are hand-moulded. Except in certain districts, comparatively few common or *stock*[1] bricks are now moulded by hand.

The clay or shale is prepared by any of the methods described on pp. 2 and 3. In addition, *souring* or ageing the clay is sometimes resorted to. This merely consists of storing the plastic clay, for a period varying from one day to several weeks, in one or more cool chambers to ensure a uniform distribution of the water throughout the mass and the decomposition of any organic matter. This results in an increase in the plasticity and workability of the paste, and assists in preventing the development of cracks, blisters and other defects.

There are two methods of shaping bricks by hand, namely, (*a*) sand-moulding and (*b*) slop-moulding.

(a) *Sand-moulding*.—The wood-mould, shaped as shown at A, Fig. 2, has neither top nor bottom and is usually lined with brass or iron; its internal dimensions are those of the finished brick plus allowance for shrinkage ($\frac{3}{4}$ to 1-in.). This is called an *open-mould* or *stock-mould*, as distinct from a *box-mould* which has a fixed bottom and is used for special bricks.

The moulding operations are done on a wood bench or *moulding stool*, which is about 6-ft. long by 2-ft. wide by 3-ft. high. A " stock " of clay of the correct consistency, flattened on top, and a heap of sand are placed conveniently to hand on or near to the bench. The moulder sprinkles sand on a portion of the table and the inside faces of the mould (hence the name applied to the process) to prevent adhesion and facilitate the subsequent removal of the clay slab. Meanwhile an assistant (known as the " clot-moulder ") cuts a portion of clay from the stock and kneads it into a rectangular " clot " which is about one-quarter larger than the mould. The moulder takes the clot, throws it into the mould and completely fills it by pressing the clay down with his fingers. The edge of a *strike* (a wood straight-edge which is dipped in water) is drawn across the top to remove the superfluous clay and level the surface of the slab. Finally, the moulder lifts the mould, and with a twist of the hand turns the slab on to a flat piece of wood called a *pallet board*. The slab is removed by a boy to the floor of the drying shed.

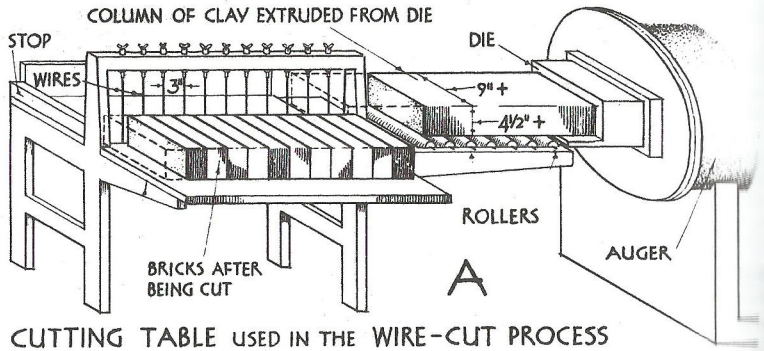
These bricks are often moulded on a piece of wood called a *stockboard*, which is nailed to the top of the bench. It has a raised centre or *kick*. The kick and stockboard are covered with brass as shown at B, Fig. 2. Four metal pegs are driven into the table, one at each corner of the stockboard, and the mould is placed upon them as shown. The thickness of the brick is regulated according to the extent to which the pegs are driven. The kick forms the characteristic frog in the bricks.

Approximately 1,000 bricks per day can be moulded by this method by a moulder and assistants.

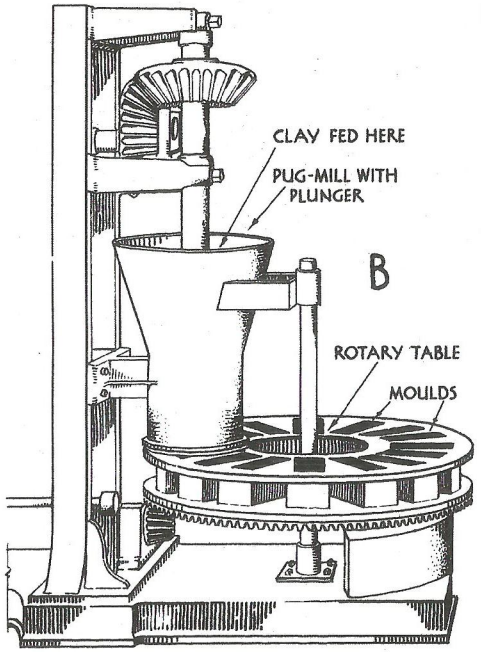
Ornamental bricks and those of special shapes are sometimes moulded from

[1] " Stock " is a term which originally denoted hand-made bricks moulded on a stock-board (see Fig. 2). It is now loosely applied and generally indicates common wire-cuts.

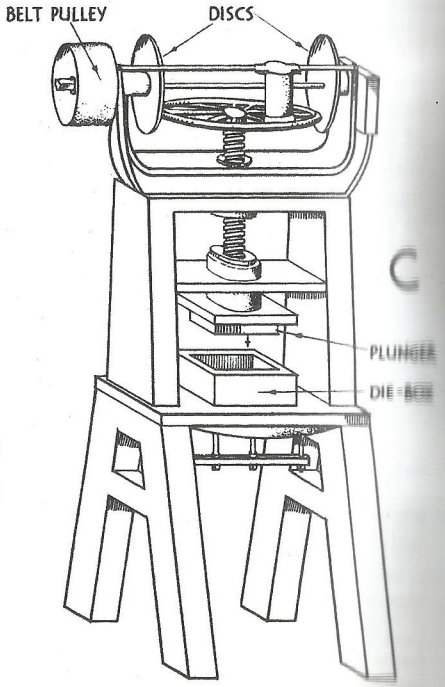
SKETCHES OF BRICK MOULDING MACHINERY



CUTTING TABLE USED IN THE WIRE-CUT PROCESS



ROTARY PRESS



BELT-DRIVEN PRESS

USED IN THE PRESSURE PROCESS

NOT TO SCALE

FIGURE 1