

S. Hanks,

Fuddlers Balls.

No. 109186.

Patented Nov. 15. 1870.

Fig.1.

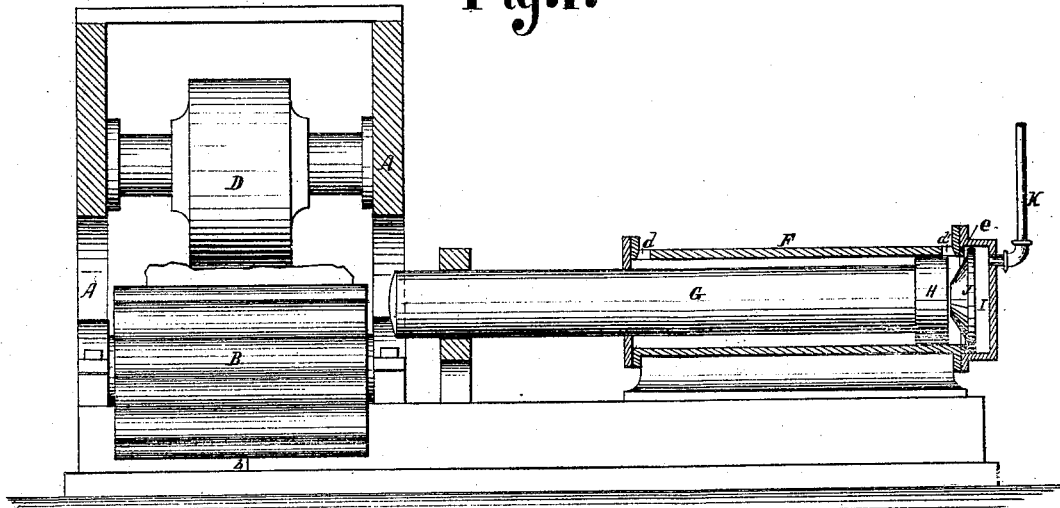
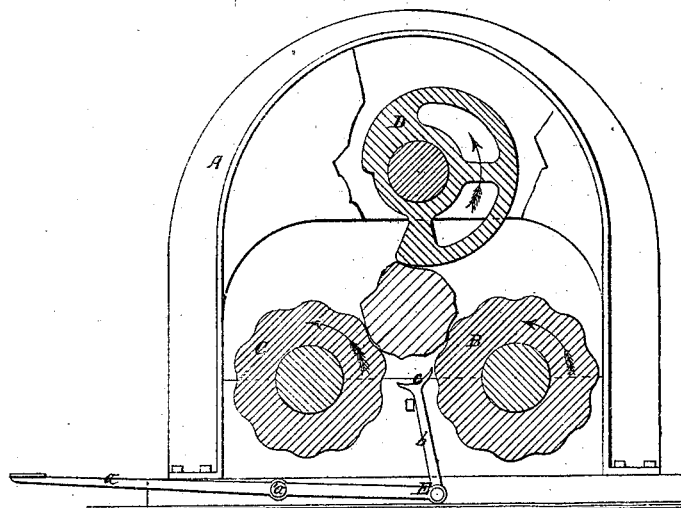


Fig.2.



Witnesses:
H. O. Peck
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UNITED STATES PATENT OFFICE.

SAMUEL DANKS, OF CINCINNATI, OHIO, ASSIGNOR TO HIMSELF, JOSEPH C. BUTLER, AND LEWIS WORTHINGTON, OF SAME PLACE.

IMPROVEMENT IN MACHINES FOR SQUEEZING PUDDLERS' BALLS.

Specification forming part of Letters Patent No. **109,186**, dated November 15, 1870.

To all whom it may concern:

Be it known that I, SAMUEL DANKS, of Cincinnati, in the county of Hamilton and State of Ohio, have invented certain Improvements in Squeezers for Working Iron, of which the following is a specification.

My invention relates to the combination of two corrugated rollers of unequal diameters and a cam-compressor; also to a device located beneath the rollers for ejecting the blooms, when sufficiently operated upon, from between the rollers and discharging them on the floor outside thereof.

Figure 1 represents a longitudinal sectional elevation of a machine embodying my invention. Fig. 2 is a transverse vertical section of the same, taken through the rollers and cam-compressor.

A A are the housing-frames, in which the gudgeons of the rollers B and C and cam-compressor D are journaled. The rollers are corrugated. The roller B is larger in diameter than C, and they, as well as the cam-compressor, are rotated in the same direction by means of suitable gearing. The bloom-ejector E is located beneath the roller C. It consists of the operating-lever *a*, which is pivoted at *a'* to the base-plate of the machine, and of the basket-arm *b*, having its lower end pivoted to the inner and short arm of the operating-lever *a*. The end of the arm *b*, which receives and ejects over the small roller C the blooms, is provided with a flat basket *c*. The edge nearest the large roller B is much higher than the

opposite edge in order to insure the ejection of the bloom when the ejector is operated.

The bloom or rough ball from the puddle-furnace is laid upon the rollers, the machine is put in motion, when the cam-compressor D presses the bloom into close contact with the rotating rollers B and C, which, having different diameters and revolving in the same direction, squeeze the bloom between them, and where they are sufficiently distant from each other force the bloom through upon the floor below them. At the same time that the bloom is being worked between the rollers and the cam-compressor the hammer G is upsetting the end by repeated blows thereon.

The devices of the steam-cylinder, steam-chamber, disk-plate, &c., shown in the drawings filed, and designated by letters F I J, &c., are not claimed as a part of the invention herein described, a separate application for Letters Patent for them having been made.

I claim as my invention—

1. The combination of the corrugated rollers B C, having unequal diameters, with the cam-compressor D, substantially as shown, and for the purpose specified.

2. The bloom-ejector E, in combination with the rollers B C, constructed and arranged to operate substantially as herein shown, and for the purpose specified.

SAMUEL DANKS.

Witnesses:

H. D. PECK,
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