

C. M. Donnalson
THE AMERICAN *1809*

COAST PILOT;

CONTAINING THE
COURSES AND DISTANCES

BETWEEN THE

Principal Harbours, Capes and Headlands, from Passama-
quoddy through the Gulf of Florida, with Directions for sailing into the same,
describing the Soundings, Bearings of the Light-Houses and Beacons
from the Rocks, Shoals, Ledges, &c.

Hemay TOGETHER WITH THE *Chambers*

COURSES AND DISTANCES

From Cape-Cod and Cape-Ann to Georges'-Bank,
through the South and East Channels, and the setting of the Currents,

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481
293
200 100
1800

1804
LATITUDES AND LONGITUDES

OF THE PRINCIPAL

HARBOURS ON THE COAST,

TOGETHER WITH A

TIDE TABLE.

897

BY CAPT. LAWRENCE FURLONG.

CORRECTED AND IMPROVED BY THE MOST EXPERIENCED PILOTS IN THE
UNITED STATES—ALSO,

Information to MASTERS of Vessels, wherein the manner
of transacting Business at the Custom-Houses is fully elucidated.

PUBLISHED ACCORDING TO ACT OF CONGRESS.

Third Edition.

NEWBURYPORT (*Massachusetts*)

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EDMUND M. BLUNT, (*Proprietor*)

1800.

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RECOMMENDATIONS.

THIS will certify that I have carefully examined the within "American Coast Pilot," and compared it with the Charts which I know from experience to be correct, and do recommend it as a valuable work, and worthy the attention of all Navigators.

BENJAMIN LURVEY.

Deer-Island, October 4, 1796.

THIS will certify, that I have proved by experience, since the within "American Coast Pilot" was put to Press, that the Directions for the Eastern Coast are correct, and recommend it to Navigators of every kind as a valuable work.

ROBERT CAMPBELL.

THIS is to certify, that we the Subscribers, at the request of the Proprietor of the "American Coast Pilot," have carefully examined the several ports we have sailed into, and from experience declare the Directions given for Boston, Marblehead, Salem, Beverly, Cape-Ann, Annis Squam, Newburyport, Ipswich-Bay, Portsmouth, from Cape-Neddock to Cape-Porpoise, from thence to Wood-Island, Portland, Husley's-Sound, &c. to the Eastward, to be correct, the work a very useful publication, and deserving the encouragement of all concerned in navigation.

William Russell,
James Sanders,
Isaac Noyes,
Abraham Wheelwright,
John Somerby,
Enoch Lunt,
Enoch Lunt, jun. }

William Milbery,
William Noyes,
Moses Brown,
Nathan Poor,

Branch Pilots at Newburyport.

Boston, July 17, 1798.

THIS may certify, That I the Subscriber, having examined the "American Coast Pilot," by desire of the Proprietor, do pronounce it very correct and worthy the attention of all mariners.

THOMAS KNOX,

Branch Pilot for Boston Bay and Harbour.

RECOMMENDATIONS.

Portsmouth, June 15, 1796.

THIS may certify, that I the Subscriber, having carefully examined the "American Coast Pilot," and finding it very correct, think it my duty to recommend it for general use to mariners, as being the most valuable publication extant.

HOPLEY YEATON.

Portland, May 8, 1798

BEING requested by the Proprietor of the "American Coast Pilot" to peruse and examine the same, I have carefully done it, and recommend the Book to be of general utility and well worthy the attention of all concerned in Navigation, as containing the most safe and correct directions ever published for the American Coast, and such as may be used with safety in times of danger.

JOHN THORLO.

Wiscasset, June 1796.

THIS is to certify, that we the Subscribers, at the request of the Proprietor of the "American Coast Pilot," have carefully perused the same, and do pronounce it a good work, and worthy the attention of all Mariners.

ALEXANDER ASKINS.
DANIEL BAKER.

Philadelphia, Nov. 1796.

THIS shall certify, that I the Subscriber, Branch Pilot for the Delaware, have carefully perused the Directions given for sailing in by Cape-May and Cape-Henlopen, from thence up the Bay, &c. to the city of Philadelphia, and from experience declare them to be very correct, the work very useful, and worthy the attention of all Mariners.

WILLIAM SCHILLINGER.

PREFACE TO THE THIRD EDITION

OF THE

American Coast Pilot.

OF the many improvements, which the science of Navigation has been continually receiving in the lapse of many centuries since the invention of the Compass, perhaps there is no one, which in its ordinary operation on maritime affairs, embraces a greater scope of *practical utility*, than the accurate description of the marine boundaries of countries by which the adventurous mariner may recognize his coast at a distance; the soundings and course of channels, by the knowledge of which he sets the rock-bound shore at defiance; and the aspect and properties of harbors, into which he can enter with security, and embay himself from the inclemency of the elements. This remark is suggested with the more confidence, as it results from the consideration that the life even of the most skilful and experienced mariner, is more endangered as he approaches the coast, however correctly he may be acquainted with its soundings and its curvatures, than it is, when exposed to the billows of the tempest, which agitates the mid-ocean. The important aid which the learned navigator derives from the calculation of the longitude by lunar observation, is undoubtedly among the most distinguished benefits of modern nautical improvement; and it is a branch of naval education, with which the mariners of our country, have of late years become generally familiar. When the spirit of adventure had extended the American commerce beyond the capes of either continent, what was before useful, became then

indispensably necessary, that *Navigation* should be taught as a *science* to the conductors of our merchantmen, and it was soon no uncommon spectacle to behold the American Eagle, lately unused to scientific restraint, shaping his course through foreign skies by the rules of geometry. The charts and marine directions, with which foreign countries abound, have also rendered the profession of the sea less dangerous and more profitable. These powerful aids have almost every where been extended to the protection and encouragement of commerce except in the American States. Here indeed few charts have been published, and those of no remarkable character either for the accuracy of their distances and bearings, or for the extent of their scale. But to collect into a compendious volume the most authentic descriptions of the harbours, and an accurate detail of the courses and soundings of the American Coast, has long been a desideratum among nautical and commercial men; and until the appearance of the first edition of the AMERICAN COAST PILOT in 1796, no attempt, we believe, had ever been made in any part of the Union to effect it.— To accomplish so important an object, which was embarrassed with more than ordinary difficulties, with which all new works are involved, the Editor, actuated by a principle of commercial benefit, and assisted by one of the most correct and experienced Pilots in the United States, hazarded the publication of that work, under auspices, by no means favourable to its eventual establishment, as a book of reference and direction to American mariners. Incident to the very arduous and complex nature of the work itself, much incompetency and error found admission into its pages, which no industry of the Editor could avoid. Add to this the avowed hostility of almost all the pilots in the southern commercial cities, with whose *interest* it militated, to permit any degree of reputation to be attached to a publication, whose professed design was to make American commanders their own pilots, and to relieve in the minds of their owners every apprehension of danger, by the certain conviction that this cabin-companion would be the means of security,

BUT notwithstanding the objections of interest, and the cavils of malice, the Editor feels it a duty, which he owes to the independent candour and integrity of some few of the southern pilots, to remark that their friendly assistance and information have largely contributed to the present highly improved state of his COAST PILOT. It is, however, unnecessary minutely to follow step by step the various and indefatigable efforts, which for four years have been exerted in all the principal cities of America, to render this work as correct in its execution as it was extensive in the purposes it contemplated. Every source of marine intelligence, which our country affords, and which the narrow selfishness of a bigotted profession had not rendered inaccessible, has been resorted to, by epistolary correspondence, expensive journies, and unwearied application. As the fruit of his labours, it is now the happiness of the Editor to present to the maritime and commercial public, a perfectly accurate compendium of the American coast navigation, combining all the information on this subject, which skilful experience and modern discovery have collected.

MANY of the most valuable portions of the information contained in the present volume, have never been committed to print, in any former edition. To insert at large the numerous omissions and errors, which have been supplied and corrected in this impression, by the aid of nautical and scientific friends, would occupy a space, too extensive for the limits assigned to these prefatory observations, or for the necessity of illustrating the Editor's attention to accuracy and copiousness. It will be sufficient to remark, that the scite and capacity of many harbours in the United States, with the necessary directions for sailing into them, which were omitted in the two first editions, are inserted in this. Several new light-houses have also been erected since, and buoys placed at the entrance of various channels, and elsewhere, which are here correctly noticed.

But among the most valuable additions to the work, the description of the *Isles of Shoals* ought to be distinguished; as a Meeting-House has been lately erected on one of those islands, which is an excellent land-mark, and can be discerned from sea, at the distance of eight or ten leagues in any point of bearing. The directions for sailing up *the Long-Island Sound to New-York*, also form a very important accession to the utility of the volume.

THE greatest improvement which has been made in point of size and expense, as well as the one which was the most wanted by a greater part of our navigation, is contained in the perspicuous and comprehensive remarks on the geography, currents, bearings, channels, soundings, harbours, and appearances at sea, of all the West-India Islands, and the ports of the most considerable trade on the Spanish Main. These descriptions and directions are entitled to the highest credit, as they are given from the authority of the most experienced and best informed navigators in the West-Indian seas. A Table of the Courses and Distances of all the islands is also subjoined, from the same authentic source. The Editor is also indebted to an American Gentleman for two very useful Tables; the first shewing the day of the month on which the new moon will fall, until the end of the year 1817, according to the new stile; and the second showing the shifting of the tide, by which the error in the common method of reckoning the time of high water to fall forty-nine minutes later every day, after the full and change, will evidently appear. The United States laws relating to seamen, and those for the relief of the sick and disabled; the statute regulation of the fisheries; the provisions against enticing away soldiers, apprentices, and debtors, and importing convicts, aliens, &c. and the several laws of the respective states on the last mentioned subject; the laws regulating quarantine; a new and corrected list of the custom-house duties, many of which have been altered, and the

forms of all the papers used in the custom-house, are inserted at length, in the present improved and enlarged edition. Nearly double the matter of the former volumes is compressed into this; and the Editor has been perseveringly attentive to correct every error of the most minute and trifling consequence.

With such pretensions to public patronage, he is not reluctant in meeting the public scrutiny. The merits of his work are grounded on the best science in the country, and every exertion of long and laborious industry has been employed in executing its pages with the strictest accuracy and fidelity, that were due to its high promise of usefulness and emolument.

EDMUND M. BLUNT.

C O N T E N T S.

	Page..
DIRECTIONS to go to the Eastward of Campo Bello, between the said island and Wolves Islands	17
————— for the Eastern Coast when you fall in with Grand Manan or Mount-Desert Hills	17
————— from Machias to Passamaquoddy	18
————— from Mount-Desert to Gouldsborough and Machias	20
————— from Long-Island to the S. W. Harbour of Mount-Desert	21
————— for sailing through Fox-island-passage	21
————— from Tennant Harbour to the Muscie Ridges	23
————— from Penmequid Point to Bass Harbour	25
————— from Bass Harbour	27
————— for Dyer's Bay, &c.	27
————— from Scodock Island	27
————— from Titmanan to Ladle-Island	27
————— for Cape Splitt Harbour	28
————— for Pleasant River	28
————— for Moose Peck Reach	28
————— going through Moose Peck Reach	29
————— for sailing into George's River	29
————— from Townsend to Manheigin	30
————— for Townsend Harbour	31
————— for Kennebeck and Sheepscut Rivers	31
————— for sailing into New Meadows	33
————— for Husley's Sound	33
————— for Portland harbour	34
Remarks on the White Hills	36
Directions from Cape Porpoise to Wood Island	36
————— to sail from Cape Neddock to Cape Porpoise	37
————— for Portsmouth, (New-Hampshire)	37
————— from Newburyport and Ipswich Bay	39
————— for sailing into Squam* harbour	40
————— to go into Cape Ann harbour	41
————— for Salem, Beverly, and Manchester harbours	42
————— for sailing into Marblehead	45
Bearings and distances of the principal Islands, Rocks, &c. in the vicin- ity of Salem from Baker's Island	47
Remarks on Cashe's Ledge	47
Directions for sailing into Boston Harbour	48
————— from Boston Light-house to Cape-Elizabeth	50
————— for sailing in and out of Boston bay from Cape-Cod or Cape- Ann to Boston light-house	50
————— for Plymouth harbour	51
————— for Cape-Cod harbour	53
————— from Cape-Cod to Holmes' Hole	54
————— for sailing into Nantucket harbour	55
————— for ditto ditto by the buoys	56
Courses and distances from Nantucket light-house	56

* The reader will find better directions in page 251.

	Page.
Directions to those running for Block-Island channel to the southward of Martha's Vineyard, Nantucket-Island, and such as are bound into the Vineyard sound, and intend going over the shoals to the eastward	57
Bearings and distances of sundry places from Gay-Head light-house	62
Description of George's Bank and Nantucket shoals	62
Directions for New-Bedford	64
————— for those who fall in with Block-Island when they are bound for Rhode-Island harbour	64
Bearings and distances of several remarkable places from Rhode-Island light-house	66
Directions for sailing from Newport through the sound to Hunt's harbour near Hell-Gate	66
————— from Block-Island to Gardner's bay	67
Bearings and distances of sundry places commencing at the light-house on Montock point, taken by the Officers of the Revenue Cutter Argus	69
Description of Long-Island	69
Directions from Gardner's Island to Shelter-Island	70
————— from ditto to New-London	70
————— for vessels coming from sea and bound to New-London	71
————— for vessels bound to New-York	71
Depths of water, bearings, courses and distances of the buoys placed in the harbour of New-York	74
Orders and regulations for the port of New-York	74
Description of the coast to the east and west of Sandy-Hook	75
————— of New-York bay	76
Directions for sailing from Sandy-Hook light-house to Cape May, or light-house on Cape-Henlopen	76
————— for sailing in by Cape-May	77
————— for sailing in by Cape-Hatteras	78
————— from Reedy-Island to Philadelphia	79
Tide Table	79
Directions from Cape-Henlopen to Cape-Henry	80
Remarks on the land from Cape-Henlopen to Chingoteack shoals	80
Directions for sailing by Cape-Henry light-house	81
————— for sailing between the middle ground and the Horse-shoe	81
————— for New Point Comfort	81
————— for Norfolk and Hampton-Road	82
————— for running from Cape-Henry up the bay to Baltimore	83
————— from New Point Comfort to Potowmack River	86
————— from Potowmack River to Patuxet River	87
————— for going from Cape-Henry or Lynn-Haven-Bay to York-River	88
Cape-Hatteras	88
Directions for coming in from sea for the coast of North-Carolina	90
————— for sailing into Charleston (South-Carolina)	91
————— from Charleston bar to Port-Royal	92
St. Helena Sound	93
Directions for Port-Royal harbour	93
————— for sailing into Savannah, in Georgia	95
Winds and Weather on the coast of South-Carolina	95
The mouth of St. Mary's River	98

CONTENTS.

xiii

Page.

WEST-INDIES.

Directions for sailing from Montserrat to Hispaniola and Jamaica, with directions for coasting round those islands	98
Jamaica, &c.	103
Directions for sailing from Jamaica through the Gulf of Florida, with directions for the coasts of Florida and Cuba; also remarks on the Tortugas, on the Florida Keys and Reef, and on the Bahama-islands	108
Remarks on the Dry Tortugas, coast of Florida, &c.	113
——— on the Florida Keys and the Reef contiguous	115
Description of the harbours, shoals, &c. of the east end of Cuba; with remarks, instructions, &c.	120
Observations on the Florida Stream, with necessary directions to Navigators	121
Directions for vessels bound Southward through the Gulf of Florida	123
Remarks concerning New-Providence and the Bahama-Banks	124
Directions for vessels bound from the eastward, over the Great Bahama-Bank, into the Gulf of Mexico	125
——— for the Mosquito Shore and Bay of Honduras	126
The course to Black River	127
To anchor off Black River bar	ibid.
Remarks when lying at anchor off Black River	ibid.
Directions from Black River to Great Poyer River	128
To know Punta Sal	129
To go from Port Omoa to the Gulf, or River Dulce	130
To sail from Black River to Cape Gracias a Dios with a west wind	131
To go from Sandy Bay to Puerto-vellu, or Cathagena	132
Directions for the Bay of Honduras	134
From Rattau to the Bay of Honduras	136
Directions to sail out of the Bay by the Northern Passage	137
——— to sail in at the Sapadilla Keys through the main reef, up to the river Belieze	138
——— for the coast of Guayana, Surinam, Demerary, Berbice, &c.	139
Demerary	139
Guayana	140
Surinam	140
Tides, Times of High Water, &c.	141
Coast of Guayana	141
Demerary	142
Remarks made among the West-India Islands	142
Martinico	142
Dominico	144
Antigua	145
Nevis	146
St. Kitts	147
From St. Kitts, to the leeward of St. Eustatius through the islands past Somborero	147
Directions for the West-India, or Caribee islands, collected from the journals and observations of several experienced Navigators	148
Barbadoes	ibid.
Tobago	149
Grenada	150

	Page.
St. Vincents	151
St. Lucia	ibid.
Martinico	152
Dominico	153
Guadaloupe	ibid.
Antigua	154
Nevis	156
St. Eustatius	157
Saba	ibid.
St. Bartholomews	ibid.
The Virgin Islands	158
St. Thomas	ibid.
Crab Island	159
Tortola	ibid.
Virgin Gorda	160
Anegada	ibid.
Sombrero	ibid.
Isles of Shoals	161
Courses and Distances on the Coast of America	163
----- on the South side of Hispaniola, &c.	169
----- on the Mosquito Shore	173
Table of the Latitudes and Longitudes of the principal Harbours and Capes from the St. Croix to the mouth of the River Mississippi	174
Directions to find the time of high water at any place	176
Use of the Tables for finding the Moon's age, and the time of high water at any place	ibid.
Table shewing the day of the month the new moon will fall on, from the beginning of the year 1799 till the end of the year 1817, &c.	178
Tide Table	179
Laws relating to masters and seamen in the merchants' service	180
Regulation of seamen	ibid.
----- of the Fisheries	184
Bounty on vessels employed in carrying on the Bank and other Cod-Fisheries	185
Abstract of the Laws of the United States concerning vessels to be employed in the Coasting Trade and Fisheries	187
Relief of sick and disabled seamen	194
Power and duty of Consuls	195
Law of the United States against Enticing and carrying away Soldiers, Apprentices and Debtors, and importing Convicts, Aliens, &c.	199
New-Hampshire do.	197
Massachusetts do.	ibid.
Rhode-Island do.	198
Connecticut do.	ibid.
New-York do.	ibid.
Virginia do.	199
United States Quarantine Law	200
New-Hampshire ditto	202
Massachusetts ditto	204
Rhode-Island ditto	206
Connecticut ditto	207
New-York ditto	209

C O N T E N T S.

xv

	Page.
Pennsylvania Quarantine Law	212
Virginia ditto	214
Duties payable by Law on all goods, wares and merchandize,	216
Tonnage	228
Rates of Com for estimating duties	228
Fees of Office	229
Allowances for Draft	ibid.
Tares	230
Allowance for leakage and breakage	230
Terms of Credit	230
Restrictions on Importations	232
Mode of transacting business at the Custom-Houses in the United States	232
Duty of Masters of Vessels	232
Form of outward Manifest for American vessels	233
Returned Cargo	ibid.
Vessel and Cabin Stores	ibid.
Form of outward Manifest for foreign vessels	ibid.
Form of return of Seamen	234
Form of report of Alien Passengers	ibid.
Form of oath taken by importers	235
Form of report of distilled spirits, wines, and teas	236
Post-Office law	237
Manifest Oath on outward Cargo	238
Importers or Consignees	ibid.
Form of Entry for American vessels	239
Form of Entry for Foreign vessels	ibid.
Entry Oath	ibid.
Appraisers Oath	241
Returned Cargo	ibid.
Form of Report and Entry of Returned Cargo	242
Passengers	ibid.
Mode of obtaining drawback on foreign merchandize	243
Form of entry for obtaining drawback	ibid.
Oath to be taken by the importer on exportation	244
—— ditto when the goods are sold	ibid.
—— to be taken by an intermediate person	ibid.
—— to be taken by the exporter other than the original importer	ibid.
Form of the certificate of their being landed without the limits of the United States	245
Oath of the master or principal officers in the above case	ibid.
Form of verification of the above by a Consul or Agent of the United States	ibid.
—— of verification when there is no Consul or Agent	ibid.
—— of entry of merchandize intended to be exported for the benefit of drawback	246
—— of entry of merchandize intended to be exported for the benefit of drawback from another district	ibid.
—— of entry of merchandize intended to be transported across the State of New-Jersey to Philadelphia	247
Mode of recovering drawback on sugar refined within the United States	248
Form of the Entry	ibid.
Oath or affirmation to the above	ibid.

	Page.
Domestic Spirits	248
Form of the entry	249
Bounty on salted provisions and fish of the United States	ibid.
Form of the Entry	ibid.
Oath to be taken by the exporter	ibid.
Information generally	250
Least sums admitting of drawback	ibid.
Directions for sailing by the light-house lately erected on Wigwam-point into Annis Squam harbour, on the southern coast of Ipswich-bay in Massachusetts	251

ERRATUM.

Page 48, line 8, in a small part of the edition, the distance from *Cape-Ann* to *Boston* light-house was called $7\frac{1}{2}$ leagues; the reader is desired to correct it in those copies, as the distance is 9 leagues.

NOTE—We do not know another error in the work. If any should be discovered (as we are all liable) please inform the

PROPRIETOR.

Newburyport, Nov. 1800.

American Coast Pilot.

Directions to go to the Eastward of the Island of Campo-Bello, between the said Island, and the Wolves Islands.

IF you are bound to the River of * *Passamaquoddy* in a large Vessel your best way is to go to the eastward of *Campo-Bello*, keeping your course N. E. b. E. which will carry you to the *Wolves*, distant about 3 leagues from *Campo-Bello*. The *Wolves* lie about E. S. E. from said Island, and when the passage between *Campo-Bello* and the *White-Horse* bears W. N. W. you must steer W. N. W. leaving the *White-Horse* on your starboard hand and keep the Island, (*Campo-Bello*) best on board. The *White-Horse* is a large white Rock which lies off the N. E. end of *Campo-Bello*. You will see a fine harbour called by the French, *Harbour Delute*, and will leave several Islands on your starboard hand, when you pass the *White-Horse*. As you pass here, you will open a large Bay to the W. S. W. which is sufficient for 100 sail of the line to lie in. There is very deep water between the *Wolves* and the Island of *Campo-Bello*, being from 50 to 100 fathoms. Bring *Campo-Bello* Island to bear S. S. E. or S. E. and you will have 20 fathoms water where you may anchor and lie safe from all winds. Your course to *Moose-Island* is W. S. W. distant 2 leagues, where you may anchor in 8 or 10 fathoms, muddy bottom. Here is the best harbour in the United States for making dry Docks, as you may have them either on the south end of *Moose-Island*, or 30 or 40 miles up *Scoodice* river. Common tides rise here 25 feet. At full and change it is high water at half past eleven o'clock at *Moose-Island*.

Directions for the Eastern Coast when you fall in with Grand-Manan or Mount-Desert-Hills.

THESE places may easily be known from the western Coast. *Mount-Desert Hills* may be seen 20 leagues at sea, and when within 4 or 5 leagues of them you may see *Skutock-Hills* bearing about N. N. E. The tide of flood sets here E. N. E. and the ebb W. S. W. but as soon as you are 9 or 10 leagues from the land, the current runs in general to the S. W. westward.

* There are three rivers which fall into *Passamaquoddy Bay*; the largest is called by the modern Indians, the *Scoodick*, but by *De Mons* and *Champlains*, *Etchemins*. Its main source is near *Penobscot River*. The mouth of the river has 25 fathoms water, and the land is very bluff.

If you fall in with *Mount-Desert-Rock*, which lies south 6 leagues from *Mount-Desert-Hills*, you must observe the tide of flood sets W. S. W. along shore, till you come to the *Fox-Islands*: but the same flood runs up to the northward into *Blue-Hill-Bay*, *Union-River* and *Isle-au-Haut** bay.

The next remarkable land is *Penobscot-Hills*, which you will see over the *Fox-Islands*, bearing from the N. W. to N. N. W. of them. When you pass the *Isle-au-Haut*, in steering W. S. W. you will leave *Mantinicus-Islands*, and *Mantinicus-Seal-Islands* to the southward of you. [If at night or thick weather I would advise you to go to the southward of all these Islands, unless you are well acquainted.] When you pass to the westward of *Mantinicus-Islands*, the main passage from sea to *Penobscot-Bay*, lies about N. by W. If you go into this passage you leave *Mantinicus-Island* on your starboard and the two *Green-Islands* on your larboard hand steering north westerly, 4 leagues, and if bound up the Bay follow your directions for *Penobscot Bay*.

If you come in from sea and make the Island of *Manhegin*, when it bears north, or N. N. W. it appears like two islands; but when it bears east or west it appears in one Island. *Damiscove-Islands* lie to the W. by N. of it, which are all bare of trees except the north part. The rocks called *Bantain-Ledge*, lie two miles from *Damiscove*, S. W. or W. S. W. When you are 6 or 7 leagues off at sea, you will have 70 or 80 fathoms of water, with a S. W. current. In general between *Damiscove* and *Manhegin-Island* the flood tide parts and sets E. N. E. to the eastward, and W. S. W. to the westward as far the Island of *Seguine*, and to the northward up to *Broad-Bay*, *Sheepcut* and *Kennebeck Rivers*, and the ebb sets the contrary way.

Seguine-Island † is remarkable when bearing east or west. It lies two miles from land but when it bears north, shuts in with it. It may be known by the high land of *Cape-Small-Point*, bearing N. W. from it. You have deep water to the eastward of *Seguine*. When you pass to the westward of *Seguine* the tide of flood sets strong to the northward into *New-Meadows*, and W. N. W. into *Broad-Sound* and up to *Portland*, and the ebb tide the reverse. Your soundings between *Seguine* and *Cape-Elizabeth* are various; at times you have 18 or 20 fathoms, rocky bottom, and within a cable's length you will find 30 or 35 fathoms, muddy bottom.

There are three rocky ledges that lie about east and west to the westward of *Seguine*, which are not much wider than a wharf. The land here is all in Islands until you come to *Cape-Elizabeth*, which Cape has a Light-House to the N. W. and a wind-mill to the westward, near *Richmond's-Island*, which is the first wind-mill you see when coming from the eastward.

Directions from *Machias* to *Passamaquoddy*.

WHEN you leave *Machias* and are bound to *Passamaquoddy*, bring *Graft-Island* to bear S. W. b. W. and steer N. E. b. E. distant 9 leagues to *West-Passamaquoddy Head*. But if the wind takes you to

* The *Isle-au-Haut* is remarkable land which makes with a large Bay on each side of it, and the highest part of the Island is in the middle.

† There is a Light House on this Island.

the eastward there is a good harbour about two leagues to the N. E. of *Cross-Island*. This harbour bears due west from the middle of *Grand-Mannan-Island*, and is called the *Little-River*, but you cannot see it except you are near the north shore. You must not run in for it, before it bears N. W. or N. N. W. There is a bluff point of rocks on the starboard hand as you go in, and an Island in the middle of the harbour. As you pass in, leave the Island on your larboard hand, and when you have passed it half a mile you may anchor in four or five fathoms, muddy bottom, and remain safe from all winds. Your course from this harbour to *West-Passamaquoddy* is N. E. b. E. distant seven leagues. When you come from the S. W. and are bound into *West-Passamaquoddy*, you must give the *Seal-Rocks* a birth of three quarters of a mile before you haul in for the harbour, as there is a whirlpool to the eastward of them. The Bay is about one league from this point; it is high water here at full and change of the moon about half past eleven o'clock.

There is a good Bay that lies about W. S. W. from this point, where you may anchor, if the tide does not suit to go over the Bar; but if the tide suits you may proceed, keeping to the westward till the Bar bears N. N. W. which course you may steer till you get up to *Allen's-Island*. In steering this course you will see a house that has two doors in it, on *Allen's-Island*, which house you must keep open with a little *Green Island* which lies in the middle of the passage. When you get over the Bar, this house must be brought open to the westward of the Island and you may go on either side of it as the wind should favour you. If you go to the westward of it with the tide of flood, and the wind fails you, the tide will carry you into a large Bay on your larboard hand. The first Island you come to is the *Collector's*, which lies on your larboard hand, and the next to this is *Allen's-Island*. When you come to the westward of the little Island you may anchor opposite the long house on *Allen's-Island*, or direct your course N. N. E. distant three miles, to *Moose-Island*. In the passage of *West-Passamaquoddy* the tide sets N. N. W. over the Bar, two hours before it rises one foot, and likewise sets S. S. E. two hours before high water. When up as far as *Allen's-Island*, if you leave it with the tide of flood, steer N. N. E. three miles, when you will have the tide against you four hours; and two hours before high water the tide sets S. S. W. till you come down to the *Collector's-Island*, when it sets over the Bar S. S. E. The tide rises here 25 feet. There is a fine Cove on the south end of *Moose-Island*, where a ship of 500 tons may lie, moored head and stern, safe from all winds, but the anchors are very much exposed, with the wind to the eastward or E. N. E.

If you are bound up *Scoodice-River* from *Moose-Island*, as you pass *Bald-Head*, give it a birth of half a mile as there is a large ledge of rocks that lie off from it. When you have passed this point your course is N. N. W. distant 8 or 9 leagues to the *Devil's-Head*, or *Oak-Point*, (so called;) the *Devil's-Head* you leave on your larboard hand, which is very high land and may be seen 10 or 12 leagues. Your course from said Head is W. N. W. one league, when you will come to a large ledge of rocks that you must leave on your larboard hand, which is bare at two hours ebb, and extends half way across the river. Keep your starboard hand on board, and when you pass this ledge your course is W. S. W. distant one mile to *Pumroy's-Point*, and from said point to the harbour your course is N. W. b. N. distant three miles, and the next reach to the *Falls* is W. N. W. distant one mile; the tide flows here 25 feet, and there are only 6 or 7 feet in the channel at low water with long flats of mud on both sides.

There are several good harbours on the west side of this river, and all the difficulty is the great depth of water which is in general from 18 to 24 fathoms. There is also a good harbour on your starboard hand, going into *Deer-Island*, which lies to the southward of *St. Andrews*, two leagues distant.—It may be easily known, as there is a large Bay between the two Islands which lies N. E. from the river *St. Croix*, three leagues distant. *St. Croix* lies in lat. $45^{\circ} 00'$ north.

Directions from Mount Desert to Goulsborough and Machias:

IN going from *Mount-Desert Rock* to *Goulsborough* you must steer N. N. E. for * *Skutock-Hills*, which lie to the N. N. E. of that port, and are remarkable from any hills in the eastern country. Keeping your course N. N. E. about 4 leagues, you will pass *Frenchman's-Bay*, which you leave on your larboard hand. You will see three Islands which lie in the mouth of the Harbour; you must leave them on your larboard hand and go in the eastern passage. In standing in for this place you will see a small Island, called *Tetitmenan's-Island*, which you leave on your starboard hand. There is a bar that runs from the shore to this little island, which is about 1 league from the land, and has a few bushes on it. This Bar is covered at high water but bare at low water. If you are bound to *Machias* or *Passamaquoddy*, your course from *Mount-Desert* is E. N. E. distant to *Machias* about 17 leagues. In steering the above course and distance, you pass by nothing but Islands on your larboard hand with inlets and sundry good harbours, pleasant rivers, *Moose-Peck-Reach*, and *Chandler's-River*, which are all good harbours, but too intricate to be described for strangers, to attempt it with safety. If you cannot steer your course as above directed, in standing to the E. N. E. there are three low Islands to the S. W. of *Grand-Manan-Island*, which lie due S. E. from *Machias*, distant 4 leagues, which you must be careful of in the night. You may see the Island of *Grand-Manan* 2 or 3 leagues before you come to it, and when it bears N. E. these Islands run southwest from *Grand-Manan*, about 2 leagues distant, and in thick weather if you make these Islands you may run for *Machias*, bringing said Island to bear S. E. and then run N. W. for the entrance of *Machias*; or if you make the S. W. end of *Grand-Manan*, bring it to bear E. b. S. and steer W. b. N. for *Machias*, 5 leagues distant, and when you have passed *Cross-Island* which you leave on your starboard hand, you may steer north. In steering this course you will leave a large white rock on your larboard hand, and if you do not want to go into *Machias* harbour, you may haul to the westward. After you have passed this rock about half a mile, bring a high round Island that is covered with trees to bear north, when you may anchor in 4 or 5 fathoms, muddy bottom. This is called *Jones's Harbour*, but if you mean to go up to *Machias*, you must keep your course north till you pass a round high Island on your larboard hand, when you may shape your course W. S. W. or W. b. S. for a point that is covered with young birch trees, and a house on it, for on the starboard hand there are nothing but flats and shoals; you may keep your larboard hand after you pass this house until the river opens

* There are five of these hills, and at a distance they appear round.

to the northward, when you may run up to *Cross-River*, where you may anchor in 4 fathoms, but if you are bound up to the S. W. Mills, you must haul away to the westward. When you get up with Mr. *Parker's* house and barn which are on the starboard hand, you must leave the barn open to the south westward of the *Pott-Head*: this *Pott-Head* is a large Hill that you leave on your starboard hand.

Directions from Long-Island to the S. W. harbour of Mount-Desert.

YOUR course is N. E. or N. E. by N. distant 5 leagues. You must leave the two *Duck-Islands* on your starboard hand and three islands on your larboard hand. It is not safe for a stranger to run here in the night, as there is a large ledge that is covered at high water and bare at half tide. You leave this ledge on your starboard hand, which is about one mile from the harbour. There is a long ledge on the larboard hand which runs off half a mile, but there is a good turning channel between them. The S. W. passage is not fit to enter with a large vessel at low water, but at high water you may enter with any vessel, keeping nearest the starboard hand as you go in, for there is a long point that lies about half a mile off from the larboard hand. Off this point you will find 6 or 7 feet of water at low tide. When you pass the point on your larboard hand, you have the harbour open, and must bear up N. W. or W. N. W. and anchor well up the harbour, in 5 or 6 fathoms, muddy bottom, where you may lie safe from all winds. If you are in a large vessel and make the *Ile-au-Haut*, bring said island to bear W. S. W. and steer E. N. E. 10 leagues, which course and distance will carry you up the eastern passage going into *Mount-Desert*: You must leave all the Islands to the northward, and go to the northward of *Mount-Desert Rock*, which lies E. S. E. from the *Ile-au-Haut*, S. E. from *Long-Island*, and S. from the *Duck-Islands*. When you bring the harbour to bear W. N. W. you may stand directly in, for you may go about with a first rate man of war in this passage. You may steer in this channel, with a fair wind, from W. N. W. to W. by N. till you come to *Langley's-Island*, which lies about one league up the harbour and makes the starboard hand of the river that runs from the N. E. Be careful of this island, as there is a sunken ledge of rocks abreast of it, near half a mile off. The river above-mentioned has water enough for any ship to go in, and is a safe harbour.

Directions for sailing through Fox-Island passage.

WHEN bound from the westward and intend going through *Fox-Island*, passage bring **Owl's-Head-Island* to bear W. by S. and then steer E-

* *Owl's Head*, a head land on the West side of *Penobscot Bay*, in the district of *Maine*. It has a good harbour on the larboard hand as you go to the eastward. The harbour makes with a deep cove, has 4 fathoms water, and a muddy bottom. It is open to the E. b. N. and E. N. E. winds: but in all other winds you are safe. The tide of flood sets to the eastward, and the tide of ebb, S. W. through the *Muscle Ridges*.

by N. from *Owl's-Head*, 4 leagues distant. If you have a head wind and are obliged to go into the mouth of the bay, be careful of a ledge of rocks that bears from *Crab-Tree-Point* about S. W. or S. W. by S. distant 4 or 5 miles. This passage has rocks on both sides. *Crab-Tree-Point* is on the larboard hand. It is on the northern *Fox-Island*, and there is a long point of rocks near 1 league to the S. W. of it. This passage is not fit to enter in the night, unless you are well acquainted. When you get in, bring *Crab-Tree-Point* to bear W. by S. and steer E. by N. about 3 leagues, which will bring you to *Young's-Narrow*. In steering this course you will make two large bare rocks called the *Sugar-Loaves*, which you may go on either side of, but to follow your directions you must leave them on your starboard hand, and also be careful of a ledge that lies about north one third of a mile from them. The entrance to *Young's-Point* is narrow at low water, off which lies a ledge of rocks which are covered at high water. There is also a quantity of funken rocks at the larboard hand, near a mile to the W. N. W. which lie off the *Dumplings*. These *Dumplings* are three islands which you leave on your larboard hand. Your course in this passage is E. S. E. and W. N. W. keeping your starboard hand on board. When you pass this point on your starboard hand, you must keep your starboard hand on board and steer E. S. E. about 2 miles, when you will make *Deep-Cove* on the starboard hand, which lies to the eastward of a very high bluff of rocks. If you have neither cables nor anchors you may run into said cove, or secure your vessel with the main or foresheet, or come to anchor in 7 fathoms water, off the said cove. There the flood meets, one from the W. N. W. and the other from the E. N. E. which makes an eddy against this cove and high land; here you may ride safe with any wind. When you leave this place and are bound to the eastward you steer E. S. E. and keep your starboard hand on board till you come up to a clear spot of land where the trees have been cut off. As soon as said spot bears W. S. W. you steer E. N. E. for the middle narrows. When you draw near the narrows you will see two large white rocks in the middle of the passage, unless at high water, at which time they are covered about 1 hour, but may be seen at all other times of tide. You may go on either side, but the deepest water is at the southward of them. Continue your course E. N. E. about 1 league, when you must keep your starboard hand on board as there are several funken rocks and ledges on your larboard hand which are covered at high water. You will make the eastern narrows on your starboard hand, and as soon as you bring it to bear S. S. E. you may run through, where you will have a fine harbour which is safe to ride in with all winds except at E. N. E. but you may remain in the west passage with the wind at E. N. E. or anchor at the northward of a bare island, that you will see on your starboard hand as you go back to the westward. When you pass the eastern passage of *Fox-Island* you must steer E. N. E. about 4 miles, which course will carry you into a large Bay that lies between *Fox-Island* and the *Isle-au-Haut*. This bay lies north and south, and about 4 leagues east and west. When you get into this bay from the above-mentioned passage, and are bound to the eastward of *Isle-au-Haut* you may steer E. S. E. 6 leagues, which course will carry you to the southward of the *Isle-au-Haut*.

[N. B. When you come from the westward and pass the Island of *Man-Arigin* and the entrance of *Penobscot Bay*, you may steer E. N. E. which course will carry you between the *Fox-Islands* and *Martinicus-Islands*, leaving all the *Fox-Islands* on your larboard hand; but bring the *Isle-au-*

Haut to bear W. N. W. and steer E. N. E. 7 leagues to *Long-Island*, which you leave on your larboard hand. If you are bound to *Blue-Hill-Bay* or *Union-River*, as soon as you pass *Long-Island*, you will open a large sound to the N. N. W. which course you are to steer 7 leagues when you will be up with *Robertson's Island*, leaving the *Ship* and **Barge* on your larboard hand. *Robertson's Island* is the only Island near that place that has a house on it. The south part of the Island is clear of trees, on which the house stands. When you come near the south part of the Island, give it a birth of $\frac{1}{4}$ of a mile as there are several sunken rocks off said Point. When you bring this Island to bear from S. W. to N. W. you may anchor in 6 or 7 fathoms water, muddy bottom; but if you are bound to *Blue-Hill-Bay*, you may stand to the northward direct for the *Blue-Hills*, which you may see 10 or 15 leagues off. If you are bound for *Union-River*, you had better take a Pilot at *Robertson's Island*, for it is not fit for a stranger to go without one.

Directions from Tennant Harbour to the Muscle Ridges.

IN sailing from this harbour you may steer E. b. N. one league to *White-Head*, but be careful not to haul in for it till it bears N. E. as there is a large ledge of rocks bearing about W. N. W. from said head, one mile distant; but within it, a pistol shot from the shore, is safe navigation. There is a good harbour on your starboard hand as you pass this Head, (bound to the Westward,) where you may lie safe from all winds. In going in you must give the larboard hand a birth as there is a sunken ledge that breaks when there is any sea, unless at high water.

Your course from *White-Head* is N. E. to *Ash-Point* (or Island) one league distant, which has a large rock to the S. W. of it, about half a mile distant, which you must leave on your larboard hand. It is not in the way except you are obliged to go about. When you haul round this Island give it a small birth and steer N. N. E. or N. E. b. N. for the *Owl's Head*, leaving two Islands on your starboard hand; but when you draw near the larboard shore you steer about E. N. E. for the *Owl's Head* which has a good harbour on the larboard hand as you go to the eastward. This harbour makes with a deep cove. You may bring a rocky point that lies on your starboard hand to bear N. E. and a Ledge of Rocks that lie without said point to bear E. N. E. and anchor in 4 fathoms water, muddy bottom.

This harbour is open to the wind at E. by N. and E. N. E. but in all other winds you are safe. The tide of flood sets to the eastward and the tide of ebb S. W. through the *Muscle Ridges*.

If it is night when you come to *White Head*, you had better not attempt going through the *Muscle Ridges*. Your best way is to go by †*Two Bush Island*, which you must leave on your starboard hand, keeping your course E. N. E. or N. E. by E.

If you are in a large vessel your best way is to go in this passage, as it is the most safe. You must follow your course as above directed about 2

* *The Ship is an Island that has three trees on it and appears like a Ship at a distance, and the Barge is a dry rock which appears like a Barge.*

† *The Island called Two-bush-Island, has but one bush on it, but formerly had two.*

leagues when you will have *Penobscot bay* open, and then you may direct your course to either side of *Long-Island*. If you go to the westward your course is N. N. E. to *Great-Spruce-Head*, which having passed seven leagues your course is N. E. by N. 5 leagues to the old Fort. In steering said course you will leave *Belfast-Bay*, and *Brigadier's Island* on your larboard hand, which island has a good harbour, and if you mean to go into it you must leave it on your larboard hand and steer in about north or N. by W. You may run up above this island and anchor on the starboard hand if the wind is to the eastward but if to the westward, or to the S. W. you must not. There is a bar that lies from this Island to the main land, which is covered at high water. There is also a good harbour to the westward of this island, called *Long-Cove*. If you turn into either of these harbours you must be careful of some rocks that lie to the southward of this island more than half a mile from the main land. But in going into *Penobscot* proceed as above, and keep your larboard hand on board. When you pass this Island for the old *Fort-Point*, which has no trees on it, you must observe before you come to it, that a large ledge of rocks lie about $\frac{3}{4}$ of a mile to the E. S. E. of it, which is covered at high water but bare at half tide. You may go within a cables length of *Old Point*, in smooth water. These rocks may be discovered when the wind blows.

If you are bound up *Penobscot river* from old *Fort-Point* with tide of ebb and the wind ahead, you may make a good harbour in the east river which lies about E. N. E. from the *Old Fort* about one league—this river lies to the south westward of *Waldow's Island*, in which place you will lie safe from all winds, and anchor in 6 or 7 fathoms, good holding ground. *Waldow's Island* is a large island which you are to leave on your starboard hand, and sundry rocks on your larboard hand, which are above water. When you pass *Waldow's Island* you may anchor to the N. W. of it on the starboard hand as you go through—but if wind and tide are in your favour you may proceed up to *Marsh-Bay* keeping the larboard hand best on board. *Marsh-Bay* is about 2 leagues from *Waldow's Island*. When you pass *Marsh-Bay* you may keep in the middle of the river, and you have neither rocks nor shoals until you get up to the falls. You have no particular course in going up this river, but may sometimes go to the westward of north, and sometimes to the eastward of north.

When you enter *Penobscot Bay*, and are bound to the eastward of *Long-Island*, you must steer N. E. by N. leaving *Long-Island* on your larboard hand, which course will carry you up to *Bagaduce*. If you intend going into this harbour, as soon as it bears E. N. E. you may run in steering E. N. E. keeping the middle of the channel until you pass the first Island, giving it a birth of $\frac{1}{4}$ a mile, then haul to the southward until the Island bears W. S. W. when you may anchor in 8 or 10 fathoms, muddy bottom, and lie safe from all winds.

In going into the harbour of *Bagaduce*, you leave three Islands on your starboard hand, but if you are bound up *Penobscot-River* you must steer north, leaving the ledge of Rocks of the old *Fort-Point* on your larboard hand, then follow the same directions you have for running into *Penobscot River*, which will carry you up to the *Falls*. The tide ebbs and flows at full and change, about 10 or 11 feet.

Directions from Pennequid Point to Bass Harbour.

WHEN you pass *Pennequid Point*, bring it to bear W. S. W. and steer E. N. E. 3 leagues, which course and distance will carry you into *George's River*. In steering this course you will leave *Egg Rock* on your larboard and *Franklin's Island* on your starboard hand; but be careful not to go to the Northward of said Course, for there are several sunken ledges to the Westward of *Egg Rock*, which you leave on your larboard hand. But if it should be in the night, and you are to the Eastward of *Damiscove Island*, bring *Seguine Light* to bear W. S. W. and steer E. N. E. for *George's River*, as above directed. But if you should meet with the wind a-head, you may anchor off *Gay's Cove*, which lies on your larboard hand, and about 3 miles to the E. N. E. of *Franklin's Island*. You may know this *Cove*, as *Gay's house* and barn lie to the N. W. of it, or you may anchor in *Pleasant Cove*, which lies on the larboard hand, about two miles to the Eastward of *Gay's Cove*. But if you are bound through *Herring Gut*, bring * *Capt. Henderson's house* to bear N. N. W. and steer S. S. E. for *Herring Gut*. This *Herring Gut* has a bar from side to side, but you may go over it at two hours flood, keeping your starboard hand best on board. As you come on the bar you will see a large rock on your starboard hand, and the deepest water is within a cable's length of the rock; your course over the bar is S. S. E. You may anchor to the N. W. of the bar, in 4 or 5 fathoms, muddy bottom, and wait for the tide. The tide of flood sets to the northward and the ebb to the southward.—

When you go out of this harbour, and bound to the Eastward, be careful and give the larboard hand a good birth, for there are two ledges of rocks on the same hand of the Eastern point, which are under water, and lie off about a cable's length. When you are clear of these ledges, you may steer E. b. S. or E. S. E. one mile to the Western *Muscle Island*, which you leave on your larboard, and 3 or 4 islands or ledges on the starboard hand. When you pass these ledges and *Musquito-Islands*, if bound to *White-Head*, you may steer N. E. b. E. 2 leagues, and when you bring said head to bear N. E. run for it, but when you pass the S. W. *White-Head*, leave it on your larboard hand, and be careful of a sunken rock that lies S. E. from the Eastern *White-Head*, about one cable's length distant. Your course through to the Eastward is N. E. and to the Westward S. W. keeping near the middle of the passage. Before you come up with *Ash-Point*, you must be careful of a sunken rock, which lies off the *Point* about one third of the passage, which has not more than 6 feet of water at low water. The marks to avoid it are, to shut in a red house, which is on the main land; with *Ash-Islands*. But if you should go through this passage in the night, keep *Potatoc-Island* (which is right against *Ash-Island*, about S. S. W. from it, and bare of trees, which you leave on your starboard hand) best on board. When you pass *Potatoc-Island*, and are bound into *Owl's Head*, your course is N. N. E. about two miles, which will leave two Islands on the starboard hand. When you open the passage to *Owl's Head*, and bound to *Edgemavoggan-Reach*, your course is N. E. b. N. till you pass the *Lime-Islands*, which you leave on your larboard hand. Continue said course till you make a large bare Rock on your starboard hand, and a little round Island to the Eastward, on the same hand, which

* *Capt. Henderson's house and barn are red, and lie on the larboard hand.*

is covered with trees. Continue your course to the N. E. then you will make a large Island on your starboard hand. When you pass this Island, you have the passage opened to *Buck's Harbour*; continue your course N. E. till you pass by all the Islands, to the Southward and Northward. In the day time you may see *Blue-Hill* bearing E. N. E. over all the land. This passage is safe to go through with a first rate man of war.

When you come within two miles of the *Reach*, you will make a small Island on your starboard hand, which has a sunken Rock to the Northward of it. Your safest way is to keep the middle of the passage, as there is a sunken Rock or Ledge on the larboard hand that lies E. b. S. from an Island which you leave on your larboard hand, about half a mile distant.

If you want to make a harbour, you may go into *Buck's Harbour* by a N. E. or N. E. b. N. course. When you come into this harbour (which is 12 leagues from *Owl's-Head*) you must leave an Island, covered with young birch trees, on the starboard hand, steering N. N. W. and when you get to the Northward of said Island, you steer E. S. E. till you bring it to bear S. S. W. where you will be land locked from all winds in 4 or 5 fathoms, soft bottom.

When you leave *Buck's Harbour*, and bound to the Eastward, you steer S. E. till you come to a large Rock and four Islands, which you leave on your larboard hand, keeping the said rock and Islands best on board, for there is a sunken Ledge that lies S. S. W. from them. You will make a black Island on your starboard hand, with burnt trees on it. This Ledge lies N. N. E. from said Island, near the middle of the passage, but keeping the Eastern shore best on board, you will go clear of it. When you have passed this ledge, you leave two Islands on your starboard, and two or three on your larboard hand. Continue your course to the S. E. till you make two Islands, between which and *Buck's Harbour* the course is S. E. and N. W. 6 leagues. To the Eastward you may go between both Islands, steering E. b. S. one league, which course will carry you up with *Trum-Cap*, which Island has a Bar of Rocks, that lies near half a mile to the northward; but if you have a head wind, and are obliged to turn through, you will observe the channel is two miles wide to *Channel-Rock*, which is always above water.

When you leave this *Trum-Cap*, steer E. b. S. which will carry you between the *Ship* and *Barge*, and three Islands which you leave on your larboard hand; which are covered with large rock-maple trees. The *Barge* is a bare rock, which you leave on your starboard hand; but there is a rock about a cable's length to the Northward of the *Barge*. Continue your course E. b. S. for *Bass-Harbour*, distance from *Trum-Cap* 5 leagues; but you must have some regard to the tide of ebb, which sets very strong to the S. S. E. and the tide of flood to the N. N. W. If you are bound into *Bass-Harbour*, you keep *Rich's-Point* within a cable's length, which Point you leave on your larboard hand, for there is a large Ledge of Rocks that lie off about half a mile, which is bare at half tide, and bears S. E. from *Rich's Barn*, and S. b. W. from the entrance of *Bass-Harbour*. You give the larboard hand a good birth in going to *Bass-Harbour*, in entering which you must give both sides a birth, for at low water it is shoal. When you get into this harbour, anchor on the larboard hand with a Cove to the Westward of you, in three or four fathoms, muddy bottom.

Directions from Bass Harbour.

WHEN you leave this harbour, bound to the Eastward, steer out S. W. till you bring *Bass-Harbour Bar* to bear S. S. E. then run S. S. E. keeping the larboard hand best on board. This Bar has not water enough for a loaded vessel before half tide; but a light vessel may go over at low water, keeping the larboard hand best on board. When you get over this Bar, you steer E. b. S. till you bring the S. W. entrance of *Mount-Desert* to bear N. E. then you may run N. E. leaving *Cranberry-Island* on your starboard hand. But this passage is shoal at low water, and not fit for loaded vessels to go through, but at full tide there is water enough, keeping the middle of the passage. Continue your course to the N. E. till you pass *Cranberry-Island*; then you may steer E. S. E. and anchor between the two *Cranberry-Islands*, where you will be safe from Easterly or S. W. winds. You may lie in from 4 to 7 fathoms, good holding ground.

When you leave this port, bound to the Eastward, you steer E. b. S. till you get up with *Baker's-Island*, which lies to the Eastward of the *Cranberry-Islands*; then you steer E. b. N. 4 leagues, to *Scoodock-Island*. When you pass said Island, and are bound to *Goldborough*, you must steer N. E. about 5 leagues, and keep that course till you bring *Goldborough Harbour* to bear N. N. W. then you must leave 3 Islands on your larboard, and one on your starboard hand, and run into the harbour, where you may lie safe from all winds, and anchor in 5 or 6 fathoms.

Directions for Dyer's-Bay, &c.

THIS Harbour lies a little to the Eastward of *Goldborough*. When you make *Titmanan*, bound to *Dyer's-Bay*, leave *Titmanan* on your starboard hand, and steer North for the Eastern head. You leave a large dry rock on your larboard hand, which when you pass, you will see a small Island, covered with trees, which you leave on your starboard hand, then haul round said Island, where you will be safe from all winds.

Goldborough lies N. N. W. from *Titmanan* one league distant.

Directions from Scoodock-Island.

WHEN you come from the Westward, and bound to *Titmanan*, you pass *Scoodock-Island*; steer E. N. E. from *Scoodock Island* 5 leagues to *Titmanan*.

Directions from Titmanan to Ladle-Island.

WHEN you pass *Titmanan*, bring it to bear S. W. and steer N. E. about $4\frac{1}{2}$ leagues, which course will carry you to *Ladle-Isle*. This Isle has a remarkable appearance, being formed exactly like a ladle, and has a

large black Rock to the S. W. a little distance from the Island. You may go any side of this Island, but the best channel is to the S. E. of it.

Directions for Cape-Splitt Harbour.

WHEN you pass *Titmanan*, bring it to bear S. W. $\frac{3}{4}$ S. and steer N. E. $\frac{1}{2}$ N. for *Cape-Splitt*, distance 5 leagues, which course will carry you safe into the Harbour. In steering the said course, you will make a black Rock, which you leave on your starboard hand, distance one mile from *Cape-Splitt*. This Harbour is safe from all winds but S. W. which blows right in; but if you anchor in a Cove on the starboard side, and moor N. W. and S. E. you will lie safe from all winds.

Directions for Pleasant-River.

WHEN you come from the Westward, and bound to Pleasant River, in passing by *Titmanan* bring it to bear S. W. b. S. and steer N. E. b. N. 5 leagues distance. In steering said course, if it is clear weather you will see Capt. *Waffes'* house open between the Island and main land; but this passage will not do at low water. You must leave this Island (and a high dry Ledge of Rocks that lies to the Westward of the Island) on your starboard hand; when you pass the bare Ledge, you will see a bare Isle, which you leave on your starboard hand; then you may haul up for Capt. *Waffes'* house and anchor, and take a pilot for *Pleasant-River*, as it is not safe going without one, except you are well acquainted.

Narrow-Guages is one mile to the Westward of *Pleasant-River*, too difficult to be described, as there are sundry small Islands at the mouth of the Harbour or Bay. The best way for a stranger is to go into *Cape-Splitt Harbour*, and get a pilot, as there is no difficulty in going into *Cape-Splitt* in the day time, keeping the larboard hand best on board.

Directions for Moose-Peck-Reach.

WHEN you come from the Westward, and pass *Ladle-Island*, on your larboard hand, steer N. E. b. N. for *Tibbet's Island*, which you leave on your larboard hand. When you come to the East end of said Island, give it a good birth, for at low water there is a Ledge of Rocks that lie a cable's length to the S. E. of said Island. When you pass this Island, and bring *Moose-Peck-Reach* open, you may steer E. for Mr. *Beals'* house, but you must keep the starboard hand best on board, for there is a Rock that lies about the middle of the sound, which has not above two feet of water on it at low water. You may anchor to the Westward of Mr. *Beals'* house.

Directions going through Moose-Peck Reach.

WHEN bound to the Eastward, over *Moose-Peck-Bar*, which you must not cross before two hours flood, you steer for **Kelly's Coffee-House*, which lies on the larboard hand as you go to the Eastward. When you are entering on the Bar, you will bring a bushy tree right against *Kelly's house*, which stands on the point. Your course over the Bar is East. You leave the *Virgin's-Breasts* on your larboard hand; but if you are bound to *Chandler's-River*, you will leave the *Virgin's-Breasts* on your starboard hand, and *Rogue's-Island* on the same hand. There is a muddy Bar that lies between *Rogue's-Island* and the main land, but has water enough on it at two hours flood. *Rogue's-Island* has a good harbour at the N. W. of it, safe from all Easterly winds, and a small distance from *Chandler's-River*.

When you go over *Moose-Peck-Bar*, bound to *Machias*, you leave the *Virgin's-Breasts* on your larboard hand, keeping your course East, and *Ragged-Arse* on your starboard hand, you must keep *Libby's-Island* open to the Southward of *Ragged-Arse*. [N. B. This *Ragged-Arse* is a bare rock, which you leave on your starboard; but you may leave it on your larboard hand, and steer E. S. E. for *Libby's-Island*.

Directions for sailing into Georges'-River.

WHEN bound from the westward to *Georges'-River* you must go to the southward of *Damiscove Islands*, and steer N. N. E. 3 leagues for *Penmequid Point*; and when said Point bears W. S. W. you must steer E. N. E. 3 leagues for the River. In steering the above courses you will see *Franklin's Island* on your starboard hand, which appears round and covered with trees; but before you come up with said Island you will make *Egg-Rock*, which is high and may be seen 2 or 3 leagues distant, which you must leave on your larboard hand. When you come near this Rock you will see a dry Rock on your starboard hand, but continue your E. N. E. course without danger. If you have a head wind and are obliged to turn to windward, you must not, after passing *Penmequid Point*, stand to the northward of *Egg-Rock*, as there are two sunken ledges between said Point and Rock, which you must leave on your larboard hand. These ledges are never bare, but at low water, with the wind at the eastward, the water over them breaks very high. After you have passed *Franklin's-Island* steer E. N. E. about 2 leagues, keeping in the middle of the River, which course and distance will carry you in sight of Capt. Henderson's House and Store, (which are both red) together with a small wharf on your larboard hand, close to the river. After you have passed this house you must keep the starboard shore best on board as there is a ledge of Rocks lying off the larboard hand that extends two thirds across the river. You will also see two small houses and two barns on your starboard hand which you may run within a quarter of a mile of.

In running up or down this river you must not shut in Capt. Henderson's house with the north shore until you have passed the above-mentioned ledge. When you see a large broad Cove on your larboard hand you may be certain you are to the eastward of the ledge, and you will be also in

* *Mr. Kelley's house lies on the N. E. part of Moose-Peck-Reach.*

sight of three large buildings, the largest of which is a spacious House built by Henry Knox, Esq. When said house bears N. N. E. you may steer N. E. by N. and run said course till within a musket shot of it. The best time for a stranger to go up this river is at low water, as it is very crooked and the flat on each side can then be seen. The river runs from *Franklin's Island* from E. N. E. to N. E. by N. about 5 or 6 leagues distant.

N. B. When you go to the eastward of *Damascove-Island*, you bring *Seguine-Light-House* to bear W. S. W. and steer E. N. E. for *George's-River*.

Directions from *Townsend* to *Manheigin*.

WHEN you take your departure from *Squirrel-Island* you steer E. S. E. for the Island of *Manheigin*, keeping that course until the passage between *George's-Islands* and *Manheigin* bears N. E. You may then steer N. E. for *White-Head*, leaving *George's Islands* (which are three in number) on your larboard hand. The eastern Island has no trees on it. There are two dangerous rocks bearing due south from the middle of the middle Island called the *Old Man* and the *Old Woman*, which are bare before low water. They lie about one mile from the shore, and at high water when the wind blows off the land they do not appear. If you are bound to the eastward and the wind should take you ahead, when you are between *Manheigin* and *George's-Islands*, you bring the middle of *Manheigin* to bear south, and run in north, which course will carry you between the eastern *George's Island* and the middle Island. You may run as near as you wish to the eastern Island, but the middle Island has a ledge of rocks that lie to the eastward of it which are always dry, which you are to leave on your larboard hand. When you get to the northward of this Island you must haul to the westward and run up between it and the western Island, so as to bring the body of the middle Island to bear N. E. of you. Here you moor your vessel if you stay any time.

If you are bound to the eastward from this Island you may go to the northward of the eastern Island, but you must be careful of a ledge that lies to the eastward of said Island, which you must leave on your starboard hand; and when you bring *Manheigin* to bear S. W. you may go N. E. If night should come on, or the wind a-head you may haul up about N. E. b. N. for *Tennant's Harbour*, which lies about 3 leagues from *George's-Islands*. You cannot miss this harbour in the day time. You will make *Musqueto Harbour* which lies between two Islands covered with spruce trees. The entrance of the harbour is north. When you have passed this harbour you will run about two miles, keeping your course N. E. b. N. when you will pass by an Island with burnt trees on it, which you leave on your larboard hand, and two Islands on your starboard hand which also have burnt trees on them; then you must bring the harbour to bear W. N. W. before you enter. This is a good harbour provided you have neither cables or anchors, as you may save your vessel by running up to the head of it, on muddy bottom, which will be dry at low water.

Directions for *Townsend Harbour*.

IF you come from the westward and make *Seguine-Island* you must leave it on your larboard hand, give it a birth of about half a mile, and steer N. E. about two leagues, which course will carry you to *Squirrel-Island*; if it is day time you will see two large rocks* on your larboard hand, to which you give a small birth, and when you pass them you will make *Squirrel-Island*, which you leave on your starboard hand directing your course N. $\frac{1}{2}$ W. about 4 or 5 miles—the entrance of *Townsend* is narrow, and there is a small rocky island that is very low which you leave on your starboard hand, then you may haul to the N. E. or N. E. b. E. but in a dark night and thick weather I would recommend to anchor under the lee of *Squirrel-Island*, where you may make a good harbour with any wind that blows, as you may go round this island with any vessel whatever: but in the day time there is not the least danger in going in, only follow the above directions and you may anchor in the N. E. or the S. W. side, but the N. E. harbour is the best and safest with all winds. In going to the N. E. harbour you will leave a small island on your larboard hand, which bring to bear S. W. and you will be safe from all winds, and if you lose your cables and anchors you may run your vessel up to the head of the harbour.

If you fall into the eastward and make the Island of *Manheigin*, bring it to bear E. S. E. and run W. N. W. for *Townsend*, 8 leagues distant. In running to this harbour from the eastward, you leave all *Damascove-Islands* on your larboard hand. The harbour is bold, but you must be careful if you should go about, not to stand too near the starboard hand which lies near *Damoriscotti-River*. When you pass *Fisherman's-Island* you continue your course W. N. W. for the middle of *Squirrel-Island*, which you will make right a-head, as there are several ledges of sunken rocks on your starboard hand. When you pass *Damoriscotti-River*, you may go within a quarter of a mile of *Squirrel-Islands*, but with a fair wind give it a birth of half a mile and then steer N. W. for the harbour, and follow the directions you have for going into the harbour of *Townsend*, where you may lie safe from all wind.

Directions for *Kennebeck* and *Sheepsfoot Rivers*.

IF you come from the westward, bring *Cape-Elizabeth* to bear west and steer east for *Seguine Island* ten leagues—If you are bound into *Kennebeck* river, † you must steer E. $\frac{1}{2}$ N. and leave said island on your starboard hand giving it a birth of about half a mile, and as soon as you bring said island to bear south, you steer due north which course will carry you into *Kennebeck* river. You must have regard to the tide, for the tide of ebb sets out very strong due south, right on *Seguine Island*, therefore if you have not a good

* Called the Cuckolds.

† This is one of the principal rivers in the District of Maine. Thirty miles from the Chops, *Swan-Island*, 7 miles long, divides the water of the river, on both sides of which it is navigable, but the channel on the east side of it is most used.

breeze of wind you cannot stem the tide, as it sets 4 or 5 knots an hour. When you come into the entrance of *Kennebeck-River*, your course is N. W. to the *Sugar-Loaves*, $\frac{1}{4}$ of a mile distant. Leave the *Sugar-Loaves* on your starboard hand, from which your course is N. N. W. 3 leagues to *Cock's-Head*: this *Cock's-Head* is a very high bluff of rocks which you leave on your larboard hand; but be careful of a shoal flat that lies on your larboard hand, before you come to *Cock's-Head*. Keep nearest to the starboard shore. In case the wind and tide should be against you, you may anchor to the southward of *Perkins'-Island*, which lies on the starboard hand, where you may lie safe after bringing the Island to bear north of you; but with a fair wind and tide, you may proceed to *Parker's-Flats*, which lie a little above *Cock's-Head*. This river is not to be attempted above *Parker's-Flats*, on account of the strength of the tide and crookedness of the channel, unless you are well acquainted, or have a pilot.

If you are bound to *Sheepscut River*, from the westward, and make the Island of *Seguine*, you may leave the Island on your starboard hand, give it a birth of half a mile, and when you pass it to the eastward you must bring it to bear S. W. b. S. and steer N. E. b. N. which course will carry you to *Ebenicook Harbour* distant 3 leagues; this harbour is very narrow at the entrance but makes a large basin when you get into it—in the entrance it lies E. N. E. You cannot get in here with a N. E. or easterly wind, but must have the wind south or westerly.: after you get into this harbour you must haul up N. E. or N. E. b. N. for there are several sunken rocks on the starboard hand as you go in which you are to avoid. The best anchorage is against Capt. SMITH'S wharf, where are four fathoms, muddy bottom; and you will lie safe from all winds. But if you are bound up *Sheepscut River* in a large vessel, and come from the westward, you must go to the southward of *Seguine Island*, steering about N. E. or N. E. b. E. one league, and when the river bears north or north a little westerly, you may run north, and must keep the starboard hand best on-board; there are many rocks and ledges, some of them above, and some under water, which are all to the eastward of *Seguine*: when you get up as high as *Ebenicook* you leave the two *Mark-Islands* on your larboard hand, keeping your course north, a little easterly, but if you only come here to make a harbour, when you get up to Capt *Holmgson's* you will see a bare ledge on your larboard hand if it is low water, which is covered at high water; you may anchor in 8 fathoms to the northward of it.

If you want to go up to *Wiscasset Point*, you must keep your starboard hand best aboard north easterly till you come to *Cross River*, which you leave on your starboard hand. You will not attempt to go up to *Wiscasset Point* with a head wind and tide of ebb, for it is three leagues from *Cross River*, but when you have a fair wind and tide, you may proceed without fear. This river is narrow and lies more to the westward; when you are about a mile or a mile and an half up you must keep your larboard hand best aboard for there is a ledge of rocks which reaches near half way across the river, which are on your starboard hand, and the rock near the middle is covered at high water, but may be seen two hours before. The river runs strait to *Decker's Narrows*, then it turns round to the westward: When you enter these narrows you may see the town. In case you should go up in the night, you must be careful of two large rocks that lie W. S. W. of these narrows; the tide of flood sets very strong for them, and they are never covered; you may go on either side of them, and may anchor in 10 or 12 fathoms water, muddy bottom.

It is high water here at full and change of the moon about three quarters of an hour sooner than at Boston.

Directions for sailing into *New-Meadows*.

THIS River bears N. E. eight leagues distant from *Cape-Elizabeth*, and about one league from *Small Point*. If you should fall into this Bay with the wind at S. E. or S. S. E. and bound to the Eastward, you may make a good harbour in the above river. In standing to the northward, you will make a large round Island on your starboard hand, covered with spruce trees, together with two large Rocks, one called the *Brown Cow*, and the other the *White Bull*, which are some distance from each other. You must leave the *Brown Cow* on your starboard, and the *White Bull* on your larboard hand, the latter of which you may go within a cable's length of, and when you have passed it, must stand over for *Horse-Island*, that lies on the starboard, which has a house on it, that you may go within a quarter of a mile of. To the westward of the Island lies a large rock which is covered at high water, but bare at half tide; you may go on either side of it when it is in sight, but the widest passage is to the eastward. When you have passed this rock steer N. by W. or N. N. W. which course will carry you up with a large Island called *Bear Island*, which is covered with Spruce and Birch Trees. When you have passed this Island about one quarter of a mile, you may haul in for the starboard shore and anchor in 5 or 6 fathoms water. This is the best place to anchor with the wind at S. S. E. or East, but be careful of a ledge of Rocks, that run to the northward of this Island about half a mile off. You may anchor in this Bay according as the wind may be; if it should be at the westward you may anchor on the west side of the Bay; and if to the eastward anchor on the east side. If you have lost your cables and anchors there is a large Cove on the starboard hand, about two miles from *Bear Island*, bearing about North, which is sufficient to hold 30 or 40 sail of vessels. It is land-locked all round, so that no wind can damage a vessel after she gets into it.

Directions for *Huffey's Sound*.

IF you come from the eastward and make *Seguine Island*, bring it to bear east and steer west for *Huffey's Sound*, if you have a fair wind and day light, as you have nothing but Islands on your starboard hand. The tide of flood sets very strong in between these Islands; when you get within two miles of *Huffey's Sound* you will make two Islands which have no trees on them, called *Green-Islands*—you continue your course till you make *Huffey's Sound* bearing N. N. E. then you may steer in with your course N. N. E.

There is a large sound called *Broad Sound*, about half way between *Seguine* and *Huffey's Sound*: you leave *Merrikeneck Island* on your starboard and *Half-way-rock* on your larboard hand—but this sound has several rocks under water, and is not fit for strangers to go into.

When you pass the two Islands after entering *Huffey's Sound* you leave three Islands on your larboard and two islands on your starboard hand; the northern Island on your starboard is called *Smith's Island*: when you pass said Island about $\frac{1}{2}$ of a mile you may haul away E. N. E. till you shut in

said Island to the S. E. then you may anchor in 8 or 9 fathoms, muddy bottom.—*Hog Island* to the S. W.—*Basket Island* to the N. W.—*Great Gabegue Island* to the N. E.—and *Smith's Island* to the S. E. Here you may moor 200 sail of ships safe from all winds; and when wind and tide serves, you may be out to sea in one hour.

Directions for Portland Harbour.

THE last summer the harbour of *Portland* was buoyed out. In December last, three of the buoys were driven from their moorings, but are now (August, 1800) replaced, and will be observed as follows:—

In coming from the south-westward, when within half a mile of **Cape-Elizabeth*, the red buoy on *Broad-Cove-Rock* may be seen; it bears N. N. E. from the pitch of the Cape, distance $1\frac{1}{2}$ mile, and lies in 24 feet water. When up with this buoy leave it on the larboard hand, half a cable's length distance, and steer N. b. E. $\frac{1}{2}$ E. one mile, which will carry you up with the white buoy on *Trundy's-Reef*, which lies in 16 feet water. Giving it the same birth as the other, you may then run N. b. W. $\frac{1}{2}$ W. for *Portland* light-house, 3 miles distant. When up with the head on which the light-house stands, give it a small birth, and steer N. b. W. leaving *Bang's-Island* on the starboard hand, till you come to *House-Island*, the S. W. point of which bears N. from the light-house, distant 2 miles. Before you are up with this Island, the black buoy on *Spring-Point-Ledge* may be seen; it bears N. W. b. W. from the S. W. part of *House-Island*, distant half a mile, and lies in 14 feet water. [When up with this buoy, you open the town.] Giving it a small birth, you may haul up N. W. for the white buoy on *Stanford's-Ledge*; this buoy lies also in 14 feet water, and one mile distant from *Spring-Point-Ledge* buoy. Giving the white buoy a small birth, you may keep up midway the river, and anchor opposite the town, where you please, in safety.

[N. B. All the above buoys are to be left on the larboard hand in coming in, and the depth of water put down is at low water; the courses are by the compass.]

There are also two small buoys, on two ledges in *White-Head* passage, at the N. E. part of *Bang's-Island*. This passage is narrow, and but seldom used with large vessels. By keeping midway between the two buoys, the red on the starboard and the white on the larboard hand in coming in, you will not have less than 5 fathoms water. After passing the buoys, keep midway the passage, and run one mile distance, which will carry you into *Ship-Channel*, the same as if you had passed the light-house.

* There is a rock called *Alden's-Rock*, bearing E. S. E. from *Cape-Elizabeth*, 3 or 4 miles distant, with only 9 or 10 feet water on it at low water, and in rough weather the water over it frequently breaks; it lies nearly S. S. E. from the light-house, distant about 3 leagues.

† The Light-House is on a Point of land called *Portland-Head*, at the entrance of the harbour. It is a stone edifice 72 feet high, exclusive of the lanthorn, and stands in lat. 43. 39. N. long. 69. 52. W.

NOTE. If by any accident either of the buoys should be removed, the following directions for sailing into *Portland Harbour* will be found useful.

WHEN you come from the south-westward, and intend to go into *Portland*, give *Cape-Elizabeth* a birth of half a mile, and steer N. N. E. until you bring *Portland* light-house to bear N. N. W. when you must haul up N. N. W. if the wind will permit; but if you are in a large ship, and the wind at N. W. or W. N. W. your safest way is to continue your course N. N. E. which will carry you safe into *Huffey's-Sound*, allowing it to be tide of flood, as *Portland-Sound* is narrow but bold between the light-house and *Bang's-Island*, which is on your starboard hand. If you should turn into *Portland* in the night, in standing to the south-westward you must go about as soon as the light bears N. N. W. and in standing to the eastward, you must go about as soon as the light bears W. N. W. for there is a ledge of rocks that bears S. b. E. from *Portland* light-house, and also a low Island called *Ram-Island*, about east-northerly one mile distant from the light-house: but if you have a leading wind, you may go in without fear, keeping about middle of the channel way, and when abreast of the light steer about N. b. W. for *House-Island*, which you leave on your starboard hand; when you pass *House-Island*, bring it to bear S. E. b. E. and steer N. W. b. W. or W. N. W. with the tide of flood. In steering the above course, you will see a round bushy tree to the north of the town, and a house with a red roof and one chimney; bring the tree to the west of the house, which course will carry you up channel way in 6 or 7 fathoms of water; but when you come abreast of the fort, which stands on a hill, haul away W. S. W. as there is a shoal bank on your starboard hand, that has not more than 10 or 12 feet on it at high water, which you are to avoid. Here you will be careful of two ledges of rocks, one called *Spring-Point-Ledge*, two miles N. b. W. $\frac{1}{2}$ W. from the light-house, and the other three miles, bearing N. b. W. $\frac{1}{2}$ W. called *Stanford's-Ledge*, which has a buoy on it, and stretches off from your larboard hand near half a mile in length. They lie to the S. W. of *House-Island*, and are all bare at low water. If you are obliged to turn in here, they are much in the way, and when you are standing to the southward be careful of them. The marks will do in the day time, but are of no service in the night. There is a pilot who generally attends here. This harbour is very open to the wind at N. E. and E. N. E. If you should come in a dark night, your best way is to go into *Hog-Island-Road*, which may be done by steering as follows:—When you pass the light-house, steer N. b. W. until you pass *Bang's-Island*, which you will leave on your starboard hand: in steering this course, you will make *House-Island*, which you will leave on your larboard hand; when you are between both of these Islands, you steer N. E. b. E. till you come to the second Island on your starboard hand. If it is day time, you will see a large house on said Island, and may anchor as soon as abreast of it, in 10 or 12 fathoms, muddy bottom.

If you should fall into the eastward of *Portland*, and make the Island of *Seguine*, bring said Island to bear E. and steer W. which course you are to continue till you make *Portland* light to bear from N. W. to W. N. W. when you may run for it without fear.

N. B. You must have some regard to the tide of flood, which sets very strong between the Islands to the eastward of *Portland*.

Remarks on the *White Hills*.

THESE hills lie N. W. from *Portland* and N. N. W. from *Wood-Island*. You may see them in clear weather when no other part of the land is in sight. At the first sight they appear like a cloud and are always white, occasioned, it is said, by their being covered with white moss. They have been seen when in lat. 43, 10, N. being 46 miles from *Cape-Elizabeth*. The depth of water in the above latitude is 80 fathoms, muddy bottom. When you steer N. W. or W. N. W. from this latitude, you will make *Agamenticus-Hills*, and when bearing W. b. N. 6 or 7 leagues, they appear with three hills, and the smallest of them to the eastward. At the same time, you will make *Wells'-Hills*, bearing W. N. W. and when you are on the northern part of *Jeffrey's-Ledge*,* in 45 fathoms water, you will see the hills of *Agamenticus* bearing W. b. N. or W. N. W.

I would recommend to all mariners, in coming from the eastward, not to go to the northward of lat. 43, 10 N. in thick weather, unless they are well acquainted, and judge themselves to be to the westward of *Boon-Island Ledge*, as this has proved fatal to many who were unacquainted.

Between *Jeffrey's* and the *Isle of Shoals* you will have 70 and 75 fathoms water, muddy bottom, and a strong current setting to the S. W. You may see the *Isle of Shoals* 5 or 6 leagues when you are to the eastward of them, but in thick weather you will see a wind-mill first, which is on one of the Islands. When you go to the westward of these Islands, and are bound to *Portsmouth* or *Newburyport*, give them three miles distance, as there is a large rock, called *Innes-Rock*, two miles off, bearing S. W. b. S. from *Star-Island*, which is bare before low water.

Directions from Cape-Porpoise to Wood-Island.

WOOD-ISLAND, which is high woody land, and very even, lies N. E. 3 leagues distant from *Cape-Porpoise*. You may go into this harbour either at the eastward or westward of the Island. There are several rocks to the westward of the Island, and likewise a long bar which lies to the S. W. about one quarter of a mile distant. When you have the wind to the southward, you may lay your course in, and anchor near *Stage-Island*; this is called *Winter-Harbour*. You may go in the eastern way, and have room to turn your vessel, (which is an advantage you cannot have in going in to the westward) but here you are exposed to the wind at N. E. or E. N. E. but if your cables and anchors are not good, you may run into the Pool, and lie safe from all winds.

Saco lies about a league to the northwest, but it is a barred place, and has not above 10 feet at high water, which makes it not fit for a stranger to go in.

The next port to *Wood-Island* is *Richman's-Island*, which lies about N. E. northerly four leagues; this place is only fit for small vessels, such as coasters—but few vessels put in here, it being only one league to the west-

* *Jeffrey's-Ledge* lies between 42, 40, and 43, 37, 30, North Lat. and between 68, 52, 30, and 69, 45, West Long.

ward of *Portland*, which is at present one of the principal ports in the eastern country.

In sailing by *Richman's-Island* you must be careful of a sunken ledge, called *Watch-Ledge*, that lies off about S. E. near half a mile from the N. E. end of the Island; it does not show itself, except the wind blows fresh; but you need not go so near the Island unless you have a scant wind, or turning to windward.

Directions to sail from Cape-Neddock to Cape-Parpoise.

YOUR course from *Cape-Neddock* to *Cape-Parpoise* is N. E. distant 7 leagues. *Cape-Parpoise* is a bad harbour, and not to be attempted unless you are well acquainted or in distress. In going in, you must leave two small Islands on your larboard hand, and three on your starboard. It may be known by the high land of *Kennebunk*, which lies to the N. W. of it. When the *harbour bears N. W. you must haul in, but be careful of the point on your larboard hand, and not go too near it, as it is very rocky. As soon as you are in the harbour, and clear of the point of rocks on your starboard hand, your course must be N. W. about two cables length, when you must come too, and moor N. E. and S. W. A vessel that draws 10 feet will be aground at low water. The harbour is so narrow that a vessel cannot turn round—is within 100 yards of the sea, and secure from all winds, whether you have anchors or not.

Directions for Portsmouth, (New-Hampshire.)

WHEN you fall into the eastward and make *Cape-Neddock*, and are bound to *Portsmouth*, when within half a mile of said *Cape*, your course is S. S. W. 4 leagues which course you are to continue till you bring *Portsmouth* †Light-House to bear north, and run within $\frac{1}{4}$ of a mile of the Light, then steer N. b. E. or N. N. E. until you are abreast of the Light, when you must steer N. W. until the Light bears S. S. E. and anchor in 9 fathoms at low water, good bottom.

If, when coming from sea, you make the *Isle of Shoals*, and you are to the eastward of them, you must run for them till within one mile of the eastern Isle, then steer W. N. W. until *Portsmouth* Light-House bears North, then follow your directions as above.

If you come to the westward of the *Isle of Shoals*, give it a good birth and steer N. $\frac{1}{2}$ W. which course will carry you up with the Light as above directed. If you have a head wind and are obliged to beat into the

* At the eastern side of the harbour lies a ledge on which it always breaks.

† The Light-House has but one Light in it and stands on Fort-Point, (*New-Castle-Island*) at the entrance of the harbour. N. by W. and S. by E. Moon makes High Water at full and change.

harbour, you must observe there is a funken Rock, at the east side of the the entrance, called *Kitt's-Rock*, which has a buoy on it, and S. by W. one quarter of a mile from the Light-House lies a funken Rock called *Stillman's Rock*, which also has a Buoy on it. Give the buoys a good birth and there is no danger.

When you come from the S. W. and make *Cape Ann* and to the eastward of the *Dry-Salvages*, bring said *Salvage* to bear S. b. E. and steer N. b. W. or N. $\frac{1}{2}$ W. In steering said course you will make the *Isle of Shoals* from which you may take a new departure—bring *Star-Island* to bear S. S. E. and run N. N. W. but if the wind should come to the northward, and you are obliged to turn into said port, you must stand to the westward no farther than to bring the Light to bear north, till you get within *Odiorne's Point*, and when standing to the eastward to go about as soon as the Light-House bears N. N. W. until you get within *Wood-Island*. Be careful of *Odiorne's-Point*, coming from the south westward, for it lies off more than half a mile, with funken rocks which do not shew themselves when the wind is off the land—likewise in standing to the east, you must be careful of the *Whale's Back*, which lies S. S. W. of *Wood-Island*, and is covered at half tide. If you are bound to the eastward from this port you steer S. b. E. one league from the Light House, then steer N. N. E. for *Old York* or *Cape Neddock*, which is four leagues from *Portsmouth*: but if the wind should get to the northward you must be careful of *York Ledge*, which bears from *Swett's Point*, S. E. distant 2 leagues. There is a funken ledge that lies S. W. one mile from *York Ledge*—it is never bare, but always breaks at low water, and is called the *Tray Angle*. Some part of *York Ledge* is bare at half tide.

The next you come to is *Boon-Island* which lies S. E. from *Cape Neddock* or the *Nubble* so called; when you pass *Boon Island*, bound to the eastward, and take the wind to the N. N. E. you must take care of a ledge of rocks due north from *Boon Island*, one mile distant.

[N. B. I have past this place several times in the course of forty years but never discovered the ledge till the year 1783, when being bound to the eastward, the wind took me from the westward, but the vessel having no more than steerage way, I hove over a line to catch a fish, and found I had 24 fathoms water, sandy bottom, and in a few minutes I had but 10 feet of water, and my vessel drawing nine: all that saved me from striking was, that the water being entirely smooth, the current set me to the eastward, and I got into 24 fathoms within the length of the vessel from where I foundered and had but 10 feet.]

The worst ledge that I know on our Eastern Shore, is *Boon Island Ledge*, which bears E. S. E. from *Boon Island* distant one league; and from *Aquamanticus Hill*, it bears S. E. 5 or 6 leagues.—It is not safe for strangers to go too near this ledge, for several of the rocks are to be seen, long before low water.

When you come in from sea, and make *Aquamanticus-Hill* bearing N. W. b. N. you are then to the westward of *Boon-Island Ledge*; but when the said hill bears N. W. b. W. you may be sure you are to the eastward of it.

Directions for Newburyport and Ipswich Bay.

WHEN you come round *Cape-Ann*, and are two miles to the northward of the dry *Salvage-Rock*, bring said rock to bear S. E. and steer N. W. 6 leagues, which course and distance will carry you up with *Newburyport-Bar*. You must bring the * lights to bear W. b. S. and anchor in 11 or 12 fathoms water, if the tide will not permit your coming in. There are several pilots belonging to this harbour, who will, if possible, be outside the bar, to take command of every vessel that wishes for their assistance. If they cannot, you must keep the lights in range, and run for them till within a cable's length of the eastern light, when you must haul to the westward, and anchor between the two lights, in 4 fathoms of water.† If your cables and anchors are not good, you may bring the western light-house to bear S. E. b. S. and run N. W. b. N. for *Salisbury-Point*; but as soon as you make said Point, you must haul up N. W. which course will carry you clear of ‡ *Badger's*, *Black-Rocks*, and the *Hump-Sands*. The *Hump-Sands* lie S. W. from *Salisbury-Point*, which makes the channel very narrow and difficult for strangers. When you pass the *Black-Rocks*, you must haul up W. b. S. $\frac{1}{2}$ S. which will bring you in channel way and good anchorage. And if it be in the night or dark weather, when you judge yourself about half a mile from *Black-Rocks*, you may come too with safety. I would recommend to all masters, whether they belong to *Newburyport* or not, to avoid coming to this port in a gale of easterly winds, except they are well acquainted, and have a good prospect of getting in, as every person that belongs there must know that no pilot can get over the bar when it blows a gale from the eastward. And if you should make *Cape-Ann* lights, and bring them to bear S. b. E. or the *Dry Salvages* to bear S. b. E. you may run with safety N. b. W. or N. $\frac{1}{2}$ W.

* The Light-Houses stand on the North end of *Plumb-Island*, and are so constructed that they may be removed with little difficulty. The Eastern Light is 50 feet high and the Western Light 44. This Island is about 9 miles long and half a mile broad, extending from the entrance of *Ipswich River* on the south, nearly a north course to the mouth of *Merrimack-River*, and is separated from the main land by a narrow sound, called *Plumb-Island-River*. On the sea shore of this Island and on *Salisbury-Beach* the Marine Society, and other gentlemen of *Newburyport* have humanely erected several small houses, furnished with fuel and other conveniences for the relief of Mariners who may be shipwrecked on the coast. The north end lies in lat. 43. 4, N. and long. 70, 47, W.

† A vessel that draws ten feet water may come in at two-thirds flood. They should always observe to keep to the windward of the bar, unless the wind should be fair. If the sea is so great as to prevent the pilot's getting over, a signal will be made by him, when you must run direct for his boat, keeping the lights in range, which will carry you safe over.

‡ *Badger's-Rocks* bear N. W. $\frac{1}{2}$ N. from the light-houses, distant half a mile, and are covered at two-thirds flood, which you leave on your starboard hand. *Black-Rocks* bear N. W. from the light-houses three quarters of a mile distant, are always dry, which you also leave on your starboard hand.—*Half-Tide-Rocks* bear W. b. S. $\frac{1}{4}$ S. from *Black-Rocks*, distant one mile and a half, are bare at half tide, on which is placed a buoy, that you leave on your larboard hand. *North-Rocks* (which are seen only at very low tides) bear W. b. S. from *Black-Rocks*, distant one mile and a half, which also have a buoy on them, which you leave on your starboard hand, between which and *Half-Tide-Rocks* is the channel.

distant ten leagues from *Cape-Ann* to *Portsmouth*. In running the above course you will make the *Isle of Shoals*, if it is any way clear, from which you take a new departure; when you pass the said Islands, you bring *Star-Island* to bear S. S. E. and then steer N. N. W. distant from said Island three leagues to *Portsmouth*. (*Star-Island* is the S. W. Island.) There is a very good harbour in the *Isle of Shoals* from the wind from north-easterly round to southerly, and you may lie land locked with any of them; but if the wind hauls to the S. W. or W. N. W. you may run out between *Smutty-Nose-Island*, which has a wind-mill on it, and *Hog-Island*, where there is water enough for a first-rate man of war; and where you anchor, you have 12 fathoms, muddy bottom.

In going into *Portsmouth*, you may bring the light-house to bear N. N. W. till you get within *Wood-Island*; then you may haul away N. or N. b. E. till you pass the light-house; you may then haul up W. N. W. or N. W. b. W. and bring the light-house point to shut in with *Wood-Island*, where you will be safe from all winds, and may anchor in 8 or 9 fathoms water.

When you come from the eastward, with the wind at east or E. S. E. with which winds you cannot weather away *Cape-Ann*, when you are at the northward of the *Isle of Shoals*, your only shift is to *Portsmouth*, and you are obliged to run so far to the westward as to bring said port to bear N. N. W. and in general the wind at east at sea hauls two or three points to the northward, which makes it a head wind.

N. B. The masters of vessels out of *Newburyport* ought in general to be acquainted with the harbour of **Squam*. When a vessel at anchor off *Newburyport-Bar* parts a cable and loses an anchor with the wind at N. E. or E. N. E. if she can carry double reefed sails, she may run S. S. E. five leagues, which course, if made good, will carry her a little to the eastward of *Squam-Bar*; and if the weather is so clear as to see half a mile when you make the land to the eastward of *Squam* you may run within a cable's length of the shore; your course is S. S. W.

If you are bound to *Ipswich*, your course from *Hallowboat-Point* to the mouth of the channel that leads into the harbour is W. $\frac{1}{2}$ N. distant about 8 miles. There are two *Beacons* erected a small distance to the southward of *Castle-Hill*, which may be run for, but as the bar is often removed by storms, it is not safe to run into the harbour unless acquainted.

Directions for sailing into Squam Harbour.

SQUAM-BAR is from *Hallowboat-Point*, (which is the N. E. end of *Cape-Ann*) from W. S. W. to S. W. distant about two leagues. There is nothing to hurt you in running from *Hallowboat-Point* to *Squam-Bar*, except *Plumb-Cove-Ledge*, which lies N. N. E. off said bar, distant half a mile. After you have passed this ledge, (which shows itself except at high tide) you will pass another Cove called *Hodgkin's-Cove*, when you will come up with *Davis'-Neck* so called. When up with this Neck, haul S. W. or S. W. b. W. for **Wigwam Point*, which lies on the larboard hand. Continue your course to the S. W. till you have the river open, and to bear S. S. W. when you will see one pine tree on *Coffin's-Beach*, which is on the starboard hand of the river, on the sand knowls, if the weather is clear. Bring this tree to

* A wooden light-house is to be erected on this point, on the place where the beacon now stands, 45 feet high, of an octagonal form, and painted white.

bear S. S. W. and run for *Wigwam-Point* which you must keep close aboard (within a biscuit throw.) When you are off the bar, you will see some trees up the river, on the larboard hand, which you must keep open to the westward of the beacon (or light-house) on *Wigwam-Point* about a sail's breadth, which will carry you clear of *Harridon's-Rock*, which lies on the eastern side of the river, going into *Squam*, about two cables length short of *Wigwam-Point*. This is a flat rock that has not more than five feet of water on it at low water, but it is very bold all round it. After you have passed *Wigwam-Point*, haul a little to the westward, toward the bar, to avoid *Lobster's-Rocks* (so called) which lie about one and a half cables length within *Wigwam-Point*, and are covered, except at low tide. After you have passed these rocks, haul away more to the southward, keeping in the middle till you come just above the first point on your larboard hand, when you may come to; but if you have no anchors, go round the point, and run your vessel ashore on the flats, without any injury or danger, on the starboard hand—or running up to *Capt. Gee's wharf*. There are seven feet of water on this bar at low water.

Directions to go into Cape-Ann Harbour.

WHEN you come from the eastward, and make † *Cape-Ann* lights, if in the night, bring them to bear S. W. and run direct for them, which course will carry you within the *Londoner*, and when you pass the said rocks, bring the two lights in one, at which time they will bear N. b. E. $\frac{3}{4}$ E. and S. b. W. $\frac{3}{4}$ W. and then steer S. S. W. $\frac{1}{4}$ W. keeping said course about one mile, which will carry you clear of *Milk-Island*, which is very low, and cannot be seen in a dark night. When you judge yourself to the westward of said Island, you haul to the westward, until you bring the lights to bear E. N. E. when you must steer W. S. W. about five miles, which course will carry you to *Eastern-Point*. When you pass said point, keep your course W. N. W. until you bring *Cape-Ann* harbour to bear north, when your course is N. E.

If you want to go inside the *Salvages*, keep close aboard ‡ *Hallowboat Point*, and steer S. S. E. for *Strait's-Mouth-Island*, but be careful to avoid *Avery's-Rock*, by keeping the lights on the dry point ~~of~~ *Strait's-Mouth-Island* till you get up close aboard, then haul round the point, and S. S. E. will carry you to the lights. To avoid the *Londoner*, you must keep the lights close aboard the body of the Island on which they stand; the *Londoner* lies half a mile off, breaks at all times of tide, is quite dry at low water, and bears E. S. E. from the middle of *Thatcher's-Island*. A long shoal runs off N. E. half a mile distant from the *Londoner*. Between the *Londoner* and *Thatcher's-Island* there are three fathoms and a half at low water. From the *Salvages* to *Hallowboat-Point* and *Sandy-Bay* there lies a large spot of flat ground, which at low water will take up a small vessel. Outside the *Salvages* is very bold. *Hallowboat-Point* bears from the *Salvages* W. N. W. $2\frac{1}{2}$ miles distant,

† *Cape-Ann* light-houses are built on *Thatcher's-Island*, which lies about two miles east of the south-east point of *Cape-Ann*, and forms the northern limit of *Massachusetts-Bay*.

‡ This point has a tree on the eastern part of it.

and the *Salvages* bear from the lights N. N. E. 3 miles distant. If the wind be to the eastward, you may anchor in a bay that makes between *Ten-Pound-Island* and *Eastern-Point*, the latter bearing S. b. E. and *Ten-Pound Island* bearing north. Here you may anchor in 4 fathoms water, on muddy bottom. This is a good harbour against easterly winds, but if the wind be S. W. you are exposed to it, in which case you may clear away *Ten-Pound Island*, leaving said Island on your starboard hand, and steer into the harbour as above directed, and come too, near *Five-Pound-Island*.

NOTE. In sailing from *Cape-Ann* lights to *Cape-Ann* harbour, you will first open *Braces-Cove*, before you come up with the harbour, which will, when open, bear N. N. W. which you are to avoid. *Cape-Ann* harbour lies one mile further to the westward, and when open bears N. N. E.

Directions for Salem, Beverly and Manchester Harbours.

VESSELS inward bound and falling in with *Cape-Ann*, must observe the following directions, viz. When abreast of *Cape-Ann* Lights, bearing N. N. W. about two miles distant, steer W. S. W. about three leagues, which will carry them up with the eastern point of *Cape-Ann*, then steer W. b. S. $7\frac{1}{2}$ miles, which will carry them up with the Lights on *Baker's-Island*.*

Ships bound to *Salem* and falling to the southward of *Boston Bay* and running for the Lights, must, when they have made them, keep the north or lower Light open to the eastward of the southern Light, and run for them, which will carry them to the eastward and clear of the south breaker of *Baker's-Island*, which bears from the Lights S. E. b. S. one mile and a half distant.

Vessels bound to *Salem*, having made the Lights with a westerly wind, in beating up, must not stand to the southward or westward, further than to shut one Light in with the other, on account of the south breaker, nor to the northward further than to bring the Lights to bear W. b. S. $\frac{1}{2}$ S. on account of *Gale's-Ledge*, which bears from the Lights N. E. $\frac{1}{2}$ E. one mile and three quarters distant.

In going into *Salem* and being up with the Lights, give *Baker's-Island* a berth of near one quarter of a mile, then steer W. b. N. and you will pass the † *Misery-Island*, leaving it on your starboard hand. Continue your

* *Baker's-Island* lies on the south side of the principal entrance of *Salem Harbour*, is about $\frac{3}{8}$ of a mile in length, from N. to S. bearing E. from *Fort Pickering*, distant about 4 miles, and 5 miles from the town of *Salem*. The light-house, which stands on this island, has two lights on it which bear N. W. $\frac{1}{4}$ W. and S. E. $\frac{1}{4}$ E. at the distance of 40 feet from each other. The water is deep near the island, but there is no convenient landing place. The N. & E. sides are high and rocky. There is a small channel between the S. Rocks and the *Dry Breakers*, but is safe only to those who are acquainted with it.

† *Misery-Island* lies from *Baker's-Island* about 1 mile, is joined by a Bar to *Little Misery*, which makes the north side of the channel opposite *Baker's-Island*. *Misery-Island* or *Great-Misery*, is 174 rods in length from N. to S. and 96 rods in breadth. *Little-Misery* is 40 rods in length, with its most western point projecting into the channel.

course W. b. N. one mile and a half, when you will have passed * *Bowditch's-Ledge* leaving it on your larboard hand, where any stranger may anchor in safety, in about five fathoms water, good anchoring ground. But, if you choose to proceed into *Salem* harbour, steer west until abreast of the † *Haste*, which you will leave on your larboard hand about half a mile distant, then steer S. W. b. W. which will carry you into *Salem* harbour.

To enter *Salem* Channel by the Southern way, between ‡ *Cat-Island* and § *Black-Rock*, which bears easterly of the Eastern rock of *Cat-Island*, distant $\frac{1}{2}$ a mile; the course is N. W. b. N. till you pass the *Haste*, a broken rock in Ship Channel. It is best to keep in mid channel to avoid || *Eagle-Island Bar*, which tends N. W. from the Island, and to avoid *Coney-Island Ledge*, which lies S. E. from ¶ *Coney-Island*—you then enter Ship Channel. The *Brimbles* lie between *Eagle-Island* and *Black-Rock*, not half a mile from *Eagle-Island*, and bearing N. N. W. $\frac{3}{4}$ of a mile from *Black-Rock*. They appear at half tide.

If you pass into *Salem* harbour by the southern way, get *Eagle-Island* well open with *Baker's-Island*, and steer for *Naugus'-Head*, or the most northern height of land on *Marblehead*, or the south side of *Salem* harbour, in from 4 to 6 fathoms at full tide. You then pass north of the *Endeavours*, which are large beds of sunken rocks, and which have not one fathom water upon them at common ebb. To find the *Endeavours*, bring the house on the brow of the hill, westward of *Peach's-Point*, or the extreme easterly point of *Marblehead*, over the bold rock lying in the cove, or upon *Scot's Beach*, and bring *Gray's-Rock* in with *Cat-Island*. The *Inner-Endeavours* are not more than a quarter of a mile from shore, with 5 feet at common ebb, on the shoalest of them. There is an opening between these and the outer, which gives a narrow channel; on the outer are 7 feet at common ebb. Westward of these are sunken rocks, of which the outermost and shoalest give $1\frac{1}{2}$ fathom at common ebb, and then the barn over *Scot's-Beach* was

* *Bowditch's Ledge* bears from *Baker's-Island* light-house W. N. W. distant $1\frac{1}{4}$ miles.

† The *Haste-Rock* is a broken rock, lying near the channel, bearing from *Baker's-Island* light-house W. b. N. distant $2\frac{3}{4}$ miles, and $1\frac{1}{4}$ miles from *Salem* neck.

‡ *Cat-Island* is situated about S. W. b. W. from *Baker's-Island*, 2 miles distant, and about $1\frac{1}{4}$ miles from *Marblehead-Neck*, and ranges from *Baker's-Island* just clear of *Marblehead-Neck*. On the N. W. end is a high beach, directly opposite the point of *Marblehead*, called *Peach's-Point*. The shore is irregular and rocky. Beyond and on a line with the Island are two other heads, of nearly the same projection; and on the southern side are three high rocks, but not so large as the former. Two of them are connected with the Island, by bars of sand, out of water at the ebb; the other stands boldly up within these two, but more southerly.

§ *Black-Rock* bears from the light-house S. W. b. W. $\frac{1}{2}$ W. distant $1\frac{3}{4}$ miles.

|| *Eagle-Island* is about $1\frac{1}{2}$ miles from *Peach's-Point*. It lies nearly north and south, and bears from the light-house W. b. S. $\frac{1}{4}$ S. one mile distant; from a point on the south end runs the bar which tends westerly.

¶ *Coney-Island* is a small Island that lies near the mouth of *Salem* harbour; it bears from *Marblehead-Point* N. E. one mile distant; from *Fort-Pickering* on *Winter-Island* E. $\frac{1}{4}$ S. two miles distant; and from *Baker's-Island* light W. $\frac{1}{4}$ S. $2\frac{1}{2}$ miles distant.

west of the rock in the beach, and *Eagle-Island* just open with *Baker's-Island*—*Gray's-Rock* then just in with *Cat-Island*. On the opposite side of this channel, north of them, S. W. of *Coney-Island*, are two beds of sunken rocks, shewing the dry breakers clear between *Eagle-Island* and *Baker's-Island*; five feet were found upon them, and two fathoms near them, at common ebb.

If you enter by *Marblehead-Rock*, which lies between *Cat-Island* and *Marblehead-Neck*, not far from the rock on each side you have 6 fathoms. To avoid the *Kettle-Bottom*, which is a sunken bed of rocks, not half way over from *Gray's-Rock* to *Peachy-Head*, which is three quarters of a mile distant, keep within one eighth of a mile of *Gray's-Rock*, in from 7 to 9 fathoms. *Kettle-Bottom*, at common ebb, has from $1\frac{1}{2}$ to 2 fathoms. It may be found, by bringing a bold rock at the point opposite to *Orne's-Island*, under a large house with two chimnies, or so as to appear in the middle of the cove, and *Eagle-Island* so as to bear upon the south part of *Baker's-Island*.

If you enter by *Cat-Island*, on the western side, besides the barred rocks out of water, there are sunken rocks on the N. W. part of the Island. Keep well clear of the Island till you have passed it, and then you have from 4 to 9 fathoms till you reach the S. W. end of *Eagle-Island*, N. N. E. three quarters of a mile, and from 4 to 7 and 8 fathoms from *Cat-Island* east of *Gray's-Rock* till you reach *Coney-Island-Breakers*, above three quarters of a mile, in a N. W. course.

If you pass within the *Endeavours*, you may proceed from *Marblehead-Rock* within one eighth of a mile of the shore, till you reach the southern part of *Peachy-Head*. From it there is a ledge, out of water at half tide. Near to these bold rocks, 200 yards from the shore, is a narrow channel, having 11 feet at common ebb, between the ledge and a bed of sunken rocks which lie N. E. of the ledge, and extend one quarter of a mile from the shore. If you pass between the rocks off the ledge and the *Endeavours*, you must not open the marks for the *Endeavours*, and sail for *Peachy's-Point* in a westerly course.

If you pass the narrow channel between the ledge and sunken rocks to *Peach's-Point*, off *Dolliber's-Point*, or the point beyond the beach and rock, called *Scot's-Beach*, westward is *Pitman's-Rock*, 100 yards from the shore. The house is then over the middle of the beach, between the rock and *Dolliber's-Point*, and *Eagle* just up with *Baker's-Island*. It is a sharp rock, having 5 feet at common ebb, and 2 fathoms near it.

From *Peach's-Point* to *Fort-Pickering* is one and a quarter of a mile, N. N. W. in from 4 to 5 fathoms. To clear the *Aqua-Vita*, give the outer a good distance, lying north of a ledge on *Fluent's-Point*, or the point within *Dolliber's*. In going to *Beverly*, bring *Beverly* meeting-house over the eastern part of the hospital on the point of *Salem Neck*, and you leave the inner rocks 300 yards to the eastward. Being east of *Fort-Pickering*, to avoid *Abbot's-Rock*, and the ledge off the N. E. end of * *Winter-Island*, keep above one quarter of a mile from the shore. *Abbot's-Rock* is found by bringing *Castle-Hill* and *House* into the cove north of *Fort-Pickering*, and *Bev-*

* *Winter-Island* lies on the north side of the entrance of *Salem harbour*, about half a mile in length: the highest part is on the south of the Island, opposite a point of rocks on the † Neck. It has a store and wharf on the southern end, at the entrance of *Cat-Cove*. On the eastern point stands *Fort-Pickering*.

† The Neck is a point of land running north-eastwardly from the town about one mile.

erly meeting-house well in with *Juniper-Point*, or the S. E. point of *Salem-Neck*. *Abbot's-Rock* has 7 feet at common ebb. The mean of common tides is 12 feet.

To enter *Beverly* harbour, bring the *Haste* to bear E. S. E. and run W. N. W. about two miles and you reach *Beverly-Bar*, which is a spot of sand running out from the southern, or *Salem* side of the entrance, and has commonly a Beacon upon the head of it, above a quarter of a mile from the shore. The Bar has very shoal water on the eastern or outward side, near it, but good anchorage within. There is good water at the head of the Bar. Having passed the Bar, there is a sandy point from *Beverly*, or the northern side of the entrance, and beyond this point are the *Lobster-Rocks*, which bear from the head of the Bar west a little south, and not half a mile distant, and they are above water at half tide. To avoid this point, after having well cleared the Bar, you will steer towards *Ram-Horn-Rock*, which has also commonly a Beacon and is to be seen at half tide, bearing S. W. b. S. from the head of the bar one eighth of a mile distant. There are several fathoms of water within a vessel's length of *Ram-Horn-Rock*. Giving this a good birth, you then clear the sandy point and steer for the *Lobster-Rock* Beacon bearing from *Ram-Horn* Beacon N. W. b. W. distant about one quarter of a mile. Giving this a good birth, you are then opposite to the wharves, and may anchor in deep water and in a very safe and excellent harbour.

To enter *Manchester* harbour you must bring the Southern Light to bear S. $\frac{1}{2}$ E. and run N. one mile distant, where you may anchor on good bottom.

N. B. *Eastern-Point* bears from *Baker's-Island* lights E. b. N. $\frac{1}{2}$ N. $7\frac{1}{2}$ miles distant. *Halfway-Rock* bears from the lights S. 2° E. three miles distant. *Harding's-Rocks* bear from the lights W. $\frac{3}{4}$ N. distant three quarters of a mile.

Directions for sailing into Marblehead.

VESSELS inward bound, and falling in with the lights on *Thatcher's Island*, may observe the following directions, viz. *Thatcher's-Island-Ledge* bears from the body of the Island from E.S.E. to S.S.E. extending about 2 miles from the island. After getting the west light to bear N. $\frac{1}{2}$ W. you are to the westward of the ledge; then haul to the N. W. to bring the lights to bear N. E. b. E. and steer S. W. b. W. for the eastern point, which is about 6 miles distant from *Thatcher's-Island*. Then your course is W. b. S. distant 7 miles, for the lights on *Baker's-Island*.

Vessels bound to *Marblehead*, and falling to the southward, and running for the lights, after making them, must keep the north and lower one open to the eastward of the southern light, and run for them, which will carry them to the eastward, and clear of the south breakers, off *Baker's-Island*, which bears from the lights from S.E. $\frac{1}{4}$ S. to S.E. b. S. $\frac{1}{4}$ S. distant $2\frac{1}{2}$ miles.

Having made the lights with a westerly wind, and beating, when within $2\frac{1}{2}$ miles of them, you must not stand to the southward and westward so far as to shut the north light up with the south light, on account of the south

breakers; nor to the northward further than to bring the lights to bear W. b. S. $\frac{1}{2}$ S. on account of *Gale's-Ledge*, which bears from the lights N. E. $\frac{3}{4}$ E. distant $1\frac{3}{4}$ miles. Drawing near to the lights, take care of a ledge called the *Whale's-Back*, which bears from the lights N. b. E. distance four fifths of a mile.

In going into *Marblehead*, and being up with the lights, give the north point of *Baker's-Island* a birth of one quarter of a mile, or less. Having the lights one in with the other, you are up with the point. When the south light is open with the north light, you have then passed the point (leaving the *Misery-Island* on your starboard hand, which bears from the lights N. W. $\frac{1}{2}$ N. four fifths of a mile.) Then steer S. W. b. S. or S. S. W. until you bring the south light to bear N. E. b. E. $\frac{1}{2}$ E. then steer S. W. b. W. $\frac{1}{2}$ W. distance 3 miles, for *Marblehead* harbour. You will leave *Harding's-Rocks*, *Eagle-Island*, and *Gray's-Rock*, on the starboard hand; *Pope's-Head*, *Brimbles*, and north point of *Cat-Island*, on the larboard hand. The *Brimbles* bear from *Eagle-Island* S. S. E. $\frac{1}{2}$ E. distant half a mile; and *Gray's-Rock* from the north point of *Cat-Island* N. W. b. W. seven eighths of a mile.

Falling in with the south point of *Baker's-Island*, and blowing hard from the eastward, if you cannot avoid it, you may pass the point by keeping it well on board, say at the distance of from 20 to 50 fathoms from the shore, where you will have from 4 to 5 fathoms water. When up with the S. W. point, steer W. S. W. which will carry you between the North *Goosberry* and *Pope's-Head*, leaving the former on your larboard hand, and *Pope's-Head* on your starboard hand, between which you will have from $3\frac{1}{2}$ to 5 fathoms water. As soon as you have passed *Pope's-head*, haul to the northward, until the south light bears N. E. b. E. $\frac{1}{2}$ E. then steer S. W. b. W. $\frac{1}{2}$ W. for *Marblehead* harbour.

Vessels coming from the eastward, and running for *Halfway-Rock*,* must not bring the rock to bear to the southward of W. S. W. to avoid the south breaker, which bears from *Halfway-Rock* N. E. $\frac{1}{2}$ E. distant one mile. Being up with *Halfway-Rock*, and bound into *Marblehead*, bring the rock to bear E. b. S. $\frac{1}{2}$ S. and steer W. b. N. $\frac{1}{2}$ N. for *Fort-Head*, distant three miles, leaving *Cat-Island* on the starboard hand, which bears from *Halfway-Rock* W. N. W. distant $1\frac{3}{4}$ miles, and *Marblehead-Rock* on the larboard hand, which bears from *Halfway-Rock* W. $\frac{3}{4}$ N. distant 2 miles. *Black-Rock* bears from *Halfway-Rock* N. W. b. W. distant $1\frac{1}{2}$ mile. *Cat-Island-Rock* and *Point-Neck* bear east and west of each other, distant about one mile.

Vessels being up in *Boston-Bay*, may, by bringing the *Boston* light to bear S. S. W. run N. N. E. for *Marblehead-Rock*; they are distant from each other about 12 miles. *Halfway-Rock* and *Boston* light bear of each other S. W. and N. E. distant 15 miles.

Harding's-Rocks are covered at high water, and may be seen at quarter ebb. *Whale's-Back* is covered at high water, and may be seen at quarter ebb. *Gale's-Rocks* are seen only at low spring tides. The south breakers off *Baker's-Island* are always covered. The *Brimbles* are covered at high water, and are seen at half tide. *Black-Rock* is always out of water, but low. *Cat-Island-Rock*, *Halfway-Rock*, *Marblehead-Rock*, *Gray's-Rock*, and *Pope's-Head*, are large, and high above water. *Halfway-Rock* is very bold all round it. *Eagle-Island* is bold only on the south and east; from the N. E. part of it quite to *Hardy's-Rocks* is very shoal water, and no passage for ships.

* There is a white cask erected (about 25 feet from the surface of the water) on this rock.

Bearings and Distances of the principal Islands, Rocks, &c. in the vicinity of Salem, from Baker's-Island.

E. point of Cape-Ann	-	bears	-	E. N. E. $\frac{1}{2}$ E.
Gale's-Ledge, distant 2 miles,	-		-	N. E. b. E. $\frac{1}{2}$ E.
W. part of House-Island	-		-	N. b. E. $\frac{1}{2}$ E.
E. part of Whale's-Back	-		-	N. b. E. $\frac{1}{4}$ E.
E. part of Great-Misery	-		-	N. b. W. $\frac{1}{4}$ W.
S. part of Little-Misery, distant $\frac{3}{4}$ mile,	-		-	N. W. $\frac{1}{2}$ N.
Bowditch's-Ledge, $1\frac{1}{4}$ mile	-		-	W. N. W.
N. part of Harding's-Rocks, $\frac{3}{4}$ mile,	-		-	W. $\frac{3}{4}$ N.
N. part of Haste-Rock, $2\frac{3}{4}$ miles,	-		-	W. $\frac{3}{4}$ N.
S. part of Coney-Island, $2\frac{1}{2}$ miles,	-		-	W. $\frac{1}{4}$ S.
Naugus-Head, on Marblehead shore,	-		-	W. $\frac{1}{2}$ S.
N. part of Gray's-Rock	-		-	W. S. W. $\frac{1}{2}$ W.
N. part of Eagle-Island, 1 mile,	-		-	W. b. S. $\frac{1}{2}$ S.
S. part of Marblehead-Neck,	-		-	S. W. b. W. $\frac{1}{4}$ W.
N. part of Cat-Island, 2 miles,	-		-	S. W. b. W.
Middle of Pope's-Head	-		-	S. W. $\frac{3}{4}$ W.
N. part of Western Gooseberry	-		-	S. W. $\frac{1}{2}$ S.
Satan, or Black-Rock, $1\frac{3}{4}$ miles,	-		-	S. W. b. S. $\frac{1}{2}$ W.
Eastern Gooseberry, $\frac{3}{4}$ mile,	-		-	S. S. W. $\frac{1}{2}$ W.
Halfway-Rock, $2\frac{3}{4}$ mile,	-		-	S. $\frac{1}{4}$ E.
S. Breakers of Baker's-Island, $1\frac{1}{2}$ mile,	-		-	S. S. E. $\frac{1}{2}$ E.
E. ditto ditto	-		-	S. E. b. S.

Remarks on Cashe's-Ledge, by an experienced Navigator.

I TOOK my departure from *Thatcher's-Island*, which lies 2 miles to the eastward of *Cape-Ann*: the Island bore from me N. three miles distant: from the bearing I steered E. $\frac{3}{4}$ N. 65 miles, with a fair wind, and fell in with the north part of the bank, where *Cashe's-Ledge* is, about two leagues to the northward of the Shoal, in 60 fathoms, hard black clay. This Bank lies north and south seven leagues, and east and west two leagues; and in the centre of the bank is the shoal ground spoken of in the *Waggoner*, its length and breadth is one quarter of a mile: there is on it in some parts 10 fathoms, in others only $4\frac{1}{2}$, all exceeding rocky. In the length of a boat you will have from 10 to $4\frac{1}{2}$ fathoms, and there are 17 fathoms within a cable's length of the shoal, which gradually deepens as you stand from it, all over the bank, to 90 fathoms; at this sounding you are to the edge of the bank. You will in general have upon the bank oozy and sandy bottom, with black stones and broken shells, till you get into 25 or 30 fathoms, it then becomes rocky. The current sets exceeding strong and irregular; in less than an hour it will run all round the compass. All ships and vessels should endeavour to steer clear of this Shoal, for I am persuaded that in a fresh gale of wind they must strike; if not, the sea must run so as to foundered them.

By four days observation, the weather being exceeding clear, found the Shoal to lie in lat. 43, 01, North.

Directions for sailing into Boston Harbour.

IF bound to *Boston* from the Southward, cross *George's Bank* in lat. $42^{\circ}, 25'$ north, or $42^{\circ}, 30'$ in either of which the shoalest water you have will be 36 fathoms, from which you steer W. b. N. $\frac{1}{4}$ N. 45 leagues, and if clear weather you will see *Cape-Ann* on your starboard hand and **Cape-Cod* on your larboard hand. Take care not to the northward of $42^{\circ}, 40'$ for fear of *Cashe's-Ledge*, which lies East half North, 23 leagues from *Cape-Ann*. From *Cape-Ann* to *Boston* † Light-House the course is S. W. distance $7\frac{1}{2}$ leagues. After making the Light, with the wind fair, you will bring it to bear W. b. N. or W. N. W. and then run for it; till you come within two cable's length of it. If the weather is bad you cannot get a pilot from the light-house: after running abreast of it, so as to bring it to bear N. b. E. you may run W. b. S. about one mile and a half to *Nantasket-Road*, where you may anchor in from 7 to 5 fathoms in safety.

To work into *Boston-Bay* you may stand to the southward till you bring the light to bear W. N. W. and to the northward till you bring it to bear W. S. W. till you come within one league of the light; then you must not stand to the northward any further than to bring it to bear W. b. N. and to the southward to bring it to bear W. N. W.—You may anchor in the Bay with safety if the wind is off the shore. If you fall to the southward of *Boston* be careful to avoid *Cohasset-Rocks*, which lie above water some distance from the land, the outer part of which, called *Minot's-Rock*, has a black buoy on it, that lies in 5 fathoms water, which you leave on your larboard hand. Your course from this buoy to the light-house is N. W. $\frac{1}{2}$ N. distant three leagues. In running the above course and distance, you will pass a White Buoy which lies in four fathoms water, that is on the N. E. part of *Harden's Rocks*, and bears S. E. $\frac{1}{2}$ S. from the light-house, distance one league and a half, which Rocks may be seen two hours before low water, that you also leave on your larboard hand. There is another buoy on your larboard hand, which is red, that lies in three fathoms water on *Point-Alderton*. When in the middle of the light-house channel steer W. b. N. one mile distant, to the beacon on the Spit, which you may run within one quarter of a cable's length of, leaving it on your starboard hand, opposite to which lies a black buoy, in two fathoms water, on *George's-Island-Rocks*. Between the light-house and *George's-Island* lies a rock called the *Centurion*, in mid channel, with 15 feet water on it. Your course from this to *Gallop's-Island-Point* is N. W. b. N. half a mile distant. From thence through the *Narrows* by *Nick's-Mate*, your course is N. N. W. half a mile distant. *Nick's-Mate* must be left on your larboard hand, one cable's length distant, and then steer W. b. N. for *Castle-Island*, distance 4 miles, when you will see a white buoy, which is on the *Castle-Rocks*, in 2 fathoms, which you leave on your larboard hand. When abreast of the *Castle* steer N. N. W. $\frac{1}{4}$

* *Cape-Cod* is low sandy land. *Cape-Ann* is middling high, with many trees on it. There is a remarkable land called *Pigeon-Hill*, which appears like a boat bottom up.

† The light-house stands on a small Island on the north entrance of the channel, (*Point-Alderton* and *Nantasket-Heights* being on the south) and is about 65 feet high. Two huts are erected here with accommodations for shipwrecked seamen. A cannon is lodged and mounted at the light-house to answer signals.

of a mile, to clear the *Upper-Middle-Ground*, which has a black buoy on it in two fathoms water, that you leave on your larboard hand: If the buoy should be removed, run N. N. W. till you bring the two northernmost steeples in *Boston* a handspike's length open, then steer N. W. b. W. two miles and a half, which will carry you opposite the town.

Broad Sound, which is the North entrance of *Boston* harbour, is not a proper channel for large vessels, but those who frequent it will follow the directions here given: When up with the *Graves*, which are a parcel of dry rocks that appear white, you must leave them on your larboard hand, one cable's length distant, then bring them to bear S. E. and run S. W. b. W. 4 miles, when you will be up with *Long-Island-Head*, which is high and bluff, with two remarkable trees on it, that you leave on your larboard hand. In passing from the *Graves* to *Long-Island-Head* you will see two buoys on your larboard hand, one of which is on a reef called the *Devil's-Back*, and is painted red, lies in 4 fathoms water, the other on *Ram-Head-Bar*, which is black, and lies in 15 feet water; you will also pass a white buoy on your starboard hand, which lies on the N. E. part of *Fawn-Bar*, in $2\frac{1}{2}$ fathoms, when you must follow the directions above for the town.

The *Lower-Middle-Ground* lying in the way, the directions are as follows, viz.

On the *Lower-Middle-Ground*, which lies on the north side of the channel, a little above *Spectacle-Island* (which is in part dry at low water) on the eastern part of which is a red buoy, and on the western part a black buoy, in two fathoms water, which you must leave on your starboard hand.

Pudding-Point-Gut entrance is between *Fawn-Bar* and *Winship's-Bar*. You must bring it to bear S. W. and run for it, leaving *Pudding-Point* on the starboard and *Deer-Island* on the larboard hand. The channel from this gut to *Boston* is so crooked and narrow, that no person should attempt to go in with a large vessel, unless acquainted, without a pilot.

Vessels outward bound, from *Boston* light-house, who would wish to fall in with *Cape-Cod*, the course is E. S. E. distant 15 leagues—thence $\frac{3}{4}$ leagues to the light-house. When up with the light-house, and it bears S. W. 2 leagues distant, you may then steer S. S. E. which will carry you out of the south channel.

Vessels in *Boston-Bay*, who would wish to put away for *Cape-Cod* harbour, must endeavour to fall in with the *Race*. If in the night, and you cannot see the land, you must bring the light to bear E. b. N. and run for it until you have soundings in 14 or 15 fathoms water—then steer N. E. until the light bears E. b. S. then run in N. W. for the harbour.

When between *Cape-Ann* and *Cape-Cod*, you will have from 35 to 19 fathoms water, which latter sounding is within two leagues of *Boston* light-house; the quality of the soundings is more to be depended on than the depth of the water. As you will find a difference of 5 or 6 fathoms in running a cable's length, you will observe that the quality of soundings is rough on *Cape-Ann* side, and sandy on *Cape-Cod*.

At full and change, it is high water off *Race-Point* at 10 o'clock and 45 minutes. Vessels in leaving *Cape-Cod*, bound to *Boston*, should calculate the tide, as the flood sets strong to the south-west.

N. B. The upper buoys will be taken up during the winter season.

Directions from Boston Light-House to Cape-Elizabeth.

FROM *Boston* light-house to *Thatcher's-Island*, which lies 2 miles from *Cape-Ann*, the course is N. E. and the distance nine leagues, but to clear the *Londoner*, which you leave on your larboard hand when bound to *Cape-Elizabeth*, the course is N. E. b. E.—About half way, and near the north shore, is a large rock, called *Half-way-Rock*, about the bigness of a ship, and lies off the harbours of *Marblehead* and *Salem*.

From *Thatcher's-Island* S.S.E. $\frac{1}{4}$ of a mile, lies a ledge of rocks called the *Londoner*, which shew themselves at half tide, and extend E.N.E. & W.S.W. distant 2 miles from the Island. If you should be forced to the northward of *Cape-Ann*, there is a very clear bay, called *Ipswich-Bay*, at the N. E. part of which lies the harbour of *Portsmouth*, which is formed on the west shore by some small rocks, called the *Black-Rocks*—on the east by a small rock, called the *Whale's-Back*, which is sometimes covered at high water, but by keeping in 7 fathoms on the west shore you are in the fair way, and when at the entrance, a N. b. E. course will carry you up to *Fort-Point*, on which the light-house stands, where you may go within one quarter of a mile of the shore, in 9 or 10 fathoms.

From *Cape-Ann* to the *Isle of Shoals* the course is N. $\frac{1}{2}$ E. distant 7 leagues. These Isles are low and level, and near two miles in length. South from their west end, half a mile distant, lies a rock, which may be seen at half tide, and by giving the west end of these islands a birth of half a mile, a N. b. E. course will carry you to the entrance of *Portsmouth* harbour, 8 miles distant.

Strangers should never attempt to go round the east end of these Islands; but if driven thereto, give it a birth of half a mile, and steer N.W.b.N. which will carry you to *Portsmouth*. North-east from the east end of these Islands, 4 miles distant, lies *York-ledge*, which is always to be seen, and extends N. E. and S. W. two miles. From *York-Ledge* to *Boon-Island* the course is E. N. E. distant 9 miles. [*Boon-Island* is low land about one quarter of a mile in length.] From *Boon-Island* to *Boon-Island-Rock* (on which it always breaks) the course is east, and the distance 3 miles. From *Boon-Island* to *Wood-Island* the course is N. N. E. distant 12 leagues, and from thence to *Cape-Elizabeth* the course is N. E. $\frac{1}{4}$ E. and the distance 4 leagues.

Directions for sailing in and out of Boston-Bay from Cape-Cod or Cape-Ann to Boston Light-House.

BOSTON light-house stands on a small Island at the north entrance of the channel about 65 feet high. To steer for it from *Cape-Cod*, your course is W. N. W. when within one league of the Cape. From *Cape-Cod* to the light-house is about 15 leagues. From *Cape-Ann* to the light-house the course is S. W. distance 9 leagues.

The next light-houses on the course eastward are those on *Thatcher's-Island*—an Island which contains about 30 acres of land, secured by an iron-bound shore, and is situated about two miles east of the main land of *Cape-Ann*. This Island affords no harbour, nor is there any safe anchorage very near it: there is a passage between that and the main, through which

Small vessels may pass even at low tide; but the water is shoal, and the bottom covered by a collection of large round stones. The light-houses were erected there for the benefit of vessels coming in from sea, as well as for those coasting around the shores. As soon as these lights are discovered they can know their real situation; for being two lights, they cannot be taken for the single light at *Boston* harbour, or for the *Plymouth* lights, where there are also two, but the distance between them is only 11 feet and 6 inches, while the distance between those on *Thatcher's-Island* is about one fourth of a mile, and can be brought to range one with the other when you are abreast of the Island. But the *Plymouth* lights cannot be so arranged from the north until you are on the shore, and from the south only when you are near in with the land. The lights on this Island are of great use to all vessels in their passage in or out, as they point out the situation of the *Salvages* on the north, and the *Londoner* on the south. Besides, from the different bearings of the lights, a safe departure is taken for the different harbours in the bay, as well as for those bound northerly and to sea. For remarks more minute you will find them in the directions for sailing to *Boston* light, to *Baker's-Island*, and to those on *Plumb-Island* at the mouth of *Newburyport* harbour.

N. B. Strangers who may be driven upon *Plumb-Island*, or the sandy beaches of *Salisbury* or *Hampton*, are earnestly desired to continue on board their vessel, if possible, until the tide shall leave them. The number of instances of fatal miscarriage, which have attended those who have too suddenly forsaken their vessel, which has afterwards been found safe and dry, and the almost constant safety of those who continued on board, are a serious confirmation of the propriety of this advice.—[For Description of *Plumb-Island* see page 39.]

Directions for **Plymouth Harbour*.

THE high land of the Monument bears from the lights S. $\frac{1}{4}$ W. three miles, and *Monument-Point* S. S. E. three leagues, and *Branche's-Point* N. $\frac{1}{2}$ W. about three leagues, *Saguash-Head* W. $\frac{1}{4}$ S. three miles, the easternmost part of *Brown's-Islands* or *Shoal* that dries, S. S. W. one mile and one quarter, and the *Gurnet-Rock* from the body of the light-house E. b. S. $\frac{1}{4}$ S. one third part of a mile; on this Rock you have but three

* This harbour is capacious, but shallow, and is formed by a long and narrow neck of land, called *Salt-House-Beach*, extending southerly from *Marshfield*, and terminating at the *Gurnet-Head*, and by a smaller beach within, running in an opposite direction, and connected with the main land near *Eel-River*, about three miles from the town. There are two light-houses on the *Gurnet*, which are about 86 feet above the surface of the sea, and cannot be brought into one to the northward, unless you are on the shore. But to the southward you may bring them in one, which is a very good mark to clear you of *Brown's-Island* or *Sand-Bank*. On *Salt-House-Beach*, is placed one of the huts erected and maintained by the *Humane Society* of *Massachusetts*, for the reception and relief of shipwrecked mariners. There is a breach in the inner beach, which exposes the shipping, even at the wharves, during an easterly storm.

feet at low water, which you must observe; all the soundings are taken. When you have shut in the Sandy Hill with the *Gurnet-Head*, you are clear of the rock; after which you must mind not to haul in too close to the head, as there are many sunken rocks some distance from the shore. When you bring *Saquash-Head* to bear W. b. N. you may then steer up W. b. S. and if you are bound for *Plymouth*, you must keep that course for a large red cliff on the main, which is a very good mark to carry you clear of *Dick's-Flat*: then you must steer more southerly for *Beach-Point*, or run up until you are abreast of *Saquash-Head*, giving it one quarter mile distance; then steer W. b. S. $\frac{1}{2}$ S. which will clear you of *Dick's-Flat*, and carry you directly for *Beach-Point*, keeping within fifteen or twenty yards of the *Sandy-Point*, steering away to the southward, keeping that distance until you have shut in the lights, where you may anchor in three and four fathoms, but the channel is very narrow, having nothing but a flat all the way to *Plymouth*, except this small channel, which runs close by this neck of land, you will have 4 and 5 fathoms close to this point. If you are bound into the *Cowyard*, you must steer as before directed, which will clear you of *Dick's-Flat* and the *Muscle-Bank*, observing to keep the house on the *Gurnet-Head* just open with *Saquash-Head*, until you have opened the *High Pines* with *Clerk's-Islands*; then you are clear of the *Muscle-Bank*, when you may steer N. W. until you have three fathoms at low water, not running into less.

In coming from the northward, bound into *Plymouth*, you must not bring the lights more southerly than S. b. W. to avoid *High-Pine-Ledge*, which lies north from the *Gurnet-Head* about two and an half or three miles. When you are on the shoalest part of this ledge, some part of which appears at low ebbs, you will have the *High-Pines* in range with *Captain's Hill*, which will then bear W. b. S. This ledge of rocks lies one and an half mile from the shore, extending about N. N. E. for near one mile, and close to this ledge you will have four and five fathoms, which deepens gradually as you run from it to the eastward; within one mile you will have ten and twelve fathoms.

In coming from the southward, bound into *Plymouth*, you must not open the northern light to the westward, but keep them in one, which will carry you in five fathoms by the easternmost part of *Brown's-Islands* or *Shoal*, keeping that course until you are within half a mile of *Gurnet-Head*, or higher, where you will have but four fathoms; then *Saquash-Head* will bear W. b. N. a little northerly, and the two outermost trees on the Head in one; then you may steer directly for them, until you bring the lighthouse to bear E. N. E. and the house on *Saquash* to bear N. W. just open with the first *Sandy-Beach*, where you may anchor in 4 fathoms in *Saquash-Road*, good clear bottom; but if you are bound for *Plymouth*, or the *Cowyards*, you must steer as before directed. If in the night, it is best to anchor here, as it is difficult to make *Beach-Point*, if dark, or to go into the *Cowyard*.

In turning into *Plymouth*, you must not stand to the northward into less than three fathoms, as it runs a flat a long way from the *Gurnet-Head* to *Saquash*; and from both the heads lies off a point of rocks a good way from the shore, many of them but just under water at low ebbs. And all the way from *Saquash* to the *Muscle-Bank*, you have shoal water; so that you must not stand in less than before mentioned. And in standing over for the sands to the southward, you must go about as soon as you have shoaled your water to four fathoms, as it is bold too, and you may observe the rips, unless it is very smooth. This sand extends from abreast of the lights to

Beach-Point, most of which is dry at low ebbs. From the easternmost part of this sand to *Dick's-Flat* it rounds with a considerable sweep; you have but five fathoms water from the easternmost part of *Brown's-Island* to the *Gurnet Head*, and not more than seven or eight until you are abreast of *Dick's-Flat*, where you will have 13 or 14 fathoms in a deep hole, and then shoalen to 5 fathoms, abreast of *Beach-Point*.

If you should fall into the southward of *Brown's-Islands* or *Sands*, betwixt them and the *Monument-Land*, where you have 20 fathoms in some places, you must not attempt to run for the lights, until you have them shut in one with the other, when they will bear N. N. W. $\frac{1}{2}$ W.; if you do, you may depend on being on *Brown's-Islands* or *Sands*, as there is no passage for even a boat at low water.

In coming in from the northward in the night, you must not bring the lights to bear more southerly than S. b. W. to avoid *High-Pine-Ledge*, and keep that course until you have them to bear N. W. or N. W. b. W. when you will be clear of the rock, and may steer up W. b. S. until you have the lights to bear E. N. E. where you had best anchor in the night. Here the tide runs strong channel course from the *Gurnet* to the *Race-Point* of *Cape-Cod*; the course is E. $\frac{1}{2}$ N. about six leagues distance; and from the *Gurnet* to the point going into *Cape-Cod* harbour, is E. b. S. seven leagues. If you should make the lights in hard northerly or northwest winds, and cannot get into *Plymouth*, you may then run for *Cape-Cod* harbour, bringing the lights to bear W. b. N. and steer directly for the harbour, which you may do unless very dark, as it is bold too—and you may see the *Sandy-Hills* before you can get on shore. You may keep within a hundred yards of the shore, until you are up with the point that runs out to the eastward, which you must give a quarter mile distance, and then steer up N. W. If it should blow so hard that you cannot turn up the harbour, you may anchor off the point, clear bottom; you have 8 and 9 fathoms very nigh the shore, so that there is no danger of being on it, unless very dark.

At the *Gurnet* and *Plymouth* the tides are much the same as at *Boston*; that is, a S. E. moon makes full sea.

Directions for Cape-Cod Harbour.

IN passing *Race-Point* to the southward, you must give it a birth of one mile, as there is a long flat of sand that lies to the southward of said point. You must not haul to the eastward till you come near *Herring-Cove*.

Vessels inward bound, who fall in with the back of *Cape-Cod*, may bring the * light to bear S. W. two leagues distant, and then steer W. N. W. for *Boston* light-house.

If you wish to go into *Cape-Cod* harbour, you may keep the shore aboard about a mile distant, where you will have 10 fathoms water. There is a

* The light-house is erected on land at the *Clay-Ponds*, elevated about 150 feet, which, with the elevation of the lanthorn, makes the whole height 200 feet above high water mark. In order that this light may be distinguished from the *Boston*, and other lights on our coast, an eclipser is erected, which will revolve around the lump once in 80 seconds, so that the light will be nearly excluded from the eye of the approaching mariner about 30 seconds, in one revolution of the eclipser.

bar lies off the back of the Cape, about half a mile from the shore, called *Picked-Hill-Bar*.

When up with *Race-point*, you will find it very bold about 3 leagues to the westward of the light-house, and it may be known by a number of fish-houses on it. From one to three miles to the southward of *Race-point* is what is called *Herring-cove*, where you may have good anchoring half a mile from the shore, the wind from E. to N. N. E. in 4 or even in 3 fathoms water.

If bound into *Cape-Cod* harbour, your course from *Race-point* to *Wood-End* is S. S. E. 6 miles distance. Bring the light to bear E. b. N. and run for it about two miles; you will then be clear of *Wood-End*—then you must steer N. E. until the light bears E. b. S. then run N. W. for the harbour, until you have from four to three and a half fathoms water, where you will have good anchoring; the light will then bear E. b. S. $\frac{1}{2}$ S. 5 or 6 miles distance.

In running from *Race-point* to *Wood-End*, after you pass the *Black-Land* or *Hummucks*, you will come up with a low sandy beach which forms the harbour, extending between two and three miles to *Wood-End*, which is difficult to be distinguished in the night—it is very bold, and you will have 25 fathoms water within half a mile of the shore.

In beating into *Cape-Cod* harbour you must keep the eastern shore aboard until you get into 5 fathoms water. Stand no further to the westward than to bring the light to bear E. b. S. as there is a long spit of sand runs off from the western shore, which being very bold, you will have 11 fathoms water within a stone's throw of the shore.

If it blows so hard that you cannot beat into the harbour, you will have good anchoring without, from 10 to 15 fathoms water. Or if it blows hard at N. E. bring *Race-point* to bear N. W. b. N. and steer S. E. b. S. 7 leagues, which course will carry you into *Wellfleet*, formerly called *Billengale*. In steering this course you will make *Harwich* right ahead. When you open the bay, you will bring an Island on your larboard hand, when you may haul to the eastward, and anchor safe from all winds.

From Cape-Cod to Holmes'-Hole.

BRING *Morris'-Island* to bear N. N. W. then, by steering S. S. E. three and a half leagues, you will pass the *Pollock-Rip*, in 3 or 4 fathoms water; and if the weather is clear, you will make the light-house on *Sandy-point*, (*Nantucket Island*) five and a half leagues distant, which bring to bear S. W. b. W. then steer for the light-house, keeping it in this direction, and you will pass between the great and little round Shoals. When you are within about two miles of the light-house, steer W. N. W. until you are past the *Point Rip*, or you may bring the light-house to bear E. b. S. and steer W. b. N. taking care to make your course good for *Holmes'-Hole*, eleven leagues distant.

To go through the *Ship-channel*, steer from *Morris'-Island* S. S. E. until you pass the *Pollock-Rip* in 3 or 4 fathoms water; if the weather be clear, you will make the light-house: continue your course S. S. E.; S. b. E. and South, until the light-house bears W. from you; then steer directly for it, until you are within two miles of it. You should then steer N. W.

until the light-house bears S. W. b. W. then steer W. b. N. till the light-house bears E. S. E. and then steer W. N. W. making your course good for *Holmes'-Hole*. If you wish to anchor near the light-house, you may, after bringing it to bear S. b. E. steer E. S. E. till the light-house bears N. and there come to anchor in 6, 7, or 8 fathoms water.

Directions for sailing into Nantucket Harbour.

[NOTE. As the harbour of Nantucket is well calculated for small vessels during the winter season, after they have entered the Vineyard Sound, and the wind prevails at the northward, at which time it would not be prudent to come over the Shoals, the Editor has inserted three different Directions for sailing into it, either of which may be depended on.]

BRING the light-house on *Brant-point* to bear S. S. E. $\frac{1}{4}$ E. and steer for it until you are about two cables length from it; then steer S. E. b. E. or E. S. E. till *Brant-point* bears S. and steer close along by it; keep as much as a cable's length from the shore at *Brant-point*, until the light-house bears S. S. W. to avoid the *Brant-point*, or *Light-House-Shoal*. As soon as it bears S. S. W. haul for the point, to avoid the *Coetue-Flats*. S. b. E. will just lay a good reach across the harbour; but you must steer S. to avoid the *Pest-House-Shoal*; then you may stand far across the harbour, if the wind be westerly—if easterly, you may keep right for the wharves; as it could not be expected that a stranger could take the advantage of the Laps and Swashes on the bar; at middling tides he would have about 8 feet water—at neap tides not more than 7 to $7\frac{1}{2}$ feet—at spring tides 9 to $9\frac{1}{2}$ feet.

When you are about half way from the bar to the light-house, it would be best to steer about S. b. E. or S. until the light-house bears S. E. b. S. then run for it as above directed, as the straight course above will cross the corner of the *Black-Flat*; yet if the wind be easterly, there will be no danger; if the wind is westerly, you might get on the flat, as it lies on the east side of the channel, and the *Clift-Shoal* on the west side.

2d. *Directions for going into Nantucket Harbour.*

OBSERVE the small light-house on the end of *Brant-point*, and for a vessel that draws no more than 9 feet 3 inches, bring it to bear S. E. b. S. when at the back of the bar, and run directly for it, which will carry you between the *Clift-Shoal* and *Black-Flats*; continue your course until you just shut in the north shore that is to the westward of the *Clift*; then you are within the corner of the *Black-Flats*, when you may steer directly for the end of the point, and enter the harbour.

Distance between the Light-House-Shoal and Flat	60 rods.
— between the Flats and Clift-Shoal	70
— between the Clift and Stub-Shoal	78
— between Clift-Shoal and Bar	110
Length of Clift-Shoal from shore	95

N. B. You will pass six buoys going into the harbour.

3d. *Directions for sailing into the Harbour of Nantucket by the Buoy.*

Western Channel. THE first buoy you pass is a white one, which you leave on your starboard hand; the next a black one, which you leave on your larboard, said buoy bearing S. S. E. $\frac{1}{2}$ E. from the white buoy; then steer E. b. S. leaving the next buoy, which is a black one, on the larboard hand. The next a white one, which leave on the starboard. Then steer S. S. E. leaving a red buoy on the larboard hand; then run as the shore lies, till you come near up with *Brant-point*, on which is a light-house erected, which keep aboard all the way into the harbour.

Eastern Channel. The first buoy you pass is a red one, which you leave on your starboard hand; the next is a black one, which leave on the starboard hand; then steer E. S. E. till you come near a white buoy, which leave on your starboard hand; steer S. S. E. till you leave a red one on your larboard hand; then keep *Brant-point* aboard, as before mentioned.

Vessels coming in the Eastern Channel, in the night, must bring the light on *Brant-point* to bear S. E. b. S. $\frac{1}{4}$ S. and run directly for it till they get the shore soundings; then leave *Brant-point* shore aboard all the way into the harbour.

Courses and Distances from Nantucket Light-House.

	<i>Courses.</i>	<i>Lgr.</i>
From Light-House to the Handkerchief	N. b. E.	4 $\frac{1}{2}$
do. to the Snow-Drift	N. N. E.	5
do. to the Stone-Horse	N. E. b. N.	4
do. to Sandy-Point of Monomoy	N. b. E. $\frac{1}{2}$ E.	5 $\frac{1}{2}$
do. to the little Round Shoal	N. E.	3 $\frac{1}{4}$
do. to the east end of Pollock Rip	N. E.	7
do. to the great Round Shoal	E. N. E.	3 $\frac{1}{2}$
do. to the north end of great Rip	E. b. S. $\frac{1}{2}$ S.	5 $\frac{1}{2}$
do. to the south Shoal	S. $\frac{1}{4}$ E.	12
do. to Nantucket harbour	S. S. W.	3
do. to Tuckanuck Shoal	W.	3
do. to east chop of Holmes' Hole	W. b. N.	11
do. to the Horse-Shoe	N. W. b. W.	5 $\frac{1}{2}$
do. to Hyannes	N. W. $\frac{1}{4}$ N.	6
do. to Cape-Sable	E. N. E.	83
do. to the Shoal on Georges'-Bank	E. $\frac{3}{4}$ N.	87
the East end of Nantucket, called Sancoty Head, to the South Shoal	S. $\frac{1}{4}$ E.	9 $\frac{1}{2}$

Directions to those running for Block-Island Channel, to the southward of Martha's-Vineyard, Nantucket-Island, and such as are bound into the Vineyard Sound, and intend going over the Shoals to the eastward.

IN approaching the south end of *Block-Island* from the southward, the water shoals gradually. When the Island bears from N. W. to N. b. W. the bottom is mud; this is commonly called *Block-Island-Channel*. This Island, if you come from the southward, appears round and high; and if you approach it from the S. E. it appears like a saddle, being high at both ends, but highest to the southward. Your course from *Block-Island* to **Gay-head* is E. $\frac{1}{2}$ N. and the distance 14 leagues.

If you fall to the southward of *Martha's-Vineyard*, and can see *Norman's-Land*, and intend going over the shoal to the eastward, bring *Norman's-Land* to bear west, and steer east, (making the course good) which will carry you clear from all danger, and bring you up with *Sancoty-head*, but you must not run direct for *Sancoty-head* till it bears N.N.W. If it is night, you may see Nantucket light when *Sancoty-head* bears as above, also bearing N. N. W. There is a shoal bearing S. b. E. from *Sancoty-head*, one mile and a half distant, which has not above ten feet water on it at high water, called *Pachick*, which joins on the *Old-Man*, between which and the shore you may have good anchoring, with the wind at N. W. You must keep your course N. N. W. in this channel, till you bring *Sancoty-head* to bear S. W. when you must steer N. E. for the *Ship-Channel*. You may turn in or out of this harbour, only observing the flood and ebb tides, the former of which sets N. N. W. and the latter S. S. E. In this channel you will have from four to five fathoms water, and one league distant from *Pachick-Reef* to the *Bass-Rip*.

If you are coming from sea, and make the Island of *Nantucket* to the northward of you, it may be known by three Wind-Mills, which stand near each other upon an eminence. You may then steer directly for the land, until you are within half a mile; and may, if bound to the eastward, run along the shore in 4, 5, and 6 fathoms water, to the S. E. part of the Island, where there are shoals and rips, on which you will have only two and a half or three fathoms water. Continue your course along the shore, until you bring *Sancoty-Head* to bear S. W. from you; then steer N. E. and you will go over the same shoals in the *Ship-Channel*, as you do in steering East from the light-house. *Sancoty-Head* is the easternmost head land of *Nantucket*.

If, in coming from sea you make the South Shoal, which lies in 40, 44, N. lat. give it a birth of a mile. If you intend to make *Nantucket-Island*, steer N. b. W. and when you come near the Island, you may proceed along the shore, according to the former directions.

If when you make the South Shoal, you are bound to *Boston-bay*, and choose to go to the eastward of all the shoals and rips, pass a mile or two to the eastward of the South Shoal, then steer N. E. b. E. until you deepen the water to 45 or 50 fathoms, and then steer N. b. W. for the back of *Cape-Cod*.

* There is a light-house on the highest part of this head, about 60 rods from the water, 240 feet above the surface, and may be seen 7 or 8 leagues distant, when the weather is clear.

If you come from the eastward, and are bound for *Long-Island* or *New-York*, you should be careful not to go to the northward of 40, 30, N. lat. until you pass the South Shoal of *Nantucket*, the southernmost part of which lies in lat. 40, 44. If by stress of weather you should be driven so far to the northward, as to be near *Nantucket-Island*, you may pass through the channel to the southward of the Island. This is a very difficult and dangerous passage, and not to be attempted but in case of necessity. *Martha's-Vineyard-Island* lies in much the same latitude as *Nantucket-Island*, and may be known by a small round Island, which lies at the southward of *Gay-head*, called *Noman's-Land*, eight miles distant. You may sail between this Island and *Martha's-Vineyard*, but you must take care to avoid a ledge of rocks, which bears from the light N. W. b. N. one mile and a quarter distant.

Ships, in passing the shoal ground on *George's-Bank* and *Nantucket-Shoals*, should take care to go between those shoals and the **Gulph-Stream*. As the southernmost part of the shoal ground on *George's-Bank* lies in 41, 38, N. latitude; and the northern limits of the *Gulph-Stream*, directly south from this part of the shoal ground, extends to latitude 39 degrees, you should pass the shoal ground between these two latitudes. As the south part of *Nantucket-shoals* lies in lat. 40, 48, and the *Gulph-Stream* southward from this part reaches as far to the northward as lat. 38, 30, you should pass *Nantucket-shoals* between these latitudes. The shoal ground on *George's-Bank* lies in long. 67, 56, W. and the South Shoal of *Nantucket* in 69, 45, W.

* This remarkable phenomenon is a current in the ocean, which runs along the coast, at unequal distances from Cape-Florida to the Isle of Sables and the banks of Newfoundland, where it turns off and runs down through the Western Islands; thence to the coast of Africa, and along that coast in a southern direction, till it arrives at, and supplies the place of those waters carried by the constant trade-winds from the coast of Africa towards the west, thus producing a constant circulating current. This stream is about 75 miles from the shores of the southern States, and the distance increases as you proceed northward. The width of it is about 40 or 50 miles, widening towards the north. Its common rapidity is three miles an hour. A south-east wind narrows the stream, renders it more rapid, and drives it nearer the coast. North-west and west winds have a contrary effect. The *Gulph-Stream* is supposed to be occasioned by the trade winds, that are constantly driving the water to the westward, which being compressed in the *Gulph of Mexico*, finds a passage between Florida and the Bahama-Islands, and runs to the north-east along the American coast. This hypothesis is confirmed by another fact: It is said that the water in the *Gulf of Mexico* is many yards higher than on the western side of the continent in the *Pacific-Ocean*. It is highly probable that the sand carried down by great rivers into bays, and the current out of these bays meeting with the *Gulph-Stream*, by their eddies have formed *Nantucket-Shoals*, *Cape-Cod*, *George's-Bank*, the *Island of Sable*, &c.

Skilful navigators, who have acquired a knowledge of the extent to which this stream reaches on the New-England coast, have learnt, in their voyages from Europe to New-England, New-York, or Pennsylvania, to pass the banks of Newfoundland in about 40° or 50° North lat. to sail thence in a course between the northern edge of the *Gulph-Stream*, and the shoals and banks of *Sable-Island*, *George's-Bank*, and *Nantucket*, by which they make safer and quicker voyages to America.

By observing the foregoing directions, and keeping between the Gulph-Stream and the Shoals, you will shorten your passage to *New-York, Delaware, Virginia*, or other western ports; for you will have the advantage of the eddy current, running contrary to the Gulph-Stream; the latter would retard your progress at the rate of 60 or 70 miles a day. The *Nantucket* whalers, by their constant practice of whaling on the edge of the Gulph-Stream all the way from their Island to the *Bahamas*, are well acquainted with its course, velocity, and extent. A stranger may know when he is in the Gulph-Stream, by the warmth of the water, which is much greater than that on either side of it. If when you are crossing the Gulph-Stream, you are bound to the westward, you should get out of it as soon as possible.

* **GAY-HEAD** is the westernmost point of *Martha's-Vineyard*. The land of this head is high and of divers colours, namely, red, yellow, and white in streaks. In steering from *Block-Island* for *Gay-head*, you must be careful to avoid the *Sound Pigs*; they make a ledge of rocks, some of which are above and others under water. These rocks lie two miles and a half S. W. b. W. from the westernmost of *Elizabeth-Isles*, and N. W. b. W. from *Gay-head*, $3\frac{1}{2}$ leagues distant. The first of the flood tide sets strong to the northward over the rocks into *Buzzard's-Bay*, which is very foul. Within *Gay-head* there is a fair sandy bay, in which is very good anchoring with south and south-easterly winds. Your course along *Elizabeth-Isles* is E. N. E. in 15, 14, 12, 8, 15, 16, and 17 fathoms water; give the Isles a birth of about three quarters of a mile.

When coming from sea, you may run for *Gay-Head* light when it bears from N. N. E. to E. S. E. giving it a birth of two miles to clear the *Devil's-Bridge*, which bears from the light N. W. b. N. one mile and a quarter distant. As measuring the distance in the night would be uncertain, you must keep your lead going, and if you should have 7 or 8 fathoms when the light bears S. E. b. E. or S. E. haul up north till you have 10 or 12 fathoms; then with flood, steer N. E.—and with ebb, N. E. b. E. three leagues; then E. N. E. will be the course of the Sound, which will carry you to the northward of the *Middle-Ground*, when you will see the West Chop of *Holmes'-Hole* harbour, (which appears like sand-banks or cliffs) with trees back of it, which you may run in for, but keep one mile distant from the shore till you open the East Chop one cable's length, and with a flood tide steer direct for it, and with ebb keep it one point open, till you open a wind-mill on the west side of the harbour about one cable's length; then run up in the middle of the river, till you come to 4 or 3 fathoms, where you may anchor on good ground. The usual mark for anchoring is the *West-chop*, bearing from N. N. W. to N. W. b. N. but if you lie any time here, the best anchoring is well up the harbour, and close to the shore, mooring S. E. and N. W. in 6 or 5 fathoms water. In this harbour, which is about two miles deep, you will lie secure from all winds except a northerly one. You must not keep further than two miles from the West Chop, as there is a shoal called the *Hedge-Fente*, which lies about three miles and a half northward from *Holmes'-hole*, and extends W. N. W. and E. S. E. six miles, is about one mile broad, and has from four to six feet on it at low water; between this shoal and *Holmes'-hole*, there are from 8 to 12 fathoms water. If you make the Chop in the night, when it bears S. E. you are clear of the *Middle-Ground*. Steer for the east side of it till you strike in 4 or 3 fathoms, on the flat ground near the chop; then steer S. E. b. E. observing not to go nearer the land than 3

* When you come by *Gay-Head* with a southerly wind, the south channel is best.

fathoms. If in running S. E. b. E. you fall into 6 or 7 fathoms, haul up S. b. W. or S. S. W. and run into 4 or 3 fathoms, as before directed.

In coming into the sound in the night, with a strong north-westerly wind, haul to the northward till you have smooth water under the *Elizabeth-Islands*, where you may anchor in 14 or 10 fathoms water. Should you have the wind to the southward, it will be best to run down through the South Channel or *Vineyard* side. When the light bears S. S. E. your course is N. E. b. E. $\frac{1}{2}$ E. or E. N. E. observing not to come nearer the land than into 7 fathoms water, till you are abreast of *Lumbard's-Cove*, in which is good anchoring, with southerly or easterly winds, and may be known by a high sand bank, called *Necunkey-Cliff*, on the east side of it, and a ware-house standing by the water about midway the cove, opposite which you may come too in 5 or 3 fathoms, sandy bottom, where is the best anchoring. The *Middle-Ground* lies about two miles without the cove, and has 12 feet water on it. If you intend running down for *Holmes'-Hole*, your course, when opposite *Necunkey-Point*, is E. b. N. keeping near the land to clear the *Middle-Ground*. You may track the shore by the lead in from 7 to 4 fathoms, till you come near the West Chop; but come no nearer than 3 fathoms: and you may track the Chop around the same as running down to the northward of the Middle Ground. There is good anchoring along this shore, in 6 or 4 fathoms, after you are to the eastward of *Necunkey-Point*, till you come near the West Chop.

Your course from the light to *Tarpaulin-Cove* is N. E. b. N. and the distance four leagues. In this harbour you may anchor in from four to two and a half fathoms, and lie safe, with the wind from N. E. b. E. to South. It will be best to anchor in three fathoms, as with that water you will be out of the tide, where the ground is good for holding. The tide flows at change and full days of the moon, at 9 o'clock, but in the channel between *Elizabeth-Island* and *Martha's-Vineyard* the flood runs until 11 o'clock. In this channel there is a *Middle Ground*, which is a narrow shoal of sand, the eastern end of which bears N. W. b. N. from the West Chop. There is not more than 3 or 4 feet water on the eastern end. N. W. from *Necunkey-Cliff* is 3 and 4 fathoms across the ground. Opposite *Lumbard's-Cove* is 12 feet, and to the westward of that is 3 and 4 fathoms. The shoal lies W. b. S. and E. b. N. is about 4 leagues in length, and has several swashes on it. When the *East-Chop of Holmes'-hole* comes open of the *West-Chop*, you are to the eastward of the *Middle-Ground*.

Your course from *Tarpaulin-Cove* to *Holmes'-Hole* is E. $\frac{1}{2}$ N. distance three and a half leagues. In steering this course, you must have regard to the tide, as the ebb may set you too far to the southward, and the flood too far to the northward, and stand in for the harbour, when you have opened the East Chop as before directed.

From *Holmes'-hole* to *Cape-Poge* the course is E. S. E. and the distance about three leagues; in the channel between them there are 12 and 11 fathoms water. In going through this channel, you must be careful to keep your lead going, in order to avoid a dangerous sand which lies on the north side of it, called the *Horse-Shoe*, distant from *Cape-Poge* 3 leagues. The channel between this sand and *Cape-Poge*, and also between the former and *Tuchanuck-Shoak*, is narrow; in it there are from 12 to 4 $\frac{1}{2}$ fathoms water. Some part of this channel is dry at low water; in other parts there are narrow channels, through which vessels may pass, the easternmost part of it spreads with divers prongs, like fingers. When *Tuchanuck-Island* bears S. S. W. you are to the eastward of the *Horse-Shoe*. On the south side of the channel also, there are several spots of land, to avoid which you must keep your lead going.

There is a harbour between *Martha's-Vineyard* and *Cape-Poge*, in which you may anchor. In proceeding for this harbour, pass within a mile of *Cape-Poge*, and then steer south along the low sandy beach on the west side, in five fathoms water, until you come to the southernmost part of it, then sail more easterly about a mile, until you bring the town, which is in a bay to the westward, fairly open, and then steer directly S. S. W. into the harbour, until you get within half a mile of the town, where you may anchor in 4 or 3 fathoms water. This harbour is a gut between *Martha's-Vineyard* and *Cape-Poge*, and is formed by a shoal which lies on the N. W. and W. side of the entrance, and the beach to the southward. The tide runs strong in this harbour.

North from *Gay-Head* light, distant 3 leagues, lies *Quick's-Hole*. This is the passage for *New-Bedford*. In running into the Hole, you must keep in the middle of the entrance, and nearer the west side after you have entered. On the west side there is good anchoring opposite a sandy cove, in 4 or 3 fathoms water. About three leagues E. N. E. from the mouth of *Quick's-hole* there is an opening, at the east end of the Islands, called *Wood's-hole*.

When you leave *Holmes'-hole*, keep the *West-Chop* open to the northward of the *East-Chop*, until you have passed *Squash-Meadow-Shoal*, which you leave on your starboard hand, which is two miles and a half from the *East-Chop*, when your course will be E. b. S. in 10 or 12 fathoms water, which course you must continue till you pass *Cape-Poge*. If it should be tide of flood, you must steer E. b. S. $\frac{1}{2}$ S. as the tide of flood sets very strong to the northward between *Cape-Poge* and *Tuckanuck-Island*, and the tide of ebb to the southward, so that you must govern your course by the tide, N. E. from *Tuckanuck-Island*, and due west from *Nantucket* light-house, lies a *Cross-Ledge* which you must give good distance, part of which is dry at low water, between which and the *Horse-Shoe* the channel is very narrow, where you will have from 4 to 5 fathoms water. In clear weather you may see *Nantucket* light-house from this ledge, which you must bring to bear E. b. S. or E. b. S. $\frac{1}{2}$ S. which course you are to steer till you pass it one league, when you must bring it to bear west, and steer east, taking care to make this course good, which will carry you over the shoals in *Ship-Channel*; the ground is very uneven, and you will have from 4 to 8 fathoms water. When you have passed over the shoals you will have from 10 to 14 fathoms water, and then, by steering north, you will make *Cape-Cod* light-house, distant 18 leagues.

To go to the northward of the *Round-Shoal*, you must proceed according to the foregoing directions, until you pass the light-house, and bring it to bear S. W. b. W. then, by making a N. E. b. E. course good, you will go between the *Great* and *Little-Round-Shoals*, in two and a half, three, four, and five fathoms water, until you have crossed the *Pollock-Rip*, where you will have about 3 or 4 fathoms water. The *Little-Round-Shoal* bears N. W. from the great one, distant about three miles. Continue your N. E. b. E. course, until you deepen your water to 12 or 13 fathoms, and then steer north for the back of *Cape-Cod*, on which there is a light-house, built in the year 1797, as described in page 53.

Off the north-east part of *Nantucket-Island* there are three rips; the first is called the *Bass-Rip*, and is about three miles from *Sancoty-Head*; on some parts of this rip there are only 9 feet water; on other parts there are $2\frac{1}{2}$ and three fathoms water. Off the south-east part of *Nantucket-Island* lies a shoal, called the *Old Man*, running 5 miles to the westward, in the same direction with the Island, which is one and a quarter mile from the shore, and has only three feet water on the western part, between which and the shore is a good channel.

The *Great-Rip* is about four and a half leagues from *Sancoty-Head*; on this rip, about E. S. E. from *Sancoty-Head* there are 4 feet water, and east from *Squam* there are 5, but on many other parts of it there are two and a half, three, and four fathoms water.

Fishing-Rip is about eleven and a half leagues from *Sancoty-Head*, and has from five to seven fathoms water on it. Between this and the *Great-Rip* the ground is uneven; there are twelve, twenty-two, and fifteen fathoms water. These two rips stretch nearly north and south, and are about twelve miles in length.

Martha's-Vineyard is situated between $40^{\circ}, 17'$, and $41^{\circ}, 29'$, north lat. and between $70^{\circ}, 22'$, and $70^{\circ}, 50'$, west long. about 21 miles long and 6 broad, and lies a little to the westward of *Nantucket*.

Bearings and Distances of sundry places from Gay-Head Light-House.

Noman's-Land, S. eight miles distant.

Old-Man, S. b. E. This is a ledge of rocks which lies two thirds of the distance from the *Vineyard* to *Noman's-Land*, which has a passage on both sides, that is but little used. Those who do go through must keep near *Noman's-Land* till the light bears north. You will not have more than three and a half fathoms water in this passage.

Sound Pigs, N. W. b. W. three and a half leagues. This is a ledge of rocks which is very dangerous, and bears S. W. b. W. from the westernmost of the *Elizabeth-Islands* (called *Cutehunk*), distant two and a half miles.

N. E. from the light, two and a half leagues distant, is a spot of shoal ground, with three fathoms water on it.

Mananshaw-bite, three and a half miles distant. In this harbour you will have good anchoring in from 8 to 6 fathoms, the light bearing W. b. S. or W. $\frac{1}{2}$ S. and lie sheltered with the wind from E. N. E. to W. S. W.

Block-Island W. $\frac{1}{2}$ S. distant 14 leagues.

Rhode-Island light-house, W. N. W. distant 12 leagues.

Description of George's-Bank and Nantucket-Shoals.

THE Shoals of *George's-Bank* lie in lat. $41, 35$, N. and are very dangerous; in some places having only two or three feet water on them, surrounded two or three leagues by rips and breakers, with a very dangerous, irregular, and rapid tide, which sets southward most part of the time.

On that part of *George's* where the shoals lie, you will have a strong tide, but not regular. The most powerful and rapid parts of it run southward; first to the S. S. E. and continuing its force until it comes up S. W. when it flacks and alters its course, making some short returns to the N. N. E.—N. E. and East, sometimes for the space of 12 and 15 hours.

In coming from the southward for *George's-Bank*, you will get soundings in lat. $40, 17$, if on the S. S. W. part of the bank. Should you get sounding in the lat. of $40, 30$, you may be certain you are to the eastward of the shoal, when you must direct your course accordingly to clear it, when your first soundings will be in from 75 to 60 fathoms. When

steering to the northward, you will shoalen your water gradually to 24 fathoms, when you will be in lat. 41, 20, which depth of water you will have 10 or 12 leagues distant, either east or west. From 40 to 21 fathoms soundings you will have fine white sand, mixed with black specks; but the nearer the shoal the coarser the sand. When you get into 15 fathoms you will have very irregular soundings, sometimes deepening, and at others shoaling two or three fathoms. If you are coming into the east channel, and get soundings in lat. 42, 12, you will then be on the N. E. part of the bank, as there are no soundings on *George's-Bank* to the northward of the above latitude. When the shoal of *George's* bears S. W. b. W. 8 leagues distant, you will have from 20 to 22 fathoms, round stones as big as eggs, and large muscles: four leagues to the eastward of this you will have 30 fathoms, white mose; and 3 leagues further east you will have black mose; and from that to the N. E. part of the bank, rocky bottom, and plenty of halibut.

If you strike soundings in lat. 42, 30, it must be on the S. W. part of *Brown's-Bank*, where you will have from 30 to 45 fathoms, sandy bottom.

On your first entrance on *George's-Bank* from *Block-Island-Channel*, you will have oozy bottom, till you are as far to the eastward as the bank extends.

Soundings from the westward of *George's-Bank* continues its course W. b. S. until you are nearly abreast of *Long-Island*, then southward to *Cape-Hatteras*.

Eight or ten leagues south-east from the south part of *George's-Bank* lies the *Gulf-Stream*, where there is a strong E. N. E. current, and if you are bound to the westward, you had better go very near the bank, and often on soundings, till you are abreast the South Shoal of *Nantucket*, where you have 30 leagues from bank to current, and by doing which you will probably shorten your passage.

The South Shoal of *Nantucket* is almost dry; the tide runs swift, but regular, to the N. E. and S. W. Nearly to the southward of this shoal, in 25 or 30 fathoms, you will have fine black and white sand; to the eastward in the same soundings you will have coarse sand. When you are near the shoal, you will have very light coloured water, together with white and black sand and pieces of green shells. Nine or ten leagues to the westward of the above shoal, in 30 or 40 fathoms, you will have black mud of a shining smooth nature, when you will be in *Tuckanuck-Channel*.

To the westward of the South Shoal of *Nantucket*, you have no shoals, rips, nor tide to hurt you, until you come near the land; but clear sea, good navigation, and regular soundings. To the eastward and northward of the South Shoal you will have a rapid tide.

Around the coast of *Nantucket* and the shoals you will have sandy bottom, and in moderate weather had better anchor than be driven about by the tide, which is very rapid. The courses of the tides at and over *Nantucket* shoals is nearly N. E. and S. W. and regular. The N. E. tide bringeth flood.—S. S. E. moon maketh high water.—South moon makes full sea at *Nantucket* harbour.

S. S. E. and W. N. W. moon makes high water on the shoals; the tide of flood sets N. E. b. E. and ebb S. W. b. W. from two to three knots an hour. It ebbs and flows about 5 or 6 feet.

When you come in from sea and fall into *Block-Island* channel, you will have from 54 to 70 fathoms, soft muddy bottom. You will have soundings in the lat. of 40. In standing to the northward, you will shoal your water to 30 fathoms, and when in sight of *Block-Island* you will have from 25 to 20 fathoms, sandy bottom. When *Block-Island* bears north,

distant 4 or 5 leagues, you cannot see any land to the northward or eastward; but as you approach the Island, you will see *Montuck-Point* to the westward, making a long low point to the eastward. In sailing to the W. S. W. you will make no remarkable land on *Long-Island*, from the eastward of said Island to the westward,—its broken land appearing at a distance like Islands. You will have 20 or 22 fathoms water out sight of the land, sandy bottom in some and clay in other places. When you come in sight of *Sandy-Hook* light-house, you will see the *Highlands of Never-sink*, which lie W. S. W. from *Sandy-Hook*, and is the most remarkable land on that shore.

At the south entrance of the south channel you will have oozy bottom, in 40 or 50 fathoms water; south of *Noman's-Land*, in 20 or 25 fathoms, you will have coarse sand, like gravel stones; and S. S. W. from it, in 28 or 30 fathoms, coarse red sand; S. S. E. from *Block-Island*, which is in *Block-Island* channel, in 40 or 50 fathoms, you will have oozy bottom, but as you shoal your water to 25 or 20 fathoms, you will have coarse sandy bottom.

*Directions for *New-Bedford.*

IF you come into the Sound between *Gay-head* and *Elizabeth-Island*, in the winter season, and have bad cables and anchors, you must bring *Gay-head* light to bear south, and run north for *Quick's-hole*, distant three leagues from *Gay-head*. In going through this passage, keep the larboard hand best on board, as there is a ledge of rocks on the starboard hand as you enter from the southward. When you pass this place you must steer N. $\frac{1}{2}$ E. four or five miles, for there is a sunken ledge which you leave on your larboard hand after you go about two leagues on the above course; then you must steer N. N. W. In steering this course, you will make a dry ledge of rocks and a low Island with a few trees on it, on your starboard hand. You will see *Fort-Point* when you pass these Islands, and make an Island on your larboard hand with sundry trees on it: you may then run within a cable's length of *Fort-Point*, which you leave on your starboard hand. You will see the town of *Bedford* on the west side of the river, and *Fairhaven* on the east. You may fetch these ports from *Quick's-hole*, with the wind at E. or E. N. E. distant four leagues. The ebb tide sets strong through *Quick's-hole*, and the flood north, but when you get into the bay there is but very little tide.

Directions for those who sail in with Block-Island, when they are bound for Rhode-Island Harbour.

FROM the south-east part of *Block-Island* to *Rhode-Island* light-house the course is N. b. E. $\frac{1}{4}$ E. and the distance 8 leagues; about midway between them, there are 24 fathoms water. If you are on the west side of

* There is a light-house on *Clark's-Point*, at the mouth of this harbour, which you leave on your larboard hand, when sailing into it.

Block-Island, with the body of the Island bearing E. N. E. in 8 or 10 fathoms water, your course to *Point-Judith* is N. E. b. E. about 6 leagues. This point appears like a nag's head, and is pretty bold; between *Block-Island* and the point, there are from 30 to 6 fathoms water. From *Point-Judith* (when not more than a quarter of a mile from the point) to *Rhode-Island* harbour, your course is N. E. and the distance is about 5 leagues. When in 13 fathoms water, *Point-Judith* bearing W. or W. b. N. the course to *Rhode-Island* harbour is N. E. b. N. $\frac{1}{2}$ N. and the distance to the light-house 3 leagues. The light-house, together with the *Dumplings*, must be left on your larboard hand; it stands on the south part of **Conannicut-Island*: this point is called the *Beaver's-Tail*, and is about 3 leagues distant from *Point-Judith*. After leaving the light-house on your larboard side, there is a sunken rock due south from the light-house, about two hundred yards distant. You must take care to avoid the rocks which lie off south from *Castle-Hill*, some of which are above water. *Castle-Hill* is on the east side of *Rhode-Island* harbour. If you steer N. E. from the light-house, 3 miles distance, you will have good anchoring without *Goat-Island*, (off the N. E. point of which is a buoy in 16 feet water); the shore is hard and rocky. A little within the light-house, and near to the shore on the west side there is a cove, called *Mackerel-Cove*, the entrance of which is shoal and dangerous. About 5 miles within the light-house there is an Island called *Goat-Island*, on which the fort stands; it lies before the town, and stretches about N. E. and S. W. As both ends of these Islands are pretty bold, you may pass into the anchoring at either end, and ride nearer to *Goat-Island* side than to that of *Rhode-Island*, as the other parts of the harbour are grassy, and would be apt to choke your anchors. *Rhode-Island* is navigable all round, by keeping in the middle of the channel.

Narraganset-Bay lies between *Conannicut-Island* and the main. Your course in, is about north, taking care to avoid the *Whale-Rock*; you may pass in on either side, and anchor where you please. From the light-house on *Conannicut-Island* to *Gay-Head* in *Martha's-Vineyard-Island*, the course is E. S. E. and the distance 12 leagues. In little wind you must take care that the flood-tide does not carry you into *Buzzard's-bay*, or on the *Sound Pigs*.

Providence is situated about 30 miles N. b. W. $\frac{1}{2}$ W. from *Newport*, and 35 miles from the sea, being the head navigation of *Narraganset-bay*. Ships that draw from 15 to 18 feet water, may sail up and down the channel, which is marked out by stakes, erected at points of shoals and beds lying in the river.

* *Conannicut-Island* lies about 3 miles west of *Newport*, the south end of which (called the *Beaver's-Tail*, on which the light-house stands) extends about as far south as the south end of *Rhode-Island*. The east shore forms the west part of *Newport* harbour. The ground the light-house stands upon is about 12 feet above the surface of the sea at high water. From the ground to the top of the cornice is 50 feet, round which is a gallery, and within that stands the lanthorn, which is about 11 feet high, and 8 feet diameter.

The following are the Bearings, by Compass, from Rhode-Island Light-House, of several remarkable places, together with the Distance, viz.

Block-Island, (S. E. point) S. W. b. S. $\frac{1}{2}$ S.
 Point-Judith, S. W. $\frac{1}{4}$ S. distant 3 leagues.
 Block-Island, (N. W. point) S. W. $\frac{3}{4}$ S.
 Rhode-Island, (N. W. end) S. W. $\frac{3}{4}$ S. distant 8 leagues.
 ————— (S. E. end) S. W. b. S. $\frac{1}{2}$ S.
 Whale-Rock, W. $\frac{1}{4}$ S.
 Brenton's-Reef, E. S. E. $\frac{1}{4}$ E.
 South point of Rhode-Island, E. $\frac{1}{2}$ S.
 Highest part of Castle-Hill, E. N. E. $\frac{1}{4}$ E.
 Brenton's-Point, N. E. b. E.
 Fort on Goat-Island, E. N. E. $\frac{1}{2}$ N.
 South-easternmost Dumplin, N. E. b. E.
 Kettle-Bottom, N. E. $\frac{1}{4}$ E.
 Newton's-Rock, South, 200 yards.

N. B. The anchoring place between the town of Rhode-Island and Coffer's-Harbour, N. E. b. E.

Directions for sailing from Newport, through the Sound, to Hunt's Harbour, near Hell-Gate.

THE first course from *Newport* light-house is S. W. b. S. distant 3 leagues, to *Point-Judith*; thence from *Point-Judith* through the Race to the first *Gull-Island* the course is W. b. S. 16 leagues distance, leaving *Fisher's-Island* on your starboard hand; or you may run till you bring *New-London* light-house to bear north; then, if ebb tide and northerly winds, steer W. N. W. ten leagues, which (if your course is made good) will carry you up with *Falkland-Islands*; then steer W. b. S. till you make the light-house on *Eaton's-Neck*. In case of a flood tide and a southerly wind, when you come through the Race, your course should be west, until you come up with *Eaton's-Neck*, taking care to make proper allowance for the tide. If you are bound into *New-London*, after getting to the northward of the S. W. part of *Fisher's-Island*, keep *New-London* light bearing from N. N. W. to N. N. E. if you are beating to windward, but if the wind is fair, bring the light to bear north when at the distance of two leagues, and run directly for it; leave it on your larboard hand in running in; when in, you may have good anchoring in 4 or 5 fathoms water, clayey bottom. In coming out of *New-London*, when you have left the harbour, bring the light to bear N. N. E. and steer directly S. S. W. till you come into 15 fathoms water, in order to clear a reef that lies on your starboard hand, when the north part of *Fisher's-Island* will bear E. distant two leagues.

If bound up sound, steer W. b. S. 33 leagues, which will carry you up

with *Eaton's-Neck* (on which a *light-house has lately been erected). On this course you will leave *Falkland-Island* on your starboard hand; you may get as near *Long-Island* shore as 2 or 3 miles, without any danger; but if you happen to get on the north shore, take particular care to keep at the distance of three leagues, in order to avoid the reefs and shoals that lie along the shore.

About 7 leagues E. N. E. of *Eaton's-Neck* light-house lies a †Shoal, or Middle Ground, called *Stratford-Shoal*, on which there is but 3 or 4 feet water at low water. You may steer on either side of the shoal you please; on the north are from 3 to 7 fathoms; on the south side from 12 to 17 fathoms water.

From *Eaton's-Neck* to *Lloyd's-Neck* the course is west, five miles. Between *Eaton's-Neck* to *Lloyd's-Neck* lies a deep bay, called *Huntington's Bay*, where a ship of any size may anchor with safety, keeping the eastern shore aboard. From *Lloyd's Neck* to *Martinecock-Point* the course is W. b. S. distant 10 miles—good soundings borrowing on *Long-Island* to 7 fathoms. The course from *Martinecock-Point* to *Sands'-Point* is W. S. W. distant 2 leagues; between these two points is a bay, called *Hampstead's-Bay*, in which is excellent anchoring, keeping the eastern shore aboard. To the northward of *Sands'-Point*, distant one quarter of a league, lie the *Execution-Rocks*, which you must take care to avoid, leaving them on your larboard hand. From *Sands'-Point* the course is S. W. b. W. 4 miles, to *Hart-Island*, to the west of which, between which and *City-Island* there is good anchoring for ships of any size. The course from thence to *Frog's-Point* is S. S. W. distant 2 leagues, taking care to avoid the *Stepping-stones*, which lie on your larboard hand, and are steep too: the soundings on your starboard hand are regular to three fathoms. From *Frog's-point* to *Hunt's* harbour the course is W. keeping as near the middle of the Sound as you can conveniently.

From Block-Island to Gardner's-Bay.

MONTOCK-POINT, the easternmost part of †*Long-Island*, which has a lighthouse on it, erected in 1796, is 7 leagues W. b. S. from the

* This light-house stands on an eminence about 73 feet high; the height of the walls is 50 feet more. The whole height from high water mark to the lights is 126 feet. It stands about 300 feet from high water mark, is a single light, and is painted black and white in stripes from the top to the bottom.

† We are happy to have it in our power to give the bearings of this shoal, taken the 6th August, 1799, by a number of gentlemen. Standing on the Shoal, *Stratford-Point* bore N. *Mount-Misery* bore S. $\frac{1}{2}$ W. *Grover's-Hill*, near *Black-Rock* harbour, bore N. W. The length of the Shoal one league, running N. b. E. and S. b. W. Light-House on *Eaton's-Neck* bore W. b. S. $\frac{1}{2}$ S. The shallowest part is near the middle of the Shoal, from whence the observations were taken, where there is 3 feet water in common tides. The centre of the shoal is near the middle of the Sound, perhaps half a league nearest *Long-Island* shore.

‡ The light-house on *Montock-Point* is on the east end of *Long-Island*, bearing W. b. S. from the S. W. point of *Block-Island*, 7 leagues distant. From *Montock* light-house to the west point of *Fisher's-Island*, N. N. W. eight leagues distant.

S. W. point of *Block-Island*: between the Island and the point there are 16 and 18 fathoms water. As you approach the point you will quickly come into 9, 7, and 5 fathoms water. A flat runs off from the above point, on the outer part of which there are 5 fathoms water, rocky bottom.

From *Block-Island* a reef of rocks lies one mile distant from the north end of the Island.

The N. E. part of *Gardner's-Island* is five and a half leagues W. N. W. from *Montock-Point*: with westerly winds you may anchor off this part of the Island, which is sandy; the marks for anchoring are the high lands of *Plumb-Island* N. W. and the south part of *Gardner's-Island* in sight, bearing S. b. W. or south; you will have 12 or 10 fathoms water. The bottom is sand and mud. About 4 miles within *Montock-Point*, one and a half miles from the shore, lies a reef bearing N. W. from the point, on which there are 6 feet water, which is very dangerous.

The entrance of *Gardner's-bay* is formed by the north end of *Gardner's-Island* and the south end of *Plumb-Island*. When going into this bay, you may go within a cable's-length of *Gardner's-Island*, where you will have 10 fathoms water. You should be careful not to go too nigh *Gull-Rock*, as there is a rocky spot one mile and a half from it, on which there are about 3 fathoms at low water. This shoal lies with the following marks and bearings; namely, a house on *Plumb-Island*, (standing about one third of the way between the middle and the north-east end) on with the northernmost of the two trees which appear beyond the house; the north end of *Gull-Island* to bear N. N. W. or N. b. W. $\frac{1}{2}$ W.; and the southernmost end of *Plumb-Island* on with the northernmost point of *Long-Island*. In order to avoid this rock, when going into or coming out of *Gardner's-bay*, you must be sure to keep the south point of *Plumb-Island* open off the north-west point of *Long-Island*, whilst the house on *Plumb-Island* is on with the northernmost of the two trees as before mentioned. There are several trees, but they appear, when viewed at a distance, to be only two trees. This shoal is called by some the *Bedford-Rock*, because the English ship *Bedford* grounded on it August 15, 1780. E. b. N. one league from *Plumb-Island* lies a dangerous reef, which extends to the *Gull-Islands*, and the passage between is not fit to be attempted, as there are several rocks, some of which may be seen. In *Gardner's-bay* you may anchor in what depth of water you please from 5 to 8 fathoms.

On the south-west side of *Gardner's-Island* there is very good riding. If you are to the eastward of the Island, with an easterly wind, and wish to take shelter under the south-west side, you must give the north-west end of the island a large berth, as above directed, and as you open the west side of the Island, you may haul round the north-west point, and anchor where you please. The soundings are regular.

Montock-False-Point is about 3 miles N. W. from the *True-Point*. On the *Six-feet-rocky-shoal* there are the following bearings; namely, the *Long-white-cliffs* on the west end of *Fisher's-Island*, N. b. W. $\frac{2}{3}$ W. The *Gull-Islands* W. N. W. The north-east bluff of *Gardner's-Island*, W. S. W. $\frac{1}{2}$ W. A grove of trees which stands on the west side of *Fort-pond-bay*, and rises like a cock's comb, touching, or rather to the eastward of, *Willis'-point*, and bearing S. b. W. $\frac{1}{2}$ W. *Willis'-point* is on the east side of the entrance of *Fort-pond-bay*. This bay is very convenient for wooding and watering; the ground is clear and

good, and you may anchor in any depth you please. In a large ship, you may bring *Willis'-Point* to bear N. E. and even N. E. b. N. and then have in the middle about 7 fathoms water. Near the shore, at the bottom of the bay, there is a pond of fresh water.

From the west point of *Fisher's-Island* a dangerous reef runs off about one mile W. S. W. which, in passing it, you must be careful to avoid. In this passage, which is called the *Horse-Race*, the tides run very strong: it flows on the change and full days of the moon, half past eleven o'clock, and the water rises five or six feet.

Bearings and Distances of sundry places, commencing at the Light-House on Montock-Point, taken by the Officers of the Revenue-Cutter Argus.

THE south part of *Block-Island* bears E. b. N. from the light-house on *Montock-point*, 20 miles distant.

Shagwandanock Reef bears N. W. $\frac{1}{2}$ N. from the light-house on *Montock-point*, 4 miles distant; the reef ranges N. b. E. and S. b. W. about one quarter of a mile in length. There is a good channel way between the reef and *Long-Island*, about two miles wide, in 5, 6, and 7 fathoms water.

The east end of *Fisher's-Island* bears N. b. W. from the light-house on *Montock*, 20 miles.

Watch-Hill-Point bears north from the light-house twenty miles: there is a reef extending from *Fisher's-Island* to *Watch-Hill-Point*, leaving a passage between the east end of the reef and *Watch-Point*, half a mile.

The *Race-Rock*, where there is a buoy placed, bearing S. W. b. W. three quarters of a mile from the west point of *Fisher's-Island*, bears from *Montock* light-house N. W. twenty miles distant.

The *Gull-Islands* bear W. S. W. from the *Race-Rock*, six miles distant. The light-house standing on the West Chop of *New-London* harbour, bears N. N. W. nine miles from the *Race-Rock*.

Bartlet's-Reef, on which a buoy is placed, bears N. W. b. W. $\frac{1}{2}$ W. eight miles distance from the *Race-Rock*.

Little-Goshen Reef, where a buoy is placed, bears N. E. b. E. about three miles distant from the buoy on *Bartlet's-Reef*.

The light-house at *New-London* harbour bears from the buoy on *Little-Goshen Reef* N. N. E. $\frac{1}{2}$ E. about two miles distant.

The S. W. Ledge, where a buoy is placed, bears N. b. W. from the *Race rock*, seven and a half miles distant.

The East Chop of *New-London* harbour bears N. b. E. $\frac{1}{4}$ E. from the S. W. Ledge, one and a half miles distant.

The light-house bears from the buoy on S. W. ledge N. W. b. N. one and a half miles distance.

*Description of *Long-Island.*

LONG-ISLAND, from *Montock-Point* to *Red-Hook*, extends W. b. S. about 108 miles, and is at the broadest part about 25 miles across.

* *Long-Island Sound* is a kind of inland sea, from 3 to 25 miles broad, and about 140 miles long, extending the whole length of the Island, and di-

The land is generally pretty low and level, excepting a few hills which lie about 40 miles to the westward of *Montock-Point*. Along the south side of the Island a flat extends about a mile from the shore; in some places it runs out a mile and a half. Your course along this flat from *Montock-Point* to *Sandy-Hook* is S. W. b. W. $\frac{1}{4}$ W. 14 leagues; and then W. b. S. 22 leagues. The east end of the flat is sand, the middle and west parts are sand and stones. About 4 leagues distant from the island there are from 15 to 18 fathoms water; and from that distance to 20 leagues, the water deepens to 80 fathoms; in the latter depth you will have oozy ground, and sand with blue specks on it. About 4 leagues off the east end of the Island, you will have coarse sand and shells; and at the same distance from the middle and west end, there is a small white sand. From the south-west end a shoal extends about six miles towards *Sandy-Hook*.

Directions from Gardner's-Island to Shelter-Island.

IF you fall in with *Gardner's-Island*, you must sail on the north side of it, till you come up with a low sandy point at the west end, which point puts off two miles from the high land. You may bring the Island to bear east, and anchor in 7 or 8 fathoms water, as soon as within the low sandy point. If your cables and anchors are not good, you may make a fine harbour, which lies to the westward, called *Shelter-Island*. lying west three leagues from *Gardner's-Island*. You must leave *Shelter-Island* on your larboard hand, and run W. b. N. about 5 or 6 miles, when you will open a large bay, where 100 sail of vessels may lie safe, and anchor in 3 or 4 fathoms water.

Directions from Gardner's-Island to New-London.

YOUR course from *Gardner's-Island* to *New-London* is N. b. E. 5 or 6 leagues. In steering this course, you will leave *Plumb-Island* and *Gull-Islands* on your larboard, and *Fisher's-Island* on your starboard hand. In this pass you will go through the *Horse-Race*, where you will have a strong tide. The flood sets W. N. W. and the ebb E. S. E. This place breaks when there is any wind, especially when it blows against the tide. Your soundings will sometimes be 5 fathoms, at others 15 or 16. In passing the west end of *Fisher's-Island*, you must give it a berth of three and a half miles, as there are several rocks to the westward of it; then your course to the light-house is N. N. W. distant 2 leagues; but in going in here you must not make long hitches: you will leave a sunken ledge on your larboard, and one on your starboard hand. When within one mile of the light-house, you may stand on the eastward till the light bears N. N. W. and then run up about N. N. E.

riding it from Connecticut. It communicates with the ocean at both ends of Long-Island, and affords a safe and convenient inland navigation.

† The light-house stands on the west side of the harbour, and projects considerably into the sound.

Directions for vessels coming from sea, and bound to New-London.

GIVE *Montock* or *Block-Island* a birth of one mile : there is nothing to hurt any vessel between *Block-Island* and *Montock* ; when you have passed *Shagwandanock Reef*, which has been described, there is no danger, giving *Fisher's-Island* a birth of three quarters of a mile and the *Long-Island* shore two miles, until you get to the west end of *Fisher's-Island* ; you will then come into what is called the *Race*, (a stranger may be afraid, the *Race* appearing like a reef) but there is no danger, being about twenty fathoms water from the *Race-Rock* off the west end of *Fisher's Island* to the *Gull Islands* or *Gardner's Island*. The buoy on the *Race-Rock* you will leave to the eastward of you, which lies in three fathoms water at full tide ; you may go within two rods of it, in 4 fathoms water. The best course for a stranger is to bring the light-house on the West Chop of *New-London* harbour to bear North.

In beating in, there is no danger, keeping the light-house bearing N. b. E. $\frac{1}{2}$ E. and N. b. W. $\frac{1}{2}$ W. When you come within one mile of the light-house, keep about mid-channel of the harbour, leaving the light-house on the west side of you ; you may stand within 5 rods of either shore, until you get up with a small Island of rocks upon the west side of the harbour ; give it a birth of twenty rods, there being a small ledge called *Melton's-Ledge*, which bears about N. E. from the Island of Rocks ; you may anchor abreast of the town. The buoy on *Bartlet's Reef* lies in three fathoms water at full sea ; the buoy on *Little-Gosken Reef* lies in 3 fathoms water ; four rods to the eastward you will deepen the water to 4 and 5 fathoms—the buoy on the S. W. ledge being on the east side of the channel, lies in 3 fathoms at full sea ; the buoy lies on the west side of the ledge ; you may go near it ; the buoys are all painted white. There is a good channel way, of about half a mile wide, between the buoy on the *Race-Rock* and the point of *Fisher's Island*, leaving the buoy about 12 rods west of you, and the point of *Fisher's Island* thirty. The course of the tide from *Montock* through the *Race* is W. N. W. and E. S. E.

Directions for Vessels bound to New-York.

IF you fall into the southward, and make *Cape-May*, it would be prudent to keep about three leagues off, to avoid *Herrefoot* bar, which lies from 4 to 6 leagues from the Cape to the northward, and 8 miles from the inlet of that name. This inlet is frequented by the *Delaware* pilots, having no other harbour to the northward until they reach *Egg-Harbour*. After passing *Herrefoot* bar, you then may haul up N. E. in nine fathoms water, which course continued will draw you into 5 fathoms ; as you approach *Egg-Harbour*, you will there have fine white and black sand, intermixed with small broken shells ; by continuing the same course, you will deepen your water to 8 or 9 fathoms, and so continue till you draw near *Barnegat*, which will alter your soundings materially, as there is a channel runs in a S. E. direction from *Barnegat*. The soundings off the shoal is mud, shells, and gravel, mixed together. The shoal off *Barnegat* does not extend beyond 3 miles from the beach, and is very steep too ; you may turn this shoal in 6 fathoms water, within pistol shot of the outward breaker ;

it would always be prudent in night time to keep in 9 or 10 fathoms water at least, in turning the point of this shoal. The soundings are so much to be depended on, that the moment you lose the above soundings you are past the shoal, when you will have fine white sand and very hard bottom; you then may haul in for the land N. b. E. which course will bring you along shore, in from 15 to 17 fathoms water. But if the wind and weather would permit, I would recommend hauling in N. N. W. which will bring you in with the southernmost part of the *Woodlands*, which is very remarkable, having no other such land in the distance from *Cape-May* up to the *Highlands*, and can be distinguished by its being very near the beach, and extends to *Long-Branch*: by passing *Barnegat* in the day time, it may easily be known, should you be so far off as not to see the breakers; you will see a long grove of wood back to the country, apparently 3 or 4 miles long, known to the coasters by the name of *Little-Swamp*, and lies directly in the rear of the inlet of *Barnegat*, so that by sailing to the northward, your having the north end of this land directly abreast, you are then certainly to the northward of *Barnegat*; there is also another grove directly in the rear of *Egg-Harbour*, known by the name of *Great-Swamp*, which has the same references as respects *Egg-Harbour*—but that the one may not be taken for the other, it must be observed, the *Great-Swamp* of *Egg-Harbour* will appear much higher, and in length eight or ten miles, neither can they be seen at the same time, as *Barnegat* and *Egg-Harbour* are 15 miles apart. *Barnegat* bears due S. b. W. 45 miles from *Sandy-Hook*. In hauling in for the *Wood-land* before mentioned, you may, if the wind is off the shore, keep within a cable's length of it all the way, until you come up with the *Highlands*, and should your vessel not exceed 10 feet water, you may continue until you come up with the northernmost part of the cedars that stand on *Sandy-Hook*; then you must steer N. N. E. to give the *False-Hook* a birth, keeping about half a mile from the beach until you bring the light-house open with the east point of the *Highlands*: you may then steer up for the bluff of *Staten-Island* with a flood tide. Should it be night time, so that you cannot see the land alluded to, you will keep the same distance from the beach until you bring the light-house to bear S. b. E. then steer north or N. b. W. which will carry you up to the *Narrows* through the Swath; but should your vessel exceed 10 feet, it would be more prudent to go channel way. To go channel way—When you come up with the *Highlands*, keep about four miles from the shore to avoid the *Outward-Middle*, steering to the northward until you bring the light-house to bear W. b. S. then steer in for the light-house, as the flood outside sets to the northward, but when a little way in it sets to the westward: in steering, as you approach the light-house, you must not haul too nigh the shore, on account of the *False-Hook*—by keeping half a mile from the beach, you will avoid that shoal: when you have got in so far as the point of the Hook where the beacon stands, you then must haul in the bay W. S. W. but if you mean to anchor in the bay, haul in S. W. giving the point the distance before mentioned, until you bring the light-house to bear E. b. N. or E. N. E. where you may anchor in from 5 to 7 fathoms water, soft muddy bottom. But should you wish to proceed to *New-York*, when you have come in as before described, and got abreast of the beacon or the point of *Sandy-Hook*, steer up W. b. N. until you bring the light-house to bear S. E. and *Brown's-Hollow* to bear S. $\frac{1}{2}$ E. you then must steer up N. b. W. for the bluff of *Staten-Island*, which will at that time bear exactly N. b. W. from you; and that you may not be deceived with respect to *Brown's-Hollow*, it is the hollow which makes the termina-

tion of the Highlands to the westward: by steering then as before directed, you will turn the S. W. Spit—continue steering N. b. W. until you shoal your water, which you soon will do if it is young flood, as it sets from two and a half to three knots to the westward; here you will observe, at the time you turn the Spit before mentioned on the *Jersey* shore above the *Narrows*, two hummucks of land, each forming as it were a saddle, thus:



The easternmost of the two is the mark for coming up the channel, so as to avoid the *Upper-Middle*, by keeping it just open with the bluff of *Staten-Island*, which will be the case if you turn the Spit as before directed; this will bring you up channel way when you have sailed 5 or 6 miles the course described, and with this mark open; then you must haul more to the eastward, until you open the other hummuck which is called the *Westernmost-Hummuck*: by keeping both easterly and westerly hummucks open to your view, you avoid the Middle and the West Bank entirely, and come up channel way through the *Narrows*. When thus far, you must, to avoid *Hendrick's-Reef*, keep *Staten-Island* shore aboard. The mark to avoid *Hendrick's-Reef* is to keep *Bedlow's* or *Pesto* Island open with the point of *Long-Island*; for if you can see *Bedlow's* Island in coming through the *Narrows*, there is no danger of the Reef from the *Narrows* to come up to *New-York*, you will steer up for *Bedlow's* Island to avoid the *Mud-Flat*, which you leave on your starboard hand; this flat is a kind of oyster bed, or bank of mud and shells, and has not more than 1 ft. feet on it at low water; but to avoid this flat do not stand too far to the westward, on account of *Robbins'-Reef*, which to avoid, running on the west side of the channel, the mark is, To keep the point of land up the *North-River* (on which *Fort-Lee* stands) open with the east side of *Bedlow's* Island, after which there is nothing material to obstruct the navigation to *New-York*, it being very steep near the point of *Governor's* Island, and the rocks near the battery do not exceed one hundred yards from the shore. There is a reef of rocks in the *East-River*, known by the name of the *Middle-Reef*, which can be distinguished at all times by the rip of the tide going over it, both flood and ebb.—Further—

After making the *Highlands* of *Never-sink*, which is to the southward of *Sandy-Hook*, you may run boldly in within 3 miles of the beach, and in steering along to the northward, observe to keep in about 8 fathoms water, until you get the light-house to bear W. b. S. $\frac{1}{2}$ S. then if you have a round hill, called *Mount-Pleasant*, some distance in *Jersey*, in one view with the land about one quarter of a mile to the southward of the light-house, you are in a situation to pass the Bar; steer in W. $\frac{1}{2}$ N. until you are over it; you will have on it at low water three and a half fathoms: when over, you will be in four and a half fathoms; pass the *Hook* and light-house about half a mile, at which distance you will have five and six fathoms: when you have the point of the *Hook* on which the beacon stands, bearing S. S. E. you may then haul to the southward and round the *Hook*, and come too from one to two miles distant, the *Hook* bearing from E. to N. E. in good holding ground, 5 fathoms water. When you make *Long-Island*, it is necessary to keep somewhat in the *Offing*, on account of the *East-Bank*, and observe the same marks running in as above.

The following are the Depth of Water, Bearings, Courses, and Distances, of the Buoys placed in the Harbour of New-York.

No. 1. A WHITE Buoy, on the north part of the outer part of the Outer Middle Ground, sunk in 4 fathoms water, bearing from the light-house at *Sandy-Hook*, E. b. N. distant 3 miles.

No. 2. A black buoy, on the S. E. part of the East Bank, sunk in 4 fathoms water, bearing from the light-house N. E. b. E. $\frac{1}{2}$ E. distant four miles, and bearing from the white buoy, (No. 1,) N. b. E. one and a half miles distant; soundings betwixt them, four and a half fathoms water, at common low tide. A cable's length east of the black buoy, (or No. 2) are 7 fathoms water; the channel course in betwixt the aforesaid buoys, is W. N. W. allowing for the tide.

No. 3. A black buoy, on the S. W. point of the East Bank, sunk in 4 fathoms water, and bearing from the light-house, N. W. b. N. 4 miles.

No. 4. A white buoy, on the S. E. part of the West Bank, sunk in three and a half fathoms water, bearing from the light-house N. W. b. N. eight miles distant; and from this buoy to the last mentioned black buoy, (or No. 3,) the course is S. b. E. five miles distant; the least soundings betwixt them is four and a half fathoms.

No. 5. A black buoy, on the Upper Middle Ground, in four and a half fathoms water, bearing from the light-house N. b. W. $\frac{1}{2}$ W. 9 miles distant, and from the last mentioned white buoy, (or No. 4,) N. E. two and a half miles distant; soundings betwixt them, from three and a half to six fathoms.

No. 6. A white buoy, sunk on the N. E. fork of the West Bank, in three and a half fathoms water, bearing from the light-house N. b. W. $\frac{1}{2}$ W. twelve miles distant; soundings from three and a half to six fathoms water betwixt them; and from the last mentioned black buoy, (or No. 5) the course is N. b. W. $\frac{1}{2}$ W. three miles distant.



Orders and Regulations for the Port of New-York.

ALL vessels moored in the stream of the East or North River, are not to be within one hundred and fifty fathoms of any wharf.

All vessels lying at the wharves of either river, or in the basons or slips, are to have their lower and top-sail yards topped, their fore and aft spars rigged in, and to have the anchors taken up, and the crowns in upon the fore-castle.

All vessels having on board gun-powder, or other combustible articles, are to discharge the same before they come to the wharf.

All vessels having on board unslacked lime, are not to entangle themselves with other vessels, or lie where they will take the ground.

No vessel whatever, between this and *Sandy-Hook*, to throw overboard stone ballast below low water mark, and in this harbour particularly, all ballast is to be fairly landed at high water mark; and at the time of discharging it, attention is to be paid not to drop any into the water; ballast of any kind not to be unladen at night.

No fire to be made or kept on board any vessel whatsoever at any dock, wharf, pier or key, within the bounds of this city, at any other time, than from day-light in the morning, till eight o'clock at night.

No pitch, tar or other combustibles, to be heated on board any vessel lying at the wharves, or in the basons or slips, but to be done on stages or boats, removeable in case of accident.

All vessels that are not employed in discharging or receiving cargoes, are to make room for such others, as require to be more immediately accommodated with proper births for those purposes.

All vessels at the end of any wharf, and in part or in whole covering the slips, must occasionally haul either way to accommodate those going in or out of the docks or slips, or quit the birth.

All masters of ships or other vessels are to report in writing, and on oath, to the mayor of this city, the names and occupations of every person who shall be brought into this port in his vessel, and for every neglect a fine of 50 dollars will be demanded for each person, and if any of them shall be foreigners, the fine will be 75 dollars for each person, who is likely to become a tax on the city; he is to carry him or her back, or support them himself.

It is recommended, that all vessels laying at the wharves keep an anchor and cable in readiness, in case of fire, to bring up with in the stream, if necessary.

Description of the Coast to the East and West of Sandy-Hook.

IF you come in near *Cape-Hatteras*, be very cautious of its shoals, and make your way to the N. N. E. which will bring you on the sounding of the *Jersey* shore. When you get 20 fathoms water in the lat. 40, 00, north, then haul in to make the land, by which you will avoid the difficulties of the coast and the shoals nearer in shore; but if you cannot follow this direction, see the following.

When you are up with *Chingoteack* Shoals, in 15 fathoms water, it is near enough to approach them; from this station, steer N. b. E. which will bring you up nearly with *Great-Egg-Harbour* on the *Jersey* Shore, but you must use your lead on approaching this shore, and come no nearer to it than 10 fathoms water; from *Great-Egg-Harbour* to the lat. of 40, N. the *Jersey* Shore trenches near N. E. and from the lat. 40, to the *Highlands of Neverfink*, the land trenches nearly north; in all this rout, ten fathoms water must be kept, or near it.

When you are full up with the *Highlands of Neverfink*, if you see nothing of a pilot you may stand on; but keep 3 miles off the bare part of *Sandy-Hook* land, till you are up with the southern cedar trees on the Hook, then near the Hook till you get three fathoms water on the Outer Middle Ground, at which time you will be two or two and a half miles from the Hook. On this bank you must edge off and on, in three or three and a half fathoms, for the bank lies rounding in as the Hook does, and stops a little short of its north point; but long before you reach that, you will bring the light-house to bear W. $\frac{1}{2}$ S. or W. b. S. when you must immediately steer in west; this will bring the light-house a little on the larboard bow, and if you see the beacon light near the extreme point of the Hook, you must take it on the same bow also, but pass it about two cables length, when you must edge away to the W. S. W. about two miles, and anchor with the light bearing east of you.

If you should fall in with the east end of *Lang-Island*, where there is

now a light-house which does not differ much in latitude with *Sandy-Hook* light, but differs very considerable in soundings, as you will see by your draft as to depth of water, &c. in which you cannot be deceived. In steering to the westward for the light-house or the *Highlands of Never-sink*, you must come no nearer to *Long-Island* than 15 fathoms water; in this rout, which is about 125 miles from the light-house which is on the east end of *Long-Island*, and the courses between W. b. S. and W. S. W. it is necessary to use the lead after you run 80 miles, to know how you approach the *Jersey Shore*:—ten fathoms water is near enough at night.

If you should pass *Nantucket Shoals* in 38° north latitude, or 38, 30, or 39, 00, or 39, 30, you will if possible observe when you leave the *Gulph Stream*, from which advancing about ten leagues, you may begin to expect soundings, and a S. W. current as soon as you get soundings; then the observation by lead and line is to aid the navigator.

If you are on soundings and running in for the land to the northward of both the *Egg-Harbours*, the northern one is often called the *Burning-Hole*, which lies in lat. about 38, 40, north: being near the land, and steering the above mentioned course, and you find you have suddenly deepened your water from less to 13 fathoms, heave about immediately, for many vessels have been deceived by a hole in these soundings of the dimensions of about 4 acres of ground, and have been totally lost.

If you are beating to windward, off the *Hook*, waiting for a pilot or for a wind, night or day, in standing to the northward, when you suppose the light-house of the *Hook* bears west, it is near enough; when you approach *Long-Island*, the soundings are fine white sand, but on the *Jersey Shore* the soundings are coarser and darker; there is what is called a *Hook Channel* in this channel, the soundings are mud and sand.

W. S. W. and E. N. E. moon makes full sea at the *Hook*.

Description of New-York Bay.

YORK Bay is 9 miles long and 4 broad, and spreads to the southward before the city of *New-York*. It is formed by the confluence of *East* and *Hudson's Rivers*, and embosoms several small Islands, of which *Governor's Island* is the principal. It communicates with the ocean through the *Narrows*, between *Staten* and *Long-Islands*, which are scarcely two miles wide. The passage up to *New-York*, from *Sandy-Hook* (the point that extends furthest into the sea) is safe, and not above 20 miles in length.

Directions for sailing from Sandy-Hook Light-House to Cape-May, or Light-House on Cape-Henlopen.

WHEN sailing from *Sandy-Hook* light-house off *New-York*, bring it to bear W. N. W. and steer E. S. E. two leagues, S. S. E. three or four leagues, and then S. S. W. five leagues, which will bring you up with *Barney-Gatt*, which has a shoal bank one league off. When you have

passed this Gatt, steer S. W. b. S. 13 or 14 leagues, which will carry you up with *Great-Egg-Harbour*, which has a shoal bank one league from the shore, that has not more than 6 feet water on it.

This land may be known by its appearing like broken Islands, with the **Highland of Neverfink* to the westward of *Sandy-Hook*, which has a singular appearance from any land on that coast. In the day time you may go within two leagues of the shore, but in the night it will be prudent to keep further off. When you have passed *Great-Egg-Harbour* steer S. W. b. W. 10 leagues, which will bring you up with *Cape-May*.

Between *Barney-Gatt* and *Cape-May* there are two inlets, fit at high water for vessels drawing 12 feet, viz. *Little and Great-Egg-Harbours*, but they are only fit to be run for at times when no other port can be made, as the navigation is not so safe as other places.

In running for *Cape-May*, while steering your S. W. b. W. course, you will pass five inlets, before you come up with the *Cape*, viz. *Corsons, Townsend, Herrefoot, Turtle-Gut, and Coolspring*, all of which have bars lying off their entrance; when abreast of *Coolspring* inlet, you may, if bound by *Cape-May*, steer W. b. S. but if bound in by *Cape-Henlopen*, steer S. S. W. till the light-house bears west, when you may run for it till within two miles.

Off *Cape-May* lies a shoal called *Four-Fathom-Bank*, which in the chart is laid down bearing S. E. $\frac{1}{4}$ S. from the pitch of the *Cape*, but is quite erroneous, as the true bearing is E. b. S. $\frac{1}{4}$ S. and distant 6 leagues. The water sometimes breaks over this shoal, and has appearance of danger to mariners; but there has never been less than 18 feet water on the shoal of the year, which renders the passage across quite safe.



Directions for sailing in by Cape-May.

YOU may run in for *Cape-May* till within three quarters of a mile of the wind-mill which stands on the shore about two miles to the northward and eastward of the pitch of the *Cape*, where are several houses which are inhabited principally by pilots.† From abreast of the wind-mill keep the shore close on board (when you will be in five fathoms water) till you double round the *Cape*, when you will leave the *Great-Shoal* on your larboard hand, over which it continually breaks, when covered, bearing S. E. b. E. from the *Cape*, distant one mile and a half, which is bare at low water. After you have doubled the *Cape*, steer north, till it bears S. E. $\frac{1}{2}$ S. when you must steer N. W. till you deepen into 7 and 8 fathoms. (In running the above course, you will have from five to two and a half fathoms, before you come into 8 fathoms, which is three leagues distant from the *Cape*.) After you have got into 8 fathoms, you will immediately come into three fathoms, when you must steer N. W. b. W. 5 leagues, which will carry you into the *Main Channel*, between the *Brandywine* on your lar-

* *Neverfink-Hills* extend N. W. from the harbour on the *Atlantic Ocean*, to *Ravinton-Bay*, and is the first land discovered by mariners when they arrive on the coast. They are 600 feet above the level of the sea, and may be seen 20 leagues off.

† As soon as you are in sight of the *Cape*, and are in want of a pilot, you had better hoist some signal, as those who do not are considered not in want of one.

board, and *Cross-Ledge* on your starboard hand, bearing N. N. W. and S. S. E. from each other, distant 3 leagues. In running the above course you will have three, three and a half, and two and three quarters fathoms, till you come near the main channel, when you will deepen into 5 fathoms, which is a swarth that runs up to the eastward of the *Cross-Ledge*: still keep your N. W. b. W. course till you have crossed this swarth, when you will shoal your soundings into two and a half fathoms, and then deepen into 7 fathoms, which is the main Ship Channel, when you must steer N. W. till you have only 5 fathoms, which is on the *Fourteen-Foot-Bank*, and then alter your course to N. N. W. for the buoy of the *Cross-Ledge*. One league distant from this Ledge lies a shoal called *Joe-Flogger*, bearing W. S. W. from the buoy.

*Directions for sailing in by *Cape-Henlopen.*

BRING the light-house to bear west, and run for it till within two miles. When abreast of it you will have 15 or 16 fathoms water. After you have passed it, steer W. N. W. till you bring it to bear E. S. E. where you may anchor in 3 or 4 fathoms. If you intend running up the bay, bring the light-house to bear south, and steer N. b. E. with a flood tide, and N. b. W. with an ebb. The flood sets W. S. W. and the ebb E. N. E. In steering the above course 11 or 12 miles, you will make the *Brown*, which you leave on your larboard hand: it has a buoy on it. Continue your course north till you bring *Cape-May* to bear S. E. b. E. when you will make the *Brandywine* on your starboard hand, which has a buoy on it; then steer N. W. b. N. or N. W. b. N. $\frac{1}{2}$ N. and you will have 7 or 8 fathoms water. The channel between the *Brown* and *Brandywine* is not above one mile wide. South-east moon makes high water here at full and change. There are two banks about midway between the *Brandywine* and *Cross-Ledge*, called *Fourteen-Foot-Bank* and *Ten-Foot-Bank*, the former you leave on your larboard, and the latter on your starboard hand. These banks are not in the way with a fair wind, for they lie about N. W. b. W. and S. E. b. E. *Cross-Ledge* lies 9 miles from the *Brandywine*, which you leave on your starboard hand. It has a small vessel with a mast in her, for a buoy, which you may see two or three leagues. *Cross-Ledge* is about 8 miles long, bearing N. W. b. N. and S. E. b. S. the middle you leave on your larboard hand (on which the buoy is placed.) When you pass the middle, steer N. W. two leagues, for *Bombay Hook*, and when it bears N. W. or N. W. b. W. you must be careful of a bar that lies a mile and a half off from it, called *Bombay-Hook* bar, which has not more than six feet on it at low water. Your course to *Reedy-Island*, with a fair wind, is N. W. b. N.

* *Cape-Henlopen* lies in north lat. 38, 46, and in west long. 75, 07. There is a light-house here, a few miles below the town of Lewis, of an octagon form, handsomely built of stone, 115 feet high, and its foundation is nearly as much above the level of the sea. The lanthorn is between 7 and 8 feet square, lighted with 8 lamps, and may be seen in the night, ten leagues at sea. Vessels off the Delaware, upon displaying a jack at the foretopmast-head, will be immediately furnished with a pilot. None, however, are to be depended on, unless they are furnished with branches, and with a certificate from the Board of Wardens of Philadelphia.

distant 15 miles; if you have the wind ahead, be careful of *Stoney-Point-Ledge*, which you leave on your starboard hand, as the channel is not more than two miles wide. The ledge is partly dry at low water, and bears S. E. from *Reedy-Island*, distant four or five miles.

Directions from Reedy-Island to Philadelphia.

WHEN you pass *Reedy-Island*, be careful of a long shoal that lies to the N. N. W. of it, one mile and a half in length, called the *Pea-Patch*, which lies on your starboard hand. In passing said shoal point, keep your larboard hand best on board till you bring the river to bear N. E. or N. E. b. N. when you may stand up for *New-Castle*. This place is 4 miles from *Philadelphia*. When you have passed it about a mile, you give the larboard hand a birth, as there is a flat shoal near half a mile off; if you have a fair wind, you may keep in the middle of the river. This river winds from *Newcastle* to *Marcus-Hook*, from N. E. to E. N. E. distant 20 miles. Your course from this to *Chester-Island* is N. E. b. E. 4 miles. You leave said Island and a long low point that lies W. S. W. from it, on your larboard hand, giving it a good birth, and keeping your starboard hand best on board, till you come up with **Billings'-Port*, when you will haul up for *Mud-Fort*; but before you come up with this fort you will see a black buoy in channel way, which you may go close to. Run direct for this fort, which is an E. N. E. course, till you are abreast of it, when you will see a small Island on your larboard, and another on your starboard hand, which you must go between. When you have passed between these Islands, steer E. b. N. two miles, when you must haul up N. E. b. N. for *Gloucester-Point*, distant one mile, from which you must keep your larboard hand best on board, and steer north 3 miles, which will carry you abreast of the city.

T I D E - T A B L E.

Moon	}	S. E. b. E. S. E. S. S. E. S. b. E. S. S. S. W. S. W.	} makes full sea at	}	Cape-May. Cape-James. Bombay-Hook. Reedy-Island. Newcastle. Chester. Philadelphia.
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Setting of the tide within the bay of the Capes.

First Quarter Flood,	W. N. W.
Second to last Quarter,	N. N. W.
First Quarter Ebb,	E. S. E.
Second to last Quarter,	S. S. E.

* This is a high sandy point, and bluff.

Directions from Cape-Henlopen to Cape-Henry.

WHEN you leave *Cape-Henlopen*, bound to *Cape-Henry*, give it a birth of 3 or 4 miles and steer S. S. E. 10 leagues, as there is a shoal Bank that lies S. b. E. from *Cape-Henlopen*, 11 leagues distant, called *Senepuxet*. It lies one league from land. If you turn in or out by *Cape-Henlopen*, be careful of the *Hen* and *Chickens*, which lie S. b. E. from said Cape, one league distant. There is a bank that lies S. E. b. S. from the Light House, distant 5 leagues, which has not more than 5 fathoms water on it. When you judge yourself to the southward of *Senepuxet*, you may steer S. b. W. 10 or 11 leagues, which will bring you the length of *Chingoteack-Shoals*, which lie in latitude 38, 00 N. bearing due south from *Cape-Henlopen*, 20 leagues distant, and two leagues from land; between it and the shore there are 10 and 12 feet water.

Remarks on the land from Cape Henlopen to Chingoteack Shoals.

INDIAN-RIVER lies 8 miles to the southward of the Light-House. This inlet is fit only for small vessels that draw not more than 6 feet water. *Fenwick's-Island* lies 15 miles to the southward of the Light-House, which Island parts *Delaware* from *Maryland*. This Island has a grove of trees on it, and you will have 6 or 7 fathoms water within a league of the land, and a strong current setting to the southward. When you are within half a mile of *Senepuxet* and *Chingoteack Shoals* you will have 12 fathoms water. The land from *Chingoteack* to *Cape Charles* makes broken land with Islands and several small inlets. There is a good harbour within *Chingoteack Shoals* which goes by the same name. You leave *Chingoteack Shoals* on your larboard hand, and *Metomkan* harbour about 3 leagues W. S. W. from *Chingoteack*. *Metomkan* harbour has 9 feet water at high tide. These are very dangerous harbours in a gale of wind, but you may ride along shore with the wind from N. W. to S. W. When the wind blows hard at N. E. or E. N. E. and you are in sight of *Chingoteack shoals*, your only chance for safety is to stand to the southward, for you cannot clear the land to the northward, or go into the harbour of *Chingoteack*, which lies about N. W. 6 miles from the south end of the shoals. When the wind is to the eastward it is generally thick weather on this coast. After you pass the southward of *Chingoteack*, steer S. S. W. for the light-house on *Cape-Henry*, for the northern part of *Machapungo* shoals lie 4 or 5 leagues to the northward of *Smith's-Island*, and the southern part of them comes near abreast of said island. In steering to the S. W. westward 5 or 6 leagues S. E. of *Smith's-Island*, you will have 12 or 13 fathoms, and in some small places 3 and 4 fathoms. When you are 20 leagues from land, in the latitude of 37, 30, you will have from 40 to 45 fathoms; but when to the southward of *Cape-Henry*, you will have from 7 to 8 fathoms within a league of the land, and a strong southerly current, which in general runs from two to two and a half knots an hour.

Directions for sailing in by Cape-Henry Light-House.

WHEN coming from sea in the latitude of *Cape-Henry*, you meet with soundings about 25 leagues off, which you may observe by the colour of the water. On the south edge of the bank, you will have 40 fathoms water, which will soon shoal to 20, and still decrease as you approach the shore, generally sandy bottom. In clear weather, you may see the land when in about 10 or 11 fathoms, regular soundings, at which time you will be about 5 leagues to the southward of it. To the northward of the land, in 6 fathoms, the soundings are irregular, and the ground coarser. In coming in with the wind northwardly, you must be careful of the outer part of the *Middle-Ground*, which lies 14 miles E. N. E. from *Cape-Henry*, and 7 miles S. E. b. E. from *Cape-Charles*. You may go so near it as to bring *Cape-Henry* to bear W. $\frac{1}{2}$ S. which will carry you round the tail of it in four and a half or five fathoms water, when you will deepen into 11, 12, or 13 fathoms, and then haul away for the Bay, the Cape being steep to. The channel between the Cape and *Middle-Ground* is about 4 miles wide, and 8 fathoms water close to the latter.

With a fair wind, you may bring the light-house to bear west; but if you have the wind ahead, and are obliged to turn in, you may stand to the southward till the light-house bears N. W. b. N. and to the northward till it bears W. S. W. You will have 9 or 10 fathoms within a mile of the light-house, and from 6 to 5 fathoms close to the *Middle-Ground*.

Directions for sailing between the Middle-Ground and the Horse-Shoe.

CAPE-HENRY S. E. b. S. leads over the tail of the *Horse-Shoe* in 5 or 6 fathoms. This part of the shoal lies in ridges, so that you will frequently find one half a fathom difference at a cast; but it is not dangerous. The tide of ebb down *Cheapeake-Bay* sets over it to the southward.

The *Middle-Ground* is very hard sand, and pretty steep on the southwestern side. Bring the light (after passing *Smith's-Island*) to bear S. W. and run for it, which will carry you over the *Middle-Ground* in Ship-Channel, into 7 and 8 fathoms, when you must haul up west, and run for the *Horse-Shoe*, where you will find from four and a half to three fathoms, good anchoring. The ebb out of *James* and *York* rivers sets over it to the eastward, which makes it dangerous sailing there in the night. In turning, stand towards the *Horse-Shoe* to 4 or 5 fathoms, and towards the Middle to 8 fathoms; but it is best not to venture into deep water, for the deepest water, viz. 9 and 10 fathoms, is very near the *Middle-Ground*.

Directions for New-Point-Comfort.

WHEN you bring *Cape-Henry* to bear S. S. E. you may steer N. N. W. 8 leagues, which course and distance will carry you into *New-Point-*

Comfort. There is a shoal which lies east from the point, distant two miles, and four rivers that empty into this bay or harbour, viz. *Severn-River*, *Way-River*, *North-River*, and *East-River*. These rivers are all navigable for vessels of 50 or 60 tons, and considerable places of trade.

Vessels at anchor in *New-Point-Comfort* are exposed to the wind from E. S. E. to S. E. and I would therefore recommend in that case to go into *Severn-River*, where they will lie safe from all winds. Your directions for this port are to bring the south point of *New-Point-Comfort* to bear E. b. S. and steer W. b. N. 2 leagues, which course you will continue till *Severn-River* bears W. S. W. when you must steer into the river W. S. W. or S. W. b. W. which will carry you safe, where you may lie landlocked from all winds. In running for this river you will make two bunches of trees on your larboard hand, which at a distance appear like two Islands, but as you approach them you will find they are on the main land. In going into the river you must keep your lead going, and keep in the middle, and go between two points of marsh, and you will have no more than 3 fathoms between *New-Point-Comfort* and *Severn-River*, muddy bottom. You may go to sea from this river with the wind from S. W. to N. W.

Directions for Norfolk and Hampton Road.

A SHIP from sea falling into the northward ought not to go nearer than seven fathoms on the shore until she is well up with the middle of *Smith's-Island*, when she may stand into five fathoms without danger.

If the *light on *Cape-Henry* is to be seen, keep no further to the northward than for the light to bear W. S. W. by the compass, which course, after crossing the *Middle* in four or four and a half fathoms, will lead you to the *Channel-Way* in 7, 8, and 9 or 10 fathoms, sticky bottom; from thence a west course will lead you to the tail of the *Horse-Shoe*, in 5 fathoms, hard sand, the light bearing S. E. b. E.—If bound to *Hampton-Road*, in order to gain with certainty the southern shore on which it is right to take soundings, steer W. or W. b. S. until the light bears E. S. E. then, being in five fathoms or a quarter less five, a W. N. W. course leads you up clear of *Willoughby's-Point*—this being passed, and the water deepened into 9 or 10 fathoms, it is necessary to haul up W. S. W. observing to come no nearer than nine fathoms to the south shore, lest the bar off *Sowell's Point* hook you in. Should you (after passing *Willoughby's-Point*) fall into 14 or 15 fathoms, †*Old-Point-Comfort* bearing W. N. W. steer up S. W. b. W. but go no nearer to *Hampton-Bar* on the north side than ten fathoms, it being steep to, until you pass *Sowell's-Point*, when *Old-Point-*

* The light-house is situated on the larboard hand going in, is about 90 feet from the surface of the water, and cannot be seen a great distance. There is a house erected near the light-house for the accommodation of pilots.

† A law passed the Congress of the United States, April 27, 1798, which enacts, "That as soon as a cession shall be made by the State of Virginia to the United States of the jurisdiction over a tract of land proper for that purpose, the Secretary of the Treasury be, and he is hereby authorized to provide, by contract, to be approved by the President of the United States, for building a light-house on *Old-Point-Comfort*, in the said State, and to furnish

Comfort, bearing N. E. you fall into 7, 8, and 9 fathoms, good anchoring.

As the setting of the tide varies much at different stages thereof, attention should be paid as well to the bearing of the light as the soundings, when running up from the Cape to *Willoughby's*, lest you cross the channel and run on a lump of the Horse-Shoe called the *Thimble*, which has only 8 feet water on it, and is steep to, (say 7 fathoms)—this lump lies a little below *Willoughby's-Point* on the opposite side—to avoid which is the reason why it is necessary to take the soundings, as the south side of the channel is in general sticky bottom, and on the *Shoe* it is hard sand.

From *Hampton-Road* to *Norfolk* the channel is too intricate for strangers to approach without a pilot.

The greatest depth of water that can be carried to *Norfolk* is 21 feet; but if a ship should touch, the mud being so very soft, she will not be subject to injury, and there is no sea runs where the shoal water lies.

A ship, approaching from the southward, is to keep in 7 fathoms water, and no nearer, her course varying between N. $\frac{1}{2}$ E. and $\frac{1}{2}$ W. which will bring her up with the Cape, when falling into 8 or 9 fathoms water, sticky ground, will shew her to be in the channel way.

Directions for running from Cape-Henry up the Bay to Baltimore.

WHEN you come in from sea and are bound up the Bay, bring *Cape-Henry* to bear S. S. E. and steer N. N. W. about 4 leagues, which will carry you to the northward and westward of the *Middle-Ground* that lies between the two Capes, and when you have *Smith's-Island*, off *Cape-Charles*, to bear E. you will be to the northward of this shoal. If you have the wind ahead, and are obliged to turn to windward, you must not stand further to the eastward after the light-house or the Cape bears S. S. E. as the western part of the *Middle Ground* is steep. In standing to the westward, you may go into three and a half and four fathoms without danger; but in standing to the eastward, you must not go into less than 8 fathoms, as you will be near the *Middle Ground*. If you should wish to anchor at *New-Point-Comfort*, which bears from the Cape about N. W. b. N. distant 8 leagues, you must take care of the *Spit* that runs off the point about S. E. 2 miles. Keep to the westward of this point of land, and you may run in under the point and anchor in 4 or 5 fathoms water, fine bottom, where you will be secure from northerly or N. E. winds. After you are clear of the *Middle Ground*, as before directed, and have the Cape to bear S. S. E. and a fair wind, you may steer up the bay north; come not to the westward of north till you have *Gunn's-Island* to bear west, to avoid a shoal called the *Wolf-Trap*, which lies N. N. E. two and a half leagues from *New-Point-Comfort*, and S. E. b. E. one league and a half from *Gunn's-Island*, which is but small. From the *Wolf-Trap* steer north 20 leagues, which will carry you to the mouth of the *Potow-*

the same with all necessary supplies." The building of the house alluded to has never commenced, and we wish, for the security of navigation, that the important work may soon be undertaken, for the safety of our mariners, and benefit of commerce. We hazard an opinion, that the necessary cession of the land has not been made by the State.

mack. When you have *New-Point-Comfort* to bear west, you are within 10 leagues of *Watts'-Island*. In running the above course and distance, you will have from 10 to 4 fathoms before you come up with the Islands. If you should come into 3 fathoms as you approach these Islands, you may haul a little to the westward, when you will deepen your water. Off *Watt's* and *Tanger's Islands* the soundings shoal gradual. If you want to go into *Rappahannock* river, which is about six leagues to the northward and westward of *New-Point-Comfort*, and one league and a half from *Gunn's-Island*, you must, when it bears about N. W., run for it, leaving *Pianhitank* on your larboard hand, where you will have from 7 to 3 fathoms. As you come up with the larboard head of the river, keep your soundings on the larboard hand from 3 to 7 fathoms, and not deepen your water more than 7 fathoms to the northward, to avoid a long spit of sand that runs off 2 miles S. E. from the northern head of the river, which is very steep, but keep round the southern head, in the above depth of water, where you may anchor in 7 or 8 fathoms, good bottom, and lie safe from all winds.

After you are up the bay, as far as *Watt's-Island*, and have it to bear about E. S. E. you will deepen your water from 5 fathoms to 10 and 12, muddy bottom. Continue your course north until *Watts'-Island* bears S. E. and *Smith's-Point*, which is the southern head going into *Potowmack* river, to bear west, when you will be in 10 or 12 fathoms water. If you deepen your water to 15 or 20 fathoms, you will be very near the bad spit or shoal that runs off from *Smith's-Point* into the Bay one and a half leagues. Keep your soundings in 10 or 12 fathoms on the *Tanger's* side, as before directed: you may then haul up N. W. b. N. for *Point-Lookout*, which is the northern point of *Potowmack* river, and come too within one mile of the point on the western side of the bay, and have 4 and 5 fathoms water, muddy bottom. When you are up with *Potowmack* river, and would wish to harbour, having the wind down the bay, you may run in round *Point-Lookout*, giving it a small birth, and anchor, where you will be sheltered from all northerly winds.

When you are up as far as *Point-Lookout*, and have the wind ahead, you have a good channel to beat in, up as far as *Patuxet-River*. You may stand on each tack to 4 or 5 fathoms; but in standing to the eastward, when you have nine or ten fathoms, it is best to tack, as the ground rises sudden to 4 or 5 fathoms, and then lessens into two, hard sand; the western side is more regular. Your course from *Point-Lookout* to *Patuxet* river, with a fair wind, is N. b. W. $\frac{1}{2}$ W. and the distance 5 leagues, in 7 and 10 fathoms water, which will carry you up with *Cedar-Point*, which is pretty bold, and makes the south point of *Patuxet* river. If the wind is to the northward, and you cannot get into *Patuxet*, (which is often the case) you may run in under *Cedar-Point*, and anchor in 3 or 4 fathoms, good bottom, and secure from the wind down the bay.

Patuxet is as remarkable a river as any in the bay, having very high land on the north side of the river, with red banks or cliffs. If you go into this river, give *Cedar-point* a small birth, and stand to the northward till you have the river open; when you may run in for *Drum-point*, which is on your starboard hand. This is a sandy bold point, with some small bushes on it.—Double this point, and come too in two and a half and three fathoms water, where you will be secure from all winds. In beating into this place, you may stand to the north side for the high red cliffs to 3 fathoms, and to the south side to 5 fathoms water, and in the channel you will have 7 fathoms water. When standing to the south side of the river, you will see

some buildings on the north side of the river above *Drum-point*: as soon as these buildings come on with *Drum-point* you must tack, to avoid a spit that runs off from the south side of the mouth of the river.

If you cannot get up the bay, you may anchor under the high cliffs and lie safe from northerly winds, in 5 or 4 fathoms water.

If you should harbour in *Patuxet*, when you come out, bound up the bay, give the high land on the northern side of the river something of a birth, and also give *Cow-Point* a good birth, as a large spit runs off here some way, which is very bold: You will have 8 fathoms and before the next cast of your lead you may be ashore. Run from *Patuxet* into the bay till you have 9 or 10 fathoms water, when you will be near mid-channel. Your course up the bay when in the channel, is N. b. W. $\frac{1}{2}$ W. to *Poplar-Island*, distant 8 or 9 leagues. In running this course, you will have from 10 to 15 fathoms. When *Sharp's-Island* bears east, you may find 18 fathoms, muddy bottom. After leaving *Patuxet* river, if you intend to go into *Great-Cheptank* river, you must leave *James'-Island* (or point) on your starboard, and *Sharp's-Island* on your larboard hand, giving both a good birth, as there are long spits off from both these places. After you have passed *James'-Point*, steer away about N. N. E. in 7 and 8 fathoms, which will carry you in under *Sharp's-Island*, where you may anchor within half a mile of the Island, and lie secure from northerly or N. W. winds, and, if you wish it, take a pilot at this place. After you are up with *Poplar-Island*, and it bears east, you may then steer away about north, distant five and a half leagues, which will carry you up to *Annapolis-River*. After leaving *Poplar-Island*, the next you come to is *Kent-Island*, between which makes *Wye-River*. If the wind comes ahead when you are up as far as the southern part of *Kent-Island*, you may run in under it, opposite *Poplar-Island*, and anchor in 6 or 7 fathoms water, and lie secure from all winds except S. W.

The land on the western side of the bay from *Patuxet* to *Annapolis-River* is something high, with several bays, such as *Hemming* and *West-River* Bays, where the soundings are gradual on both sides. You will have, in running from *Poplar-Island* to *Annapolis* or *Tally's-Point* (which is the southern point of *Annapolis-River*) from 7 to 15 fathoms water. Give *Thomas'* and *Tally's-Point* a good birth, as there are long spits off from both places. If you go into *Annapolis-River*, give *Talley's-Point* a good birth, and haul into the westward for the mouth of the river, taking your soundings off the south side in 3 and 4 fathoms water, and pass in between *Talley's* and *Green-Bush-point*, which you leave on your starboard hand, giving said point a birth of an equal width, and run just above them, where you may anchor in 3 or 4 fathoms, and lie secure from all winds.

After you are up with *Annapolis*, and bound to *Baltimore*, when in the middle of the channel, your course is N. b. E. about 5 leagues, which will carry you up to *Baltimore* river. Come not to the northward of N. b. E. for fear of *Rattle-Snake-point* and the *Bodkin-Shoals*, which you leave on your larboard, and *Swan's-point* on your starboard hand: this point is on the eastern side of the bay, to the northward of *Kennis-Island*, (or *Love-point*.)

From *Annapolis* to the mouth of *Baltimore* river, you will have from 4 to 10 fathoms. Come no nearer the western side than four and a half or five fathoms, till you have the river open, at which time *Swan's-point* bears about E. S. E. when you may haul in for the river. The best mark is the north point a little open with a gap of woods on *Sparrow's-point*, which will carry you in three fathoms water, which is the most you will have in

this channel, soft bottom. Keep these marks till *Bodkin-point* bears S. S. W. then steer west or W. b. N. into the river, giving North Point a birth of about one mile. When abreast of North Point, steer away for the *White-Rocks*, which you will see on the south side of the river, until you are abreast of them, when you must haul to the southward till you bring Leading Point (which is high bluff woods) within two fails breadth of *Hawkins'-point*, and keep it till you are almost abreast of the rocks, when you must again haul to the southward, till you bring the said points within a small fail's breadth of each other, which must lead you up to *Hawkins'-point*, to which give a birth of one quarter of a mile. There are several small shoals of about two fathoms on each side of the channel, which are steep, and the channel between them not more than one quarter of a mile wide. When you come up with *Hawkins'-point*, you may steer away for the *Narrows* (on which the fort stands) about N. W. b. N. which course has nothing to obstruct you; you will have from two and a half to five fathoms. When you are up with the *Narrows*, pass between the two points, and give the larboard side a good birth, to keep clear of a shoal just above the *Narrows*; then haul to the S. W. up off the wharves, on the point which is on the starboard hand, and there anchor, or proceed to *Baltimore*. If you leave the point, keep your larboard hand on board, when you will find good bottom, from which you may proceed to the wharves, or come too with safety.

Directions from New-Point-Comfort to Potowmack-River.

FROM this point, a Spit extends S. E. two miles, which you will avoid by not going into less than four fathoms water. About two and a half leagues N. N. E. from *New-Point-Comfort*, and two leagues east from *Iron-Point*, lies the *Wolf-Trap-Rock*, on which there are 12 feet at low water; between this rock and *Point-Comfort* there are 8 and 9 fathoms. From the Spit, which runs off from *New-Point-Comfort*, to the entrance of *Rappahanock* river, the course is N. b. W. and the distance 6 leagues. You may keep in 5 or 6 fathoms water. Near to the *Wolf-Trap-Rock*, there are 7 fathoms.

From the entrance of *Rappahanock* to the flat which runs off from *Wichocomaca-point*, the course is north, and the distance 6 leagues. You may run in 5, 6, or 7 fathoms water. When you draw near the shoal which runs off from *Wichocomaca-point*, you should not go into less than 7 fathoms. This shoal extends about two and a half miles E. S. E. from *Smith's-Island*; on its extremity there are only two fathoms water, and very near to it eastward there are 10 or 12 fathoms. The mark for the shoalest part of this sand, is a house with a white chimney, standing among the trees on the shore within *Smith's-Island*, open to the northward of the Island, and bearing west. When this house bears W. b. N. you are to the southward of the extremity of the shoal; and when it bears W. b. S. you are to the northward of it. That which adds considerably to the danger of this shoal in going either up or down the *Chesapeake*, is, the broken Islands which lie on the east side of the channel, and the flats of sand which extend from 5 to 8 miles to the westward from them.

The *Tangier-Islands* lie to the southward of *Hooper's-Islands*, and the

Tangier-Islands and *Watt's-Island* make the entrance of *Pocomoke-Bay*, which bay separates *Virginia* from *Maryland*, on the eastern shore.

Potowmack-River separates *Virginia* from *Maryland*: Its entrance is formed by *Wichocomaca-point* on the south side, and *Point-Lookout* on the north side; the distance between these two points is about three and a half leagues.

If you are bound to *St. Mary's-River*, you must give *Point-Lookout*, and also the shore about it, a good birth; and when you approach *St. George's-Island*, you must keep nearer to the main than to the shoal, which extends from the Island. Your course into the river is N. W. and as it is all open to your view, you may anchor where you please in 5 or 6 fathoms water.

If you are bound to *Wichocomaca* in *Potowmack-River*, your course from the east end of *St. George's-Island* to *Ragged-point* is N. W. $\frac{1}{2}$ W. and the distance 4 leagues. On the south or larboard side, there are flats lying off from the shore, which in some places extend one mile: come no nearer to them than 7 fathoms. In the middle of the channel you will have 11, 10, 13, 10, and 8 fathoms. You must give *Ragged-point* a good birth, in order to avoid the shoal, which extends from it nearly one mile. From *Ragged-point* to *Clement's-Island* your course is W. $\frac{1}{2}$ N. and the distance two leagues. In the middle of the channel you will have 6, 5, $4\frac{1}{2}$, and 7 fathoms water. On the south side, a little below *Clement's-Island*, is *Nomine-Bay*. From abreast of *Clement's-Island* steer W. N. W. in 6, 5, and 4 fathoms water, until you have *Wichocomaca-River* open; then pass pretty near to the Island, which is on the east side of the entrance, in order to avoid the shoal which runs off from the point on the west side. Steer about north into the river, and anchor on the south side of *Newton's-Point*, in five or four and a half fathoms water.

Directions from Potowmack-River to Patuxet-River.

FROM *Point-Lookout* a flat runs off a considerable way, which you must be careful to avoid, by not coming any nearer to it than 7 or 8 fathoms water. Opposite this point, the flat of *Tangier-Islands* extends so far to the westward as to narrow the channel of the *Chesapeake* to about four and a half miles. This part of the flat is steep, and has 13 fathoms close to it. About two leagues to the northward of *Point-Lookout* is *St. Jerom's-Point*, off which, above two miles, there lies a shoal. About 3 leagues to the northward of *St. Jerom's-Point* is *Cedar-Point*. Between them (7 or 8 fathoms) is a good depth to keep in; near to the flat on the east side, there are 10, 16, 9, and 11 fathoms.

Cedar-point is on the south side of the entrance of *Patuxet-River*: the ground is low and sandy, and has some straggling trees standing on it. From this point a flat extends to the eastward, and also to the northward. On the north side of this river there are high hills, called Cliffs, with trees on them; and from this side also a flat extends, but the shoalings on each side of the channel are gradual, and the ground soft. In the middle of the channel there are 8 fathoms water. Higher up is *Rously's-point* on the south side, and *Drum-point* on the north side; the latter is a low sandy point. You may anchor without these points, or you may go further up the river, always observing the following general rule in all the deep bays throughout

Virginia and Maryland: namely—To every point, more especially where the land is low, a good birth in passing; because spits or flats of sand extend from them, and consequently the water it shoal in such places.

Directions for going from Cape-Henry or Lynn-Haven-Bay, to York-River.

AS *Cape-Henry* S. b. E. would lead you on the tail of the *Middle-Ground*, and as the proceeding with it at S. E. would carry you on the tail and North edge of the *Horse-Shoe*, your keeping the Cape on any bearing between S. b. E. and S. E. will carry you through between the two Shoals. On the tail, and along the North side of the *Horse-Shoe*, the shoalings are gradual. With *Cape-Henry* bearing S. S. E. or S. E. b. S. steer N. N. W. or N. W. b. N. until you bring *Cape-Charles* to bear E. b. N. you are then to the Northward of the *Horse-Shoe*, and may steer N. W. or N. W. b. W. according as you have the wind and tide. As the ebb sets strong out of the *Chesapeak* over the *Horse-Shoe* you must not, with a northerly wind and ebb tide, approach any nearer to the Shoal than 5 or 6 fathoms water. When you have brought *New-Point-Comfort* to bear North, and *Back-River-Point* S. b. W. you are then abreast of the tail of *York-Spit*, in 3 fathoms water. When you are a little above *Long-Isle*, you must not come any nearer to the shore than 5 fathoms, until you enter the river above the marsh, then keep in 9 or 10 fathoms, and run up and anchor between *York* and *Gloucester*, in what depth you please.

With a contrary wind, stand towards the *Horse-Shoe* in $4\frac{1}{2}$ or 5 fathoms, and from it into $6\frac{1}{2}$ or 7 fathoms, until you are abreast of the entrance of *New-Pocosan*, where there is a gut of 7 fathoms, which runs close to the entrance; you should therefore be careful to avoid going too far in, and thereby getting on the tail that extends from *Toes-Marsh*. When you have got thus far up, you should go no nearer to the shore on this side, than 7 or $6\frac{1}{2}$ fathoms, all the way up to *York*. On the other side, you should not stand any nearer to the small Isles on *York Spit*, than 10 or 11 fathoms; close to the tail of this spit there are 7 fathoms; close to the middle of it there are 10 fathoms; and close to it abreast of the Islands, you will have 13 fathoms; and before you can get another cast of the lead, you will be ashore. When you have entered the river you must not come any nearer to the flat than 8 or 9 fathoms water. This flat extends from the North shore, almost one third over the river.

Cape-Hatteras.

THIS Cape lies about S. $\frac{1}{4}$ E. 37 leagues from *Cape-Henry*; between them lie the Inlets of *Currituck* and *Roanoke*. In the former there are 10

* On the pitch of this Cape (which is low sandy land) a light-house was erected in 1799, which is painted white, and bears N. N. W. from *Cape-Hatteras-Shoal*, 4 leagues distant; there is a good channel one mile and a quarter from the light, keeping the land on board.

feet water, and in the latter 8 feet water. About $6\frac{1}{2}$ leagues N. b. E. $\frac{1}{2}$ E. from *Cape-Hatteras*, lies the south end of a bank on which there are 5 and 4 fathoms water; it extends north and south nearly 3 leagues, and is about two miles and a half broad. The inner edge of this bank is about three miles from the shore, between them there are 10 and 9 fathoms water. Close to the south end, and along the outer or east side, there are 7 fathoms. About three miles N. b. W. from the north end of this bank, and three miles E. b. S. from the north end of *Hatteras-Island*, there lie some small knowls, on which there are only 9 feet at low water.

Cape-Hatteras Shoals extend 10 leagues E. S. E. from the Cape, and are from N. N. E. to S. S. W. 5 leagues and a half at the broadest part; near to them on the north side, there are from 6 to 9 fathoms; near to the east end there are 9 and 10 fathoms, and near to them on the south side there are 20 fathoms. There is a channel between the cape and the shoals, in which there are from two and a half to four fathoms water. The channel or swash lies about S. W. b. S. and N. E. b. N. In going through it you will pass the cape at a distance of four miles and a half; as the sea generally breaks on the shoals on each side, you will see the swash. Your course from *Cape-Henry* to the outer end of the shoals, is S. S. E. $\frac{1}{2}$ E. and the distance 34 leagues.

Cape-Lookout bears S. W. $\frac{1}{2}$ W. distant 23 leagues from *Cape-Hatteras*. About seven leagues and a half S. W. $\frac{1}{2}$ W. from *Cape-Hatteras*, is *Occochee* inlet, in the entrance of which there are from 17 to 13 feet water. Between the two capes there are very regular soundings, in from 8 to 5 fathoms water.

Cape-Lookout Shoals extend four leagues and a half S. b. E. $\frac{1}{4}$ E. from the Cape, and are about three miles across; close to them on the east side, and off the outer end, there are five fathoms water; near to them on the west side, there are from 5 to 9 fathoms. The outer part of these shoals lie 25 leagues S. W. $\frac{1}{2}$ S. from *Cape-Hatteras*, and 30 leagues S. W. b. W. $\frac{1}{4}$ W. from the outermost part of *Cape-Hatteras Shoals*. The deepest water between them is about 30 fathoms.

About three leagues and a half N. W. b. W. $\frac{1}{2}$ W. from *Cape-Lookout* is the entrance of *Cove-Sound*, in which there are three fathoms water. The channel lies in, first, N. E. b. E. and then gradually alters round the flat, which extends from the Island on the larboard or west side, to the N. N. W. $\frac{1}{2}$ W. You will have 3, 4, and 3 fathoms in the channel, as you proceed to *Beaufort*, where you may anchor at low water in 3 fathoms.

Cape-Fear lies 26 leagues S. W. b. W. $\frac{1}{4}$ W. from *Cape-Lookout*. Between the two Capes, there are Islands lying all the way along the shore, off which, about two leagues distant, there are from 5 to 9 fathoms water. About ten and a half leagues to the westward of *Cove-Sound* is the entrance of *New-River*; in which there are only 5 feet at low water. On each side of this entrance, there are two inlets, in which there are from 7 to 11 feet water.

Cape-Fear Shoals extend about seven and a half leagues S. b. E. $\frac{1}{2}$ E. from the Cape; they are about three miles broad. On the inner part of the shoals there are 6 feet water; and on the middle part there are only 5 feet water; near to them every where there are 5 or 6 fathoms. About 4 miles to the southward of their extremity, there are 13 fathoms. The entrance of *Cape-Fear* river is about 6 miles to the westward of the Cape; there are 3 fathoms in it at low water.

Directions for coming in from sea for the Coast of North-Carolina.

When you are steering in for this coast, you should endeavour to keep about a degree to the southward of the latitude of the place which you intend to make, until you reckon yourself upon the edge of the Gulph Stream, and then your own judgment will direct what course is best, according as you find the wind to blow. Do not, if possible to prevent it, go to the northward of 33, 20, N. latitude, until you get into 10 fathoms water; in this depth you will be within the south or outer end of the *Fryingpan-Shoal*; it lies in latitude 33, 30, N. In approaching the coast in 33, 20, latitude, your first soundings will be from 30 to 25 fathoms; in this depth you will be very near to the inner edge of the Gulph-Stream. When you get into 17 fathoms you will have fine grey sand, with black spots; in this depth of water there is a long flat. In steering west, you will, for the first 5 or 6 leagues, shoal the water very little; when you come into 14 fathoms, you will shoal your water quicker, but gradually. In 10 fathoms water you will see the land, if the weather be clear; and you may then be sure that you are within the *Fryingpan*. From the outside of this shoal, you can see no land bearing to the westward of northwest.

In order to go over *Cape-Fear* bar, you must take care not to bring the pitch of the Cape to the eastward of E. b. N. until you have brought **Bald-Head* to bear N. $\frac{1}{2}$ E. when the channel over the bar will be fairly open; and, if the weather be so bad as to prevent your getting a pilot, you may steer in N. $\frac{1}{2}$ E. without being apprehensive of danger. At such times, the middle ground on the larboard side, and the fingers on the starboard side, will shew themselves very plain, by the breakers. As the least water on the bar is 3 fathoms, you may venture to go in at half flood.

†*George-Town* entrance is 18 leagues S. W. $\frac{1}{4}$ W. from *Cape-Fear*: between, lies a bank, on which there are 5 fathoms water. The north end of this bank lies about five and a half leagues S. W. b. W. from *Cape-Fear*; it thence extends S. W. $\frac{1}{2}$ S. eight and a half leagues. The inner or northwest side of this bank is about 4 leagues from the shore; near to this edge, there are 10, 9, and 8 fathoms water; it shoals gradually, as you advance towards the shore: This is called *Long-Bay*. Near to the north end of this bank, there are 10 fathoms water; along its southeast side there are 8, 7, and 6 fathoms; to the southward of this bank there are several shoals.

Cape-Roman lies about five and a half leagues S. W. b. S. from *George-Town* entrance: between them lies the entrance of *Santee-River*. The south entrance is two and a half leagues from the entrance of *Georgetown* river, and three leagues from *Cape-Roman*. Ships that fall in with the shoals of *George-Town* entrance, should not come into less than 4 fathoms water; you are then about ten or twelve miles from the land, and although the muddiness of the water is apt to frighten strangers, there is no real danger to be apprehended. The land here is

* *Bald-Head*, at the mouth of *Cape-Fear* river, is at the S. W. end of *Smith's Island*, and with *Oak-Island* forms the main entrance into the river. The light-house, which was erected in December, 1794, bears N. N. W. from the point of *Cape-Fear*, and 24 miles N. W. b. N. from the extremity of the *Fryingpan-Shoal*.

† There is a light-house here of an octagonal form, built on a sandy beach, and alternately painted red and white.

low, and appears, when viewed at a distance, in hummocks, like a range of Islands.

Cape-Roman is very low land; it has neither tree nor bush, and appears, when seen at a distance, to be a sand left dry by the tide. All the way from the south entrance of the *Santee-River*, to about two miles southwest of *Cape-Roman*, there is a shoal which extends to a considerable distance from the land; the south-east point of it lies about 4 leagues S. E. $\frac{1}{2}$ E. from the south point of *George-Town* entrance; and the south-west point lies about three leagues S. E. b. S. from *Cape-Roman*. There are 4 and 3 fathoms close to this dangerous sand; the land is so low, that you cannot, at the extremity of the shoal, see it from the deck. On *Cape-Roman* is a windmill, which has frequently been taken for *Charleston* light-house.

From the S. W. part of the shoal, steer W. N. W. and you will soon see the Island called *Racoan-Lays*: it is a long narrow Island, and lies about W. b. S. from *Cape-Roman*. When you see *Racoan-Lays-Island*, steer W. S. W. or S. W. b. W. in about 5 fathoms water. As there is a shoal runs off about 5 miles S. E. b. E. from the north-east end of *Bull's-Island*, you should take care to avoid it in passing. Between *Racoan-Lays-Island* and *Bull's-Island* lies *Service-Bay*. As there are shoals lying off the west end of *Racoan-Lays*, you should anchor near to *Bull's-Island*, in 6 fathoms water.

From the shoal off the N. E. end of *Bull's-Island* to *Charleston-Bar*, your course to go clear of the *Rattle-Snake*, is S. W. b. W. $\frac{1}{2}$ W. and the distance 7 leagues. Between *Service-Bay* and *Charleston-Bay* there are four Islands, namely, *Bull's*, *Spencer's*, *Davis'* and *Long-Island*. There are flats extending from all the Islands, along which the soundings are regular. With *Charleston* churches to the northward of *Sullivan's-Island*, you will be in five and a half fathoms water on the edge of the *Rattle-Snake*; and when the churches are open to the southward of *Sullivan's-Island*, you are clear of the *Rattle-Snake*. You should not come any nearer to this shoal than 5 fathoms water.

Directions for sailing into Charleston (South-Carolina.)

THE entrance of *Charleston* bar lies in lat. 32, 45, north. In running in for *Charleston* *light-house, which may be seen some distance at sea, you will have gradual soundings. When you come near the bar you may see the north and south breakers, between which is the entrance over the bar. In running over the bar you must have the light-house to bear W. $\frac{1}{2}$ N. or W. b. N. Continue this course between the two breakers, when you will find from 12 to 18 feet of water, according as the tide may be. Follow the above course, taking care that the tide of flood does not set you on the north breakers, till you come within half a mile of the light-house, when you may anchor in 4 or 5

* *Charleston* light-house is built of brick, and situated on an Island which you leave on your larboard hand going in, on low sandy land, about 80 feet high, the lower part of which is white, and the upper part black.

shoals water. Buoys are in general placed on the bar, in 12 feet water at low tide.

There is another ship channel to the southward of this, called *Lawford's-Channel*, where you will have from 10 to 15 feet, according as the tide may be. In going into this channel, the course is N. W. b. N. $\frac{1}{4}$ N. Bring the church a little open to the northward of the light-house, and continue the course till within $\frac{1}{2}$ or $\frac{1}{4}$ of a mile of the beacon, when you may anchor as aforesaid.

This anchorage is called *Five-Fathom-Hole*. From thence your course is about N. b. E. three miles and an half, in 6. or 8 fathoms water, which will carry you abreast of *Cumming's-Point*; when this point bears west one half a mile distant, steer N. N. W. for the S. W. part of *Sullivan's-Island*; you will have from 7 to 10 fathoms water. You may go within a quarter of a mile of *Sullivan's-Island*, as it is bold. Your course from thence to *Charleston* is about W. $\frac{1}{2}$ N. and the distance $4\frac{1}{2}$ or 5 miles. When you bring *Hog-Island* to bear N. and *Fort-Johnson* to bear S. b. W. you are up with the eastern end of the *Middle-Ground*, which you must not go nearer to than 3 fathoms. You may then steer nearly west, keeping in 4 or 5 fathoms water, which will carry you between the *Marsh* or *Shuts-Folly*, and the *Middle-Ground*. This channel is narrow, not being more than a quarter of a mile broad, as the flats lie off from *Shuts-Folly* one quarter of a mile. Continue your west course till you come up to the town, where you may anchor in 5 or 6 fathoms water. In running up from *Sullivan's-Island* stand no nearer to the southward than till you come into three fathoms, for fear of the spit, a *Middle-Ground* that lies off to the N. E. and east from *Fort-Johnson's Point*, as far as *Cumming's Point*, nor to the northward nearer than three or four fathoms.

After sailing from *Sullivan's-Island*, as before directed, you must, if bound through the S. W. channel, or by *Fort-Johnson's Point*, bring the point of land on which the fort is, to bear S. S. W. and run directly for it, where you will have from 4 to 6 fathoms. When abreast of this point, direct your course about N. W. by W. in 6 and 7 fathoms, about one mile, or till you bring a point of wood land to the northward of the town of *Cooper's River* to bear N. N. W. when you may run N. W. b. N. about one mile, which will carry you up to the town, and anchor as above directed.

You may see *Charleston* light-house, in clear weather, in 15 fathoms water. The winds on soundings govern the current.

A gentleman from *Newburyport* being bound to *Charleston* in January 1797, got soundings in lat. 32, 55 North, had 65 fathoms, when he run W. b. S. 22 miles by log and had but 20 fathoms water.

From Charleston-Bar to *Port-Royal.

FROM five fathoms water off *Charleston* bar to *North-Edisto-Inlet*, the course is S. W. b. W. $\frac{1}{2}$ W. and the distance $5\frac{1}{2}$ leagues; this course will carry you clear of the Shoals which lie off *Stono-Inlet*, which lie fur-

* *Port-Royal* is 6 leagues N. E. $\frac{1}{4}$ E. from *Tybee light-house*, at the mouth of *Savannah river*, and has a harbour sufficient to contain the largest fleet in the world.

ther off than any that are in your way to *Eddisto*. *Stono-Inlet* is about two leagues from the South Channel of *Charleston*; between them lie two Islands, viz. *Morris'-Island*, on which the Light-House stands, and the Island called the *Coffin-Island*. With the light-house open of the *Coffin-Land*, you will go clear of the *Stono-Shoals* in 6 fathoms water; but if you shut the Light-House in with the *Coffin-Land*, you will not have more than five fathoms and half off *Stono-Shoals*; you will pass close to the breakers, and consequently be in danger; the breakers, unless the sea be smooth, show where the shoal is. In *Stono-Inlet* there are 9 or 10 feet water at low water, but it was not much frequented, until *Charleston* was blocked up, in the year 1775.

From *Stono-Inlet* to North *Eddisto-Inlet*, the course is S. W. b. W. $\frac{1}{2}$ W. and the distance 11 miles: between them, the soundings are regular, and the shoalings, when you are coming from the offing towards the shore, are very gradual; the bar of *North-Eddisto*, and the shoals which are contiguous to it, lie off about 4 or 5 miles from the land. Close to the bar and shoals there are 3 and 4 fathoms water; on the bar, there are 9 or 10 feet at low water. *South-Eddisto* is 3 leagues W. S. W. from *North-Eddisto*. The shore of the Islands, which lie between them, may be approached with your lead without danger. The shoalings toward it are gradual.

St. Helena Sound.

THE entrance of this sound lies between *South Eddisto-Island* and the northernmost *Hunting-Island*; it is about two leagues wide. This place is navigable by vessels of 7 or 8 feet water only; it is full of sand banks, many of which are dry at low water. Six rivers empty themselves into this sound, namely, *South-Eddisto*, *Ashappo*, *Cumbahaw*, *Cehaw*, *True-Blue* and *Corfaw*. These rivers are all navigable; some of them come 200 miles down the country, but few of them can be navigated by vessels of six feet water, for more than 38 or 40 miles from the sound. From the entrance of *St. Helena Sound*, along the *Hunting-Islands*, to the entrance of *Port-Royal*, the course is S. W. $\frac{1}{2}$ S. and the distance about five and a half leagues. The soundings are regular; you will have 5 or 6 fathoms water.

Directions for Port-Royal Harbour.

WHEN you are coming in from sea for *Port-Royal* harbour, you should get into the latitude of *St. Michael's Head*, which is 32, 6 north, then steer west for the Head, and when you come within 15 leagues of it, you will have from 20 to 25 fathoms water.—Continue your west course until you make the land, which you will do, if the weather be clear, at a distance of 6 leagues, in 12 fathoms water. The land hereabouts is generally low, but the trees are high. *Port-Royal* entrance is known by a small grove of trees, which stands on the north side of it and tower up above all the other trees, like a high crowned hat, hence this grove is called the *Hat of Port-Royal*. Continue to steer, as before, keeping your lead

going, until you get into 8 fathoms water, when you will be about three leagues from *St. Michael's Head*. You may then steer a point to the southward of the west, until you get into 5 fathoms water: then steer more southerly, taking care not to bring *St. Michael's Head* to the northward of N. W. b. N. until you see the great north-breaker, called *Cole's-Care*: close to which there are 4 fathoms water; this shoal must be left on the starboard side. As you approach this breaker, from the northward, you will see another breaker to the southward, called *Martin's-Industry*; between these two breakers lies the entrance of the channel into *Port-Royal* harbour, which is about a mile wide. The mark to go clear of the north-breaker is, a parcel of high trees which stand near to the mouth of the river *May*, and appear like an island, kept just open of *Elizabeth-Point*. Your course through, between the two shoals, is W. $\frac{1}{2}$ N. or W. b. N. In this channel there are not less than $3\frac{1}{2}$ or 4 fathoms at low water. Continue to steer as aforesaid, between the two breakers, until you bring *Phillip's-Point* to bear N. N. W. then steer directly for it, and you will have as you proceed, 9, 8 and 7 fathoms water. When you are abreast of *Phillip's-point*, give it a small birth, and steer up N. b. W. $\frac{1}{2}$ W. in 6 and 5 fathoms water; in the latter depth you may anchor in a very safe harbour.

There is also a channel between *Martin's-Industry* and *Gaskin-Bank*, called the South-channel, in which there are not less than $1\frac{1}{2}$ feet at low water. In order to go in through this channel, you must, when in 7 fathoms water, bring *Hilton's-Head* to bear N. W. b. N. and then steer with an ebb tide, N. W. and with a flood tide, N. W. b. N. until *Phillip's-Point* bears N. b. W. $\frac{1}{2}$ W. You may then steer for the point, and proceed as before directed.

About $3\frac{1}{2}$ miles S. E. from *Hilton's-Head*, and 4 miles S. b. E. from *Phillip's-Point*, lies the east end of the *Joiner's-Bank*: it thence extends W. N. W. about $2\frac{1}{2}$ miles, and has $3\frac{1}{2}$ fathoms on it at low water. *Hilton's-Head* is on the south side of the harbour, and is a higher bluff point of land than any thereabouts.

Tybee-Inlet lies 5 leagues S. W. $\frac{1}{2}$ W. from the entrance of *Port-Royal South Channel*: between them is *Hilton's-Head-Island*: it is large, fertile, and well inhabited. From this island the *Gaskin-Bank* extends about 8 miles on the broadest part. You may proceed along this bank in 5 fathoms water.

Some, when bound to *Port-Royal*, reckon it best to make the land about *Tybee*, because the light-house makes that part of the coast distinguishable from any other part. *Tybee-Inlet* is the entrance of *Savannah-River*. Ships which draw 14 or 15 feet water, may go in at *Tybee*, and proceed through land to *Beaufort* in *Port-Royal-Island*: and from *Beaufort* vessels of 8 or 9 feet water may go through land to *Charleston*. From *Charleston* vessels drawing 7 or 8 feet water, may go through land to the river *Medway*, in *Georgia*.

On this coast it is observed, that N. E. easterly, and S. E. winds, cause higher tides than other winds, and also somewhat alter their course. At *Port-Royal* entrance, the tide flows on the change and full days of the moon, a quarter past 8 o'clock. About 6 leagues from the land, in 12 fathoms water, the flood sets strongly to the southward, and the ebb to the northward; further off from the shore, there is no tide at all. Near to the entrance of the harbour there is a strong indraught, during the flood tide, and an outset with an ebb tide.

*Directions for sailing into * Savannah, in Georgia.*

MARINERS sailing into this port will observe the following marks and buoys, viz. a large buoy lies on the outer edge of the bar, in the deepest water, having all the leading marks on the beacon and light-house in one, bearing W. $\frac{1}{2}$ N. distant 4 miles. Another buoy lies in the same direction, one mile within the bar. A third buoy lies one mile farther, W. b. N. from the second. A fourth buoy lies N. W. b. W. from the third; after passing which there is safe anchorage for a large fleet in 4 or 5 fathoms at low water, the light-house bearing S. S. W.

The buoys lie and lead in the deepest water, having a channel half a mile to the northward, and one quarter of a mile to the southward of them, (in the narrowest place) nearly the same depth of water, and there are 20 feet on the bar at lowest tides.

You may sail either side of the buoys. If in the night, and you are to the northward of *Tybee*, be careful of going nearer the *Gaskin-Bank* than 5 fathoms. *Martin's-Industry* is a bad reef lying to the northward of the bar, and the South Breakers to the southward. In fresh winds, you take a pilot abreast of the light-house—in moderate weather without the bar.

Forty miles south of *Savannah* lies *Sunbury*, a port of entry, at the head of *St. Catharine's Sound*, between *Medway* and *Newport* rivers, about 15 miles south of *Ogeechee-River*. There is a bar here, but the harbour is capacious and safe, and has water sufficient for ships of great burden.

Winds and Weather on the coast of South-Carolina.

WHEN the wind blows hard in the N. E. quarter, without rain, it commonly continues to blow hard for some time, perhaps for 3 or 4 days; but if such winds are attended with rain, they generally shift to the east, E. S. E. and S. E.

South-east winds blow right in on the coast, but they seldom blow dry, or continue long; in 6, 8, or 10 hours after their commencement, the sky begins to look dirty, which soon produces rain. When it comes to blow and rain very hard, you may be sure that the wind will fly round to the north-west quarter, and blow very hard for 20 or 30 hours, with a clear sky.

North-west winds are always attended with clear weather. They sometimes blow very hard, but seldom do so longer than 30 hours.

The most lasting winds are those which blow from the S. S. W. and W. N. W. and from the north to the E. N. E. When the wind is in any of these quarters, the weather is the most settled.

Thunder gusts are very common on this coast in the summer time; they always come from the N. W. quarter, and are sometimes so heavy that no

* *Tybee-Island* lies at the mouth of *Savannah river*, to the southward of the bar. It is very pleasant, with a beautiful creek to the west of it, where a ship of any burthen may lie safe at anchor. A light-house stands on the Island 80 feet high, is 17 miles E. S. E. $\frac{1}{2}$ E. from *Savannah*, and 6 miles S. W. $\frac{1}{4}$ W. from *Port-Royal*. *Warlaw-Sound* is formed by the southern end of this Island. The beacon is a mast with a black cash on it.

canvass can withstand their fury: they come on so suddenly, that the greatest precautions are necessary to guard against the effects of their violence.

From *Tybee-Inlet* to *St. Simon's Head* the course is S. b. W. $\frac{1}{2}$ W. and the distance 16 leagues; and from *Tybee-Inlet* to the bar on the entrance of *St. Simon* the course is S. b. W. and the distance 19 leagues. Between them are the following sounds, namely, *Warsaw*, *Hofaba*, *St. Catharine's*, *Sapello*, and *Little-Simon's*. In proceeding from *Tybee* for *St. Simon's-Sound*, you will have from 4 to 7 fathoms water: the shore of the several Islands which lie between them is flat, and the shoalings as you approach are gradual.

St. Simon's Bar lies 9 or 10 miles from *St. Simon's Fort*: the fort is on the south end of *St. Simon's-Island*, and by its white appearance, makes this place remarkable. About a mile and half to the southward of the fort, is the south end of *Jekyl-Island*, which is easily known by the trees, appearing as an umbrella, and therefore called the *Umbrella-Trees*. In order to sail over the bar, bring a large round tree which stands to the westward of the sound, right on with the middle of the opening between *St. Simon's* and *Jekyl Islands*; bring also the three trees which stand together to the westward of *St. Simon's Fort*, just open to the southward of the fort, and then steer west, until you are over the bar. On the bar you will have, at three quarters flood, about 19 feet water. The width of the bar is about three quarters of a mile: the extremities of the sands, on each side, generally shew themselves by the breakers. The north break head and the south break head bear of each other S. E. b. E. and N. W. b. W. Come no nearer to the north break head than half a cable's length. The ground on the bar is hard, but without and within the bar, it is soft. When the south end of *Jekyl Island* bears S. W. $\frac{1}{2}$ W. the north-east point of *St. Simon's Island*, called *St. Simon's-Head*, N. b. W. and the round tree, which stands to the westward of the sound, is on with the middle of the opening between *Jekyl Island*, and that of *St. Simon*, you are on the middle of the bar.

When you come into four and a half fathoms water, you are within the bar, and should then steer W. b. N. $\frac{1}{2}$ N. There is a middle-ground in the fair way, but you need not fear it, because there are always three feet more water on it than on the bar. Give the fort, in passing it, a birth of about a cable and an half's length, and anchor with the fort E. b. S. in 3 fathoms water; you will then be about 3 quarters of a mile from the fort.

The tide flows on the change and full days of the moon, as follows: namely, in the sound, 9 o'clock; on the bar half past 7 o'clock, and in the offing, three quarters after 6 o'clock.

*The Mouth of *St. Mary's-River.*

ABOUT seven and a half leagues S. b. W. from *St. Simon's Bar*, lies the bar of *St. Mary*, or the entrance of *Prince William's Sound*: between them you will have 5 or 6 fathoms water. Run to the southward, until you bring the northernmost of the three sand hills, which you will see on the north end of *Amelia-Island*, half a cable's length to the northward of the southernmost *Umbrella-Tree* on the said island, and you will then

* This river forms a part of the southern boundary line of the United States. It in part divides Georgia from East-Florida, and is very crooked.

have the bar open. When you are on the bar, the north end of *Amelia-Island* will bear W. b. N. distant three and an half miles, and the southernmost part of *Cumberland-Island* W. N. W. $\frac{1}{4}$ W. distant four and a half miles. Steer W. N. W. $\frac{1}{2}$ W. The north breaker generally shews itself; this is called by some, the *Middle-breaker*. On the bar there are not less than 12 feet at low water. In the channel between the bar and the south end of *Cumberland-Island*, there are 4 and 5 fathoms water; this is called the *South-Channel*.

There is another channel, called the *North-Channel*; it lies near to the south-east point of *Cumberland-Island*. Here are two bars, distinguished by the names of outer and inner Bars; there are only 6 feet on them at low water. In order to go over in the best of the water, bring the north-west point of *Amelia-Island* to bear S. b. W. $\frac{3}{4}$ W. and then steer for it, until you have passed through between *Cumberland-Island* and the north breakers. *St. Mary's-River* separates the province of *Georgia* from *East-Florida*.

St. Augustine lies S. b. E. $\frac{1}{2}$ E. 20 leagues from *St. Mary's-Bar*; between them lies *Nassau* and *St. John's* rivers. The bar or entrance of *Nassau* lies 5 leagues to the southward of *St. Mary's*; between them there are 5 fathoms water. The sands at the entrance of *Nassau*, lies 3 miles off from the south-east point of *Amelia-Island*, and from the north-east point of *Talbot-Island*. The entrance of *St. John* lies 3 leagues to the southward of that of *Nassau*. Between *St. John's* and *St. Augustine*, the shore is bold; you will have 5 or 6 fathoms within half a mile of the shore. When you are abreast of *Point-Carteel*, you will open *St. Augustine's-Bay*. When *St. Augustine's-Fort*, which is large and white, bears W. b. N. distant 5 miles, you will have about seven and a half fathoms water. Before *St. Augustine* lies the north end of the Island *St. Anastasia*.

St. Augustine's-Bar is formed by the extremity of a narrow sand, which extends two miles E. S. E. from *Point-Carteel*, and the point of another sand which extends half a mile E. b. N. from the north-east point of *St. Anastasia-Island*. This bar is a little more than a quarter of a mile wide, with a small shoal lying in the middle, which divides it into two channels, called the *North* and *South Bars*; there are not more than 12 feet on either of them at high water, spring tides. On the north end of *St. Anastasia's-Island*, there is a look-out-house, which appears like a light-house.

Matanza-Inlet lies S. S. E. $\frac{1}{2}$ E. about 6 leagues from *St. Augustine's-Bar*. This inlet is at the south end of *St. Anastasia-Island*: there are only eight and a half feet on the shoalest part of the bar at high water. Vessels that go in at this inlet, may proceed between *St. Anastasia's-Island* and the main, to *St. Augustine*: on the south end of this island there is also a look-out-house. The tide flows, at both ends of the Island, on the change and full days of the moon, half past 7 o'clock.

Cape-Canaverel lies S. S. E. 2 $\frac{1}{4}$ leagues from *Matanza-Inlet*; between them lies *Moskito-Inlet*, or *New-Smyrna-Entrance*: it is about 11 leagues N. N. W. $\frac{1}{4}$ W. from *Cape-Canaverel*. The shore all the way from *Matanza-Inlet* to the Cape is bold, excepting a rocky shoal, which extends a mile and a half from the shore, about 5 miles to the southward of *Matanza-Inlet*.

From *Cape-Canaverel* some rocky shoals extend east about 6 leagues; their breadth, from south to north, is about five and a half leagues. The north-east extremity lies four and a half leagues N. E. $\frac{1}{2}$ E. from the Cape; and the south-east extremity lies S. E. b. E. $\frac{1}{2}$ E. five and a half leagues. Near to them on the south side, there are 4 fathoms; and near to them without, or on the east side, there are 9 fathoms.

The northernmost part of *Maranilla-Reef* bears E. b. S. from *Cape-Canaveral*. Near to these shoals on the north side, there are five fathoms water, bearing S. E. b. E. distant 26 leagues. *Memory-Rock* bears S. S. E. $\frac{1}{2}$ S. distant 28 leagues from the Cape, and 25 leagues S. S. E. $\frac{1}{2}$ E. from the easternmost part of the shoals which lie off the Cape.

About 16 leagues S. b. E. from *Cape-Canaveral* is *Ayes-Inlet*, now called *Hillsborough-Inlet*; the land between them is curved; near to the shore, in the bite, there are some rocks. Between the Cape and this inlet, there are 2, 3, 4, 5, 6, 7, and 8 fathoms water. From *Hillsborough-Inlet* to the south-east part of the shoals which lie off *Cape-Canaveral*, your course is N. b. E. and the distance $13\frac{1}{2}$ leagues; between them there are 10 fathoms water. *Memory-Rock* lies 16 leagues E. S. E. from *Hillsborough-Inlet*.

From *Canaveral* to *Biscaina-Isle*, the coast lies nearly south; and the distance is about 54 leagues. From *Biscaina-Isle* to *Cape-Largo*, the coast runs south-westerly; and from *Cape-Largo* to *Cape-Florida*, it runs S. b. W. and S. S. W.

Maranilla-Reef is the north end of the *Little-Bahama-Bank*: as the flood tide sets in, on every part of this end of the bank, it is exceedingly dangerous.

About 12 leagues S. b. W. from *Memory-Bank* lies *Seal-Key*; this key lies off the north end of the *Bahama-Island*: this is a long narrow Island, stretching about S. E. b. E. and N. W. b. W. 23 leagues; it is rocky, from one end to the other.

WEST-INDIES.

Directions for sailing from Montserrat to Hispaniola and Jamaica; with Directions for coasting round those Islands.

[*.* The Courses here are the true Courses; allowance must therefore be made for Variation.]

IN sailing down to *Jamaica*, or the *Bay of Honduras*, go to the southward of *Montserrat*, and steer west by the compass until you get into the latitude $17^{\circ} 27' N$. Keep that parallel; and do not go to the northward of it, until you are past *Altavella* (hereafter described); for, by keeping in that latitude, you avoid falling into a deep dangerous bay, called *Jubana* or *Neyva Bay*, on the south side of *Hispaniola*, into which a strong indraught sometimes sets.

South side of Hispaniola. *Altavella* is a high picked rock, and is the southernmost part of *Hispaniola*, about the middle of the Island down, and, from most bearings, makes the resemblance of a bell. It lies in latitude $17^{\circ} 29' N$. longitude $71^{\circ} 32' W$. from *Greenwich*; and S. W. b. S. from the island of *Beata*, distant seven and a half miles: from the island and rocks called the *Frails*, S. S. E. distant 8 miles: from *Cape Lopez*, or the western *False Cape*, to the south-west point of *Beata*, is S. E. b. S. 16 miles: from the same *Cape* to *Altavella* is S. b. E. 19 miles: and from the said *False Cape* to the *Frails* bear S. $\frac{1}{2}$ E. 11 miles distant: from *False Cape* to *Sambay* is N. N. W. northerly 19 miles. The two *False Capes* bear from each other E. S. E. and W. N. W. Between, is the bay called *Blue-Hole*, where there is good fishing, and on shore wild bullocks and hogs.

When off the west end of *Beata*, bring the S. W. point S. or S. b. W. distance 2 or 3 miles.

There is anchorage in 10 or 12 fathoms, the north-west point bearing about N. N. E. At the last-mentioned point you may anchor; there is a well which at times has fresh water in it. A small distance N. W. from

Altavella is a small rock; a mile and a half farther a shallow runs out, having 16 fathoms water, sandy ground.

The *Frails* are steep rocks; you may sail within a quarter of a mile of them all round.

Within Cape *Lopez*, or the western False Cape, you may anchor; but the soundings are within a mile of shore. The wind is for the most part off shore, and there is good fishing.

Going into *Sambay*, you may keep *Altavella* just open with Cape *Lopez*. When at anchor off the mouth of *Sambay*, Cape *Lopez* will bear S. S. E. southerly, distant 19 miles. At about midway between the same cape and the river, you come upon soundings from 30 to 16 fathoms, and gradually down to 6 or 7 fathoms, at about a mile from the river, all good ground.

Above the river's mouth are two square brown places, or savannahs, which may guide you in anchoring. The river *Sambay* is extremely convenient for a fleet to wood and water in, as there is generally but little wind, and that off shore; for the sea-winds come not in above two or three hours in a day. In the bay is plenty of fish. At times you may meet with the hunters, who have huts for curing wild bullocks and hogs.

Thirteen or 14 miles to the westward of *Sambay* is a small harbour called *Trou*, frequented by barks wherein the hunters carry their meat to market.

Jacquemel, the next port to *Trou*, is a fine harbour, with fortifications at the entrance, and is distinguished by the sudden cut off or drop of a hill, seen over another long hill, at the upper part of the harbour; by running in for which drop, you will be led directly in for the harbour's mouth.

From *Jacquemel* to Cape *Bennet* the course is W. S. W. distance four leagues. It is very remarkable on account of its white cliffs.

From Cape *Bennet* to the east end of the Isle of *Avache* or *Ash*, is W. $\frac{1}{2}$ S. distance 18 or 19 leagues. When you are off at sea, and abreast of *Avache*, the middle of the saddle-hill over *Port-Louis* bears N. b. E. easterly, and then the east end of *Avache* is between you and it. This island is low, and lies so under the other land of the main, that you must be near it before you will be able to distinguish it from the main. From the distance of six leagues it appears like a cluster of small islands; and the water towards it gradually shoals.

The hills over *Port-Louis* are the second high land from the west end of *Hispaniola*. The westernmost is the highest, and is called *Grandtance*. It may be seen a long way off at sea, on both sides of the island; so that, knowing the bearing, you may be secure of a good guide in working up through the Windward Passage.

There is a rock, called the *Diamond*, bearing E. northerly from the entrance of *Port-Louis*, 2 leagues, and from the east end of *Avache* N. E. b. N. 5 leagues.

The *Achens Keys* lie a little to the eastward of it, and bear from the east end of *Avache* N. E. northerly. The south end of *Avache* and *Point Abacco*, when in one, bear E. b. N. $\frac{1}{2}$ N. and W. b. S. $\frac{1}{2}$ S. 2 or 3 leagues. There is a reef off the east end of the Isle of *Ash*, about a mile, which must be avoided when going into *Port Louis*.

To anchor at the west end of *Avache*, you may sail within a mile or two of the west end of the island, so as to bring the aforesaid point to bear S. E. b. S. in four and a half fathoms water; and then the easternmost white cliff on the main will bear N. westerly, the entrance of *Port Louis* N. E. and *Point Abacco* S. W. b. S. and the *Grand Cáyes* N. W. b. N. All hereabouts is good ground.

There is a small sandy key which lies a little off the N. W. point of *Avache*; bring this key on the aforesaid point, and at about a mile distance

you will find 5 fathoms, sandy ground, with good anchoring and soundings a long way to the southward.

All along the east side of *Point Abacco* is a reef of rocks, about a mile from shore, to which you should be attentive when coming out from the west end of *Avache*.

If bound to *Jamaica*. Being off *Point Abacco*, in a fair way, steer west for the east end of the island, and be careful in not running too far in the night, as the land at that end of *Jamaica* is very low.

West and north side of *Hispaniola*, &c. The course from *Point Abacco* to *Cape Tiberon* is W. b. N. distance 10 or 11 leagues. *Cape Tiberon* lies in lat. $18^{\circ} 20' N.$ and long. $74^{\circ} 23' W.$ from *Greenwich*.

To anchor in *Tiberon-Bay*, you must bring the easternmost point to bear S. E. b. S. distant three quarters of a mile; and you will then be right against the river or watering-place. There are soundings a good way off from the bay, and round the cape as far as *Cape Donna Maria*.

From *Cape Tiberon* to the small island *Navasa* is 11 leagues W. $\frac{1}{4}$ N. by compass. This island is of moderate height and bold-to: it lies in lat. $18^{\circ} 23\frac{1}{2}' N.$ long. $74^{\circ} 56' W.$ from *Greenwich*. Under the N. W. point is anchorage in 12 to 17 fathoms, sandy ground, but there is a great swell, with strong sea-breezes.

From *Cape Tiberon* to *Irish-Bay Point* is N. N. W. 4 miles, and from thence to *Donna Maria* N. N. E.

To anchor in *Donna-Maria Bay*, you must bring the White Cliff in the bay to bear E. b. S. in 5 fathoms water. The soundings, as you come into the bay, are gradual; wherefore keep your lead going.

From *Navasa* to *Cape Donna Maria*, the course is N. E. b. E. distant 12 leagues.

From *Cape Donna Maria* to *Cape Rosa*, or *Roxa*, the distance is 6 leagues: between, are three small bays, having barcadiers for small vessels.

From *Cape Rosa* to the *Great Caymite* the course is E. b. N. $\frac{1}{2}$ N. dist. 12 leagues.

The north point of the *Great Caymite* and the west end of the *Granive* bear from each other S. W. b. W. and N. E. b. E. dist. 9 leagues.

From the west end of the *Granive* to a reef of rocks which lies between the *Granive* and the main, when they are in one, the bearing is N. N. W. and S. S. E. dist. 4 or 5 leagues. This reef is dry for about 100 yards S. W. and N. E. and has gradual soundings to the rocks. The flat of the reef runs a long way to the N. E. and the best working is between the reef and the main, because the main is bold, and continues so all the way up to *Lewigan* or *Leogane-Road*; but, in standing over to the *Granive*, you will meet with overfalls of 13, 11, 9 and 7 fathoms water.

To anchor in *Lewigan-Road*, give the *Fort-Point* a good birth of about a mile. You will see the white water, it being very rocky about the *Fort-Point*. For coming to anchor, bring the *Fort-Point* E. N. E. or N. E. b. N. dist. 2 miles, and you will have muddy ground in 18 fathoms water, with the fort N. E. $\frac{1}{2}$ N. dist. 1 mile; then the east end of the *Great Granive* will bear N. W. b. N. and the west end W. N. W. northerly, and the *Little-Granive* N. W. $\frac{1}{4}$ N. dist. about 6 leagues.

About 4 miles to the northward of the point of *Lewigan*, you come to the over-falls, in 20 fathoms, and so to 13, 10, 7 and 11.

The *Triangles* and the S. E. point of the *Little Granive* bear from each other N. E. easterly, and S. W. westerly, dist. 5 leagues.

From the *Triangles* to *St. Mark's Point* is N. W. b. W. dist. 5 leagues. By the *Triangles* there is good anchoring in 13 fathoms water, coarse sand and shells.

St. Mark's Point and the east end of the *Granive*, when in one, bear S. b. E. and N. b. W. dist. about 5 leagues.

From *St. Mark's Point* to *Arthabonite* or *Artribonite Point*, the bearing is N. N. W. dist. about 3 leagues. Here is good gradual founding all the way, 10 and 11 fathoms, and so up in the bite, where is *St. Mark's Town*, with a good road for shipping, well secured by forts.

From *Cape Donna Maria* to *Cape Nicolas*, the course is N. E. b. E. dist. 32 leagues.

From *Cape Nicolas* to the island of *Great Caymite*, the course is S. dist. 22 leagues.

From the platform of *Cape Nicolas* to the west end of the *Great Granive* is S. S. E. 15 leagues.

From the same platform to *Arthabonite-Point* is S. E. b. E. dist. 13 leagues.

From *Cape Nicolas* to the *Mole-Land Point* is N. N. E. 3 or 4 miles; between, is the *Mole* itself, where, in a wet season, you may get water at the head three or four miles up; which may likewise be had after rains at the platform; but, in dry seasons, neither afford any.

From the *Mole-Land Point* to the west end of the island of *Tortugas*, or *Turtle-Island*, the course is N. E. b. E. dist. 13 leagues. In order to anchor at the west end of this island, in five and a half fathoms, sandy ground, you must bring that end N. W. b. N. dist. 3 miles, the S. W. end of the same S. S. E. and a small reef in the bay N. N. E. distant three quarters of a mile. There is a reef all along the inside of the island; otherwise there is a good working channel between the island and the main. The west end of *Tortugas* lies in lat. $20^{\circ} 5\frac{1}{2}'$ N. and long. $73^{\circ} 1'$ W. from *Greenwich*. It is 5 or 6 leagues long, and stretches E. b. S. and W. b. N.

Port Paix, which lies within the island of *Tortugas*, is a place for large ships: when the high hill which is seen over *Port Paix* bears S. W. b. S. then the east end of the island is between you and it.

From the east end of the island of *Tortugas* to *Cape Francois*, the course is S. E. b. E. dist. 10 or 11 leagues.

From ditto to *Monta-Christa*, or *Monte-Christi*, or the *Grange*, E. b. S. dist. 21 leagues.

To the westward of this mount is a large flat, with several keys and shoals upon it. When the northernmost key or shoal is in one with the mount, they bear E. In 19 fathoms water, you are about a mile from the shoal, *Cape Francois* bearing S. W. $\frac{1}{2}$ W. and the dry key in one with the highland within the mount. To the southward of the dry shoals is a long flat of 10 or 11 fathoms, which reaches as far as *Port Dauphin*, and so all along the outside of the reef which forms the harbour of *Cape-Francois*: the leading mark into this harbour is, the east end of the island of *Tortugas* kept open of the point of the *Cape-land*.

On the outside of the *Cape-land* is a little harbour called *Little-Cape-Francois*: to the westward of the same *Cape-land* is a sandy bay with a bar, fit only for boats; 5 miles to the westward of which is a good anchorage and watering-place, named *Cumberland-Bay*. You may anchor in 7 fathoms, bringing the point N. N. E. and the river where the casks may be filled E. S. E. three quarters of a mile distant. A little to the westward of this is a most pleasant island, where the gentry of *Cape-Francois* often regale themselves.

Westward of *Monta-Christa* are gradual soundings from 12 to 5 fathoms. In order to anchor, bring the S. E. end of the little key to bear N. b. E. and between that and a dry shoal lying to the W. S. W. of the little key;

there is smooth riding and good ground. At the town of *Monta-Christa* is a river of fresh water, and a fort which was built by the *Spaniards*.

To the eastward of the mount you may anchor in what depth you please, from 12 to 3 fathoms, within a reef, where you will be sheltered from the N. E. winds. This is a good place to look out for ships coming from the eastward; for, you are so much under the mount, that before they come very near they cannot distinguish you.

The *West Corcois Keys* being low, stand to the southward in the day, but keep off to the northward with little sail during night. From the main-top the keys upon the *West Corcois* may be seen from the distance of about four leagues, when 2 or 3 miles to the westward of the northern key of *Turks-Island*. In passing the first great key, the vessels at anchor may be seen while keeping a S. S. W. course. From the *Corcois Key* S. b. E. 11 leagues distant, the high land to the eastward of *Monta-Christa* may be seen, bearing S. b. W.

In running over from *Monta-Christa* to the *Corcois* bank, the distance is 20 or 21 leagues; whence it is inferred that the south side of the *Corcois* bank lies in lat. $21^{\circ} 5' N.$ Upon the edge of the reef are several dry patches of rocks; but the key is a good way in upon the bank; and, when you come past the said patches of rocks, the bank inclines to the N. and N. N. W. distance 8 or 9 leagues. Then you pass by a key, which is rather bold to, but joined to the main key by a reef, the north side of which is at the entrance of the south harbour. This key is called the *Little Corcois Key*, and lies in lat. $21^{\circ} 22' N.$ from which you haul up N. N. E. and then run along by a narrow key 5 or 6 leagues, whence it rounds up more to the eastward; here is a place for anchoring, and small craft can go in; but the northernmost part of the bank and reef runs up as far as latitude $22^{\circ} 5' N.$

From *Corcois Key* to *Mayaguana* the course is N. W. b. W. distance 20 leagues.

From ditto to the east end of *Heaneago* is W. dist. 15 or 16 leagues.

From *Corcois Key* to *Cape Francois* is S. b. E. 36 leagues.

In coming through between the *Corcois Key* and *Heaneago*, both may be seen from the mast-head.

At the east end of *Heaneago* there is a remarkable rock: when it bears N. W. $\frac{1}{4}$ W. dist. about 2 leagues, the ground may be seen with no more than three and a half fathoms water. Haul out S. S. E. and keep the lead going till you have from three and a half to four, four and a half, seven, eight, ten fathoms, and then no ground. When the aforesaid rock bears N. N. W. dist. 4 or 5 leagues, then the east end of *Little Heaneago* bears N. W. b. W. $\frac{1}{2}$ W. dist. 4 leagues. Latitude observed $21^{\circ} 25' N.$

Heaneago stretches about W. S. W. and E. N. E. being in length about 13 or 14 leagues. It is environed with a reef, and about midway there is a remarkable white rock just within the reef. The highest part of the key is about five or six miles to the eastward of the S. W. point; being the first land you see when you come from the southward; but the S. W. is low and sandy, lying in lat. $20^{\circ} 57' N.$ If you would water at the pond, it lies about 4 or 5 miles to the northward of the S. W. point, when you will bring the westernmost point to bear N. W. b. N. dist. 2 or 3 miles, where you may anchor in 10 fathoms, taking care to look out for a good place to let go your anchor; for, the water being clear, you may see the bottom. The watering-place is in over the bank, and in rainy times you may have water out of the pond; but none in dry weather. The westernmost point is about the middle of the west end of the island, and from it the N. W. point bears N. $\frac{1}{2}$ E. 6 or 8 miles; between, is a shallow bay, with reefs in it. The south-west and north-west points are low and sandy.

From the S. W. end of *Great Heaneago* to *Achlin's Key*, N. N. W. $\frac{1}{2}$ W. 24 leagues.

From the west end of ditto to the *French Keys*, N. b. E. 30 leagues.

From the *French Keys* to *Atwood's Key*, N. N. W. 11 leagues.

From ditto to the S. W. point of *Mayaguana*, E. S. E. 8 leagues.

From the west end of *Mayaguana* to the west *Corcois*, S. E. b. E. 20 leagues.

From the west *Corcois Key* to *Cape Francois*, S. b. E. 36 leagues.

Jamaica, &c.

THE direct course from *Altavella* (described in the foregoing directions) to *Point Abacco*, on *St. Domingo*, is W. b. N. dist. 42 leagues. The course and distance from *Altavella* to *Cape Tiberon*, the south-westernmost point of *St. Domingo*, is W. N. W. 15 leagues; and from *Cape-Tiberon* to the east point of *Jamaica*, it is W. b. S. $\frac{1}{4}$ S. 34 leagues. As the eastern part of *Jamaica* is very low, it is unsafe to run for it in the night. The latitude of the east point is $17^{\circ} 58'$ N. long. $76^{\circ} 3'$ W. from *Greenwich*.

The southernmost high land of *Jamaica* is *Yallah's Hill*, which is a very remarkable one. When the fall of this hill bears W. b. N. steering W. $\frac{1}{2}$ S. it will carry a vessel a league or more to the southward of the east end of the island. The latitude will be a guide for *Yallah's Hill*: in $17^{\circ} 50'$ or $17^{\circ} 51'$ it bears W. b. N. Should you make this land, bearing W. b. S. $\frac{1}{2}$ S. 9 or 10 leagues distant, haul up to the south-westward, so as to clear the east point, making allowance for a current which frequently sets to the northward.

Vessels, bound for *Port-Royal* from off the east point of *Jamaica*, should steer at the distance of 3 or 4 miles from shore until they are past *Morant-Bay*, to avoid a reef which extends two miles from shore to the southward of *Rocky-Point*. The coast thence to the entrance of *Port-Morant* is rocky for about a mile from shore, and from *Port-Morant* to *Morant-Bay* it is the same. From *Morant-Bay* to near the white cliffs called the *White-Horses*, the coast is clear; but from those cliffs are some rocks extending nearly half a mile from shore.

Yallah's Point may be approached within one third of a mile; from this point to *Cow-Bay Point* is clear. The latter point is low, and it is, with the coast to the westward of *Plum-Point*, bold-to.

The course from *Cow-Bay Point* to *Plum-Point* is W. $\frac{1}{2}$ N. distance 8 miles.

South side of Jamaica. Vessels may run bold in with *Plum-Point*: when you bring *Rock-Fort* N. b. E. you will come over a cross-ledge about 8 fathoms, just as you are out, and in with the leading mark, which is the magazine of *Port-Royal* on the highest part of *Salt-Pond Hill*, on the *Nab*, or the north part of the *Apostles'-Battery*, on the west side of *Port-Royal* harbour, in a line with the magazine of *Fort-Charles*. Steer with the last mark on until abreast of *Lime-Key*, and then a little southward towards *Rackham's-Key*, giving *Lime-Key* a good birth, until *Port-Royal Point* appears open between *Gun-Key* and *Rackham's-Key*: steer between the two keys in mid-channel; and, having passed them, steer directly for *Port-Royal Point*, until the fall of *Yallah's-Hill* is brought on the centre of *Gun-Key*;

this will lead between the *Point-Knowl* (a hard coral bank having but two and a half fathoms on it) and the point of *Port-Royal*. The channel, although but a cable's length wide, is safe.

The shoal you first come to is the *Middle Ground*, which lies S. S. W. off *Plum-Point*. The eastern channel is between *Plum-Point* and the *Middle Ground*: this is the best channel; keep well in shore till the leading-mark is on, as aforetaid; then you may go on in safety.

Off the *Fort-Point*, westward of *Gun-Key*, are three knowls, called the *Point-Knowl*, the *Harbour-Knowl*, and the *South Channel Middle Knowl*.—The best channel is between the fort and the first knowl: close to the fort the water is deepest. A leading-mark for this channel is, to keep *Gun-Key* a ship's length open of *Yallah's-Point*; the breast-mark is, the church on the second embrasure of the fort.

The *Harbour-Knowl* of 3 fathoms lies about 150 fathoms to the westward of the point. It is avoided by keeping within half a cable's length from shore. When past the point, steer northward until the *Admiral's Penn* appears to the northward of *Gallows-Point*, which will lead clear of *Old-Port-Royal* and to the anchorage off the dock-yard.

The best anchorage for ships bound to sea from *Port-Royal* harbour is in 9 fathoms: the mark is, a notch on the east side of the high mountain, (called the *Leading-Notch*) open a little to the eastward of *Fort-Augusta*, bearing nearly north by compass, and *Rackham's-Key* on with *Fort-Royal-Point*.

The channel most used by vessels bound outwards is that called the *South Channel*. You should weigh anchor early in the morning, as at that time the current generally sets to the eastward. The leading-mark is the *Leading-Notch* above-mentioned in one with the magazine of *Fort-Augusta*, the easternmost building of the fort. This mark will lead ships drawing 16 or 17 feet water clear through: larger ships should keep the notch a very little eastward of the magazine, until the hummock of *Helshire* appears open of *Fort-Small*. This will lead clear of the *South Channel Middle Knowl*, of 20 feet water. After *Helshire-Hummuck* is open of *Fort-Small*, the *Leading-Notch* kept a little to the eastward of the magazine will lead clear between *Drunken Man's* shoal and the *South-Knowls*, which are two small knowls of 23 feet water: when you are to the southward of these knowls, *Maiden-Key* will appear a ship's length open of *Drunken-Man's-Key*. Then bring and keep the leading-mark on as first directed till *Portland* appears like an island, when you will be clear of all the shoals.

Should the land-breeze fail before you are out of the channel, you must anchor: the best mark for this purpose is, the *Leading-Notch* a little open to the eastward of *Fort-Augusta* magazine, and about a mile S. W. by S. of *Drunken-Man's-Key*.

The mark, when on-shore on the east-side of the *Turtle-Heads* and *Three-Fathom-Bank*, is, the church-steeple upon the magazine of the fort, and *Spanish-Town* land just open.

From *Port-Royal* to *Portland* is S. W. dist. 10 leagues: but you must keep farther to avoid *Wreck-Reef* and the key. There is sounding so far out as to bring the easternmost land of *Helshire* to bear N. by E. and *Rock-Point*, or the southernmost land of *Portland*, to bear N. W. by N.—for, at that bearing are from 17 to 23 fathoms, and the next east no ground with 80 fathoms line, though not a ship's length from the first to the last. Upon this flat are several keys, and going into *Old-Harbour* from *Portland-Point* E. dist. 3 and 4 miles, are two keys, and *Negro-Head-Rock*; and N. E. are the other keys.

Right off from *Portland* there is a gradual sounding for 8 or 9 miles.

From *Portland S.* dist. 13 or 14 leagues, lies *Portland-Rock*.

To sail into *Withy-Wood Road*, you must keep to the westward till you bring a little round hill in the bay to bear N. or N. by W. (taking care in coming from the eastward to keep off shore so as to avoid *Rock-Point*) and keep the same bearing as you run in for it, which will bring you in sight of the *Old-Fort*; then between you and the hill, in these depths, 10, 8, 7, 6, 5, 4, $3\frac{1}{2}$ fathoms; then you will be within a mile and a half of the shore. The fort N. E. is the best birth, as the boats can sail both on-shore and on-board, and then *Rock-Point* will be on with the southernmost point of *Portland*, bearing E. S. E.

From *Portland* to *Pedro-Point* is W. b. N. dist. 10 leagues; between which is *Milk-River*, a little to the westward of *Withy-Wood*, and the going in is much the same.

Between *Great-Point-Pedro* and *Little-Point-Pedro* is *Alligator-Pond Reef*, a dry key 2 or 3 miles long. On the inside is 3 fathoms water, and good soundings; off here and off *Point-Pedro*, for 4 or 5 miles, is 20 fathoms, sandy ground, and the edge of the soundings runs E. S. E.

To sail into *Black-River* coming from the eastward, you are to keep *Pedro Point* open of the *Parrattee Point*, till you bring the church N. N. E. easterly, or the church on with the gap in the high land, and that will carry you in the best of the channel. It is full of heads of coral rocks.

To anchor in *Bluefield's-Bay*, coming from the eastward, you must keep down by the outside of the reef, or keep the land to the eastward open of the point, till you bring the leading mark, which is the overseer's house, and the tavern, in one, bearing N. E. b. E.; and, for your anchoring, bring the easternmost point to bear S. E. b. S.

Savannah-la-Mer bears about W. b. N. $\frac{1}{2}$ N. from *Bluefields*. The coast between is rocky to nearly two miles from shore in some places. The leading mark for going in there is, to bring the fort north, keeping your lead going, which will lead you in the channel.

West end of Jamaica. All round the west end of *Jamaica* it is flat off with good sounding for a long way. And between the N. W. point and *St. Lucea* is *Orange-Bay*, *Green-Island*, and *Davis'-Cove*. These are places which are seldom used but by those who go thither on purpose to load, and have pilots on board.

The way of going into *St. Lucea* harbour, coming from the eastward, is, to open the harbour, and steer right in, giving the *Fort-Point* a little birth; for there is a small reef which runs off from it, and in the middle of the harbour is a small rock, steep all round;

North side of Jamaica. *Montego-Bay*. In going into this bay from the eastward, you must give the point a good birth of 5 or 6 miles as you come down, on account of the reef which runs off, till you open the town, and bring the *Gun-Tavern* to bear S. E. then stand in for it, which will carry you clear off the reef to the westward, and thus run in till you shut in the point to the northward of the fort: and then you will come in upon soundings in the bay. To anchor, bring the fort to bear N. b. E. and the *Gun-Tavern* E. b. S. then you will have 9, 10, or 11 fathoms water.

In working hence to windward, when *Cuba* in clear weather is visible, you may discern a remarkable hill, the highest on *Cuba*, called the *Copper-Hill*, bearing from *Montego Point* N. E. dist. 34 leagues, and from the east end of *Jamaica* N. N. W. by which you may judge how far you are to windward at any other bearings.

N. E. side of Jamaica. To sail into *Port Antonio*, coming from sea, bring the eastern part of the *Blue-Mountains* to bear S. S. W. and steer in that

course, which will bring you in sight of the Commodore's house upon *Navy-Island*. Keep that on your starboard side, keeping about mid-channel between *Navy-Island* and the east point. There is a reef in the middle of the easternmost harbour, of 10 feet water, which you may anchor without, or go within it. If you choose the latter, you must keep over to the fort side till you open a great cotton-tree with a house on the east shore; then you may haul up, and come to anchor in 7 fathoms water, good holding ground both here and without; indeed, it is difficult to get the anchors out of the ground.

To go into the western harbour, you must open the store-house with the point of *Navy-Island*, or a house upon the hill, clear of the point where the King's wharf was; steer in for that, which will lead you into the harbour, where you may anchor in what place you please. This channel is no more than 70 feet wide, with 15 or 16 fathoms water in the middle.

In order to sail into *Anatto-Bay*, from the eastward, steer down for *Green Castle* wind-mill, until you bring *Old Shaw's* house (in the middle of the bay) south of you: then steer in directly for the said house, which will carry you clear to the westward of the *School-Masters*, the only shoal in the bay. As the bank is steep and narrow, the first sounding is 9 or 10 fathoms water; wherefore you should have your anchors clear, and anchor in 6 or 7 fathoms water, when you will be about a quarter of a mile from the shore.

To sail into *Porta-Maria*, from the eastward, the high island, which you will see, must be kept a little to the larboard bow, so as to give the north part of the island a birth of a pistol-shot: then luff right in, and anchor close under the island in 4 or 5 fathoms, within a cable's length of the island, and one and a half of the main: small vessels, drawing 10 feet water, may anchor between the island and main.—*Note*: Vessels that lie any time here must buoy their cables, because ships are too often apt to heave their ballast over-board and spoil the ground.—If you are to sail from the eastward into *Orocobaca*, you must go in by the west of *Galana* or *Galina* Point; but if you are off at sea, and want to go in for *Galana* Point, you must bring the westernmost high land of the *Blue-Mountains* S. b. E. $\frac{1}{2}$ E. and keep it so, which will lead you in with it: but to anchor as aforesaid, bring the easternmost point of the reef N. E. b. N. dist. about a quarter of a mile, and a house upon the hill on the larboard side S. E. b. S. the guard-house on the west side of the river S. W. b. S. distance half a mile, and the westernmost bluff-point W. b. N. then you will have five and a half fathoms water, sandy ground: you may also anchor farther in under the *Red Cliff*, bearing W. S. W. in deeper water.

From *Orocobaca* 8 or 9 miles to the westward is *Oche-Rees* or *Ochoreras-Bay*, to anchor in which you may sail by the reef to the westward. This reef spits off from the east side of the bay; so haul up and bring the westernmost part of the reef N. N. W. or N. W. in 7 fathoms. There is another reef to the southward; but, as the water is very clear, your eye may be your guide, as in most places where the water is so.

Eight miles to the westward from *Oche-Rees* is *St. Anne's* harbour. The usual method of going in here, as the water is clear, is to go close to the westernmost reef, leaving it on the starboard side. Here is always a pilot.

Eleven miles from *St. Anne's* is *Dry-Harbour*, a good place for small vessels; but the channel is narrow, and has but 16 feet water.

From *Dry-Harbour* 4 or 5 miles westward is *Rio-Bona*, where a ship may lie and bring the point N. N. W. in 8 or 9 fathoms. The bank is steep.

From *Rio Bona* to the westward is *Martha Brae*, a bar-harbour where vessels load. The depth in the channel is 16 or 17 feet.

From *Martha Brae* to *Montego-Point* is 6 or 7 leagues.

From *Port-Morant Harbour* (on the south side of *Jamaica*) S. E. b. S. distant 12 or 13 leagues, are *Port-Morant Keys*, or *Carrion-Crow Hill*, N. N. W. $\frac{1}{2}$ W. being the first rising hill of the *Blue Mountains* to the eastward. The keys lie from lat. $17^{\circ} 23'$ to $17^{\circ} 30'$ N. The easternmost key stretches S. $\frac{1}{2}$ E and N. $\frac{1}{2}$ W. being in length 2950 feet. There are three keys: from the south end of the easternmost key to the southernmost, is S. S. W. and from the westernmost key S. W. $\frac{1}{2}$ S. from the north end of the easternmost key to the southern key S. b. W. and to the western key S. S. W. $\frac{1}{2}$ W.

With *Morant-Keys* S. W. dist. 4 miles, on sounding, there were found 18 fathoms water, stony ground, mixed with fine red specked gravel; with the keys S. W. b. S. dist. 4 miles, 16 fathoms water; and with them S. S. W. $\frac{1}{2}$ W. dist. 6 miles, 23 fathoms, and the same ground.

To anchor, coming from the eastward, borrow no nearer the reef than 6 fathoms. This reef runs down by the north side of the easternmost key, and may generally be seen. Steer down to the westward by it, until you bring the westernmost key to bear S. S. E. or S. E. b. S. then haul in for it, and you may anchor in what water you choose, from 12 to 11, 9, 8, 7 fathoms, white sandy ground, and at what distance you will from the westernmost key. There is an over-fall which bears, from the east end of *Jamaica*, E. b. S. dist. 16 or 17 leagues, having 20 fathoms water on it; but it is seldom met with, being a narrow one.

There is a dangerous shoal, 10 miles long, and 6 broad, called the *Formigos*, lying in an E. N. E. direction, with its eastern part N. E. b. N. 40 miles from the east point of *Jamaica*, and its western part N. N. E. 35 miles from the same point. From the N. E. end of *Jamaica* the body of the shoal bears N. E. b. E. about 40 miles distant. The eastern part is the shoalest, having not, in some places, more than 14 feet water. A mile to the westward from the eastern edge, is from four and a half to five fathoms, increasing its depth thence westward to six and a half fathoms, where vessels may anchor in sandy ground; thence suddenly it increases to 10, 13, 15, and 20 fathoms. The N. E. part is in lat. $18^{\circ} 34\frac{1}{2}'$ N, long. from Greenwich, $75^{\circ} 38'$ W. and the S. W. part is in lat. $18^{\circ} 28'$ N, long. $75^{\circ} 48'$ W.

From the east end of *Jamaica* N. N. W. are the *Copper Hills* on *Cuba*, being the highest land on that part of the island. They have been seen and the east end of *Jamaica* at the same time. They bear from *Montego-point* N. 34° E. dist. 34 leagues; whence by their bearings, when they can be seen, you may know what places you are abreast of on the north side of *Jamaica*.

From the east end of *Jamaica* to *St. Jago* is N. 6° E. 38 leagues.

From ditto to *Cumberland-Harbour*, N. N. E. 47 leagues.

From ditto to *Hooka* or *Spinck's-Bay*, N. 35° E. 51 leagues.

From ditto to *Navasa*, E. N. E. $\frac{1}{2}$ N. 22 leagues.

From ditto to *Cape Donna-Maria*, E. N. E. 32 leagues.

From *Navasa* to *Cape Tiberon*, east-southerly, 12 leagues.

From ditto to *Cape Donna-Maria*, N. E. b. E. 12 leagues.

From *Cape Donna-Maria* to *Cape Nicolas*, N. E. b. E. 32 leagues.

From *Cape Nicolas* to the S. W. end of *Heaneago*, N. $\frac{1}{2}$ W. 20 leagues.

From the S. W. end of *Heaneago*, to the *Hog-sties*, N. N. W. 12 leagues.

The *Hog-sties* are three patches of dry, low, sandy keys, under the middle one of which you may anchor. They stretch north and south, and the east side is encompassed with a reef.

From the *Hog-sties* to the south part of *Acklin's Key* is N. 27° W. dist.

45 miles. The first land usually seen is that upon the main key; the southernmost part making like a key by itself, though it is joined to the main by a low sandy bank and reef. This southernmost point lies in lat. $22^{\circ} 13' N.$ The reef runs about the point to the eastward, but the west side is steep-to, being a bold shore all the way to the northward, as far as a point on which stand some trees, whereas all the other parts have none. From this point the bank runs N. W. and N. W. b. W. till it meets two small keys lying to the eastward of the south end of the *Long Key*, but all upon the same bank.

From the south end of *Acklin's Key* lie the *Mireporvois*. These are a parcel of rocks, some of them a good height above water, and may be seen three leagues off. There are soundings to the N. E. about two or three miles from them.

From the south point of *Acklin's Key* to the south part of the *Long Key*, the course is W. $\frac{1}{2}$ N. dist. 9 leagues. This key is bold-to, so that you may go within pistol-shot all the way on the west side; but, as you come to the north end, you will see two keys and openings: here the bank falls out, and there are several beads of rocks, which you must be careful of, in going in to water at the wells of *Crooked-Island*.

The course from the point of the *Long Key* to the wells is N. N. E. To know exactly where they are, pass the aforesaid two openings, and you will see a low point stretching out to the southward from *Crooked-Island*: on this point are the wells, four or five in number. It will be proper to run in by the opening between this point and the small key which is to the southward of it, and there look out for a birth for anchorage, the water here being very clear.

When at anchor, the westernmost land of *Crooked-Island* will bear W. N. W. All this north shore must be avoided, as it is very rocky. There is a small key at some distance on the bank, within the point where the wells are, which will be open of the point, and bear E. b. N. at your anchorage.

From the south end of the *Long Key* to the *Bird Rock*, which is within a mile of the west end of *Crooked-Island*, is N. dist. 8 leagues. This rock lies in lat. $23^{\circ} 3' N.$ and has a reef which runs from the north part of it, about 2 or 3 miles to the northward, and so to the eastward, round *Crooked-Island* and *Acklin's Key*.

Directions for sailing from Jamaica through the Gulf of Florida, with directions for the coasts of Florida and Cuba; also remarks on the Tortugas, on the Florida Keys and Reef, and on the Bahama-Islands.

AS you sail out of *Port-Royal* in the morning with land-winds, when you weigh anchor, keep well to the westward of the *Middle Ground*, observing the directions before given for *Port-Royal*; or be careful that you do not bring the church-steeple over the corner of the wall where the embrasures are, before you bring *Yallah's Hill* in one with *Lime Key*: in case you should not see *Yallah's Hill* or *Point*, there is, on *Helshire*, a

mount, which, when open of *Salt-Pond Hill*, shews that you are to the southward of the fourth *Middle Ground*. An out-and-in leading-mark, besides that beforementioned, is the second embrasure (counting from the westward) in one with the church-steeple.

You may next haul up, in order to avoid the *Turtle-Heads*, so as to bring the church-steeple to the easternmost part of the fort, and keep that mark on till you bring the southern key on with *Yallah's Point*, which will carry you clear of the *Three-Fathoms Bank* and *Wreck-Reef*. But if you should fall so far to leeward as to bring the church-steeple near the corner of the fort, you must either come to anchor, or tack, and stand in.

From *Port-Royal Keys* to *Portland* is S. W. but you must keep farther to the southward to avoid *Wreck-Reef*, and the keys and shoals which lie off *Old-Harbour*. To the southward of those keys is good sounding in 16, 18, or 20 fathoms. When the easternmost point of *Helfshire* bears N. b. E. and the outermost land in sight of *Portland* bears N. W. b. N. on sounding, you will have 17 and 23 fathoms, and the next cast no ground with 80 fathoms of line, though not a ship's length between the first and last cast.

From *Portland* E. dist. 3 or 4 miles, are two keys. *Negro-Head Rock* and the other keys lie in N. E. by which is the going into the *Old-Harbour*. Right off from *Portland* is gradual sounding for 8 or 9 miles.

To the westward of *Portland Point* is a reef and a point called *Rocky-Point*. As you sail to the westward, you must give it a good birth of 3 or 4 miles; and, should you want to go into *Withy-Wood*, you must keep so far to the westward as to bring a little round hill in the bay to bear N. or N. b. W. and steer in for it, which will bring you in sight of the *Old Fort*, which will then be between you and the said little hill, and you will meet with these depths of water, 10, 8, 7, 6, 5, 4, and $3\frac{1}{2}$ fathoms, when you will be about one and a half mile from the shore. The fort N. N. E. is the best place to anchor in for loading, as your boats can sail on-shore or on-board; with the sea-winds, and then *Rocky Point* will bear E. S. E. and be in one with the land off *Portland*.

To anchor off *Milk river*, you must act as for *Withy-Wood*: between this and *Pedro Point* is *Alligator-Pond Reef*, and *Sandy Key*, within which is 3 fathoms water, and good soundings for a long way without it.

From *Portland Point* to *Great Pedro Point*, is W. b. N. dist. 10 leagues.

From *Pedro Point* S. 7° E. dist. 14 leagues, is the easternmost *Pedro Keys*. To anchor in 9 fathoms water, hard ground, you may bring the easternmost key E. $\frac{1}{2}$ S. dist. 4 or 5 miles, the middle key S. E. $\frac{1}{2}$ S. and the western key, or *Savannah Key*, S. b. E. $\frac{1}{2}$ E. there is sounding for 3 or 4 leagues to the westward in the following depths, $9\frac{1}{2}$ to 7, and then to 10 fathoms, hard ground.

From *Pedro Key* S. 30° W. dist. 27 leagues, is *Boxa-Nova*; the west end of *Jamaica* bears from *Boxa-Nova* N. b. E. dist. 50 leagues; the difference of longitude between is 32 miles.

To anchor at *Boxa-Nova*, bring the easternmost point of the reef E. N. E. 6 or 7 miles distant, and a small sandy key E. S. E. 3 or 4 miles, and the westernmost breakers in sight from the deck of a 20 gun ship bearing S. S. W. and you will have hard sandy ground, in lat. $15^{\circ} 57'$ N. The soundings from a ship in this situation S. b. W. 2 cables' length distant, were 10 fathoms; at 3 cables', 8 fathoms; at a mile, $7\frac{1}{2}$ fathoms; all coarse sandy ground. In sounding, a rock was found with 7 feet water upon it. The ship bore from the rock N. b. W. $\frac{1}{2}$ W. dist. two and a half miles, and the key E. N. E. two and a half miles. S. b. E. $\frac{1}{2}$ E. from the rock at the knowl, at the distance of a quarter of a mile, there is another knowl with

4 feet water. Both of them are steep-to, and not bigger than a boat. The soundings from the key to the ship one third of the way, 5 fathoms, half of the way, $7\frac{1}{2}$, and three fourths of the way, $8\frac{1}{2}$.

The key is about two cables length long, and about one third broad, and stretches E. b. N. and W. b. S. It is a good station for ships in a Spanish war; for most ships come this way from the Spanish Main, going to the Havannah.

As there is sounding off *Portland* for 8 or 9 miles, so there is off *Pedro* for 5 or 6 miles. The edge of the sounding runs E. S. E. and W. N. W.

Should you want to go into *Black-River*, you must keep *Point Pedro* open of *Parrattee Point*, and that will lead you the outside of the reef. Keep on till you bring the church to bear N. N. E. easterly, or the church on with the gap in the high land; then steer right in for the church, and that will carry you into the best of the channel. It is full of heads of coral rocks.

The sounding comes but narrow at *Bluefields Point*; but you may sail down by it, keeping the land to the eastward in sight open of the point, until you open the leading-mark, which is a little house upon a small hill, in one with the tavern by the water and the river's side, they bearing when in one, N. E. b. E. then steer in for them till you bring the easternmost point of the bay to bear S. E. b. E. and then you will have 4 or 5 fathoms water.

Point Pedro and the S. W. point of *Jamaica* bear W. N. W. dist. 20 leagues.

Savannah-la-Mer bears from *Bluefields Point* W. b. N. $\frac{1}{2}$ N. dist. 8 or 9 miles. The leading-mark is to bring the fort north, and keep it so, which will carry you in the best channel.

All round the west end of *Jamaica* are good regular soundings. The S. W. or *South Negril Point* lies in latitude $18^{\circ} 16'$ N. long. $78^{\circ} 33'$ W. from *Greenwich*.

From the S. W. end of *Jamaica* to the *Grand Cominas*, or *Cayman*, the course is W. b. N. $\frac{1}{4}$ N. dist. 56 leagues.

From the S. W. end of *Jamaica* to the *Little Cominas*, or *Cayman*, is N. W. $\frac{1}{4}$ N. dist. 35 leagues.

The *Cominbrack*, or *Caymanbrack*, bears from the *Little Cominas* E. N. E. dist. 2 or 3 leagues: between is a good channel, but the *Caymanbrack* is the boldest; for, off the east end of the *Little Cominas* is a reef of a mile or two. The latitude of the *Caymanbrack* is $19^{\circ} 56'$ N.

From the *Little Cominas* to the *Great Cominas* is W. S. W. distance 18 leagues.

The *Great Cominas* is 10 leagues long, and 4 or 5 broad. The south side lies in lat. $19^{\circ} 21'$ N. and the N. W. point in lat. $19^{\circ} 27'$ N. From the east end of the island, for half way down, the shore stretches W. b. S. and the other half W. b. N. Off the S. W. point there is a reef of rocks for 2 or 3 miles, to which a birth must be given. From the S. W. point to the N. W. point is N. N. W. dist. 4 leagues: between is a place called the *Hog-sties*, where there are several houses, off which you may anchor, bringing the southernmost house to bear E. S. E. distance a mile from the shore. The bottom is rocky, but you may see it where you let go your anchor.

From the east end of the *Grand Cominas* to the south side of the *Iste of Pines*, is N. W. $\frac{1}{4}$ W. 52 leagues; but from the S. E. side of the *Iste of Pines* there is a great bank and reef, stretching E. b. S. 22 leagues from the island. There are several keys upon this bank; but the bank being very low, and the reef which environs it but just above water, it is very dangerous.

The keys all together are called the *Jordans*. The island itself is pretty bold all the way to the southward and S. W. sides.

From the N. W. end of the *Grand Cominas* to the south side of the *Isle of Pines*, is N. W. $\frac{1}{4}$ W. dist. 48 leagues.

From the west end of the *Grand Cominas* to Cape *Coretas*, or *Corientes*, the course is N. W. $\frac{1}{4}$ W. dist. 76 leagues. The cape is in lat. $21^{\circ} 54'$ N.

The south side of the *Isle of Pines* lies in lat. $21^{\circ} 22'$ N. and the hills in $21^{\circ} 57'$. With the hills E. N. E. is the going in between you and them; so that, when you come in between the *Little Key* and *Key Blanco*, the distance between them is 4 leagues. In working in, you must keep in mid-channel; the depth of water is three or three and a half fathoms: but you should keep your lead going for about a mile to the northward of the *Little-Key*, because there is a spit of 12 feet water. When you have wrought up a good way in the bay, the depth will increase to 5 or 6 fathoms; but you may go within one and a half mile of the north shore, and there anchor in four and a half, three and a half, or 3 fathoms. There is plenty of fish and turtle in season to be had here: there is also a running river of fresh water. If you ascend the hills to take a view of the island and adjacent lands, you will cross over three little rivers, and pass several springs.

To the westward of this bay is *Philippa-Bay*, with gradual foundings on the outside of the *Sandy Keys*, they making several inlets. At the west end of this bay is Cape *Gunnall*, which is a bluff-point, and off it is a reef of rocks for 4 or 5 miles. Three leagues to the westward of this cape, being within a mile of the shore, we set the westernmost part of the high land of Cape *Bonavista*, or *Bonavista*, which bore N. Being then at the mast-head, we saw over the land next us, and about three or 4 miles on the inside; nothing could be seen but a sand for 3 or 4 leagues more, as if the sea had been there; and beyond that a low barren land as far as the high land, the nearest of which was judged to be 15 or 16 miles off.

Judging ourselves so many miles southward of those hills, we reckoned the course and distance to Cape *Corentas*, or *Corientes*; but, before we got there, the hills came on a line each over the other; and then they bore N. N. E. from us.

Off Cape *Corentas* is a flat reef stretching from the point for 3 or 4 miles. You may come to anchor for watering, by bringing the point or cape to S. E. b. S. in 5 fathoms, one and a half or two miles distant. There are several wells of tolerable good water, and there is also a good rolling-way from the well. This is right on-shore, a little within the point. But, for wooding, go farther up in the bay, where there are salt-water ponds.

Whilst you lie there, you may look over the land from the mast-head, and see whatever is coming from the eastward; whence a judgment may be formed of the height of the land.

And now to work the distance from Cape *Corentas* to Cape *Antonio*, and thence N. N. W. dist. 5 leagues, where there were 15 fathoms water; the high land of *Bonavista* bearing from us, by account, E. $\frac{1}{2}$ N. dist. 22 leagues. From the main-top-gallant-mast-head of a 20 gun ship, may be seen the top of three small hills, bearing as before; and Cape *Antonio*, bearing S. S. E. dist. 5 leagues. Going to England with a fleet of merchantmen, we kept working off the west end of the *Colarados* with the wind northerly, and we came in so as to bring the *Little Dry-Key* on the *Colarados* to bear E. northerly, dist. 6 or 8 miles, and from the reef 2 miles, being then in latitude $22^{\circ} 34'$ N. As the wind was northerly we stood to the westward, and made up the distance from the *Colarados* 14 miles before we lowered the view of the hills of Cape *Bonavista* to the same resemblance we had seen

before. Thus we found that the *Colarados-Reef* was so far to the eastward of our first station, or 9 miles east of *Cape Antonio*.

Being so near the *Colarados-Reef*, I went to the mast-head and made my observations; at some distance on the inside I saw clear water (as we call it in the *West-Indies*) and observed, to the best of my judgment, that the southernmost end terminated in a point. To be sure of which, we stood in to the southward of the reef, so far as to bring the supposed point north of us, and the key N. N. E. and, when we came upon soundings, (which continued all the way round from *Cape-Land* to the *Colarados-Reef*;) the southernmost point of the reef bore about W. b. N. from the southernmost part of the high land of *Cape Bonavista*. Knowing how far this high land is to the westward, and also the latitude of the reef, you may thence make out your account for sailing all that way.

An important remark to be made, when coming from the *Havannah*, is, that, when you are but a little way north of the *Moro-Castle*, you can but just see the top of the *Saddle-Hill*; and, when so far to the westward as to bring the *Saddle-Hill* south-easterly, to the like height as before, in latitude $23^{\circ} 56'$ N. being 20 leagues difference of latitude from the foot of the *Saddle-Hill*, and coming along shore to the westward, the top of it may be seen the same height, over the long flat hill, nearly as before, it bearing E. northerly, when within two miles of the reef; then the westernmost high land of *Cape Bonavista* bears south-easterly; so that, keeping the *Saddle-Hill* open of the land to the westward, or the Notch of the *Cocks'-Combs* open, you will be sure to keep clear of the *Colarados-Reef*. These remarks, with the bearings of the several appearances, will at all times shew you how far you are to the east or westward.

Key-Lavisa bears from the Notch of the *Cocks' Combs* W. N. W.

Next to the *Cocks' Combs* is *Manitee-Head*; eastward of them 4 leagues, and N. W. from this point, is *Key-Grande*, or the *Angular-Key*; from it, westward, the keys or reefs stretch W. S. W. or S. W. and eastward of it they stretch E. b. N. and E.

You come next to the *Saddle-Hill*, which when it bears S. $\frac{1}{2}$ E. then is *Rio-Porka* between you and it, the entrance of which river is distinguishable by two small bluff-keys. This river is 4 leagues to the westward of the Bay of *Hunda*. Bring the *Saddle-Hill* S. W. b. W. and keeping that bearing will lead you into the harbour, for it is improperly called a bay, the going in being scarce half a mile broad, though, within, a number of ships may lie. There is a fresh water river called the river *Hunda*, S. E. from the little island in the middle of the harbour, on which little island there is also a fresh well, yielding about 10 or 12 tons of water before it is exhausted, and soon filling again.

From *Hunda-Bay* to *Porta-Cavanna* is 4 leagues, and thence to the *Havannah* 18 leagues more, with several inlets between, but unknown to us. The land is very remarkable for 5 leagues. To the westward of the *Havannah* is a table-land called *Table-Marial*; and the two little hills, called *Maiden-Paps*, are also remarkable. Bring these *Paps* S. b. E. the *Moro-Castle* being between you and it, and you may run in to the *Havannah*. The *Moro-Castle* is no less remarkable, and close by its foot are 13 fathoms water.

From the *Havannah* to the reef of the *Tortugas-Bank*, is N. b. W. dist. about 37 leagues; and from the *Havannah* to the place where the English ship *Looc* was cast away, since called *Looc-Key*, is N. E. b. N. dist. 32 leagues, which key lies in latitude $24^{\circ} 30'$ N. and the bank and key stretch west from it.

From the *Havannah* to the *Matanzas* is 22 or 23 leagues, and the land between them is remarkable. The coast lies almost east and west. The *Havannah* and the bay of *Matanzas* lie both nearly in lat. $23^{\circ} 14' N.$

From the *Matanzas* to *Looe-Key* is north-westerly, 25 leagues.

From the *Matanzas* to the *North-key* of *Cuba* is east, 20 leagues; from the same *North-key* to the west end of *Key-Set*, north, 2 leagues.

From *Key-set* to the *Double-headed Shot*, upon the same bank, is N. N. W. 4 or 5 leagues.

From *Key-set* to the *Matanzas*, W. S. W. 22 leagues.

From the *Double-headed Shot* to *Cape Florida Reef*, N. W. by N. 12 or 19 leagues.

From ditto to *Cat-key*, N. E. by N. 24 leagues.

Coming round *Cape Antonio*, do not come too near the *Colarados*, because the current is like a tides-way; or as one of the points of the river *Thames*. If you presume to go close by the point, it is a hundred to one if you are not caught in the eddy. When the high land of *Cape Bonavista* was seen from the mast-head bearing east, the current was tried; and found to set N. W. at the rate of one mile an hour, and trying it two or three miles off the *Colarados*, it went S. S. W. at the rate of $1\frac{1}{2}$ mile an hour: so that, coming from *Cape Antonio*, it is best to steer north (allowing for the reefs to the N. N. W. of it) till you get into latitude of 23° and then to the eastward; for, were you to keep in shore you would have the S. W. current as far as the easternmost part of the *Cock's Combs* land.

But, when you get so far as *Key-Grande* to the westward, you will get on faster, and find the current part: when we brought the notch of the *Cocks' Combs* E. S. E. and by *Key Lavisa*, we saw a turtle crawl, and sent our boat on shore, and, though not gone four hours, we were driven from her 6 or 7 miles to the westward, notwithstanding we strove to keep nearer, but could not. So that it is not the best way to keep in shore, till you are got to the eastward of *Key-Grande*.

If you would go into the Bay of *Hunda*, you are to keep in by the reef that runs off the east point, by your lead, and haul up south, or S. by E. and so keep up the east shore till you come to a low point, from which runs a spit or shallow water. Give this a birth, then haul up to the east, and anchor in 6 or 7 fathoms, where the little island will bear S. or S. S. W.

As you are working up to go through the *Gulph*, be sure that you get so far to the eastward as to bring the Pan of *Matanzas* to bear S. or S. by E. before you put over for the *Gulph*, and then the most common course is N. N. E.



Remarks on the Dry Tortugas, coast of Florida, &c.

The *Tortugas* consist of ten small islands or keys, extending E. N. E. and W. S. W. for 10 or 11 miles, at the distance of about 30 leagues from the nearest part of the coast of *Florida*, 40 from the island of *Cuba*, 14 from the westernmost of the *Florida-keys*. They are all very low, but some of them, covered with mangrove-bushes, may be seen at 4 leagues distance.

The south-westernmost key (which, in going from *Pensacola*, *Mobile*, or the *Mississippi*, is the corner to be turned, and coming from *Cape Antonio*, the point to be avoided) lies in $24^{\circ} 32' N.$ latitude, and about $83^{\circ} 50' W.$

longitude, from the royal observatory at *Greenwich*. The variation of the compass, by a medium of several observations, is 7 degrees east. A reef of coral-rocks runs about a quarter of a mile S. W. from this key, the water of which is discoloured; and, in general, wherever there is danger, it may easily be seen from the mast-head in the day-time. There is a large bank of brown coral rocks, intermixed with white patches of sand, about 5 or 6 miles to the westward of the *Tortugas*, with very irregular soundings, from six to twelve fathoms. The bottom appears very plainly, and, though it may be alarming to strangers, yet there is no danger. You will find from 13 to 17 fathoms between this bank and the *Tortugas*.

If you are bound to the eastward, and meet with a strong easterly gale, which is frequent there in summer, you may safely come to an anchor in 5 or 6 fathoms, under the lee of the long sandy island to the northward of the S. W. key, about a quarter of a mile off shore.

The bank of soundings extends only about 5 or 6 leagues to the southward of the *Tortugas*, but much farther to the westward, and all the way to the northward along the *Florida* shore: this is a favourable circumstance for the safety of navigation in those parts, as caution in sounding may prevent any danger in the night; for, the soundings are extremely regular all along this bank to the northward, almost to *Cape St. Blaize*, in lat. $29^{\circ} 42'$; so that, by the latitude and depth of water, we may generally know how far we are to the eastward or westward. From the depths of 20 to 50 fathoms, is a space of several leagues; but from 50 or 60 it deepens quickly to 70, 80, and soon after no ground.

From the bar of *Penfacola* to the *Dry Tortugas* the true course is S. 30° E. distance 134 leagues, and therefore S. E. b. S. by the compass will carry you clear of them to the westward; but it will be both prudent and necessary to sound frequently when you get into the latitude of 26° and 25° , and never stand into less than 30 fathoms in the night till you are past the latitude of $24^{\circ} 30'$, when you must haul up S. E. b. E. or E. S. E. which will carry you near to the *Havannah*.

There is a broad channel over the bank, to the eastward of the *Tortugas*, of 10 or 17 fathoms, which, in going to and from the coast of *West Florida*, &c. might occasionally cut off a great deal of the distance; but that passage is by no means to be attempted, unless you can see the *Tortugas* distinctly, and keep within two or three leagues of the easternmost of them, as there is a coral bank of only twelve feet at the distance of 5 leagues; and farther on towards *Cavo Marques*, the westernmost of the *Florida-keys*, there is a very dangerous and extensive bank of quick-sand, on many parts of which there is no more than 4 or 5 feet water. It is of a remarkable white colour, and may be easily seen and avoided by day-time.

Penfacola, with the coast adjacent. From *Cape Antonio*, the west end of *Cuba*, make your course good N. b. W. $\frac{1}{2}$ W. and you will fall in with some part of *Rose-Island*; but, from extraordinary currents, and suddenly changing, you may fall in many leagues to the eastward or westward of that island; therefore it will be necessary to observe the following directions.

A current has been found to set from S. E. to E. b. S. for at least 70 leagues from the coast; but, as you approach the land, you will find the current to set a point or two off shore: if you should fall in to the eastward of *Cape St. Blaize*, you will have 10 or 12 fathoms, coral rocks, and no sight of land; but, if on the meridian of *Cape St. Blaize*, you will shoal from 16 to 7 in a quarter of a mile, and then the land will be just in sight 2 or 3 ratings up. The land about *Cape St. Blaize* barely in sight from the deck, in clear weather, are many shoals and strong riplings; but generally not less than 4 fathoms on the sea. To the westward are gradual soundings close to the beach. If you fall to

the westward of *Cape St. Blaize*, and to the eastward of *Penfacola*, the land is discernable by the trenching of the coast, and by numbers of white sand-hills, like snow drifted among the bushes, and in some places towered up like houses.

Rose-Island is to be known by standing into 9 or 10 fathoms; then from the mast-head you will discover a narrow strand of sand, mostly without trees, and the water over the island.

Should you fall into the westward of *Penfacola*, you will find the coast trenching away, and a smooth even beach, with the woodland close to the water-side, observing that the soundings farther to the westward lie not above 10 or 15 leagues from shore, and inclinable to the clay or soft muddy ground; but abreast of *Cape St. Blaize* is small sandy ground, and to the eastward are coral-rocks, stones, and coarse gravel.

The *Chandeliers*, *Horn-Island*, and *Dauphin's-Island*, have likewise a smooth beach and gradual soundings close to the shore. Two miles within the west end of *Rose-Island* are many straggling trees, and a fort, where they fire a gun at the approach of any ship; the east end is woody for two miles.

There is a stronger current in the winter-time than in summer, occasioned by prevailing N. W. and N. N. W. winds, which immediately cause a general ebb from all the bays and inlets on the coast, and set to the eastward a point or two off shore; at which season a southerly wind, which is a dead wind on that coast, is a forerunner of a N. W. wind in a few hours; so that no one, knowing themselves to be to the westward of *Cape St. Blaize*, should haul from the land exceeding 17 or 16 fathoms water, lest they should not be able to get the land on board again for the above current and N. W. winds.

There is no house along shore from *Cape St. Blaize* to *Mobile Point*; but to the westward in every inlet are houses, and some people of considerable property. To the eastward of *West Belloxi*, on the coast, is fit only for raising stock; but to the westward is as rich soil as any in the world.

The river *Ibberville* is choked with wood, but great pains are taking to clear it.

Remarks for the Florida-Keys and the Reef contiguous.

CAYO-MARQUES, which is the westernmost of the range of *Florida-keys*, lies about E. $\frac{1}{2}$ S. 17 leagues from the S. W. key of the *Tortugas*, in lat. $24^{\circ} 28'$. There is a cluster of 8 or 9 mangrove islands that go under that name, the northernmost of which is the largest, being near two leagues in extent from west to east: to the westward and north-westward of *Cayo-Marques* there is a large bank of quick-sand extending about six leagues; and, nearly due south from the western extremity of this bank, lies the west end of the *General Florida Reef*, in lat. $24^{\circ} 20'$, being the southernmost part of the whole.

There is a channel between the reef and the above-mentioned bank, and likewise all along between it and the keys, in many places upwards of 4 miles broad. The reef at the west end is about 3 miles broad, but the least water on it is 5 fathoms, with irregular soundings to 7 and 8 fathoms; it is all discoloured water, white and brown patches of sand and coral rocks, and the bottom plainly appears. The reef, in general, is very steep on the south side, there being from 20 to 30 fathoms, muddy bottom, within about a mile or two of it.

There is from 7 to 10 fathoms in the channel, to the westward of *Cayo Marques*, and $3\frac{1}{4}$ fathoms is the least water on the reef. Abreast of *Cayo Marques* $7\frac{1}{2}$ fathoms, soft mud, is the deepest water in the channel, and $3\frac{1}{4}$ the least water on the reef.

Just to the eastward of *Cayo Marques*, there is a large opening, called by the Spaniards *Boca Grande*, which is upwards of two leagues in breadth, and has a channel through to the northward of 9 or 10 feet, but it is not to be recommended to strangers.

Cayo Hueffo is the first island of any consequence to the eastward of *Cayo Marques*, at the distance of 9 leagues. There is a parcel of scattered mangrove islands between *Boca Grande* and it; the three southernmost of which have white sandy beaches. *Cayo Hueffo* (or *Key West*, as it is corruptly called by the English) is 7 miles in length, and has a sandy beach on the south side; the trees are very thick upon it, especially at the west end, round which there is a safe and convenient harbour, with a channel of 4 fathoms into it. You must keep within less than a cable's length of the N. W. point, which is remarkable for a single bushy tree and a turtle-crawl; and come to an anchor in $3\frac{1}{2}$ or $3\frac{3}{4}$ fathoms, about half way between it and a small mangrove island which lies about a mile to the northward of it. The best anchoring-ground is near the east bank; for, there is some small coral near the middle and west part of the harbour. This harbour is frequented by the turtlers and wreckers from *Providence*, and likewise the fishing-craft from the *Havannah*, who find it convenient on account of a channel through the bank to the northward, in their way to the coast of *Florida*.

The S. W. point of *Cayo Hueffo* is in lat. $24^{\circ} 29'$ N. and long. $82^{\circ} 35'$ W. from the Royal Observatory at *Greenwich*, and lies nearly due north from the *Havannah*, about 27 leagues.

The westernmost sandy key on the reef lies three leagues S. S. W. from *Cayo Hueffo*, in lat. $24^{\circ} 23'$. A large pole is erected upon it to make it more conspicuous. There is a dry patch of rocks on the reef, about 4 miles to the westward; and another about 2 miles to the eastward; thence you have 2 and 3 fathoms on the reef for about 5 miles to the eastward of the key; but, when you bring the west end of *Cayo Hueffo* to bear about N. N. W. or N. b. W. $\frac{1}{2}$ W. there is a fair channel of $4\frac{1}{2}$ or 5 fathoms over the reef; and, when you get into 6 and 7 fathoms soft mud within the reef, keep more to the westward, observing to give the S. W. point of *Cayo Hueffo* a birth of about three quarters of a mile, on account of a rocky spit that runs off from it.

The channel within the reef between *Boca Grande* and *Cayo Hueffo* is in general about 3 miles broad, and the deepest water is 6 and 7 fathoms, fine sand and clay: there are two or three patches of coral rocks with $2\frac{1}{2}$ and 3 fathoms water, nearly in mid-channel, lying about S. S. E. from the west end of *Cayo Hueffo*.

At the east end of *Cayo Hueffo* there is a small opening called *Bocha Chica*, which leads to an infinite number of small mangrove islands, but nothing except a canoe can pass quite over through the shoals.

About 7 miles S. S. E. from *Bocha Chica*, there are three small sandy keys on the reef; between the westernmost and middle one, there is a channel of 4 fathoms over the reef, and another of 3 fathoms between the middle and easternmost key; but for 10 miles to the eastward of these keys, the reef is broad and dangerous, there being in some places dry rocks, and in general it is full of sunken rocks 4 or 5 feet under water, with crooked channels of 4, 6, and 7 fathoms between them.

Seven miles to the eastward of *Bocha Chica* there is a small island with a

remarkable high bluff of trees, which in most views appears in the shape of a saddle. It has an opening at each end into a large shallow bay, bordered with innumerable mangrove islands to the northward. The general course of the chain of islands turns gradually to the northward of east from *Cayo Hueffo*.

At the distance of 7 leagues from the west end of *Cayo Hueffo*, there are several large islands covered with pine-trees, which continue all the way to *Bahia Honda*, for the space of 4 leagues farther on to the eastward; but these pine-islands are bordered with mangrove keys on the south, and there are several openings quite through to the northward, but they are so shallow as to be only passable in boats and canoes.

Looe-key (so called from the *British* ship *Looe* being cast away there) is a small sandy island on the reef, 9 leagues from the west end of *Cayo Hueffo*, 18 from *Cayo Marques*, and 35 leagues to the eastward of the *Tortugas*. It lies in the latitude of $24^{\circ} 30'$ N. and long. $82^{\circ} 11'$ W. The rocks run but a very little out from it, and there is no kind of danger but what may be avoided in the day-time. The reef is very steep on the South side, for you have 20 fathoms within a mile of the key, and 100 fathoms about two leagues to the southward of it. There is a channel of 4 and 5 fathoms over the reef, about a mile to the westward of the key; but to the eastward of it, for 2 or 3 miles, you cannot depend on carrying more than 15 or 16 feet, though farther on to the eastward, for the distance of 4 or 5 leagues, you will have $3\frac{1}{2}$, and, in many places, 4 and 5 fathoms, the least water on the reef.

There is likewise a large pole erected on *Looe-key*, which may be seen at a considerable distance.

About 4 miles due north from *Looe-key* there is a small harbour, called by the Providence people *New-found Harbour*, and by the Spaniards *Cagzamos* or *Cayovamo*; but it is fit for nothing but small craft, as only 7 or 8 feet at most can be carried into it.

Bahia Honda lies about 10 miles N. E. from *Looe key*, in lat. $24^{\circ} 35'$. It has a large entrance and a fair channel of 4 and 5 fathoms, but when you are in the harbour it shoals to $3\frac{1}{2}$, 3, $2\frac{3}{4}$, and $2\frac{1}{2}$ fathoms; and the bottom in general is rather hard rough ground. This place may be easily known by three small islands on the west side of the entrance, and a large island on the east side, a mile long, with a sandy beach, remarkable for a number of tall palmetto cabbage-trees, the first of the kind you fall in with coming from the westward.

From *Bahia Honda* to the west end of *Cayo Vaccas* (the next considerable island in proceeding to the eastward) the distance is 4 leagues, and the direction of the coast turns still more to the northward. There are only a few small keys between them, the body or thick cluster of islands ending about *Bahia Honda*, which makes this almost vacant space the more remarkable.

About 5 miles south from the west end of *Cayo Vaccas*, there is a small sandy key on the reef, called by the Spaniards *Cayo Sombrero*, in latitude $24^{\circ} 34'$ and $81^{\circ} 55'$ W. longitude: this is the easternmost key on the reef. There are in all six keys on the reef; and, as they may serve as so many good land-marks to know exactly where you are, in case of falling in with any of them, it will not be improper in this place to recapitulate the situation of each of them, beginning at the westernmost, which lies 3 leagues S. S. W. from *Cayo Hueffo*, in lat. $24^{\circ} 23'$ and long. $82^{\circ} 39'$ W.; the three small keys off *Bacha Chiva*, in lat. $24^{\circ} 24'$ and long. $82^{\circ} 25'$. *Looe-key* in $24^{\circ} 30'$ N. lat. $82^{\circ} 11'$ W. long. and *Cayo Sombrero* just now mentioned,

As we have thus far given a general account of the reef and the chain of islands as far as *Cayo Vaccas*, it is now time to return to the channel between them. It was observed before, that there were two or three small coral patches with $2\frac{1}{2}$ or 3 fathoms water, lying about $2\frac{1}{2}$ or 3 miles S. S. E. from the west end of *Cayo Hueffo*, with 5 and 6 fathoms all round them, being near the middle of the channel, which is there about 5 miles broad.— It continues to be upwards of 4 miles in breadth till you are past the three keys on the reef off *Bocha Chica*; when the reef grows broader and the channel narrower, with 4 or 5 fathoms the deepest water. In the narrowest part, which is about 5 or 6 miles to the westward of *Looe-key*, the channel is only a mile and a half broad, and $3\frac{1}{4}$ fathoms the deepest water. But, as you approach *Looe-key*, the channel grows broader again, and deepens to 5, 6 and 7 fathoms, mud and clay. Abreast of *Bahia Honda*, the channel is about 3 miles broad with the same soundings, and continues about the same breadth as far as *Cayo Vaccas*. There are two general remarks concerning this channel to the westward of *Cayo Vaccas*, namely, that you will have 3 fathoms all the way within a mile of the keys, and that you will always find the deepest water nearest the reef.

Cayo Vaccas, or rather the thick range of islands that go by that name, extends about N. E. by E. for the space of 5 leagues, the easternmost of which islands is called *Duck-key*.

From *Duck-key* to *Key Bivoras*, the distance is about 5 miles, and there are three small mangrove islands between them. *Key Bivoras* is 5 miles long, with a white sandy beach, and is remarkable for a high hummock of trees at the west end.

From the east end of *Bivoras* to the west end of *Old Matacumbe* the distance is $3\frac{1}{2}$ miles. *Matacumbe* is 4 miles long, in a N. E. direction. The trees at the north end are very high and level at the top, appearing at a distance like table-land. It lies in latitude $24^{\circ} 49'$ and longitude $81^{\circ} 30'$.— There is a safe harbour near the north end of *Matacumbe*, where vessels not drawing above 7 or 8 feet may go in, and anchor in 3 fathoms, secure from all winds; but you must go round the east side of a small island, called *Indian-key* or *Metance*, keeping about a cable's length off shore, where you will have 9 and 10 feet for some distance, till you get into 2 and 3 fathoms in a broad channel which runs round towards the north end of *Matacumbe*, where there is a large turtle-crawl. The channel plainly shews itself by the white shallow banks on each side, where there is only 2 or 3 feet water.— *Indian-key* lies about a mile to the eastward of *Matacumbe*, and it is all a shoal between them. To the N. W. and northward of *Matacumbe* the mangrove islands begin again, and continue to the main land, about 6 or 7 leagues distant, and all the way to the eastward within *Cayo Largo*, &c. but that large space is almost one continued flat, with some small channels of 5 or 6 feet water.

The reef from *Cayo Sombrero* is in general very broken ground as far as the west end of *Matacumbe*; there being many patches of coral rocks, with 6 or 8 feet water, and others where the rocks rise to the surface, particularly some spots off the east end of *Cayo Vaccas*, about 7 or 8 miles off shore. There are likewise some large patches of 8 or 9 feet off the middle of *Key Bivoras*, and another large rocky shoal of 8 or 10 feet off the west end of *Matacumbe*, at the distance of about 5 miles; but there are channels of at least 3 fathoms over several parts of the reef between them.

There are likewise some dangerous shoals of coral rocks in the channel between the reef and the S. W. part of *Cayo Vaccas*, the largest of which has only 4 feet water on it, and lies 4 miles N. E. from *Cayo Sombrero*, and

about 2 miles off *Key Vaccas*. There are several other small patches of 5 and 6 feet to the N. E. of it; but in the day-time all these shoals appear very plainly at a distance, being of a brown colour; and, as it is unsafe running in the night, it is always necessary to come to anchor, through the whole extent of the channel.

From *Cayo Vaccas*' shoals, the channel still continues to be 2 or 3 miles broad to the eastward of *Matacumbe*; 4 fathoms is the deepest water, but two and a half and three fathoms is the general depth along *Key-Bivoras*, at two or three miles distance.

We have hitherto purposely omitted mentioning where fresh water may be found among those keys, to avoid confusion, and to bring into one point of view so necessary an article for those who may have the misfortune to be shipwrecked, or otherwise be in want of it. There is no drinkable water on the *Tortugas*, nor any where till you come to the west end of *Cayo Hueso*, where there are several wells dug in the sand. The water is pretty good, especially after rain; but sometimes you will find it a little brackish, in which case the best way is to dig a new well, which is soon done, and you will find the water much better than what has been standing in the old wells. At *Bahia Honda* there is very good fresh water to be got in the same manner, and on the south side of *Cayo Vaccas*, about 8 miles from the west end, there are likewise fresh water wells, on the east side of a narrow opening, with a sandy beach on each side of it.

These are the only places among the keys (at least as far as we know) where fresh water is to be got by wells; but there are several fresh-water swamps and natural reservoirs among the rocks; particularly a large one on the north side of *Key-Vaccas*, about 6 miles from the west end, where the water never fails. It lies in a valley about 100 yards from the beach, a little to the westward of three mangrove islands. There is likewise fresh water to be got sometimes among the rocks at the west end of *Key-Vaccas*, and the small islands to the westward of it, besides at the west end of *Duck-key*, and several other places. In general, wherever there is a rocky foundation, there is a chance of finding fresh water, especially after rain.

But the principal watering-place is at the north end of *Old Matacumbe*, where there is a natural well in a rock, about 4 feet deep, which is constantly full of excellent water, being a kind of spring. On this account *Matacumbe* is much frequented by the wreckers and turtlers, as there is no fresh water for many leagues to the eastward.

New Matacumbe lies upwards of 2 miles to the north-eastward of *Old Matacumbe*, and is 4 miles long in a N. E. direction. It is covered with thick tall trees. At the east end of it there is an opening about half a mile wide, with a small mangrove island in the middle; then a mangrove island near 2 miles long, which is separated by a narrow channel from a large island near 7 miles in length, covered with high trees of various kinds. This island has no name, either by the Spaniards or Providence people, but goes under the general appellation of *Cayo Largo*, though it is separated from it by a narrow channel.

Key-Tavernier (or *Cayo Tavano*, as it is called by the Spaniards) is a small island about two miles from the S. W. end of *Cayo Largo*, and five leagues N. E. from *Old Matacumbe*. There is very good anchorage, a little to the northward of it, for such vessels as frequent the coast.

Cayo Rodrigués, a pretty large mangrove island, without any firm ground, (the roots of the trees being constantly overflowed,) likewise lies off *Cayo Largo*, at the distance of 5 miles N. E. b. N. $\frac{1}{4}$ N. from *Tavernier*. It is in lat. 25° N. and long. $81^{\circ} 15'$ W. From hence, the coast of *Cayo Lar-*

go, which here appears like main land, turns quickly N. N. E. and N. b. E. to north, for which reason *Cape Florida* ought to be reckoned somewhere hereabouts, though there is no particular point of land known by that name to the people of *Providence*, who seem to be best acquainted with those parts.

There are no shoals on the reef opposite to *Old Matacumbe*, except that off the S. W. end above mentioned; but there is a large patch of coral rocks bearing E. S. E. 6 or 7 miles from the north end of *Old Matacumbe*, on which there is only four or five feet water. The reef comes within less than three miles of *Rodrigues*, where you have only 7 and 8 feet, and 3 fathoms is generally the deepest water in the channel all along.

From this large shoal off *Rodrigues*, which forms a kind of elbow, the patches of coral rocks are said to increase in number and dimensions, forming double and treble reefs, with small channels of deep water through them; but, as I can add nothing farther from my own knowledge, I shall leave the subject for the present.

Description of the Harbours, Shoals, &c. of the East End of the Island of Cuba; with Remarks, Instructions, &c.

CAPE-CRUZ bears from the west end of *Jamaica* N. b. E. $\frac{1}{2}$ E. dist. 27 leagues, in the latitude $19^{\circ} 50'$ N. It is a low level land with a bluff point: the east side stretches in N. N. E. and N. E. b. N. for 4 or 5 leagues. Without it, is an island called *Bird-Island*, which makes a good harbour; for, vessels may sail through between it and the land. It is also a good place for wooding and watering, and there is plenty of fish. You must make very bold near the shore, otherwise you will be apt to miss the entrance, because it lies obscurely under the other land. There is also, between this and *St. Jago*, several little places where small craft may go in, but with which, as yet, we are not so well acquainted as to be able to give an accurate description of them.

The *Copper Hills* are high, round, and picked land, about 15 or 16 leagues from *Cape Cruz*, and about 25 leagues to the westward of *St. Jago*. They lie a little way inland, may be seen from most parts of the north side of *Jamaica*, and make pretty much alike at all bearings from thence.

The *Moor-Castle* of *St. Jago* lies in lat. $19^{\circ} 52'$. When the east point of the entrance of *St. Jago* bears N. E. then is the innermost battery shut in with the west point.

From *St. Jago* to *Cumberland-Harbour* is east, dist. 12 leagues; and, when you come so far to the eastward as to bring *Cumberland-Harbour* north, dist. 5 or 6 miles, then the land to the westward of *Cumberland-Harbour* and the *Moor-castle* will be in one, they bearing W. $\frac{1}{2}$ N. by compass, and the outermost land to the eastward E. N. E. From hence may be seen the island of *Grandtance* bearing E. S. E. $\frac{1}{2}$ E. and then the observed latitude was $19^{\circ} 45'$ N.

The soundings are good 2 or 3 miles without *Cumberland-Harbour*, but there is a sunken rock on the starboard side going in, about a quarter of a mile from the shore, of 20 feet water. Otherwise the shore is bold, and good room to work in it, except off the south shore, where *Angusta-River* comes out, there being a bank of sand and mud by all means to be avoided.

To anchor, you may bring *Augusta-River's* mouth to bear S. W. $\frac{1}{2}$ W. and the *Battery-Point* S. S. E. Then you will have 6 fathoms water. The harbour is in latitude $19^{\circ} 50' N.$

From *Cumberland-Harbour*, 5 leagues to the eastward, is a little river, where many small vessels may lie. There is no more than 12 feet water upon the bar called *Escondeda*; and here you must be well acquainted before you can find out the mouth of the river, it being but narrow, and the west point running out narrow. The deepest water is close by this point; but there is anchoring a little to the eastward of the mouth of the harbour.

From *Cumberland-Harbour* to *Hooka-Point*, or *Sphinks'-Bay*, the course is E. by N. $\frac{1}{2}$ N. dist. 16 leagues. You may anchor in the bay, bringing the easternmost point to bear E. S. E. distance about a mile and a half, and then the platform-land on *Hispaniola* will be in one with the point. The latitude is $20^{\circ} 6' N.$ You may anchor in any water, from 35 to 7 fathoms, but 16 fathoms is the best, and there is plenty of fish to be caught with hooks. To the westward, about 2 or 3 miles, is a fresh-water river, and at most times there are Spanish hunters who will supply you with fresh provisions.

From *Hooka-Point* to the extremity of *Cape Maize*, the course is N. E. dist. 5 leagues. The Cape is in lat. $20^{\circ} 18' N.$ From it may be seen the high land of *Grandtance*, bearing S. by E.

Cape Maize and *Cape Nicolas* bear from each other E. S. E. and W. N. W. dist. 18 or 19 leagues.

The high land from *Grandtance* bears from *Cape Nicolas* S. by W. westerly.

Cape Maize is a low sandy point, with a reef running from it about 2 or 3 miles; about 4 leagues to the westward is a lagoon, where small vessels may go in.

Farther on about 3 leagues is *Barraco-Harbour*, a very good one, but narrow in the entrance. However, the harbour is known by a little round hill, called the *Anvil-hill*, being flat at top, and a little to the westward of the harbour. The east side is the best to go in by; for, the west side is sandy and flat.

Observations on the Florida-Stream, with necessary Directions to Navigators.

THE great weight of the sea, inclosed within the vast extent of the Gulf of Mexico, is set in agitation by the trade-winds, as is generally agreed, whereby the *Florida-stream* is supposed to be affected, and thence called the *Gulf-stream*. This stream is in reality carried into the *Mexican Gulf* by these trade-winds, and therein circulates at large; but, at the place of its issue, strongly compressed by the island of *Cuba* and those of *Bahama* on one side, and by the promontory on the other, it is constrained to curb its current sudden and often, in order to take its vent on the east side of the said promontory at *Cape Florida*, through the *New Bahama-channel* into the *Atlantic Ocean*, with a N. by E. direction; which direction, at *Cape Canaveral*, it exchanges with a N. N. E. direction, in which it continues as far as *Charleston*. North and N. E. as also east winds press the *Florida-stream* home to the *Atlantic coast*, and confine it in a very narrow channel,

at which time it runs like a torrent. S. E. and south winds give less motion to the natural current of the stream, because it then runs in its natural channel, is wider, as also distant from the shore, on which distance part of the stream returns by an eddy southwardly. South-west, west, and north-west winds extend the stream still farther into the ocean, consequently beyond its natural eastern boundary; by which its current is but moderate, having that motion diminished, which is caused by the pressure it receives in its confinement between the islands of *Bahama*, *Cuba*, and the promontory. According to the interceptions of winds, contrary to its assumed regular course, it begins to change at the west end of the *Martyrs*, from south to S. E. to east, to N. E. at Cape *Florida* to N. N. E. and in the *New Bahama channel* to N. by E.

The *Florida-Stream*, at its regular seasons, and uninterrupted course in fair weather, forms a remarkable visible glazed line of division; but in many places out of sight of any land. Without this line, the stream appears in some places as blue boiling water; in others, bursting and fermenting like cataracts, even at times of the greatest calms, besides being fathomless in these very spots. Within the aforesaid line is an eddy quite smooth, changing gradually, as it approaches *Hawke-channel* and its islands, from the Stream's deep blue to a beautiful sea-green, and, at last, into a milk-white. The soundings under the blue-coloured water are on a fine white marl; under the sea-green, on the said marl, with sponge, white coral, sea-feathers, turtle-grass, and sometimes banks of rocks; and, under the white-coloured water, the soundings are on a white marl, with banks of rocks or white sand. The eddy takes its current in an opposite direction from that of the contiguous stream, viz. south-westwardly.

The soundings of the eddy, provided no reef is in the way, between the stream and *Hawke-channel*, run from 20 fathoms to $2\frac{1}{2}$; and, where the reef divides the stream and *Hawke-channel*, the soundings, in some places, are from bottomless at once to 12 or 11 fathoms.

Vessels may with safety hereafter avoid the eddy, or make allowance for it in their calculations; that is, if they cannot help falling into it, (after they have taken all precautions by sounding in blue water, and, when they had bottom, stood off.) they will naturally subtract what longitude they make in the eddy, from what they had made in the stream, and begin a new departure, being at the same time very precise in their morning and meridian observations. Many ships bound through the Gulf of *Florida*, unacquainted with the stream's eddy, and ignorant also of soundings being under blue water, have been lost in fair weather: they were swept incessantly by the eddy to the westward; and, when they found by their calculations that they had a sufficient offing east of Cape *Florida*, they stood north, and, instead of entering the Gulf, ran straight upon a reef.

Besides the effect different winds have upon the *Florida-stream*, it is subject to another cause that also presses it on or off the coast; and that is, the full and change of the moon, which, according to its position, has all the different effects upon the stream, however, not equal in power with those of the wind; and the disposition of the stream is increased to its extreme, if the effects both of the winds and the moon are combined; for, at this time the ocean rising highest, this regulates the flood and ebb, and divides them in proportionate times; consequently it directs and increases them, with the assistance of easterly moons and winds, to the west; and with that of westerly moons and winds, to the east; so that the west and east shores are at times deprived of, and, at other times, overflowed by, tides, occasioned by these vicissitudes.

The boisterous east, N. E. and north winds begin generally in September, and continue during the season, when the sun is in the south, viz. until March, at which times these winds generally end with a gale or hurricane, if the moon's full or change falls in with the season. If then vessels happen to be in the mouth of the Gulf of *Mexico*, that is, between the *Havannah* and *Cape Florida*, they had best endeavour to make the *Bahama-Islands*, or, at least, the soundings of them, and proceed under their lee-side; but, when they are to the north of them, to keep in the eastern extent of the stream, or else they will not be able to clear their way through the Gulf, nor along the coast of *East-Florida*; either go on shore of the Reefs, *Cape Florida*, or *Cape Canaveral*; if not, upon the beach between both Capes, which is the least evil of the two; for, thus the crew and cargo may be saved, and some vessels may also be brought off, provided the storm ceases before the vessel is a wreck. But if, at any time of the south sun, or at any other time, the winds are westerly, then the *Atlantic* coast affords the most eligible lee for navigators who do not choose to take the stream.



Directions for Vessels bound Southward, through the Gulf of Florida.

THE practice of going southward through the Gulf of *Florida*, by keeping upon soundings outside of the reef, is a navigation so dangerous, that we recommend every one, except in cases of extreme necessity, to avoid it. The following are directions for avoiding its dangers:

Vessels from *Port-Royal* harbour, in *South-Carolina*, may keep upon soundings as far to the southward as *Tybee*, and then stand to the east, and afterwards to the south, till they get into the latitude of 26° N.; they may then run down in that parallel, and make the south end of *Abacco*, or the *Hole-in-the-Wall*. N. W. by W. 5 or 6 miles from the *Hole-in-the-Wall*, they may anchor in white water, of about 7 fathoms, off a point where the key falls in, and where is good fishing.

The course from the *Hole-in-the-Wall* to the *Berry-Islands* is W. by S. or W. S. W. $\frac{1}{2}$ W. 13 or 14 leagues, which will bring you to *Stirrup's-key*, or *Money-key*, being the N. W. part of the *Berry-Islands*.

To the westward of *Stirrup's-key* is a tongue of ocean water, shooting into the banks, across which the course is W. $\frac{1}{2}$ N. or W. by N. 10 leagues, scarce to the *Little Isaac's Rocks*. From these to *Great Isaac's Rock*, the course is about west, and the distance between 9 and 10 leagues.

From the *Berry-Islands* to *Providence*, the course is S. S. E. 12 leagues.

When you get soundings, keep your lead going, keeping in or out as the water deepens or shallows, steering between the west and W. by N. about 15 leagues.

The breadth of soundings (at least from the *Berry* to *Isaac Rock*) is from 3 to 5 miles from the banks, being broadest at the rock. Upon the bank's edge are two small rocks, between the *Berry-Islands* and *Isaac Rock*, which terminate the N. W. corner of the bank.

At a cable's length off the west side of *Isaac Rock*, are no soundings.—As you come round it, you immediately get into ocean-water, and consequently into the current of the Gulf; but, if it should happen that the wind be at S. S. E. and you cannot lie south, or S. by E. so as to take the current under your lee, and keep the bank on-board, the best way is to an-

chor, or keep in upon soundings to the northward of *Isaac Rock*, till the wind comes favourable.

By this will appear the necessity of getting to *Isaac Rock* by morning; for, then, you get round and keep in on the edge of the soundings, by which you will plainly discern the bank, the water being clear, and the bank white, with two small rocks, between *Isaac Rock* and the island of *Bemini*: the distance between is 7 leagues, nearly north and south.

At *Bemini* is a harbour of 9 feet water, and an anchorage in the opening, with a well of water on the east point: the harbour lies in lat. $25^{\circ} 30' N.$

From the island of *Bemini*, south, dist. 8 or 9 leagues, is *Cat-key* harbour, or the beginning of the *Rocqueses*.

From *Bemini* to *Beak's-key* is S. $\frac{1}{2}$ E. $7\frac{1}{2}$ leagues. *Beak's-key* is the southernmost of *Cat-keys*, and affords some shelter.

A little less than a league from *Beak's-key*, begin the *Riding-Rocks*, bare of bushes, and appearing like wrecks: the *Spaniards* call them *Los Mimbres*.

S. W. by S. about 7 miles from the southernmost *Riding-Rock*, is a shoal on which a very rich *Spanish* galleon struck, in 1765; her bottom beat over, and pieces of her were found as far as *Money-key* to the eastward. The loss of this vessel was a profitable circumstance to the people of *Providence*: her bottom now lies about east, or E. by S. 7 or 8 miles from the shoal, in 17 feet water, and is yet supposed to contain some treasure.

From *Bemini* the sounding is narrow, and consequently the current strong. From hence, over to the *Florida* shore, the breadth is no more than 15 or 16 leagues. From *Cat-key* abreast of the *Rocqueses*, the sounding is pretty broad, with good anchorage and less current, towards the S. E. and S. E. by S.

From the second, or *Cat-key*, the course S. E. by S. dist. 12 or 13 leagues, is *Orange-key*, having good anchorage to the S. W. of it, 5 or 6 miles, in 20 fathoms. When upon this flat, you have secured your passage through the Gulf, this way; for, then, you may make sail either in the morning or at midnight: steering S. W. 10 or 11 leagues, you will fall in with *Key Set Bank*, which, for 10 leagues on the north side, stretches east and west, and consequently the current sets stronger as you get to the westward. There are good soundings all along by it, and you may discern by the bank how far you are to the eastward of the *Double-headed Shot*; there is anchorage, in spots, all the way in, but the soundings are narrow at the *Double-headed Shot*, the middle of which lies in lat. $23^{\circ} 57' N.$ and S. S. E. 4 leagues, is *Key Set*, where there is water. Here the *Spaniards* make salt.

From the *Double-headed Shot* to the edge of the soundings, a little to the west of *Cape Florida*, is N. W. by N. 15 leagues.

From the *Double-headed-Shot* to the *Matanzas*, the course is S. W. b. W. dist. 23 or 24 leagues, and from the *Matanzas* to the *Havannah*, west, the distance is nearly the same.

Remarks concerning New-Providence and the Bahama-Banks.

NEW-PROVIDENCE, whose town, called *Nassau-Town*, is in $25^{\circ} 8'$, is the chief of all the *Bahama-Islands*, and lies east and west, about 10 leagues long and 4 broad. The harbour is on the north side (where there are several keys) between the island and *Hog-Island*.

From *Providence* to *Frozen-key*, the south-easternmost key of the *Berry-Islands*, the course is about N. W. dist. 10 or 11 leagues.

From this key to N. W. Passage, or the entrance upon the bank, between the *Black-wood-Bush* and *Faulter-keys*, at the north end of *Andros-Island*, is about 8 or 9 leagues. As the bank is bound with a reef here, you must pick your way through that, and you may do it easily, as there are several swashes, which, though they are narrow, have no less than 11 or 12 feet through. The water being very clear in this part of the world, this picking one's way through a shoal is attended with little or no difficulty.

When you first come upon the bank, you will see some scattered heads of rocks and sponges; but, there being no danger except what is very visible, it is sufficient to tell you that, by running W. S. W. about 12 or 13 leagues, you will come out a league and a half to the southward of the *Riding-Rocks*, on the west part of the bank, whence you may easily find your way, either to *Cuba* or the *Florida* shore.

N. B. In coming from the *Florida* shore this way, by the *Riding-Rocks*, you should endeavour to make the south-easternmost *Berry-Island* early in the morning, which precaution will give you a great benefit with regard to safety in your run to *Providence*. You need not be told how great the danger is in coming among shoals and broken land during night.

There are several small harbours on the N. E. part of the *Berry-Islands*, where water and other refreshments may be had; but, as they are seldom frequented but by the people of *Providence*, it may be superfluous to say any thing about them.

Something might be said with regard to the passage by *Bemini*; but, it being the shoalest, and the bars to the eastward of *Bemini* making it very dangerous, no new comer ought to go there without a pilot.

From *Providence* to the *Hole-in-the-Wall*, (sometimes called the *Hole-in-the-Rock*.) south end of *Abacco*, the course is north, about 20 leagues. The passage from the *Hole-in-the-Wall* towards the Gulf of *Florida* is already explained; but we must repeat here, that it is necessary to give the west end of the *Grand Bahama* a good birth, not only on account of its shoals, but for fear, if the wind should hang south-westward, you should be embayed.

The north or *Little Bahama Bank* is little frequented but by whales and turtles; and, on account of its iron-bound reefs, is not to be approached, chiefly on the N. W. end, called *Maranilla-Reef*: the tide of flood sets an indraught on this end of the bank, from every point of the compass, which renders it dangerous to the last degree.

Directions for Vessels bound from the Eastward, over the Great Bahama-Bank, into the Gulf of Mexico.

FIRST, take care to make the *Hole-in-the-Wall* at the south end of *Abacco*, and from thence steer W. b. S. 13 or 14 leagues, which course and distance will carry you to *Stirrup's-key*, the northernmost of the *Berry-Islands*; then run S. W. till you can but just see it off the deck of a vessel of about 100 tons burthen; you will then be in 8 or 9 fathoms water, and about 7 leagues from it. Next, haul up S. W. b. S. and keep no nearer to the southernmost of the *Berry-Islands* than 3 fathoms, which will

be when you have run on that course 12 or 13 leagues; you will then begin to come on the middle of the bank, where you may depend on finding no where less than 15 feet.

Both on coming on to the bank, and in going off from it, you will find a strong tide, which sets right on, or right off: it is easily observed to go along by the ground, the water being clear and transparent: on the middle of the bank you will find little or no tide. If the wind hangs on too far to the southward, it will follow that you shall be forced to the westward; in that case, make no delay in coming to an anchor, lest you fall in with the bars that lie to the south and westward of the *Bemini-Islands*, and extend near 3 leagues. Get under way as soon as you can steer south. You must see no land after you leave the *Berry-Islands*, till you make the *Roques*, or *Orange-keys*: these keys are four in number, besides two small rocks, without bush or shrubs on them. From the *Roques* to the westernmost of the *Double-headed-Shot* keys, the course is S. S. W. distance about 15 leagues, yet the current will sometimes force you on them in steering S. W.

Should you fail for those keys in the night, by all means keep clear of them; they are a number of bare rocks, perhaps 100, or 120, about the size of a vessel, and some less; but, in general, there is water plenty between them and about them. S. b. E. about 6 or 7 leagues from the *Double-headed-Shot-keys*, is *Key-Sel*, so called because the *Spaniards* make salt there, and about which are several sunken rocks. The best way is to go S. W. from the *Roques*, and not to run the 22 leagues between *Roques* and *Key-Sel*, before morning; if in the morning you find yourself in ocean-water, run S. W. b. S. for *Matanzas*; if not, keep down west till you be in ocean-water; then haul up for the coast of *Cuba*, and run down it till you are abreast of *Bahia-Honda*, from whence you must steer over N. W. or thereabouts, which will carry you clear of every thing, into the Gulf of *Mexico*.

DIRECTIONS for the MOSQUITO SHORE and BAY OF HONDURAS.

BEING bound from the island of *Jamaica* to Cape *Gracias à Dios*, take your departure from *Great Point Pedro*, the west end of *Jamaica*; steer W. S. W. $\frac{1}{2}$ S. 75 leagues; then steer S. b. W. about 30 leagues, and you will make the main; between the river *Pulluck* and *Carratasco-Lagoon*, the rivers open to the southward. *Carratasco* makes with a large opening in the land, which is low, and has trees upon it. The coast is clear, and there is good anchoring in 5, 6, or 7 fathoms water.

If the current sets to the eastward, before you make the land, be very careful of the reef of rocks which lies to the northward of *Carratasco*, 15 leagues off from the main, and no soundings until close on them. You will probably fall to the westward of them, if you steer the above courses. If you make them, be sure to go to the westward of them, and do not attempt to find a channel through. The west end of them lies north from *Carratasco*, and is called *Carratasco-Shoals*. It is all shoal and broken ground quite up to *Hobby-Keys*; and it is very difficult for a stranger to find a channel amongst those shoals to the main. There is a very fine channel between them and the main, in some places from 7 to 10 leagues over.

When you are to the westward of *Carratasco-Shoals*, which lie in latitude $15^{\circ} 47'$ N.; longitude $82^{\circ} 31'$ W.: being bound to Cape *Gracias à Dios*, endeavour to make the main; and, if you can lay through, keep your

lead going, especially in the night, and come no nearer to the shoals than 20 fathoms : you will then be about 4 or 5 miles off them, and out of sight of the main, which cannot be seen till you are in 12 or 13 fathoms : you may run down, keeping the main on board, in 6 and 7 fathoms, till you come to the False Cape. When you are come near the False Cape you will shoal your water, but you may run along the spit in 5 fathoms in safety. It stretches from the main about N. E. a long way off. The False Cape makes when you are to windward of it, like the Main Cape, with high mangroves. From the False Cape to the Main Cape, the course is S. E. 7 leagues.

When off the pitch of the Main Cape, you will see the land trend away N. and S. The cape ends in a low sandy point, trending to the southward, with old trees on it, that drift out of the river. The water shoals a good way off, till you double the pitch of it, and then you may borrow as close as you please into 2, 3, 4, and 5 fathoms, soft ground. Off the spit of sand where the old trees lie, at the going-in of Cape *Gracios à Dios*, are regular foundings and a very fine harbour. Do not go higher up in the bay than 3 or 4 fathoms, although it is all clear good ground, and sheltered from all winds.

The Course to Black-River.

FROM the west end of *Jamaica* is W. b. S. a little southerly, distance about 90 leagues to the *Swans'-Islands* : then, if you do not make those islands, you may safely haul up S. b. W. or even S. which will bring you very little to the eastward of *Black-River*.

The currents are very uncertain ; therefore, when you make the land, going for *Black-River*, if you see any high land to the eastward of you, you are to leeward and westward, and the current has deceived you : for, there is no high land to the eastward of *Brewer's-Lagoon* ; for the land makes at *Brewer's-Lagoon*, and runs all along to the westward as far as *Congretoy* and farther. To the eastward of *Brewer's-Lagoon* is all low land.

To anchor off Black-River Bar.

IN running for *Black-River*, after you have made the high land called the *Poyer-Mountains*, bring the *Sugar-Loaf* to bear southward, and run into 12 fathoms water, and there anchor, as farther in you will be apt to meet with anchors lost by the traders in the north winds, which generally begin in November and last till March. This is a wild open road, and the bar too dangerous for strangers to attempt with boats.

Remarks when lying at anchor off Black-River.

BE attentive to the weather. When the wind comes to the S. E. and, baffling about, changes to the westward, get up your anchor as quick as possible, stretch off to the northward, and get a good offing ; for, you may then be sure you will have a north wind, which generally blows very hard, and makes so great a sea that it is impossible for any vessel to ride at her anchors. If your anchors start, it is extremely dangerous, as the rocks and shoals lie at a distance from the main. If you cannot get up your anchor, slip or cut your cable immediately : if it looks black to the N. W. it will not be long before you have it, and then it will not be

possible to get an offing. When you cannot get an offing before the gale comes on, if you can weather *Point Puttuck*, which lies east northerly from *Black-River*, run away for *Cape Gracios a Dios*, for which you have a fair wind all the way, observing the directions to go between the reef and the main. When you come to the Main Cape, do not attempt to work in, but bring up off the *Sandy-Point*, in 2, 3 or 4 fathoms, all clear ground, and very smooth riding; then you are ready to go to *Black-River* as soon as the north wind is over, which may be known by its getting to the N. N. E. and N. E. Some people go from *Black-River* for *Bonacca*; but, after they come there, it often happens that they cannot get in, as the entrance of the harbour lies nearest north and south. Some vessels have got in, but they have been four or five weeks before they could get to *Black-River* again, on account of a strong current setting to the westward, and the trade-winds from the eastward; therefore go for *Cape Gracios a Dios*, as you have a fair wind both ways.

If a north wind comes on before you can get an offing, and you do not like to steer for *Cape Gracios a Dios*, if you can weather *Cape Cameron*, go for *Truxilla-Bay*, which is a very good road, and sheltered from all winds. There is nothing to fear going in, only give the point a small birth, and stand up in the bay as far as you can fetch, and bring a small island which you will see, to bear S. S. W. or S. W.; then you will have 8 or 9 fathoms, soft mud. But you will be to leeward after the north wind is over.

Directions from Black-River to Great Poyer-River.

FROM *Cape Cameron* keep close in shore, in 9 or 10 fathoms, till you run as far to westward as to bring the *Sugar-loaf* to bear S. E. by E.; you will then see the round hill, which must be kept a sail's breadth open of *Great Rock*. Run till you see a very low part in the beach, which is the river's mouth.

To anchor here, bring the white sandy spot on the beach, which is between the river and *Great Rocks*, to bear S. W. $\frac{1}{2}$ S.; you will be in 9 or 10 fathoms, muddy ground; *Great Poyer-River* S. by W. *Great Rock* W. S. W. and *Round Hill* just open with *Great Rocks*. Off this place is much foul ground; therefore try it before you bring up.

You must observe the weather, as at *Black-River*; for it is more difficult to get an offing here than at *Black-River*; for you cannot lie off shore here, if you lie till the wind comes to the northward of N. W.

The *Hogs'-Islands* are two high islands; and there are 18 little sandy keys, which begin to run from the S. E. of the E. Island to the W. Island; that is, to the southward of the two islands; and between the two islands, to the N. W. of the westernmost island, are 3 or 4 of these sandy keys, where there is no passage through; but between the others you may pass. There is a rocky reef that stretches along to the southward of these two islands; so on to the N. W. side of the West Island. It begins from the E. S. E. of the East Island; it lies 2 miles distant from the shore, and runs from the E. S. E. to N. W. northerly. You must not come nearer on any side of the West Islands than about a league; but, on the East Island, observe, that from the east end to the west end, on the north side of the island, you may come as near as a mile to the shore; and, at the west end of the east island you may come to an anchor, with barks or small vessels, with a sea-breeze; but it is very bad with a northerly one. On the north side of the island the best anchorage is at the west end. You may sail on boldly; and keeping a good look-out for

a few rocks, which are close to the shore and under water, you come to an anchor, in a bay, in 6 or 7 fathoms water, good sandy ground. There is a channel on the south side; but you are obliged to go between the reef and the keys. To pass through this south channel, you ought to be very well acquainted with it.

If you go from *Black-River*, on the *Mosquito* shore, and are bound to *Port-Omoa*, you must sail to the southward of *Bonacca* and *Rattan*, and pass between *Rattan* and the *Hogs' Islands*. Do not pass to the southward of *Hogs' Island*, for fear of the *Salmadinas*, unless you are well acquainted; then you may pass to the southward of the *Hogs' Islands* and the *Salmadinas* with small vessels, though it is not advisable so to do.

Steer from *Black-River* for the island of *Bonacca* W. N. W. until you come close to *Bonacca*. *Bonacca* is 23 leagues distant from *Black-River*. Then steer W. S. W. and S. W. b. W. in order to pass between *Rattan* and the *Hogs' Islands*; and still continue to steer W. S. W. and S. W. b. W. until you get the island *Utilla* in sight; then steer W. or W. b. N. as you will.

To pass to the northward of *Utilla*, take great care that you do not come nearer to *Utilla*, on the north side, than the distance of 2 leagues; nor on the west side, nor on the south side, unless you are well acquainted with it. When you are at the west end of *Utilla*, steer your course for *Punta Sal*. *Punta Sal* is 15 leagues from the island *Utilla*. The course is W. S. W. but you must steer W. S. W. $\frac{1}{4}$ S. to prevent being carried away by the N. W. current; for, if you are carried away by the N. W. current, you are in danger of driving upon *Gloffer's* (or *Glover's*) *Reef*. W. S. W. $\frac{1}{2}$ S. is the common or usual course to steer to make land to the southward of *Punta Sal*; then you may come to the N. W. of *Punta Sal*.

To know Punta Sal.

There are at the point of the main shore 3 or 4 great rocks, that lie pretty high above the water, larger than those called the *Bishop* and *Clerks*; they lie about half a mile off the shore; there is a little channel, where small craft or boats may pass through.

The point off the main shore appears with little hills, as if it were broken land, high and low; therefore if you cannot see the point of *Punta Sal*, and are to the westward of *Punta Sal* and *Rio Lua*, you will see a very high round hill, and other high land, over *Puerto Cavallo* inland. You may come to an anchor under *Punta Sal*, right before the opening of *Puerto Sal*. You must not come to an anchor in 18, 17, 16, 15 fathoms water, because it is rocky ground; but from 13, 12, and less, you may anchor with safety, in fine muddy ground. There is no high land between *Punta Sal* and *Puerto Cavallo*; but from *Puerto Cavallo* to the westward is all very high. *Punta Sal* is in lat. $15^{\circ} 59' N$.

Rio Lua is about 3 leagues to the westward of *Punta Sal*. Right over *Rio Lua*, a little inland, there is a little round hill, which stands alone.— You may anchor at *Rio Lua* in a very good muddy ground, but it is very bad with a north wind.

Chamalacon is about 3 leagues from *Rio Lua*. Course W. by S. You may come to an anchor here in very good muddy ground, but bad for a north.

Puerto Cavallo is 5 leagues distant from *Chamalacon*. Course W. S. W. A low sandy point runs off. The north part of this low point makes the bay. To the westward of this point you may anchor in 7, 6, 5 fathoms

water, sandy ground; but, without the point, muddy ground. There are 5 or 6 broken hills, appearing red, close into the sea that lies between *Puerto Cavallo* and the bay of *Omoa*: there stretches off from these red hills a stone bank into the sea, which runs to the northward about a league and a half from the shore. Come no nearer in-shore than 8 or 7 fathoms water.

Port Omoa is 7 miles distant from *Puerto Cavallo*, S. W. b. W. The windward or larboard side of *Omoa* is a low sandy point that runs off towards the sea; it is full of high mangrove trees. There is, always, on this windward side or point, a look-out house, which you may see. This windward point makes the bay of *Omoa* a very safe bay in a north, and secure in all winds. You may go as nigh the windward point as you will. Quite close to the point you have 6 fathoms water; and, about a cable's length from off the point, you will have 17, 16, 15, 14, 12, 9, 8, 7, 6, 5, $4\frac{1}{2}$, 4, and 3 fathoms water. This depth runs from the windward point as far as the river. You will have from 17 to 12 fathoms water when you come to sail in; and you loof as near as you can to the windward point. If you cannot lay into the bay, it is best to come to an anchor in 12 fathoms water, and warp up in the bay, and moor the ship. You must not come too nigh on the side of the river, nor where the houses of the town stand; but you may go as nigh as you please to windward. You will have 12 fathoms water nigh the wharf at the fort. The river lies to the westward of the town: you will have this depth of water, from 12 fathoms to 9, 8, 7, 6, 5, $4\frac{1}{2}$, 4, 3, and $2\frac{1}{2}$. About a cables length off the mouth of the river, you will have 7 fathoms water, and so on to $2\frac{1}{2}$ fathoms. When you are at anchor in *Omoa*, and it is any thing of clear weather, you may see *Cape Trespuntas* about W. b. N. or W. N. W. To the westward of *Omoa* there is very high land; there are also 3 or 4 very high mountains, which appear plainly like sugar-loaves.

Glover's or *Gloffer's Reef* lies N. and S. that is, the N. E. point of *Gloffer's Reef* from *Chamalacon*, about 9 leagues distant from each other. When you come from *Omoa* to go to the eastward, that is, to the windward, never stand farther to the northward from the main shore than 6 leagues. *Gloffer's Reef* is a very dangerous rocky reef; you can hardly see it by day.

To go from Port Omoa to the Gulf or River Dulce.

THE course is N. N. W. until you get the kays in sight. This course will bring you to *Point San Francisco*. It is a low point; you may see it at least a mile off. This point is about 6 or 7 leagues from *Omoa*: keep about 4 miles from the main shore, then you go free from all danger. You must not come too near the kays, and then you will have deep water.

About 9 or 10 leagues from *Omoa* is the river called *Montagua*. There is a bar before this river, which runs a league from shore: you must be sure to avoid it.

Cape Trespuntas is about 14 or 15 leagues from *Omoa*. The course is N. N. W. as above mentioned. When you have sailed about 14 or 15 leagues, then you may haul W. b. N. or W. N. W. and you will leave *Cape Trespuntas* on your larboard side, about a league and a half off.

When you have opened the gulf of *Dulce*, that is, when you have passed by *Cape Trespuntas*, then you steer S. S. W.

From *San Francisco Point*, you may come to an anchor in 20, 15, or

less water, muddy ground, till you come to *Cape Trespuntas*. The course is S. S. W. from *Cape Trespuntas* up to the mouth of the *Gulf Dulce*.

The *Gulf Dulce*, that is, the mouth of the river, is about 5 or 6 leagues from *Cape Trespuntas*. You must go by the lead; you will have from nine to three and a half fathoms water. Anchor in what water you please.

At the mouth of the river *Dulce*, you will see a little single hill, which hill you leave to the westward of the river; and this hill is not joining to the high land. The mouth of the river shews itself plainly. Bring the river to bear S. S. W. come to an anchor in what water you please, and moor the ship S. E. and N. W. A very good bay in any wind.

The bay *San Thomas* is about 6 leagues S. b. E. from the river *Dulce*. This bay makes a very great bight; very low land, with large mangenceel bushes.

From *Omoa* to the *Gulf of Dulce*, along the sea-coast, the land is very low; but inland, very high land.

To sail from Black-River to Cape Gracios a Dios, with a West Wind.

The course is E. b. N. until you are past *Patook-River*; it is a sharp point of a sand-bank, runs for a mile and a half into the sea. Come no nearer, by day or night, than in 9 fathoms water.

About 14 leagues eastward of *Black-River* there is a lagoon, called *Brewer's-Lagoon*. In the middle of the haven of the lagoon, about a league up it, there is an island that appears like two hills, where English people reside.

You may go from *Black-River* with the lead, and turn up as far as *Brewer's-Lagoon*, and as near as you please to the main. You may come to anchor off *Brewer's-Lagoon*, in 8, 9, 10, 11, or 12 fathoms water.

Three leagues to the eastward of *Brewer's-Lagoon* is a low land, with a few trees growing on it, called the *Haul-Over*, where the English haul their canoes over into the river: there are some cocoa-nut trees, but very few. The English people of *Brewer's-Lagoon*, and Indians, fish in common at this place for turtle.

Carratasco-Lagoon is 17 leagues from *Patook-River*. The course from *Patook-River*, with a westerly wind, is E. b. S.

Carratasco is very easily known. The mouth of the river is very wide; the opening of the mouth of the river may always be seen.

The *False Cape* is 16 leagues from *Carratasco*. If you sail from *Carratasco* for the *False Cape*, with a westerly wind, take care to clear the *False Cape Bank*, that lies to the northward of you.

To pass clear of the bank of the *False Cape*, keep at least three leagues off from the shore; but, if you come no nearer in than 5 fathoms water, you have nothing to fear. This bank stretches 12 leagues long, and lies from the main N. N. E.

From *Cape Gracios a Dios*, you may sail between the sand-bank and the Cape; but always keep nearer the land of the Cape than on the side of the sand-bank; for, you cannot see the sand-bank.

From the *False Cape* to *Cape Gracios a Dios*, you must go by the lead; then you will find this depth of water, six, five, four and a half, four and a quarter, four, a quarter less four, three and a half, three and a quarter, and a quarter less three fathoms.

If you sail between the bank and the cape, and bring the bank to bear E. N. E. from you, then you will find this depth of water, four, a quarter

less four, three and a half, three and a quarter, three, a quarter less three fathoms. The bank is not above a mile long; keep in 3 fathoms water, and there is no danger.

As soon as you are clear of the bank, you will be in three, three and a half, four, a quarter less four, a quarter less five, five; then you keep in five, or a quarter less five, very close along the low sandy point.

This low sandy point is to the windward or to the eastward of the river; but give this low sandy point a good birth, and, as soon as you have well opened the bay of *Cape Gracios a Dios*, then steer right in for the *Haul-Over*.

To come to an anchor at the *Haul-Over* you have this depth of water, six, five and a half, five, four and a half, four and a quarter, three and a half, three and a quarter less three, two and a half. To come to an anchor, it is best to go in four and a half or four fathoms water, good muddy ground.

Note. As you go from the *False Cape*, to go to *Cape Gracios a Dios*, and would pass to the eastward of the sand-bank, then you must keep 3 or 4 leagues to the eastward of *Cape Gracios a Dios*, and you will have this depth of water, 7, 8, 9, 10, 11, 12, 15, and so on to 18 or 20 fathoms water.

Sandy-bay is 10 leagues to the southward of *Cape Gracios a Dios*. The course for *Sandy-bay* is S. $\frac{1}{2}$ E. Keep along shore, with the lead going, in six, seven, and eight fathoms water. You may come to anchor in *Sandy-bay* in as deep or as little water as you choose; in six and seven fathoms is good muddy ground; good anchoring for ships: but, from 5 fathoms, or less, is sandy ground; good for small vessels.

N. B. Under *Cape Gracios a Dios* is a safe and convenient bay in the time of the north winds, and all vessels on this coast endeavor to shelter there.

To go from Sandy-Bay to Puerto Vello, or Carthagena.

FROM *Sandy-bay* shape your course for *Stone-Island*. This *Stone-Island* is a rock that lies above the water the height of a ship's hull, and shews itself quite black: it is distant about 4 or 5 leagues from *Sandy-bay*. *Stone-Island* lies E. S. E. from *Sandy-bay*. S. E. will bring you to *Stone-Island*. You may see *Stone-Island* 5 or 6 miles distance off.

From *Sandy-bay* to *Stone-Island* you will have from 5 to 10 fathoms water, being white sandy ground. Steer from *Sandy-bay* S. E. till you come in sight of *Stone-Island*; then steer S. S. E. because there lies to the westward a little sandy key, by the *Mosquito Indians* called *Wanieffa*, and by the *English* called the *Devil's-key*. This key will not appear in sight; but continue still to steer S. S. E. till you come to the N. E. of the *Corn-Islands*, otherwise called *Manglares*: when you get in sight of them, then steer S. E. or higher if you choose it.

The *Corn-Islands* are two large high islands; the west island is bigger than the northeast island. From the N. E. island stretches a reef, about 2 leagues distant, on the N. E. side of the island. Go to the west side of these two islands, and anchor in clear sandy ground, in 4, 5, or 6 fathoms water. These two islands are reckoned 50 leagues from *Sandy-bay*. This channel is also very proper for shipping to go for the island of *Providence*, or to go to *St. Andreas*, or *Puerto Vello*, or *Carthagena*.

From *Sandy-bay* to *Stone-Island* the course is E. S. E. but you steer to the S. E. in order to keep to the southward of *Stone-Island*, because, to the

northward you cannot go safely. The depth of water from *Sandy-bay* to *Stone-Island* is from 5 to 10 fathoms.

Wanieffa, or *Devil's-key*, is a very little low sandy key, with a very few trees upon it. *Wanieffa* is about 2 leagues or 7 miles from *Stone-Island*: they lie S. E. and N. W. of each other.

When you go from *Sandy-bay*, steer S. E. with the lead, till you are near *Stone-Island*. *Stone-Island* is about 4 or 5 leagues from *Sandy-bay*. You can come in very close to the southward of *Stone-Island*, to about a mile; you will have 6 fathoms water, white sand bottom. You may see *Stone-Island* two leagues off at most.

If you come close by *Stone-Island*, and steer E. S. E. to pass to the eastward of *Wanieffa*, with this course you will see *Wanieffa*; but not without it be clear weather. When you are close in the land of *Wanieffa*, and it be clear weather, you may see *Stone-Island*. You must not come too near *Wanieffa*, but always keep the lead going. When you steer from *Stone-Island* E. S. E. then you have all along 7 fathoms water: and, if you do not see *Wanieffa*, you will have white sandy ground, until you are to the eastward of *Wanieffa*; then you begin by degrees to come into deeper water, but very little: so that, when you come close to *Wanieffa*, you will have less than 7 or 6 fathoms water; and immediately dry.

If you find that you have less than 7 or 6 fathoms water, then you are too nigh *Wanieffa*; and you must always strive to keep in 7, 8, 9, 10, and so on, to 14 or 15 fathoms, until you come in sight of *Old Providence*, or come to *St. Andreas*.

The course from *Wanieffa* to *Old Providence* is E. S. E. or S. E. b. E. but, for *St. Andreas*, you steer commonly E. S. E. to keep on the bank. This bank stretches from the outermost *Mosquito's Keys* to the southward; therefore you must keep on this bank, white sand bottom. You may come to an anchor upon any part of the bank. When you have 15 fathoms water, then it will begin to deepen till you come to 20 fathoms; then you will be immediately off the bank, and have no ground, and are about 10 leagues from *Old Providence*.

If you come from *Stone-Island*, or *Wanieffa*, and immediately get clear of the bank, intending to return on the bank again, and would not pass to *Old Providence* nor *St. Andreas*, and when you have 25 fathoms water, you must endeavour to come in less water to remain on the bank, and get into 15 fathoms, and from 9 to 15 fathoms. The course is E. S. E. or S. E. b. E. From 15 fathoms, you will have 16, 17, 18, 20, 22, 25, and then no ground; but you must not go to the southward, but must keep the course above mentioned till you get *Old Providence* in sight: then steer your course for *St. Andreas*, that is south, going to the westward of *Old Providence*.

St. Andreas is about 18 leagues from *Old Providence*. At the S. W. side of *St. Andreas* you may anchor in very good sandy ground. About a mile from the shore you have 6 fathoms water; and, about two miles from shore, you have from 15 fathoms to 6 fathoms. You may come to an anchor in what water you please. Then you will have the north point of the island N. b. E. and the middle of the island E. b. S. and the south point S. E. It is in the latitude $12^{\circ} 30' N.$

If you sail from *St. Andreas* as above mentioned, the course is S. E. to pass through the E. S. E. and S. S. W. keys.

The E. S. E. keys are three keys with reefs all round them: there is good anchoring for small vessels, but you must be well acquainted. The E. S. E. keys are 6 leagues distance from *St. Andreas*.

The S. S. W. keys, called by the *Dutch Albu-kerken*, are three keys, and very good anchoring ground. There is nothing to fear; you may see every thing, and come to an anchor: it is deep water.

There are a few rocks, above water, close by the keys. Take care to bring the island *St. Andreas* to bear N. b. W. till you have the S. S. W. key S. W. b. S. about 4 leagues distance; then you will be right in the channel, and have no ground: steer E. S. E. or as high or as low as you please. You must take care, if you sail from *St. Andreas*, not to be carried with the current to the leeward; and bring the island of *St. Andreas* to bear with the S. S. W. key: then you are clear of all danger, and are through the channel.

N. B. The English name these Keys the S. S. W. Keys; the Dutch and Spaniards call the S. S. W. Keys, *Albu-kerken* Keys.

This channel is a good and very convenient channel for ships that go to *Rio Matina*, or *Carpenter's River*; and also to go to *Puerto Vello*, or *Carthagena*.

Note. The course from *Cape Gracios a Dios* to *Sandy-Bay* is S. $\frac{1}{2}$ E.; it is 10 leagues distance. You must go by your lead in 5, 6, or 7 fathoms water.

The course from *Sandy-Bay* for *Governor's Point* is S. S. E. 4 miles distance.

The course from *Governor's Point* to *Wawa*, or otherwise called *Bregmans*, is S. $\frac{1}{2}$ E. 12 leagues distance.

Directions for the Bay of Honduras.

Being bound down to the Bay, the course, from the west end of *Jamaica* to the *Swans'-Islands* is W. S. W. a little southerly, distance 90 leagues.—After making the *Swans'-Islands*, steer W. S. W. 40 leagues for *Bonacca*. To sail into the harbour of *Bonacca*, run in with the N. E. end, which is bold; and when you draw near it, you will then see the small keys that lie along to the S. W. Count 10 keys, as you run down along, at a moderate distance; the 10th is called *Half-Moon Key*, and is remarkable for having some cocoa-nut trees on the east end of it. Run in close with this key into 3 fathoms water off the west end; luff right round, and let go your anchor in 10 fathoms. You will see a small sandy key about a cable's length to the northward. Do not go between that and the main, for there is a reef of rocks which runs from the sandy key to the key which lies due west, half a mile, which has not above 8 or 9 feet water. The island lies in the latitude of $16^{\circ} 30' N.$ There is a channel between the first and second key, and another to the westward of the S. W. key.

The course from the west end of *Bonacca* to the east end of *Rattan* is W. by S. 5 leagues. There are three islands more that lie from the east end of *Rattan*, called *Helena*, *Moratt*, and *Barbaratta*; the latter is the easternmost and largest. Off the east part of *Barbaratta* are several low keys: and care must be taken, in the night, not to haul in until you get abreast of *Barbaratta*. To go into *Port-Royal* harbour, in *Rattan*, haul close in with the east end, and you will see a remarkable red cliff near the water-side. About 3 or 4 miles to leeward of that cliff is the entrance of the harbour, which may be seen by going a few ratlins up the shrouds: the keys on which the fort and magazine stood, as well as the harbour, will appear very plainly. Run to the westward and leeward of the key where the fort stood, and haul up close round it, giving the point a small birth. You cannot sail in with the wind farther to the northward than N. E. by N. as the channel is very

narrow. It is a fine harbour when you are in, with room to turn, and anchorage in what depth of water you please, from 12 to 6 fathoms. Here is good water and wood, and very convenient to heave down.

From *Port-Royal* harbour, in *Rattan*, to the west end, is W. S. W. and S. W. by W. distance about 8 leagues, with a very good harbour every two or three miles; but, about 3 leagues before you come to the west end, and just to leeward of the second point that you see in running down from *Port-Royal*, is a harbour called *Dixon's Cove*, very convenient in north winds for ships to shelter in that are bound to the bay.

To come into this harbour from the eastward, run to leeward of the above-mentioned point, and you will see a key just to leeward of it: keep round the bank that lies off this key, in 8 or 9 fathoms, and you will open the harbour, which lies N. by W. and S. by E. In running in you will see another key to leeward of you, with a reef running to the eastward, which always shews itself. Keep mid-channel, which is all deep water, from 20 to 15 fathoms. Run in till you bring the west end over the key on which the little hut stands, and anchor in the middle of the harbour in about 15 or 16 fathoms, clay ground, and moor with a kedge to the eastward; you will then be abreast of a creek on the east side of the harbour. The banks, on both sides of the harbour, are very steep, 12 to 3 fathoms, not half a ship's length from the deep water to the shoallest. This is a fine out-let, as you may be at sea in 10 minutes; and, in case of accidents, a vessel may be saved here without anchors or cables, by running up the N. E. part of the harbour, which is all soft mud. There is a remarkable high cabbage-tree on the high land over this harbour, which may be seen very plainly coming from the eastward, but not from the westward till you open the harbour: it bears about N. W. when you lie at anchor, and the *Great Hog Island* due S. E. by E. The latitude of this harbour is $16^{\circ} 20' N.$ If your vessel work well, you have room to turn in.

In going down to the bay, if you meet with northerly or N. W. winds, come for this harbour. In coming in from the westward you will see the above-mentioned point about $3\frac{1}{2}$ leagues from the west end. Run in well with the west key until you come on the bank into 7 fathoms; keep along in that depth, hauling round the key, until you open the small key, on which the hut stands; then edge off into deep water, as the reef is very steep, and luff in till you are abreast of the creek on your starboard hand, or the west end over the small key; anchor in about 16 fathoms, and moor as before directed; but, if you anchor in the middle of the harbour, you have room to swing any way, and come to sail from your kedge when you go out.

When bound for the bay with a good sea-breeze, you need not go out of this harbour before two o'clock, as you will be down the west end time enough to take your departure in the evening.

Right off this harbour, to the southward, lies a bank, about 3 or 4 miles off, that stretches about W. S. W. 6 miles, with about 7 fathoms on it; and off *Cockson's Hole* is a shoally spot, which has not above 10 feet on it.

Running along this bank, about 2 miles to the westward of the harbour, and about the same distance from the shore, a shoally spot has been passed over of a foot less 3 fathoms, when, in a cast or two, it deepened to $3\frac{1}{2}$ and 4 fathoms, then to 6 and 7 fathoms. Loaded vessels of a great draught of water, when running up or down, should not come nearer the land than 4 or 5 miles, to keep clear of these banks. There is a good channel between them and the island, but it is very narrow. When you bring the west key of *Dixon's Cove*, N. N. E. you are then to the eastward of the foul ground, and may haul in for the harbour. When you come within 4 miles of the west end, going to the westward, you are to the westward of the bank.

This harbour of *Dixon's Cove* has been the more particularly described from its great utility for ships that may want a place of safety in bad weather.

From Rattan to the Bay of Honduras.

IN sailing from hence to the bay of *Honduras*, observe to time your departure from the west end of *Rattan* in the close of the evening, and not before. Steer N. W. a little northerly, which will run you in with the southern 4 keys, distance about 20 or 22 leagues. Be careful to sail with such canvas as may suit the weather you have, or the way your vessel has through the water, taking great care to keep a look-out, and not run more than 16 leagues by the log, as the currents are rapid, at times, by which many have been deceived. When day appears, and you have run the distance of 16 or 18 leagues, and do not see the keys, steer N. W. b. W. or W. N. W. which will shorten your distance, and you will soon raise them. They ought, if possible, to be made in the forenoon, to enable you to get to *Key Bokell*, or farther in, as time permits. The southern 4 keys are on a reef 7 or 8 leagues long, at the north end of which lie 2 keys called the northern 2 keys; the one large, with tall trees, the other a small spot with bushes. The 4 keys are on the south end of this reef, in lat. $17^{\circ} 12' N.$ The easternmost, on the end of the reef, is pretty round and high, with a large sandy bay on the east side: the westernmost is a long key with tall trees: the northernmost is next; and, coming from the eastward, an opening shews itself in the middle. The southernmost is the smallest, and is called *Hat-key*, resembling the form of a hat. From this key to the eastern key the reef lies in the form of a half-moon, so that care must be taken not to get embayed, as you will find it very difficult to get out with the wind at E. or E. S. E. if it blow and much sea, for the reef lies due S. S. E. from the westernmost key 4 miles, and the sea breaks very high.

From *Hat-key* to *Key Bokell*, the course is W. 6 or 7 leagues. This key is small, with bushes on it, and lies close to *Turniff*, which is a long island, or range of keys, lying N. N. E. and S. S. W. Keep close round *Key Bokell*, and anchor on the bank in 4 or 5 fathoms, looking out for a clear spot to let go the anchor in, as there is much foul ground, with heads of coral rocks. Bring the key to bear E. S. E. or S. E. b. E. 2 or 3 miles; or you may run to the northward along *Turniff* until you open the third lagoon or bog, and there anchor in 4 fathoms, and you will have smoother ridings, if a north should happen to catch you.

If you have day-light to get to *Key Cozen*, after giving the point of *Turniff* a birth, steer N. W. b. N. which will soon lead you in sight of the shipping at *Key Cozen*, as well as the key itself. At the same time you will make a high bluff of trees which is more in-land, and to the westward of *Key Cozen*, called *Ruyden's-Bluff*; keep it a sail's breadth open of *Key Cozen*, and run in with that mark until abreast of the south end of the reef, which is just without the vessels; haul up under this reef, and anchor at a moderate distance from it in 17 or 18 feet water. Farther in to the northward is *Blue-hole*, which is the best place to ride in, clayey ground, from 18 to 20 feet water. This key lies in latitude $17^{\circ} 34' N.$

In coming round *Key Bokell*, being bound for the *Old River* or *River Sheeboon*, the course from *Key Bokell*, to *English key* is N. W. This is a small round key with tall trees on it. To the northward about $1\frac{1}{2}$ mile lies *Goff's-key*; and between these two keys is the channel commonly called *English-key Channel*. Your course in, when mid-channel between the two

keys, is W. N. W. When near *Goff's-key* in a range to the northward of it, are three keys more, viz. *Corlicu-key*, *Sergeant's-key*, and *Paunch-Gut-key*. *Sergeant's-key* is the largest and middlemost, and has a large sandy bay on it. A little without *Goff's-key* is a small sand-bore, that shews itself above water, with a flat running off it to the southward. Observe, that the keys above mentioned are all on the main reef, which runs a great way nearly north and south. When you have the above channel open, and *English-key* bearing about W. from you, steer a little to the northward of the middle of the channel, towards *Goff's-key*, to avoid a rocky shoal that runs to the northward from *English-key*; then steer W. b. N. $\frac{1}{2}$ N. keeping you lead going, as the channel is but narrow; the entrance is not more than a mile, and narrower.

Farther in, to the N. W. of *Goff's Key* is *Water-Key*, a large key with tall trees on it, from the south end of which lies a large bank, which spits into the channel. Steer in nearly W. N. W. until you shut in *Sergeant's Key* with the south end of *Water-Key*, then steer N. by W. until you bring *Goff's Key* on or in a range with *Water-Key*; then steer N. W. $\frac{1}{2}$ W. which carries you in the best of the channel over the narrows, taking great care not to open or shut *Goff's Key* with *Water-Key*, as you will be near if not quite aground. Continue your course until you shut in *Banister's Key* with the *Drowned-Keys*; you are then over the narrows, and may steer in N. W. for the *Old River's Mouth*, distance about 4 leagues. Anchor off the mouth of the river in about 16 feet, all soft mud, so that your vessel can take no hurt in the north times. It is best to anchor in the above depth of water a little to the southward of the river, as the current generally sets strongly to the southward. The same may be observed off *Sheeboon-River*.

To anchor under Goff's Key.—In coming from the northward, after you are round the sand-bore, that lies to the eastward, keep on the bank in 4 or 5 fathoms, until you bring *Corlicu-Key* and *Sergeant's Key* into one, and then let go your anchor, and you will have clear ground. *Goff's Key* will then bear E. by N.

N. B. Here you take a pilot for *Old-River* and *Sheeboon*.

Directions to sail out of the Bay by the Northern Passage.

Leave *Mauger-Key* about eight or nine o'clock at night, if the sea-breeze be fresh, and steer N. N. E. $\frac{1}{2}$ E. about 10 leagues, and not more till daylight. The distance between *Mauger-Key* and the south point of the *Triangle-Reef* N. N. E. 12 or 13 leagues, but there is generally a northern current which you must guard against.

Should there be much sea on, and your ship will lie up N. E. keep her by the wind, and do not run more than the 10 leagues till day-light; for, there is often a lee-set of the current to the N. W. which, with the sea, may heave you near *Ambergris-Reef*. So that, leaving *Mauger-Key*, and not lying better than N. by E. or N. do not stand longer than 4 hours on that tack, for fear of coming near *Ambergris-Reef* in the night. When you make the *Triangle-Reef*, the south end is broad, not less than 4 or 5 miles, and makes in two points, between which is a small sandy spot. Go to the leeward of the reef; and your course from the S. W. point is nearly N. by W. $\frac{1}{2}$ W. up to the *Great Key*, from thence about N. by E. to the two keys which lie on the north part of the reef. Keep your lead going, for fear of a spit which runs off abreast of the key. The whole length of the reef, from the S. W.

end to the north part, is about 12 or 13 leagues. Leaving *Mauger-Key*, and not fetching the point of the *Triangle-Reef* in sight, you will see the main, and should night overtake you when under the lee of the reef, steer about N. by E. if you are any distance off, until you meet the sea coming round the north end of the reef; then haul up N. E. if the wind permit, which will carry you to windward of *Cape Antony*. The distance from the north end of the *Triangles* is 65 leagues; and, from the south end of *Cozemell*, 48 leagues. The south end of *Triangles-Reef* is in latitude $18^{\circ} 18'$ N.; the north end is in $18^{\circ} 56'$ N. The south end of *Cozemell* bears from this reef about N. by E. 16 or 17 leagues. The latitude $19^{\circ} 45'$ N. and the north end lies in latitude $18^{\circ} 23'$ N. The distance from the *Triangle-Reef* to the main is about 11 or 12 leagues, and it lies round in a deep bight.

To the south end of *Cozemell* there is an indraught to the N. W. which you must take great care of.

N. B. By going the northern passage you save 50 or 60 leagues right to windward.

Directions to sail in at the Sapadilla-Keys, through the Main-Reef, up to the River Belieze.

From the west end of *Rattan* to the entrance, through the reef, by the *Sapadilla-Keys*, is west, 29 or 30 leagues. You may know the *Sapadilla-Keys* by 5 dry sandy keys, without shrubs or trees on them, except that on the starboard side going in, on which are two dry trees appearing like a schooner at anchor: when you first make them, all the keys to leeward are bushy and full of *sapadilla-trees*.

In the passage through, you have $4\frac{1}{2}$ fathoms, and then, after a few casts, you deepen your water to 6, 7, 10, and so to 17 fathoms. This is esteemed the best passage for large ships. The course through is W. and W. b. N. When you are over the reef it is termed the *Harbour of Honduras*.

From *Sapadilla-Keys* you steer W. S. W. between 4 or 5 leagues, to avoid several bad shoals and rocks that lie to the northward of the passage.

When you bring *Point-Placentia* to bear N. b. W. steer for it; it will be at the distance of about 6 leagues. From *Point-Placentia* to *Settle-River* is north 6 or 7 leagues. From *Settle-River* to *Colson's-point* is north 6 leagues. From *Colson's-point* to the mouth of the river *Belieze* is N. $\frac{1}{2}$ E. 6 or 7 leagues; where you anchor as before directed.

Off *Colson's-point* is a shoal, 2 or 3 miles off; and another shoal lies S. E. 3 miles from the river's mouth. After you have got through the *Sapadilla-Keys*, and up as high as *Point-Placentia*, you may anchor all along the main at any depth of water, from 5 to 17 fathoms, keeping at the distance of 2 miles from the shore.

In going between the *Northern Triangles* and the main, if you should get the wind to the W. or N. W. or N. go to the southward of the *Northern Triangles*; taking very great care to keep far enough to the southward of them, for fear it should fall little wind or calm, and a N. W. current or swell, which will heave you on them, as there are no soundings before you are almost on shore. Likewise, stand, at the least, 10 or 12 leagues to the eastward of them, before you haul to the northward for *Cape Antony*, for fear you should be caught abreast of them with a lee current and set of the sea which generally runs here. In standing to the southward of them, do not go too far to the southward for fear of the spit which runs off the northern two-key reef, which lies N. E. b. E. from the northern-

most key of the northern two keys, with 6 fathoms close to them: the next cast you are on shore, or near it.

If you come out of the bay by the southern passage, and your ship will not lie up east, or E. b. N. from *Key Bokell*, bear up and run to the southward, between *Tabacco-key*, which is the outer part of the reef, and *Glover's Reef*, especially if you have not day-light to get to the northward and eastward of the north end of *Glover's Reef*. Run to the southward till you see the small keys on the south end of the reef, and there you may bring up till morning, bringing the keys about N. E. There is mostly a strong lee current about *Glover's Reef*, which has deceived many, who have lost their ships in the night, expecting to have weathered the north end of *Glover's Reef*, which is steep-to in most places.

Directions for the Coast of Guayana, Surinam, Demerary, Berbice, &c.

NOTE.—All the depths of water after mentioned were taken at low Spring Tides.

DEMERARY.

OFF this coast 12 leagues, and from that to 40 leagues, the wind generally prevails east south-east; within 12 leagues the wind is variable, in the morning S. E. and E. S. E. towards noon draws round to the east, and between two and eight o'clock is generally to the N. E. N. N. E. or north; during the night it varies from E. b. N. to E. b. S. If bound for *Demerary* from the northward or eastward, observe there is no place below *Curintin river* but you may run in 5, 4, and 3 fathoms; after passing *Berbice* 4 or 5 leagues, the bushes appear very irregular, and several white houses, with red tops, may be seen, which is not the case at any part to windward of *Berbice*. About 9 leagues to the eastward of *Demerary*, is a remarkable clump of trees, called *Machia Clump*; they may be seen some distance before you can discern any object near them. If in running along the shore you make the clump of trees, haul off immediately, in order to round the bank, which lies to the northward and eastward of *Demerary*; for when abreast of the trees, in 4 fathoms, by hauling off north, you will not deepen your water for several miles, or out of sight of all objects on the coast, except *Machia Clump*.

On the northernmost part of the bank are 4 fathoms; it lies in latitude 7 deg. 00 min. N. You may run along this bank west in 4 fathoms, until you see the entrance of the river, or gap in the bushes, under the bushes, and a little to the eastward of the gap, are several white houses, and two windmills. When the entrance bears S. W. b. S. you may then steer S. W. or S. W. b. W. 3 or 4 miles, according to the time of tide, which flows half past 4 o'clock full and change; the first part of the flood sets to the W. S. W. and the latter part west; it ebbs seven hours to the N. E. and N. N. E.

Merchants' vessels, who wish to take a pilot for the river *Demerary*, should bring the gap to bear S. S. W. and anchor in $3\frac{1}{2}$ fathoms; they will then be about 7 miles from *Spirit-point*. Frigates should anchor with the gap south in 4 fathoms, they will then be about 9 or 10 miles from *Spirit-point*; although the latter distance is greater than the former, it is much more convenient for men of war, because their boats will fetch oftener off to their ships.

On the N. E. of *Demerary-bank*, nothing can be seen from the deck of a frigate but *Machia Clump*, and the bottom is soft mud, much more so than any other part of the coast.

Merchants' vessels should anchor off *Machia Clump*, and send a boat on shore, in order to be certain of their situation.

GUAYANA.

To get to windward on the coast of *Guayana*, care must be taken not to let the southerly winds draw you more than 10 leagues from the land, and be careful to be at that distance about noon, as probably by 2 P. M. you will find the wind so far to the north as to lay along shore; about 8 P. M. you generally lose the northerly wind, and find it blow along shore from the eastward: therefore, should you have a whole ebb tide before you, it will be better to anchor, and stop a tide. By day-light the wind draws round west, southerly; for which reason it will be necessary to be in shore. By taking those advantages, with that of the tides, a frigate may beat from *Demerary* to *Surinam* in 3 or 4 days.

SURINAM.

You may anchor off *Surinam* in 4 fathoms by bringing it to bear S. b. E. With that bearing you get nearer the point than any other with the same depth. In sailing for *Surinam*, bring *Bram's-point* to bear S. E. b. S. distance 6 or 7 miles, you will then be in three and a half fathoms; then steer S. S. E. until you bring it to bear S. E. then steer for *Bram's-point*; when within one mile, keep the point just open on the larboard bow, and by rounding it within a cable and a half's length, you will get 4 or 5 fathoms; when abreast of the point, haul about one third from the larboard shore: when half a mile within the point, it is shoal water, and not more than 14 feet over that part of the river. This bank, or bar, runs nearly a mile; after passing it, you will get $3\frac{1}{2}$ and 4 fathoms; when within half a mile of *Parmerand-redoubt*, you will get only 13 feet: still keep one third from the larboard shore, but not more, to avoid a wreck which lies sunk off the redoubt. When abreast of the first redoubt, steer for the flag-staff on *Fort-Amsterdam*; you will then deepen your water; a black buoy is laid on the wreck, and must be left on the larboard hand. When abreast of *Fort-Amsterdam*, keep near the shore in 4 or 5 fathoms, till you are near the last plantation, off which are 14 or 15 feet. If bound to *Paramaribo*, and abreast the last plantation, steer for the flag-staff on *Lutandia*, in 11 feet, about half a mile; about two miles further you will get 13 feet, soft mud; but within one mile of *Fort-Zelandia* you will deepen your water, and off the fort, get 7 fathoms. Care must be taken not to come near any of the points inside *Bram's-point*, because there are many shoals of mud: the starboard shore is shoal from *Bram's-point* to *Fort-Zelandia*.

T H E T I D E S.

Times of High Water, at full and change of the Moon.

	H.	M.
Seven miles off <i>Bram's-point</i>	5	00
At <i>Bram's-point</i>	5	30
Off <i>Fort-Amsterdam</i>	6	10
<i>Fort-Zelandia</i>	7	00

The tides flow 7 feet at full and change, and between three and four at neap tides; the water falls one foot before the stream is done running in the mid-channel.

The Coast of GUAYANA.

SHIPS bound from the *Caribbee Islands* to the coast of *Guayana*, should steer as far to the eastward as S. E. if the wind will permit, on account of a strong indraught, or current, setting at all times of the year to the westward through the *Gulf of Paria*. On the outward edge of the ground, you will perceive the colour of the water change to a light green, and have from 35 to 45 fathoms. If in that depth you should be so far to the southward as 7 deg. 25 min. north latitude, you may steer in S. W. and make the land; but if more to the northward, keep your wind till you attain that latitude. You will have gradual soundings quite to the shore, but very shallow. You will be in 9 fathoms when you first get sight of the land about *Demerary*, but you may run in 4 fathoms, being attentive to your lead. As it is the general opinion that there are many unexplored landbanks on this coast, a great attention to the lead, and quality of the ground, will be necessary, as by that only you will be apprized of the danger, for, as on most parts of this coast to the eastward of the *River Oroonoko*, the bottom is a very soft mud: if on a sudden you find hard sandy ground, be assured some danger is near, and immediately haul off, till you again find soft ground as before.

The making of the land, all the way from *Oroonoko* as far to the eastward as *Cayenne*, is very low and woody, and therefore appears in all parts so much alike, that the most experienced pilots are frequently deceived. Your chief dependance, therefore, is in a true altitude; if that, by reason of thick weather, cannot be obtained, it will be advisable to anchor in about 6 fathoms, which you may do with great safety, having good ground, and in general moderate gales and smooth water.

The making of the land about *Demerary* is the most remarkable of any part of the coast; the woods in many places being burned down, and cleared for cultivation, makes the land appear in large gaps, where the houses, &c. are plainly to be seen; and if there are any ships lying at the lower part of the river, their mast-heads may plainly be descried above the trees at some distance at sea.

If bound into *Demerary*, you must run to the westward till you bring the entrance of the river S. S. W. or S. b. W. and either lay to, or anchor for the tide, in 4 fathoms; but be cautious not to be hauled further to the westward, for the flood runs strong into the *River Essequibo*, at the mouth

of which, and at a great distance from the land, lie many very dangerous sand banks, on some of which there are not more than 9 or 10 feet, and the flood tide sets right on them.

On many parts of this coast, particularly off *Point-Spirit* to the eastward of *Demerary*, the flood tide sets right on the shore, and the ebb right off to the N. E. It will be advisable, when calm and near the land, to anchor in time.

In the month of *December* there is, at times, particularly in shoal water, on the coming in of the flood, a great sea called the *Rollers*: it is often fatal to vessels at anchor.

DEMERARY.

AT the entrance of the *River Demerary*, and E. N. E. and W. S. W. the moon makes full sea, and the water at spring-tides rises 8 or 9 feet. From each point of the river runs off a flat mud-bank, at least 3 leagues, on many parts of which there are from 8 to 12 feet at high water. Between these banks lie the entrance and bar of the river, on which, at spring-tides, there are 20 feet, soft ground. If the wind should cast out, be cautious, and not stand too near the west bank, as the flood tide sets on it in an oblique direction, and the ground in some parts is hard sand, but you may borrow on the east bank at pleasure, being all soft mud.

About 6 miles on the west side of the river, stands a remarkable lofty tree by itself, the branches of which appear to be withered, and 3 or 4 miles above that, there is a tuft of trees, or bush, which is very remarkable. In running into the river, the leading mark is to keep the *withered tree* on with the westernmost part of the *tuft*, or *bush*, which will carry you in the best water, and about mid-channel, steering, at the same time, S. b. W. by compass. The breadth of the channel going in is about two miles, shoaling gradually on each side. The anchoring ground is within the east point, in 4 fathoms at low water, soft mud. Keep the eastern shore on board, the western side being flat and shoal.

It is necessary to weigh the anchors once every ten days, or they will bury so much as to be supposed to be lost.——N. B. The thwart mark to know when you are without the bar, is when *Point-Spirit* comes open to the northward of *Corrobana-point*, and you have 4 fathoms.

Remarks made among the Westindia-Islands.

MARTINICO.

POINT-SALINES, the south end of *Martinico*, is in lat. $14^{\circ} 22'$ N. and lies N. W. 28 leagues from the north end of *Barbadoes*, and N. W. $\frac{1}{2}$ N. 34 leagues from *Carlisle-bay*. It consists of some low rocky islands, lying near the main land, which is also low.

Diamond-rock lies N. W. from *Point-Salines*, and is remarkable, by be-

ing a high, steep, round rock, about a mile from the main ; it is said there is a good passage between them. The shore, between the *Diamond-rock* and *Point-Salines*, is low, and forms a bay, called *St. Ann's-bay*, which is said to be a very good road for ships. *Diamond-point* lies $\frac{1}{2}$ miles N. W. b. W. from *Diamond-rock*, and about 2 miles N. N. W. $\frac{1}{2}$ W. from *Diamond-point*, is *Point-Solomon*, on which is a small battery. Both these points are high, steep, and rocky.

Point-Solomon forms the south side of *Fort-Royal bay*, and the point of *Morn-Boef* the north. From these points the bay grows narrower until up as high as *Fort-Royal*, where it is not above 3 or 4 miles across ; and the shores are every where steep, having 9 or 10 fathoms a ship's length from the shore, and half a mile farther out there is no bottom.

On the south side of *Fort-Royal bay*, about 4 miles above *Point-Solomon*, is *Pigeon-island*, strongly fortified with cannon and mortars ; and 4 miles farther up the bay, on the north side, are the town and fortifications of *Fort-Royal*, which, with *Fort-Bourbon* over it, make a very formidable appearance.

Point-Nigris lies on the north side of the bay, 2 miles west from *Fort-Royal*. It is low, and there is a strong masked battery on it.

About 2 miles N. W. from *Point-Nigris*, where a rivulet of fresh water runs down a deep and fertile valley into the sea, is the village of *Cafe-Navires* ; the principal part of the village is close to the sea side, under a rising ground, a little east from the mouth of the rivulet ; but there are several houses on the plain, to the west of the rivulet, all of which go under the name of *Cafe-Navires* ; also on a bluff point a little east of the town, is a small battery, with a flag-staff.

Abreast of the town of *Cafe-Navires*, is an excellent road for ships ; it lies from abreast of the westernmost houses in *Cafe-Navires* to abreast of the battery east of it. The bank for anchoring reaches about a cable and a half's length from the shore, the first half-cable's length of which is a shoal along the beach, deepening to 3 fathoms on the outer edge ; from thence the bank deepens to 5, 7, 10, 15, 18, and 25 fathoms, a cable's length from the edge of the shoal. Abreast of the battery, the ground is clean sand, from thence softening to very soft mud abreast the westernmost houses in *Cafe-Navires*, but when without 24 or 25 fathoms, the ground is hard and gravelly.

Ships intending to anchor in *Cafe-Navires road*, must turn to windward, until they bring the easternmost cluster of houses in the town on a line with the middle of the valley behind them, bearing about N. b. E. $\frac{1}{2}$ E. or N. N. E. before they stand in for the anchoring place ; then steer in for it, with the cluster of houses on with the valley ; and when the point between *Cafe-Navires* and *Cafe-Pilote* is opening without the land to the N. W. of it, you are entering on the bank, in 45 fathoms ; steer in so as to have the westernmost house of this cluster on with the middle of the valley ; and by the time *Le-Groffe-point* (on the opposite side of the bay) is shutting in behind *Point-Nigris*, in a large ship you may let go your anchor in 18 or 20 fathoms ; but small vessels may stand in with this mark to 9 or 7 fathoms.

Cafe-Pilote is the next village to the N. W. of *Cafe-Navires* ; it is close to the sea side, with a small battery at the west end of it. *Fort-Capet* and *Carbet* are other two small villages, between *Cafe-Pilote* and *St. Pierres*, having each a small battery by them.

In sailing round the point of *Morn-Boef*, you will open *St. Pierres*, which is a large, well-built town along the bottom of the bay, having several handsome public buildings in it, which make a fine appearance from the

sea. The road is abreast the south end of the town, and the ships anchor close to the shore.

From *St. Pierres* to the north end of the island, are several villages, with small batteries. The shores are very steep, and there are no hidden rocks or shoals to hurt a ship on the west side of *Martinico*, excepting the bottom of *Fort-Royal bay*, where are several shoals; the outermost of which is abreast of the town of *Fort-Royal*.

The highest mountains in *Martinico*; like those of the other islands, are almost continually covered with clouds, which intercept the general course of the trade winds, and therefore cause calms, or variable winds, to leeward of them, which give the small batteries underneath these mountains; a great advantage of annoying ships, which, in these places, are frequently unmanageable for want of wind.

Morn-Boef bears, by compass, N. N. W. $\frac{1}{4}$ W. from *Diamond-point* and *Pearl-point*, as also the lee point of *Dominico* bears N. N. W. from *Morn-Boef-point*.

DOMINICO.

SHIPS from the lee of *Martinico* for *Dominico* should not steer to leeward of N. b. W. on account of lee-way sea, and perhaps current setting between these islands. On making *Dominico* from the southward, or steering along shore from the northward, *Scotchman's-head* is remarkable, being a high rock, with a flag-staff on it, lying a good way out from the south end of the island, and joined to the main by a low neck, so that at first it appears like a small island. The lee side of *Dominico* is every where steep, and there is nothing distant from the shore that can hurt a ship.

Rouffeau, the chief town in the island, is easily discerned in sailing along shore. The road for merchant ships is in a kind of bay, at the south end of the town: but the best anchorage for men of war, is in *Woodridge's-bay*, which is a little north of the town. The anchoring place is easily known by a gibbet erected near the beach, under the middle of a large cane-field.—The rule for anchoring is, to run in, under an easy sail, opposite, or nearly so, to the gibbet; and the moment you get proper soundings, let go your anchor.

The lee shore of *Dominico* (without attending to the small bays, and little irregularities) is nearly a straight line from *Scotchman's-head* to *Rollo's head*, the south side of *Prince Rupert's-bay*, bearing N. b. W. $\frac{1}{4}$ W.; and, as observed before, the shore is every where steep.

Prince Rupert's Bay is under the north end of *Dominico*, and may be reckoned the best bay in the *West-Indies* for a fleet to wood and water in. On entering the bay, you have *Rollo's-head* on the south side, being a low point, with a remarkable high round hill over it, called *Rollo's-hill* (by some the *Barber's Block*) and *Prince Rupert's head* on the north side, consisting of two pretty high fortified hills, called the *Cabretts*, which are joined to the main by a low marshy neck. At the bottom of the bay, you will see the town of *Portsmouth*, consisting of scattered houses along the sandy beach, having three cocoa-nut trees at the south end of it, two ditto at the north end, and a large tamarind tree near the middle.

To the westward of the town of *Portsmouth*, and on a green rising ground at the inner end of the marsh that joins the *Cabretts* to the main, is

A small plantation, called *Cotton-hill*, consisting of a few little houses. Directly over *Portsmouth*, you will see two high *sugar-loaf hills*, with a large mountain to the north of them, still higher, and covered with clouds.

About two miles to the southward of *Portsmouth*, is a plantation, on low ground, pretty close to the beach, called *Picard Estate*: and half way between *Pickard Estate* and *Rollo's-head*, is a fine looking plantation, called *Mount-Allen*, lying in the declivities of an irregular valley, at the bottom of a little bay.

Indian-river is a pretty large run of fresh water, that comes down the valley on the south side of the two *sugar-loaf hills*, that are over the town of *Portsmouth*, and discharges itself into the bay, half way between *Portsmouth* and *Pickard Estate*.

Ships anchoring in *Prince Rupert's Bay* must observe, that from the east, or inner part of the *Cabretts*, round the bay, to the outer or west side of the cultivated part of *Mount-Allen Estate*, there is a shoal reaching out from the beach, deepening to 3 fathoms a cable's length off, except abreast the mouth of *Indian River*, where the shoal reaches a cable's length and a half off. From 3 fathoms the bank deepens gradually to 5, 7, 10, and from thence suddenly to 15, 20, and 26 fathoms at the outer edge of it.

Turning into the bay, *Rollo's-head* and *Prince Rupert's head* are both very steep, and may be approached within two ships' lengths. When as high as *Mount-Allen Bay*, you may stand in to it, so far as to bring the tamarind tree in *Portsmouth* on with the highest land behind it; and when as high as *Pickard Estate*, stand in to it until you begin to open the little height at the west, and of the cultivated part of *Mount-Allen Estate* without the west edge of *Rollo's-hill*. In standing to the marsh between the *Cabretts* and *Cotton-hill*, tack in 9 or 7 fathoms, according to the size of the ship. In anchoring, it is to be observed that the shoalest water is the cleanest; for any where without 10 fathoms it is rocky. The best birth is reckoned abreast of the tamarind-tree, with the outermost land (seen over the neck within the *Cabretts*) on with the west edge of *Cotton-hill*, or on with the drain at the west end of it: but if any way to the southward of the tamarind-tree, towards *Indian River*, you must run in until you have just opened, or begun to open, the little height, or highest ground at the west end of the cultivated part of *Mount-Allen Estate*, without the west edge of *Rollo's-hill*: and in both these situations you will have 9 or 7 fathoms, muddy ground.

The common watering-place is about 100 yards north from the tamarind-tree; but at *Picard Estate*, and all along that side of the bay, there are plenty of rivulets for watering. There is wood to be had every where round the bay.

From *Rollo's Head* to *Prince Rupert's Head*, is N. 2° W.
 to *West Point* of the *Saints*, N. W. b. N. 1° N.
 to *West Point* of *Guadaloupe*, N. W. b. N. 2° N.
 From *Prince Rupert's Head* to *Cape Melvil* N. b. E.
 The latitude of *Cape Melvil* is 16° 26' N.

ANTIGUA.

The west end of *Antigua* bears N. b. W. from *Englishman's-head* in *Guadaloupe*. When to leeward of *Antigua*, the south and east parts of it appear high land, but the north end is low and broken. The road of *St. John's* is under the low broken land at the north end.

Steering from abreast of *English-harbour* to *St. John's Road*, the course is W. N. W. ; N. W. and N. When past *Falmouth-harbour*, keep the small battery on the east side of the entry open without the west point of the harbour, until you are abreast of *Old-Road*, commonly called *Cale's-bay* ; then steering so as to keep *English-harbour Bluff* open without *Old-Road Bluff*, will carry you clear off *Johnson's Reef* in 13 or 14 fathoms. Keep this mark until you open the *Hawk's-Bill*, to the westward of the *Five Islands* ; you are then clear of *Johnson's Reef*, and may haul up north, or N. b. E. for *Sandy Island*. When *Five-Island harbour* bears east, you are to the northward of *Johnson's-shoals*, and if found necessary, may haul more up, taking care to keep the *Camel* open without the *Ship's-stern*, in order to keep the *nine-feet bank*. When you see *Sandy-Island*, steer so as to pass two cable's length to leeward of it, because of a reef reaching that distance to the westward from it. When past *Sandy-Island*, stand on upon a wind until you can weather it about half a mile ; then tack, and stand to windward of *Sandy Island*, close in to *Ship's-stern*, or the little bay to the southward of it. In standing towards *Ship's-stern*, be sure not to be farther to windward than to open *Hawk's-Bill* without the land, or to bring it on with the innermost of the *Five-Islands*, because of the *Warrington* ; and when so far in as this mark, you must, in standing to the northward toward the *Warrington*, tack as soon as the flag-staff on *James'-fort* comes on with the middle of *Rat-Island* ; but the south shore is very steep, and you may stand to it as near as you please all the way from *Ship's-stern* up to the bar. The anchoring place is about two or three cable's length within the *Warrington*, with the flag-staff of *James's-fort* on with the north side of *Rat-Island* ; but there is good ground, and moderate depth for anchorage all the way out to *Sandy-Island*.

The largest of the *Five-Islands*, open to the westward of the *Hawk's-Bill*, is in 9 fathoms close to, and clear to the westward of the *Warrington* ; and the north part of the works on *James'-fort* on with *Rat-Island*, is directly on the middle of it in 3 or 4 feet. There are 10 or 11 fathoms, smooth bottom, abreast of *Sandy-Island*, between it and the *Warrington*, and between it and *Ship's-stern* ; nine fathoms between the *Warrington* and *Goat-hill*, and 3 and 7 fathoms within the *Warrington*.

St. John's-road, *Antigua*, is in 17° 7' N. latitude.

South point of *Nevis* bears west from *St. John's-road*, *Sandy-Island*, W. $\frac{1}{2}$ S. *Rodondo* S. W. b. S. and the north end of *Montserrat*, S. W. b. W. by compass.

NEVIS

Is a high round mountain, declining gradually to the sea side, where on the south and west sides, the shore is very low, therefore dangerous to approach in a dark night, because the high land over the low shore hides it, so that it is not seen until very close. There is a reef runs out from both the south and S. W. points of *Nevis*, reaching near half a mile off.

The mark to clear these reefs, when coming from the windward, is to keep the round hill on the island of *St. Eustatius*, open to the southward of *Brimstone-hill*, until *Booby-Island* (in the passage between *Nevis* and *St. Kitts*) comes in sight, without the west point of *Nevis* ; then you are clear of every thing.

If bound into *Nevis-road*, keeping *Booby-Island* its own breadth open without the west point of *Nevis*, will carry you in five and a half or six

fathoms close to the point of the shoal which lies off *Charles'-fort*, or S.W. point of *Nevis*; and when past the shoal, you may anchor abreast of the town, with *Booby-Island* just touching the west point of *Nevis* and *Brimstone-hill* on with the middle of *St. Eustatius*, in 7 or 8 fathoms, clean landy bottom.

ST. KITTS.

WHEN past the south point of *Nevis*, if bound for *Bassaterre-road* *St. Kitts*, steer N. W. b. N.; and when abreast of *Frigate-bay*, run in until you bring *Nag's-head* to the southward of the top of the mountain in *Nevis*, or the high hummock on *Nag's-head*, on with the south part of the top of the mountain; steer, keeping this mark, until a remarkable tree, and indeed the only one, on the green ridge behind the town of *Bassaterre*, comes on with the edge of *Monkey-hill*, or begins to shut in out of sight behind it; then let go your anchor, and you will have 10 fathoms, mud or clay bottom. If standing from sea into the road, with the tree on the ridge just open to the east of *Monkey-hill*, when you observe the points of the two high lands on each side *Frigate-bay* begin to shut in on each other, you will then deepen your water from 7 to 10 fathoms; you are then coming within the rocky ridge into clean ground. The anchorage in *Bassaterre-road* is very extensive; but except in the places described by the above marks, the ground for the most part is rocky.

Old-road, *St. Kitts*, lies 6 miles to the westward of *Bassaterre*. If running down close along the shore, the first things you will observe are the embrasures of the low battery on *Stony-Point*; afterwards the town will open, lying on low ground near the beach, with the houses intermixed with trees, or bushes. The anchoring place is half way between the town and *Stony-point*. Ships intending to anchor in *Old-road*, should run so far to leeward as to fetch the anchoring place upon a wind, or at least nearly so; then stand in, under an easy sail, directly for the Gully to the eastward of the town; and when a church, that lies about a mile to the westward of *Old-road*, comes on with the flag-staff on *Brimstone-hill*, let go your anchor: you will then be a cable's length from the beach, in 9 or 10 fathoms, gravelly ground with stones.

Sandy-point lies about 2 miles west from *Brimstone-hill*. The road is about 2 cables' length from the shore to the westward of the town, from 9 to 13 fathoms. Abreast of the town, and to the eastward of it, the bank is narrow, and the ground rocky, so that you must be to the westward of it, bringing the street end on, that goes up from the landing-place through the middle of the town, before you let go your anchor. From the point of *Charles'-fort*, which lies in ruins between the town and *Brimstone-hill*, is a small rocky reef, reaching half a mile out.

From St. Kitts, to Leeward of St. Eustatius, through the Islands, past Somberero.

ST. EUSTATIUS bears N. W. b. W. 7 or 8 miles from the west end of *St. Kitts*, and *Saba* bears W. N. W. about 5 leagues from *St. Eustatius*. The west end of *St. Martin's* bears N. N. W. about 8 or 9

leagues from the west end of *St. Eustatius*, and the west end of *Dog-island* N. N. W. $\frac{1}{2}$ W. 6 leagues from the west end of *St. Martin's*; so that ships must lie up N. b. W. from the west end of *St. Martin's*, to fetch the *Dog* and *Prickly-Pear Passage*.

St. Eustatius and *Saba* are very high islands; *St. Martin's* is an irregular ridge of high land; but the west point is low, and there is a small reef that runs half a mile out from it. *Anguetta* is to the northward, and is farther to the eastward than *St. Martin's*, and is very low, level land. The *Dog* and *Prickly-Pear Islands* are also very low and level; but the *Dog*, or westernmost, is the biggest, and remarkable for a little key at the west end, resembling a round hat, and therefore called *Hat-key*. The passage between these islands is very clear; also there is no reef or danger round *Dog-island*.

Somberero is a low flat rock, not half a mile in circumference, lying N. N. W. 20 miles from *Dog-island*. Both these islands are so low, that, in a small vessel, you will lose sight of *Dog-island* before you make *Somberero*. In heavy gales of wind, the sea sometimes washes rock *Somberero*. Ships go on each side of it, and it is said there is no reef or danger reaching above two cables' length from it.

Directions for the West-India, or Carribbee Islands, collected from the Journals and Observations of several experienced Navigators.

The West-India, or Carribbee Islands lie off the Continent of America in nearly a semicircular form.

BARBADOES.

BARBADOES is an island to the eastward of the *Carribbee Islands*; its north or high point is in 13 deg. 21 min. north latitude; its south point in 13 deg. 3 min. and *Bridgetown*, its capital, in 13 deg. 8 min. and 59 deg. 46 min. longitude west from London. In steering for this island, keep as near as possible in the latitude of 13 deg.; and when about 70 or 80 leagues to the eastward, you will find the water to be discoloured and thick, but no soundings. The island may be seen 12 or 13 leagues off; endeavour to keep on its southern side, and you may run along within 3 miles of the shore, until you come to *Needham's-point*—give this a good birth; avoid a reef running from it, which is visible, and upon which the water breaks, and haul in for *Carlisle-bay*. The long mark for it is the house standing upon the hill above the north end of the town open with the outermost flag-staff on the point: the thwart-mark is the three flag-staffs in one. When the house is open to the northward of the church, you may tack, and anchor on the starboard side of the bay, in from 10 to 20 fathoms: at the bottom of the bay stands *Bridgetown*.

The S. E. part of the island is much encumbered with rocks, called the *Cobblers*; they extend about a mile from the shore; you must be careful not to fall in with them. At *South-point*, about 6 miles to the eastward of *Needham's-point*, where the rocks terminate, is a spit, stretching off W. S. W. above a mile; give it a birth, and when you have passed it, haul up N. E. and bring a mill standing close on shore either E. b. N. or E. N. E. anchor in 7, 8, 9 or 10 fathoms; the ground is tolerable, but rocky. Off *Carlisle-bay* N. N. W. lie the *Pelican* and *Half-acre shoals*.

TOBAGO,

The island of *Tobago* lies also out of the line, and to the eastward of the *Carribbee Islands*. *St. Giles' Rocks* are 109 miles distant from *Needham's-point*, in *Barbadoes*; they lie in the latitude of 11 deg. 22 min. and longitude 60 deg. 14 min.; the course is nearly S. b. W. You must always keep on the north side of the island; it is high land, and may be seen 14 or 15 leagues in clear weather. The coast is bold and clear till you are about 9 miles from *St. Giles' Rocks*, where you will see several rocks above water, called the *Sisters*; they are two miles off the shore, and steep to.

When you are abreast of the *Sisters*, you may see the west end of the island, which is low and sandy; and to the westward of them you may heave as near the shore as you please. Should you make *Tobago* in the evening, and are fearful of running in, you must stand to the southward with an easy sail, or the current, which sets to the N. W. or N. E. will endanger your losing sight of the island. *Man-of-War Bay* is on the north side, and lies about three miles from *St. Giles' Rocks*; there are no soundings until you are close in the bay, when you will have from 40 to 10 fathoms. When bound to this bay, you must go to leeward of the rocks; then haul in for the *Bluff-point*, and you will perceive the bay; open the key as near the bluff as you can, but be careful the wind does not take you aback; turn into the bay, which is bold to, and anchor as far to windward as you can; you will see a small bay, called *Pirates-bay*, where you will find 12, 14, 16, and 17 fathoms, clear ground; but if you are not able to turn in, you may anchor in 35 and 40 fathoms, and warp up. In *Pirates-bay* is a watering place. On the south side of *Man-of-War Bay*, you may anchor in 16 and 18 fathoms, one quarter of a mile off the shore, having good water half a mile from the anchorage, but with a dangerous surf.

About 6 leagues from *man-of-war-bay* lies the north point of *Great-Courland-bay*: if by night you are fearful to run for the bay, you will find good anchorage to the windward of the *Bluff*, with from 6 to 20 fathoms: there is no danger in day-time, except the *Beef-Barrel*, and that lies close to the shore, and breaks at low water: the best anchorage is in the middle of the bay, between the north or *Guayana-point* and *Hawk's-bill*, or the west point of the bay, where you may find 6, 8, and 10 fathoms, clear ground. The common trade wind blows all day, and a breeze off shore all night. To the south of *Great*, is *Little Courland-bay*, where you may ride safe in smooth water, and within the windward point there is very good anchorage.

Between *Man-of-War* and *Courland-bays*, there are 4 little bays, where vessels of 150 tons may find safe anchoring ground; they are called *Bloody-bay*, *Peletuvier's-bay*, *English-man's-bay* and *Castara-bay*.

If you weigh from *Great Courland bay*, be sure of a breeze to carry you beyond the *Buccoo*, a reef which is 2 miles from the shore, and whose northern end breaks, and dries at low water.

Sandy-point bay is at the S. W. end of *Tobago*; to enter which, haul close round the reef, and anchor in 6 fathoms.

Vessels sailing to the eastward of the island, must beware of the N. W. current setting round *Little Tobago*, which will otherwise carry them to the northward. There is a bay for small vessels, called *Tyrrell's bay*, lying between *Little* and *Great Tobago*, about four miles from *St. Giles's-rocks*. About 10 miles from the above rocks, and on the S. E. side of the island, lies *King's-bay*, within the windward point of which there is good anchorage any where in from 6 to 20 fathoms; the high land on this point intercepts the trade wind, and the swell of the sea from the eastward is apt to

drive you to the leeward. The best time to sail out is in the morning, when the wind blows fresh off the land.

Queen's-bay is contiguous to *King's-bay*, and has very safe anchorage on the west side, about a cable and a half from shore; give the island off the point a good birth to windward.

Halifax-bay is about three miles to leeward, and is a small snug bay for vessels of 250 tons; but be careful of a shoal lying in the middle of its entrance.

Barbadoes-bay is about 5 miles from *Halifax-bay*; you must keep the east end of *Little Tobago* open with *Smith's-Island* until the latter bears N. W. to avoid running on *Great-River-shoal*; you may then luff up for the bay, but be careful of the reef of coral rocks, running off *Granby's-point* about a cable's length: within this reef you will find good anchorage in 7, 10, and 12 fathoms; the mark is, bring the cotton tree on the beach and the flag-staff on the hill in one.

Rockly is the next bay; it is safe and deep, having from 7 to 15 fathoms, and no danger in standing in: but in running down this bay, you must take care of the *Chesterfield*, which is a sunken rock, lying near a mile off shore, and covered with only 9 feet at low water.

In going to any of the bays to the leeward of the island of *Tobago*, you may run safely as near *St. Giles's-rocks* as you choose; and in going to *Man-of-War bay*, you may borrow on the north side as you judge convenient, both being steep to.

The currents round *Tobago* are strong and uncertain, particularly in the channel of *Trinidad*. The tide rises 4 feet at full and change of the moon, and the north-east trade-wind blows all the year round.

GRENADA.

The south end of the island of *Grenada* lies in the latitude of $11^{\circ} 47' N.$ and in the longitude of $61^{\circ} 49' W.$; *Point Salines* bears N. W. b. W. from *Brown's-point* in *Tobago*, distant 84 miles; the land is high, and may be seen 13 or 14 leagues off. There is good anchoring all along the coast of *Grenada*, and on the east and west sides are several good bays and inlets.

The *Great Bay* lies on the west side, and wears the form of a crescent; the entrance is W. S. W. the anchorage is good; but as you run into the port, there stretches out a high rocky point, steep to on every side, except the N. E. where stands *Fort-Royal*: you are generally obliged to work up into the *Great Bay*; the trade-wind blows right out.

On the southern side of this island, about 7 miles E. from *Point-Salines*, is the harbour of *Calvins*, which is very deep, and divided into the outer and inner ports; the entrance into the former is about half a mile broad, with as much extent, and the latter being a quarter of a mile broad, and above one mile deep; there are 6 and 7 fathoms, good holding ground, and soft oozy bottom.

The south side of *Grenada* is bold, there being only 2 or 3 small islands and small rocks near the shore; give it a birth of a mile or two; and as you run down towards *Point-Salines*, you will see *Ramier-Island* about 1 mile from the shore, and one mile and a half from the point; give it one mile birth, and pass *Point-Salines* in 7 fathoms, one half mile from the shore. As soon as you are past this point, you open the *Grand Bay*, which is bold; run in, and anchor to the northward of the fort about one mile, where you will find 14 and 15 fathoms, clear ground; higher, it is not so deep and

rocky. If you go into the harbour, run close under the fort, and anchor midway; then warp up, all clear ground. *Point-Laurent* is the N. W. point of *Granadoes*, and lies in latitude $12^{\circ} 11'$, and longitude $62^{\circ} 40'$.

The *Granadillos* are a number of islands and barren rocks, extending N. E. b. N. near 50 miles, some of which are large and inhabited; of these *Carriacou island* seems the most considerable; the middle is in latitude 12 deg. 25 min.; it is of an irregular form, about six miles in length, and as broad as long; it is said to have a good harbour.

Beconia is another, and the most northerly of these islands, its north end lying about five miles from the south end of *St. Vincent's*; it is about 9 miles long, and 2 broad, and on the west side is a good sandy bay, where you may have safe riding: all the little islands to the southward are bold and fair, having neither rocks nor dangers.

ST. VINCENT'S.

From the *Great Bay* in *Grenada* to *Kingstown-bay* in *St. Vincent's*, the course is N. b. E. 69 or 70 miles; and from *Carlisle-bay* in *Barbadoes* to the south end of *St. Vincent's*, the course is W. b. S. nearly distant 83 miles. *Kingstown-bay* lies in $13^{\circ} 4'$ north latitude, and in $61^{\circ} 19'$ west longitude from *London*: if you are bound to this bay, you will see a small peaked island, called *Young's sugar-loaf*; you must pass this bay to the leeward of the *sugar-loaf*, and go round a long sloping point; it is steep to, and you may sail within pistol-shot; but if the wind is contrary, you may anchor in 35 fathoms, and warp in. There is a ledge of rocks on the weather shore, within 6 fathoms; but the best bay in this island is *Tyrrell's*. When you turn through the channel between *Beconia* and *St. Vincent's*, you will see a large bluff of land, to windward of which is *Tyrrell's-bay*; the shore is bold on each side; you may run into 19 and 20 fathoms, and then anchor. On the west side of the island are several good bays; the coast is generally bold, and you may anchor as near, or as far off as convenient, especially in *Kingstown-bay*. *Tarraty-point* is in latitude $13^{\circ} 20'$, longitude $61^{\circ} 18'$ west from *London*. *St. Vincent's* is within sight of *Barbadoes*.

ST. LUCIA.

The S. W. or *Piton-point*, lies N. N. E. $\frac{1}{2}$ E. from *Point-Tarraty*, distant 18 miles; its latitude is 13 deg. 36 min. N. and longitude 61 deg. 10 min. W.; there is a good channel between the two islands. *St. Lucia* is very high land: near *Piton-point* are two high mountains, called the *Sugar-loaves*; and on the west side, about 19 miles N. E. from *Piton-point*, and 8 or 9 miles S. W. from the *Gross inlet*, lies the *Careenage*, considered one of the best harbours in the *West-Indies*; it has deep water, and exceeding good ground all over: no ships can enter without warping in, but there is always a good breeze to carry them out; the shore is steep to and bold,—Three miles to the southward, is the *Grand Cul-de-Sac*, and 6 to the northward, is the bay of *Gross-inlet*, both good roads for men of war.

When you are bound from the northward to the *Careenage*, you will see a bluff about six miles to the leeward, which you may draw near to; for unless you haul close in, you cannot see the harbour; run into the mouth of it as far as you can, and then warp in.

Under the S. E. bluff of *St. Lucia* there is said to be a fine deep bay, where you may run in, until *Montacique-point* bears S. S. W. and then anchor in 7, 8 and 10 fathoms, good ground.

The north cape of *St. Lucia* lies in the latitude of 14 deg. 3 min. N.

MARTINICO

Is about 45 miles in length, and in breadth very irregular; the south point of *Cape-Salines* is in latitude 14 deg. 22 min. and longitude 60 deg. 50 min.: its course from the north cape of *St. Lucia* is N. b. E. distance 19 miles, and from *Carlisle-bay* in *Barbadoes* N. W. $\frac{1}{2}$ N. distance 96 miles. *Point-Salines* is low land, and has 3 or 4 small islands lying off it; when you are west of them, you may see between them and the point. About 12 miles to the westward lies a high rock, called the *Diamond*; it is about one mile from the shore, and is steep to on the southern side; but you must not attempt to go within it.

Fort Royal is on the S. W. side, in latitude 14 deg. 32 min. at the bottom of which stands the chief town of *Martinico*; it is about 10 miles from the *Diamond-rock*; between them are three small coves. When you have passed the *Diamond* three leagues, you will see a large bay open; haul up, and the fort will be in view: steer toward the fort till it bears N. or N. b. E. and anchor in 8 fathoms about two miles off: if you go further in, you will have 14 or 17 fathoms, which is the deepest and best ground; it is corally, but no rocks. If you anchor opposite the town, bring the church N. and steer right in: there is a shoal off the fort with not more than 6 feet upon it. The north and south sides of *Fort-Royal bay* are bold, and the bay is encumbered with numerous shoals. In working in, you must keep the lead going; and when standing to the southward, if you can weather *Pigeon-island*, you must round the N. E. point, coming as near it as you please, and turn in—the south shore is steep to; bring the western part of the island to bear about N. N. W. and you may anchor in 7, 8 and 9 fathoms, clear ground: there is a bank off the eastern shore which breaks with a great swell.

Fort. St. Pierre is about 13 miles N. W. of *Fort-Royal*: Its latitude is $14^{\circ} 42'$ and longitude $61^{\circ} 13'$ it has a spacious circular bay: the best anchorage is in the southernmost part of the road, where you will see some steep cliffs and rocks; you will have 7, 8 and 9 fathoms, gravelly ground; if you bring the highest steeple of the town N. $\frac{1}{2}$ E. and *Point-Carbet* south, you will have 7 fathoms, oozy ground. If you intend staying in this road, you should lie with one anchor on shore, and the other N. W.

The island of *Martinico* is indented with numerous bays and inlets, at the bottom of which are fine sandy coves, and very good harbours, sheltered by long points stretching into the sea.

In coming from the eastward, if you intend sailing by the north side of *Martinico*, you are to take your departure from *Caroel-Island*, which lies about 2 miles north of the N. E. point of the island, in latitude $14^{\circ} 55'$. In running along, you will be exposed to sudden squalls, which are very frequent, on account of the narrow openings of the mountains.

Point-Macouba, the northernmost of the Island, lies in latitude $14^{\circ} 56'$ and is remarkable for a waterfall rushing from a high rocky coast into the sea. About 5 miles to the S. W. of this point lies a round rock, called the *Pearl*, and close to it are the little islands of the *Precheur*; soon after *Point-Precheur* appears, which ends in a flat hummock; the town is to the S. E. Be-

yond this are seen two other points ; the first is *Oxen-point*, terminating the south side of *Fort St. Pierre* ; the second is *Diamond-point*, to the S. E. of *Fort-Royal*. Having doubled *Point-Precheur*, you may see the ships lying at anchor in the road of *Fort St. Pierre* ; but you cannot come to anchor there close hauled, the wind, which always blows from the E. and E. N. E. obliging you to make several trips for it.

DOMINICA.

This island is about 30 miles in length, and 12 in breadth ; its appearance is mountainous and broken. There are no harbours, but very good anchorage on the western side. *Scot's-head*, which is a low point, but bold to, bears from the *Pearl-rock* N. b. W. $\frac{1}{4}$ W. distant 22 miles ; it is in the latitude of $15^{\circ} 13'$ and *Cape Melvill* in latitude $15^{\circ} 41'$. About five miles S. W. of *Cape Melvill* is *Prince Rupert's Bay*, which is safe, capacious, and deep, with good anchorage, and fresh water. The bay is known by a remarkable high bluff, on the north side, called *Prince Rupert's Head* ; the south point is low, but steep to ; so that in working in, you may stand over from side to side ; the bay is one mile and a half deep. The best anchoring is on the north side, but you may anchor in what water you please, and moor W. N. W. and E. S. E.

If you come from *Barbadoes*, you must steer N. N. W. till you have passed *Martinico* ; a north-west course will then bring you to the northward of *Dominica*. Leave *Marigalante* on the starboard side, haul up close in with the north part of *Dominica* ; you will see a bluff, making like an island, round that, and you will open *Prince Rupert's Bay* ; turn in to the north part, and anchor in 7, 8, and 9 fathoms ; you will see the mouth of a large river ; anchor to the northward of that about half a mile. There is another river to the south, where you may anchor in 6 fathoms, clear ground ; in 10 fathoms it is rocky. The town of *Roseau* is in the latitude of 15 deg. 18 min. and longitude 61 deg. 22 min. The road is better than *St. Pierre's*, in *Martinico*, the foundings more regular ; and good holding ground from 15 to 25 fathoms.

GUADALOUPE.

The island of *Guadaloupe* is large and irregular ; it is divided into two parts by the *Salt River* ; whose length is about 2 leagues, the S. W. part being called *Bassaterre*, and the S. E. *Grand Terre*. To the south of *Guadaloupe* lie the islands of the *Saints* and *Marigalante* ; the former are composed of 6 or 7 small islands, the S. W. being called the *Lower*, and the N. E. the *Upper Islands*. The least depth between them and *Guadaloupe* is 17 fathoms ; the best channel is on the south side, there being on the other side a rock under water. The *Saints* are all steep to, and between them is a very fine road for shipping.

The island of *Marigalante* lies to the eastward of the *Saints* about nine miles ; there is a good channel between ; its length and breadth is about 12 miles each, and its height increasing toward the north. At the S. and S. E. sides are dangerous reefs, stretching out a league to sea ; but the west shore has good anchorages. From *Cape Melvill* in *Dominica*, to *Fort-Point* in *Marigalante*, the course is N. E. b. E. distance 21 miles.

The chief place of *Guadaloupe* is the town of *Bassaterre*, on the western

side of the island, and near *Old Fort-point*; it is in latitude 15 deg. 58 min. N. and longitude 61 deg. 45 min. W. of *London*. The course from *Prince Rupert's Bay*, in *Dominica*, is N. W. b. N. distant 28 miles. From *Basseterre-road*, if bound to *Antigua*, you must weigh at night, sailing at such distance from the shore as to keep the land winds; these may carry you to the northern part of the island by the morning, when you will meet the sea winds to carry you across.

There is a small island about one mile from the N. W. between which and the shore there is no passage. Off the N. W. point of *Guadeloupe* there lies an island rising out of the sea, like a small rock; it is about two miles from the shore; it looks grey, is very high, and called the *English-head*. The courses in rounding the island to *English-head*, are N. W. North, and N. N. E. about 35 miles. Between *Marigalante* and *Guadeloupe* are regular soundings as far as *Point Peter*, near which stands *Fort-Louis*.

From the north end of *Marigalante* to the island of *Desceada*, is twenty-two miles—the course N. b. E. and the channel good; but in the midway lies a small sandy island, about three miles long, in the middle of which small vessels may anchor in 7 fathoms. *Point Chateau*, in *Guadeloupe*, is known by a parcel of grey rocks, stretching from shore about 5 or 6 miles.

From *Chateau-point* to *Desceada* the bearing is N. E. b. N. distant eight miles. This island lies E. N. E. and W. S. W. its N. E. end, or *Noric-point*, making like the prow, and the S. W. like the tilt of a galley; but passing near its north end, white broken patches will appear like heaps of sand, with red streaks in them: on this side are several rocks under water. There is an anchorage on the southern part, called the *Cove*, at the distance of one mile and a half from shore; the ground is rocky, but take care to look out for a clear spot, and you may anchor in 5, 6, and 7 fathoms: between *Desceada* and *Guadeloupe* is a channel, with 22 and 23 fathoms.

ANTIGUA

Is about 18 miles from N. to S. and 27 miles from E. to W.; it is surrounded with many dangerous reefs, but has several excellent harbours. From *Antigua-point*, in *Guadeloupe*, to *English-harbour*, the bearing is nearly N. W. the distance about 18 miles; and from *English-head* the course is N. b. E. distance 24 miles. This is a very safe and fine harbour, sheltered from all winds, and lying close under the easternmost high land; you may anchor without the harbour in 5, 6, 7, and 8 fathoms, and warp in. You must endeavour to lie N. N. E. or the wind will discompose you. Give the low point on the starboard a good birth, and keep mid-channel. There are 4 fathoms, smooth water. You must be careful of a bar at the entrance.

A small distance to the westward of *English-harbour*, lie the town and harbour of *Falmouth*; to sail into which, you must run in close to the west, or *Proctor's-point*. There is a ledge of rocks covering the middle of the inlet; from thence it is shoalen to the eastern point.

About 3 miles to the S. W. lies *Carlisle-bay*, where you will have the same water as at *Falmouth* harbour.

If bound from *English-harbour* to *St. John's*, observe that from the former to the eastward, the shore lies E. b. N. abreast of *Johnson's-point*; and 2 leagues to the eastward is foul ground, about two miles off shore. As you approach *Antigua*, you must give the western shore a good birth, un-

til you open *Sandy-Island* and the main, or till you open the houses upon the rising hill, within *Pelican-point*. These are the leading marks for the main side: *Sandy-Island* is bold to. In working into the road of *St. John's*, you may stand so far to the northward as to bring the *Ship's-stern* S. S. E. then put about. If you sail from the southward, within *Sandy-Island*, when you are off *Johnson's-point*, bring the westernmost of the *Five-Isles* N. b. E. $\frac{1}{2}$ E. and keep those islands open on the starboard bow; this will carry you clear of a funkken rock: keep also about one mile distant from the westernmost of the *Five-Isles*, and you will be in the channel. Between *Sandy-Island* and the main, you will have 6 and 7 fathoms. It is better to go to the leeward; but do not run above 3 or 4 miles north of the island, because a lee current sets down, and several shoals lie to the N. E.

If you can reach the *Ship's-stern*, you may stand boldly to, and anchor in from 6 to 12 fathoms; in 15 fathoms you may run to the westward of *Sandy-Island*. On the N. N. E. and N. E. b. N. from the *Ship's-stern*, distant one mile and a half, lies the *Wallington*, a dangerous shoal, on which, when it blows hard, you will see the breakers; the channel is on the southern side.

If running down the south side of *Antigua*, haul in for *Johnson's-point*, till you bring the *Indian-Creek Land* to be seen a sail's breadth open of *Old road Bluff*; run down with that mark till the largest of the *Five Isles* bears N. E. b. N. then steer N. That course will carry you clear of the *ten feet shoal*, lying to the south of the *Five Isles*, and of the *nine feet bank*, lying off the north point of *Five islands harbour*; bring *Hawk's-Bill* to bear east, and haul up within *Sandy-island*, as near the *Ship's-stern* as you please.

The harbour of *St. John's* lies in latitude 17 deg. 8 min. and longitude 61 deg. 58 min.; it is a bar harbour, having a sand-bank stretching across from the N. to the S. W. On the south part of the bar are 14 feet, and on the north 12 feet. To anchor in *St. John's Road*, bring the *Ship's-stern* S. W. b. W. *St. James' Fort* E. S. E. and the *Wallington* N. b. W. and you may anchor in 7 fathoms, good ground. In coming in, keep along the southern shore, it is steep to, and without any dangers.

To the N. E. of *English-harbour* 7 or 8 miles, is *Willoughby-bay*; the entrance is on the western side; a reef stretches off the east, and in the middle of the channel lies a spit with only 9 feet upon it: between the island and the spit are 4 fathoms;—between the spit and the reef the passage is wider, and the depth 7 fathoms; you are recommended to sail in close on board the island, and anchor in 4 fathoms. A few miles to the north, lies *Green-Island*, and close to it is *Nonfuch-harbour*; the best going in is between this island and the *South-point*, where you will have 5 fathoms; the northward is dangerous and rocky.

In making the land from the northward, give the island a good birth till you are a quarter of a mile down, then haul in to 14 fathoms—keep that depth, and run on in safety; if the water shallows, haul off; if it deepens, haul in, until the *Ship's-stern* bears S. $\frac{1}{2}$ E. then steer for the fort. Off *Great Bird's Island* $1\frac{1}{2}$ mile, lies a bank, bearing N. N. E.; it may be seen at some distance; on it are $3\frac{1}{2}$ fathoms. N. W. about 3 miles, and the same distance from *Barnacle-fore Point*, lies another shoal, called *Addison's*. N. b. W. $\frac{1}{2}$ W. distant not a mile, lie two more shoals, having three fathoms upon them; and to the westward half a mile, lies the *Horse-shoe*, above water, and bearing north from the *Prickly-Pear* one mile. A little westward stands a wind-mill, and further to the S. W. is another; these are very good marks to go within the reefs, steering between them S. b. W.; the least water will be 5, and the inner part of the channel 9 fathoms. About a

mile from the *Horse-shoe S. W. b. S.* and from the *Prickly-Pear N. W. b. W.* is a small shoal with 5 feet upon it; another runs from the *Prickly-Pear*. About one mile N. from *Boon's-point*, and the same distance from the above small shoal, is a dangerous reef; you must bring *Boon's-point* to bear S. b. W. and you may steer within it; the westernmost part of the reef bears north from the *Sisters* $1\frac{1}{2}$ mile. But there are so many shoals and reefs about this island, that it is dangerous to approach nigh: the most remarkable is the *Diamond*; it is round, and in breadth and length about one mile; the water upon it varies from 1 foot to 9 feet. Between the above-mentioned reef and the *Diamond*, there is a channel with 5 and 6 fathoms; the mark is the west side of the *Leeward Sister*, and the *Port Flag-staff* in one. To avoid this danger, you must bring *Ship's-stern* to bear S. b. E. before you haul up with the fort; then look for *Wallington's-rock*; steer close to the *Western Sister*, and you may weather the *Wallington*, which will bear from *Ship's-stern* nearly north, distant about one mile; the western part breaks, but the eastern is bold to.

There is a harbour on the north side of *Antigua*, called *Parham-harbour*; it lies to the south of *Barnacle-point*, but its entrance is difficult and dangerous.

To the north of *Antigua* lies the island of *Berbuda*; its southern extremity lies from *Boon's-point* N. E. b. N. about 23 miles; it is low, and about 16 miles in length, lying nearly N. N. W.; from both its ends stretches a long reef; but on the western side is a good road, with 9, 12 and 14 fathoms, between which and *Antigua* is a good channel.

S. W. of *Antigua* lies the island of *Monferrat*; it is high, nearly 10 miles in length, and 8 in breadth; on its west side are situated the town and road, in the latter of which large ships may anchor, but it has no harbour.

To the N. W. b. N. of *Monferrat*, distance 7 miles, lies a high barren rock, called *Redondo*; it looks like a haycock, and may be seen 18 or 20 miles off.

NEVIS

Is a small island, about 5 miles in length, and 4 in breadth; it is very easily discovered by being low on the sides, and high in the middle; it is very lofty; and when you come athwart it, either N. or S. it makes like a fiddle: the principal town is near the S. W. point, where is a good road for anchorage; it lies in latitude 17 deg. 10 min. and longitude 62 deg. 30 min. To the N. W. of *Nevis* is the island of *St. Kitts*; they are separated by a channel, called the *Narrows*. In coming from the northward, and before you are in the *Narrows*, you will see a high rock, called *Booby-island*, about the middle of the channel; you must keep it on the larboard side: keep also *Nevis southern point* open of this rock to the westward, and you will avoid a reef of rocks lying without. *Booby-island* and the north part of *Nevis*, when in one, bear S. E. b. S. and *Nevis south point* will bear S. $\frac{1}{2}$ E. About one mile to the southward of *Booby-island* are two smaller rocks, above water, called the *Cows*; the passage is between them and *St. Kitts*, where you will find 4, 5, 6 and 7 fathoms, with good anchoring ground. The island of *St. Kitts* lies nearly N. W. b. W.; its length is 14 miles, its breadth, at the north-west parts, is 6 miles; but towards the S. E. end it is narrow; it is high, especially towards the center; the S. E. part appears at the distance of 4 or 5 miles like a parcel of broken detached islands, and the N. W. end gradually diminishes to the sea. There is no harbour, and but few landing-places, owing to the surf continually lashing

the shores, which are sandy, making it always inconvenient, and sometimes dangerous.

In running from *Nevis* to *Bassaterre*, which has a large open bay, you will cross a bank which has 4 and 5 fathoms upon its shoalest part; it is not quite one mile broad, and its middle lies nearly S. b. W. from *Nag's-head* in *St. Kitts*. To anchor in *Bassaterre road*, bring *Londonderry fort* to bear north, distant half a mile, and the west point of the bay W. b. N. you will have good ground in 9 fathoms; here are no tides. To the N. W. 5 miles, is *Old-Road Bay*; there is a black rock close by the shore; observe to keep it a little open to the westward of the westernmost houses above the rock; for if you shut it in with these houses, you will have no ground half a mile off shore; but bring it a little open, and you will have 9 and 10 fathoms, good ground: keep *Nevis point* open with the easternmost point of *Old road bay*, and the S. W. point of *St. Kitts* W. N. W. and more to the S. E. in 10 and 13 fathoms;—there is a great surf, and a rocky shore.

ST. EUSTATIUS

Lies from *Sandy-point*, in *St. Kitts*, N. W. b. W. distant 7 miles; it rises to a considerable height, is 5 miles broad, and as many in length. About a mile W. N. W. from *Sandy-point* is a danger, called the *Sheep*; the town is on the south side of the island, and is divided into the upper and the lower town. When the wind blows from the S. E. there is a very great swell in the road, and the waves break off the shore with great violence. If you intend to anchor in this road, you must bring the tower of the church N. E. b. E. and the west cape of the bay N. W. b. N. you will have 9 and 10 fathoms, sandy ground, half a mile from the shore: you may also anchor further out in 15 fathoms; but be always attentive to the wind, and on the least appearance of a squall from the south, put immediately out to sea.—This island is clear from danger all round, except a shoal stretching out to the S. E. and another to the west.

SABA

Is another steep rock, of a round form, and accessible only on its south side; it bears N. W. of *St. Eustatius*, and is distant about 11 miles; you may see the bottom all round it, and there is no danger visible: off the N. W. side lies a rock, looking like a ship under sail: and from the south side stretches a narrow bank, near 43 leagues towards a small solitary island, called the *Bird's-island*: on this bank are various soundings from 10 to 20 fathoms. This island lies in latitude 15 deg. 31 min. and longitude 63 deg. 37 min.; its length from east to west is about 6 miles, and it is surrounded with rocks and shoals, which break at low water.

ST. BARTHOLOMEW

Is an island somewhat circular; it lies nearly E. and W. is 23 miles long, and about 4 broad; the shores are extremely dangerous, having many rocks both above and under water. From *Sandy-point*, in *St. Kitts*, to the west end of *St. Bartholomew*, the bearing is N. b. E. distance 9 leagues; the middle is very high, and may be seen 30 miles off; it has a good harbour.

St. Martin's is nearly as long as *St. Bartholomew*, but broader; between them is a channel, on the west side of which are several large rocks. This island is high and irregular, but toward the west it declines; the sea is calm, and the anchorage safe every where: on the west side is the *Great Bay*, with 8, 9 or 10 fathoms, good sandy bottom; and to the eastward about 14

miles, is another bay. Off the western point of *St. Martin's* about two miles, you will find 30 and 35 fathoms, rocky and corally ground. *Anguilla* is another island, lying to the northward of *St. Martin's*; it is 25 or 26 miles long, and of an irregular breadth, being narrow at the west end; it is low and flat, and off the east end stretches a reef, breaking the current, and making good anchoring. On the south side of the island, to the west and N. W. lie several small islands, the principal of which are the *Dog* and *Prickly-Pear* islands; between these is a good and clear channel. The *Dog* island is on the west, and is the largest; its latitude is 18 deg. 21 min. longitude 63 deg. 17 min.; the *Prickly Pear* is on the east side: they are low, and cannot be seen far off. From the west end of *St. Bartholomew* to the west end of *St. Martin's*, steer N. N. W. and so through the *Dog* and *Prickly-Pear* passage.

THE VIRGIN ISLANDS.

These are a collection of islands lying between the *Carribee* Islands and *Porto-Rico*, taking up a space from east to west of more than 100 miles; their shores are rocky and dangerous, but in the middle of them is a very fine basin, 15 or 16 miles broad, and about 24 miles long; it is called *Drake's-Bay*, and ships may lie there at anchor land-locked, and sheltered from all winds. Most of the islands are high, and appear joined together, but between them are several deep channels, which, if acquainted with, you may navigate with safety.

Santa-Cruz is the southernmost of the *Virgin Islands*; its east end lies W. b. N. from *Sandy-point* in *St. Kitt's*, distant 107 miles. This island is not high, but full of hummocks, the most remarkable of which are on the east side; it is surrounded on the south by numerous and dangerous shoals; and from the east end a reef stretches a long way into the sea. The principal town, called *Christianstad*, is on the N. E. side, and in the latitude of 17° 40' N. and the longitude of 64° 50' W. The other town, called *Fredrickstad*, is on the western side: the island is about 24 miles long, and 6 miles broad.

From *Christianstad* to *Ram-head*, in *St. John's*, the course is N. b. E. about 19 miles: in the channel lies a round rock, called the *Bird's-key*. On the eastern side of *St. John's Island* is a harbour, from without the east point of which you will find regular soundings from 10 to 5 fathoms: the mouth of the harbour is about half a mile broad; and off the west side is a key, with a reef from its inner side, running southward. If the wind is to the northward of east, you may lie in the harbour; but if the wind is to the southward of E. S. E. you must anchor without, and warp in. Less than half a mile is the *Governor's house*, above which ships of war seldom go: you may anchor within a quarter of a mile of the weather shore, in 5 fathoms, and run a stream anchor to the S. W. In coming in, observe to leave one third of the channel from the east point to windward, and two thirds to leeward towards the key. There is a small bank, not visible, off the gate, a cable's length from the shore, on which are only 10 feet.

ST. THOMAS.

From *Ram-head* to the entrance of *St. Thomas' harbour*, the course is N. W. b. N. distant 19 miles, and from *Christianstad* N. N. W. $\frac{1}{2}$ N. distant 37 miles. *St. Thomas' town* is in the latitude of 18° 21' N. and in the longitude of 63° 01' west from *London*.

The island of *St. Thomas* is about 14 miles long, and 5 miles broad; it has a good harbour, where a number of ships may lie sheltered and secure.

In running from *Ram-head* to *St. Thomas'* harbour, the *Bird's-key* will be left to the south, and your course is W. N. W. till you reach the *Duck-Island*, between which and the main the channel is about a mile and a half broad; and at the entrance in the fair-way lies a sunken rock, with only 5 feet on it: the safest passage is between this rock and *Duck-Island*, keeping the latter on board; for between the rock and *St. Thomas' Island* it is foul ground. In hauling in for the town, N. b. W. or N. N. W. give the eastern shore a good birth, and run within half a mile of the *white fort* which is to be seen at the east end of the town; anchor in 5 fathoms, clear ground. In entering the harbour, there is a rock above water, called *Prince Robert's Cliff*; leave it to the eastward, and you may make bold with its west side, but there is no passage within.

From *St. Thomas' harbour*, if bound to *Porto-Rico*, steer W. b. N. till you reach the west end of the island, which is about 11 miles from the harbour. There are several small rocks and islands lying off, the chief of which are *Green-Island* and *Little Saba*; the former is to the west of the western point of *St. Thomas'*, and the latter is to the southward; it is rocky, about half a mile round, and lies two miles from the shore; it is foul all round, and must have a good birth: all these islands must be left on the starboard hand; and in running down till you are past *Green-Island*, you will have soundings all the way, but irregular, and in some places deep. Steering S. W. b. S. from the west end of *St. Thomas' Island*, distant 7 miles, you will fall in with a round, rugged, double pointed rock, called the *Carvel*; it is high, white, and steep to. About 7 miles westward of this rock lies *Great-Passage-Island*, bearing from the west point of *St. Thomas' W. b. S.* distance 15 miles; round this island lie several keys and rocks, but particularly to the westward, where is a cluster, called the *Tropic Keys*: the channel between *Green-Island* and *Passage-Island* is broad, but to the latter must always be given a good birth. The course through is N. W. or N. N. W. with little wind, for fear of a calm and lee current, the western side being foul and dangerous; keep this course till you bring *St. Juan's Cape*, which is low, to bear W. b. S. or W. S. W. which will carry you to *St. Juan*, the chief town of *Porto-Rico*.

CRAB ISLAND.

Crab-Island is about 20 miles in length, and narrow; it lies S. W. of *St. Thomas' harbour*, distant about 26 miles, and 10 from the S. E. end of *Great Passage Island*; the west end, on the east part, is low land, but to the S. W. are hills, and from thence to the westward, low broken hummocks, and to the S. W. higher hills. In going to *Crab-Island*, keep the southern side, the north part being foul: you may sail within 2 or 3 miles of the shore all the way down to the west end; anchor on the south side of that point, and you will have 3 and 4 fathoms about 2 miles off. From the west end of *Crab-Island* to the S. E. cape of *Porto Rico*, the distance is about 5 miles.

TORTOLA.

The island of *Tortola* is to the N. E. of *St. John's*; it is about 16 miles long, and its broadest part 8; on the south side is a bay, with a good entrance, at the bottom of which the town is situated; the east part of the bay is bold, and off the western part runs a reef; the depth of water is 12 fathoms, good ground. To the north and east of *Tortola* lie several islands, called *Guayana-Island*, *Commanoes-Island*, *Scrub-Island*, *Dog-Island*, *Beef-Island*, and others.

VIRGIN GORDA.

Virgin Gorda is an irregular Island, lying to the eastward of *Tortola*; it is high land, and has two good harbours; the largest, called *East Bay*, is on the north side, in which you may anchor safe in 5 fathoms; the other is on the west side, where stands the town, being in the latitude of 18 deg. 18 min. N. and longitude 64 deg. 12 min. W. from *London*: there is also another bay to the southward. From *Saba* to the east point of *Virgin Gorda*, the course is nearly N. W. distant 50 miles. When *Virgin Gorda* bears N. W. b. N. about 7 leagues, they appear like 3 large, with several small islands encircling them, the middlemost appearing the longest; but when you approach nearer, they seem joined together.

From the S. W. end of *Virgin Gorda*, lie a parcel of small broken islands and rocks, just above water, called the *Fallen City*, terminating their southern extremity with a remarkable rocky island called the *Round Rock*; between this rock and an island to the southward of it, named *Ginger Island*, is the eastern passage into *Drake's Bay*; it is called the *King's Channel*, and in it is no ground with hand leads. To the west of *Ginger Island* are several other islands, namely, *Cooper's-Island*, *Salt-Island*, *Dead-Man's-Chest*, *Peter-Island*, *Norman-Island*, and *Witch-Island*; these are the southern boundaries to *Drake's-Bay*, while the islands of *St. John*, *Tortola*, *Beef-Island*, *Dog-Island*, and *Virgin Gorda*, enclose it on the west and northern sides. This bay is about 25 miles long, and 15 broad; the depths of water are from 10 to 25 fathoms. Its northern entrance is between *Dog-Island* and *Virgin Gorda*, being about 2 miles broad; its southern entrance is between *Witch-island* and *St. John's*, about 5 miles broad; and the other entrance is between *St. John's Island* and *Tortola*, scarce a mile in breadth, and being the western passage of the *King's Channel* above mentioned.

ANEGADA.

Anegada lies 10 or 11 miles to the northward of *Virgin Gorda*; it is very low, and at high tides almost drowned by the sea; the rocks and shoals, by which this island is surrounded, are very dangerous. From its eastern end a long reef extends, with only two feet upon it in some places; it stretches 14 or 15 miles into the sea. The course between *Anegada* and *Virgin Gorda* is N. W. and W. b. N. or W.; but you must be careful to avoid a sunken rock lying in the midway of the channel between them.

SOMBRERO.

The island of *Sombrero* is a flat rocky island, about 3 miles in length; it has a white appearance, but cannot be seen further off than 13 or 16 miles; on its east side are several rocks, and it is surrounded by a shoal. *Sombrero* is in the north latitude of 18 deg. 38 min. and in 63 deg. 30 min. longitude west from *London*: 6 miles W. S. W. of this island, from 22 to 35 fathoms; uneven and rocky bottom. From *Anegada's* east end, *Sombrero* lies east, distant 21 miles; there are 5, 6, 7, 8, 10 and 12 fathoms between them. From *Dog-island*, *Sombrero* lies N. W. b. N. distance 19 miles; and from *Saba* N. N. W. $\frac{1}{2}$ N. 58 miles. The passage to leeward or windward of *Sombrero* is clear and safe—there is no swell; the winds are favourable for going out; and when once you are past *Sombrero*, you are out of all danger.

Isles of Shoals.

BY the benevolence of the *Massachusetts Missionary Society*, aided by subscriptions of several Gentlemen in *Newburyport* and the neighbouring towns, a *meeting-house* has been erected on *Star-Island* (one of the above islands) which, from its situation, cannot fail of being advantageous as a land-mark to mariners.

The following description of the islands, and their relative situation, has lately been obtained.

White-Island (the south-westernmost island) is a rocky island, about three quarters of a mile in length from S. E. to N. W. and about one mile and three quarters distant from the *meeting-house*. There is a reef that extends about one third of a mile from the N. W. end, which in passing you must give a good birth. The S. E. end bears from the *meeting-house* S. W. $\frac{1}{4}$ S. the N. W. end S. W. b. W. $\frac{3}{4}$ W.

Londoner's, (or *Lounging Island*), lies about one mile and a half to the northward of *White-Island*, is about five eighths of a mile in length from S. to N. and is high at each end; in high tides the middle is sometimes covered; a number of rocks lie close about the island, in almost every direction, some of which are always bare. The south end bears west from the *meeting-house*; the north end W. N. W. $\frac{1}{2}$ W. about half a mile distant. About half-way between this island and *Star-Island* lies a rock which is bare at low water; it bears from the *meeting-house* N. W. b. W. $\frac{1}{2}$ W. one third of a mile dist.

Star-Island (where the *meeting-house* stands) is about three quarters of a mile in length from S. E. to N. W. and about half a mile in breadth; it is covered with buildings on the north side. The *meeting-house* stands on an eminence a little to the northward of the middle of the island; is 12 feet high from the foundation to the roof; to the top of the steeple is 30 feet more; the whole height from the surface of the water is about 65 feet; it is painted white, and the steeple is placed in the middle of the building; it stands fronting the west, and may be seen at the distance of 8 or 9 leagues, in almost any direction at sea: it bears from *Thatcher's-Island* lights (*Cape-Ann*) N. $\frac{1}{2}$ E. six and a half leagues dist.; from *Pigeon-Hill* N. b. E. six and a quarter leagues distant; from *Newburyport* light-houses N. E. $\frac{1}{2}$ E. six leagues distant; from *Portsmouth* light-house S. S. E. $\frac{1}{2}$ E. three and a quarter leagues distant: from the western *Agamenticus* mountain S. $\frac{1}{2}$ E.; from the eastern ditto S. $\frac{1}{4}$ E.; from *Boon-Island* beacon (which appears in the day time like a light-house) S. W. $\frac{1}{2}$ S. four and a quarter leagues distant; from *Boon-Island* ledge (which lies 1 league S. E. from *Boon-Island*) S. W. b. W. four and three quarters leagues dist. Off the south end of this island, about three quarters of a mile from shore, lies *Anderfon's-Rock*, which is bare at half tide; in passing, give it a good birth; it bears from the *meeting-house* S. S. E.

Cedar-Island is small and about one third of a mile in length from E. to W. situated between *Star* and *Smutty-nose Islands*. There is a channel between it and *Smutty-nose Island*; but it is crooked, and not fit to be attempted by strangers. The east end bears from the *meeting-house* E. $\frac{1}{4}$ N. and the west end E. N. E. $\frac{1}{2}$ E. three eighths of a mile distant. A rock lies off the S. E. end of this island, half a mile distant, bare at half-tide; it bears from the *meeting-house* E. b. S.

Smutty-nose Island is about one mile in length from east to west, and about half a mile in breadth, and may be known by a wind-mill on the north

part of the island; at the west end is a fine harbour, called *Haley's-Cove*, where 15 or 20 small vessels may lie safe from all winds. There are several buildings near this harbour. There is a fine channel between this island and *Hog-Island*, where is water sufficient for any vessel, keeping near the middle of the passage. The west end of *Smutty-nose Island* bears from the *meeting-house* N. b. E. $\frac{3}{4}$ E. and the east end E. N. E. about five eighths of a mile distant.

Hog-Island is a high island lying to the northward of *Smutty-nose Island*; is about one mile in length from east to west, and five eighths of a mile from north to south. The west end lies from the *meeting-house* N. b. W. $\frac{1}{4}$ W.; east end of ditto N. N. E. seven eighths of a mile distant.

Duck-Island (the northernmost island) is a long low rocky island; some parts of it are covered at high water, with rocks, projecting in every direction, especially at the N. W. end, where a ledge runs off half a mile. It is the most dangerous of any of the *Isles of Shoals*, and ought carefully to be avoided; it is about seven eighths of a mile in length from N. W. to S. E.; the east end bears from the *meeting-house* N. N. E. $\frac{1}{4}$ E.; the west end N. b. W. $\frac{1}{4}$ W. about three and a quarter miles distant.

[NOTE. A Gentleman at *Georgetown (South-Carolina)* has informed the Editor, that a new passage has been discovered into *Georgetown*, through *North-Inlet*, which is easier of entrance and safer than the common passage mentioned in page 90. You may go in safe, by steering a W. b. S. course, keeping in the middle of the river, where you will not have less than 15 feet water. It has been generally believed, that a shoal extended across the passage, which is not the case.]

COURSES

COURSES AND DISTANCES.

By the Compaſs. Leagues.

FROM Point Alderton, when to the eaſtward of the Graves, to Cape-Ann	N. E.	10
———— Broad-Sound to Marblehead	N. N. E.	5
———— Boston Light-Houſe, when to the eaſtward of the Graves, to Cape-Ann	N. E. $\frac{1}{2}$ N.	9
———— Boston Light-Houſe to Cape-Cod	E. S. E.	15
———— the dry Salvage-Rock, off Cape-Ann, when ſaid rock bears S. E. two miles diſtant, to Newburyport-Bar	N. W.	6
———— Newburyport-Bar, to Portſmouth Light-Houſe	N. N. E.	7
———— the dry Salvage-Rock, to Portſmouth	N. $\frac{1}{2}$ W.	11
———— the Meeting-Houſe on the Iſle of Shoals to Boon-Iſland	N. E. $\frac{1}{2}$ N.	4 $\frac{1}{4}$
———— do. to Boon-Iſland Ledge	N. E. b. E.	4 $\frac{1}{4}$
———— do. to Portſmouth Light-Houſe	N. N. W. $\frac{1}{2}$ W.	3 $\frac{1}{4}$
———— do. to Newburyport Lights on Plumb-Iſland	S. W. $\frac{1}{2}$ W.	6
———— do. to Thatcher's-Iſland Lights	S. $\frac{1}{4}$ W.	6 $\frac{1}{2}$
———— * do. to Baker's-Iſland Light-Houſe	S. S. W.	9
———— * do. to Boston Light-Houſe	S. S. W. $\frac{1}{4}$ W.	13 $\frac{1}{2}$
———— do. to Cape-Cod Light-Houſe	S. S. E. $\frac{1}{2}$ E.	19
———— the Iſle of Shoals to York-Harbour,	N. $\frac{1}{2}$ E.	5
———— York-Harbour to York-Ledge	S. E.	2
———— Portſmouth, when the light-houſe bears N. N. W. diſtant one league, to the Nubble of Cape-Neddock	N. N. E.	4
———— Cape-Neddock to Boon-Iſland	S. E.	2
———— Boon-Iſland to Boon-Iſland-Rock	E. S. E.	1
———— Cape-Neddock to Well's-Bar	N. b. E.	4
———— Cape-Neddock to Cape-Porpois	N. E.	7
———— Cape-Porpois to Wood-Iſland	N. E.	4

* Theſe courſes cannot be run, on account of *Cape-Ann*, which intervenes, till you have run more to the ſouthward.

COURSES AND DISTANCES.

	By the Compass.	Leagues.
FROM Wood-Island to Cape-Elizabeth	N. E.	4
----- Cape-Elizabeth to Alden's-Ledge	E. S. E.	3
----- Portland Light-House to Alden's-Ledge	S. S. E.	4
----- Cape-Elizabeth to Seguine-Island	E.	10
----- Cape-Ann to Cape-Elizabeth	N. N. E.	28
----- Seguine-Island to Manheigin-Island	E.	10
----- Manheigin-Island to Matinic	E.	10
----- Matinicus-Island to the Isle-of-Holt	N. N. E. $\frac{1}{2}$ E.	7
----- the Isle-of-Holt to Long-Island	E. N. E.	7
----- Long-Island to Mount-Desert-Rock	S. E.	3
----- Mantinicus-Island to Mount-Desert-Rock	E. N. E.	14
----- Mantinicus to Machias-Seal-Islands	E. N. E.	26
----- Mantinicus to Machias	N. E. b. E. $\frac{1}{2}$ E.	27
----- Machias-Seal-Islands to Grand-Manan	E. N. E.	2
----- Cross-Isle-Machias to West-Passamaquoddy-head	N. E. b. E.	9
----- West-Passamaquoddy-head over the Bar to Allen's-Isle	N. N. W.	2
----- Allen's-Island to Moose-Island	N. N. E.	1
----- Moose-Island to the Devil's-Head, or Oak-Bay	N. N. W.	9
----- Grand-Manan-Isle to the Wolves'-Islands	N. E. b. N.	3
----- the Wolves'-Island when said Island bears E. S. E. your course to Campo-Bello-Island,	W. N. W.	3
----- Cape-Ann to Cashe's-Ledge	E. $\frac{1}{2}$ N.	21 $\frac{1}{2}$
----- Cape-Ann to Manheigin-Island	N. E. $\frac{1}{2}$ E.	40
----- Eastern Point of Cape-Ann to Baker's-Island	W. b. S.	2 $\frac{1}{2}$
----- Boston Light-House to go clear of Cape-Cod	E. b. S.	18
----- Cape-Ann Lights to go clear of Cape-Sables	E. b. S.	75
----- Cape-Ann do. to the Shoals of George's Bank	S. E. $\frac{1}{2}$ E.	45
----- Cape Ann do. to go clear of Cape-Cod, through the South Channel	S. E. b. S.	18

COURSES AND DISTANCES.

	By the Compaſs.	Leagues.
FROM the high land of Cape-Cod to George's-Bank	E. S. E.	36
the high land of Cape-Cod to the South-Shoal of Nantucket to go clear of the Shoals,	S. S. E.	28
Cape-Cod Light to Chatham	S.	12
Chatham to the Round-Shoal	S. S. E.	7
Chatham to Butler's-Hole,	S. S. W.	4
Butler's-Hole when clear of the Pollock-Rip to Nantucket Light-Houſe	S. S. W.	4
Sandy-Point Light-Houſe to Nantucket Light-Houſe (on Brant-point)	S. S. W.	3
Morris-Iſland to the Round-Shoal	S. S. E.	7
the Round-Shoal-Channel-way when the Light-Houſe bears S. W. b. W. ſteer for the Light-Houſe	S. W. b. W.	3 $\frac{1}{2}$
Morris-Iſland and Ship-Channel	S. S. E. and S. b. E.	7 $\frac{1}{2}$
Gay-Head to Block-Iſland, with an ebb-tide	W. b. N.	14
Block-Iſland to Rhode-Iſland	N. E. b. N.	7
Rhode-Iſland Light-Houſe to the Harbour of Rhode-Iſland	N. E.	1 $\frac{1}{2}$
Block-Iſland to Point-Judith	N. N. E.	4
Block-Iſland to Gardner's-Iſland	W. $\frac{1}{2}$ N.	11
Block-Iſland to Montock-Point	W. b. S.	6 $\frac{1}{2}$
Montock-Point to Gardner's-Iſland	W. b. N.	5 $\frac{1}{2}$
Gardner's-Iſland to Shelter-Iſland	W.	3
Block-Iſland to the eaſt end of Fiſher's-Iſland	W. b. N.	8 $\frac{1}{2}$
Block-Iſland to Watch-Point, which lies to the northward of Fiſher's-Iſland	W. N. W.	7
* Watch-Point to the Light-Houſe of New-London, going to the northward of Fiſher's- Iſland, W. b. N. two leagues, and	W. N. W.	7
Block-Iſland to the S. W. end of † Fiſher's-Iſland	W. b. N.	11

* This is not to be depended on unleſs you are well acquainted with the tide, which ſets N. N. W. and S. S. E. acroſs the Race, and will be apt to ſet you on one ſide or the other.

† Latimer Rock bears N. from the E. part of the Harbour of Fiſher's-Iſland half a league diſtant. It has an *Iron Spire* on the top of it, about 13 feet high, with a white vane. The deepeſt channel is to the northward of the rock.

COURSES AND DISTANCES.

	By the Compass.	Leagues.
FROM the S. W. end of Fisher's-Island to New-London	N. N. W.	2 $\frac{1}{2}$
Point-Judith to Fisher's-Island,	W. $\frac{1}{2}$ S.	11
Point-Judith to go through the Race	W. b. S.	14
the * Race to the Light-House on Eaton's Neck	W. b. S.	32
Eaton's-Neck to Saunders'-Point	W. S. W.	9
Saunders'-Point to Hart-Island	S. W.	2 $\frac{2}{3}$
Hart-Island to Frog's-Point	S. S. W.	1 $\frac{1}{2}$
Frog's-Point to Hunt's (near Hell-Gate)	W. $\frac{1}{2}$ S.	1 $\frac{2}{3}$
Plumb-Island to Sharp's-Point (being up the Sound on Long-Island)	W. b. S.	19
Sharp's-Point to Crane's-Point	W.	2 $\frac{1}{2}$
Crane's-Point to †Huntington Harbour	W.	6 $\frac{1}{2}$
Montock-Point to Sandy-Point, or Light-house of New-York	W. S. W.	46
Sandy-Point to Cape-Henlopen	S. S. W. $\frac{1}{4}$ W.	37
Cape-Henlopen to Cape-Henry	S. S. W. $\frac{1}{4}$ W.	40
South-Shoal of Nantucket to Block-Island	W. b. N. $\frac{1}{2}$ N.	40
South-Shoal of Nantucket to Cape-Henry	S. W. b. W.	141
Gay-Head to Cape-Henlopen	W. S. W. $\frac{1}{4}$ S.	97
Gay-Head to Cape-Henry	S. W. $\frac{1}{2}$ S.	130
Holmes'-Hole in the north channel to Gay-Head your course is W. S. W. Your course from West-Chop to Wood's-Hole is	N. b. W.	3
Cape-Henry to Cape-Hatteras	S. $\frac{1}{2}$ E.	37
Cape-Henry to Roanok,	S.	25
Cape-Hatteras to Ocrecock Bar	W. S. W.	10.

* In sailing from the Race to Eaton's-Neck you will have from fifteen to twenty fathoms water, sandy bottom.

† A Light-House is erected at the mouth of this harbour, on Eaton's Neck, a point of land comprehended within the county of Suffolk which is the most Eastern of the three counties into which Nassau-Island is divided. For a description of the Light-House see page 67.

COURSES AND DISTANCES.

By the Compass. | Leagues.

FROM	By the Compass.	Leagues.
Roadcock to Cape-Hatteras	S. $\frac{1}{4}$ E.	15
Ocrecock to Cape-Lookout	S. W.	14
Cape-Lookout to Top-fail Inlet	W. S. W.	4
Top-fail Inlet to Bouge Inlet	S. W. b. W.	6
Bouge Inlet to Bear do.	S. W. b. W.	1 $\frac{1}{2}$
Bear do. to New River	S. W. b. W.	8 $\frac{1}{2}$
New River to Cape-Fear	S. W.	16
Cape-Hatteras to the S. W. point of Cape-Hatteras-Shoals	S. E. $\frac{1}{4}$ E.	11
Cape-Hatteras-Shoals to Cape-Lookout	W. S. W.	29
thence to the south point of the Shoals of ditto	S. b. E. $\frac{1}{2}$ E.	4
thence to Cape-Fear	W. S. W. $\frac{1}{4}$ W.	23
thence to the S. E. point of Fryingpan-Shoals, off do.	S. S. E.	7 $\frac{2}{3}$
thence to George-Town	W. b. S. $\frac{1}{4}$ W.	23
thence to the Shoals off do.	S. S. E.	8
thence to Cape-Roman	W.	4 $\frac{2}{3}$
thence to Charleston Light-House	W. S. W. $\frac{1}{4}$ W.	12
thence to Savannah	S. W. b. W. $\frac{1}{4}$ W.	29 $\frac{1}{2}$
thence to Tybee Light-House	E. S. E. $\frac{1}{2}$ E.	2 $\frac{1}{2}$
thence to Port-Royal	N. E. $\frac{1}{4}$ E.	6
thence to the entrance of the River St. John	S. $\frac{1}{2}$ W.	38 $\frac{1}{2}$
thence to Augustine-Bay	S. b. E. $\frac{1}{4}$ E.	18 $\frac{2}{3}$
thence to Cape-Caneveral	S. b. E. $\frac{1}{4}$ E.	31
thence to Shoals off do.	E.	1 $\frac{1}{2}$
thence to Cape-Florida	S.	45 $\frac{1}{2}$
thence to the S. W. point of Dry-Tortuga-Shoals	S. W. b. W. $\frac{1}{4}$ W.	59 $\frac{1}{2}$
thence to Cape-Sable	E. N. E. $\frac{3}{4}$ E.	33
thence to Cape-Roman	N. W. b. N. $\frac{1}{4}$ W.	20 $\frac{1}{2}$

COURSES AND DISTANCES.

By the Compass. | Leagues.

FROM thence to Charlotte Harbour	N. $\frac{1}{4}$ E.	21 $\frac{1}{2}$
thence to Spiritu-Santo-Bay	N. N. W. $\frac{1}{4}$ W.	9
thence to the Bay of Apalache	N. W. b. N. $\frac{1}{4}$ W.	56
thence to Cape St. Blaize	W. b. S. $\frac{1}{2}$ W.	12 $\frac{2}{3}$
thence to Pensacola-Bar	W. N. W.	34
thence to Mobile-Point	W. b. S. $\frac{1}{2}$ W.	15 $\frac{1}{3}$
thence to the mouth of the Mississippi	S. W. b. S. $\frac{1}{4}$ W.	24 $\frac{2}{3}$
Providence Harbour to Frozen-Key	W. N. W.	10
Frozen-Key to the North-West-Passage	W. $\frac{1}{2}$ N.	9
Turk's-Island to Phillip's-Reef	N. W.	9
Phillip's-Reef to Will's-Look-out	W. N. W.	7
Will's-Look-out to Bottle-Crick	W. N. W.	6
Bottle-Crick to Blubber-Cutt	W. S. W.	5
Blubber-Cutt to the N. W. Point	W. b. S.	5
the N. W. Point to West-Caukers	S. W.	4
the Point of Reef to the West-Harbour	E. b. N.	3
West-Harbour to the Little French Key	S. E. b. S.	6
the Little French Key to the West-Caukers	W. N. W.	6
West-Caukers to Muguannah	N. N. W.	12
the West point of Muguannah to Atwood's-Key	N. W.	8
Atwood's Keys to the French Keys	S. b. W.	8
the French Keys to Muguannah	E. b. S.	8
Muguannah to Hanneauger	S. S. W.	25
West-Caukers to Little Hanneauger	S. W. b. W.	8
West-Caukers to Great Hanneauger	S. W.	9
the N. W. point of Great Hanneauger to the Hogsties	N. b. W. $\frac{1}{4}$ W.	12
the Hogsties to the French Keys	N. N. E.	18

COURSES AND DISTANCES.

By the Compaſs. | Leagues.

FROM the Hogſies to Acklin's Keys	-	-	-	N. W. $\frac{1}{2}$ W.	12
— Acklin's Keys to Long-Iſland	-	-	-	N. b. W.	6
— Long-Iſland to the Bird Rock	-	-	-	N. b. E.	6
— the Bird Rock to Watling's-Key	-	-	-	N. $\frac{1}{2}$ W.	18
— Turk's-Iſland to the Great Salt-Key	-	-	-	S. W.	10
— Long-Key to the Five-Keys	-	-	-	W. b. N.	15

COURSES and DISTANCES on the South ſide of HISPANIOLA, &c. with Latitudes and Longitudes from Greenwich.

		True Courſe.	Leagues.	Latitude.
* FROM Altavella (long. $71^{\circ} 32'$ W.)	-	-	-	$17^{\circ} 29'$ N.
— ditto to the iſland of Beata	-	N. E.	$2\frac{1}{2}$	
— ditto to the Frails	-	N. N. W.	3	
— the Falſe Cape to the S. W. point of Beata	-	S. E. b. S.	5	
— Western Falſe Cape to Altavella	-	S. b. E.	6	
— ditto Falſe Cape to the Frails	-	S. $\frac{1}{2}$ E.	4	
— ditto to River Sambay	:	N. N. W.	6	
— Jacomet to Cape Bennet	:	W. S. W.	4	
— Cape Bennet to Avache or the Iſle of Aſh	:	W. $\frac{1}{2}$ S.	19	
— Avache to Point Abacco	:	W. b. S. $\frac{1}{4}$ S.	2 or 3	18 $1\frac{1}{2}$
— Point Abacco to Cape Tiberon (long. $74^{\circ} 23'$ W.)	:	W. b. N.	10 or 11	18 20
— Cape Tiberon to Navafa (long. $74^{\circ} 56'$ W.)	:	W. northerly.	12	18 $29\frac{1}{2}$
— Navafa to Cape Donna Maria (long. $74^{\circ} 18'$ W.)	:	N. E. b. E.	12	18 $37\frac{1}{2}$
— Cape Donna Maria to Cape Roſa	:		6	

COURSES AND DISTANCES.

	True Course.	(Leagues.)	Latitude.
FROM Cape Rosa to the Great Caymite	E. b. N. $\frac{1}{2}$ N.	12	
----- N. point of Caymite to W. end of Granive Bar		9	
----- Cape Donna Maria to Cape Nicolas (long. $73^{\circ} 31'$ W.)	N. E. b. E.	32	19 50
----- Cape Nicolas to the island of Great Caymite	S.	22	
----- ditto to the W. end of Great Granive	S. S. E.	15	
----- Cape Nicolas to the W. end of Tortugas (long. $73^{\circ} 1'$ W.)	N. E. b. E.	13	20 $5\frac{1}{2}$
----- the E. end of Tortugas to Cape Francois (long. $72^{\circ} 18'$ W.)	S. E. b. E.	10 or 11	19 $46\frac{1}{3}$
----- ditto to the Grange (long. $71^{\circ} 49\frac{1}{2}'$ W.)	E. b. S.	21	19 $54\frac{2}{3}$
Turk's Islands, <i>Grand Turk</i> , N. point (long. $71^{\circ} 10'$ W.)			21 $31\frac{1}{4}$
Sand Key (long. $71^{\circ} 15'$ W.)			21 11
S. E. side of Corcois Bank (long. $71^{\circ} 37'$ W.)			21 1
S. W. side of Little Corcois (long. $72^{\circ} 33'$ W.)			21 $36\frac{1}{4}$
From Corcois Key to Mayaguana	N. W. b. W.	20	
----- Corcois Key to the E. end of Heaneago	W.	15 or 16	
----- the S. W. end of Great Heaneago (lat. $20^{\circ} 56\frac{1}{2}'$ long. $73^{\circ} 46'$ W.) to Acklin's Key	N. N. W. $\frac{1}{2}$ W.	24	
----- W. end of ditto to French Keys (long. $73^{\circ} 43'$ W.)	N. b. E.	30	22 $42\frac{1}{2}'$
----- French Keys to Atwood's Key (W. point long. $73^{\circ} 54\frac{2}{3}'$ W.)	N. N. W. $\frac{1}{4}$ W.	10	23 9
----- French Keys to S. W. Point Mayaguana	E. S. E.	8	22 28
----- W. end of Mayaguana to W. Corcois	S. E. b. E.	20	21 35
----- W. Corcois Key to Cape Francois (long. $72^{\circ} 18'$ W.)	S. b. E.	36	19 $46\frac{2}{3}$
SOUTH SIDE OF JAMAICA.			
----- Port-Morant Harbour to ditto Keys (long. $75^{\circ} 55'$ W.)	S. E. b. S.	12 or 13	17 25
----- Port-Royal (long. $76^{\circ} 47'$ W.)			17 58
----- South Negril Point (long. $78^{\circ} 33'$ W.)			18 $15\frac{3}{4}$

COURSES AND DISTANCES.		True Course.	Leagues.	Latitude.
WINDWARD PASSAGE.				
FROM	The East end of Jamaica to St. Jago	<i>N. $\frac{1}{2}$ E.</i>	38	19 55
-----	Ditto to Cumberland Harbour	<i>N. N. E.</i>	47	19 56
-----	the E. end of Jamaica to Sphink's Bay	<i>N. E. b. N.</i>	51	
-----	ditto to Navala (long. $74^{\circ} 56'$ W.)	<i>E. N. E. $\frac{1}{2}$ N.</i>	22	18 $23\frac{1}{2}$
-----	ditto to Cape Donna Maria (long. $74^{\circ} 18'$ W.)	<i>E. N. E.</i>	32	18 $37\frac{1}{2}$
-----	Navala to Cape Tiberon (long. $74^{\circ} 23'$ W.)	<i>E. fotherly.</i>	12	18 20
-----	Cape Nicolas to the S. W. end of Heaneago (long. $73^{\circ} 46'$ W.)	<i>N. $\frac{1}{2}$ W.</i>	20	20 $56\frac{1}{2}$
-----	ditto to Cape Maize	<i>W. b. N. $\frac{1}{4}$ N.</i>	16	20 19
-----	the S. W. end of Heaneago to the Hogsties (long. $73^{\circ} 58'$ W.)	<i>N. N. W.</i>	12	21 $40\frac{2}{3}$
-----	the Hogsties to the south part of Acklin's Key	<i>N. N. W. $\frac{1}{2}$ W.</i>	15	
Acklin's Key	south part			22 13
From	Acklin's Key to south part of Long Key	<i>W. $\frac{1}{4}$ N.</i>	9	
-----	south end of Long Key to Bird Rocks	<i>N.</i>	8	22 49
-----	west part of Bird Rocks to south part of Watland's Island	<i>N.</i>	20	24 0
-----	Watland's Island to south end of Rum Key	<i>S. W.</i>	7	23 40
-----	Rum Key to Little Island	<i>N. W.</i>	5	23 50
-----	Watland Island to Little Island	<i>W. S. W.</i>	9	
-----	Rum Key to N. W. part of Long Island	<i>W. $\frac{1}{2}$ N.</i>	7	
-----	N. W. end of Long Island to Little Island	<i>N. E. b. E.</i>	5	
-----	ditto to Exuma Pond	<i>S. W.</i>	8	
-----	Exuma Pond to Ship's Channel, between the east end of the island Ethera and Little Island	<i>N. N. W.</i>	20	
-----	S. E. end of Cat Island to Little Island	<i>S. E.</i>	9	
-----	Ship's Channel to Powell's Point	<i>N. W.</i>	17	
-----	Powell's Point to James's Point	<i>N. W.</i>	6	
-----	James's Point to the entrance of Harbour Island	<i>N. N. W.</i>	7	

COURSES AND DISTANCES.

	True Course.	Leag.	Latitude.
FROM Harbour Island to Egg Island	W. b. S.	8	
— Egg Island to Providence Bar	S. W. $\frac{1}{4}$ W.	14	
From JAMAICA through the GULF.			
— Port-Royal Keys to Portland (long. 77° 24' W.)	S. W. southerly.		17° 42'
— Portland Point to Great Pedro Point	W. b. N.	10	
— Pedro Point to the easternmost Pedro Keys	S. $\frac{1}{4}$ E.	14	
— Pedro Keys to Boca Nova	S. S. W. $\frac{1}{4}$ W.	27	18 16
— Boca Nova to W. end of Jamaica	N. b. E.	50	
— the S. W. end of Jamaica to Grand Caminas	W. b. N. $\frac{1}{4}$ N.	56	
— ditto to Little Caminas	N. W. $\frac{1}{4}$ N.	35	
— Little Caminas to Caminbrack	E. N. E.	2 or 3	
Caminbrack			19 56
From Caminas to Great Caminas	W. S. W.	18	
South side of Great Caminas			19 21
N. W. point			19 27
From E. end of Grand Caminas to S. side of the Isle of Pines	N. W. $\frac{3}{4}$ W.	52	
— W. end of ditto to Cape Corientes	N. W. $\frac{1}{4}$ W.	76	
Cape Corientes			21 54
South side of the Isle of Pines			21 24
From Cape Corientes to Cape Antony	N. N. W.	5 or 6	
— the Havannah to the reef of Tortugas-Bank	N. W.	37	
— ditto to Looe-Key	N. E. b. E.	32	
Looe-Key			24 30
From the Havannah to Matanzas	E.	23	
Havannah			23 14
From Matanzas to Looe-Key	N. westerly.	25	
— ditto to North Key, Cuba	E.	20	
— North Key to W. end of Key Sel	N.	2	
— Key Sel to Double headed Shot	N. N. W.	4 or 5	
— ditto to Matanzas	W. S. W.	22	
— Double headed Shot to Cape Florida Reef	N. W. b. N.	18 or 19	
— ditto to Cat Key	N. E. b. N.	24	
— the Pan of Matanzas bearing S. by W. through the Gulf, the general course is	N. N. E.		

COURSES AND DISTANCES ON THE MOSQUITO SHORE.

True Course. | Leag. or miles.

From Black River (lat. 16° 0' N.) to Cape Cameron (lat. 16° 3' N.)	W. $\frac{1}{2}$ N.	4 l.
— Cape Cameron to Truxilla Point	W. $\frac{1}{4}$ S.	17 l.
— Black River to the island of Bonacca (lat. 16° 30' N.)	W. N. W.	25 l.
— Cape River to Prenaw	W.	2 m.
— Prenaw River to Sacrelyien Creek	W. $\frac{1}{4}$ S.	2 m.
— Sacrelyien Creek to Little Rock	W.	5 m.
— Little Rock to Great Rock	W. S. W. $\frac{1}{2}$ S.	12 m.
— Great Rock to Lyme's River	S. W. b. W.	9 m.
— Lyme's River to Old Romaine River	W.	14 m.
— Old Romaine River to Three Leagues Point	W.	12 m.
— Lyme's River to Cape Honduras	W. b. N.	27 m.
— Cape Honduras to the Hog Islands	W.	18 $\frac{1}{2}$ l.
— Cape Honduras (lat. 16° 2' N.) to Truxilla	S.	8 m.
— Cape Honduras to Utilla	W. b. N.	18 l.
— Utilla to Bishop and Clerks	S. W. nearest	15 l.
— Bishop and Clerks to Saales Keys	W.	21 l.
— Bonacca Middle to Middle Ballan	W. b. S.	16 l.
— Swans' Islands (lat. 17° 10' N.) to Bonacca	W. S. W.	40 l.
— Salmadines Reef, 3 leagues long, from Utilla	W. S. W. southerly	
— Triumph la Cruz distant from Bishop and Clerks	S. W. b. W.	6 l.
— Point Sal to Bishop and Clerks	E. b. N.	7 l.
— Cape Honduras to the Island of Bonacca	N. easterly	19 l.
— Cape Honduras to the East end of Rattan	N. W. b. W.	14 l.
— the West end of Rattan (lat. 16° 25' N.) to Utilla (lat. 16° 10' N.)	S. W. southerly	8 l.
— Black River to Patook River	E. b. N.	17 l.
— Patook River to Carratasco Lagoon	E. b. S.	17 l.
— Carratasco to False Cape (lat. 15° 10' N.)	E. b. S.	16 l.
— False Cape to Main Cape	S. E.	8 l.
— West end of Rattan to Utilla	S. W. southerly	8 l.
— Utilla to Trium le Crouze	S. W. b. W.	16 l.
— Trium le Crouze to Port Sal	W. N. W.	4 l.
— Port Sal to Port Ornoá	W. S. W.	7 l.
— Port Ornoá to the Entrance through the Reef, by the Sapadilla Keys	N. N. W.	10 l.

Southern Four Keys Bay lat. 17° 12' N. Key Boddell Bay 17° 8' N. English Key Bay 17° 9' N. Cape Gracias a Dios 14° 55' N. Hobbys Keys, 15° 48' N. Carratasco Shoals 15° 47' N.

T A B L E
 OF THE LATITUDES AND LONGITUDES
 OF THE
 PRINCIPAL HARBOURS AND CAPES,
 FROM THE
 ST. CROIX-RIVER (THE EASTERN BOUNDARY OF THE
 UNITED STATES OF AMERICA) TO THE
 MOUTH OF THE RIVER MISSISSIPPI.

NAMES OF PLACES.	Lats.		NAMES OF PLACES.	Lats.	
	North	West.		North	West.
Annapolis Royal (N. S.)	44,47	65,50	Brunswick	43,52	
Entrance of St. Croix River	45,00	67,00	Fort Hill (Portland)	43,43	
Island of Campo Bello (middle or west passage of Passama- quoddy Bay)	44,50	67,04	Portland Light-House	43,39	70,08
Wolves' Islands	44,48	66,50	Cape Elizabeth	43,33	70,06
East end of Grand Manan	44,40	66,50	Saco River entrance	43,28	70,17
Grand Manan N. head	44,43	66,55	Wood Island off do.	43,27	70,15
do. West end	44,30	67,04	Biddeford Town	43,30	70,21
do. S. W. Ledge of Seal Rock	44,25	67,06	Agamenticus Hill	43,16	70,36
Quady Head N. E. point	44,43	67,05	Cape Porpoise	43,21	70,20
Entrance of Machias River	44,35	66,56	Wells Harbour	43,19	70,28
Crofs Island off Machias Bay	44,31	67,23	Bald Head	43,13	70,30
Machias Seal Islands	44,27	66,52	Cape Neddock Nubble	43,10	70,31
Beal's Island South Point	44,24	67,37	York River	43,07	70,33
Little Manan Island	44,19	67,52	Boon Island	43,06	70,26
Gouldsborough Harbour	44,20	67,56	Boon Island Ledge	43,04	70,22
Mount Desert Rock	43,52	68,05	Portsmouth Light-House	43,04	70,39
Cranberry Island (near Mount Desert)	44,14	68,12	Portsmouth	43,05	70,41
Long Island, south of Mount Desert, or entrance of Blue Hill Bay	44,06	68,22	Isles of Shoals	42,57	70,33
Isle of Haut	44,00	68,05	Newburyport Lights on Plumb Island	42,48	70,46
Castine (formerly Penobscot)	44,24	68,46	Ipswich entrance	42,43	70,44
Matinicus Island	43,50	68,56	Squam (Pigeon Hill)	42,40	70,36
Cape Sable (south point of No- va Scotia)	42,24	65,35	Sandy Cove (or Bay)	42,40	70,34
Wooden Bald Rock	43,45	68,55	Cape Ann Light-Houses on Thatcher's Island	42,38	70,33
Island of Manheigan	43,44	69,15	East point of Cape Ann Har- bour	42,35	70,39
Pennequid Point	43,48	69,27	Light-House on Baker's Island	42,33	70,46
Townsend, or Booth Bay en- trance	43,49	69,04	Beverly	42,33	70,50
do. South point Rock	43,26	69,07	Salem	42,32	70,50
Bantum Ledges	43,42	69,03	Marblehead	42,30	70,49
Kennebeck River entrance	43,43	69,42	Nahant Point (northeast point of Boston harbour)	42,27	70,52
Seguine Island light-house	43,41	69,41	Boston light-house	42,21	70,53
Cape Small Point	43,40	69,47	Boston	42,23	70,58
Cashe's Ledge (shoalest part)	43,04	69,06	Cape Cod	42,05	70,14
Alden's Ledge, off Cape Eli- zabeth	43,28	70,00	Cape Cod Light-House	42,05	70,14
			Sandy Point or Malabar	41,34	70,00
			Shoal of Georges, East end	41,45	68,22
			do. of do. West end	41,35	68,54

TABLE OF LATITUDES AND LONGITUDES.

NAMES OF PLACES.	Lats.		Long.		NAMES OF PLACES.	Lats.		Long.	
	North.	West.	North.	West.		North.	West.	North.	West.
Nantucket Great Round Shoal	41,25	69,55	Cape-Hatteras	35,08	76, 7				
Nantucket Light-House	41,22	69,58	Occacocke Inlet	34,54	76,28				
Sancoty-head or Nantucket-Island	41,16	69,56	Newbern (N. Carolina)	35,14					
Tom-Nevers-head	41,14	69,57	Beaufort, (N. Carolina)	34,42					
Nantucket South-Shoal	40,44	69,55	Cape-Lookout	34,22	77,06				
Cape-Poge	41,25	70,27	Shoals off do. South part	34,12	77,01				
Squibnocket-Head (Southwesterly part of Martha's-Vineyard)	41,19	70,48	Gore-Sound (or entrance to Beaufort)	34,28	77,18				
Gay-Head light-house (West end of the Vineyard)	41,22	70,53	Bouge Inlet	34,33	77,38				
Noman's-Land-Island	41,16	70,52	Bear do.	34,32	77,42				
New-Bedford	41,41	70,57	New-River do.	34,27	77,52				
Buzzards Bay entrance	41,28	70,58	Top-Sail do.	34,18	78,04				
New-Port entrance	41,29	71,23	Wilmington, (N. C.)	34,11	78,21				
Rhode-Island Light House	41,28	71,30	Peterburgh (Georgia)	33,46	81,32				
Point-Judith	41,24	71,33	Cape-Fear	33,50	78,25				
Block-Island (Middle)	41,10	71,40	S. end of do. Shoals	33,40	78,23				
Montock-Point, East End of Long-Island	41,04	72,01	Fryingpan-Shoals off do.	33,30	78,17				
New-London, or entrance of Thames-River	41,22	72,16	George-Town	33,14	79,07				
Norwich on do	41,34	72,29	Shoals off do.	33,10	79,03				
New-Haven entrance	41,18	72,57	Cape-Roman	33,03	79,24				
New-York Light-House on Sandy-Point	40,28	74,07	Charleston Light-House	32,44	80,02				
* Perth-Amboy	40,35	74,25	North Eddisto Inlet	32,33	80,16				
Little-Egg-Harbour	39,30	74,33	South Eddisto do.	32,30	80,24				
Great-Egg-Harbour	39,18	74,55	Beaufort, (S. Carolina)	32,28					
Cape-May	38,57	74,58	Port Royal	32,05	80,52				
Cape-James	38,47	75,08	Tybee-Light	32,	80,57				
Light-House on Cape Henlopen	38,46	75,07	St. Catherine-Sound	31,37	81,18				
False-Cape	38,27	75,08	St. Simon's Sound	31,01	81,48				
Cape-Charles	37,11	76,10	Brunswick, (Georgia)	31,10					
Cape-Henry	36,58	76,17	Amelia Sound (or entrance of St. Mary's river)	30,35	82,00				
Norfolk (Virg.)	36,55	76,37	Talbert's Island, (Georgia)	30,20	82,00				
Peterburgh, (Vir.)	37,14	77,54	River St. John (Entrance)	30,09	81,55				
York-Town, (Vir.)	37,12	76,52	St. Augustine	29,40	81,45				
Richmond (Vir.)	37,30	77,50	Augustine Bay	29,41	81,49				
Annapolis (Mar.)	39,00		Cape Caneveral	28,12	80,52				
Alexandria, (Vir.)	38,55		Shoals off do.	28,15	80,47				
† Chincoteague-Shoals, on Maryland-Shore	38,00	75,05	Cooper's Hill (easternmost part of East Florida)	26,42	80,23				
Baltimore	39,20	76,50	Cape Florida	25,44	80,34				
Roanoke Inlet	35,47	76,08	Dry Tortuga Shoals	24,22	83,10				
Cape-Hatteras Shoals, S. West point	34,48	76,00	Cape Sable	25,00	81,37				
			Charlotte Harbour	26,43	82,55				
			Spiritu Santo Bay	27,46	83,22				
			Bay of Apalache	29,40	83,35				
			Cape St. Blaize	29,35	85,00				
			Penfacola Bar	30,20	86,42				
			Mobile Point	30,15	87,21				
			Mouth of the Mississippi River	29,00	88,37				

* This place lies at the head of Raviton, on a neck of land between Raviton river and Arthur Kull Sound, open to Sandy Hook, and has one of the best harbours on the continent. Vessels from sea may enter it in one tide, in almost any weather. It is not in a flourishing state.

† It bears about south from Cape Henlopen, two leagues from land.

To find the time of High Water at any place.

THE method commonly used for finding the time of high water will, at times, give the moon's age a day wrong; and the time of her southings consequently that of high water, will partake of that error. Even supposing the moon's southing were exactly found, yet the tides would generally differ, more or less, from the computed time; for the times of high water do not always happen at *equal* distances from each other, but at *different* distances, according to the time of the moon's age, and her situation with respect to the sun, or as the waters are acted upon by the *joint* attracting forces of the sun and moon, or the *difference* of their forces. Hence the times of the tides are not always in proportion to the distance of the moon from the meridian at the same places, but are variously affected by the action of the sun, which brings them on *sooner* when the moon is in her *first* and *third* quarters, and keeps them back *later* when she is in her *second* and *fourth* quarters. In the former case, the tides, were they raised by the sun alone, would be earlier than those raised by the moon alone; and in the latter case, they would be *later*, as may evidently be seen in the following Table of the times, or shifting of the Tides.

As these causes will make the times of high water at any place differ widely from those by common computation, pilots, and all concerned, would do well to use the following method, which will in general give the times of high water within 24 minutes of the truth, when the tides are not greatly influenced by the wind. Here it is necessary to observe, that the times of the new moon may, by the irregularity of her motion, differ half a day from those found in the First Table; and consequently the time of high water may differ 24 minutes from the truth, but seldom more, unless the tides are either accelerated or retarded by high winds.

The Use of the following Tables for finding the Moon's Age, and the Time of High Water at any Place.

Find the moon's age in the first table, by reckoning the number of days since last new moon; and against her age, in the second table, you will find hours and minutes, which being added to the time of high water at the given place, on the change and full days, will give the time of high water there past noon on the given day. If the sum exceed 12 hours, subtract 12 hours from it, and the remainder will shew the time of high water after midnight; but if the sum exceed 24 hours, subtract 24 hours from it, and the remainder will shew the time of high water after noon on the next day; which being reduced *back* to the given day, by deducting 12 hours 24 minutes, for each tide of ebb and flood, will give the time of high water on the given day.

EXAMPLE I.

What time will it be High Water at Charleston on the 26th of August, 1800?

Against 1800, in the first table, and under August, I find new moon the 19th day; and reckoning forward to the 26th, I find the moon will then be 7 days old. Then against 7, under the moon's age in the second table, stand 4h. 24m. to which I add 7 hours (the time of high water at

Charleston on the change and full days) gives 11h. 24m. the time of high water at *Charleston* in the afternoon of the given day.

EXAMPLE II.

Required the time of High water at Boston Light-House, December 15, 1803?

Against 1803, in the first table, and under December, I find it will be new moon on the 12th day; and counting forward to the 15th, I find that the moon will be 3 days old; then against 3, her age, in the second table, stand 1h. 56m. to which add 11h. 30m. (the time of high water at *Boston* light-house on the change and full days) gives 13h. 26m. the time of high water after noon; from which take 12h. 24m. for half a lunar day, or the time of one ebb and flood, the remainder, 1h. 2m. will be the time of high water at *Boston* light-house in the afternoon of the given day.

A TABLE shewing the Day of the Month the New Moon will fall on from the beginning of the Year 1799 till the end of the Year 1817, according to the New Stile. And also a TABLE of the shifting of the Tide, by which the *Error*, in the common method of reckoning the time of High Water to fall 49 minutes later every day after the Full and Change, will evidently appear.

TABLE I.

TABLE II.

Years.	Ja.	Feb.	Ma.	Apr.	May.	Ju.	Jul.	Aug.	Sept.	Oct.	Nov.	Dec.	Moon's Age.	Tim. An.
	N M	N M	N M	N M	N M	N M	N M	N M	N M	N M	N M	N M		
1799	6	4	6	5	4	3	2	1. 30	29	28	27	26	1	H Water later each day after the new & full moon
1800	25	23	24	22	22	20	20	19	17	17	15	15	2	H M
1801	13	12	13	12	11	10	9	8	6	6	4	4	3	Afternoon.
1802	3	1	3	1	1. 30	29	28	27	25	25	23	23	4	
1803	22	20	22	20	20	18	18	16	15	14	13	12	5	Afternoon.
1804	11	9	10	8	8	6	6	5	3	2	1	1. 30	6	
1805	29	28	29	28	27	26	25	24	22	22	20	20	7	After Midnight.
1806	18	17	19	17	17	16	15	13	12	11	10	9	8	
1807	8	6	7	5	5	3	3	2	1. 30	29	28	27	9	After Midnight.
1808	26	25	27	25	25	23	22	20	19	18	17	17	10	
1809	15	14	16	15	14	13	12	10	8	8	6	6	11	After Midnight.
1810	4	3	5	3	3	1	1. 30	29	27	27	25	25	12	
1811	23	22	22	21	20	19	18	17	16	15	14	13	13	From the change to the full, the Moon comes to the Meridian in the afternoon, and from the full to the change, the comes to the meridian after midnight.
1812	12	10	12	10	10	8	8	6	5	4	3	3	14	
1813	1	—	1	29	29	27	27	25	24	23	22	21	15	From the change to the full, the Moon comes to the Meridian in the afternoon, and from the full to the change, the comes to the meridian after midnight.
1814	20	18	20	19	18	17	16	15	13	13	11	11	16	
1815	9	8	8	7	6	5	4	4	2	1	29	29	17	From the change to the full, the Moon comes to the Meridian in the afternoon, and from the full to the change, the comes to the meridian after midnight.
1816	27	26	27	26	25	24	23	22	20	20	18	18	18	
1817	17	15	17	15	15	13	13	11	10	9	8	7	19	

T I D E T A B L E,

S H E W I N G

The time of High Water at Full and Change of the Moon
at the following places.

[NOTE. H. stands for hours, M. for minutes, and F. for feet.]

	H.	M.	F.
Boston Light-House,	11	30	12
Marblehead, Salem, and Cape-Ann,	11	30	12
Newburyport and Portsmouth,	11	15	10
Portland and Casco-Bay,	10	45	9
Kennebeck and Sheepscut,	10	45	9
Townsend, Broad-Bay, and George's-River,	10	45	9
Penobscot-River and Fox-Island,	10	45	10
Mount Desert and Goulsborough,	11	—	12
Machias,	11	—	12
Passamaquoddy River and Moose Island,	11	30	25
Plymouth, Cape Cod, and Manomoy Point,	11	30	6
Race Point,	10	45	6
Nantucket,	12	3	6
Tarpaulin Cove,	9	52	5
Gay-Head, New-Bedford, Block-Island, and Rhode-Island Har- bours,	7	37	5
New-Haven,	11	—	8
New-London, New-York, Elizabeth-Town Point, and Cape- Henlopen,	8	54	5
Sandy-Hook, (New-York)	6	37	5
Cape-Henry and Cape-Charles,*	7	—	4
Charleston, (S. C.)	7	—	6
Port-Royal,	8	15	—
St. Simon's-Sound,	9	—	—
St. Simon's-Bar,	7	30	—
St. Simon's-Offing,	6	45	—
St. Anastatia's-Island,	7	30	—
Florida-Keys,	8	50	—

* The Tides in these rivers are governed by the winds. When it blows for two or three days at N. or N. W. the flood tide does not rise two feet; but when the wind blows a gale to the S. E. or E. S. E. the tide rises 4 or 5 feet.

L A W S

Relating to *Masters and Seamen* in the Merchants' Service.

Regulation of Seamen.

BY a Law of the United States for the Government and Regulation of Seamen in the Merchants' service, it is provided,

That every master or commander of any ship or vessel bound from a port in the United States to any foreign port, or of any ship or vessel of the burthen of fifty tons or upwards, bound from a port in one state, to a port in any other than an adjoining state, shall, before he proceed on such voyage, make an agreement in writing or in print, with every seaman or mariner on board such ship or vessel (except such as shall be apprentice or servant to himself or owners) declaring the voyage or voyages, term or terms of time, for which such seaman or mariner shall be shipped. And if any master or commander of such ship or vessel shall carry out any seaman or mariner (except apprentices or servants as aforesaid) without such contract or agreement being first made and signed by the seamen and mariners, such master or commander shall pay to every such seaman or mariner the highest price or wages which shall have been given at the port or place where such seaman or mariner shall have been shipped, for a similar voyage, within three months next before the time of such shipping: *Provided*, such seaman or mariner shall perform such voyage: or if not, then for such time as he shall continue to do duty on board such ship or vessel; and shall moreover forfeit twenty dollars for every such seaman or mariner, one half to the use of the person prosecuting for the same, the other half to the use of the United States: and such seaman or mariner, not having signed such contract, shall not be bound by the regulations, nor subject to the penalties and forfeitures contained in this act.

At the foot of every such contract, there shall be a memorandum in writing, of the day and the hour on which such seaman or mariner, who shall so ship and subscribe, shall render themselves on board, to begin the voyage agreed upon. And if any such seaman or mariner shall neglect to render himself on board the ship or vessel, for which he has shipped, at the time mentioned in such memorandum, and if the master, commander, or other officer of the ship or vessel, shall, on the day on which such neglect happened, make an entry in the log-book of such ship or vessel, of the name of such seaman or mariner, and shall in like manner note the time that he so neglected to render himself (after the time appointed); every such seaman or mariner shall forfeit for every hour which he shall so neglect to render himself, one day's pay, according to the rate of wages agreed upon, to be deducted out of his wages. And if any such seaman or mariner shall wholly neglect to render himself on board of such ship or vessel, or having rendered himself on board, shall afterwards desert and escape, so that the ship or vessel proceed to sea without him, every such seaman or mariner shall for-

feit and pay to the master, owner or consignee of the said ship or vessel, a sum equal to that which shall have been paid to him by advance at the time of signing the contract, over and besides the sum so advanced, both which sums shall be recoverable in any court, or before any justice or justices of any state, city, town or county within the United States, which, by the laws thereof, have cognizance of debts of equal value, against such seaman or mariner, or his surety or sureties, in case he shall have given surety to proceed the voyage.

If the mate or first officer under the master, and a majority of the crew of any ship or vessel, bound on a voyage to any foreign port, shall, after the voyage is begun (and before the ship or vessel shall have left the land) discover that the said ship or vessel is too leaky, or is otherwise unfit in her crew, body, tackle, apparel, furniture, provisions or stores, to proceed on the intended voyage, and shall require such unfitness to be inquired into, the master or commander shall upon the request of the said mate (or other officer) and such majority, forthwith proceed to or stop at the nearest or most convenient port or place where such inquiry can be made, and shall there apply to the judge of the district court, if he shall there reside, or if not, to some justice of the peace of the city, town or place, taking with him two or more of the said crew who shall have made such request; and thereupon such judge or justice is hereby authorized and required to issue his precept directed to three persons in the neighbourhood, the most skilful in maritime affairs that can be procured, requiring them to repair on board such ship or vessel, and to examine the same in respect to the defects and insufficiencies complained of, and to make report to him the said judge or justice, in writing under their hands, or the hands of two of them, whether in any, or in what respect the said ship or vessel is unfit to proceed on the intended voyage, and what addition of men, provisions or stores, or what repairs or alterations in the body, tackle or apparel will be necessary; and upon such report the said judge or justice shall adjudge and determine, and shall endorse on the said report his judgment, whether the said ship or vessel is fit to proceed on the intended voyage; and if not, whether such repairs can be made or deficiencies supplied where the ship or vessel then lies, or whether it be necessary for the said ship or vessel to return to the port from whence she first sailed, to be there refitted; and the master and crew shall in all things conform to the said judgment; and the master or commander shall, in the first instance, pay all the costs of such view, report, and judgment, to be taxed and allowed on a fair copy thereof, certified by the said judge or justice. But if the complaint of the said crew shall appear upon the said report and judgment, to have been without foundation, then the said master, or the owner or consignee of such ship or vessel, shall deduct the amount thereof, and of reasonable damages for the detention (to be ascertained by the said judge or justice) out of the wages growing due to the complaining seamen or mariners. And if after such judgment, such ship or vessel is fit to proceed on her intended voyage, or after procuring such men, provisions, stores, repairs or alterations as may be directed, the said seamen or mariners, or either of them, shall refuse to proceed on the voyage, it shall and may be lawful for any justice of the peace to commit by warrant under his hand and seal, every such seaman or mariner (who shall so refuse) to the common gaol of the county, there to remain without bail or main-prize, until he shall have paid double the sum advanced to him at the time of subscribing the contract for the voyage, together with such reasonable costs as shall be allowed by the said justice, and inserted in the said warrant, and the surety or sureties of such seaman or mariner (in case he or they shall have given any) shall remain liable for such payment.

If any person shall harbour or secrete any seaman or mariner belonging to any ship or vessel, knowing them to belong thereto, every such person, on conviction thereof before any court in the city, town or county where he, she or they may reside, shall forfeit and pay ten dollars for every day which he, she or they shall continue so to harbour or secrete such seaman or mariner, one half to the use of the person prosecuting the same, the other half to the use of the United States; and no sum exceeding one dollar, shall be recoverable from any seaman or mariner by any one person, for any debt contracted during the time such seaman or mariner shall actually belong to any ship or vessel, until the voyage for which such seaman or mariner engaged shall be ended.

If any seaman or mariner, who shall have subscribed such contract as is herein before subscribed, shall absent himself from on board the ship or vessel in which he shall so have shipped, without leave of the master or officer commanding on board; and the mate, or other officer having charge of the log-book, shall make an entry therein of the name of such seaman or mariner, on the day on which he shall so absent himself; and if such seaman or mariner shall return to his duty within forty-eight hours, such seaman or mariner shall forfeit three days pay for every day which he shall so absent himself, to be deducted out of his wages: but if any seaman or mariner shall absent himself for more than forty-eight hours at one time, he shall forfeit all the wages due to him, and all his goods and chattels which were on board the said ship or vessel, or in any store where they may have been lodged at the time of his desertion, to the use of the owner of the ship or vessel, and moreover shall be liable to pay to him or them all damages which he or they may sustain by being obliged to hire other seamen or mariners in his or their place, and such damages shall be recovered with costs, in any court or before any justice or justices having jurisdiction of the recovery of debts to the value of ten dollars or upwards.

Every seaman or mariner shall be entitled to demand and receive from the master or commander of the ship or vessel to which they belong, one third part of the wages which shall be due to him at every port where such ship or vessel shall unlade and deliver her cargo before the voyage be ended, unless the contrary be expressly stipulated in the contract: and as soon as the voyage is ended, and the cargo or ballast be fully discharged at the last port of delivery, every seaman or mariner shall be entitled to the wages which shall be then due according to his contract: and if such wages shall not be paid within ten days after such discharge, or if any dispute shall arise between the master and seamen or mariners touching the said wages, it shall be lawful for the judge of the district where the said ship or vessel shall be, or in case his residence be more than three miles from the place, or of his absence from the place of his residence, then for any judge or justice of the peace, to summon the master of such ship or vessel to appear before him, to shew cause why process should not issue against such ship or vessel, her tackle, furniture, and apparel, according to the course of admiralty-courts, to answer for the said wages: and if the master shall neglect to appear, or appearing shall not shew that the wages are paid, or otherwise satisfied, or forfeited, and if the matter in dispute shall not be forthwith settled, in such case the judge or justice shall certify to the clerk of the court of the district, that there is sufficient cause of complaint whereon to found admiralty process, and thereupon the clerk of such court shall issue process against the said ship or vessel, and the suit shall be proceeded on in the said court, and final judgment be given according to the course of admiralty-courts in such cases used; and in such suit, all the seamen or mariners (having cause of com-

plaint of the like kind against the same ship or vessel) shall be joined as complainants; and it shall be incumbent on the master or commander to produce the contract and log-book, if required, to ascertain any matters in dispute; otherwise the complainants shall be permitted to state the contents thereof, and the proof of the contrary shall lie on the master or commander; but nothing herein contained shall prevent any seaman or mariner from having or maintaining any action at common law for the recovery of his wages, or from immediate process out of any court having admiralty jurisdiction, wherever any ship or vessel may be found, in case she shall have left the port of delivery where her voyage ended, before payment of the wages, or in case she shall be about to proceed to sea before the end of the ten days next after the delivery of her cargo or ballast.

If any seaman or mariner, who shall have signed a contract to perform a voyage, shall at any port or place desert, or shall absent himself from such ship or vessel, without leave of the master, or officer commanding in the absence of the master, it shall be lawful for any justice of peace within the United States (upon the complaint of the master) to issue his warrant to apprehend such deserter, and bring him before such justice; and if it shall then appear by due proof that he has signed a contract with the intent and meaning of this act, and that the voyage agreed for is not finished, altered, or the contract otherwise dissolved, and that such seaman or mariner has deserted the ship or vessel, or absented himself without leave, the said justice shall commit him to the house of correction or common gaol of the city, town, or place, there to remain until the said ship or vessel shall be ready to proceed on her voyage, or till the master shall require his discharge, and then to be delivered to the said master, he paying all cost of such commitment, and deducting the same out of the wages due to such seaman or mariner.

Every ship or vessel belonging to a citizen or citizens of the United States, of the burthen of one hundred and fifty tons or upwards, navigated by ten or more persons in the whole, and bound on a voyage without the limits of the United States, shall be provided with a chest of medicines, put up by some apothecary of known reputation, and accompanied by directions for administering the same; and the said medicine shall be examined by the same or some other apothecary, once at least in every year, and supplied with fresh medicines in the place of such as shall have been used or spoiled; and in default of having such medicine-chest so provided, and kept fit for use, the master or commander of such ship or vessel shall provide and pay for all such advice, medicine, or attendance of physicians, as any of the crew shall stand in need of in case of sickness at every port or place where the ship or vessel may touch or trade at during the voyage, without any deduction from the wages of such sick seaman or mariner.

Every ship or vessel, belonging as aforesaid, bound on a voyage across the Atlantic ocean, shall, at the time of leaving the last port from whence she sails, have on board, well secured under deck, at least sixty gallons of water, one hundred pounds of salted flesh meat, and one hundred pounds of wholesome ship-bread, for every person on board such ship or vessel, over and besides such other provisions, stores, and live stock as shall by the master or passengers be put on board, and in like proportion for shorter or longer voyages; and in case the crew of any ship or vessel, which shall not have been so provided, shall be put upon short allowance in water, flesh, or bread during the voyage, the master or owner of such ship or vessel shall pay to each of the crew one day's wages beyond the wages agreed on for every day they shall be so put to short allowance, to be recovered in the same manner as their stipulated wages.

Regulation of the Fisheries.

BY a law of the United States concerning certain fisheries, and for the regulation and government of the fishermen employed therein, it is provided, that

No ship or vessel of twenty tons or upwards, employed in those fisheries, shall be entitled to the allowance therein granted, unless the skipper or master thereof shall, before he proceeds on any fishing voyage, make an agreement, in writing or in print, with every fisherman employed therein, excepting only any apprentice or servant of himself or owner; and in addition to such terms of shipment as may be agreed on, shall in such agreement express whether the same is to continue for one voyage, or for the fishing season, and shall also express that the fish or the proceeds of such fishing voyage or voyages which may appertain to the fishermen, shall be divided among them in proportion to the quantities or number of said fish they may respectively have caught; which agreement shall be endorsed or countersigned by the owner of such fishing vessel or his agent; and if any fisherman, having engaged himself for a voyage or for the fishing season, in any fishing vessel, and signed an agreement therefor as aforesaid, shall thereafter and while such agreement remains in force and to be performed, desert or absent himself from such vessel, without leave of the master or skipper thereof, or of the owner or his agent, such deserter shall be liable to the same penalties as deserting seamen or mariners are subject to in the merchants' service, and may in the like manner, and upon the like complaint and proof, be apprehended and detained; and all costs of process and commitment if paid by the master or owner, shall be deducted out of the share of fish, or proceeds of any fishing voyage to which such deserter had or shall become entitled. And any fisherman, having engaged himself as aforesaid, who shall during such fishing voyage, refuse or neglect his proper duty on board the fishing vessel, being thereto ordered or required by the master or skipper thereof, or shall otherwise resist his just commands, to the hindrance or detriment of such voyage, beside being answerable for all damages arising thereby, shall forfeit to the use of the owner of such vessel, his share of the allowance, which shall be paid upon such voyage as is herein granted.

Where an agreement or contract shall be so made and signed, for a fishing voyage or for the fishing season, and any fish which may have been caught on board such vessel during the same, shall be delivered to the owner or to his agent, for cure, and shall be sold by said owner or agent, such vessel shall for the term of six months after such sale, be liable and answerable for the skipper's and every other fisherman's share of such fish, and may be proceeded against in the same form, and to the same effect as any other vessel is by law liable, and may be proceeded against for the wages of seamen or mariners in the merchants' service. And upon such process for the value of a share or shares of the proceeds of fish delivered and sold as aforesaid, it shall be incumbent on the owner or his agent, to produce a just account of the sales and division of such fish according to such agreement or contract, otherwise the said vessel shall be answerable upon such process for what may be the highest value of the share or shares demanded. But in all cases, the owner of such vessel or his agent, appearing to answer to such process, may offer thereupon his account of general supplies made for such fishing voyage, and of other supplies therefor made, to either of the demandants, and shall be allowed to produce evidence thereof in answer to their demands respectively, and judgment shall be rendered upon such process, for the respective balances, which upon such an inquiry shall appear: *Provided always, That*

When process shall be issued against any vessel liable as aforesaid, if the owner thereof or his agent will give bond to each fisherman in whose favour such process shall be instituted, with sufficient security, to the satisfaction of two justices of the peace, one of whom shall be named by such owner or agent, and the other by the fisherman or fishermen pursuing such process; or if either party shall refuse, then the justice first appointed shall name his associate, with condition to answer and pay whatever sum shall be recovered by him or them on such process, there shall be an immediate discharge of such vessel: *Provided*, That nothing herein contained shall prevent any fisherman from having his action at common law, for his share or shares of fish, or the proceeds thereof as aforesaid.

Bounty on Vessels employed in carrying on the Bank and other Cod-Fisheries.

THERE shall be paid on the last day of December, annually, to the owner of every vessel, or his agent, by the collector of the district where such vessel may belong, that shall be qualified agreeably to law, for carrying on the bank and other cod-fisheries, and that shall actually have been employed therein at sea for the term of four months at the least, of the fishing season, next preceding, which season is accounted to be from the last day of February to the last day of November in every year, for each and every ton of such vessel's burthen, according to her admeasurement as licensed or enrolled, if of twenty tons and not exceeding thirty tons, one and a half dollars, and if above thirty tons, two and a half dollars, of which allowance aforesaid three eighths shall accrue and belong to the owner of such fishing vessel, and the other five eighths thereof shall be divided by him, his agent or lawful representative, to and among the several fishermen who shall have been employed in such vessel during the season aforesaid, or a part thereof, as the case may be, in such proportions as the fish they shall respectively have taken may bear to the whole quantity of fish taken on board such vessel during such season: *Provided*, That the allowance aforesaid on any one vessel, for one season, shall not exceed one hundred and seventy dollars.

On the last day of December annually, as aforesaid, there shall also be paid to the owner of every fishing boat or vessel of more than five tons, and less than twenty tons, or to his agent or lawful representative, by the collector of the district where such boat or vessel may belong, the sum of one dollar upon every ton admeasurement of such boat or vessel; which allowance shall be accounted for as part of the proceeds of the fares of said boat or vessel, and shall accordingly be so divided among all persons interested therein: *Provided however*, That this allowance shall be made only to such boats or vessels as shall have actually been employed at sea in the cod fishery, for the term of four months at the least, of the preceding season: *And provided also*, that such boat or vessel shall have landed in the course of said preceding season, a quantity of fish not less than twelve quintals for every ton of her admeasurement; the said quantity of fish to be ascertained when dried and cured fit for exportation and according to the weight thereof, as the same shall weigh at the time of delivery when actually sold; which account of the weight, with the original adjustment and settlement of the fare or fares among

the owners and fishermen, together with a written account of the length, breadth and depth of said boat or vessel, and the time she has actually been employed in the fishery in the preceding season, shall in all cases be produced and sworn or affirmed to, before the said collector of the district in order to entitle the owner, his agent or lawful representative, to receive the allowance aforesaid. And if at any time within one year after payment of such allowance, it shall appear that any fraud or deceit has been practised in obtaining the same, the boat or vessel upon which such allowance shall have been paid, if found within the district aforesaid, shall be forfeited; otherwise the owner or owners having practised such fraud or deceit, shall forfeit and pay one hundred dollars.

The owner or owners of every fishing vessel of twenty tons and upwards, his or their agent or lawful representative, shall, previous to receiving the allowance which is provided for in this act, produce to the collector who is authorized to pay the same, the original agreement or agreements which may have been made with the fishermen employed on board such vessel, as is herein before required, and also a certificate to be by him or them subscribed, therein mentioning the particular days on which such vessel sailed and returned on the several voyages or fares, she may have made in the preceding fishing season, to the truth of which they shall swear or affirm before the collector aforesaid.

No ship or vessel of twenty tons or upwards, employed as aforesaid, shall be entitled to the allowance granted by this act, unless the skipper or master thereof shall, before he proceeds on any fishing voyage, make an agreement in writing or in print, with every fisherman employed therein, excepting only an apprentice or servant of himself or owner; and in addition to such terms of shipment as may be agreed on, shall in such agreement express whether the same is to continue for one voyage or for the fishing season, and shall also express that the fish or the proceeds of such fishing voyage or voyages which may appertain to the fishermen, shall be divided among them in proportion to the quantities or number of said fish they may respectively have caught; which agreement shall be endorsed or countersigned by the owner of such fishing vessel, or his agent.

Any person who shall declare falsely in any oath or affirmation required by this act, being duly convicted thereof in any court of the United States, having jurisdiction of such offence, shall suffer the same penalties as are provided for false swearing or affirming, by "An act to provide more effectually for the collection of the duties imposed by law on goods, wares, and merchandize imported into the United States, and on the tonnage of ships or vessels."

This act to be in force until the 16th day of February, 1799, and from thence to the end of the next session of Congress.

According to the provision above mentioned, this allowance is increased $33\frac{1}{3}$ per cent after the 1st day of Jan. 1798: and all vessels following the directions of this act, are now entitled to bounty according to the following

T A B L E.

	per ton,	Dol.	Cents.
Vessels of 5 tons, and not exceeding 20 ton,		1	33 $\frac{1}{3}$
— 20	— 30	2	00
— above 30 tons		3	33 $\frac{1}{3}$

Abstract of the Laws of the United States concerning Vessels to be employed in the Coasting Trade and Fisheries.

IN order to the licensing any ship or vessel for carrying on the coasting trade or fisheries, the husband or managing owner, together with the master thereof, with one or more sureties to the satisfaction of the collector granting the same, shall become bound to pay to the United States, if such ship or vessel be of the burthen of five tons, and less than twenty tons, the sum of one hundred dollars; and if twenty tons, and not exceeding thirty tons, the sum of two hundred dollars; and if above thirty tons, and not exceeding sixty tons, the sum of five hundred dollars; and if above sixty tons, the sum of one thousand dollars, in case it shall appear, within two years from the date of the bond, that such ship or vessel has been employed in any trade, whereby the revenue of the United States has been defrauded during the time license granted to such ship or vessel remained in force; and the master of such ship or vessel shall also swear, or affirm, that he is a citizen of the United States, and that such license shall not be used for any other vessel, or any other employment, than that for which it is specially granted, or in any trade or business, whereby the revenue of the United States may be defrauded; and if such ship or vessel be less than twenty tons burthen, the husband or managing owner shall swear, or affirm, that she is wholly the property of a citizen or citizens of the United States.

No license, granted to any ship or vessel, shall be considered in force, any longer than such ship or vessel is owned, and of the description set forth in such license, or for carrying on any other business or employment, than that for which she is specially licensed; and if any ship or vessel be found with a forged or altered license, or making use of a license granted for any other ship or vessel, such ship or vessel, with her tackle, apparel, and the cargo found on board her, shall be forfeited.

Every ship or vessel of twenty tons or upwards (other than such as are registered) found trading between district and district, or between different places in the same district, or carrying on the fishery, without being enrolled and licensed, or if less than twenty tons, and not less than five tons, without a license, in manner as provided by this act, such ship or vessel, if laden with goods, the growth or manufacture of the United States, (distilled spirits excepted) or in ballast, shall pay the same fees in every port of the United States at which she may arrive, as ships or vessels not belonging to the citizen or citizens of the United States, and if she have on board any articles of foreign growth or manufacture, or distilled spirits, other than sea-stores, the ship or vessel, together with her tackle, apparel, and furniture, and the lading found on board, shall be forfeited; *Provided*, however, if such ship or vessel be at sea, at the expiration of the time, for which the license was given, and the master of such ship or vessel shall swear or affirm that such was the case, and shall also within forty-eight hours after his arrival deliver to the collector of the district in which he shall first arrive the license which shall have expired, the forfeiture aforesaid shall not be incurred, nor shall the ship or vessel be liable to pay the fees and tonnage aforesaid.

If any ship or vessel, enrolled or licensed as aforesaid, shall proceed on a foreign voyage, without first giving up her enrolment and license to the collector of the district comprehending the port from which she is about to proceed on such foreign voyage, and being duly registered by such collector, every such ship or vessel, together with her tackle, apparel and furniture, and the goods, wares and merchandize, so imported therein, shall be liable to lei-

zure and forfeiture : *Provided always*, if the port from which such ship or vessel is about to proceed on such foreign voyage, be not within the district where such ship or vessel is enrolled, the collector of such district shall give to the master of such ship or vessel a certificate, specifying that the enrolment and licence of such ship or vessel is received by him, and the time when it was so received ; which certificate shall afterwards be delivered by the said master to the collector, who may have granted such enrolment and licence.

The licence granted to any ship or vessel shall be given up to the collector of the district, who may have granted the same, within three days after the expiration of the time, for which it was granted, in case such ship or vessel be then within the district, or if she be absent, at that time, within three days from her first arrival within the district afterwards, or if she be sold out of the district, within three days after the arrival of the master within any district, to the collector of such district, taking his certificate therefor ; and if the master thereof shall neglect or refuse to deliver up the licence, as aforesaid, he shall forfeit fifty dollars ; but if such licence shall have been previously given up to the collector of any other district, as authorized by this act, and a certificate thereof, under the hand of such collector, be produced by such master, or if such licence be lost, or destroyed, or unintentionally mislaid, so that it cannot be found, and the master of such ship or vessel shall make and subscribe an oath or affirmation, that such licence is lost, destroyed, or unintentionally mislaid, as he verily believes, and that the same, if found, shall be delivered up, as is herein required, then the aforesaid penalty shall not be incurred. And if such licence shall be lost, destroyed, or unintentionally mislaid, as aforesaid, before the expiration of the time for which it was granted, upon the like oath or affirmation being made and subscribed by the master of such ship or vessel, the said collector is hereby authorized and required, upon application being made therefor, to license such ship or vessel anew.

It shall and may be lawful for the owner or owners of any licensed ship or vessel to return such licence to the collector who granted the same, at any time within the year for which it was granted, who shall thereupon cancel the same, and shall license such vessel anew, upon the application of the owner or owners, and upon the conditions herein before required, being complied with ; and in case the term for which the former licence was granted shall not be expired, an abatement of the tonnage of six cents per ton shall be made, in the proportion of the time so unexpired.

Every licensed ship or vessel shall have her name, and the port to which she belongs, painted on her stern, in the manner as is provided for registered ships or vessels ; and if any licensed ship or vessel be found without such painting, the owner or owners thereof shall pay twenty dollars.

When the master of any licensed ship or vessel, ferry-boats excepted, shall be changed, the new master, or, in case of his absence, the owner or one of the owners thereof, shall report such change to the collector residing at the port where the same may happen, if there be one, otherwise to the collector residing at any port, where such ship or vessel may next arrive, who, upon the oath or affirmation of such new master, or, in case of his absence, of the owner or one of the owners, that he is a citizen of the United States, and that such ship or vessel shall not, while such licence continues in force, be employed in any manner whereby the revenue of the United States may be defrauded, shall endorse such change on the licence, with the name of the new master ; and when any change shall happen, as aforesaid, and such change shall not be reported, and the endorsement made of such

change, as is herein required, such ship or vessel, found carrying on the coasting trade or fisheries, shall be subject to pay the same fees and tonnage, as a vessel of the United States having a register, and the said new master shall forfeit and pay the sum of ten dollars.

The master or commander of every ship or vessel licensed for carrying on the coasting trade, destined from a district in one state to a district in the same, or an adjoining state on the sea-coast, or on a navigable river, having on board either distilled spirits in casks exceeding five hundred gallons, wine in casks exceeding two hundred and fifty gallons, or in bottles exceeding one hundred dozens, sugar in casks or boxes exceeding three thousand pounds, tea in chests or boxes exceeding five hundred pounds, coffee in casks or bags exceeding one thousand pounds, or foreign merchandize in packages, as imported, exceeding in value four hundred dollars, or goods, wares or merchandize, consisting of such enumerated or other articles of foreign growth or manufacture, or of both, whose aggregate value exceeds eight hundred dollars, shall, previous to the departure of such ship or vessel from the port where she may then be, make out and subscribe duplicate manifests of the whole of such cargo on board such ship or vessel, specifying in such manifests the marks and numbers of every cask, bag, box, chest or package containing the same, with the name and place of residence of every shipper and consignee, and the quantity shipped by and to each; and if there be a collector or surveyor, residing at such port, or within five miles thereof, he shall deliver such manifests to the collector, if there be one, otherwise to the surveyor, before whom he shall swear or affirm, to the best of his knowledge and belief, that the goods therein contained were legally imported, and the duties thereupon paid or secured, or if spirits distilled within the United States, that the duties thereupon have been paid or secured, whereupon the said collector or surveyor shall certify the same on the said manifests, one of which he shall return to the said master, with a permit, specifying thereon, generally, the lading on board such ship or vessel, and authorizing him to proceed to the port of his destination. And if any ship or vessel, being laden and destined, as aforesaid, shall depart from the port where she may then be, without the master or commander having first made out and subscribed duplicate manifests of the lading on board such ship or vessel, and in case there be a collector or surveyor residing at such port, or within five miles thereof, without having previously delivered the same to the said collector or surveyor, and obtaining a permit, in manner as is herein required, such master or commander shall pay one hundred dollars.

The master or commander of every ship or vessel licensed for carrying on the coasting trade, having on board either distilled spirits in casks exceeding five hundred gallons, wine in casks exceeding two hundred and fifty gallons, or in bottles exceeding one hundred dozens, sugar in casks or boxes exceeding three thousand pounds, tea in chests or boxes exceeding five hundred pounds, coffee in casks or bags exceeding one thousand pounds, or foreign merchandize in packages, as imported, exceeding in value four hundred dollars, or goods, wares or merchandize, consisting of such enumerated or other articles of foreign growth or manufacture, or of both, whose aggregate value exceeds eight hundred dollars, and arriving from a district in one state, at a district in the same or an adjoining state on the sea-coast, or on a navigable river, shall, previous to the unloading of any part of the cargo of such ship or vessel, deliver to the collector, if there be one, or if not, to the surveyor residing at the port of her arrival, or if there be no collector or surveyor residing at such port, then to a collector or surveyor, if there be any such officer residing within five miles thereof, the manifest of the cargo, certified by the collector or surveyor of the district from whence she sailed.

(if there be such manifest) otherwise the duplicate manifests thereof, as is herein before directed, to the truth of which, before such officer, he shall swear or affirm. And if there have been taken on board such ship or vessel, any other or more goods, than are contained in such manifest or manifests, since her departure from the port, from whence she first sailed, or if any goods have been since landed, the said master or commander shall make known and particularize the same to the said collector or surveyor, or if no such goods have been so taken on board or landed, he shall so declare, to the truth of which he shall swear or affirm : Whereupon, the said collector or surveyor shall grant a permit for unlading a part, or the whole of such cargo, as the said master or commander may request. And if there be no collector or surveyor, residing at, or within five miles of the said port of her arrival, the master or commander of such ship or vessel may proceed to discharge the lading from on board such ship or vessel, but shall deliver to the collector or surveyor, residing at the first port, where he may next afterwards arrive, and within twenty-four hours of his arrival, the manifest or manifests aforesaid, noting thereon the times when, and places where, the goods therein mentioned, have been unladen, to the truth of which, before the said last mentioned collector or surveyor, he shall swear or affirm ; and if the master or commander of any such ship or vessel, being laden as aforesaid, shall neglect or refuse to deliver the manifest or manifests, at the times, and in the manner herein directed, he shall pay one hundred dollars.

The master or commander of every ship or vessel, licensed for carrying on the coasting trade, and being destined from any district of the United States, to a district other than a district in the same, or an adjoining state, on the sea-coast, or on a navigable river, shall, previous to her departure, deliver to the collector residing at the port where such ship or vessel may be, if there is one, otherwise to the collector of the district comprehending such port, or to a surveyor within the district, as the one or the other may reside nearest to the port at which such ship or vessel may be, duplicate manifests of the whole cargo on board such ship or vessel, or if there be no cargo on board, he shall so certify, and if there be any distilled spirits, or goods, wares and merchandize, of foreign growth or manufacture on board, other than what may, by the collector, be deemed sufficient for sea-stores, he shall specify in such manifests, the marks and numbers of every cask, bag, box, chest or package, containing the same, with the name, and place of residence, of every shipper and consignee of such distilled spirits, or goods of foreign growth or manufacture, and the quantity shipped by, and to each, to be by him subscribed, and to the truth of which, he shall swear or affirm ; and shall also swear or affirm before the said collector or surveyor, that such goods, wares or merchandize, of foreign growth or manufacture, were, to the best of his knowledge and belief, legally imported, and the duties thereupon, paid or secured ; or if spirits distilled within the United States, that the duties thereupon, have been duly paid or secured ; upon the performance of which, and not before, the said collector or surveyor shall certify the same on the said manifests ; one of which he shall return to the master, with a permit, thereto annexed, authorizing him to proceed to the port of his destination. And if any such ship or vessel shall depart from the port where she may then be, having distilled spirits, or goods, wares or merchandize, of foreign growth or manufacture on board, without the several things herein required, being complied with, the master thereof shall forfeit one hundred dollars ; or if the lading be of goods, the growth or manufacture of the United States only, or if such ship or vessel have no cargo, and she depart, without the several things herein required, being complied with, the said master shall forfeit and pay fifty dollars.

The master or commander of every ship or vessel licensed to carry on the coasting trade, arriving at any district of the United States, from any district, other than a district in the same, or an adjoining state on the sea-coast, or on a navigable river, shall deliver to the collector residing at the port where she may arrive, if there be one, otherwise to the collector or surveyor in the district comprehending such port, as the one, or the other, may reside nearest thereto, if the collector or surveyor reside at a distance not exceeding five miles, within twenty-four hours, or if at a greater distance, within forty-eight hours next after his arrival; and previous to the unlading any of the goods brought in such ship or vessel, the manifest of the cargo (if there be any) certified by the collector or surveyor of the district from whence she last sailed, and shall make oath or affirmation, before the said collector or surveyor, that there was not, when he sailed from the district where his manifest was certified, or has been since, or then is, any more or other goods, wares or merchandize of foreign growth or manufacture, or distilled spirits (if there be any, other than sea-stores, on board such vessel) than is therein mentioned; and if there be no such goods, he shall so swear or affirm; and if there be no cargo on board, he shall produce the certificate of the collector or surveyor of the district from whence he last sailed, as aforesaid, that such is the case: Whereupon such collector or surveyor shall grant a permit for unlading the whole, or part of such cargo (if there be any) within his district, as the master may request; and where a part only of the goods, wares and merchandize, of foreign growth or manufacture, or of distilled spirits, brought in such ship or vessel, is intended to be landed, the said collector or surveyor shall make an endorsement of such part, on the back of the manifest, specifying the articles to be landed; and shall return such manifest to the master, endorsing also thereon, his permission for such ship or vessel, to proceed to the place of her destination; and if the master of such ship or vessel shall neglect or refuse to deliver the manifest, (or if she has no cargo, the certificate) within the time herein directed, he shall forfeit one hundred dollars, and the goods, wares and merchandize of foreign growth or manufacture, or distilled spirits, found on board or landed from such ship or vessel, not being certified, as is herein required, shall be forfeited, and if the same shall amount to the value of eight hundred dollars, such ship or vessel, with her tackle, apparel and furniture, shall be also forfeited.

Nothing in this act contained shall be so construed, as to oblige the master or commander of any ship or vessel, licensed for carrying on the coasting trade, bound from a district in one state, to a district in the same, or an adjoining state on the sea-coast, or on a navigable river, having on board goods, wares, or merchandize, of the growth, product or manufactures of the United States only (except distilled spirits), distilled spirits, not more than five hundred gallons, wine in casks not more than two hundred and fifty gallons, or in bottles not more than one hundred dozens, sugar in casks or boxes not more than three thousand pounds, tea in chests or boxes not more than five hundred pounds, coffee in casks or bags not more than one thousand pounds, or foreign merchandize in packages, as imported, of not more value than four hundred dollars, or goods, wares or merchandize, consisting of such enumerated or other articles of foreign growth or manufacture, or of both, whose aggregate value shall not be more than eight hundred dollars, to deliver a manifest thereof, or obtain a permit previous to her departure, or on her arrival within such district, to make any report thereof; but such master shall be provided with a manifest, by him subscribed, of the lading, of what kind soever, which was on board such ship or vessel, at the time of his departure from the district from which she last

ailed, and if the same, or any part of such lading, consists of distilled spirits, or goods, wares, or merchandize, of foreign growth or manufacture, with the marks and numbers of each cask, bag, box, chest or package, containing the same, with the name of the shipper and consignee of each; which manifest shall be by him exhibited, for the inspection of any officer of the revenue, when, by such officer, thereunto required; and shall also inform such officer, from whence such ship or vessel last sailed, and how long she has been in port, when by him so interrogated. And if the master of such ship or vessel shall not be provided, on his arrival within any such district, with a manifest, and exhibit the same, as is herein required, if the lading of such ship or vessel consist wholly of goods, the produce or manufacture of the United States (distilled spirits excepted) he shall forfeit twenty dollars, or if there be distilled spirits, or goods, wares, or merchandize, of foreign growth or manufacture, on board, excepting what may be sufficient for sea-stores, he shall forfeit forty dollars; or if he shall refuse to answer the interrogatories truly, as is herein required, he shall forfeit the sum of one hundred dollars. And if any of the goods laden on board such ship or vessel, shall be of foreign growth or manufacture, or of spirits distilled within the United States, so much of the same, as may be found on board such ship or vessel, and which shall not be included in the manifest exhibited by such master, shall be forfeited.

When any ship or vessel of the United States, registered according to law, shall be employed in going from any one district in the United States, to any other district, such ship or vessel, and the master or commander thereof, with the goods she may have on board, previous to her departure from the district, where she may be, and also, upon her arrival in any other district, shall be subject, (except as to the payment of fees) to the same regulations, provisions, penalties and forfeitures, and the like duties are imposed on like officers, as is provided above for ships or vessels carrying on the coasting trade: *Provided however*, that nothing herein contained, shall be construed to extend to registered ships or vessels of the United States, having on board goods, wares and merchandize of foreign growth or manufacture, brought into the United States in such ship or vessel from a foreign port, and on which the duties have not been paid or secured according to law.

The master or commander of every ship or vessel, employed in the transportation of goods from district to district, that shall put into a port, other than the one to which she was bound, shall, within twenty four hours of his arrival, if there be an officer residing at such port, and she continue there so long, make report of his arrival, to such officer, with the name of the place he came from, and to which he is bound, with an account of his lading; and if the master of such ship or vessel shall neglect or refuse to do the same, he shall forfeit twenty dollars.

If the master or commander of any ship or vessel, employed in the transportation of goods, from district to district, having on board goods, wares, or merchandize of foreign growth or manufacture, or distilled spirits, shall, on his arrival at the port to which he was destined, have lost or mislaid the certified manifest of the same, or the permit which was given therefor, by the collector or surveyor of the district from whence he sailed, the collector of the district where he shall so arrive, shall take bond for the payment of the duties on such goods, wares and merchandize of foreign growth or manufacture, or distilled spirits, within six months, in the same manner as though they were imported from a foreign country: *Provided however*, such bond shall be cancelled, if the said master shall deliver, or cause to be delivered to the collector taking such bond, and within the term therein limited for pay-

ment, a certificate from the collector or surveyor of the district, from whence he sailed, that such goods were legally exported in such ship or vessel, from such district.

In all cases, where such ship or vessel, or any other licensed ship or vessel, shall have been once admeasured, it shall not be necessary to measure such ship or vessel anew, for the purpose of obtaining another enrolment or license except such ship or vessel shall have undergone some alteration as to her burthen, subsequent to the time of her former license.

It shall be lawful for any officer of the revenue, to go on board of any ship or vessel, whether she shall be within or without his district, and the same to inspect, search, and examine, and if it shall appear that any breach of the laws of the United States has been committed, whereby such ship or vessel, or the goods, wares, and merchandize on board, or any part thereof, is or are liable to forfeiture, to make seizures of the same.

In every case where a forfeiture of any ship or vessel, or of any goods, wares, or merchandize, shall accrue, it shall be the duty of the collector, or other proper officer, who shall give notice of the seizure of such ship or vessel, or of such goods, wares, or merchandize, to insert in the same advertisement the name or names, and the place or places of residence, of the person or persons, to whom any such ship or vessel, goods, wares, and merchandize belonged, or where consigned, at the time of such seizure, if the same shall be known to him.

If any person or persons shall swear or affirm to any of the matters herein required to be verified, knowing the same to be false, such person or persons shall suffer the like pains and penalties, as shall be incurred by persons committing wilful and corrupt perjury. And if any person or persons shall forge, counterfeit, erase, alter, or falsify any enrolment, license, certificate, permit, or other document, mentioned or required in this act, to be granted by any officer of the revenue, such person or persons, so offending, shall forfeit five hundred dollars.

If any person or persons shall assault, resist, obstruct, or hinder any officer in the execution of any act or law of the United States, herein mentioned, or of any of the powers or authorities vested in him by any act or law, as aforesaid, all and every person and persons so offending, shall, for every such offence, for which no other penalty is particularly provided, forfeit five hundred dollars.

If any licensed ship or vessel shall be transferred in whole or in part to any person, who is not, at the time of such transfer, a citizen of, and resident within the United States, or if any such ship or vessel shall be employed in any other trade than that for which she is licensed, or shall be found with a forged or altered license, or one granted for any other ship or vessel, every such ship or vessel, with her tackle, apparel, and furniture, and the cargo found on board her, shall be forfeited.

Provided nevertheless, That in all cases where the whole or any part of the lading or cargo on board any ship or vessel shall belong bona fide to any person or persons other than the master, owner, or mariners, of such ship or vessel, and upon which the duties shall have been previously paid or secured, according to law, shall be exempted from any forfeiture under this act, any thing therein contained to the contrary notwithstanding.

Relief of sick and disabled Seamen.

MANY Hospitals and Lazarettoes are founded in different parts of the United States for the support and relief of poor, sick and disabled Seamen ; and by the United States Laws as well as those of several different States, taxes are collected of masters and mariners for this valuable purpose. We here subjoin an abstract of those laws, for the instruction of masters of vessels on entering the different ports.

BY a law of the United States for the relief of the sick and disabled seamen, it is provided,

That from and after the first day of September, 1798, the master or owner of every ship or vessel of the United States, arriving from a foreign port into any port of the United States, shall, before such ship or vessel shall be admitted to an entry, render to the collector a true account of the number of seamen, that shall have been employed on board such vessel since she was last entered at any port in the United States—and shall pay to the said collector, at the rate of twenty cents per month for every seaman so employed ; which sum he is hereby authorized to retain out of the wages of such seamen.

From and after the first day of September, 1798, no collector shall grant to any ship or vessel whose enrolment or license for carrying on the coasting trade has expired, a new enrolment or license before the master of such ship or vessel shall first render a true account to the collector, of the number of seamen, and the time they have severally been employed on board such ship or vessel, during the continuance of the license which has so expired, and pay to such collector twenty cents per month for every month such seamen have been severally employed, as aforesaid ; which sum the said master is hereby authorized to retain out of the wages of such seamen. And if any such master shall render a false account of the number of men, and the length of time they have severally been employed, as is herein required, he shall forfeit and pay one hundred dollars.

It shall be the duty of the several collectors to make a quarterly return of the sums collected by them, respectively, by virtue of this act, to the Secretary of the Treasury ; and the President of the United States is hereby authorized, out of the same, to provide for the temporary relief and maintenance of sick or disabled seamen, in the hospitals or other proper institutions now established in the several ports of the United States, or, in ports where no such institutions exist, then in such other manner as he shall direct : and the President is hereby authorized to purchase or receive cessions or donations of ground or buildings, in the name of the United States, and to cause buildings, when necessary, to be erected as hospitals for the accommodation of sick and disabled seamen.

And by another act in addition to the above, it is provided,

That the President of the United States shall be, and he hereby is authorized to direct the expenditure of any monies which have been or shall be collected by virtue of an act, entitled " An act for the relief of sick and disabled seamen," to be made within the state wherein the same shall have been collected, or within the state next adjoining thereto, excepting what may be collected in the states of New-Hampshire, Massachusetts, Rhode-Island, and Connecticut ; any thing in the said act contained to the contrary thereof, notwithstanding.

That the Secretary of the Navy shall be, and he hereby is authorized and directed to deduct, after the first day of September, 1799, from the pay thereafter to become due, of the officers, seamen and marines of the Navy

of the United States, at the rate of twenty cents per month, for every such officer, seaman and marine, and to pay the same quarter annually to the Secretary of the Treasury, to be applied to the same purposes, as the money collected by virtue of the above mentioned act is appropriated.

That the officers, seamen and marines of the Navy of the United States, shall be entitled to receive the same benefits and advantages, as by the act above mentioned are provided for the relief of the sick and disabled seamen of the merchant vessels of the United States.

POWER *and* DUTY of CONSULS.

By an Act concerning Consuls and Vice-Consuls of the United States, it is enacted, that

THEY shall have right in the ports or places to which they are or may be severally appointed, of receiving the protests or declarations, which such captains, masters, crews, passengers and merchants, as are citizens of the United States may respectively chuse to make there ; and also such as any foreigner may chuse to make before them relative to the personal interest of any citizens of the United States ; and the copies of the said acts duly authenticated by the said consuls or vice consuls, under the seal of their consulates, respectively, shall receive faith in law, equally as their originals would in all courts in the United States. It shall be their duty where the laws of the country permit, to take possession of the personal estate left by any citizen of the United States, other than seamen belonging to any ship or vessel who shall die within their consulate ; leaving there no legal representative, partner in trade or trustee by him appointed to take care of his effects, they shall inventory the same with the assistance of two merchants of the United States, or for want of them, of any others at their choice ; shall collect the debts due to the deceased in the country where he died, and pay the debts due from his estate which he shall have there contracted ; shall sell at auction after reasonable public notice such part of the estate as shall be of a perishable nature, and such further part, if any, as shall be necessary for the payment of his debts, and at the expiration of one year from his decease, the residue ; and the balance of the estate they shall transmit to the treasury of the United States, to be holden in trust for the legal claimants. But if at any time before such transmission, the legal representative of the deceased shall appear and demand his effects in their hands, they shall deliver them up, being paid their fees, and shall cease their proceedings.

For the information of the representative of the deceased, it shall be the duty of the consul or vice consul authorized to proceed as aforesaid in the settlement of his estate, immediately to notify his death in one of the gazettes published in the consulate, and also to the Secretary of State, that the same may be notified in the state to which the deceased shall belong ; and he shall also, as soon as may be, transmit to the Secretary of State, an inventory of the effects of the deceased taken as before directed.

The said consuls and vice consuls, in cases where ships or vessels of the United States shall be stranded on the coasts of their consulates respectively, shall, as far as the laws of the country will permit, take proper measures, as well for the purpose of saving the said ships or vessels, their cargoes and appurtenances, as for storing and securing the effects and merchandize saved,

and for taking an inventory or inventories thereof; and the merchandize and effects saved with the inventory or inventories thereof taken as aforesaid, shall, after deducting therefrom the expense, be delivered to the owner or owners. *Provided*, That no consul or vice consul shall have authority to take possession of any such goods, wares, merchandize or other property, when the master, owner or consignee thereof is present or capable of taking possession of the same.

To prevent the mariners and seamen, employed in vessels belonging to citizens of the United States, in cases of shipwreck, sickness or captivity, from suffering in foreign ports, it shall be the duty of the consuls and vice consuls respectively, from time to time to provide for them in the most reasonable manner, at the expense of the United States, subject to such instructions as the Secretary of State shall give, and not exceeding an allowance of twelve cents to a man per diem; and all masters and commanders of vessels belonging to citizens of the United States, and bound to some port of the same, are hereby required and enjoined to take such mariners or seamen on board of their ships or vessels, at the request of the said consuls or vice consuls respectively, and to transport them to the port in the United States to which such ships or vessels may be bound, free of costs or charge; but that the said mariners or seamen shall, if able, be bound to do duty on board such ships or vessels according to their several abilities: *Provided*, That no master or captain of any ship or vessel, shall be obliged to take a greater number than two men to every one hundred tons burthen of the said ship or vessel, on any one voyage; and if any such captain or master shall refuse the same on the request or order of the consul or vice consul, such captain or master shall forfeit and pay the sum of thirty dollars for each mariner or seaman so refused, to be recovered for the benefit of the United States by the said consul or vice consul in his own name, in any court of competent jurisdiction.

Where a ship or vessel belonging to citizens of the United States is sold in a foreign port or place, the master, unless the crew are liable by their contract or do consent to be discharged there, shall send them back to the state where they entered on board, or furnish them with means sufficient for their return, to be ascertained by the consul or vice-consul of the United States, having jurisdiction of the port or place. And in case of the master's refusal, the said consul or vice-consul may (if the laws of the land permit it) cause his ship, goods and person to be arrested and held until he shall comply with his duty herein.

The specification of certain powers and duties, in this act, to be exercised or performed by the consuls and vice-consuls of the United States, shall not be construed to the exclusion of others resulting from the nature of their appointments, or any treaty or convention under which they may act.

*Entising and carrying away Soldiers, Apprentices, and Debtors,
and importing Convicts, Aliens, &c.*

BY an act of the United States, every captain or commanding officer of any ship or vessel, who shall enter on board such ship or vessel, as one of his crew, knowing him to have deserted, or otherwise carry away any soldier in the service of the United States, or shall refuse to deliver him up to the orders of his commanding officer, shall, upon legal conviction, be fined, at the

discretion of the court, in any sum not exceeding three hundred dollars, or be imprisoned, for any term, not exceeding one year.

NEW-HAMPSHIRE.

By a law of the state of New-Hampshire, the master of every ship or other vessel, must, within three days, from and after the time of entering his ship or vessel, deliver to the selectmen or town clerk of the town where any such ship or vessel shall arrive, a true and perfect list, or certificate under his hand, of the christian and surnames of all persons, passengers and others, brought in such ship or vessel, not belonging thereto, and not heretofore inhabitants of this state, with a particular account of their several circumstances, so far as he shall know them, on penalty of forfeiting to the use of the said town, in which such vessel arrives, the sum of *two pounds* for each person; to be recovered by action by the selectmen, overseers of the poor, or town treasurer. And when any person so brought by any such master of vessel, shall be sick or lame, and likely to be chargeable, such master shall carry him or her out of the state again, within two months after request made, or give bond in a reasonable sum with sufficient sureties, that said person shall not become chargeable to said town, and shall be liable to pay all charges of supporting any such person.

MASSACHUSETTS.

By a law of Massachusetts, it is enacted, That if any master or other person, having charge of any vessel, shall therein bring into, and land, or suffer to be landed in any place within the Commonwealth, any person, before that time convicted in any other state, or in any foreign country, of any infamous crime, or any for which he hath been sentenced to transportation, knowing of such conviction, or having reason to suspect it, or any person of a notoriously dissolute, infamous and abandoned life and character, knowing him or her to be such, shall for every such offence forfeit the sum of *one hundred pounds*, one half thereof to the use of the Commonwealth, and the other half to the use of any person, being a citizen of, and residing in the Commonwealth, who shall prosecute and sue for the same, by action of debt as aforesaid.

That the master or any other person, having charge of any vessel arriving at any place within the Commonwealth, with any passengers on board from any foreign dominion or country, without the United States of America, shall within forty-eight hours after such arrival, make a report in writing under his hand, of all such passengers, their names, nation, age, character and condition, so far as hath come to his knowledge, to the overseers of the poor of the town or district, at, or nearest to which such vessel shall arrive, who shall record the same in a book kept for that purpose in their office. And every such master or other person, that shall neglect to make such report, or that shall wittingly and willingly make a false one, shall, for each of these offences, forfeit the sum of *fifty pounds*, to be sued for and recovered by action of debt as aforesaid, by, and to the use of such town or district.

By another act of the Commonwealth of Massachusetts, every master or commander of any outward bound ship or vessel that shall hereafter carry or transport out of the government any person under the age of twenty-one years, or any apprentice, or any indented servant, to any parts beyond sea, without the consent of his parents, master, or guardian, shall forfeit and pay the sum of *fifty pounds*: one moiety to the use of the government, and the other moiety to him or them that shall sue for the same; and be further liable for the damages sustained by the parent, master, or guardian, in a special action of the case.

RHODE-ISLAND.

If any master or other person, having charge of any vessel, shall bring into and land, or suffer to be landed in any place within the state, any person before that time convicted, in any other state or in any foreign country, of any infamous crime, or of any crime for which he hath been sentenced to transportation, knowing of such conviction, or having reason to suspect it, or any person of a notoriously dissolute, infamous, and abandoned life and character, knowing him or her to be such, shall, for every such offence, forfeit the sum of *four hundred dollars*, one half thereof to the use of the state, and the other half to the use of any person, being a citizen of and residing within the state, who may prosecute and sue for the same by action of debt as aforesaid.

The master, or any other person having the charge of any vessel arriving at any place within the state with any passengers on board, from any foreign dominion or country, without the United States of America, shall, within forty-eight hours after such arrival, or before landing any such passenger, make a report in writing, under his hand, of all such passengers, their names, nation, age, character, and condition, so far as shall have come to his knowledge, to the overseers of the poor of the town at which such vessel shall arrive. And every such master or other person, who shall neglect to make such report, or who shall wittingly and willingly make a false one, shall for each of these offences forfeit the sum of *two hundred dollars*, to be sued for and recovered by action of debt as aforesaid by the town-treasurer, to the use of such town.

CONNECTICUT.

By a law of the state of Connecticut, it is enacted, That any person who shall bring into the state any poor and indigent person, and leave him or her in any town within the same, of which town he or she is not an inhabitant, such person so bringing in and leaving such poor and indigent person, shall forfeit and pay for every such person so brought in and left, the sum of *sixty-seven dollars*, to be recovered in any court proper to try the same, to and for the use of such town.

No person convicted of any crime, in any foreign country, and sentenced therefor to be transported abroad, shall be imported into the state; and any person or persons who shall, contrary to the true intent and meaning of the law, import, or bring into the state any such convict, or be aiding or assisting therein, knowing such person so imported to be a convict, and sentenced as aforesaid, shall forfeit and pay to the treasurer of the state, the sum of *three hundred and thirty-four dollars*, for every such convict, so imported as aforesaid. And whenever any person or persons shall be prosecuted for any breach of this law, such person shall be adjudged guilty of the same, unless they shall make full proof that they had lawful right to import the same; and that such importation was not contrary to the true intent and meaning of the law.

NEW-YORK.

If any master of any ship or other vessel shall bring or land within the state, any person who cannot give a good account of himself or herself, to the mayor or recorder of the said city for the time being, or who is like to be a charge to the said city, such master shall, within one month,

carry or send the person so imported by him, back again to the place from whence he or she came, and shall for that purpose enter into bond to the mayor, aldermen and commonalty of the city of New-York, with one or more surety or sureties, to be approved of by such mayor or recorder, in the sum of *one hundred pounds*, conditioned for the purposes aforesaid, or shall enter into bond to the said mayor, aldermen and commonalty of the said city, with one or more sufficient surety or sureties, to be approved by such mayor or recorder as aforesaid, in the sum of *one hundred pounds*, conditioned that the person so imported shall not be or become a charge to the said city as aforesaid, or any other city or town in the state: and in case such master of any ship or other vessel shall refuse to become bound as aforesaid, it shall and may be lawful for such mayor or recorder, by warrant under his hand and seal, directed to any constable of the said city, to cause such person so refusing, to be committed to the common goal of the said city, there to remain until he shall consent to become bound as aforesaid; and such bond shall not be avoided by plea of duress.

Every master of any ship or other vessel who shall enter the same in the custom-house in the city of New-York, shall within twenty-four hours after his arrival make a report in writing on oath to the mayor of the said city, or in case of his sickness or absence, to the recorder of the said city, for the time being, of the name and occupation of every person who shall be brought into port in his said ship or other vessel; and in case of neglect the master of such ship or other vessel shall forfeit the sum of *fifty dollars* for every person so neglected to be reported. And if any person so neglected to be reported to the mayor or recorder of the said city as aforesaid shall be a foreigner, the master of such ship or other vessel so neglecting to make report as aforesaid shall forfeit the sum of *seventy-five dollars* for every foreigner so neglected to be reported.

Every master of any ship or other vessel who shall, after the fifteenth day of May, 1797, arrive at the city of New-York, with emigrants from any foreign country, he shall, previous to the landing of any such emigrants, give a bond to the mayor, recorder, and aldermen of the said city of New-York, with two sufficient sureties, to be approved of by the said mayor, recorder, and aldermen, conditioned to indemnify and save harmless the said city of New-York from all and every expense and charge which shall or may be incurred for the support and maintenance of any such person so imported, as the mayor, or, in his absence or sickness, the recorder of the said city for the time being shall deem likely to become chargeable to the said city; and if any master of any ship or other vessel shall suffer or permit any such emigrant to land previous to giving such bonds as aforesaid, every such master shall forfeit and pay to the mayor, aldermen, and commonalty of the city of New-York the sum of five hundred dollars for each and every such person whom he shall permit and suffer to land, and for whom he shall neglect or omit to give security as aforesaid.

VIRGINIA.

By a law of the Commonwealth of Virginia, it is enacted, that

No master of a ship or other vessel shall transport or carry any person whatsoever out of the Commonwealth, unless such person shall first have published for six weeks successively, in the Virginia Gazette, his or her resolution to depart there from, under the penalty of answering and paying every debt and duty such person at his or her departure out of the Commonwealth shall owe, or stand bound for to the Commonwealth, or to any citizen thereof, by judgment, bond, bill, covenant, account, or by

any other ways or means whatsoever, to be recovered against such master by action of debt, in any court of record within the Commonwealth.

Every master of every ship or other vessel offending herein, shall be liable to be sued at any time for any debt due or owing from the person so transported. And whensoever any such action or suit shall be brought against him, the court wherein the same shall be depending may rule the defendant to give special bail, and the clerk shall endorse on the writ that appearance bail is required: *Provided*, the plaintiff shall make affidavit before a magistrate of the cause of action, which shall be transmitted to the clerk of the court.

By another law of Virginia, it is enacted, That no captain or master of any vessel, or any other person, coming into the commonwealth, by land or by water, shall import or bring with him any person who shall have been a felon convict, or under sentence of death, or any other legal disability incurred by a criminal prosecution, or who shall be delivered to him from any prison or place of confinement, in any place out of the United States.

Every captain or master of a vessel, or any other person, who shall presume to import or bring into the commonwealth, by land or by water, or shall sell or offer for sale, any such person as above described, shall suffer three months imprisonment, without bail or mainprize, and forfeit and pay for every such person so brought and imported, or sold or offered for sale, the penalty of *fifty pounds* current money of Virginia, one half to the commonwealth, and the other half to the person who shall give information thereof; which said penalty shall be recovered by action of debt or information, in which the defendant shall be ruled to give special bail.

Every master of vessel or other person, who shall bring into the Commonwealth, by water or by land, in any vessel, boat, land carriage or otherwise, any free negro or mulatto, shall forfeit and pay for every such person, so brought, the penalty of *one hundred pounds* lawful money; one half to the Commonwealth, and the other half to the person who shall inform thereof, to be recovered by action of debt or information, in any court of record, and the defendant in every such case shall be ruled to give special bail.

This act shall not extend to masters of vessels bringing into the state any free negro or mulatto employed on board and belonging to such vessel, and who shall therewith depart, nor to any person travelling in the state, having any free negro or mulatto as a servant.

QUARANTINE.

BY an act of Congress respecting quarantines and health laws, it is provided, That the quarantines and other restraints, which shall be required and established by the health laws of any state, or pursuant thereto, respecting any vessels arriving in, or bound to, any port or district thereof, whether from a foreign port or place, or from another district of the United States, shall be duly observed by the collectors, and all other officers of the revenue of the United States, appointed and employed for the several collection districts of such state respectively, and by the masters and crews of the several revenue cutters, and by the military officers who shall command in any fort or station upon the sea coast; and all such officers of the United States shall be, and they hereby are, authorized and required, faithfully to aid in the execution of such quarantines and health laws, according to their respective powers and precincts, and as they shall be directed from time to

time by the Secretary of the Treasury of the United States. And the said Secretary shall be, and he is hereby authorized, when a conformity to such quarantines and health laws shall require it, and in respect to vessels which shall be subject thereto, to prolong the terms limited for the entry of the same, and the report or entry of their cargoes, and to vary or dispense with any other regulations applicable to such reports or entries: *Provided*, that nothing herein shall enable any state to collect a duty of tonnage or impost without the consent of the Congress of the United States thereto: *And provided*, that no part of the cargo of any vessel shall, in any case, be taken out, or unladen therefrom, otherwise than as by law is allowed, or according to the regulations hereinafter established.—When, by the health laws of any state, or by the regulations which shall be made pursuant thereto, any vessel arriving within a collection district of such state, shall be prohibited from coming to the port of entry or delivery by law established for such district, and it shall be required or permitted by such health laws, that the cargo of such vessel shall or may be unladen at some other place within or near to such district, the collector authorized therein, after due report to him of the whole of such cargo, may grant his special warrant or permit for the unloading and discharge thereof, under the care of the surveyor, or of one or more inspectors, at some other place where such health laws shall permit, and upon the conditions and restrictions which shall be directed by the Secretary of the Treasury, or which such collector may, for the time, reasonably judge expedient for the security of the public revenue: *Provided*, that in every such case, all the articles of the cargo so to be unladen, shall be deposited, at the risk of the parties concerned therein, in such public or other warehouses or inclosures, as the collector shall designate, there to remain under the joint custody of such collector, and of the owner or owners, or master, or other person having charge of such vessel, until the same shall be entirely unladen or discharged; and until the goods, wares, or merchandize which shall be so deposited may be safely removed, without contravening such health laws; and when such removal may be allowed, the collector having charge of such goods, wares, or merchandize, may grant permits to the respective owners or consignees, their factors or agents, to receive all goods, wares, or merchandize which shall be entered, and whereof the duties accruing shall be paid or secured, according to law, upon the payment by them of a reasonable rate of storage; which shall be fixed by the Secretary of the Treasury for all public ware-houses and inclosures.

There shall be purchased or erected, under the orders of the President of the United States, suitable ware-houses, with wharves and inclosures, where goods and merchandize may be unladen and deposited, from any vessel which shall be subject to a quarantine, or other restraint, pursuant to the health laws of any state as aforesaid, at such convenient place or places therein, as the safety of the public revenue, and the observance of such health laws may require.

When, by the prevalence of any contagious or epidemical disease, in or near the place by law established, as the port of entry for any collection district, it shall become dangerous or inconvenient for the collector and the other officers of the revenue employed therein, to continue the discharge of their respective offices at such port, the Secretary, or, in his absence, the Comptroller of the Treasury of the United States, may direct and authorize the removal of the collector, and the other officers employed in his department, from such port, to any other more convenient place, within, or as near as may be to such collection district, where such collector and offi-

cers may exercise the same authorities, and shall be liable to the same duties, according to existing circumstances, as in such lawful port or district; and of such removal, public notice shall be given as soon as may be.

[As the above law of the United States refers to the several health laws of the different states, the Editor has therefore taken great pains to procure copies of them, part of which he has obtained. These laws being from their subject liable to frequent alterations, he cannot vouch for the authenticity of the following abstract; it is, however, as accurate as the nature of the subject will admit of. It is probable that masters of vessels will be furnished with copies of the health laws by the proper officers of the port immediately on their arrival.

NEW-HAMPSHIRE.

By a law of this state it is provided, That whenever any ship, or other vessel shall arrive in any port in the state, having any person on board infected with the plague, small-pox, pestilential or malignant fever, or shall have been so infected during the voyage, or having on board any goods which may reasonably be apprehended to have any infection of such diseases, it shall be the duty of the master or commander of such ship or vessel to give immediate information thereof to the selectmen of Portsmouth, and it shall be the duty of the selectmen of Portsmouth, upon information of the arrival of such ship or vessel, and they are hereby empowered immediately to take such prudential methods and precautions as to them appear necessary, to prevent the spreading such infection, and may order and appoint the distance at which such ship or vessel shall lie from the shore, and shall have power to remove the same at the expense of the owner or master, if the master or commander shall refuse or neglect to remove after receiving from said selectmen an order therefor—and the said selectmen are hereby further empowered to forbid or prevent any person coming on shore from such ship or vessel, or any goods being landed from the same, until such precautions be taken as the public safety may to them appear to require. And if the commanding officer of any such ship or vessel shall suffer any person or thing to be put on shore without permission first obtained therefor, under the hands of the said selectmen, or a major part of them, he shall forfeit and pay the sum of *four hundred dollars*.

If any person come on shore from any such ship or vessel without such liberty, any justice of the peace may cause such person to be confined in such proper place as the selectmen aforesaid may appoint, for a term of time not exceeding thirty days, at his own expense, to be recovered by them, by action of debt in any court proper to try the same.

The said Selectmen shall have full power to seize and keep any goods landed from such vessel, without such leave, until they shall cause the same to be cleansed at the expense of the owner of such goods—and if the owner neglect to pay such expense, the Selectmen shall have power to sell so much of the goods as will defray the reasonable charges of seizing, keeping, and cleansing the same.

If any person or persons, seamen or passengers belonging to, or on board any vessel arriving at any port or harbour within the state, shall be infected with the plague, small-pox, pestilential or malignant fever, during the voyage, the commander of such ship or vessel, shall immediately on his entrance into such port or harbour, cause his vessel to be anchored, and give information thereof to the commanding officer of Fort William and Mary, if the vessel

happens to be in Piscataqua harbour, or in case of the vessel's being in any other port, to the nearest field officer of the militia, whose business it shall be immediately to notify the president, or in his absence two of the council, and receive their directions. And if the commanding officer shall suffer any person or thing to be landed, or set on shore out of said vessel, without permission obtained either from the president, or in his absence from two of the council, he shall forfeit and pay the sum of *one hundred pounds*. And if any person who may come in such vessel, either as seaman or passenger, shall presume to come on shore before license is obtained as aforesaid, he shall forfeit the sum of *fifty pounds*.

By another law of New-Hampshire it is enacted, That whenever any ship or vessel shall arrive at the port or harbour of Portsmouth, after the fifteenth day of May, and before the first day of November, in any year, from any country, place or port, subject to the yellow fever, or any malignant pestilential or contagious disorder, or where the yellow fever, or any malignant contagious disorder is usually or often prevalent, it shall be the duty of the health officers or any one of them, immediately to examine into the state and circumstances of such ship or vessel, and if it shall be the opinion of said health officers, or any two of them, that such ship or vessel, her cargo, or any person on board of the same is infected with any such malignant contagious disorder, and that her coming to, or remaining at, or near any of the wharves, or compact parts of said town, would be injurious or dangerous to the health of said inhabitants, it shall be the duty of said health officers, or some two of them by a writing under their hands, to order and direct the owner or owners, master or commanding officer of such ship or vessel, to remove such ship or vessel to some place of safety not exceeding three miles distance from said town, in such order to be specified, there to remain to cleanse and purify such ship or vessel and her cargo, for such a term and space of time not exceeding thirty days, as shall be limited and specified in such order—and in case the owner or owners, master or commanding officer of any such ship or vessel, shall disobey or neglect to perform and comply with such order, or shall move or bring such ship or vessel, or any part of her cargo, or any article on board such ship or vessel, or permit, or suffer the same to be moved or brought on shore before the expiration of the time limited and specified in such order, without having previously obtained permission in writing to do the same from two of said health officers, or from a majority of the selectmen of said town, such owner or owners, master or commanding officer so offending, shall forfeit and pay to said town, a sum not exceeding *two thousand dollars*, which may be recovered with costs in an action in the name of said town, to be prosecuted by said health officers, in any court proper to try the same: and if the owner or owners, master or commanding officer of any such ship or vessel shall neglect to remove the same agreeable to such order, or having removed the same shall again before the expiration of the time limited and specified in such order, bring such ship or vessel, or cause the same to be brought to or near any wharf in said town, or near any compact parts of said town, without having previously obtained such permission therefor, as is herein above provided, the said health officers, or some two of them, taking with them sufficient assistance, shall remove such ship or vessel to the place specified in said order, there to remain at the risk of the owner or owners until the expiration of the time in such order limited and specified—and the expence of removing such ship or vessel and keeping the same, may be recovered against such owner or owners, master or commanding officer, with double costs, in the same way and manner as is provided

for recovering the expence of removing or destroying nuisances and putrid substance or matter.

MASSACHUSETTS.

By a law of the Commonwealth of Massachusetts, to prevent the spreading of contagious sickness, it is enacted, That inquiry shall be made by the officer or other person on duty at the castle in the harbour of Boston, of every vessel coming from sea, and passing by the said castle, whether any infectious sickness be on board, or has been on board, since such vessel left the port from whence she last came; and if any such vessel has any sickness on board, or has had any on board, since her leaving such port, in such case, orders shall be given by said officer, or other person on duty, to the master or commander of such vessel, immediately to anchor, and to remain at anchor until a certificate shall be obtained from the major part of the Selectmen of the town of Boston, that they are of opinion such vessel may come up to the town without danger to the inhabitants, or until the said master or commander shall receive orders from the said Selectmen to anchor his vessel near the hospital on *Rainsford's Island*, in the harbour of Boston. And in case any master or commander of a vessel shall by himself or the people on board make false answer, when enquired of as aforesaid, by the officer or other person on duty as aforesaid, or after orders are given as aforesaid, shall neglect or refuse to anchor near the castle as aforesaid, or come on shore, or suffer any passenger, or other person belonging to the vessel, to come on shore, or any goods to be taken out before the vessel shall have anchored, or without liberty from the Selectmen as aforesaid; or in case any master or commander of a vessel, ordered to anchor near the hospital aforesaid, shall neglect or refuse so to do; in every such case, every master or commander so offending, shall forfeit and pay for each offence the sum of *four hundred dollars*, or suffer six months imprisonment.

Upon application made to the Selectmen of the town of Boston by any master or commander of any vessel at anchor near the hospital as aforesaid, the said Selectmen are hereby empowered to permit such passengers, goods, or lading, as they shall judge free from infection, to come on shore; or to be taken out and disposed of as the owners shall see fit; and such passengers and goods as shall not be permitted as aforesaid, shall remain on board or be landed on said island; and if any master or commander of any such vessel, for the time being, shall come on shore, or suffer any of his people or passengers to come on shore, or any boat to come on board, or suffer any goods to be taken out of his vessel, unless permitted as aforesaid, or shall come up to said town, with his vessel, until by a certificate under the hands of the said Selectmen, or a major part of them, it shall appear that said vessel, company and goods are clear of infection, and the orders for stopping the same be removed, or taken off, he shall for every such offence forfeit the sum of *two hundred dollars*; and in case he be not able to pay that sum, he shall suffer three months imprisonment; and if any sailors or passengers, coming in said vessel, shall without the knowledge or consent of the master or commander, presume to come on shore, or up above the castle aforesaid, or if any person shall knowingly presume to go on board from shore, or go to the aforesaid house or island in time of infection there, without leave as aforesaid; or if any person put sick into the said house or sent there on suspicion of being infected, shall presume to go off the said island without leave as aforesaid, any person offending in any of the particulars above-mentioned, shall forfeit the sum of *two hundred dollars*; and in case such person be not able to pay such forfeiture, he shall suffer two months imprisonment.

Whenever any ship or vessel, wherein any infection or infectious sickness hath lately been, shall come to any harbour within the state, or whenever any person or persons belonging to, or that may either by sea or land come into any town or place near the public hospital aforesaid, shall be visited, or shall lately before have been visited with any infectious sickness, two of the justices of the peace or selectmen of such place, be, and hereby are empowered immediately to order the said vessel and sick persons to the said hospital, there to be taken care of according to the directions of this act: and where any such ship, vessel, or persons, cannot without great inconvenience and damage, be ordered to the aforesaid hospital, in any such case the rules and directions are to be observed which are provided in the first enacting clause of the act: and in case the master or mariners of any vessel ordered to the hospital as aforesaid, shall refuse or delay for the space of six hours after such orders being given to said master, or either of the owners of said vessel, or of the factors, or either of the said owners of the goods, to come to sail, if wind and weather permit, in order to proceed to said hospital, such master, so refusing, shall forfeit and pay the sum of *four hundred dollars*: and each mariner so refusing, the sum of *one hundred dollars*: and in case they be not able to pay said sums, they shall suffer six months imprisonment.

If any master, seaman, or passenger, belonging to any vessel on board which any infection is, or may have lately been, or suspected to have been, or which may have come from any port where any infectious mortal distemper prevails, shall refuse to make answer on oath to such questions as may be asked him or them relating to such infection, by the selectmen of the town to which such vessel may come, (which oath the said selectmen are hereby empowered to administer) such master, seaman, or passenger, so refusing, shall forfeit the sum of *two hundred dollars*: and in case he be not able to pay said sum, he shall suffer six months imprisonment.

And the selectmen of Boston are hereby authorized and directed to provide nurses, assistance, and necessaries, for the comfort and relief of such sick persons as may be sent to said hospital as aforesaid: the charge thereof to be borne by the said persons themselves, if able: or if poor and unable, by the towns to which they respectively belong: or if not inhabitants of any particular town, or other place within this state, then by the commonwealth.

Whenever any vessel shall arrive at any port other than Boston within the commonwealth, having on board any person visited with the plague, small-pox, malignant fever, or any other pestilential disease, the master, commander, or pilot thereof shall not bring such vessel up near the town of the port where she first arrives, until liberty be first granted in writing by the selectmen thereof: but they may bring such vessel to an anchor in such place below the town, as will be most for the safety of the inhabitants thereof, and the preservation of the vessel and the people on board, there to wait for orders from the selectmen of such town before any passenger or person belonging to, or any thing on board the same be brought on shore: and any master or commander of such vessel who shall be found guilty of a breach of the law contained in this section, shall forfeit and pay a fine of *two hundred dollars* for every such offence, upon conviction thereof before any court proper to try the same: and any pilot who may go on board any such vessel, and pilot the same up to the town without liberty first had and obtained from the selectmen thereof as aforesaid, shall forfeit and pay a fine of *fifty dollars* for every such offence.

RHODE-ISLAND.

No master or commander of any ship or other vessel, who shall come into any port or harbour of the state, and shall have any person or persons on board sick of the small-pox, or any other contagious distemper, or who has had any person sick of such distemper in the passage, or who shall come from any port or place usually infected with the small-pox, or where any other contagious distemper is prevalent, shall presume to bring such vessel to anchor in any of the ports of the state within the distance of one mile of any public ferry, pier or landing place, or permit or suffer any person or persons on board such vessel to be landed, or any person to come on board such vessel without a license first had and obtained from the governor or lieutenant-governor, or, in their absence, from one or more of the assistants of the state, or, in his or their absence, from two or more justices of the peace or wardens of such town where such vessel shall arrive, on the penalty of forfeiting *four hundred dollars* to and for the use of the state, to be recovered by the general treasurer, by action of debt, in any court of common pleas. And it shall be the duty of such master or commander, on his first arrival in any port in the state, to hoist and keep his colours in the shrouds of his ship or vessel, as a signal of having come from such infected place, or having infection on board.

If any person or persons whatsoever shall presume to land or come on shore from on board such vessel without license first had and obtained as aforesaid, it shall be lawful for any assistant, justice of the peace or warden, to send back such offender or offenders immediately on board such vessel, or confine him or them on shore, in such convenient place as to him shall appear most effectual to prevent the spreading of any infection, until the town-council of such town shall have information and opportunity to remove said offender or offenders, as they are hereafter empowered and directed; and the person or persons so offending shall satisfy and pay all charge that shall arise thereon, and also each of them shall forfeit *forty dollars*, to be recovered in manner as aforesaid; and if the offender or offenders shall not have sufficient estate to pay the same, he or they shall be confined and subjected to hard labour for a term not exceeding two months.

The governor, lieutenant-governor, assistants, justices and wardens as aforesaid, be and they are hereby empowered and directed, to send a physician or other suitable person to examine into, and make report to him or them respectively, of the true state of such vessel and the people on board, at the charge of the master or commander of such vessel.

The town-council of the town where such vessel shall arrive, be, and they are hereby empowered and directed, forthwith to put on board such vessel some suitable person or persons to secure said vessel and effectually prevent any communication therewith, at the expense of the owners.

The town-council of such town be and they are hereby empowered and directed, to confine on board said vessel, or send to some hospital or other suitable place, all persons, mariners or passengers, or others who came in said vessel, for a convenient time, until such of them as have, or are liable to have, the small-pox, or other infectious distemper, are perfectly recovered and cleansed from said distemper, or have passed a suitable quarantine; and also all other persons who have gone on board such vessel without license as aforesaid, at the charge and expense of such persons respectively; and also all other persons that came in said vessel, until they have been sufficiently aired and cleansed.

The town-council of the town where such vessel arrives, be, and they are hereby empowered and directed, to appoint two suitable persons to take effectual care that all goods, wares and merchandize imported in such vessel, which they think liable to hold and communicate the infection, be landed on some of the islands in the Narragansett bay, and exposed to the sun and air, and cleansed, not exceeding ten days, nor under six days, before they are permitted to be brought into any house, shop or warehouse, other than where they are cleansed as aforesaid; and when such goods are sufficiently aired and cleansed, such persons shall give the owners or possessors thereof a certificate, and the town-council shall allow and order said goods, wares and merchandize, to be delivered to the owner or owners thereof; and the charge and expense of landing, airing and cleansing such goods, wares and merchandize, shall be borne by the respective owner or owners; and all goods that are judged by the town-council not to be infected, shall be delivered to the owner or owners, without delay and expense of airing, as soon as may be consistent with the safety of the town in regard to other parts of the cargo.

All goods imported in such vessels as aforesaid, that shall be clandestinely landed, or brought into any house, shop or warehouse, without a certificate and allowance as aforesaid, and not cleansed or aired by order of the town-council as aforesaid, shall be forfeited, one third to and for the use of the state, and the other two thirds to him or them who shall inform and sue for the same, in the court of common pleas in the county where such offence shall be committed. And all assistants, justices and wardens, are hereby empowered and required, upon information given them, to seize and secure all such goods, wares and merchandize, in their respective jurisdictions, until legal trial.

The town-councils of the respective towns be, and they are hereby empowered and directed, to fix, settle and adjust, all wages and charges demanded by persons employed by them to secure such vessel, or to air and cleanse such goods, or to attend upon and nurse such persons as aforesaid.

For the better securing of the payment of what charges may arise on the nursing or attendance upon any sailor or mariner belonging to such vessel as aforesaid, the master thereof is hereby required to stop payment of the wages due to such mariner, until certified from the town-council that such charges are fully satisfied and paid, on penalty of paying the same, so far as the amount of the wages so paid by him.

CONNECTICUT.

By a law of the state of Connecticut, it is enacted, That if any person or persons, seamen or passengers belonging to or transported in any ship or vessel, arriving at any port or harbour within the state, happen to be visited with the small-pox, or other contagious sickness during the voyage, or come from any place where such sickness prevails and is common, it shall be in the power of the selectmen of the town to order such person or persons to confinement in such vessel and such place as they shall think proper, and for so long a time as they shall think most convenient and safe; and if need so require, upon their application to one assistant or justice of the peace, or more if readily to be come at, he or they may and are hereby authorized to make out a warrant to the sheriff or constable aforesaid; or in want of such officers, or for any other special reason, to some other suitable person (who is accordingly hereby empowered with the same authorities, and required upon the same penalties as the proper officers are invested with and liable to) both for the remanding such persons on board again, and confining them to the

places assigned them on board or on the shore ; and also for preventing persons coming to, or going from them contrary to the orders given.

Whenever any person or persons, shall come into any town in the state either by land or water, from any place where the small-pox or other contagious disease is, or hath lately been prevalent, or whenever the selectmen of any town shall suspect that any person in their town hath come from such place, or is infected with, or hath been exposed to the small-pox, or such other disease, or that any goods, wares or merchandize, on board any ship or vessel, arriving in such town, if landed, would be likely to communicate the small-pox or such other disease, it shall be lawful for the selectmen of such town, or such person or persons as they shall appoint the health officer or officers thereof, to require such person or persons, so coming or suspected to disclose on oath, whether he or they have come from such place, or are infected with, or have been exposed to the small pox, or such other disease ; as also his or their whole knowledge concerning such goods, wares and merchandize, and for that purpose to administer an oath or oaths to such person or persons, or enter on board any such ship or vessel ; and in case any such person or persons shall, when required, refuse to suffer such selectmen, or health officer or officers, to enter into such ship or vessel, or shall refuse to disclose on oath as aforesaid, said selectmen shall, without further proof, have the same authority to order, and effect the confinement of such person or persons, so refusing as is provided in the preceding paragraph of this act relative to persons suspected to have the small-pox or other disease. And if such selectmen shall on examination be of opinion that such goods, wares and merchandize, or any part thereof, if landed, would expose the inhabitants to the small-pox, or other contagious disease ; it shall be the duty of such selectmen (with the advice of the civil authority of such town) to secure the same on board such ship or vessel, and prevent the landing thereof until they shall be suitably aired and cleaned, in such manner as such selectmen shall order and direct.

In case any person or persons shall land or unlaid, in any town in the state, from any ship or vessel, any cloathing or bedding which hath been used by any person or persons infected with the small-pox, or such other disease (without the consent of the selectmen of such town) knowing the same to have been used as aforesaid, he, she, or they shall forfeit to the treasurer of such town, *one hundred dollars*, to be recovered by bill, plaint or information.

When any person in any vessel, in any harbour or road within the state, shall be taken sick, and do fear and suspect it to be the small-pox, or other contagious sickness, as aforesaid, it shall be the duty of the master of the vessel, immediately to put forth a signal, *to wit*, a white cloth, two feet square, shall be hoisted on the shrouds of said vessel, which signal shall be so continued till by order of a justice of the peace, or the selectmen of the town, they shall be discharged therefrom. And on failure thereof, the master of such vessel, on conviction thereof before the county court in the county where such omission shall be, shall incur such penalty as the said court shall judge proper ; not exceeding *forty dollars*.

If any person shall bring into any town in the state, either by land or water, from any place infected with the small-pox, or any other mortal or contagious disease, any goods, wares or merchandize, and land them or expose them to sale without liberty from two or more of the selectmen of said town first had and obtained in writing, under their hands, such persons shall forfeit the sum of *sixty-seven dollars*, one half of said penalty to the informer who shall prosecute the same to effect, the other half to the treasurer of the town in which such goods are landed or exposed to sale.

It shall be the duty of the selectmen, upon application to them made, to make speedy examination whether it be necessary to air such goods, wares or merchandize, brought in as aforesaid; and if they judge it not necessary to air them, they shall then give a certificate to the person or persons applying therefor, and liberty to land and sell the same. And whensoever any goods, wares or merchandize brought in as aforesaid, and are suitably aired, said selectmen shall give a certificate thereof to the person whose goods, wares or merchandize, are thus aired, with liberty to land or sell the same accordingly.

When it shall happen, that any ship or vessel shall come from any place where the small-pox, or other contagious sickness is prevalent, it shall be the duty of the master of such ship or vessel, and in case of the inability of the master, it shall be the duty of the next officer successively upon their arrival in any harbour, road, or creek in the state, forthwith to give information to one or more of the selectmen of such town where such vessel shall first arrive, from whence they came, and the true circumstances of the people and cargo on board. And whatever master, or other officer on board such vessel, shall for the space of twelve hours after his arrival as aforesaid, neglect to give information as aforesaid, or shall neglect to wait for and punctually obey such orders as shall be given in such case according to law, or shall suffer any of the people belonging to such ship or vessel to go on shore (except to give information as aforesaid) shall forfeit to the treasurer of such town where such offence shall be committed, the sum of *one hundred and sixty-seven dollars*, to be recovered by bill, plaint or information in any court proper to try the same.

If any passenger or other person on board such vessel shall presume to go on shore from any such vessel (except as before excepted, before information as aforesaid has been given, and order thereon made) such person shall incur upon himself a fine of *thirty-three dollars and thirty-four cents*, to be recovered as aforesaid.

When any soldier, sailor, or marine belonging to the army or navy of the United States, who is not an inhabitant of this state, shall become sick in any town within this state, under such circumstances that he cannot be removed, and unable to provide things necessary for his support, or procure the same from some hospital or person employed in the hospital or medical department of the United States, it shall be the duty of the selectmen of such town to provide the necessaries for the support and relief of such soldier, sailor, or marine in his sickness, and the reasonable expenses thereof, properly authenticated, being laid before the governor and council, with the name of such soldier, sailor, or marine, the company, regiment, ship or other vessel, and state to which he belonged, they are hereby authorized to order payment of the amount of such expense, or so much of it as shall be by them allowed, and charge the same to the account of the United States.

NEW-YORK.

By a law of the state of New-York, to prevent the spreading of contagious sickness, it is enacted, That all vessels arriving in the port of New-York, from parts beyond the sea, having on board forty passengers, all vessels arriving in the said port having on board a person sick with a fever, all vessels arriving in the said port, on board of which a person may, during the time such vessels were at the foreign port from which they last sailed, or during their passage from thence to the port of New-York, have died of a

fever, and all vessels arriving in the said port from places where at the time of their departure, an infectious disease prevailed, shall be subject to quarantine of course. It shall be lawful for the person administering the government of the state, from time to time, whenever and as he shall judge advisable, to issue his proclamation declaring what other vessels to be described as coming from the countries, islands, or ports therein to be mentioned, shall also be subject to quarantine. That it shall in like manner be lawful for him to issue his proclamation, assigning and limiting the places or spaces where all vessels subject to quarantine shall, on their arrival within the said port, be brought to anchor, and remain until they shall have been visited and examined by the health officer, and by him reported to some one of the commissioners to be free from infection. That all persons offending in the premises shall be liable to be punished as for a misdemeanor, by fine and imprisonment, in the discretion of the court having cognizance thereof; and moreover it shall be lawful for the said commissioners to cause any vessel subject to quarantine which before she shall have been so visited, examined and reported as aforesaid, shall be brought to anchor elsewhere within the said port of New-York; and all vessels, although not described in this act, or in such proclamation as above mentioned, as vessels subject to quarantine, having on board a person sick with a disease which in the judgment of the health officer, there shall be reason to apprehend is infectious, or having on board articles which may be apprehended to contain infection, to be removed to, and brought to anchor within the said places or spaces so to be assigned and limited, and to cause all persons and articles which may have been landed to be arrested and seized, and to be returned on board such vessel, or removed to the lazaretto herein after mentioned.

The health officer shall without delay visit and examine all vessels subject to quarantine, and whenever he shall judge any such vessel free from infection, he shall so report her to some one of the said commissioners, and he shall be entitled to receive from the master of every vessel so to be visited by him, if coming from a foreign port, the sum of *three pounds*, and if coming from a port within the United States, the sum of *thirty-two shillings*, for his services therein; and the commissioners shall cause him at all times when he shall require it, to be furnished with a convenient boat, and with men sufficient to row the same; and to that end, if they shall deem it most convenient, it shall be lawful for them to contract with any person for that purpose. And in order that the said health officer may be enabled the better to perform the examination of vessels subject to quarantine, it shall be lawful for him to put all such questions to the persons on board any such vessel as shall be needful and proper to that end, and the persons to whom such questions shall be put shall respectively truly answer the same on oath, and which oath he is hereby authorized to administer accordingly; and every person swearing falsely in the premises shall be considered as liable to the pains and penalties for wilful and corrupt perjury.

It shall be lawful for the person administering the government of the state to cause a building, suitable to serve for a lazaretto, the expense whereof, exclusive of the monies to be expended for the purchase of lands, if any shall be purchased, not to exceed the sum of *two thousand pounds*, to be erected on Nutton Island, or on other lands which may be deemed more eligible, and which other lands he is hereby authorized to purchase for the people of this state, for the reception of persons and articles arriving in a vessel subject to quarantine, and by the health officer, or the said commissioners, ordered or permitted to be removed from on board such vessel, and

for the reception of all persons within the said city sick with an infectious disease, and whom it may be necessary to have removed to such lazaretto.

The said health officer shall be physician to the said lazaretto, and the commissioners of the health office shall in other respects have the superintendance thereof, and employ mates, nurses, and attendants, and provide bedding, clothing, fuel, provisions, medicines, and such other matters as shall be requisite therein; and it shall be lawful for them to make reasonable and prudent needful rules and orders for the government and management thereof.

All persons removed to the said lazaretto shall be liable to pay a reasonable sum for their board, medicine, and attendance therein, and if any of them, deemed to have sufficient means, shall refuse to pay such sum, the same shall be recovered from them by the said commissioners by suit in their own name.

It shall be lawful for the said health officer, whenever he shall judge it necessary to prevent infection, to cause any bedding and clothing, arriving in a vessel subject to quarantine, to be destroyed.

By another law, in addition to the above, it is provided, That all coasting vessels coming from any place south of Cape May, although not subject to quarantine, of course shall be liable to examination, if the health officer shall deem it expedient by some fit person to be by him deputed, who shall have such reasonable compensation for his services, and paid by the commissioners, as they shall deem right. And that quarantine shall in all cases continue as many days as the commissioners shall deem necessary. And that no vessel hereafter arriving in the port of New-York otherwise, and subject to quarantine, of course shall be exempted from such quarantine, by reason of having previously touched or entered at any port within the United States, unless such vessel shall have remained in such port for the space of ten days.

By an act of the assembly of New-York, passed April 7th, 1800, it is enacted, that whenever a vessel shall arrive at the anchoring place for vessels at quarantine, from a place where a malignant or pestilential fever prevailed, or if during her voyage any person has died or been sick on board with such fever, the master or owner shall forthwith, upon the requisition and under the direction of the health officer, whose duty it shall be to make such requisition, cause such vessel to be unloaded, cleaned and purified, and that until then no permit shall be granted for her to proceed to the city of New-York; and every master and owner neglecting or refusing to comply with such requisition of the health officer, shall be considered guilty of misdemeanor, and upon conviction thereof, shall be fined in a sum not exceeding *five hundred dollars*, or be imprisoned for a time not exceeding six calendar months by any court having cognizance thereof.

Whenever any vessel shall arrive at the quarantine ground between the first day of June and the first day of October in any one year, from a place to the southward of Sandy Hook, the master or person having the charge of such vessel shall forthwith upon the requisition of the health officer, cause all the wearing apparel, bedding and every other thing on board, likely, in the opinion of the officers to communicate infection, to be landed for the purpose of being cleaned with water or otherwise purified, under the direction of the commissioners of the health office, by persons to be employed by them; during which cleansing they shall, if necessary, furnish any indigent person with change of apparel at the expense of the health office, the same to be afterwards returned to the said commissioners to employ persons to cleanse and purify any part of the cargo of any vessel. And

that until such requisition shall be complied with, no vessel shall have a permit to proceed to the city of New-York; and that any master or person having charge of a vessel so circumstanced, neglecting or refusing to comply with such requisition, shall be considered guilty of a misdemeanor, and upon conviction thereof shall be fined in a sum not exceeding *two hundred dollars*, or be imprisoned for a time not exceeding three calendar months, by any court having cognizance thereof.

No cotton or hides, damaged coffee or damaged peltry, shall be brought into the city of New-York between the first day of June and the first day of November in any one year, and no coffee or peltry whatever within the period aforesaid, unless authorized by the commissioners of the health office, after having been examined; and if any of the articles aforesaid shall be brought into the city in violation of this act, it shall be the duty of said commissioners to seize and sell the same, and to apply the neat proceeds thereof to the use of the health office.

The commissioners of the health office, or either of them, are hereby authorized and required to demand and receive from the captain or commander of every vessel which shall hereafter enter the port of New-York from any foreign port the following sums, to wit, for each captain or commander, *one dollar and fifty cents*, for each cabin passenger, *one dollar and fifty cents*, for each steerage passenger, *seventy-five cents*, and for each mate, sailor, or mariner, *seventy-five cents*, which several sums are demandable of the captain or commander of every such vessel, and on payment thereof every such captain or commander shall and may lawfully demand and receive from every such person on whose account, respectively, the same shall have been paid, the monies so paid.

PENNSYLVANIA.

By a law of Pennsylvania it is enacted, That all ships and vessels, as well vessels of war as merchant vessels, arriving at the lazaretto from any port or place in the Mediterranean, or the seas or waters connected with the same, to the eastward of the Straits of Gibraltar, or from the coast of Africa without the Straits of Gibraltar, and the territory of the same, and the ports of Africa other than the Cape of Good-Hope, in the Indian Ocean, and from the main land of North or South America, or the West India Islands between the latitude of the River St. Mary, in Georgia, and the beginning of the latitude of thirty degrees south of the Equator, and from Batavia in the island of Java, from the fifteenth day of May to the first day of October, shall there be detained at anchor, and discharge the whole of their cargoes and ballast, which, together with the vessels, bedding, clothing, and every other article on board, which may be supposed capable of retaining infection, shall be perfectly cleansed and purified, under the direction of the Resident Physician and Quarantine Master.

All ships or vessels, as well vessels of war as merchant vessels, coming from any port or place within the United States, and bound to the port of Philadelphia, from the fifteenth day of May to the first day of October, and having on board any goods or merchandize, the growth or produce of any port or place mentioned in the first part of this extract, or any person or persons, bedding or clothing, from any of the said ports or places, shall come to anchor opposite to the said lazaretto; and, if the captain or master of such ship or vessel shall produce to the resident physician and quarantine master such satisfactory proof as the board of health shall, in that case, direct to be required, that the said goods or merchandize have been landed in

the United States, and are free from damage, and that the said vessel, bedding, clothing, and persons are free from the infection of any dangerous contagious disease whatever, then, and in that case, the said resident physician and quarantine master shall give to the captain or master of such ship or vessel, a certificate of the facts permitting such ship or vessel to proceed to the city, which certificate the said captain or master shall present at the health office in Philadelphia within twenty-four hours after his arrival and safely mooring there; and, if he shall neglect to do, being thereof convicted upon indictment under this act, by verdict, confession, or standing mute in any court of criminal jurisdiction within this commonwealth, he shall be sentenced to pay a fine of *two hundred dollars*; and if the said captain or master shall fail to produce such satisfactory proof as aforesaid of the wholesome state of the said vessel, goods, merchandize, bedding, clothing and persons, the said vessel, goods, merchandize, bedding, clothing and persons shall be detained at the lazaretto, and shall be proceeded with in the same manner and subject to the same orders and regulations as is herein before provided and directed in the case of vessels coming direct from the aforesaid foreign ports and places, mentioned in the first part of this extract; and if the captain or master of any ship or vessel coming from any port or place within the United States and bound to the port of Philadelphia, having on board any goods or merchandize, bedding, clothing or persons as aforesaid, shall refuse or neglect to come to anchor opposite the lazaretto, and shall pass the same with intent to proceed to the city, without examination and certificate obtained from the resident physician and quarantine master as aforesaid, he shall, on conviction, forfeit and pay the sum of *five hundred dollars* for each and every offence; and, moreover, shall be sentenced to imprisonment at hard labour for any term not less than one nor more than five years, and the said vessel, goods, merchandize, bedding, clothing, and persons shall be sent back to the lazaretto, there to be proceeded with in such manner as the board of health, agreeably to this act, shall, in that case, devise and direct.

Any person or persons, and all goods, merchandize, bedding and cloathing arriving at any port or place within the United States, from any port or place mentioned in the first part of this extract, are hereby prohibited from entering within the city or county of Philadelphia from the fifteenth day of May to the first day of October, either by land or water, unless the said person or persons, goods, merchandize, bedding or cloathing shall have been landed in such port or place within the United States in a wholesome state, at least thirty days previous thereto, under the penalty of five hundred dollars for each and every offence, together with the forfeiture of such goods, merchandize, bedding or clothing, one-half to the benefit of the informer.

And, if any master or captain, shall, knowingly, receive or employ on board of his ship or vessel; or, if any housekeeper or other inhabitant of this commonwealth, shall, knowingly, receive, harbour or in any wise entertain any person so eloping or absenting from the Lazaretto, without having previously obtained and producing a discharge as aforesaid, each and every master and captain, and each and every house-keeper or inhabitant, so respectively offending, shall, on being thereof legally convicted, forfeit and pay a sum of one hundred dollars; and, moreover, be sentenced to imprisonment at hard labour, for any term not less than one nor more than five years.

If any person other than those detained at the Lazaretto as aforesaid, shall go on board or along side of any ship or vessel whilst under quarantine as aforesaid; or, if any person not authorized by the proper officer, shall go

within the limits of the Lazaretto, such person or persons shall perform such quarantine as the board of health may direct; and, being thereof convicted upon indictment under this act, by verdict, confession or standing mute in any court having criminal jurisdiction within this Commonwealth, shall, moreover, be sentenced to, and suffer confinement at hard labour in the jail of the county of Philadelphia for any space not less than one or more than three years.

VIRGINIA.

By a law of the Commonwealth of Virginia it is provided, That vessels, persons, and merchandize, coming or brought into any place within the commonwealth, from any other part of the world, whence the governor, with advice of his council, shall judge it probable that any plague or other infectious disease may be brought, shall be obliged to make their quarantine in such place, during such time, and in such manner as shall be directed by the governor, by his order in council, notified by proclamation, to be published in the *Virginia* gazette: And until they shall be discharged from the quarantine, no such persons or merchandize shall come or be brought on shore, or go or be put on board of any other vessel in the commonwealth, but in such manner, in such cases, and by such license, as shall be permitted by their order; and the vessels and persons receiving goods out of her, shall be subject to the orders concerning quarantine, and for preventing infection, which shall be made by the governor and council, and notified as aforesaid.

The master of a vessel coming from sea, on board of which there shall be a person infected with the plague or other pestilential disease, shall immediately make the case known to such person as shall be appointed for the purpose, in the manner as is hereinafter directed, who shall give intelligence thereof with all speed to the governor, that measures may be taken for support of the crew, and precautions used to prevent the spreading of the infection; and the master shall not enter into any port, but shall remain in some open road, and shall avoid and hinder all intercourse with other vessels or persons, nor shall any of the passengers or crew go on shore, until the order of the governor and council shall be received by the master. Whosoever shall offend against this act, in either or any of the aforementioned instances, shall be amerced the sum of fifteen hundred dollars.

When a place shall be infected with the plague or other pestilential disease, or when the governor, with the advice of council, shall have notified by proclamation published in the *Virginia* gazette, that it is judged probable the plague or other pestilential disease may be brought from any place, if a vessel from such place shall be coming into a port of the commonwealth, the person who shall be authorized to see quarantine performed, shall go off, or cause some other to go off to the vessel, and at a convenient distance require the commander to declare what is his name, at what place the cargo was taken on board, at what places the vessel touched in her passage, whether any of those places were infected with the plague or any other pestilential disease, how long the vessel had been in her passage, how many persons were on board when she set sail, whether any on board during the voyage had been infected with the plague or other pestilential disease, and who they are, how many died in the voyage, and of what distemper, what vessels he or any of his company with his privity went on board of, and whether any of their company had been on board his vessel, in their voyage, and to what places those vessels belonged, and what are the contents of his lading.

The master of a vessel coming from a place infected with the plague or other pestilential disease, or having any person on board so infected, who shall conceal it, or who shall not give true answers to the questions so to be propounded to him, shall be amerced the sum of *fifteen hundred dollars*.

The master of a vessel ordered to perform quarantine, when he shall be required, after his arrival at the place appointed, shall deliver to the officer authorised to see it performed there, the bills of health and manifests he shall have received during the voyage, with his log-book and journal; and refusing or neglecting so to do, or to repair in convenient time after notice to the place appointed, or escaping from thence before quarantine performed, shall be amerced the sum of *fifteen hundred dollars*.

Persons ordered to perform quarantine, if they shall escape, may be compelled to return, or if they shall attempt to escape, may be detained by the persons who shall be authorised to see the quarantine performed, and who may employ force, and call for the assistance of others, if it be necessary for this purpose.

Any person going on board a vessel, or into any place under quarantine, without licence from the superintendant thereof, may be compelled to remain there, in the same manner as he might have been if he had been one of the crew of the vessel. The person thus appointed to execute an order concerning quarantine, guilty of wilful breach or neglect of duty, shall be amerced the sum of *three thousand dollars*. And any person embezzling, or wilfully damaging goods performing quarantine under his direction, shall be liable to the party injured for treble the value of the damages sustained thereby. The vessel, persons and goods, after quarantine performed, certificate thereof, and that they are freed from infection, being given by the superintendant, shall be no further restrained by virtue of this act.

DUTIES

D U T I E S

PAYABLE BY LAW ON ALL

GOODS, WARES AND MERCHANDIZE,

Imported into the UNITED STATES of AMERICA, after the last day of September, 1797. The inward column exhibiting the rates of duties payable on those imported in ships or vessels of the United States, and the outward column the rates payable on the same, if imported in foreign ships or vessels.

A	American ships or vessels.	If imported in	Foreign ships or vessels.
A ARMS, fire and side, not otherwise enumerated, or parts thereof	15	per cent. ad val.	16 $\frac{1}{2}$
Apparatus, philosophical specially imported for any seminary of learning	free		free
Ale, beer and porter, in casks or bottles, on value of the bottles,	8	cents per gallon	8 $\frac{1}{2}$
Artificial flowers, feathers and other ornaments for women's head dresses	12 $\frac{1}{2}$	per cent. ad val.	13 $\frac{1}{2}$
Anniseed	15	Ditto	16 $\frac{1}{2}$
Articles of all kinds of the growth, product or manufacture of the United States, spirits excepted	15	Ditto	16 $\frac{1}{2}$
Accepted	free		free
Anchors	12 $\frac{1}{2}$	Ditto	13 $\frac{1}{2}$
B			
Brass cannon, until 14th June, 1800, and to the end of the next session of Congress, after the above period	free		free
teutenage and wire	15	per cent. ad val.	16 $\frac{1}{2}$
iron or steel locks, hinges, hoes, anvils and vises	free		free
all other manufactures of brass	12 $\frac{1}{2}$	Ditto	13 $\frac{1}{2}$
Balls and ballams (see powders, pastes, &c.)	15	Ditto	16 $\frac{1}{2}$
Beer, ale and porter in casks or bottles, on value of the bottles	8	cents per gallon	8 $\frac{1}{2}$
Bricks and tiles	12 $\frac{1}{2}$	percent. ad val.	13 $\frac{1}{2}$
	15	Ditto	16 $\frac{1}{2}$

DUTIES PAYABLE BY LAW.

	American ships or vessels.	If imported in	Foreign ships or vessels.
Bonnets, hats and caps, of every kind	15	Ditto	16 $\frac{1}{2}$
Boots	75	cents per pair	82 $\frac{1}{2}$
Books, blank	12 $\frac{1}{2}$	per cent. ad val.	13 $\frac{1}{4}$
Books of persons who come to reside in the United States	free		free
Buttons of every kind	15	per cent. ad val.	16 $\frac{1}{2}$
Buckles, shoe and knee	15	Ditto	16 $\frac{1}{2}$
Brushes	12 $\frac{1}{2}$	Ditto	13 $\frac{1}{4}$
Bullion	free		free
Burgundy wine	40	cents per gallon	44
C			
Cannon of brass, until 14th June, 1800, and to the end of the next session of Congress after the above period	free		free
Carriages, or parts of carriages	15	per cent. ad val.	16 $\frac{1}{2}$
Cards, playing	20	Ditto	22
----- wool and cotton	25	cents per pack.	27 $\frac{1}{2}$
Cables and tarred cordage	50	cents per dozen	55
Cabinet wares	180	cents per cwt.	198
Caps, hats and bonnets of every kind,	15	per cent. ad val.	16 $\frac{1}{2}$
Carpets and carpeting	15	Ditto	16 $\frac{1}{2}$
Cartridge paper	15	Ditto	16 $\frac{1}{2}$
Candles of tallow	2	cents per lb.	2
----- of wax or spermaceti	6	Ditto	6 $\frac{1}{2}$
Champaign wine	40	cents per gallon	44
Capers	15	per cent. ad val.	16 $\frac{1}{2}$
Canes, walking sticks and whips,	12 $\frac{1}{2}$	Ditto	13 $\frac{3}{4}$
Cambricks	12 $\frac{1}{2}$	Ditto	13 $\frac{3}{4}$
Cheese	7	cents per pound	7 $\frac{1}{2}$
China ware	15	per cent. ad val.	16 $\frac{1}{2}$
Cinnamon, cloves, currants and comfits,	15	Ditto	16 $\frac{1}{2}$
Chintzes and coloured calicoes or muslins, and all printed, stained, or coloured goods or manufactures of cotton, or of linen, or of both, or of which cotton or linen is the ma- terial of chief value	12 $\frac{1}{2}$	Ditto	13 $\frac{1}{4}$
Cocoa	2	cents per pound	2 $\frac{1}{2}$
Chocolate	3	Ditto	3 $\frac{1}{2}$
Clogs and goloshoes (see shoes)	15	cents per pair	16 $\frac{1}{4}$
Cordage, tarred	180	cents per cwt.	198
----- and yarn untarred	225	Ditto	247 $\frac{1}{2}$
Cosmetics	15	per cent. ad val.	16 $\frac{1}{2}$
Coal	5	cents per bushel	5 $\frac{1}{2}$
Colours (see painters)	15	per cent. ad val.	16 $\frac{1}{2}$
Copper manufactures	15	Ditto	16 $\frac{1}{2}$

D d

DUTIES PAYABLE BY LAW.

	American ships or vessels.	If imported in	Foreign ships or vessels.
Copper in plates, pigs and bars	free		free
Compositions for the teeth or gums (see dentifrice)	15	Ditto	16 $\frac{1}{2}$
Coffee	5	cents per lb.	5 $\frac{1}{2}$
Cotton	3	Ditto	3 $\frac{1}{2}$
Cotton or linen manufactures, or of both, or of which cotton or linen is the material of chief value, being printed, stained or coloured, or cotton manufactures, not printed, stained or coloured	12 $\frac{1}{2}$	per cent ad val.	13 $\frac{1}{4}$
Clocks and watches, or parts of either,	15	Ditto	16 $\frac{1}{2}$
Coaches, chariots, phaetons, chairs, chaises, solos, or other carriages, or parts of either,	20	Ditto	22
Cloathing ready made	12 $\frac{1}{2}$		13 $\frac{1}{4}$
Cloths, books, household furniture, and the tools or implements of the trade or profession of persons who come to reside in the United States	free		free
Cutlasses until 14th June, 1800, and to the end of the next session of Congress,	free		free
— or parts thereof, after the above period,	15	per cent ad val.	16 $\frac{1}{2}$
D			
Dates and figs	15	Ditto	16 $\frac{1}{2}$
Dentifrice, powders, tinctures, preparations and compositions for the teeth or gums	15	Ditto	16 $\frac{1}{2}$
Dolls, dressed and undressed, or parts thereof	15	Ditto	16 $\frac{1}{2}$
Drugs, medicinal, except those commonly used for dying	15	Ditto	16 $\frac{1}{2}$
— and woods for dying	free		free
E			
Earthen and stone wares	15	per cent ad val.	16 $\frac{1}{2}$
Essences (see powders, pastes, &c.)	15	Ditto	16 $\frac{1}{2}$
F			
Fans, or parts thereof	15	Ditto	16 $\frac{1}{2}$
Fayal wine	20	cents per gallon	22
Feathers and other ornaments for women's head dresses	15	per cent ad val.	16 $\frac{1}{2}$
Fringes commonly used by upholsterers, coach-makers and saddlers	15	Ditto	16 $\frac{1}{2}$
Figs	15	Ditto	16 $\frac{1}{2}$
Flowers, artificial	15	Ditto	16 $\frac{1}{2}$
Floor cloths and mats, or parts of either,	15	Ditto	16 $\frac{1}{2}$
Fruits of all kinds	15	Ditto	16 $\frac{1}{2}$

	American ships or vessels.	If imported in	Foreign ships or vessels.
Furs of every kind undressed	free		free
G			
Glass, black quart bottles	12½	per cent ad val.	13¼
— window glass	15	Ditto	16½
— all other glass, and manufactures thereof,	20	Ditto	22
Glauber salts	200	cents per cwt.	220
Gauzes	12½	per cent ad val.	13¼
Geneva (see spirits)			
Ginger	15	Ditto	16½
Girandoles, or parts thereof	20	Ditto	22
Goloshoes (see shoes)	15	cents per pair	16½
Gloves and mittens of every kind	15	per cent ad val.	16½
Gold, silver and plated ware	15	Ditto	16½
Gold and silver lace	15	Ditto	16½
Goods, wares, and merchandizes imported directly from China, or India, in ships or vessels not of the United States, except teas, China ware, and all other articles liable to higher rates of duties		Ditto	12½
Goods, wares, and merchandize, intended to be re-exported to a foreign port or place in the same ship or vessel in which they shall be imported—and all articles of the growth, product or manufacture of the United States, spirits excepted	free		free
Goods, wares, and merchandize, not herein otherwise particularly enumerated and described	12½	per cent ad val.	13¼
Glue	15	Ditto	16½
Gunpowder until 14th June, 1800, and to the end of the next session of Congress	free		free
— after that period	12½	per cent ad val.	13¼
H.			
Hangers, or parts thereof	15	Ditto	16½
Hair-powder	15	Ditto	16½
Hats, caps, and bonnets of every kind	15	Ditto	16½
Hemp	100	cents per cwt.	110
Hides raw	free		free
Household furniture of persons who come to reside in the United States	free		free
L.			
Implements of trade or profession of persons who come to reside in the United States	free		free

	If imported in	
	American ships or vessels.	Foreign ships or vessels.
Indigo	25	27½
Iron wire	free	free
—, steel, or brass locks, hinges, hoes, anvils, and wifes	12½	13½
— cast, slit, or rolled, and all manufactures of iron, steel, or brass, or of which either of these metals is the article of chief value, not being otherwise particularly enumerated	15	16½
J.		
Jewellery and paste work	15	16½
L.		
Lace of gold and silver	15	16½
Laces and lawns	12½	13½
Laces, lines, fringes, tassels, and trimmings commonly used by upholsterers, coach-ma- kers, and saddlers	15	16½
Lampblack	12½	13½
Lapis Calaminaris	free	free
Leather, tanned and tawed, and all manufac- tures of leather, or of which leather is the article of chief value, not otherwise particu- larly enumerated	15	16½
Lead and Musket Ball until 14th June, 1800, and to the end of the next session of Congress	free	free
— after the above period	1	1½
— all other manufactures of lead, or in which lead is the chief article	1	1½
Lemons and limes	15	16½
Linen or cotton manufactures, or of both, or of which cotton or linen is the material of chief value, being printed, stained, or coloured, or cotton manufactures, not printed, stained, or coloured	12½	13½
Linen manufactures, or of which linen is the chief value, not printed, stained, or coloured	12½	13½
Lisbon and Oporto wines	25	27½
Looking glasses or parts thereof	20	22
M.		
Manufactures of tin, pewter, and copper	15	16½
— of iron, steel, or brass, not other- wise particularly enumerated	15	16½
— of leather, not otherwise particu- larly enumerated	15	16½

DUTIES PAYABLE BY LAW.

	If imported in	
	American ships or vessels.	Foreign ships or vessels.
Manufactures of lead, not otherwise particularly enumerated	1 cent per pound	1 $\frac{1}{16}$
_____ of cotton or linen, or of both, printed, stained, or coloured, or of cotton, not printed, stained, or coloured	12 $\frac{1}{2}$ per cent ad val.	13 $\frac{3}{4}$
_____ of linen, not printed, stained, or coloured	12 $\frac{1}{2}$ Ditto	13 $\frac{3}{4}$
_____ of glass (see glass)		
_____ of tobacco (see snuff and tobacco)		
_____ of wood (see cabinet wares and wood)		
_____ of the United States, (spirits excepted)	free	free
Mats and floor cloths, or parts of either	15 Ditto	16 $\frac{1}{2}$
Malt	10 cents per bush.	11
Marble, slate, and other stone, bricks, tiles, tables, mortars, and other utensils of marble or slate, and generally all stone and earthen ware	15 per cent ad val.	16 $\frac{1}{2}$
Madeira wines (see wines)		
Malaga wine	20 cents per gallon	22
Mace	15 per cent ad val.	16 $\frac{1}{2}$
Medicinal drugs, except those commonly used in dying	15 Ditto	16 $\frac{1}{2}$
Merchandise, goods, and wares, imported directly from China or India, in ships or vessels not of the United States, except teas, China ware, and all other articles liable to higher rates of duties		
	Ditto	12 $\frac{1}{2}$
Merchandise, goods, and wares, intended to be re-exported to a foreign port or place in the same ship or vessel in which they shall be imported—and all articles of the growth, product, or manufacture of the United States, spirits excepted	free	free
Merchandise, goods, and wares, not herein otherwise particularly enumerated and described	12 $\frac{1}{2}$ Ditto	13 $\frac{3}{4}$
Mittens and gloves of every kind	15 Ditto	16 $\frac{1}{2}$
Millenary ready made	15 Ditto	16 $\frac{1}{2}$
Molasses	5 cents per gallon	5 $\frac{1}{2}$
Muskets and firelocks with bayonets suited to the same, and musket ball, until 14th June, 1800, and to the end of the next session of Congress	free	free
_____ or parts of either after the above period	15 per cent ad val.	16 $\frac{1}{2}$

DUTIES PAYABLE BY LAW.

	If imported in	
	American ships or vessels.	Foreign ships or vessels.
Muskets and firelocks without bayonets or parts of either	15	per cent ad val. 16 $\frac{1}{2}$
Mustard in flour	15	Ditto 16 $\frac{1}{2}$
Muslins and muslinets, whether printed, stained, coloured or otherwise	12 $\frac{1}{2}$	Ditto 13 $\frac{1}{2}$
N.		
Nails	2	cents per lb. 2 $\frac{1}{2}$
Nankeens	12 $\frac{1}{2}$	per cent ad val. 13 $\frac{1}{2}$
Nutmegs	15	Ditto 16 $\frac{1}{2}$
O.		
Oranges	15	Ditto 16 $\frac{1}{2}$
Ornaments for women's head-dresses	15	Ditto 16 $\frac{1}{2}$
Ointments, oils and odours (see powders, pastes, &c.)	15	Ditto 16 $\frac{1}{2}$
Olives	15	Ditto 16 $\frac{1}{2}$
Oil	15	Ditto 16 $\frac{1}{2}$
Oporto and Lisbon wine	25	cents per gallon 27 $\frac{1}{2}$
P.		
Paper hangings	15	per cent ad val. 16 $\frac{1}{2}$
— writing and wrapping	12 $\frac{1}{2}$	Ditto 13 $\frac{1}{2}$
— sheathing and cartridge	15	Ditto 16 $\frac{1}{2}$
Painters' colours, whether dry or ground in oil, except those commonly used in dying	15	Ditto 16 $\frac{1}{2}$
Pack-thread and twine	400	cents per cwt. 440
Paste-boards, parchment, or vellum	12 $\frac{1}{2}$	per cent ad val. 13 $\frac{1}{2}$
Paste-work and jewellery	15	Ditto 16 $\frac{1}{2}$
Phætons, or parts thereof	20	Ditto 22
Plaster of Paris	free	free
Pewter manufactures	15	Ditto 16 $\frac{1}{2}$
— old	free	free
Pepper	6	cents per lb. 6 $\frac{1}{2}$
Perfumes	15	per cent ad val. 16 $\frac{1}{2}$
Pistols until 14th June, 1800, and to the end of the next session of Congress	free	free
— or parts thereof after the above period	15	per cent ad val. 16 $\frac{1}{2}$
Pictures and prints	12 $\frac{1}{2}$	Ditto 13 $\frac{1}{2}$
Pimento	4	cents per lb. 4 $\frac{1}{2}$
Printing types	12 $\frac{1}{2}$	per cent ad val. 13 $\frac{1}{2}$
Pickles of all sorts	15	Ditto 16 $\frac{1}{2}$
Printed, stained, or coloured goods or manufactures of cotton, or of linen, or of both	12 $\frac{1}{2}$	Ditto 13 $\frac{1}{2}$
Philosophical apparatus, specially imported for any seminary of learning	free	free

DUTIES PAYABLE BY LAW.

	American ships or vessels.	If imported in	Foreign ships or vessels.
Porter, beer, or ale, in casks or bottles	8	cents per gallon	8
— on value of the bottles	12½	per cent ad val.	13
Powder, for hair	15	Ditto	16
— gun-powder, until 14th June, 1800, and to the end of the next session of Congress	free		free
— after the above period	12½	per cent ad val.	13½
Powders, pastes, balls, ballams, ointments, oils, waters, washes, tinctures, essences, or other preparations or compositions, commonly call- ed sweet scents, odours, perfumes, or cos- metics, and all powders or preparations for the teeth or gums	15	Ditto	16½
Plumbs and prunes	15	Ditto	16½
R.			
Raisins	15	Ditto	16½
Raw hides and skins	free		free
Rum (see spirits)			
S.			
Salt weighing more than fifty-six pounds per bushel	20	cents per 56 lb.	22
— weighing fifty-six pounds per bushel, or less	20	cents per bushel	22
Salts glauber	200	cents per cwt.	220
Stained, printed, or coloured goods or manu- factures of linen	12½	per cent ad val.	13½
Salt-petre until the 14th June, 1801, and to the end of the next session of Congress	free		free
St. Lucar wines	30	cents per gallon	33
Starch	15	per cent ad val.	16½
Sail cloth	12½	Ditto	13½
Slate, stone, and stone ware	15	Ditto	16½
Saddles, or parts thereof	12½	Ditto	13½
Sattins, and other wrought silks	12½	Ditto	13½
Steel	100	cents per cwt.	110
Steel, iron, or brass locks, hinges, hoes, anvils, and vices	12½	per cent ad val.	13½
— all other manufactures of steel	15	Ditto	16½
Sheathing and cartridge paper	15	Ditto	16½
Sherry wine	33	cents per gallon	36
Sea stores of ships or vessels	free		free
Spermaceti candles	6	cents per pound	6½
Sweet scents (see powders, pastes, &c.)	15	per cent ad val.	16½

DUTIES PAYABLE BY LAW.

	American ships or vessels.	If imported in	Foreign ships or vessels.
Spirits distilled in foreign countries, viz.			
<i>From Grain.</i>			
First proof	28	cents per gallon	30 $\frac{1}{2}$
Second proof	29	Ditto	31 $\frac{1}{2}$
Third proof	31	Ditto	34 $\frac{1}{2}$
Fourth proof	34	Ditto	37 $\frac{2}{3}$
Fifth proof	40	Ditto	44
Sixth proof	50	Ditto	55
<i>From other Materials.</i>			
First proof	25	Ditto	27 $\frac{1}{2}$
Second proof	25	Ditto	27 $\frac{1}{2}$
Third proof	28	Ditto	30 $\frac{1}{2}$
Fourth proof	32	Ditto	35 $\frac{1}{2}$
Fifth proof	38	Ditto	41 $\frac{2}{3}$
Sixth proof	46	Ditto	50 $\frac{1}{3}$
Spirits distilled in the United States, imported in the same ship or vessel in which they had been previously exported from the United States, viz.			
<i>From Molasses.</i>			
First proof	13	Ditto	13
Second proof	14	Ditto	14
Third proof	15	Ditto	15
Fourth proof	17	Ditto	17
Fifth proof	21	Ditto	21
Sixth proof	28	Ditto	28
<i>From Materials of the growth and produce of the United States.</i>			
First proof	7	Ditto	7
Second proof	8	Ditto	8
Third proof	9	Ditto	9
Fourth proof	11	Ditto	11
Fifth proof	13	Ditto	13
Sixth proof	18	Ditto	18
Spikes	1	cent per pound	1 $\frac{1}{2}$
Silver and plated ware	15	per cent ad val.	16 $\frac{1}{2}$
— lace	15	Ditto	16 $\frac{1}{2}$
Skins raw	free		free
Shoes and slippers of silk	25	cents per pair	27 $\frac{1}{2}$
— other shoes and slippers for men and women, clogs or golofoes	15	Ditto	16 $\frac{1}{2}$
— other shoes and slippers for children	10	Ditto	11
Swords or cutlasses until 14th June, 1800, and to the end of the next session of Congress	free		free
— or parts of either, after the above period			
Stockings	15	per cent ad val.	11

DUTIES PAYABLE BY LAW.

	American ships or vessels.	If imported in	Foreign ships or vessels.
Stone and earthen ware	15	per cent ad val.	16 $\frac{1}{2}$
Soap	2	cents per lb.	2 $\frac{1}{2}$
Solos and other carriages, or parts thereof	20	per cent ad val.	22
Sulphur until 14th June, 1801, and to the end of the next session of Congress	free		free
Sugars, brown	2 $\frac{1}{2}$	cents per pound	2 $\frac{3}{4}$
white clayed	3	Ditto	3 $\frac{1}{8}$
do. powdered	3	Ditto	3 $\frac{1}{8}$
all other clayed or powdered	2	Ditto	2 $\frac{1}{2}$
lump	6 $\frac{1}{2}$	Ditto	7 $\frac{1}{8}$
Sugar, loaf	9	Ditto	9 $\frac{1}{8}$
other refined	6 $\frac{1}{2}$	Ditto	7 $\frac{1}{8}$
Sugar-candy	11 $\frac{1}{2}$	Ditto	12 $\frac{1}{8}$
Snuff	22	Ditto	24 $\frac{1}{2}$
T.			
Tassels and trimmings commonly used by up- holsterers, coachmakers, and saddlers	15	per cent ad val.	16 $\frac{1}{2}$
Tables of marble, slate and other stone, or parts thereof	15	Ditto	16 $\frac{1}{2}$
Tallow candles	2	cents per lb.	2 $\frac{1}{2}$
<i>Teas from China and India.</i>			
bohea	12	Ditto	17 $\frac{1}{2}$
fouchong and other black teas	18	Ditto	27
hyson, imperial, gun-powder, or gomee	32	Ditto	50
other green teas	20	Ditto	30
<i>From Europe.</i>			
bohea	14	Ditto	17 $\frac{1}{2}$
fouchong and other black teas	21	Ditto	27
hyson, imperial, gun-powder, or gomee	40	Ditto	50
other green teas	24	Ditto	30
<i>From any other Place.</i>			
bohea	17	Ditto	18 $\frac{1}{2}$
fouchong and other black teas	27	Ditto	29 $\frac{1}{8}$
hyson, imperial, gun-powder, or gomee	50	Ditto	55
other green teas	30	Ditto	33
Teneriffe wine	20	cents per gallon	22
Twine and pack-thread	400	cents per cwt.	440
Tin manufactures	15	per cent ad val.	16 $\frac{1}{2}$
in pigs and plates	free		free
Tinctures (see powders, pastes, &c.)	15	Ditto	16 $\frac{1}{2}$
Tiles and bricks	15	Ditto	16 $\frac{1}{2}$
Toys, not otherwise enumerated	12 $\frac{1}{2}$	Ditto	13 $\frac{1}{2}$
Tobacco manufactured (other than snuff)	10	cents per lb.	11
Tools of the trade or profession of persons who come to reside in the United States	free		free

DUTIES PAYABLE BY LAW.

	If imported in	
	American ships or vessels.	Foreign ships or vessels.
Types for printing - - -	12½	per cent ad val. 13¼
V.		
Velvets and velverets - - -	12½	Ditto 13¼
W.		
Wares of tin, pewter, and copper - - -	15	Ditto 16½
— earthen or stone - - -	15	Ditto 16½
— china - - -	15	Ditto 16½
— gold, silver, and plated - - -	15	Ditto 16½
—, goods, and merchandize, imported directly from China or India in ships or vessels not of the United States, except teas, china ware, and all other articles liable to higher rates of duties - - -		Ditto 12½
—, goods, and merchandize of the growth, produce, or manufacture of the United States (spirits excepted) - - -	free	free
Wafers - - -	15	Ditto 16½
Waters and wafles (see powders, pastes, &c.) - - -	15	Ditto 16½
Walking-sticks, whips, and canes - - -	12½	Ditto 13¼
Wax candles - - -	6	cents per lb. 6½
Watches and clocks, or parts of either - - -	15	per cent ad val. 16½
<i>Wines in casks, bottles, or other vessels, viz.</i>		
— London particular, or Malmsey Madeira - - -	58	cents per gallon 63½
— all other - - - do.	50	Ditto 55
— Burgundy and Champaign - - -	45	Ditto 49½
— Sherry - - -	40	Ditto 44
— St. Lucar - - -	40	Ditto 44
— Claret imported in bottles or casks - - -	35	Ditto 38½
— Lisbon and Oporto - - -	30	Ditto 33
— Teneriffe, Fayal, and Malaga - - -	28	Ditto 30½
All other wines, when imported otherwise than in bottles and casks - - -	23	Ditto 25½
On value of the bottles - - -	12½	per cent ad val. 13¼
W.		
Window glass - - -	15	Ditto 16½
Wire of brass and iron - - -	free	free
Wool and cotton cards - - -	50	cents per dozen 55
Wool unmanufactured - - -	free	free
Wood unmanufactured - - -	free	free
Wood manufactured (exclusive of cabinet wares) - - -	12½	per cent ad val. 13¼

DUTIES PAYABLE BY LAW.

		If imported in	
		American ships or vessels.	Foreign ships or vessels.
Yarn untarred	Y.	225	247½
All other goods not before particularly enumerated and described		12½ per cent ad val.	13½

All Parts of Articles to be subject to the same Duties, as the entire Article is subject to.

The duties on Wines shall not be less than ten cents per gallon. Bottles in which liquors are imported, to pay the same duty as empty bottles.

DUTIES PAYABLE BY LAW.

T O N N A G E,

By Act of Congress, approved 2d March, 1799, to be paid at the time of entering the vessel, and before any permit shall be granted for unloading any part of the cargo, at the following rates :

On all ships or vessels, entering from any foreign port or place. Per Ton.		Cents.
Ships or vessels of the United States,	- - -	6
built within the United States, after 20th July 1789, but belonging wholly or in part to foreign powers, duly recorded,	- - -	30
On other ships or vessels,	- - -	50
Vessels of the United States, employed in the coasting trade or fisheries, duly licensed, per annum,	- - -	6
Vessels of the United States, (other than licensed) taking in merchandize in a district in one state, to be delivered in a district in another state, other than an adjoining state on the sea-coast, or on a navigable river,	- - -	6
Other ships or vessel, taking in merchandize to be delivered in another district,	- - -	50

D U T I E S P A Y A B L E I N

	Dolls.	Cts.
Gold coins of Great-Britain and Portugal, of the standard prior to the year 1792, for every 27 grains,	1	00
Gold coins of France, Spain, and the dominions of Spain, of the standard prior to the year 1792, for every 27 and $\frac{2}{3}$ th grains,	1	00
Spanish milled dollars, 17 dwt. 7 grains, and in proportion for the parts of a dollar.	1	00
Crowns of France, 18 dwt. 17 grains, and in proportion for the parts of a crown.	1	10

Provided, That no foreign coins shall be receivable, which are not by law a tender for the payment of all debts, except in consequence of a proclamation of the President of the United States, authorising such foreign coins to be received in payment of the duties and fees aforesaid.

Rates of coins for estimating duties.

Pound sterling of Great-Britain	4	44
Livre Tournois of France,	-	18 $\frac{1}{2}$
Florin or guilder of the United Netherlands,	-	40
Mark banco of Hamburgh	-	33 $\frac{1}{2}$
Rix dollar of Denmark	1	00
Ryal plate of Spain	-	10
Vallon of do.	-	5
Millree of Portugal	1	24
Pound sterling of Ireland	4	10
Tale of China	1	48
Pagoda of India	1	94
Rupree of Bengal	-	55 $\frac{1}{2}$

DUTIES PAYABLE BY LAW.

And all other denominations in value, as near as may be, to the said rates, or the intrinsic value thereof, compared with the money of the United States. Provided, That it shall be lawful for the President of the United States to cause to be established, fit and proper regulations for estimating the duties on goods, wares and merchandize, imported into the United States, in respect to which the original cost shall be exhibited in a depreciated currency, issued and circulated under authority of any foreign government.

That on all goods, wares and merchandize, imported from the Cape of Good Hope or beyond the same, (if ad valorem articles) 20 per cent. to be added to the actual cost thereof, including all charges, (commissions, outside packages and insurance only excepted) and 10 per cent. if from any other foreign port, before the duties are calculated.

FEEES OF OFFICE.

<i>To the Collector and Naval-Officers.</i>		Dlls.	Cts.
Entry of a vessel of 100 tons or upwards,	-	2	50
Clearance, do. do. do.	-	2	50
Entry of a vessel under 100 tons,	-	1	50
Clearance of do. do. do.	-	1	50
Every post entry,	-	2	00
Permit to land goods,	-		20
Every bond taken officially,	-		40
Permit to lade goods, for exportation for drawback	-		30
Debenture or other official certificate,	-		20
Bill of Health,	-		20
Official document (register excepted) required by any person	-		20

To the Surveyor,

Admeasuring and certifying the same, of every ship or vessel of 100 tons and under, per ton,	-		1
Admeasurement of every ship or vessel above 100 tons and not exceeding 200 tons,	-	1	50
Above 200 tons,	-	2	00
For all other services on board any ship or vessel of 100 tons and upwards, having on board goods, wares or merchandize, subject to duty,	-	3	00
For like services on board any ship or vessel of less than 100 tons,	-	1	50
On all vessels, not having on board goods, wares or merchandize, subject to duty,	-		66 $\frac{2}{3}$

Allowances for Draft.

	lb.
Any quantity of 100 weight or 112 lb.	1
Above 100 and under 200	2
200 and under 300	3
300 and under 400	4
400 and under 1800	7
1800 and upwards,	9

DUTIES PAYABLE BY LAW.

	<i>Tares.</i>	lb.
On every whole chest of bohea tea,	-	70
half do. do.	-	36
quarter do. do.	-	20
chest of hyson or other green tea, of 70 lb. or upwards,	-	20
box of other tea, between 50 and 70 lb.	-	18
do. if 80 lb.	-	20
do. from 80 lb. and upwards,	-	22
The above to include ropes, canvases and other coverings.		
On all other boxes of teas, according to the invoice or actual weight thereof.		
On coffee, in bags,	-	2 per cent.
in bales,	-	3
in casks,	-	12
On sugar, other than loaf sugar in casks,	-	12
in boxes,	-	15
in bags or mats,	-	5
On cocoa, in casks,	-	10
in bags,	-	1
On pimento, in casks,	-	16
in bags,	-	3
On cheese, in hampers or baskets,	-	10
in boxes,	-	20
On candles, in boxes,	-	8
On chocolate, in boxes,	-	10
On cotton, in bales,	-	2
in seroons,	-	6
On glauber salts, in casks,	-	8
On indigo, in barrels,	-	12
in other casks,	-	15
in seroons,	-	10
in bags or mats,	-	3
On nails, in casks,	-	8
On pepper, in casks,	-	12
in bales,	-	5
in bags,	-	2
On sugar candy, in boxes,	-	10
On segars, in boxes,	-	18
On soap, in boxes,	-	10
On shot, in casks,	-	3
On twine, in casks,	-	12
in bales,	-	3
On all other goods, according to the invoice thereof, as actual weight.		

Allowance for leakage and breakage.

Two per cent. allowed on the gauge on all merchandize, paying duty by the gallon, contained in casks.

Ten per cent. on all beer, ale and porter in bottles, and five per cent. on all other liquors in bottles, to be deducted from the invoice quantity, in lieu of breakage; or it shall be lawful to compute the duties on the actual quantity by tale, at the option of the importer *at the time of entry.*

Terms of Credit.

When the duties on ad valorem articles are less than 50 dollars it must be paid immediately: if specific, a deposit must be made to secure the same, which, when ascertained, will be immediately settled.

When the duties on goods imported, (where the sum payable by one person or co-partnership, shall amount to more than fifty dollars) the following credit is allowed by law, except where any bond on which the person or co-partnership entering such goods, wares or merchandize, are either principal or security, and which being due, remains undischarged.

On all articles the produce of the West-Indies (salt excepted) the one half in three and the other half in six months.

On salt, in nine months.

On Madeira, and all other wines, twelve months.

On all goods, &c. from Europe, (wine, salt and teas excepted) the one-third in eight, one-third in ten, and one third in twelve months.

On all goods &c. (wines, salt and teas excepted) from any other place than Europe and the West-Indies, one half in six months, one fourth in nine months, and one fourth in twelve months.

On teas, "from China or Europe, may be deposited at the option of the importer or importers (to be determined at the time of making entry therefor) either to secure the duties thereon, on the same terms and stipulations as on other goods, wares and merchandize imported, or to give his or her, or their bond, to the collector of the district, where any such teas shall be landed, in double the amount of the duties thereupon, with condition for the payment of the said duties *in two years*, from the date of such bond; which bond shall be accepted by such collector, without surety, upon the terms following; that is to say, The teas, for the duties whereof such bond shall be accepted, shall be deposited at the expense and risk of the said importer or importers, in one or more store-house or store-houses, as the case may require to be agreed upon, &c." The said teas to be delivered upon bond being given with one or more surety or sureties, to the satisfaction of the collector "if the same shall not exceed one hundred dollars in four months; if above one hundred dollars and not exceeding five hundred dollars in eight months; or if the same shall exceed five hundred dollars in twelve months;" so that the term of credit shall not extend the period beyond *two years* from the time of depositing the said teas: any teas remaining after the said term of two years, to be sold by the collector, who shall return the surplus (after paying the duties) to the owner or owners thereof.

When bonds given for duties shall become due, and not discharged, the collector is to prosecute without delay; and in case of insolvency or death, the United States to be the first creditor, "and if any executor, administrator, assignee, or any other person, shall pay any debt due by the person or estate, from whom, or for which they are acting, previous to the debt or debts due to the United States, being first fully satisfied and paid, shall become answerable in their *own person and estate* for the same, or part thereof remaining unsatisfied."

Sureties on all bonds given for duties, shall, in case of insolvency or death of the principal, "have and enjoy the like advantages, priority or preference for the recovery and receipt of the said money out of the estate and effects of such insolvent, or deceased principal, as are reserved to the United States."

When bonds are prosecuted for the recovery of duties due to the United States, judgment to be granted at the return term, "unless the defendant shall in open court, the United States Attorney being present, make oath or affirmation, that an error has been committed in the liquidation of the duties demanded upon such bond, specifying the errors alledged to have been committed, and that the same have been notified, in writing, to the collector of the district prior to the commencement of the return term *afore-aid*."

On all bonds upon which suits shall be commenced, an interest shall be allowed at the rate of six per cent. per annum, from the time when said bonds became due until the payment thereof."

Duties to be paid where goods are landed, and bonds to be given for securing the duties, if the whole or part of the cargo is destined to different districts.

Restrictions on Importations.

No goods, wares or merchandize, of foreign growth or manufacture, subject to the payment of duties, shall be brought into the United States from any foreign port or place in any other manner than by sea; nor in any ship or vessel of less than *thirty tons burthen*, agreeable to the mode of ascertaining American tonnage, except in certain districts on the Northern, North-western and Western boundaries of the United States, adjoining to the dominions of Great-Britain in Upper and Lower Canada, and the districts on the rivers Ohio and Mississippi.

No beer, ale or porter, to be imported in casks of less capacity than *forty gallons beer measure*, or if in bottles, in packages less than *six dozen*, under penalty of forfeiture, with the ship or vessel.

No refined lump, or loaf sugar, shall be imported into the United States, from any foreign port or place, except in ships or vessels of the burthen of *one hundred and twenty tons* and upwards, and in casks or packages containing each not less than *six hundred pounds*, on pain of forfeiting the said ship or vessel, and the loaf and lump sugar imported therein, except in such casks or packages as aforesaid.

No distilled spirits, (arrack and sweet cordials excepted) to be imported in casks or vessels of less capacity than *ninety gallons wine measure*, on pain of forfeiture, with the ship or vessel, nor in casks or vessels which have been marked pursuant to any law of the United States, on pain of forfeiture of the said refined lump or loaf sugar, and distilled spirits, together with the ship or vessel: Provided, that the forfeiture shall not be incurred on "any spirits imported, or brought into the United States, in other casks or vessels as aforesaid, or the ship or vessel in which they shall be brought, if such spirits shall be for the use of the seamen on board of such ship or vessel, and shall not exceed the quantity of four gallons for each seaman," and which shall at the time of the entry of the said vessel be inserted in the Manifest as the sea stores of such ship or vessel.

Mode of transacting business at the Custom-Houses in the United States.

DUTY OF MASTERS OF VESSELS.

No merchandize to be imported in any vessel belonging in whole or in part to a citizen or inhabitant of the United States, unless the Master of such vessel shall have on board a manifest in writing, signed by such master or other person having the command, containing the name of the port or place where such merchandize were received, and the port where consigned or destined to, within the United States, particularly noting the merchandize destined for each port respectively; and every package on board such vessel to be particularly described—to whom consigned, or if to order, with the names of all passengers, distinguishing whether cabin or steerage passen-

AT THE CUSTOM-HOUSES.

gers, or both, with their baggage, and an account of all remaining sea-stores (if any) : The form of such manifest as follows :

REPORT and manifest of the cargo laden on board of the
 whereof _____ is master, which cargo was taken on board at
 _____ burthen _____ tons, built at
 in the state of _____ and owned by _____ merchants at
 the _____ as per register granted at
 _____ and bound for _____

Marks	Number inclusive	Packages and Contents	By whom shipped	To whom consigned, or if to order	Place of Consignee's residence	Ports of destination

Returned Cargo.

(If any articles of the outward cargo are brought back, they are to be detailed, specifying by whom shipped outward, and to whom consigned inward.)

Return of passengers, and of packages belonging to them respectively.

(Here insert the names of the passengers, and whether cabin or steerage passengers; with the description and number of packages containing their baggage, or the tools or implements of a mechanical trade.)

Vessel and Cabin Stores.

(Here detail what are remaining.)

If merchandize imported are destined to be delivered in different districts or ports, the said merchandize to be inserted in successive order in the above manifest, and all *spirits, wines, and teas*, being the whole or any part of the cargo, shall be inserted in like order, distinguishing the port where destined, and the kind, qualities, and quantities thereof; and if merchandize shall be imported by citizens or inhabitants of the United States, in vessels other than of the United States, the manifest shall be of the form, and shall contain the particulars aforesaid, except that the said vessel shall be described in manner following :

REPORT and manifest of the cargo laden on board the
 whereof _____ is master, burthen _____ bound to _____ which
 cargo was taken on board at _____

Excessive quantity of sea-stores to pay duty.

In addition to the above, the master of every American vessel to make the following—

MODE OF TRANSACTING BUSINESS

Return of seamen on board the _____ called the _____ master, showing also their names, the time for which they were respectively employed, and the sums retained out of the wages of each.

Whole number employed.	Names of Seamen, and the time for which they have been respectively employed.	Time employed.		Sums retained out of Seamen's wages, to be paid over to the Collector.	
		Months	Days	Dollars	Cents

The master is authorized by law to retain from each seaman so returned, the sum paid for them to establish a Marine Hospital.

The master of all vessels to produce the following—

Report of alien passengers on board the _____ of which _____ is master, arrived at the port of _____ in the state of _____ on the _____ day of _____

Names.	Ages.	Places of nativity.	Country from whence they have come.	To what nation they belong and owe allegiance.	Their occupation.	Description of their persons.

Vessels bound to Connecticut, by way of Sandy-Hook, or to Hudson, before they pass the port of New-York, and immediately after arrival, the master to deposit with the Collector a true manifest of the cargo on board such ship or vessel: the penalty for neglect or omission, or refusing to receive an Inspector of the Customs on board the same, to accompany such vessel, is 500 dollars.

For all goods not included in the manifest, the master forfeits a sum of money equal to their value; and all merchandize not included in such manifest, belonging or consigned to the Master, Mate, Officers, or Crew of such vessel, shall be forfeited, unless it is made appear to the satisfaction of the collector, naval officer, and surveyor, or the major part of them, or to a court on trial, that no part was unshipped, except what is mentioned in the report, or that the manifest has been lost or mislaid, without fraud, or defaced by accident, incorrect by mistake,

The master of any vessel, or other person having charge thereof, belonging in whole or in part to a citizen or citizens, inhabitant or inhabitants of the United States, on arrival within four leagues of the coast, or within any bays, harbours, ports, rivers, creeks, or inlets thereof, to have a manifest on board, and on demand made by any officer of the customs, first coming on board, to produce such manifest and deliver him a copy thereof, signed by the master or other person having charge of such vessel, and the officer shall certify on the original the day and year the same was produced; the said copy to be provided and subscribed by the master, or such other person having command; the copy of which to be compared with the original, and certified by such officer on the back thereof; the day and year such copy or copies was or were delivered to him; the original manifest to be delivered

afterward by the master to the collector—*Provided*, that not more than one copy of each manifest shall be required by any officer or officers who shall first come on board, within four leagues of the coast of the United States, and one other copy to any officer or officers who shall first come on board, within the limits of any district for which the cargo or any part thereof shall be destined.

The penalty on masters, for not producing manifest, and delivering copy thereof to the proper officer or officers on demand, or for not informing such officer the *true destination* of such vessel, is *five hundred dollars* for each offence; and the like penalty is incurred by such officer who shall neglect or refuse to certify such manifest; and the officer is required to make a return in writing of the name of the vessel, and master, offending in any or all of the particulars required, to the collector of the district where such vessel may be bound.

Any vessel within four leagues of the coast, or within the limits of any district, unloading goods without authority from proper officers, the master and mate forfeit *one thousand dollars* for each offence, and the goods forfeited, except in case of accident, necessity, or stress of weather; which shall be proved before the collector, by the master, mate, and one other officer or mariner.

Masters of vessels receiving goods so unladen (except as before excepted) to forfeit treble the value of such goods; and the ship, boat, or vessel receiving them to be forfeited.

If any vessel, having arrived within any district, shall depart, or attempt to depart from the same, (unless to some more interior port, or by stress of weather) without report to the collector, the master forfeits *four hundred dollars*.

Any vessel arriving from a foreign port, the master is to report to the collector, within twenty-four hours after his arrival, and within twenty-four hours thereafter, further to report the name, burthen, &c. in writing, agreeably to the directions given in pages 232, 233, and shall make oath or affirmation to the truth of the same, in the words following:

I (A. B.) do solemnly, sincerely, and truly swear, (*or affirm*) that the report and manifest subscribed with my name, and now delivered by me to the collector of the district of _____ contains, to the best of my knowledge and belief, a just and true account of all the goods, wares, and merchandize, including packages of every kind and nature whatsoever, which were on board the _____ at the time of her sailing from the port of _____ or which have been laden or taken on board at any time since, and that the packages of the said goods are as particularly described as in the bills of lading, signed for the same by me, or with my knowledge; that I am at present, and have been during the voyage, master of the said vessel; (*or how long*) that no package whatsoever, or any goods, wares, or merchandize have been unladen, landed, taken out, or in any manner whatever removed from on board the said _____ since her departure from the said port of _____ except such as are now particularly specified, and declared, in the abstract or account herewith, and that the clearance and other papers now delivered by me to the collector, are all that I now have, or have had, that any way relates to the cargo of the said vessel.—And I do further swear (*or affirm*) that the several articles specified in the said manifest as the sea-stores for the cabin and vessel, are truly such, and were *bona fide* put on board the said _____ for the use of the officers, crew, and passengers thereof, and have none of them been brought and are not intended by way of merchandize, or for sale, or for any other purpose, than above mentioned, and are intended

prince or state to carry goods in way of trade, are not required to make such reports.

Masters of vessels, after arrival and entry, may proceed to foreign ports with goods, *noted on the manifest at the time of entry for such foreign port*, without paying duties thereon, on giving bond that the said goods shall be actually re-exported in such vessel to a foreign port; but bonds are not required when vessels put in, in distress.

Masters of vessels having goods on board destined to different districts, other than the district at which he may arrive, to be furnished by the collector with a copy of his report, and a certificate, shewing on what part of the cargo the duties have been paid or secured, and give bond for reporting such goods on which the duties have not been paid or secured; which copy the master is to produce to the collector of the district where bound, within 24 hours after his arrival, under a penalty of *five hundred dollars*; and the said bond to be cancelled by producing from the collector of such district, a certificate, within six months of the due entry and delivery of such merchandize in such district or districts.

In addition to the foregoing the master to apply to the surveyor or inspector of the port, for a copy of his report (where there are distilled spirits, wines or teas on board, to be delivered in different districts) the want of which subjects such articles to forfeiture, and *five hundred dollars* penalty on the master.

Post-Office Laws.

No ship or vessel from foreign ports, or coming by sea from any port of the United States, shall be permitted to report, make entry, or break bulk, till the master shall deliver to the post-master all letters under his care or within his power, other than such as are directed to *the owner or owners, of such ship or vessel, or to persons at the port of delivery*, and on oath or affirmation, to be taken of such delivery, the master to receive two cents for every letter so delivered.

Form of the Oath.

I do solemnly that I have delivered to the post-master of all letters directed to any person or persons within the United States, which under my care or within my power have been brought in the myself master, from those directed for the owner or owners, consignee or consignees of the said vessel, and persons at the port of delivery excepted.
So help me God.

Goods found on board any vessel not noted on the manifest, the master to make post entry, previous to any permit being granted therefor.

Packages wanting, or goods not agreeing with the manifest, the master forfeits *five hundred dollars*, unless made appear to the satisfaction of the principal officers of the customs, that no part of the cargo has been unloaded since it was taken on board, except such as noted in the report, and pursuant to permits; and that such disagreement arises from accident or mistake.

Vessels arriving from any foreign port, *in distress*, at any port of the United States, not being destined for the same, protest to be made by the master and mate, within twenty-four hours and lodged at the custom-house; and within forty-eight hours enter his vessel, as in all other cases; and if by certificate of the officers of the port, of the necessity thereof, the

vessel may be unladen and cargo deposited in the public store, and reloaded again (except such part as may be necessary to be sold to defray the expences of the repairs of the vessel only, on which the duty shall be paid as in other cases) by permission from the Custom-house, free from any other charge than storage and fees to the officers of the customs as in other cases.

The master or person having command of any vessel bound to a foreign port or place, shall deliver to the Collector of the district from whence such vessel is about to depart, a manifest of all the cargo on board, and the value thereof, subscribed by such person; the penalty for not delivering such manifest, and obtaining a clearance, previous to departure from such district, is 500 dollars for every offence. The form of such manifest as follows:

Report and Manifest of the Cargo laden at the port of _____ *on board*
the _____ *Master, bound for* _____ *port of* _____

Marks.	Numbers.	Packages or articles in bulk.	Contents or quantities.	Value at the port of exportation.

Manifest Oath on outward Cargo.

I _____ *District of* _____
master or commander of the _____ bound from the port of _____
to _____ do solemnly, sincerely and truly swear
(or affirm) that the manifest of the cargo on board the said _____ now
delivered by me to the collector of this district, and subscribed with my
name, contains, according to my best knowledge and belief, a full, just and
true account of all the goods, wares and merchandize now actually laden on
board the said vessel, and of the value thereof; and if any other goods, wares
or merchandize shall be laden or put on board the said
previous to her sailing from this port, I will immediately report the same to
the said collector. I do also swear (or affirm) that I verily believe the duties
on all the foreign merchandize therein specified have been paid or secured,
according to law, and that no part thereof is intended to be re-landed within
the United States; and that if by distress or other unavoidable accident it
should become necessary to re-land the same, I will forthwith, make a just
and true report thereof to the collector of the customs of the district wherein
such distress or accident may happen.

So help me God,

IMPORTERS OR CONSIGNEES.

Owners or consignees of goods imported are, within fifteen days after the master's report, to make entry with the collector, detailing the several contents and net cost of each package particularly; and produce the original invoice, documents and bills of lading; which must be verified on oath, or affirmation, by the said parties, who must subscribe the *Form of Entry and Oath, as follows*:

AT THE CUSTOM-HOUSES.

[When imported in an American Vessel.]

*Entry of Merchandise, imported by
Master, from
in the*

Marks.	
	Numbers inclusive.
	Packages and contents.
	Quantity per Invoice of Articles not subject to specific Duties.
	Value of Articles sub- ject to specific Duties.
	Value subject to 12½ per cent ad valorem.
	Value subject to 15 per cent ad valorem.
	Value subject to 20 per cent ad valorem.
	Value subject to 40 per cent ad valorem.
	Amount of free goods.
	Charges not subject to duty.
	Total amount per Invoice.

[When imported in a Foreign Vessel.]

*Entry of Merchandise, imported by
Master, from
in the*

Marks.	
	Numbers inclusive.
	Packages and Contents.
	Quantity per Invoice of Articles not subject to specific Duties.
	Value of Articles subject to specific Duties.
	Value subject to 13¼ per cent ad valorem.
	Value subject to 16½ per cent ad valorem.
	Value subject to 22 per cent ad valorem.
	Value subject to 44 per cent ad valorem.
	Amount of free goods.
	Charges not subject to Duty.
	Total amount per Invoice.

The Oath or Affirmation in either Case.

District of

Port of

I do solemnly, sincerely and truly swear (or affirm) that the entry now subscribed with my name, and delivered by me to the Collector of goods, wares and merchandise imported for sale, or intended to be landed in this district for me, or on my account, or on account of any house of trade or partnership in which I am concerned, in this district, or which actually came consigned to me, or to any house of trade or partnership in which I am concerned, or imported by, or consigned to and intended for sale or to be landed in this district, in the _____ whereof is master, from _____ that the said entry contains a just and true account in _____ of the cost thereof, including all

charges ; that the invoice or invoices and bill or bills of lading now produced by me, are the true, genuine and only invoices and bills of lading by me received, of the said goods, wares and merchandize imported or consigned as aforesaid, and the only invoices by which I have been charged, or for which I am to account, and that the said invoices and bills of lading are in the actual state in which they were received by me, and that I do not know of any other invoices or account of the said goods, wares and merchandize, different from what is or are here produced. I do further swear (or affirm) that if I hereafter discover any other or greater quantity of goods, wares or merchandize than is contained in the entry aforesaid, or shall receive any invoice of the whole or any part thereof other in quantity, quality and price than has been now exhibited, I will immediately, and without delay, report the same to the Collector of this district. I also swear (or affirm) that nothing has been concealed or suppressed in the entry aforesaid, whereby to avoid the just payment of the duties imposed by the laws of the United States, and that all matters are justly and truly expressed therein, according to my best knowledge and belief.

So help me God.

When the above entry is made by any agent, factor or other person, other than the *bona fide* owner or consignee of such merchandize, such person to give bond in the sum of 1000 dollars, over and above what the duties may amount to, with condition, that the *bona fide* owner or consignee of such merchandize shall, on or before the first period of payment of such duty become due, deliver to said Collector, a full and correct account of said merchandize, in manner and form aforesaid ; verified by a like oath or affirmation, before any judge of the United States, or the judge of any Court of Record of a state, or before a Collector of the Customs ; and in case the duties are paid at the time of entry, a like bond to be given, that such an account shall be delivered within ninety days from such entry.

When the particulars of such merchandize are not known, an entry thereof to be made according to circumstances ; declaring, on oath or affirmation, all the particulars the party knows or believes concerning the same ; to be subscribed by the party : and where an imperfect entry is made, either for want of invoices, bills of lading ; &c. the collector to take such merchandize into his custody, until the quantity, quality, or value can be ascertained.

Every importer or consignee of distilled spirits, wines, or teas, to make a separate entry of the same, specifying the name of the vessel and master, and place from whence ; the quantity and quality, and a particular detail of the chests, casks, or vessels containing the same, with the marks and numbers ; which entry, after being certified by the collector, to be produced to the surveyor or officer acting as inspector of the revenue for the port ; and all permits granted by the collector for the above articles, shall, prior to the landing of the same, be produced to the surveyor or officer acting as inspector for the port, for endorsement ; any of the above articles landed, contrary to the above direction, are subject to forfeiture, and five hundred dollars penalty on the master or person having charge of the vessel.

Goods without invoice, or specification of particulars, to be stored by the collector, until appraised or invoices arrive, at the option of the importer.

Appraisers to ascertain and certify at what rate, or per centage, such goods are damaged, but no allowance for damage, unless such appraisement is lodged in the Custom-House within ten days after the landing thereof, accompanied with a certificate of the officers of the port.

Form of Appraisers Oath and Certificate where goods are without Invoice.

We A. B. and C. D. appointed by the Collector of
and to ascertain the contents, and appraise the value
of the merchandize contained in the several packages described in the within
or annexed entry or account, do solemnly, sincerely and truly swear (*or
affirm*) that the several articles detailed in the annexed appraisment, subscri-
bed with our names, contains a full and true account of all the merchandize
whatsoever contained in the several packages mentioned in such entry or
account, and that the several prices by us affixed to each article are to the
best of our skill and judgment, the true and actual value or cost thereof, at
the place of exportation.

So help us God.

Form of Appraisers Oath and Certificate where Goods are damaged.

We A. B. and C. D. appointed by the Collector of the district of
and to ascertain and appraise the damage
sustained on merchandize imported by in the
whereof is master, from do solemnly, sin-
cerely and truly swear (*or affirm*) that we have carefully examined the
several packages hereafter enumerated and described, and find the several ar-
ticles of merchandize as particularly detailed, contained in the said pack-
ages, to have received damage, as we believe, during the voyage of import-
ation, and that the allowance by us made for such damage is to the best of
our skill and judgment just.

So help us God.

Goods, not entered in fifteen days, to be sent to the public store, (salt
and coal excepted) which may remain longer, the owner or master paying
inspectors: and all goods so deposited to be at the risk and charge of the
importer; and if not entered, and the duties paid or secured, *within nine
months*, to be sold, (being first advertised for one month) the surplus money
arising from such sale, after the duties and charges are paid, to be paid into
the treasury of the United States, for the benefit of the owners, who, upon
due proof of the property, shall be entitled to the same. Perishable articles
may be sold immediately.

Goods entered under a fraudulent invoice to be forfeited, or where the col-
lector shall suspect that such goods are not invoiced agreeably to the sum
such goods are sold for at the place from whence they are imported, to be
taken into his possession at the risk and expense of the importer, until they
are appraised; and in case of prosecution for the forfeiture aforesaid, such
appraisment shall not exclude other proof on trial, of the actual and real
cost of the said goods, at the place from whence imported.

Packages may be opened in presence of two merchants, upon suspicion of
fraud, and repacked under the inspection of an officer; and if found to dif-
fer from the entry, to be forfeited, unless made appear to the satisfaction of
the principal officers of the customs, or a court on trial, that such differ-
ence proceeded from accident or mistake, or without intention of fraud.

Returned Cargo.

When goods, &c. the growth or manufacture of the United States shall
be returned, not having been shipped for the benefit of drawback or boun-
ty, no duty to be demanded.

MODE OF TRANSACTING BUSINESS

Report and entry of such goods, &c. to be made, and proof by oath or affirmation of the facts thereof, in manner following :

*Entry of Merchandize exported from the district of _____ in the
 _____ master, for _____ on the _____ day of _____ by
 and returned in the _____, _____ master, from _____*

Marks.	Numbers.	Packages and Contents.

District of _____
 ff. Port of _____

I, _____, do solemnly, sincerely, and truly swear (or affirm) that the several articles of merchandize mentioned in the entry hereto annexed, are, to the best of my knowledge and belief, truly and *bona fide* of the growth, product, or manufacture of the United States, and that they were truly exported and imported as therein expressed ; and that no drawback, bounty, or allowance has been paid or admitted thereon, or any part thereof.

So help me God.

N. B. When the goods so returned have been exported from any other district than the one they may be imported in, bonds to be given by the importer, in addition to the above oath, in the sum of the duties, that within six months a certificate shall be produced from the collector of the customs for the district from whence they were exported, that such goods were actually so exported ; in default of which, the bond to be forfeited, and the penalty paid.

—•—

PASSENGERS.

Entry to be made by passengers of all clothes, books, household furniture, tools or implements of trade or professions, arriving in the United States to settle ; which articles are exempted from duty. The form of such entry and oath respecting the same, as follows :

*Entry of wearing apparel, &c. imported by _____ in the _____,
 _____ master, from _____*

(Here the particulars to be inserted.)

District of _____
 ff. Port of _____

I, _____, do solemnly, sincerely, and truly swear (or affirm) that the entry subscribed by me and hereto annexed, contains, to the best of my knowledge and belief, a just and true account of the contents of the several _____ mentioned in the said entry, imported in the _____ from _____ and that they contain no goods, wares, or merchandize whatever, other than the wearing apparel and other personal baggage, (or if the case require) and the tools of the trade of _____ all of which are the property of _____ who has or have arrived, who is or are shortly expected to arrive, in the United States ; and are not directly or indirectly imported for any other person or persons, or intended for sale.

So help me God.

If the articles shall be entered by any other person than the owner, bond to be given in a sum equal to the amount of what the duties would be if imported subject to duty; that the owner shall within one year verify such entry on oath, or the collector may direct such baggage to be examined; and if any article is contained therein, which ought to pay duty, entry must be made therefor; and if an entry is made as aforesaid, and upon examination thereof any article is found therein subject to duty, (*not having been expressed at the time of making the entry*) it is forfeited, and the person in whose baggage the same shall be found, forfeits and shall pay treble the value thereof.

D R A W B A C K S.

Mode of obtaining Drawback on foreign Merchandize.

Merchandize imported into the United States, (loaf-sugar, fish, snuff, and manufactured tobacco excepted) if exported within one year from the paying or securing the duties thereon, from the ports of original importation, are entitled to a drawback of such duties, or may be transported coastways to certain districts, and obtain the drawback if exported from thence to a foreign port, by observing the following directions: Provided, The duties paid or secured on such merchandize shall amount to *fifty dollars* and are exported in the original casks, cases, chests, boxes, or other packages in which they were imported, except liquors in casks, coffee or cocoa in casks or other packages, or unrefined sugar, which may be filled up out of others of the same importation, or put into new casks or packages corresponding therewith, which must be marked and numbered as the originals; but no change or filling up to take place unless the casks or other packages are unfit for exportation, and in no other case; the whole to be performed under the inspection of a proper officer appointed for that purpose.

When articles are imported in bulk, the packages in which they are landed shall be deemed the packages of original importation, and must be exported in the same; and all certificates for distilled spirits, wines, or teas, must be given up, or no drawback to be allowed.

Twenty-four hours notice to be given, by lodging an entry therefor before shipping the goods, except distilled spirits which require but six hours; and goods shipped without a proper permit forfeit the drawback. The form of the entry as follows:

Entry of Merchandize intended to be exported by _____ *on board of*
the _____ *whereof* _____ *is master, for* _____ *for the benefit of*
drawback, which were imported into the district of _____ *on the*
by _____ *in the* _____ *from* _____ *and brought into this district*
on the _____ *in the* _____ *from* _____

Marks.	Numbers	Packages and contents.	Net cost of ad valorem articles as having paid duties.	Weight or gauge.	Tare and draft or allowance for leakage.

MODE OF TRANSACTING BUSINESS

When merchandize are exported from the port of original importation, the following to be omitted in the above: "*and brought into this district on the in the , master, from*".

Previous to any permit being given, proof must be made by the importer, and every other person through whose hands such merchandize may have passed, of the due importation, the paying or securing the duties, and identity thereof. The form of the oath as follows:

Oath to be taken on Exportation, by the original Importer.

I, do solemnly, sincerely, and truly swear (or affirm) that the articles specified in the above, or annexed entry, were imported by (or *consigned to*) me, in the whereof was master, from that they were duly entered by me at the custom-house of this port, and the duties paid (or *secured*)—that they are the same in quantity, quality, package, (and *value*) as at the time of importation, necessary or unavoidable wastage or damage only excepted, and are now actually laden on board the whereof is master; and that they are truly intended to be exported by me in the said vessel to the port of and are not intended to be re-landed within the limits of the United States,

So help me God.

Oath to be taken by the original Importer when goods have been sold.

I do solemnly, sincerely and truly swear (or *affirm*) that the articles specified in the above, or annexed entry, as imported by (or *consigned to*) me, were truly imported by, or consigned to me in the whereof is master, from that they were duly entered by me at the Custom-House of and the duties thereon paid (or *secured*)—that they were the same in quantity, quality, package, necessary or unavoidable wastage or damage only excepted (and *value*) at the time of sale or delivery to as at the time of importation.

So help me God.

Oath to be taken by an intermediate person.

I do solemnly, sincerely and truly swear (or *affirm*) that the articles of merchandize specified in this entry were purchased by me from and were sold by me to and that they were not to the best of my knowledge and belief altered or in any respect changed in quantity, quality, value or package, necessary or unavoidable wastage or damage only excepted, while in my possession, or from the time of said purchase until the time of said sale.

So help me God.

Oath to be taken by an Exporter, other than the original Importer.

I do solemnly, sincerely and truly swear (or *affirm*) that the articles specified in the above or annexed entry, were purchased by me of that they are now actually laden on board of the whereof is master, and were at the time of such lading, and are now the same in quantity, quality, package, necessary or unavoidable wastage or damage only excepted (and *value*) as at the time of purchase, that they are truly intended to be exported by me in the said vessel to the port of and are not intended to be re-landed within the limits of the United States,

So help me God,

AT THE CUSTOM-HOUSES.

The exporter to make oath respecting such exportation, and to give bonds before clearance, or within ten days after, with security, to the satisfaction of the Collector, in a penalty double the amount of such drawback, to produce the proof required by law in respect to their being landed without the limits of the United States; within one year if to Europe or foreign dominions in America, or within two years if to Asia or Africa. The certificate proper to be produced to be of the following form:

I _____ of the _____ of _____ do hereby certify, that the goods or merchandize herein after described, have been landed in this _____ between the _____ and _____ days of _____ from on board the _____ of _____ whereof _____ is at present master, viz.

A. B. No. 1. a. 10 ten hogsheds	} Containing fourteen thousand
C. D. No. 3. 6. 9. 15. four tierces	
E. F. No. 14. 18. 22.	} Eight hogsheds, containing ten thousand
25. 27. 30. 33. 36.	
G. H. No. 21. a. 30.	Ten chests, containing seven hundred weight of hyson tea.

I. K. 7. 16. 19. Three bales, containing one hundred and fifty pieces of nankeen—) which according to the bills of lading for the same, were shipped on board the _____ at the port of _____ in the United States of America, on or about the _____ day of _____ and consigned to _____ by _____ of _____ afore said, merchant
 Given under _____ hands, at the _____ this _____ day of _____ A. A.

Oath or Affirmation of the Master or principal Officers of the Vessel confirming the above.

Port of _____
 We _____ master, and _____ mate of the _____ of _____ lately arrived from the port of _____ in the United States of America, do solemnly swear (or affirm) that the goods or merchandize enumerated and described in the preceding certificate, dated the _____ day of _____ and signed by A. A. of the city of _____ merchant, were actually delivered at the said port, from on board the said _____ within the time specified in the said certificate.

Sworn (or affirmed) at the port of _____ before me, this _____ day of _____

Form of verification of the above by a Consul or Agent of the United States.

I _____ (consul or agent of) the United States of America, at the city of _____ do declare, that the facts set forth in the preceding certificate, subscribed by A. A. of the said _____ merchant, and dated the _____ day of _____ are to (my knowledge, just and true; or are in my opinion just and true, and deserving full faith and credit)

In testimony whereof, I have hereunto subscribed my name and affixed the seal of my office, at _____ this _____ day of _____ M. M. Consul.

If there is no Consul or Agent, the following in place thereof.

We _____ residing in the _____ of _____ do declare, that the facts stated in the preceding certificates signed by A. A.

MODE OF TRANSACTING BUSINESS

of the said merchant, on the day of are (to our knowledge just and true; or are in our opinion just and true, and worthy of full faith and credit.) We also declare that there is (no consul or other public agent for the United States of America, or American merchants) now residing at this place.

Dated at the city
this day of

J. P.
C. D.

If any goods, wares or merchandize, entered for exportation with intent to drawback the duties, shall be landed within the limits of the United States, the same is subject to seizure, and forfeiture, together with the ship or vessel; and the vessels or boats used in landing the same, and all persons concerned therein upon conviction, to suffer imprisonment not exceeding six months.

Merchandize may be transported coastways to such parts as vessels arriving from the Cape of Good Hope, or beyond the same, are admitted to enter at, by making the following entry, and obtaining a certificate from the port of original importation.

The form of the entry as follows:

Entry of Merchandize intended to be shipped by on board
the whereof is master, for
to be exported from thence for the benefit of drawback, which were import-
ed into this district on the by in the
from

Marks.	Numbers.	Packages and Contents.	Cost of articles paying duty ad valorem	Weight or guage.	Tare and draft or allowance for leakage.

Such merchandize to be entered by the consignee, previous to the landing thereof, in manner following:

Entry of merchandize, transported coastways, for in the
whereof is master, from
for the purpose of being exported from the district of for the
benefit of drawback; which were imported in the district of
on the by in the from

Marks.	Numbers.	Packages.	Contents.

Oath or Affirmation to this Entry.

I do solemnly, sincerely and truly swear (or affirm) according to the best of my knowledge and belief, that the entry by me subscribed is just and true, that the merchandize therein mentioned, have been duly im-

ported, and the duties thereupon paid, or secured to be paid, according to law. So help me God.

The certificate accompanying such merchandize to be produced at the time of making entry, upon which a permit will be granted for unloading; and if intended to be exported to a foreign port the same proceedings to be had as if such merchandize had been originally imported into the district from whence they are to be exported.

Merchandize may be transported across the State of New-Jersey, by the following rout to Philadelphia, and exported from thence to a foreign port and obtain drawback, viz. New-Brunswick, South-Amboy, and Lambertton, Bordentown or Burlington, by making an entry as if transported by water; the said merchandize to be inspected and marked previous to the lading on board any packet with intention of transportation as aforesaid, and obtaining the certificate as in other cases: and if merchandize is transported by any other rout than expressed in the passport accompanying the same, or if the marks, fastnings or seals that may be placed thereon, by direction of any officer of the customs, be broken, or defaced, or unpacked, the merchandize in respect to which such omission or wrong doing shall happen, or the value thereof, shall be forfeited.

In addition to the above mentioned entry, the following shall be made to obtain the passport for transportation, and which is to accompany such merchandize.

Entry of merchandize intended to be transported by _____ of the city of merchant, across the State of New-Jersey to Philadelphia.

Marks.	Numbers.	Number and description of Packages.	Contents.	By whom sent.	To whom consigned.

If goods are exported from the district into which they were originally imported, the exporter shall receive from the Collector of such district, a debenture or debentures for the amount of such drawback, payable at the exact time or times on which the duties on such goods shall become due.— *Provided*, that if the duties on such merchandize shall have been paid prior to an entry for exportation, the debenture shall be made payable in *fifteen days* from the time of signing the bond; and the debenture may be made payable to the original importer, when the same shall be requested in writing, by the exporter, and not otherwise.

If merchandize having been imported coastways, accompanied with a certificate, shall be exported to a foreign port, the exporter to receive a certificate from the Collector of the district from whence exported; which is to be produced to the collector of the district of original importation; and the drawback to be paid at such port, upon a debenture or debentures being granted thereon, payable as aforesaid: but in no case is the drawback to be paid until the duties are first received.

Deduction, on exportation, is one and a quarter per cent on all merchandize, except distilled spirits, which is half a cent per gallon, and a quarter per cent of the amount of duties.

A law of the United States, passed May 13, 1800, authorizes the Collector to retain in his hands $2\frac{1}{2}$ per cent on all drawbacks, in addition to the before mentioned, and in the lieu of stamp duties heretofore imposed on adventures.

Mode of recovering Drawback on Sugar refined within the United States.

A drawback of seven cents per pound is allowed on sugar refined within the United States: the exporter to give six hours notice of such exportation to the Surveyor or officer acting as inspector of the port, and make entry therefor at his office—also make oath before the Collector, that the sugar so laden on board the vessel specified in such entry, is truly intended to be exported to the place therein mentioned; and that they believe the duties thereupon have been truly paid, or secured; and shall give bond to the Collector with two sureties, one of whom shall be the master of the vessel, in which laden, for exportation, that the same shall be really and truly exported to, and landed in some port or place without the limits of the United States; such drawback not to be less than twelve dollars, and is payable in nine months from the date of the bond, provided, the certificates are produced of the actual landing thereof at a foreign port; the certificate to be of the form as in other cases of foreign merchandize.

Form of the Entry.

Entry of Sugar refined within the United States, intended to be shipped by
on board the _____, _____ master, for _____ for the
benefit of Drawback.

Marks and Numbers.	Packages and Contents.	Quantity.	Place where deposited.

Oath or Affirmation to the above.

I, _____, do solemnly, sincerely, and truly swear (or affirm) according to my best knowledge and belief, that the sugar specified in the above return, is truly sugar refined within the United States; and I do verily believe the duties imposed by law have been paid, or secured; that it is now actually laden on board the _____, _____ master, for the purpose of being exported to _____ and is not intended to be re-landed within the limits of the United States. So help me God.

Sugar so laden for exportation, if re-landed within four leagues of the coast of the United States (unless in cases of necessity or distress, notice of which shall be immediately given to the principal officers of the customs residing nearest to which such vessel may be) shall be forfeited, together with the ship or vessel on board of which the same shall have been shipped, with her furniture, &c. and the ship or vessel into which such sugar shall be unshipped and put.

Domestic Spirits.

A drawback of $13\frac{1}{4}$ cents is allowed on all domestic spirits which are exported; six hours notice to be given by the exporter to the surveyor or

Inspector of the port previous to the lading thereof, by lodging an entry therefor with such surveyor or inspector; and bonds to be given to the collector in the same manner as in cases of refined sugar; to produce certificates of landing at a foreign port, as in other cases: the drawback is payable in six months; provided, such certificates are produced—but no drawback under one hundred and fifty gallons.

Form of Entry.

Marks and Numbers.	Packages and Contents.	Quantity.	Proof.

The Oath to this Entry is the same as for refined sugar.

Bounty on Salted Provisions and Fish of the United States.

An allowance of thirty cents per barrel is allowed on pickled fish of the United States; and twenty-five cents per barrel on all provisions salted within the United States, without any deduction, if the same shall amount to ten dollars. And in order to obtain such bounty; the exporter to make an entry therefor with the collector; but no entry will be received where such pickled fish or salted provisions have *not been inspected and marked* agreeable to the laws of the respective states, where such laws are in force. Such bounty is payable in six months from the date of the bond to be given; and in no case, unless the certificates of landing at a foreign port, as in other cases, are produced. The bond to be in double the amount of such bounty—conditioned, that the same shall be landed and left at some foreign port.

Form of the Entry.

Entry of _____ intended to be exported for the Benefit of Bounty, by
 in the _____ whereof _____ is Master, bound for _____

Marks as branded on the casks.	Number of barrels.	Description and species of fish or provisions.	Quality.

Oath to be taken by the Exporter.

I _____ do solemnly, sincerely and truly swear, (or affirm) to the best of my knowledge and belief, that the _____ designated in the annexed entry, dated _____ and subscribed with my name, have not been imported from any foreign port or place, but are truly and *bona fide* (if provisions) salted provisions, cured within the limits of the United States, (or if fish) pickled fish of the fisheries of the United States; that they are now actually laden on board the _____ whereof _____ is master, and are to be exported to _____ and are not intended to be landed within the limits of the United States. So help me God.

H h

INFORMATION GENERALLY.

The want of certificates of distilled spirits, wines or teas, subject such articles to seizure, and fifty dollars fine, if such certificates are not delivered to the purchaser; and if any cask, chest, vessel or case, containing such articles, shall be found in the possession of any person, without being marked, and not being accompanied with a certificate, the same is liable to seizure.

On the sale of any cask, &c. which has been marked, the marks to be defaced in presence of some officer of inspection or customs; and the certificate of the same to be delivered up, under penalty of one hundred dollars with costs of suit.

Goods from foreign ports, not to be unladen but between sunrise and sunset, without special licence, under a penalty of four hundred dollars on the master, and every other person concerned, disability from holding any office under the government of the United States for seven years, and being advertised in the newspapers, with forfeiture of the goods; and if above four hundred dollars, value of vessel and apparel.

Goods removed before gauged, and weighed, and if wines, spirits or teas, before being marked, without permission, are forfeited.

Persons giving or offering a bribe, forfeit from two hundred to two thousand dollars.—Inspectors and officers of revenue-cutters may go on board, examine and search vessels, have free access to the cabin, and seal packages; and after sunset secure hatches, &c.—Persons in charge of vessels, for breaking fastenings, but in presence of an officer, forfeit two hundred dollars.

The master or commander of any vessel, that shall obstruct or hinder (or be the cause thereof) any officer of the revenue, in going on board his ship or vessel, for the purpose of carrying into effect any of the revenue laws of the United States, forfeits from fifty to five hundred dollars.

Every owner of a vessel, residing within the limits of the United States, to swear to the register within ninety days after its being granted, or it becomes void, and the vessel and cargo pays foreign tonnage and duty.

Least Sums admitting of Drawback.

Money.	12½ p. cent.	15 p. cent.	20 p. cent.	40 p. cent.
Pound Sterling of England,	82.10.0	69.0.0	51.10.	25.15.0
Ireland	90. 0.0	75.0.0	56. 0.0	28. 0.0
Guilder of U. Netherlands,	925	770	585	292
Specie Livre of France,	2000	1667	1250	625
Mark banco of Hamburg,	1105	930	690	345
Spanish & Rix Doll. of Denmark,	368	307	230	115
Rupee of Bengal,	610	510	383	196
Pagoda of India.	175	145	109	55

 AMERICAN COAST PILOT.

[The following information could not be procured early enough for insertion in its proper place, as the Light-House was not completed till Wednesday, Nov. 19, 1800.]

*Directions for sailing by the * Light-House lately erected on Wigwam-Point, into Annis Squam Harbour (on the southern coast of Ipswich-Bay) in Massachusetts.*

IN sailing into this harbour, bring the light-house to bear S. $\frac{1}{2}$ W. (when at the distance of one mile) then run directly for it, leaving † *Haraden's Rock* (or *Sunken Ledge*) one-tenth of a mile on your larboard hand; when you are within one quarter of a mile of the light-house, you will be on the shoal of the bar, which carries over six feet water at low ebb; continue your course south till you come within a cable's length of the light-house, then haul S. S. W. leaving the light-house on your larboard hand, and a sandy Bar (which runs nearly N. E. and S. W. leaving the river about 90 fathoms broad, at low water, opposite the light-house), on your starboard hand. In running S. S. W. half a mile, you will pass the *Lobster Rocks* on your larboard hand, which are dry at low water; then steer S. S. E. leaving the *Bar Rocks* (which are seen till nearly high water) on your starboard hand; run one quarter of a mile and anchor in five fathoms, clear bottom; or run your vessel on shore on either hand, in case you have neither cables nor anchors.

* *Annis Squam Light-House is a wooden building of an octagonal form, about 40 feet high, and about 50 feet above the surface of the water at common high tides. It is painted white, and may be known by being lower than any other light-house on the coast of Massachusetts, and its inland situation. It bears from Portsmouth light-house about S. b. W. distant 10 or 11 leagues; and from Newburyport Bar S. S. E. 5 leagues.*

† *This Rock lies N. b. E. $\frac{1}{4}$ E. from the light-house, half a mile distant.*

Newburyport Book-Store.

NEW CATALOGUE

OF
Charts, Pilots, Navigation Books, &c.

CONSTANTLY FOR SALE BY

Edmund M. Blunt,

AT HIS

Book, Chart & Stationary Store,

Sign of Bible and Quadrant.

STATE-STREET,

NEWBURYPORT

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