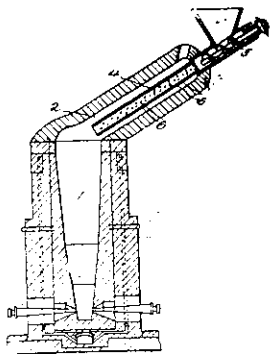


**Iron Steel Manufacture from Magnetic Ironsand.**—A patent, No. 39,032, has been taken out by W. P. Heskett of Christchurch. According to this invention, the top of the furnace is covered by a dome of brickwork, with openings on either side or both sides. These openings lead into a chamber or chambers 2, the waste heat of the furnace travelling the same. Extending through the chamber 2 are a plurality of pipes 4, each of which is adapted to receive material by means of a worm-feed or other suitable device 5 and to deliver such material into the furnace 1. The said pipes 4 may be disposed vertically, hori-



zontally, or at any suitable angle as here shown, the form of the chamber 2 being modified accordingly. The pipes 4 are formed with perforations 6 adapted to permit the escape of gases from such pipes to the surrounding chamber 2. The iron-ore is intimately mixed with coaldust, or any form of carbonaceous mat or in solid or liquid form, and also, if thought desirable, with caustic lime, silica, and alumina. In lieu of the lime, silica, and alumina, Portland cement or any form of hydraulic lime comprising the approximate proportions of 70

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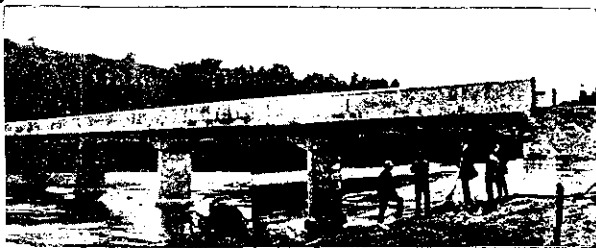
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