NEW MARINE SIGNAL.

The instrument shown in the accompanying engraving, and called the lucigraph, is used for signaling at night, and commends itself especially to those engaged in marine pursuits. It is adapted for use by the mercantile marine, by lighthouses, signal, coast guard, telegraph, or other stations, and for the use of lightships.

It is constructed on the principle of the stereopticon or magic lantern, and is worked by keys similar to the typewriter, each key being attached to a metal plate stenciled in any desired character, such as a letter of the alphabet or numeral. Each key is painted with a character similar to that cut out of the plate to which it is attached, and when pressed, it projects the letter plate before the light, throwing the said character on a screen.

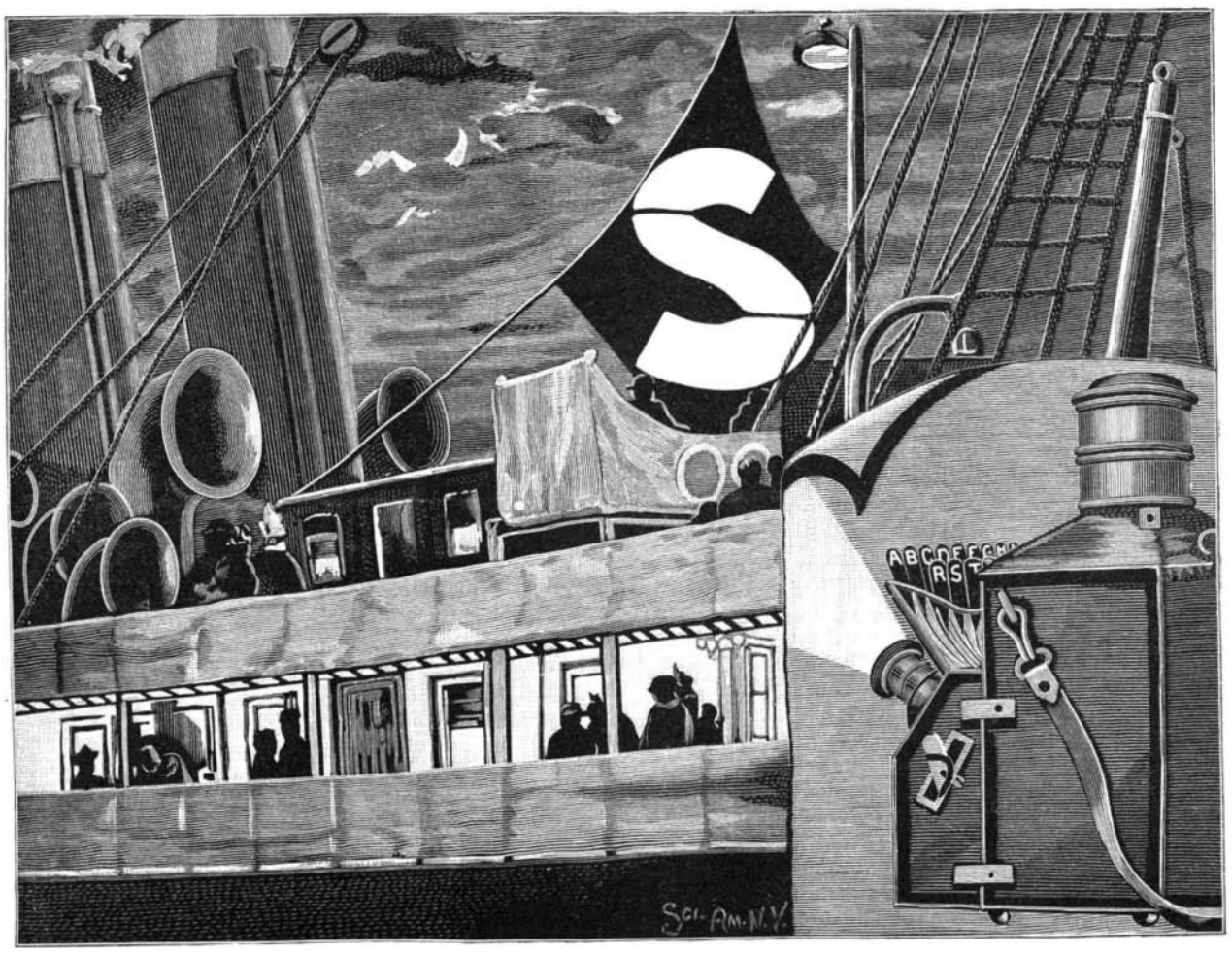
For ordinary use an Argand burner kerosene lamp is sufficiently strong, as it is estimated that every five candle power gives a range of vision of about a quarter of a mile on a bright moonlight night. Of course, for higher and better service, the electric or lime light should be used in the lantern.

The signals can be read by any one without instruction, and when code letters, like those of the universal international code, are used, it can be read by any one using the code book carried on all ships. It would be found useful on pilot boats for signaling their numbers as well as for speaking ships. It also signals by any flash code, and by exposing the bull's eye lens and working a special mechanism it can be made to signal quite as fast and to a greater distance than most of the patent flash code lamps in use.

It has been exhaustively tested by practical men in all weathers, and has received much favorable comment. Among those who have commended its use may be mentioned: The head signal department, Washington, Brigadier-General Greely; the signal department, Fort Meyer; Captain Sir Baldwin Walker, H. M. S. Emerald; Captain Watkins, steamship City of New York; Captain Barclay, superintendent Allan Line; Capt. Ritchie, steamship Parisian; and many other practical men. Captain S. M. Orr, of the London steamship Port Donaldson, who has had it several months on his ship, between London and Australia, has sent in a favorable official report.

The apparatus has been patented here and in Europe by the inventor, Mr. John W. Hayward, Astor House, New York City.

The screen should be of white duck or of some bright color. A house may be used or anything giving a flat surface confronting the point to be signaled to, but the most efficient device is probably a diamond shaped duck screen located on the bridge, which may be hoisted or lowered at pleasure, and held in place by stays, as shown in the cut, so that it can be turned at pleasure toward any point of the compass.



NEW MARINE SIGNALING DEVICE CALLED THE LUCIGRAPH.

Twenty Stories High.

The new Masonic building now being erected in Chicago will be an architectural marvel. It is to have a frontage of 170 feet, a depth of 114 feet, and will be twenty stories high, and the roof will be nearly 300 feet from the level of the street. There are to be eighteen elevators, arranged in a semicircle, having a total carrying capacity of 40,000 passengers daily. The entrance is to be 42 feet high by 28 feet wide, and the rotunda, with an area of 3,700 square feet, will be opened to the roof, where visitors will find a pavilion garden from which they can get a bird's eye view of all creation.

A twenty story building has been lately proposed in London, but the idea of it nearly takes the breath away from the people there, and it doubtless will be half a generation before they set to work to erect it.

Necklaces of Human Teeth.

Mr. R. H. Woodhouse presented to the Odontological Society, London, at its last meeting, a necklace of human teeth, for which he was indebted to the kindness of Mr. H. M. Stanley. The necklace was found upon a young warrior, a native of Avisibba, a cannibal tribe, upon the Sturi River, who was killed in an attack upon Mr. Stanley's party, in which Lieut. Stairs was wounded with a poisoned arrow, at the junction of the Ruku and Sturi Rivers, 1,500 miles from the mouth of the Congo. These necklaces are considered horrible by non-man-eating tribes. Other tribes wear necklaces of monkey or crocodile teeth. This particular necklace consists of thirty-eight teeth, some of which are deciduous, and one molar was observed to be carious. Most of the single-fanged teeth were perfect, but the roots of the molars were more or less broken by the rude method of removal, in order to facilitate which the natives burn the skulls to a certain extent. Mr. Stanley informed Mr. Woodhouse that many of these necklaces consisted of several rows, and sometimes contained as many as 400 teeth; and, further, speaking of the prevalence of caries among the natives of Africa, which appears to be far greater than is generally supposed, stated that during the Emin Pasha expedition he and his subordinates extracted between 300 and 400 teeth for their followers; these, however, were natives of the extreme west and extreme east, and not of central Africa.—*Lancet.*

A PINE APPLE GROVE IN FLORIDA.

The pine apple (*Ananassa sativa*) belongs to the Bromeliad family, and is indigenous to tropical America, where it was found after the discovery of this country. It was found wild in Mexico and Central America, Guiana and Brazil. It is such a delicious fruit that it is grown now in various parts of the South. Our engraving was prepared from a photograph taken by Mr. Wm. H. Jackson, of Denver, and represents very well the manner in which the fruit grows. This pine apple field is located at Eden, on the Indian River, Florida.

A PINE APPLE GROVE IN FLORIDA.

To tell the truth of electricity, about which we are wont to speak glibly enough, and which we introduce into our equations quite as a matter of course, we know, directly, absolutely nothing whatever. Concerning electrical energy we know much; but the factor of it which we call electricity eludes alike our senses and intelligence. From a practical point of view, electricity is hardly more than a mathematical coefficient, of which we may in due season learn the physical significance.—*Electrical World.*