

to consist in the cutters acting during the incursion as well as the excursion of the slide, and when forming long screws, in their being alternately stayed on the side opposite to the tool which was in action ; that by these means, good work could be produced with such dispatch, as to reduce the cost of turned screw bolts, as low as that of similar articles produced by screwing machines, which worked with dies acting by compression.

A drawing of the lathe used in cutting the screws was presented with the specimens.

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Mr. Field observed that the machine was ingenious and appeared to do the work well ; but as far as could be ascertained from the drawing there was not any novelty in it. A similar machine made by the late Mr. Maudslay, had been in use in Maudslay and Field's manufactory for the last fifteen years. The screwing dies invented by Mr. Whitworth, cut out the threads of screws as clearly as if done by a chasing tool, and entirely without compression.

Mr. Field,  
V. P.

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April 25, 1843.

The PRESIDENT in the Chair.

No. 616. "An Account of the Brick-making at Blechingley Tunnel, during the winter of 1840, and summer of 1841." By Frederick Walter Simms, M. Inst. C. E.

As the forming of this part of the Dover Railway was not let by contract, it was necessary to make extensive preparations previously to commencing the work, and amongst these the brick-making department was one of the principal, the whole being under the personal superintendence of the author.

The bricks were all made on the surface along the line of the tunnel, the brick-grounds being so arranged on each side of the shafts, that when the bricks were delivered from the kilns and stacked, but little labour was necessary to convey them to the spot, whence they were lowered to the underground works.

The mode of manufacture adopted was that of "slop-moulding," in which process the mould is dipped into water previous to its receiving the clay, instead of its being sanded as is the case in making sandstock bricks ; the workman then throws the clay with some force into the mould, pressing it down with his hands to fill all the cavities, and strikes off the overplus with a stick ; an attendant boy, who has previously placed another mould in a water trough by the side of the moulding table, takes the mould just filled, and carries it to the floor,

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