

Mr. Brunel then gave an account of the new Poling Boards which he is employing for the effectual protection of the Shield at the Tunnel. These constitute a system of pannelling, of which every one, though it can be easily moved, is secured to its neighbour. Thus the boards cannot be displaced, and a most efficient auxiliary is provided against the loose portions of ground in front of the shield. The application of these appears to have added everything that was wanted to render the shield a perfect protection in all operations of a nature similar to those which are now going on at the Tunnel.

February 6, 1838.

The PRESIDENT in the Chair.

The following candidates for admission were balloted for, and duly elected :—Thomas Jackson Woodhouse, as a Member ; Henry Carr, as a Graduate ; David Mushet, Charles L. Francis, George Crane, Henry Kendall, and Henry Vint, as Associates.

“ On the construction of Flat Roofs with Earthenware Pots. By F. W. Simms.”

Mr. Simms details the construction of the roof of the Manutention des Vivres de la Guerre quai de Billy, Paris, formed of earthenware pots, and entirely without timber. This roof, which forms a flat terrace, having only inclination sufficient to carry off the water, is constructed with pots of about nine inches long, and five inches in diameter, nearly cylindrical, and closed at both ends ; one end being finished off nearly square. The soffits of the arches are covered with plaster, and form ceilings. The extrados of the arch is covered with Beton, composed of lime, sand, and gravel, of such thickness as to give the inclination requisite for carrying off the water ; on this is laid a thin coating of hydraulic mortar, over which, when dry, canvas is stretched tight, and upon the canvas Asphaltic Mastic is poured in a semi-fluid state, which forms the finished surface of the terraced roof.

Roofs of
Earthen-
ware Pots.

The paper was accompanied with a plan and section of the roof so constructed. The strength of part of this roof had been tested during its construction, and was found to bear six tons without yielding ; it