J. Hart,

Ore Stamp

No. 109,006. Patented Nov. 8. 1870.

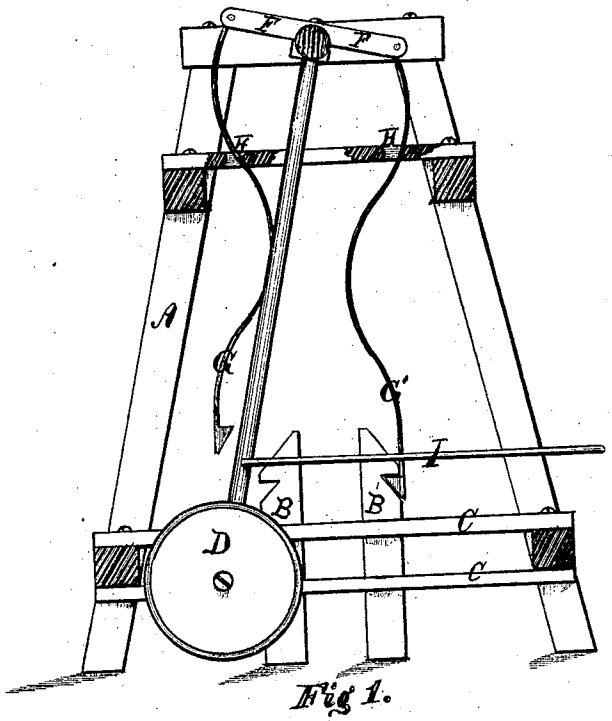

Fig 1.

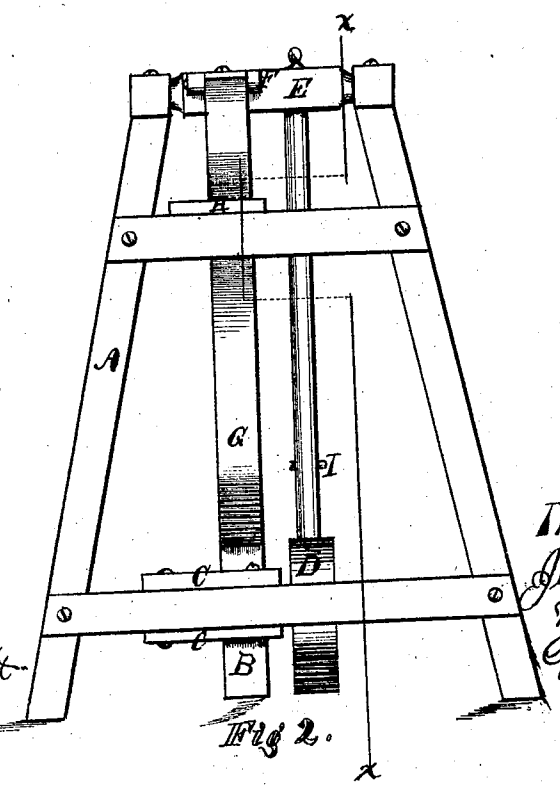

Fig 2.

Witnesses:
John A. Straight
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United States Patent Office.

JAMES HART, OF SWEEDEN CENTER, NEW YORK.

Letters Patent No. 109,006, dated November 8, 1870.

IMPROVEMENT IN PENDULUM CRUSHING-MILLS.

The Schedule referred to in these Letters Patent and making part of the same.

I, JAMES HART, of Sweeden Center, in the county of Monroe and State of New York, have invented certain Improvements in Crushing-Mills, of which the following is a specification.

Nature and Objects of the Invention.

The first part of my invention relates to the combination of a pendulum with the stamps of a crushing-mill, in such a manner that the momentum of the pendulum is made serviceable in raising the stamps.

The second part of my invention relates to the combination with the pendulum and stamps of a suitable let-off, which will allow the stamps to drop after having been raised to a sufficient height.

The object of my invention is to produce a cheap and efficient crushing-mill without wheels or gearing.

Description of the Accompanying Drawing.

Figure 1 is a vertical transverse section, taken on the line *x x* in fig. 2.

Figure 2 is a side elevation.

General Description.

A is the frame of the machine.

B B′ are stamps, which pass easily through the guides C C.

D is the pendulum, which is suspended from the rocking shaft E.

F F are arms attached to the shaft E at right angles with the pendulum-rod.

G G′ are curved spring catches, which hang loosely from pins in the ends of the arms F F, through the guiding-slots H H.

The stamps B B are notched, to engage with the spring-catches G G′.

I is a connecting-rod, by means of which motion is given to the pendulum by any convenient power.

On giving motion to the pendulum, the spring-catches G G′ are alternately thrown up and down, and they are so curved that, when they are thrown down, the outside of the spring strikes the outer end of the guiding-slot H and throws the catch into the notch in the stamp B′, as at G′, and the return stroke of the pendulum raises it until the curve in the inside of the spring catch G′ strikes the inner end of the slot H, when it is thrown out of the notch in the stamp B′, as shown at G.

By lengthening the shaft E any number of stamps may be operated.

Claim.

I claim as my invention—

The combination of the pendulum D, spring catches G G′, and stamps B B′, substantially as and for the purpose set forth.

JAMES HART.

Witnesses:

JOHN A. STRAIGHT,

EUGENE F. WOOD.