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(Illustrated articles are marked with an asterisk.)

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A DISSOLVING ISLAND.

The Dominion steamer Alert recently left Halifax, N. S., with men and material for the erection of a lighthouse, for the third time, on the west end of Sable Island.

The rapid disappearance of this remarkable island is one of the present marvels of the North Atlantic. Year by year it lessens in extent, threatening soon to be submerged, and its existence at no distant day promises to be as great a mystery as the location of the mythical Atlantis.

Mr. S. D. Macdonald, F.G.S., who, in the interest of science, has made himself personally acquainted with this island, making a special study of the various transformations it has undergone from its earliest history, and who has just returned, after noting its most recent changes, called the attention of Admiral Lyons to the rather startling fact that not only has the northwest submerged bar traveled in pace with the retreating west end, but has also changed its direction, swerving eastward, and now bears almost due north, or at right angle to the island proper, as shown by its 17 miles of breakers in bad weather.

The lighthouse will not be completed probably before August next. In mean time navigation becomes exceedingly dangerous from the fact of those changes and errors of the chart being unknown to mariners.

Within a comparatively short space of time, dating back but a few years previous to the founding of the life saving station, it has decreased in length from 40 miles to 19 1/2, in breadth from 2 1/4 miles to less than 1 mile.

The future of this island is everything but cheering to the navigator, and should those destructive forces now in operation continue, in not a very remote period the sea will claim this island as its own.

The site for the new lighthouse is well chosen on a broader portion of the island, as near as possible under the circumstances to that ever dangerous northwest bar whose presence has been so terribly felt, and in whose secret lies the fate of many a missing mariner.

In our SUPPLEMENT, No. 436, we gave an interesting paper, read some time ago by Mr. Macdonald before the Institute of Natural Science, Halifax, in which various facts relating to the condition of Sable Island, and the progress of its submergence, were set forth.

POSITION OF THE PLANETS IN JULY.

VENUS

is morning star until the 11th, and then becomes evening star. She is conspicuous, not by her presence, but by her absence from the sky in the month of July. She is in superior conjunction with the sun on the 11th at 2 h. P. M. She then passes beyond the sun, changing from his western to his eastern side, and is at her greatest distance from the earth. Her lesser light is entirely hidden in the sunbeams during the entire month.

JUPITER

is evening star. He is a brilliant object in the southeastern sky in the early evening, and reaches the meridian at 9 h. P. M. on the 1st. He changes his course on the 24th, moving eastward and approaching the red star Antares, which is southeast of the planet. Jupiter sets on the 1st at 1 h. 44 m. A. M. On the 31st he sets at 11 h. 44 m. P. M. His diameter on the 1st is 41".2, and he is in the constellation Scorpio.

MARS

is evening star. He is in quadrature with the sun on the 22d, and is, at that time, on the meridian at sunset. He will be in fine position for observation during the whole month. He is in conjunction with Spica on the 3d, passing 1° 32' north of the bright star, and is also approaching Jupiter. Mars sets on the 1st at 11 h. 59 m. P. M. On the 31st he sets at 10 h. 33 m. P. M. His diameter on the 1st is 10".6, and he is in the constellation Virgo.

URANUS

is evening star. He is in quadrature with the sun on the 4th, at 4 h. P. M. Uranus sets on the 1st at 11 h. 48 m. P. M. On the 31st he sets at 9 h. 51 m. P. M. His diameter on the 1st is 3".6, and he is in the constellation Virgo.

MERCURY

is evening star until the 12th, and after that time morning star. He is in inferior conjunction with the sun on the 8th, at noonday, and reaches his greatest western

elongation on the 29th, at 2 h. A. M., when he is 19° 31 west of the sun, and favorably situated for being seen by sharp sighted observers. Mercury sets on the 1st at 7 h. 55 m. P. M. On the 31st he rises at 3 h. 27 m. A. M. The diameter of Mercury on the 1st is 11".4, and he is in the constellation Gemini.

SATURN

is evening star. He is of little account during the month, for his period of visibility has closed, and he is hidden in the sun's rays. Saturn sets on the 1st at 9 h. 3 m. P. M. On the 31st he sets at 7 h. 17 m. P. M. His diameter on the 1st is 15".6, and he is in the constellation Cancer.

NEPTUNE

is morning star. He rises on the 1st at 1 h. 59 m. A. M. On the 31st he rises at 0 h. 4 m. A. M. His diameter on the 1st is 2".5, and he is in the constellation Taurus.

Venus, Saturn, Uranus, Mars, and Jupiter are evening stars at the close of the month. Mercury and Neptune are morning stars.

NEW YORK HARBOR.

Two bills of much importance have recently passed Congress: One preventing the dumping of ashes and refuse within the limits of the port; the other laying down anchorage limits for every class of vessel, so that the fullest room may be left for passing traffic.

Thirty thousand dollars has been appropriated to carry the former into effect under the management of a naval officer, to be known as a supervisor, to be directly responsible to the U. S. Engineer Department, and a similar amount will probably be approved for anchorage purposes.

Each of these departments will be effectual will require ceaseless vigilance, stern uprightness, and business methods of the highest order.

Unscrupulous contractors and local politicians have for many years been defying the Pilot Commissioners and all others having the welfare of this national harbor at heart.

Fortunately, the bills are so framed that ample power is given to whoever may be placed in charge to enforce them to the fullest.

The Secretary of the Navy will doubtless detail officers fully able to suppress the jobbery and vandalism now so rife. These gentlemen with able assistants, a proper corps of harbor and shore inspectors, and a flotilla of swift cheap launches, will strike terror on all wrong-doers.

Their movements should be ubiquitous—here and everywhere, at all hours of the day and night.

No scow should be loaded without a permit, nor leave the dock without notifying the supervisor, and a sworn statement should be made as to time and place of loading and discharge.

The commissioner in charge of street cleaning should heartily co-operate.

Confiscation of the property and a heavy penalty should immediately follow disobedience of orders.

As regards anchorage, most accidents arise from want of established and enforced limits. At present, vessels spread themselves over the harbor. They drop their anchors with any length of chain that suits them, dragging if too short, and taking unnecessary room if too long. No harbor in the world is so destitute of common care and mooring appliances as the port of New York.

The duties needed to reform this state of affairs are essentially naval, have not and should not have any bearing on military knowledge or services, and for this reason it is to be hoped that the officers selected to fill these important posts may possess great activity and high nautical judgment, so that when questions bearing on the welfare of the port arise and come up for discussion, they may be able to speak wisely and authoritatively.

Telegraphing by the Clouds.

Admiral Sir W. Hunt Grubbe has recently made some interesting experiments at the Cape of Good Hope on the sending of signals by means of the rays of an arc lamp reflected by the clouds.

The luminous fascicle from a 100,000 candle arc lamp was directed against the clouds by means of a reflector, and interrupted according to the heliographic code. The dispatch could be read with ease at Cape Town.

Other experiments were made by a vessel of the navy sent out to sea, and the signals could be read from a distance of 50 miles. This method affords a possibility of sending signals at sea, and might prove useful in favorable weather for ships in danger.—La Lumiere Electrique.

LONDON, June 23.—The patents of an American invention, known as the Cyclone Pulverizer, were purchased here to-day for France, Italy, and Belgium for £40,000. The vendors were Erastus Wiman, of New York, and associates, and the purchaser was Gustave Drolet, representing a French syndicate.—Dispatch in the N. Y. World.