(No Model.)

H. BOLTHOFF.

MORTAR FOR STAMP MILLS.

No. 261,297. Patented July 18, 1882.

Fig. 1.

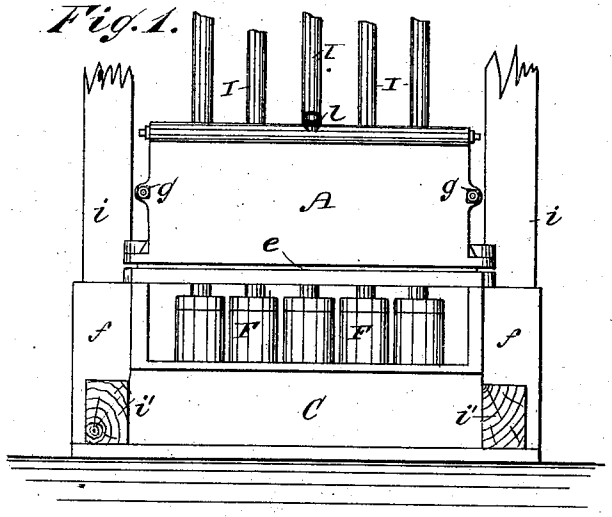


Fig. 2.

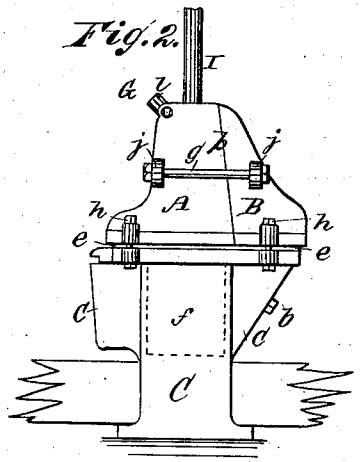


Fig. 3.

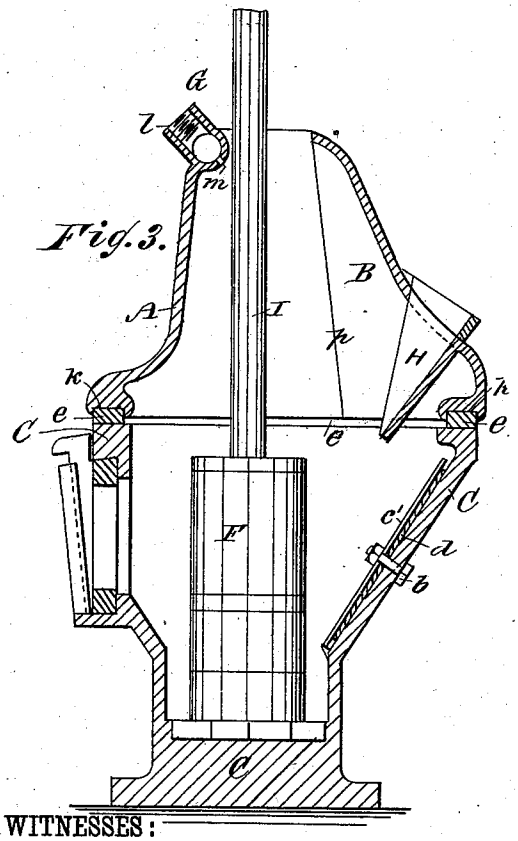
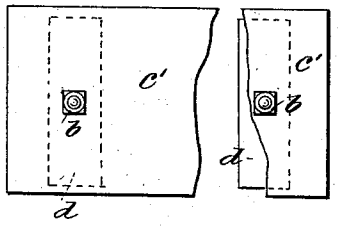


Fig. 4.



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N. PETERS. Photo-Lithographer. Washington, D. C.

UNITED STATES PATENT OFFICE.

HENRY BOLTHOFF, OF CENTRAL CITY, ASSIGNOR TO HIMSELF AND CHARLES F. HENDRIE, OF DENVER, COLORADO.

MORTAR FOR STAMP-MILLS.

SPECIFICATION forming part of Letters Patent No. 261,297, dated July 18, 1882.

Application filed March 21, 1882. (No model.)

To all whom it may concern:

Be it known that I, HENRY BOLTHOFF, of Central City, in the county of Gilpin and State of Colorado, have invented a new and useful Improvement in Mortars for Stamp-Mills, of which the following is a full, clear, and exact description.

My invention relates to improvements in mortars for stamp-mills; and it consists in the peculiar construction and arrangement of parts, as hereinafter more fully set forth and claimed.

Reference is to be had to the accompanying drawings, forming a part of this specification, in which similar letters of reference indicate corresponding parts in all the figures.

Figure 1 is a side elevation of the mortar and stamps and part of the frame. Fig. 2 is an end elevation. Fig. 3 is a transverse sectional elevation. Fig. 4 is a plan of the amalgamating-copper, showing the arrangement of the cushions.

The mortar, which has heretofore been cast entirely in one piece, I now propose to make in two sections divided horizontally at about the middle from top to bottom, making an upper housing-section, A B, and a lower section, C, the latter being the mortar proper. I divide the upper section vertically in two parts at *p*. I connect the upper and lower sections by bolts *h* with an elastic packing, *e*, of wood or other suitable material, interposed between them, preferably having a groove, *k*, in the edge of one of the sections for the better security of the packing. The two parts A B of the upper sections are clamped together by a couple of bolts, *g*, and lugs *j* at the ends of the mortar. By this construction the mortar can be transported in sections much better than when whole, and in case of requiring access to the inside for any cause, for inspection or repairs, the said housing-section can be easily removed, so that when the stamp F has to be removed it only has to be raised to the top of the part C instead of the top of A B, as in the case of the construction hitherto employed—about twice the height. This allows the lower guides (not shown) for the stems I of the mortar to be arranged so much lower, whereby the stamps will run steadier, thus increasing their capacity and greatly reducing the wear and liability of breakage. The packing *e* lessens the effect of the vibrations on the housing-section and makes a water-tight connection of the two sections, which is sometimes required.

I also propose to cast the vertical socket-extensions *f* together with the base-section to receive the frame-posts *i*, and through said extensions, and in the lower part, I core out openings from side to side of the mortar for the base-timbers *i'* of the frame, thus extending the length of the base of the mortar itself, for greater stability, without having to widen the frame, and adding to it the stability afforded by the base-timbers, besides providing for more substantial footing for the posts.

I also propose to cast the water-distributer G together with the part A of the housing-section, to simplify and lessen the cost of such connection, the same being a tubular construction along the upper edge of said part A, cored through and plugged at the ends, and having a pipe-connection, *l*, also the jet-holes *m*, for distributing the water. The holes *m* will probably be bored.

c' represents the amalgamating-copper applied to the sloping side of the mortar C, and which I propose to fix on elastic packings *d*, of rubber or other suitable packing, the packing being secured by suitable bolts, and by the same bolts, *b*, that attach the copper to prevent the jar of the machine from affecting the amalgam.

The feed-spout H, which is located over the amalgamating-copper, I propose to extend inside of the mortar sufficiently to discharge the ores beyond the copper, so as to prevent the injury common thereto by the falling of the ores upon it.

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

1. A mortar divided horizontally and the upper part subdivided vertically, in combination with bolts held to lugs on said sections by nuts, as shown and described.

2. The base-section of a mortar, having the

vertical socket-extensions *f* for posts *i* and openings from side to side for timbers *i'*, whereby the base is lengthened and utilized without widening the frame, as described.

3. The mortar for stamp-mills, divided at or about the middle of its height into upper and lower sections, and connected together with a packing of elastic material, *e*, between them, substantially as specified.

HENRY BOLTHOFF.

Witnesses:
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