

tains many valuable features over machines heretofore used for this purpose.

The frame is cast in one piece with cored centre, making it very stiff and reliable to stand the heavy labor expected from it.

The bed-plate upon which the form rests is a heavy casting, occupying 6 feet by 2 feet floor space.

The hub to be operated upon is held at each end in a pair of adjustable saddles having independent vertical adjustments for the length of the spoke and a horizontal adjustment to accommodate the length of the hub.

The hammer shaft is of steel, 2 7/16 in. diameter, and it runs in genuine babbit-metal self-lubricating bearings, and is driven by a powerful friction clutch which is connected by foot pedal at the base of the machine for starting and stopping the hammer.

When in use, the foot of the operator is placed upon the pedal which immediately engages the friction clutch and instantly starts the hammer, which delivers a blow similar to the swinging of a hammer by hand. The force of the blow is regulated by the pressure applied to the pedal. It will strike the blow heavy or light as desired. By the aid of an ingenious device, the frictions are automatically disengaged before the hammer delivers the blow which prevents shock or injury to the machine. The friction acts as a loose pulley when disengaged.

The graduation of the blows is so quickly accomplished that the stroke of the hammer can be changed after the hammer is started by changing the pressure of the foot upon the pedal.

The adjustable gauge is conveniently arranged to guide the spoke, being driven

to exact position, returning out of the way when not in use. The dish staff is also furnished to test the work.

The hammer helve is attached to the machine by a friction binder, and it is easily removed when desired. The hammer is made of solid swedes iron.

The friction driver is 18 in. by 5 in., driven by a single 5 in. belt 250 rotations per minute, and it can be belted to from above, below or either side direct from the main line shaft.

For further information, enquire of the Defiance Machine Works, Defiance, Ohio.

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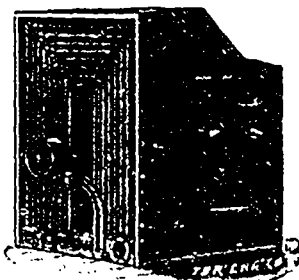
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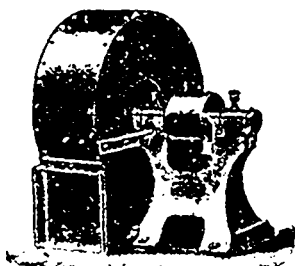
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