

For the Journal of the Franklin Institute.

Particulars of the Steamers Building or just Finished in the United States.

New York.—Steamer (not yet named) for U. S. Mail Steamship Co., to ply between New York and Aspinwall. Hull by Wm. H. Webb. Machinery by Morgan Works.

HULL.—

Length on deck,	275 feet.
Breadth of beam,	40 "
Depth of lower hold,	24 "
Depth below spar deck,	31 " 6 ins.
Draft loaded (expected,)	13 "
Tonnage,	2114

ENGINE.—One inclined direct action.

Diameter of cylinder,	65 inches.
Length of stroke,	10 feet.
Average revolutions, (expected,)	16

BOILERS.—Two "drop flue," with one row of upper return flues.

Length,	24 feet.
Breadth,	16 "
Height, except steam drum,	14 " 2 ins.
Number of furnaces,	8
Breadth "	3 " 7 ins.
Length "	8 " 3 "
Grate surface,	223.25 sq. feet.
Total heating surface,	
Steam pressure,	15 pounds.

WHEELS.—

Diameter over boards,	34 feet.
Length of "	8 "
Depth of "	1 " 4 ins.
Number of "	28

Remarks.—Frames of ship, 18 inches deep, and sided 16 inches; distance apart, (centre to centre,) 32 inches; double diagonal iron straps, $5 \times \frac{3}{4}$ inches; floor filled in solid.

*On a new Plastic Material for forming various Objects. By Prof. PURKINJE.**

Five parts of sifted whiting are mixed with a solution of 1 part of glue. When the whiting is worked up into a paste with the glue, a proportionate quantity of Venetian turpentine is added to it, by which the brittleness of the paste is destroyed. In order to prevent its clinging to the hands whilst the Venetian turpentine is being worked into the paste, a small quantity of linseed oil is added from time to time. The mass may also be colored by kneading in any color that may be desired. It may be pressed into shapes, and used for the production of *bas-reliefs* and other figures, such as animals, &c. It may also be worked by hand into models, during which operation the hands must be rubbed with linseed oil; the mass must also be kept warm during the process. When it cools and dries, which takes place in a few hours, it becomes as hard as stone, and may then be employed for the multiplication of these forms.—*Gewerbebl. aus Wurtemb.*, 1852, p. 45.

*From the London Chemical Gazette, No. 233.