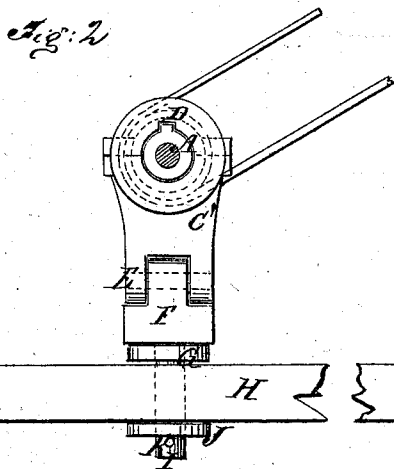
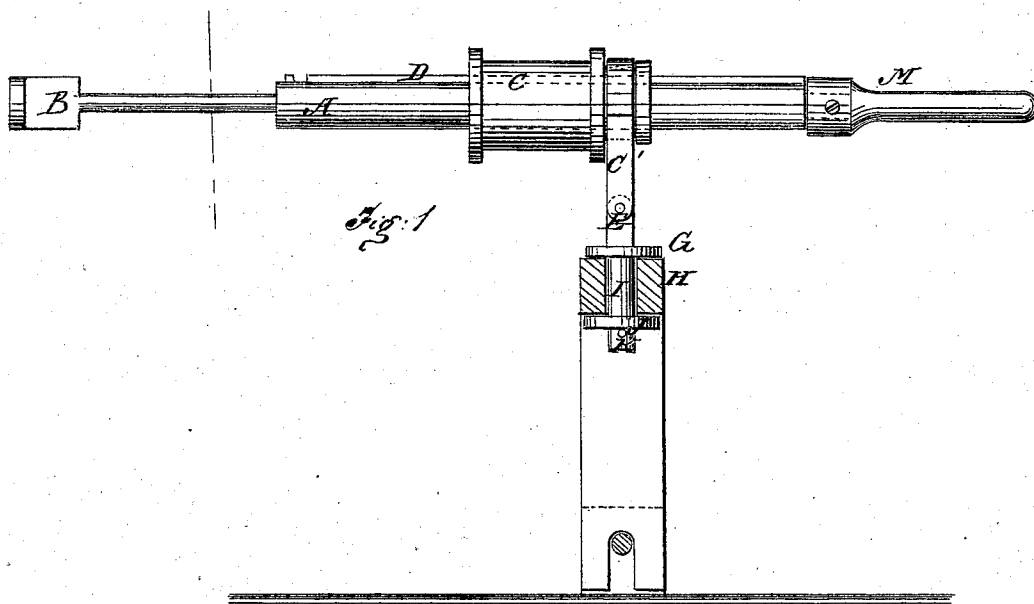


J. DAVIES.

Apparatus for Puddling Iron.

No. 143,811.

Patented Oct. 21, 1873.



Witnesses

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JOSEPH DAVIES, OF KNOXVILLE, TENNESSEE.

IMPROVEMENT IN APPARATUS FOR PUDDLING IRON.

Specification forming part of Letters Patent No. **143,811**, dated October 21, 1873; application filed August 9, 1873.

To all whom it may concern:

Be it known that I, JOSEPH DAVIES, of Knoxville, in the county of Knox and State of Tennessee, have invented a new and Improved Puddling-Tool, of which the following is a specification:

The invention will first be fully described, and then clearly pointed out in the claim.

Figure 1 is a side elevation of my improved puddling-tool, and a section of the bench on which it is mounted. Fig. 2 is a section of the tool on the line *xx* of Fig. 1, and a side elevation of the bench.

Similar letters of reference indicate corresponding parts.

A represents the rod or shaft of the puddling-tool B, on which is a pulley, C, for revolving it. The pulley is fitted by a journal at one end in a bearing in a standard, C', and the shaft is fitted in the pulley so as to slide freely endwise, and has a long key or spline, D, working in a groove in the pulley, to be revolved at the same time. The standard is jointed at E to a section, F, which is seated by a collar, G, on the bench H, and has a cylindrical extension, I, passing down through a long slot in the bench-top, also through a loose washer or collar, J, which is secured by a pin, K. The bench ranges parallel with the front of the furnace, and is pivoted just above the ground

at L, so as to swing toward and from the furnace. The handle portion M of the puddling-tool rod or shaft is jointed to the other portion, so as not to revolve with it when held by the attendant for directing the tool.

It will be seen that the tool can be moved in and out by sliding in the pulley in which it is supported; also, by swinging the bench forward and backward on the pivots L, that it can be swung horizontally on the bench by turning the section F of the support, and that it can be shifted along the bench parallel with the furnace, and thus all necessary movements can be made to work the tool in all parts of the furnace to manipulate the iron for puddling and balling.

The principal object of the joint E is to keep the shaft or rod horizontal while swinging forward and backward on the pivots L.

Having thus described my invention, I claim as new and desire to secure by Letters Patent—

The puddling-tool shaft D, pulley C, jointed revolving and sliding stand C' F, and the slotted and jointed bench H, combined and arranged substantially as specified.

JOSEPH DAVIES.

Witnesses:

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