

(No Model.)

H. BOLTHOFF.

CAM SHAFT BOX FOR STAMP MILLS.

No. 260,527.

Patented July 4, 1882.

Fig. 1.

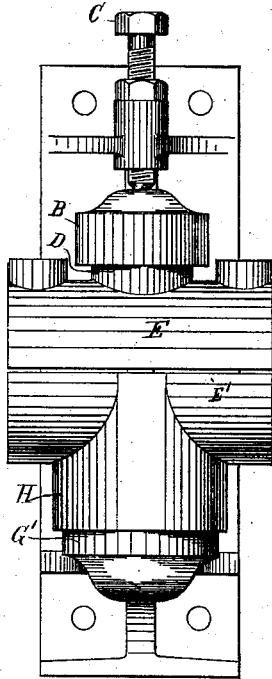


Fig. 2.

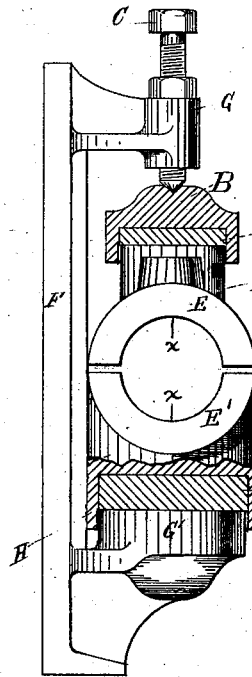


Fig. 3.

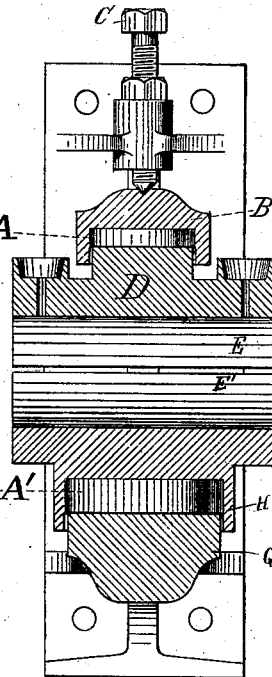


Fig. 4.

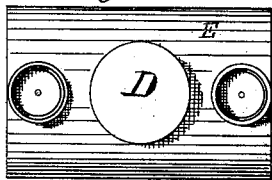


Fig. 6.



Fig. 7.

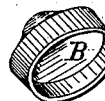


Fig. 5.

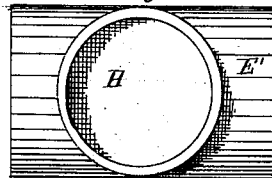
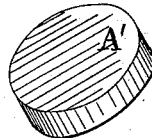


Fig. 8.



Witnesses,
C. Sedgwick
A. Lincott

Inventor,
H. Bolthoff
By *Mum & Co*
Attorneys

UNITED STATES PATENT OFFICE.

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

CAM-SHAFT BOX FOR STAMP-MILLS.

SPECIFICATION forming part of Letters Patent No. 260,527, dated July 4, 1882.

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

To all whom it may concern:

Be it known that I, HENRY BOLTHOFF, of Central City, Gilpin county, Colorado, have invented a new and Improved Cam-Shaft Box for Stamp-Mills, of which the following is a full, clear, and exact description.

This invention consists of an improved bearing-box for the cam-shaft of a stamp-mill, the essential feature of which is a contrivance of the box between cushions interposed both top and bottom between the box and its support, and confining devices for the cushions, so as to lessen the shocks both ways, greatly to the relief of the boxes, shaft, and cams of the mill, as hereinafter described, and pointed out in the claims.

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

Figure 1 is a front elevation of my improved box for stamp-mill shafts. Fig. 2 is an end elevation with top and bottom parts sectioned. Fig. 3 is a vertical longitudinal sectional elevation taken on line *xx* of Fig. 2. Fig. 4 is a top view of the top or cap of the box. Fig. 5 is a plan of the lower half of the box inverted. Fig. 6 is a perspective view of the upper cushion. Fig. 7 is a perspective view of the cap to the upper cushion, and Fig. 8 is a perspective view of the lower cushion.

A represents an elastic cushion, of rubber or other approved material, placed upon the top of a vertical boss, D, preferably of circular form, cast upon the top of the cap E of the journal-box for the cam-shaft.

B is an inverted-cup-shaped cap deeper than the cushion placed over it, and extending below the top of the boss to secure the cushion in position, said cap being itself secured in position by the binding-screw C and a jam-nut in the bracket G of the upper end of a base-plate, F, which carries a boss, G', near its lower end for the support of the lower half, E', of the journal-box.

Plate F is to be bolted to the side of the

timber frame of the mill, to secure the box in the required position for the cam-shaft.

The lower box, E', is cast with an inverted-cup-shaped extension, H, on its under side, adapted to fit upon boss G' and secure the cushion A' thereon between the bottom of the bearing and the top of the boss in like manner as the cushion A is secured above.

The boss G' and the cushion A' are made larger both transversely and vertically than the similar devices for the upper side of the box, because they have, in addition to the shocks of the machine, to sustain the weight of the cam-shaft and cams also.

By this plan it will be seen that the shocks of the cam-shaft will be much less injurious to the machine than when the boxes are bolted fast to rigid supports, because of the yielding of the boxes in both the directions that the thrusts of the cam-shaft tend.

The cushions may be compressed more or less by the binding-screws, as required, to produce the requisite tension for the service and to vary it in case of need.

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

1. In a journal-box for the cam-shaft of a stamp-mill, the combination, with the base-plate F, provided with the bracket G and the boss G', of the journal-box E E', provided with cushioned extensions on its upper and lower sides and supported between the said bracket and boss, substantially as and for the purpose set forth.

2. In a journal-box for the cam-shaft of a stamp-mill, the combination, with the base-plate F, provided with the bracket G and the boss G', the cup-shaped cap B, and the screw C, of the upper box, E, provided with the boss D, the lower box, E', provided with the cup-shaped extension H, and the cushions A A', substantially as and for the purpose set forth.

HENRY BOLTHOFF.

Witnesses:

R. C. ADAMS,
H. B. HAMILTON.