

Steamer "Phosphor-Bronze."—An English company has built a steamer of phosphor-bronze, to which it has given the name of the metal. The length is 10·5 metres (11·393 yards) and the breadth 1·8 metres (1·969 yards). On its experimental trip it gave a velocity of $12\frac{1}{2}$ miles, which is a rapid speed for a boat of its size. The object of the company in constructing so small a vessel was to test the rigidity of phosphor-bronze, both in plates and angular pieces, before employing it for larger boats. The results are more satisfactory than were anticipated. The cost will not much exceed that of iron or steel, and as the bronze does not corrode, the value of the raw material will be preserved.—*Gaceta Industrial*. C.

Borate of Soda.—M. Widemann finds that if 12,000 kilogrammes (12 tons) of soda are dissolved in 2000 litres (528·37 gallons) of water and the solution is saturated with boric acid or *tinkal* and then boiled, a borate of soda is produced which has five equivalents of water, while ordinary borax contains ten. If borate of soda is calcined and melted in a crucible and then poured upon a plate of glass or very dry stone, it may be pulverized and placed upon a piece of damp linen or unsized paper, when there is a very rapid elevation of temperature to about 80°C. (176°F.). This property may be employed for producing a warm poultice with cold water, without danger of burning or inflaming the skin, or for warming food, etc.—*Chron. Industr.* C.

Last Eruption of Mauna Loa.—The late eruption of this volcano was the greatest that has been observed for fifty years. The lava flowed regularly and without interruption for nearly nine months and a half. A cloud commonly rested over the hot lava, which was doubtless formed, like ordinary clouds, by the ascending heated air, which was loaded with invisible vapors that were condensed by the cold currents of the upper atmosphere. The condensed moisture, in descending, formed a kind of cyclone or water-spout, which was precipitated upon the incandescent lava and reduced again to vapor. As there were commonly many square miles of lava at a red heat, these storms were frequent and gave some faint idea of the disturbances which are continually taking place at the surface of the sun.—*Comp-tes Rendus*. C.