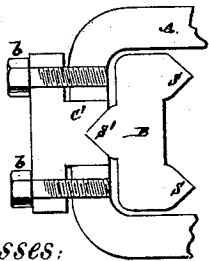
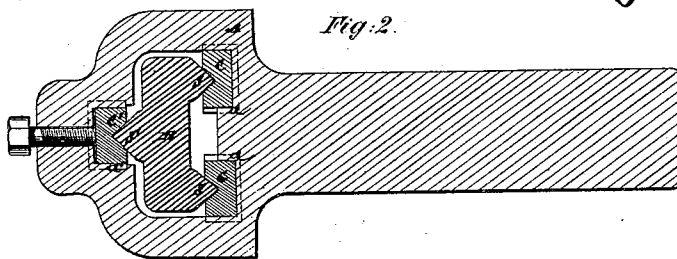
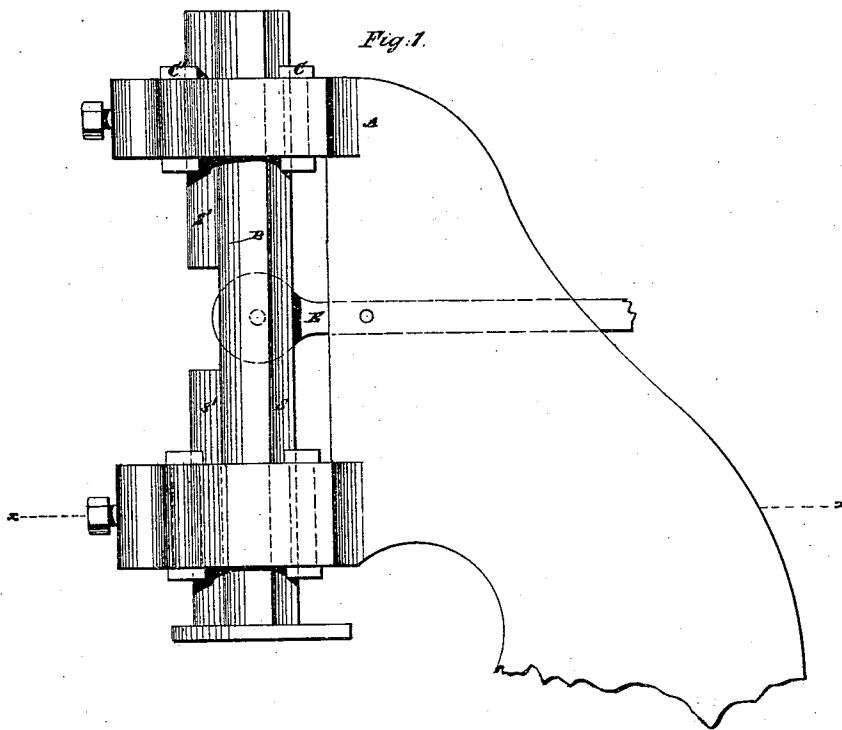


W. Burke,

Die Press.

No. 99,149.

Patented Jan. 25. 1870.



Witnesses:

Henry T. Brown

FR. R. R. R.

W. B. Bunker

United States Patent Office.

WILLIAM BURKE, OF BROOKLYN, NEW YORK.

Letters Patent No. 99,149, dated January 25, 1870.

IMPROVED DIE-PRESS.

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

To all whom it may concern:

Be it known that I, WILLIAM BURKE, of Brooklyn, in the county of Kings, and State of New York, have invented a new and useful Improvement in Die and other Presses, of which the following is a full, clear, and exact description, reference being had to the accompanying drawing, forming part of this specification, and in which—

Figure 1 represents a side view of a die or stamping-press, in part, with my improvement applied to it;

Figure 2, a horizontal section, taken as indicated by the line *xx* in fig. 1; and

Figure 3, a similar view, in part, of a modified construction of the parts which constitute my improvement.

Similar letters of reference indicate corresponding parts.

My improvement relates to the construction of the sliding head of the press, and means for guiding it and adjusting the guiding-surfaces, as wear renders necessary; and

The invention consists in a peculiar triple arrangement of the *V*, or other equivalently-shaped bearings to the sliding head, with correspondingly-arranged gibs, or boxes, for said bearings to slide up and down through, and whereby only one of said gibs or bearings requires to be adjustable, and that in but one direction, to meet the exigencies of wear in various directions, and as taking place on the several bearings or guiding-surfaces.

Referring, in the first instance, to figs. 1 and 2 of the drawing—

A represents the frame of the press, slotted at its forward end, for play of the sliding head B through it, and having two rear recesses, *a a*, and one intermediate front one, *a'*, made in the solid portion of its front or box part.

These recesses serve to receive, within them, gibs or boxes, *O O C*, the two rear ones, *O O*, of which are in line at a suitable distance apart, while the front one, *C*, occupies an intermediate position relatively to the other two. In some cases, the boxes *O O* may be a solid portion of the main frame, as, under my improved arrangement of the bearing or guiding-surfaces, they do not require to be adjusted; but it is preferable, for many reasons, to fit them separate.

The front one, *C*, of these gibs or boxes, is fitted loose, so as to be capable of being slid to or from the rear boxes *O O*, and is under control of an adjusting-screw, *b*, passed through the box-portion of the frame; or the front box *C* may be arranged to pass through

the box-portion of the main frame A, and be adjustable as a gland, by screws, *b*, on either side of it, as represented in fig. 3.

The sliding head B of the press, is formed or provided with three *V*-bearings, *S S S'*, that is, two in rear and one in front, corresponding to the arrangement of the gibs or boxes *O O C*, grooves in which they are made to fit.

This triple arrangement of the guiding or bearing-surfaces secures the most perfect steadiness to the sliding head, as it is raised and lowered by a lever, *E*, suitably formed at its end, and acting through a slot, centrally, as it were, within the head, and between a duplicate, or upper and lower triple arrangement of *V*-bearings, and gibs or boxes, as described.

But a yet more prominent advantage of such triple arrangement of the guiding or bearing-surfaces to the sliding head, as compared with a quadruple arrangement thereof, (that is, one to either side, and one at back and front,) is, that while under the quadruple arrangement, it is necessary, to meet the exigencies of wear, not only to make three of the gibs or boxes adjustable up against the sliding head, but two out of the three also adjustable in a lateral direction, to accommodate or provide for the movement of the third adjustable box, it is only requisite, under the triple arrangement here described, to make the one gib or box of either set adjustable, and that merely in one direction, to meet the exigencies of wear in every direction, so that there may be only one loose or sliding gib or box, and the other two be of a fixed or stationary character. This greatly simplifies construction, as well as contributes to or increases the steady working of the press.

What is here claimed, and desired to be secured by Letters Patent, is—

1. The combination and arrangement, substantially as shown and described, of the three *V*-bearings *S S S'*, to the sliding head B, and the correspondingly-arranged gibs or boxes *O O C*, the one of which is made adjustable, substantially as specified.

2. The sliding head B, with its three *V*-bearings *S S S'*, arranged as described, the solid frame A, or box-part thereto, the stationary gibs or boxes *O O*, and the adjustable gib or box *C*, all constructed and arranged, with the lever, essentially as shown and described.

WM. BURKE.

Witnesses:

HENRY T. BROWN,
HUGH J. QUIGLEY.