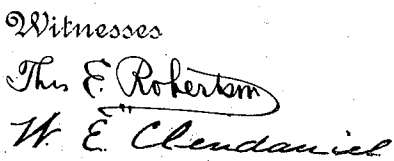


I. B. HAMMOND.
FRAME FOR STAMPS.

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Inventor
Isaac B. Hammond
By J. J. W. Robertson
Attorney

UNITED STATES PATENT OFFICE.

ISAAC B. HAMMOND, OF PORTLAND, OREGON.

FRAME FOR STAMPS.

SPECIFICATION forming part of Letters Patent No. 549,785, dated November 12, 1895.

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To all whom it may concern:

Be it known that I, ISAAC B. HAMMOND, a citizen of the United States, residing at Portland, in the county of Multnomah and State of Oregon, have invented certain new and useful Improvements in Frames for Stamps, of which the following is a specification, reference being had therein to the accompanying drawings.

This invention is designed to provide a stamp that will be portable and self-contained, convenient, economical, and durable in use, and yet cheaply made. To these ends the invention consists in the construction hereinafter more particularly described, and then definitely claimed at the end hereof.

In the accompanying drawings, Figure 1 is a front elevation of my stamp partly in section. Fig. 2 is a side view of the same. Fig. 3 is a plan of a guide-bar and top of frame. Fig. 4 is a sectional detail on a larger scale, which will be more fully described hereinafter. Fig. 5 is a sectional detail on the line *x x*, Fig. 3, which will be more fully referred to hereinafter.

Referring now to the details of construction by letter, A represents the mortar, of any approved construction, having on each side a pocket B, in which are inserted the standards C, which set loosely therein and rest upon cushions D, preferably of rubber or similar material. These standards may be all of cast-iron, but for some purposes I prefer to make them of a combination of wrought and cast iron, as shown in the drawings, in which E E' E'' represent pieces of angle-iron, to which are attached at the top and near the bottom castings F F, each having tapering dovetail sockets *f* on the inner side. At the center is a larger casting G, which forms a support for the journal-bearing H, in which revolves the shaft I, carrying the belt-wheel J and cams K for operating the stamps, in a manner well understood and therefore unnecessary to describe. At G' is shown an L-shaped casting forming a foot for the standard. The castings F, F', G, and G' are all firmly secured to the angle-irons by rivets, as shown at *e*.

The standards are connected by the stamp-guides L L, each of which has at each end a tapering dovetail *l*, which tightly fits in a socket *f* in one of the castings F, so that when

these parts are assembled and the dovetails driven "home" a stiff durable frame is provided for the support and guiding of the stamps and the shaft and cams for operating the same.

The guide-bars are each provided with a series of projections M, which are T-shaped in cross-section, and which are used for securing the caps N to the guide-bars by means of wedges O, which are forced down between the caps N and the heads of the projections M, as shown in Figs. 3 and 5. The caps are provided with lugs *n*, which will keep them from falling down with the stems of the stamps.

Between the stamp-rods and the guides and caps are set pieces of rawhide P, which are held in place by driving nails Q through the rawhide and into plugs of wood R, set in holes in guides, as shown in Fig. 4.

It will be seen that by my invention a stamp is produced that will not be troubled by the vibration which causes so much breakage in stamps of the class herein referred to, as much of the vibration is absorbed by the cushion D, and as the parts are connected by dovetail joints and wedges there are no nuts to be shaken loose by the vibration, and thus trouble on this point is avoided.

It will also be seen that by the construction above set forth I am enabled to provide a stamp that can be readily taken apart and as readily put together again by common laborers, and can thus be conveniently transported and set up in mountainous regions, where skilled labor cannot readily be found, and to places where it would be extremely difficult to send complete stamps.

By using angle-irons as part of the frame the machine is made much lighter and can therefore be more easily transferred, a point which is of much consequence when it is considered that much of the mining operations is carried on in places where it is very difficult to carry heavy machinery.

I have divided the front part of the angle-iron into two parts E E', so as to more readily set the shaft in position; but instead of making it in two pieces, as shown, the front angle-irons may be made integral, as shown in dotted lines in Fig. 2, in which case, of course, the bearing, shaft, &c., would neces-

sarily be set more to the rear, and I should consider a front angle-iron made in one piece as an equivalent of the two-piece front angle-iron.

5 The rawhide lining of the guides for the stamp-stems will not only be found very efficacious in preventing wear of the stamp-stems, but will also be found to be very durable, lasting a long time without renewal.

10 What I claim as new is—

1. In a stamp-mill, and in combination with a suitable base and the connecting bearing and operating parts, a standard comprising front and rear angle-irons E E' E'', a central
15 casting G forming a support for the bearing of the main shaft, and castings F F' adapted to receive the connection between the opposite standards, substantially as described.

2. In a stamp-mill, a mortar provided with
20 pockets at opposite sides, in combination with a frame comprising a pair of standards rigidly connected together and having their lower ends loosely fitted in the pockets of the mortar, substantially as described.

3. In a stamp-mill, a mortar provided with
25 pockets at opposite sides, having cushions set therein, in combination with a frame, comprising a pair of standards rigidly connected together, and having their lower ends loosely
30 fitted in the pockets and resting on said cushions, substantially as described.

4. In a stamp-mill, a guide for a stamp-

stem lined with two pieces of rawhide, each pressed half around the stem and having its opposite ends extended between the guide 35 and the cap, substantially as described.

5. In a stamp-mill, a guide for the stamp-stems thereof, comprising recesses to receive one half of a stamp-stem, caps to receive the other half, sheet packing encircling the stems 40 and held between the flat portions of the guide and cap; and means for fastening the caps in place, substantially as described.

6. In a stamp-mill, a guide for the stamp-stems thereof, comprising a casting L having
45 recesses formed therein, fitting and receiving one-half of the circumference of the stems, T-shaped projections M between said recesses, caps N fitting between said projections, and provided with lugs n resting on
50 the same, independent wedges O for forcing the caps inward as desired, and sheet packing encircling the stems and held between the flat portions of the guide and caps, all
55 constructed and arranged substantially as shown and described.

In testimony whereof I affix my signature, in presence of two witnesses, this 1st day of November, 1894.

ISAAC B. HAMMOND.

Witnesses:

HENRY E. COWGILL,
ARTHUR L. VEAZIE.