

NAVIGATION.

The usual tabular exhibit of river-changes for the month will be found on chart No. III. The following data show the condition of navigation on the rivers, the lakes and along the Atlantic sea-coasts :

(1) *Ice in the North Atlantic.*—European steamships arriving at American ports reported very large quantities of ice in the North Atlantic during the first part of April. On April 1st the steamer China passed a very large iceberg; also a very large ice-floe in latitude $46^{\circ} 53' N.$, longitude $41^{\circ} 25' W.$ The next day and the day following, the steamer City of New York had similar experience in latitude $41^{\circ} 53' N.$, longitude $53^{\circ} 09' W.$ On April 2d, the steamship Italy passed several icebergs in latitude $42^{\circ} 10' N.$, longitude $50^{\circ} 04' W.$ The day after, the steamship Ethiopia, in latitude $42^{\circ} 38' N.$, longitude $49^{\circ} 31' W.$, encountered a large iceberg, and the steamship Switzerland numerous icebergs and field-ice, extending westward to longitude $50^{\circ} 31'.$ April 8th, the steamship Baltic, in latitude $42^{\circ} 02' N.$, longitude $42^{\circ} 12' W.$, met five large icebergs. As late as April 10, Penobscot bay was still solidly bridged with ice, averaging fifteen inches thick, and on that date the steamship Schiller, in latitude $42^{\circ} N.$, longitude $50^{\circ} W.$, saw an immense iceberg. April 13th, the steamship Weser, in the same locality, passed a great quantity of drift-ice and a large iceberg. April 15th, the steamship W. A. Scholten, in latitude $44^{\circ} 07' N.$, longitude $49^{\circ} 12'.$ was surrounded by heavy fields of ice, stretching as far as the eye could reach, many cakes twenty feet thick, with surfaces of five thousand square feet, while icebergs, eighty feet high and six hundred feet long, surrounded the steamer, which escaped with difficulty. Still later, on the 26th, the steamship Severn, in latitude $47^{\circ} 36' N.$, longitude $69^{\circ} 28'.$ was embayed and fast-stuck in the midst of large quantities of ice, and, after escaping in a damaged condition, ran through the ice-fields one hundred and eighty-five miles south.

(2) *The Reopening of River and Lake Navigation.*—As late as April 5th, large quantities of ice came down the North river and obstructed New York harbor. Ice broke up in Seneca lake, N. Y., and navigation resumed on the 5th. At Mount Desert, Me., the lower harbor opened on the 26th. At Bangor, Me., river open on the 16th. Grand Traverse bay, Mich., cleared on the 14th. The Red river of the North on the 19th, and first boat arrived on the 22d. Chatauqua lake, N. Y., cleared on the 13th. Navigation partly opened on Lake Ontario about the middle of April. At Muscatine, Iowa, first boat on the 5th; at Fort Madison, Iowa, first boat on the 4th. At Albany, N. Y., ice moved on the 1st and 2d; Connecticut river thawed at Springfield, Mass., on the 2d; on the 1st ice broke above West Point, N. Y.; on the 8th the Hudson river was open from New York to Albany. At Erie, Pa., Lake Erie was open on the 17th; on the 12th navigation opened from Detroit to Cleveland; the St. Paul ice-gorge broke on the 4th and navigation opened on the 25th. Navigation was resumed at Buffalo on the 2d; at Chicago ice broke on the 1st, and at Grand Haven navigation was free on the 3d.

ATMOSPHERIC ELECTRICITY.

(1.) *Thunder and Lightning.*—The following data exhibit the prevalency of thunder and lightning: On the 1st in Ala., La., and N. Y.; on the 3d in Ill., Ind., and Maine; on the 6th in Iowa, Kan., and Neb.; on the 7th in Iowa, Kan., and Texas; on the 8th in Ala., Ill., La., Miss., and Tenn.; on the 9th in Ala., La., and S. C.; on the 10th in Ala., Ga., La., Penn., S. C., and Tenn.; on the 11th in Ala., Ga., Kan., Ohio, Penn., and S. C.; on the 16th in Ga., Ill., Me., Mass., N. H., and R. I.; on the 19th in Ill., Ind., Iowa, Kan., Mo., N. Y., Ohio, Tenn., and Texas; elsewhere on the 20th, 27th and 29th.