

E. DART.
Ore Stamp.

No. 50,342.

Patented Oct. 10, 1865.

Fig. 2.

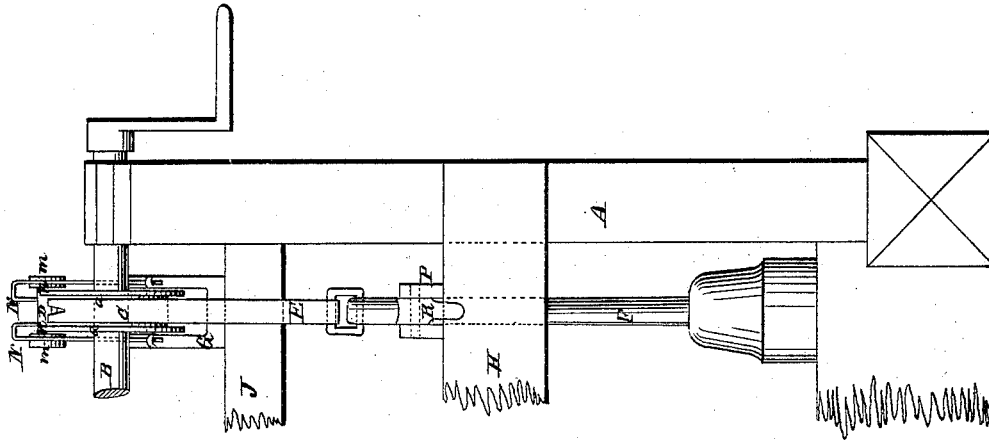


Fig. 1.

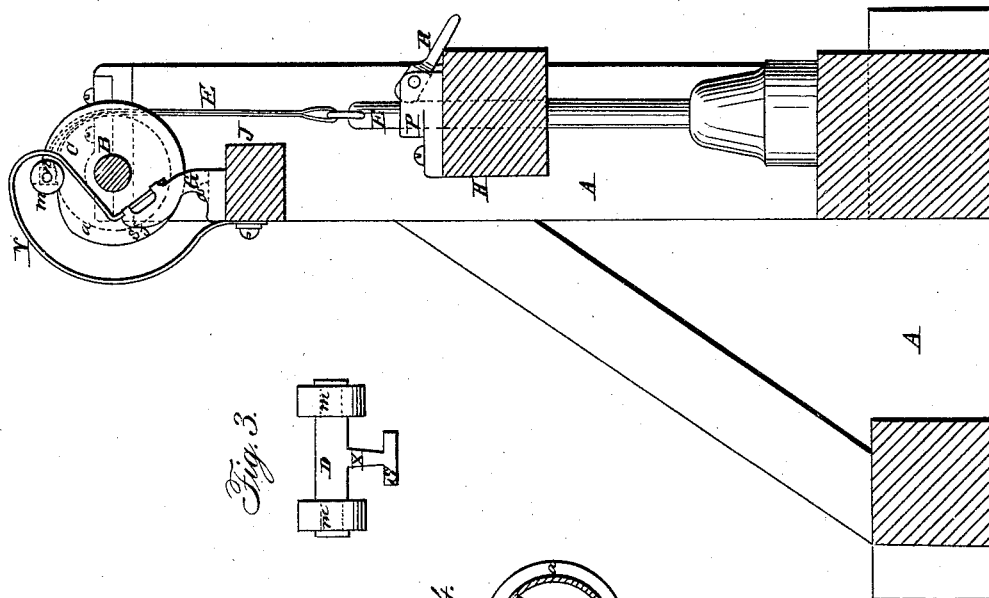


Fig. 3.

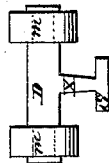
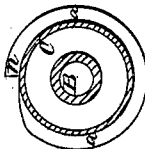


Fig. 4.



Witnesses:

Henry C. Dart
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UNITED STATES PATENT OFFICE.

EDWARD DART, OF NEW YORK, N. Y.

IMPROVEMENT IN ORE-CRUSHING STAMPS.

Specification forming part of Letters Patent No. 50,342, dated October 10, 1865.

To all whom it may concern:

Be it known that I, EDWARD DART, of New York, in the county and State of New York, have invented certain new and useful Improvements in Stamps for Crushing Seed, Ore, &c.; and I do hereby declare that the following is a full and exact description thereof, reference being had to the accompanying drawings, and to the letters of reference marked thereon.

The nature of my invention consists in the arrangement of a revolving pulley provided with flanges, part of which said flanges are cut away to form a nose, which, during the revolution of the pulley, take hold of a cross-bar connected by means of a belt or chain with the stamp-rod, and thereby lift the stamper, in combination with a fixed cam or frame, whereby the cross-bar is pushed away and brought clear of the nose in the flanges, to allow the stamper to fall again by its own weight, and producing thereby the alternate lifting and dropping of the stamper.

Figure I represents a side elevation, and Fig. II shows a front view, of my improved stamper. Fig. III represents the cross-bar.

A is the frame-work, on the upper end of which the driving-shaft B is arranged, to which the pulley C is attached. This pulley C is made with flanges *a a*, one on each side, part of which flanges are cut away down to the surface of the pulley, and form the noses N. (See Fig. IV.)

Upon the flanges *a a* a cross-bar, D, is placed, provided with flanges or friction-rollers *m m* on each end, and outside of the pulley-flanges, to act as guides for said cross-bar. At or near the middle of this cross-bar a projection, *x*, is arranged, (see Fig. III,) on the other end of which a cross-piece, S, is provided, the length of which is less than the width of the pulley C between the flanges *a a*, and to which said cross-piece S the strap or chain E is fastened, lying upon the surface of the pulley C.

F is the stamper-rod, guided in the cross-beam H and connected near the top with the lower end of the belt or chain E.

G is a cam-frame attached to a cross-beam, J, and projecting upward on the outside of the flanges *a a* near the after or back side of the pulley C. The back surface, *f*, of these pro-

jecting parts of the frame G is placed near the back end of the flanges *a a*, and is shaped in such a manner that the flanges or friction-pulleys *m m* on the ends of the cross-bar D will be lifted upward or pushed away, so as to lift the cross-bar D clear of the nose *n* formed in the flanges *a a*.

N are guard-rods attached to the frame G and to the cross-beam J, and arranged in such a manner as to allow free motion to the cross-bar D, while being acted upon by the nose *n* on the pulley C, and to prevent said cross-bar D from flying off after being disengaged by the cam-frame G, and at the same time act as a stop for said cross-bar when the same is pulled forward again by the dropping of the stamper. Motion being communicated to the shaft B, the nose *n*, formed in the flanges *a a* will come in contact with the cross-bar D and carry the same around, thereby lifting the stamper-rods F with the stamper or weight W attached. When by the revolution of the pulley C the friction-rollers *m m* on the ends of the cross-bar D come against the surfaces *f* of the frame G, the same are pushed away or lifted up, so as to bring the cross-bar D clear of the nose *n* and allow the stamper to drop again by its own weight, whereby the cross-bar D will be brought again forward ready to be taken hold of by the nose *n* during the next revolution of the pulley C, the guard-rods N preventing said cross-bar from being thrown off from the surfaces of the flanges *a a*.

On the guide-boxes P, attached to the cross-beam H an eccentric lever, R, is attached, which, when the handle of said lever is pressed upward, will press against the face of the stamper-rod F and hold the same in the upward position, so that the pulley C may revolve without acting upon the stamper-rod.

In the drawings only one stamper with its necessary driving-gear is shown; but it will be readily understood that any number of stampers may be arranged side by side with pulleys on the shaft B and driven by said shaft.

What I claim as my invention, and desire to secure by Letters Patent, is—

1. The arrangement of the pulley C, with flanges *a a* partly cut away to form a nose, *n*, in the manner and for the purpose described.

2. In combination with the above-described pulley C, the cross-bar D, working loosely on said pulley, when constructed, arranged, and operated in the manner and for the purpose set forth.

3. In combination with the pulley C, the frame G, constructed as specified, and operating on the cross-bar D in the manner and for the purpose substantially as set forth.

4. The guard-rods N, in combination with the pulley C, frame G, and cross-bar D, arranged in the manner and for the purpose described.

EDWARD DART.

Witnesses:

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