U. S. F. C.
Records.

Nos. 858-901.

1880.

ORIGINAL LOG BOOK OF THE "FISH HAWK"

UNITED STATES FISH COMMISSION

STATION RECORDS

Numbers 858 to 901

Copy.

C.

U. S. Fish Commission.
Dredging Record.
1880

Locs. 858 to
Sept. 1 to

All bearings in this book are magnetic

Air temperatures taken by a Jas. Green thermometer supplied by the Navy Department, and corrected within .5° of a deg. It was placed in the open field-house

Chester Rake Dredge.

TEMPERATURE RECORD.

Instrument used, Negretti & Zambra.

Current number of observation, 858.

Date, Sept. 1, 1880.

Locality, Narragansett Bay

Bearings, Beaver Tail Lt., N. N. W. 1/4 W., 1/3 mile.

Time of day, 1.05 P.M.; of tide, flood.

State of sky, clear.

Temperature of air, 69.

" surface of water, 63. (N.Z. 42666

" at depth of 10 fathoms, 66.5 (N.Z. 40007.

" of bottom, 66. (N.Z. 40007.

Depth, in fathoms, 14.

Nature of bottom, shelly.

Direction of ~~surface current~~ wind, S. E.

Force of ~~surface current~~ " , 2.

Direction of ~~bottom current~~ drift, E.

~~Force of bottom current~~ Dist " , 1/4 mile.

Name of vessel, Fish Hawk.

To what service attached, U. S. F. C.

Name and rank of commanding officer, Z. L. Tanner, Lieut., U. S. N.

Name and position of observer, F. C. VanVleet, M.D.

858

REMARKS.

Coarse sand, broken shells, Cancer borealis.

Chester Rake Dredge

TEMPERATURE RECORD.

Instrument used, Negretti-Zambra

Current number of observation, 859.

Date, Sept. 3, 1880.

Locality, Vineyard Sd.

Bearings, Gullytunk Light, N. 1/2 W., 3 miles.

Time of day, 11.20 a.m.; of tide,

State of sky, Clear.

Temperature of air, 68°

" surface of water, 66. (N.Z. 46400.

" at depth of 5 fathoms, 65. (N.Z. 40007

" of bottom, 63. "

Depth, in fathoms, 17 1/2

Nature of bottom, Sand.

Direction of ~~surface current~~ wind, S. W.

Force of ~~surface current~~ " 2.

Direction of ~~bottom current~~ drift, W.

~~Force of bottom current~~ dist. ", 1/4 mile.

Name of vessel,

To what service attached,

Name and rank of commanding officer,

Name and position of observer,

859.

REMARKS.

Net caught over rake
Nothing in bag; but on rake
Ninoe nigripes
Phascolosoma ?
and in piece of lobster
pot brought up large
species of Teredo

Chester Rake Dredge

TEMPERATURE RECORD.

Instrument used, Negretti Zamba

Current number of observation, 8 60.

Date, Sept. 3, 1880.

Locality, Vineyard Sound.

Bearings, Gully Hunk Lt., N. 1/2 W. 3 miles.

Time of day, 11.55 a.m.; of tide,

State of sky, clear,

Temperature of air, 70.

" surface of water, 66. (N.Z. 46400)

" at depth of 5 fathoms, 65° (N.Z. 40007.

" of bottom, 64. "

Depth, in fathoms, 17 1/2

Nature of bottom, mud.

Direction of ~~surface current~~ wind, S. W.

Force of ~~surface current~~ " 2,

Direction of ~~bottom current~~ drift, W.

Force of ~~bottom current~~ dist. " 1/4 m.

Name of vessel,

To what service attached,

Name and rank of commanding officer,

Name and position of observer,

860

REMARKS.

Bag nearly full, very fine sand. slight admixture of mud. very rich in annelids and amphipods. and Mollusks

Meslucius bilinearis.

Trawl

TEMPERATURE RECORD.

Instrument used, Negretti-Zambra

Current number of observation, 861.

Date, Sept. 30. 1880

Locality, Vineyard Sd.

Bearings, Cuttyhunk Lt., N. 3/4 W., 3 3/4 miles.

Time of day, 12.20 P.M.; of tide,

State of sky, clear.

Temperature of air, 69.

" surface of water, 66. (N.Z. 46400.

N.Z. 40007 " at depth of 5 fathoms, 65. (10 f. - 65°

" of bottom, 61. (N.Z. 40007.

Depth, in fathoms, 17.

Nature of bottom, sand.

Direction of ~~surface current~~ wind, S.W.

Force of ~~surface current~~ " 2.

Direction of ~~bottom current~~ drift, S.

Force of ~~bottom current~~ dist. " 1/4 mile.

Name of vessel,

To what service attached,

Name and rank of commanding officer,

Name and position of observer,

861.

REMARKS.

Suberites compacta?
Loligo Realii
Homarus Americanus,
Asterias vulgaris.
Pecten tenuicostatus
Eupagurus Bernhardus.
Platyonichus ocellatus.
Cancer borealis
" irroratus
Pinnotheres maculatus in Pecten

Trawl

TEMPERATURE RECORD.

Instrument used, Negretti-Zambra

Current number of observation, 8862.

Date, Sept. 3d 1880.

Locality, Vineyard Sound.

Bearings, Cuttyhunk Light. North. 4 miles.

Time of day, 12.55 P.M.; of tide,

State of sky, Clear.

Temperature of air, 68.

" surface of water, 66 (N.Z. 46400

" at depth of 5 fathoms, 65. (N.Z. 40007.

" of bottom, 64 "

Depth, in fathoms, 17.

Nature of bottom, Sand.

Direction of ~~surface current~~ wind, S. W.

Force of ~~surface current~~ " 2.

Direction of ~~bottom current~~ drift, S.

Force of ~~bottom current~~ dist. drift, 1/4 m.

Name of vessel,

To what service attached,

Name and rank of commanding officer,

Name and position of observer,

862

REMARKS.

Platyonichus ocellatus.
Eupagurus Bernhardus.
Cancer borealis.
Homarus Americanus.
Loligo Pealii, juv,
Crebrella sanguinolenta
ones a few of each of above
Asterias vulgaris. (2)
Suberites compacta ?

Rake Dredge

TEMPERATURE RECORD.

Instrument used, Negretti-Zambra,

Current number of observation, 863,

Date, Sept. 3, 1880.

Locality, Vineyard Sd.

Bearings, Cuttyhunk Lt., N. 1/8 E. 3 3/4 miles.

Time of day, 1.40 P.M.; of tide, flood.

State of sky, clear

Temperature of air, 70.

" surface of water, 67. (NB. 42600.

NB. 40007. " at depth of 10 fathoms, 65° (5 f. 65°)

" of bottom, 65 (NB. 40007.

Depth, in fathoms, 18.

Nature of bottom, mud,

Direction of ~~surface current~~ wind, S. W.,

Force of ~~surface current~~ " , 2,

Direction of ~~bottom current~~ drift, S.,

~~Force of bottom current~~ dri " , 1/4 mile

Name of vessel,

To what service attached,

Name and rank of commanding officer,

Name and position of observer,

863,

REMARKS.

Same as 860. very rich
Foldia limatula, very large.

Dredge

TEMPERATURE RECORD.

Instrument used, Negretti-Zambra

Current number of observation, 864.

Date, Sept. 3, 1880.

Locality, Vineyard Sd.

Bearings, Gay Head Lt., S. S. W. 7/8 W. 5 6/10 miles.

Time of day, 3 P.M. ; of tide, flood.

State of sky, clear.

Temperature of air, 70.

" surface of water, 67. (N.B. 46400

" at depth of 5 fathoms, 66. (N.B. 40007

" of bottom, 65. "

Depth, in fathoms, 13.

Nature of bottom, sand.

Direction of ~~surface current~~ wind, S. W.

Force of ~~surface current~~ " , 2.

Direction of ~~bottom current~~ drift, S.

Force of ~~bottom current~~ drift " , 1/4 m.

Name of vessel,

To what service attached,

Name and rank of commanding officer,

Name and position of observer,

864.

REMARKS.

Sand and broken shells.

Trawl

TEMPERATURE RECORD.

Instrument used, Negretti-Zambra

Current number of observation, 865.

Date, Sept. 4, 1880.

Locality, Atlantic.

Bearings, Lat. 40° 05′ N,

Long. 70° 23. West.

Time of day, 5.40 am; of tide,

State of sky, Clear.

Temperature of air, 71.

" surface of water, 73. (N.B. 46400

" at depth of 5 fathoms, 75. (N.B. 46401.

" of bottom, 68.5 (N.B. 46401.

Depth, in fathoms, 65.

Nature of bottom, Compact fine sandy mud.

Direction of ~~surface current~~ wind, Var.

Force of ~~surface current~~ " , 1.

Direction of ~~bottom current~~ drift, E. N. E.

~~Force of bottom current~~ Dist. " , 3/4 mile.

Name of vessel,

To what service attached,

Name and rank of commanding officer,

Name and position of observer,

865.

REMARKS.

Lost lead, and Negretti Zambra therm. No. 40007. on first cast. by parting of wire.
Archaster sp. receding abdt.
Asterias vulgaris, (one)

Peristedium. fi one spec.

A heavy swell, the ship rolling violently at times.
The Negretti-Zambra thermometers are not reliable for bottom and intermediate temperatures, frequently being capsized by rolling of the ship.

Z. L. Tanner.

Trawl.

TEMPERATURE RECORD.

Instrument used, Negretti Zambra

Current number of observation, 866.

Date, Sept. 4. 1880.

Locality, Atlantic

Bearings, Lat. 40°. 05'. 18" N.

Long. 70°. 22'. 18" W.

Time of day, 6.30 a.m.; of tide,

State of sky, Clear.

Temperature of air, 73.

" surface of water, 73. N.Z. 46400

" at depth of 5 fathoms, 74.5. (N.Z. 46401

" of bottom, 68.5 (?) "

Depth, in fathoms, 65.

Nature of bottom, fine sand & mud.

Direction of ~~surface current~~ wind, Var.

Force of ~~surface current~~ " , 1. - 0.

Direction of ~~bottom current~~ drift, N. E. by E.

~~Force of bottom current~~ dist. " , 1/2 m.

Name of vessel,

To what service attached,

Name and rank of commanding officer,

Name and position of observer, Dr. F. C. Van Vleet.

REMARKS.

Rake Dredge

TEMPERATURE RECORD.

Instrument used, Negretti-Zambra

Current number of observation, 867.

Date, Sept. 4, 1880.

Locality, Atlantic

Bearings, Lat. 40° 05′ 42″ N.
Long. 70° 22′ 06. W.

Time of day, 7.04 a.m.; of tide,

State of sky, clear.

Temperature of air, 75.

" surface of water, 73. (N.Z. 46400 46401.

" at depth of 5 fathoms, 75° (N.Z. 46400 46401.

" of bottom, 53° (N.Z. 46400 46401.

Depth, in fathoms, 64,

Nature of bottom, sand and mud.

Direction of ~~surface current~~ wind, calm.

Force of surface current,

Direction of ~~bottom current~~ drift, E.S.E.

Force of ~~bottom current~~ drift, 2/4 mile.

Name of vessel,

To what service attached,

Name and rank of commanding officer,

Name and position of observer, Z. L. Tanner.

867.

REMARKS.

Compact, hard
Sand and broken shells.

Travel

TEMPERATURE RECORD.

Instrument used, Negretti Zambra

Current number of observation, 868.

Date, Sept. 4, 1880.

Locality, Atlantic

Bearings, Lat. 40° 01′ 42″ N.
Long. 70° 22′ 30″ W.

Time of day, 8.23 a.m.; of tide,

State of sky, Clear.

Temperature of air, 75.

" surface of water, 75° (N.B. 46400.

" at depth of 5 fathoms, 75. (N.B. 46401.

" of bottom, 47. "

Depth, in fathoms, 162.

Nature of bottom, fine sand & black specks.

Direction of ~~surface current~~ wind, calm.

Force of surface current,

Direction of ~~bottom current~~ drift, N. W.

~~Force of bottom current,~~ Dist " 3/4 mile

Name of vessel,

To what service attached,

Name and rank of commanding officer,

Name and position of observer, J. A. Tanner.

868.

REMARKS.

from 162 into deeper water
Nothing from bottom.
but gigantic Sulpae ? from inter-
mediate

Trawl

TEMPERATURE RECORD.

Instrument used, Negretti-Zambra

Current number of observation, 869.

Date, Sept. 4, 1880.

Locality, Atlantic

Bearings, Lat. 40°. 02'. 18" N.
Long. 70° 23' 06. W.

Time of day, 9.27 am; of tide,

State of sky, Clear,

Temperature of air, 80.

" surface of water, 76. (N.Z. 46400.

" at depth of 5 fathoms, 75° (N.Z. 46401.

" of bottom, 50 (?) "

Depth, in fathoms, 192.

Nature of bottom, fine sand.

Direction of ~~surface current~~ wind, calm

Force of surface current,

Direction of ~~bottom current~~ dist-, N. N. E.

Force of ~~bottom current~~ dist-, 3/4 mile.

Name of vessel,

To what service attached,

Name and rank of commanding officer,

Name and position of observer, Z. L. Tanner.

869.

REMARKS.

Very Rich.
Leaving Net. 10 fms.

870. Trawl

TEMPERATURE RECORD.

Instrument used, Negretti Zambra.

Current number of observation, 870.

Date, Sept. 4. 1880.

Locality, Atlantic.

Bearings, Lat. 40° 02' 36" N.
Long. 70° 22' 58" W.

Time of day, 10.50 a.m.; of tide,

State of sky, Clear.

Temperature of air, 80.

" surface of water, 77 (N.Z. 46400.

" at depth of 5 fathoms, 75. (N.Z. 46401.

" of bottom, No obs.

Depth, in fathoms, 155.

Nature of bottom, Sand and fine sand.

Direction of ~~surface current~~ wind, Calm

Force of surface current,

Direction of ~~bottom current~~ drift, N. by N.

Force of ~~bottom current~~ drift, 1 mile.

Name of vessel,

To what service attached,

Name and rank of commanding officer,

Name and position of observer, J. L. Tanner.

8 70.

REMARKS.

Leaving net at 5 fms.

Travel

TEMPERATURE RECORD.

Instrument used, Negretti-Zambra

Current number of observation, 871.

Date, Sept. 4, 1880.

Locality, Atlantic.

Bearings Lat. 40°02'54" N. } Lon. Lat. 70°23'40" W.

(Lat. merid. obs. 40°04'57" N.)

Time of day, 11.40 a.m.; of tide,

State of sky, Clear.

Temperature of air, 84

" surface of water, 76.5 (N.B. 46400.

N.B. 46401 } " at depth of 5 fathoms, 75. (10 f. 75°

" of bottom, 49. (N.B. 46401

Depth, in fathoms, 115.

Nature of bottom, mud & fine sand.

Direction of ~~surface current~~ wind, calm.

Force of ~~surface current~~ " ,

Direction of ~~bottom current~~ drift, N. N. W.

Force of ~~bottom current~~ drift, 3/4 mile.

Name of vessel,

To what service attached,

Name and rank of commanding officer,

Name and position of observer, J. L. Tanner.

871.

REMARKS.

Joining net 20 fms.

Trawl

TEMPERATURE RECORD.

Instrument used, Negretti-Zambra

Current number of observation, 872.

Date, Sept. 4, 1880.

Locality, Atlantic.

Bearings, Lat. 40°.05'.39" N

Long. 70°23'.52 W.

Time of day, 12.45 P.M.; of tide,

State of sky, Partially clear.

Temperature of air, 81.

" surface of water, 77 (N.Z. 46400.

" at depth of 5 fathoms, 75. (N.Z. 46401.

" of bottom, 50.5. "

Depth, in fathoms, 86.

Nature of bottom, Sand, gravel, shells, sponges.

Direction of ~~surface current~~ wind, South.

Force of ~~surface current~~ " 1.

Direction of ~~bottom current~~ drift, N. W. by N.

~~Force of bottom current~~ drift, " 1/2 mile.

Name of vessel,

To what service attached,

Name and rank of commanding officer,

Name and position of observer, J. A. Smith.

872.

REMARKS.

Mailed fish (5 specimen

Travel.

TEMPERATURE RECORD.

Instrument used, Negretti-Zambra

Current number of observation, 873.

Date, Sept. 13. 1880.

Locality, Atlantic.

Bearings, Lat. 40°02 N.

Long. 70°57' W

Time of day, 5.36 a.m.; of tide,

State of sky, clear.

Temperature of air, 68.

" surface of water, 69.5 (N.Z. 46404

N.Z. 46400. " at depth of 5 fathoms, 70° (10 f. 70°

" of bottom, 51. N.Z. 46400.

Depth, in fathoms, 100.

Nature of bottom, mud.

Direction of ~~surface current~~ wind, S. W.

Force of ~~surface current~~ " 3.

Direction of ~~bottom current~~ drift, N. W. by N.

~~Force of bottom current~~ dist. do 1/2 mile.

Name of vessel,

To what service attached,

Name and rank of commanding officer,

Name and position of observer,

REMARKS.

Nos. 873-877. Soft sticky mud. very similar in character throughout, and with about the same assemblage of life. Two of the trawls had but little in them, but it was all the same.

Travel

TEMPERATURE RECORD.

Instrument used, Negretti Zambra

Current number of observation, 874.

Date, Sept. 13, 1884.

Locality, Atlantic

Bearings, Lat. 40° N.

Long. 70°57' W.

Time of day, 6.26 a.m.; of tide,

State of sky, clear

Temperature of air, 70°

" surface of water, 70 (N.Z. 46404.

N.Z. 46400 " at depth of 5 fathoms, 70.5° (10f. 70° X

" of bottom, 51. (N.Z. 46400

Depth, in fathoms, 85.

Nature of bottom, mud.

Direction of ~~surface current~~ wind, S.W.

Force of ~~surface current~~ " 2.

Direction of ~~bottom current~~ drift, N.W.

Force of ~~bottom current~~ dist. " 1/2 mile.

Name of vessel,

To what service attached,

Name and rank of commanding officer,

Name and position of observer,

20f. 64° - 40f. 55°

REMARKS.

Travel

TEMPERATURE RECORD.

Instrument used, Negretti & Zambra

Current number of observation, 875

Date, Sept. 13. 1880.

Locality, Atlantic

Bearings, Lat. 39° 57' N.
Long. 70° 57' 20" W.

Time of day, 7.51 am ; of tide,

State of sky, clear.

Temperature of air, 70.

" surface of water, 70. N.Z. 46404.

N.Z. 46400 " at depth of 5 fathoms, 71° (10 f. 70° ×
N.Z. 46400.

" of bottom, 53.

Depth, in fathoms, 126.

Nature of bottom, mud.

Direction of ~~surface current~~ wind, S.W.

Force of " " 2.

Direction of ~~bottom current~~ drift, N.E.

~~Force of bottom current~~ Dist, " 1/2 mile

Name of vessel,

To what service attached,

Name and rank of commanding officer,

Name and position of observer,

20 f. 69° - 30 f. 54°

REMARKS.

Travel

TEMPERATURE RECORD.

Instrument used, Negretti-Zambra

Current number of observation, 876.

Date, Sept. 13, 1880.

Locality, Atlantic.

Bearings, Lat. 39°57' N.
Long. 70°56' W.

Time of day, 8.45 am; of tide,

State of sky, Clear.

Temperature of air, 68

" surface of water, 70. (NB. 46404

NB. 46400. at depth of 5 fathoms, 71. (10f. 70°x

" of bottom, 58. NB. 46400.

Depth, in fathoms, 120.

Nature of bottom, mud,

Direction of ~~surface current~~ wind, S. W.

Force of ~~surface current~~ " , 2,

Direction of ~~bottom current~~ drift-, N.

~~Force of bottom current~~ dist. " , 3/4 mile

Name of vessel,

To what service attached,

Name and rank of commanding officer,

Name and position of observer,

x 2of. 69° = 30f. 54°.

REMARKS.

Trawl

TEMPERATURE RECORD.

Instrument used, Negretti Zambra.

Current number of observation, 877.

Date, Sept. 13. 1880. Atlantic.

Locality, Lat. 39° 56' N.

Bearings, Long. 70° 54' 18" W.

Time of day, 9.40 am ; of tide,

State of sky, Clear.

Temperature of air, 71.

" surface of water, 71. (N.Z. 46404

N.Z. 46400 " at depth of 5 fathoms, 78° (10 f. 70° 20 f. 66°

" of bottom, 57. N.Z. 46400.

Depth, in fathoms, 126.

Nature of bottom, mud.

Direction of ~~surface current~~ wind, S. W.

Force of ~~surface current~~ " , 2.

Direction of ~~bottom current~~ drift, N.N.W.

~~Force of bottom current~~ Dist. " , 3/4 m.

Name of vessel,

To what service attached,

Name and rank of commanding officer,

Name and position of observer,

REMARKS.

Trawl

TEMPERATURE RECORD.

Instrument used, Negretti-Zambra and Miller-Casella.

Current number of observation, 878.

Date, Sept. 13, 1880.

Locality, Atlantic.

Bearings, Lat. 39° 55' N,

Long. 70° 54' 15" W.

Time of day, 11 a.m. ; of tide,

State of sky, Cloudy.

Temperature of air, 72.

" surface of water, 71. (N.Z. 46404,

" at depth of 5 fathoms, N.Z. 70, M.C. 66. } 10 of N.Z. 70, M.C. 70. ×

" of bottom, 52. N.Z. 46400, 48. M.C.

Depth, in fathoms, 142½

Nature of bottom, mud.

Direction of ~~surface current~~ wind, S. W.

Force of ~~surface current~~ " , 2.

Direction of ~~bottom current~~ Drift, ~~Z~~ N. W.

~~Force of bottom current~~ Dist. " , 3/4 m.

Name of vessel,

To what service attached,

Name and rank of commanding officer,

Name and position of observer,

× 2 of N.Z. 55. M.C. 55

REMARKS.

Trawl

TEMPERATURE RECORD.

Instrument used, Negretti Zambra & Miller Casella

Current number of observation, 879.

Date, Sept. 13. 1880.

Locality, Atlantic.

Bearings, Lat. 39.° 49' 30" N, Long. 70.° 54' W.

Time of day, 1.20 PM ; of tide,

State of sky, cloudy.

Temperature of air, 73.

" surface of water, 71.5. N.3. 46404.

" at depth of 5 fathoms, N.3. 71. M.C. 68 } 10 N.3. 71. M.C. 70 x

" of bottom, N.3. 42. M.C. 42 N.3. 46400

Depth, in fathoms, 225

Nature of bottom, sand & blue mud.

Direction of ~~surface current~~ wind, S. W.

Force of ~~surface current~~ " 3.

Direction of ~~bottom current~~ drift, N. by W.

~~Force of bottom current~~ drift " 2/4 m.

Name of vessel,

To what service attached,

Name and rank of commanding officer,

Name and position of observer,

* 20 f. N.3. 70. M.C. 70.

879.

REMARKS.

Large quantities of big
worm tubes.
Bolocera Tuediae.
Urticina ~~crassicornis~~ ?.

Trawl

TEMPERATURE RECORD.

Instrument used, Negretti Zambra and Miller Casella.

Current number of observation, 880.

Date, Sept. 13, 1880.

Locality, Atlantic

Bearings, Lat. 39° 48' 30" N.
Long. 70° 54' W.

Time of day, 3.12 P.M.; of tide,

State of sky, Cloudy.

Temperature of air, 74.

" surface of water, 71.5 (N.S. 46402

" at depth of 5 fathoms, N.S. 74, M.E. 68 } 10 72 71.

" of bottom, N.S. 43, M.E. 41.5 } N.S. 46400

Depth, in fathoms, 25 2/2

Nature of bottom, mud.

Direction of ~~surface current~~ wind, S. W.

Force of ~~surface current~~ " 3.

Direction of ~~bottom current~~ drift, N. by N.

~~Force of bottom current~~ drift " 3/4 m.

Name of vessel,

To what service attached,

Name and rank of commanding officer,

Name and position of observer,

880.

REMARKS.

very Rich. Large quantities of Acarella. and big Wormtubes.
Bolocera Truediae.
Urticina (very large.
two webbed Octopi.

Trawl

TEMPERATURE RECORD.

Instrument used, Negretti Zambra & Miller Casella

Current number of observation, 887.

Date, Sept. 13. 1880.

Locality, Atlantic

Bearings, Lat. 39°. 46'. 30" N
Long 70°. 54' W.

Time of day, 5 P.M. ; of tide,

State of sky, Cloudy.

Temperature of air, 70.

" surface of water, 71 (Nz. 46 & 04

" at depth of 5 fathoms, Nz. 71, Mc. 66 } 10f. 71.5 71.

" of bottom, Nz. 42 Mc. 41.

Depth, in fathoms, 325.

Nature of bottom,

Direction of ~~surface current~~ wind, S. W.

Force of ~~surface current~~ " 3

Direction of ~~bottom current~~ drift, W. N. W.

~~Force of bottom current~~ drift " 1/2 m.

Name of vessel,

To what service attached,

Name and rank of commanding officer,

Name and position of observer,

881,

REMARKS.

Trawl fouled, and but little
Came up.
Acanella
Archaster? sp.
Nebbed octopus.
Urticina nodosa?

Avery rich bottom
apparently.

Trawl,

TEMPERATURE RECORD.

Instrument used, ~~8-8~~ Negretti & Zambra

Current number of observation, 882

Date, Sept. 17, 1880.

Locality, Narragansett Bay

Bearings, Halfway Rock N. N. E. 1/2 E.

2 3/8 miles.

Time of day, 10.56 a.m.; of tide,

State of sky, Clear.

Temperature of air, 68.

" surface of water, 65° (N.Z. 46402

" at depth of fathoms,

" of bottom, 67. (N.Z. 46400

Depth, in fathoms, 12 1/2

Nature of bottom, mud.

Direction of ~~surface current~~, wind S. W.

Force of ~~surface current~~, " 2.

Direction of ~~bottom current~~, drift. S. W.

~~Force of bottom current~~ Distance, " 1/4 mile

Name of vessel,

To what service attached,

Name and rank of commanding officer,

Name and position of observer,

882

REMARKS.

Lycotypus canaliculatus
Asterias Forbesii
Eupagurus pollicaris
Metridium marginatum
Loligo Pealii (young)
Libinia emarginata. young
Cyprina Islandica (dead)
Callista convexa "
Cribella sanguinolenta (young)

Trawl

TEMPERATURE RECORD.

Instrument used, Negretti-Zambra

Current number of observation, 883.

Date, Sept. 17.

Locality, Narragansett Bay

Bearings, Halfway Rock N. E. by N., 2 1/4 miles.

Time of day, 11.35 am; of tide,

State of sky, Clear.

Temperature of air, 70

" surface of water, 65 (N.Z. 46402

" at depth of fathoms,

" of bottom, 63 1/2 (N.Z. 46400

Depth, in fathoms, 13.

Nature of bottom, mud.

Direction of ~~surface current~~, wind S. W.

Force of ~~surface current~~, " 2.

Direction of ~~bottom current~~, drift- S. W.

Force of ~~bottom current~~, drift " 1/2 m.

Name of vessel,

To what service attached,

Name and rank of commanding officer,

Name and position of observer,

883.

REMARKS.

About same things as in 882.
Homarus americanus.
Squilla.
Loligo Realii.
Eupagurus longicarpus.

Chester Rake Dredge

TEMPERATURE RECORD.

Instrument used, Negretti Zambra

Current number of observation, 884

Date, Sept. 17. 1880.

Locality, Narragansett Bay

Bearings, Hope I. N. E. ½ E.

200 yards.

Time of day, 2.10 PM; of tide,

State of sky, clear.

Temperature of air, 72

" surface of water, 65, (Nz. 46402

" at depth of fathoms,

" of bottom, 63.5 (Nz. 46400

Depth, in fathoms, 5.

Nature of bottom, mud.

Direction of ~~surface current,~~ wind, S. W.

Force of ~~surface current,~~ " 3.

Direction of ~~bottom current,~~ drift - S. W.

~~Force of bottom current,~~ Dist. " 1/4 m.

Name of vessel,

To what service attached,

Name and rank of commanding officer,

Name and position of observer,

REMARKS.

Otter Trawl

TEMPERATURE RECORD.

Instrument used, Negretti Zambra

Current number of observation, 885.

Date, Sept. 17, 1880.

Locality, Narragansett Bay

Bearings, Towed S. N. by E. 3/4 E. 3/8 mile

Time of day, 3.15 PM; of tide,

State of sky, Clear.

Temperature of air, 71. (Nz. 46402

" surface of water, 69.

" at depth of 5 fathoms, 64 (Nz. 46400

" of bottom, 65 "

Depth, in fathoms, 16.

Nature of bottom, mud & shells.

Direction of ~~surface current,~~ wind S. W.

Force of ~~surface current,~~ " 2.

Direction of ~~bottom current,~~ drift S.

Force of ~~bottom current~~, " 1/4 m.

Name of vessel,

To what service attached,

Name and rank of commanding officer,

Name and position of observer,

REMARKS.

Dredge

TEMPERATURE RECORD.

Instrument used, Negretti Zambra

Current number of observation, 886.

Date, Sept. 21.

Locality, off Block I.

Bearings, South Lt, Block I. N. 3/4 W, 5 3/4 miles.

Time of day, 12.49 P.M. of tide,

State of sky, Clear.

Temperature of air, 67.

" surface of water, 64 (N.Z. 46402

" at depth of 5 fathoms, 62 (N.Z. 46400

" of bottom, 62. "

Depth, in fathoms, 19.

Nature of bottom, Shells.

Direction of ~~surface current,~~ wind West

Force of ~~surface current~~, " 2

Direction of ~~bottom current~~, drift N.

Force of ~~bottom current~~, " 1/4 m

Name of vessel,

To what service attached,

Name and rank of commanding officer,

Name and position of observer,

886. Dredge

REMARKS.

very poor, hard sand.
Stereoderma unisemita
Unciola irrorata
Cancer. sp. jun.

Trawl.

TEMPERATURE RECORD.

Instrument used, Negretti Zambra

Current number of observation, 887.

Date, Sept. 21.

Locality, Off Block I.

Bearings, South Light, Block I. N. 1/2 W. 5 3/4 miles

Time of day, 1.30 pm; of tide,

State of sky, Clear

Temperature of air, 67.

" surface of water, 64 (N.B. 46402

" at depth of 5 fathoms, 62 (N.B. 46400

" of bottom, 62 "

Depth, in fathoms, 19.

Nature of bottom, Shells.

Direction of ~~surface current~~, wind N.

Force of ~~surface current~~, " 2

Direction of ~~bottom current~~, Drift - N.

Force of ~~bottom current~~, " 3/4 m.

Name of vessel,

To what service attached,

Name and rank of commanding officer,

Name and position of observer,

887 Trawl

REMARKS.

Like former.
Echinarachnius parma,
Asterias vulgaris,
Pecten tenuicostatus,
Pharcoldoma Caementarium
Astarte
Venericardia borealis.

Trawl.

TEMPERATURE RECORD.

Instrument used, Negretti Zambra

Current number of observation, 888.

Date, Sept. 21, 1880,

Locality, off Block I.

Bearings, South Light Block I, N. by E., 6 miles.

Time of day, 2 P.M., ; of tide,

State of sky, Clear.

Temperature of air, 68

" surface of water, 64 (N.Z. 46402

" at depth of 5 fathoms, 62 (N.Z. 46400

" of bottom, 62 "

Depth, in fathoms, 19.

Nature of bottom, Shells.

Direction of ~~surface current~~, Wind, N.

Force of ~~surface current~~, " 3.

Direction of ~~bottom current~~, Drift N.

~~Force of bottom current~~, " 1½ m.

Name of vessel,

To what service attached,

Name and rank of commanding officer,

Name and position of observer,

888. Trawl

REMARKS.

Same as last very poor.

Dredge

TEMPERATURE RECORD.

Instrument used, Negretti Zambra

Current number of observation, 889.

Date, Sept. 21.

Locality, Off Block I.

Bearings, South Light Block I., N. 1/4 S. 5 miles.

Time of day, 3.50 PM; of tide,

State of sky, clear.

Temperature of air, 68

" surface of water, 64 (Nz.46402

" at depth of 5 fathoms, 62 (Nz.46400

" of bottom, 61.5 "

Depth, in fathoms, 11.

Nature of bottom, Rocky.

Direction of ~~surface current~~, Lines N.

Force of ~~surface current~~, " 3.

Direction of ~~bottom current~~, Drift N. S. N.

Force of ~~bottom current~~, " 1/2 m

Name of vessel,

To what service attached,

Name and rank of commanding officer,

Name and position of observer,

REMARKS.

Hard sand. some Rocks

Dredge

TEMPERATURE RECORD.

Instrument used, Negretti Zambra

Current number of observation, 890.

Date, Sept. 21. 1880.

Locality, Off Block I.

Bearings, South Light Block I.
W. 1/4 S. 4 3/4 miles.

Time of day, 4. 15 P.M.; of tide,

State of sky, Clear.

Temperature of air, 68.

" surface of water, 64. (N.Z. 46402

" at depth of 5 fathoms, 62 (N.Z. 46400

" of bottom, 61.5 (N.Z. 46400

Depth, in fathoms, 11

Nature of bottom, Rocky.

Direction of ~~surface current,~~ wind W.

Force of ~~surface current,~~ " 3

Direction of ~~bottom current,~~ drift W. S. W

Dist ~~Force of bottom current,~~ " 1/2 m.

Name of vessel,

To what service attached,

Name and rank of commanding officer,

Name and position of observer,

REMARKS.

hardsand. some rocks.

Trawl

TEMPERATURE RECORD.

Instrument used, Negrette Zambra

Current number of observation, 891.

Date, Oct. 2. 1880.

Locality, Atlantic

Bearings, Lat. 39° 46' N
Long. 71° 10' W

Time of day, 6 am, ; of tide,

State of sky, Clear

Temperature of air, 60

" surface of water, 67

" at depth of fathoms,

" of bottom,

Depth, in fathoms, Sounding line broke at 310 +.

Nature of bottom, mud.

Direction of ~~surface current~~, wind N.E.

Force of ~~surface current~~, " 3.

Direction of ~~bottom current~~, drift N.

Dist.
~~Force of bottom current~~, " 1/2 m

Name of vessel,

To what service attached,

Name and rank of commanding officer,

Name and position of observer,

891.

REMARKS.

Soft brown mud.
Not much variety, but
abundance of some shells etc.
Foraminifera. 3 specimens Copepod.

The sounding for No 892
was 480 fathoms and
this is probably the depth
of this one also.

Long. by observation
Lat. by do (noon)

Trawl

TEMPERATURE RECORD.

Instrument used, Negretti & Zambra

Current number of observation, 892

Date, Oct. 2, 1880

Locality, Atlantic,

Bearings, Lat. 39° 46' N

Long. 71° 05' W.

Time of day, 8.46 am; of tide,

State of sky, Clear,

Temperature of air, 64,

" surface of water, 65,

" at depth of fathoms,

" of bottom, Lost lead when at surface

Depth, in fathoms, 487.

Nature of bottom,

Direction of ~~surface current~~, Wind N.E.,

Force of ~~surface current~~, " 3,

Direction of ~~bottom current~~, Drift - N.N.E.,

Dist

Force of ~~bottom current~~, " 2 miles,

Name of vessel,

To what service attached,

Name and rank of commanding officer,

Name and position of observer,

892

REMARKS.

Soft brown mud
Some small stones.

Trawl

TEMPERATURE RECORD.

Instrument used, ~~Negretti Zambra~~

Current number of observation, 893

Date, Oct. 2. 1880.

Locality, Atlantic

Bearings, Lat. 39° 52' 20" N.
Long. 70° 58' W.

Time of day, 11.23 a.m.; of tide,

State of sky, Clear

Temperature of air, 63

" surface of water, 64

" at depth of fathoms,

" of bottom, 40. M.C.

Depth, in fathoms, 372

Nature of bottom, mud.

Direction of ~~surface current~~, wind N.E.

Force of ~~surface current~~, " 3

Direction of ~~bottom current~~, drift N.

~~Force of bottom current~~, Dist. " 1 mile

Name of vessel,

To what service attached,

Name and rank of commanding officer,

Name and position of observer,

893.

REMARKS.

Mud & small stones
Very Rich.
Acanella.
Worm tubes.
Octopus
" webbed.
Archaster?

Time of descent of lead in sounding every one-half fathom. seconds
46, 46, 50, 53, 52, 55.
Time hauling 8' 15"

Trawl

TEMPERATURE RECORD.

Instrument used, Miller Casella

Current number of observation, 894

Date, Oct. 2, 1880

Locality, Atlantic,

Bearings, Lat. 39°53' N
Long. 70°58' 30 W,

Time of day, 1.10 PM; of tide,

State of sky, Clear

Temperature of air, 63.

" surface of water, 64.

" at depth of fathoms,

" of bottom, 40. M.C,

Depth, in fathoms, 365.

Nature of bottom, Sand

Direction of ~~surface current,~~ Wind NE,

Force of ~~surface current,~~ " 3

Direction of ~~bottom current,~~ drift- N,

Force of ~~bottom current,~~ Best- 2 m.

Name of vessel,

To what service attached,

Name and rank of commanding officer,

Name and position of observer,

Long. by observation

REMARKS.

Mud and small stones
very Rich

Trawl

TEMPERATURE RECORD.

Instrument used, Miller Casella

Current number of observation, 896

Date, Oct. 2, 1880

Locality, Atlantic

Bearings, Lat. 39° 56' 30" N
Long. 70° 59' 45" W

Time of day, 3.17 P.M.; of tide,

State of sky, Clear

Temperature of air, 62

" surface of water, 65

" at depth of fathoms,

" of bottom, 42 M.C.

Depth, in fathoms, 238

Nature of bottom, mud

Direction of ~~surface current~~, wind N.W.

Force of ~~surface current~~, " 3.

Direction of ~~bottom current~~, drift N

Force of ~~bottom current~~ Bri- 1½ m.

Name of vessel,

To what service attached,

Name and rank of commanding officer,

Name and position of observer,

Long. by observation

REMARKS.

Soft mud, about 2 tons,
multitudes of Filabellum
Goodei, broken into
small pieces.
Worm tubes
Sea anemones, etc
Very Rich

Trawl

TEMPERATURE RECORD.

Instrument used,

Current number of observation, 896.

Date, Nov. 16. 1880.

Locality,

Bearings, Lat. 37° 26′ N.
Long. 74° 19′ W. (19′)

Time of day, ; of tide,

State of sky,

Temperature of air,

" surface of water,

" at depth of fathoms,

" of bottom,

Depth, in fathoms, 56.

Nature of bottom, Sand, shells.

Direction of surface current,

Force of surface current,

Direction of bottom current,

Force of bottom current,

Name of vessel,

To what service attached,

Name and rank of commanding officer,

Name and position of observer,

REMARKS.

Travel

TEMPERATURE RECORD.

Instrument used,

Current number of observation, 897.

Date, Nov. 16, 1880.

Locality,

Bearings, Lat. 37°25′ N
Long. 74°18′ W.

Time of day, ; of tide,

State of sky,

Temperature of air,

" surface of water,

" at depth of fathoms,

" of bottom,

Depth, in fathoms, 157½

Nature of bottom, Sand, mud

Direction of surface current,

Force of surface current,

Direction of bottom current,

Force of bottom current,

Name of vessel,

To what service attached,

Name and rank of commanding officer,

Name and position of observer,

REMARKS.

Trawl

TEMPERATURE RECORD.

Instrument used,

Current number of observation, 898.

Date, Nov. 16, 1880.

Locality,

Bearings, Lat. 37°24′ N.
Long. 74°17′ W.

Time of day, ; of tide,

State of sky,

Temperature of air,

" surface of water,

" at depth of fathoms,

" of bottom,

Depth, in fathoms, 300 (approx.)

Nature of bottom, mud.

Direction of surface current,

Force of surface current,

Direction of bottom current,

Force of bottom current,

Name of vessel,

To what service attached,

Name and rank of commanding officer,

Name and position of observer,

REMARKS.

Trawl

TEMPERATURE RECORD.

Instrument used,

Current number of observation, 899.

Date, Nov. 16, 1880.

Locality,

Bearings, Lat. 37°22′ N
Long. 74°29′ W.

Time of day, ; of tide,

State of sky,

Temperature of air,

" surface of water,

" at depth of fathoms,

" of bottom,

Depth, in fathoms, 57½

Nature of bottom, Sand.

Direction of surface current,

Force of surface current,

Direction of bottom current,

Force of bottom current,

Name of vessel,

To what service attached,

Name and rank of commanding officer,

Name and position of observer,

REMARKS.

Trawl

TEMPERATURE RECORD.

Instrument used,

Current number of observation, 900.

Date, Nov. 16, 1880.

Locality,

Bearings, Lat. 37°19′ N
Long. 74°41′ W.

Time of day, ; of tide,

State of sky,

Temperature of air,

" surface of water,

" at depth of fathoms,

" of bottom,

Depth, in fathoms, 31.

Nature of bottom, Sand

Direction of surface current,

Force of surface current,

Direction of bottom current,

Force of bottom current,

Name of vessel,

To what service attached,

Name and rank of commanding officer,

Name and position of observer,

REMARKS.

Trawl.

TEMPERATURE RECORD.

Instrument used,

Current number of observation, 901.

Date, Nov. 16. 1880.

Locality,

Bearings, Lat. 37.° 10' N
Long 75° 08' W.

Time of day, ; of tide,

State of sky,

Temperature of air,

" surface of water,

" at depth of fathoms,

" of bottom,

Depth, in fathoms, 18,

Nature of bottom, Sand.

Direction of surface current,

Force of surface current,

Direction of bottom current,

Force of bottom current,

Name of vessel,

To what service attached,

Name and rank of commanding officer,

Name and position of observer,

— Closed year 1880 —

REMARKS.