No. 685,622. Patented Oct. 29, 1901.

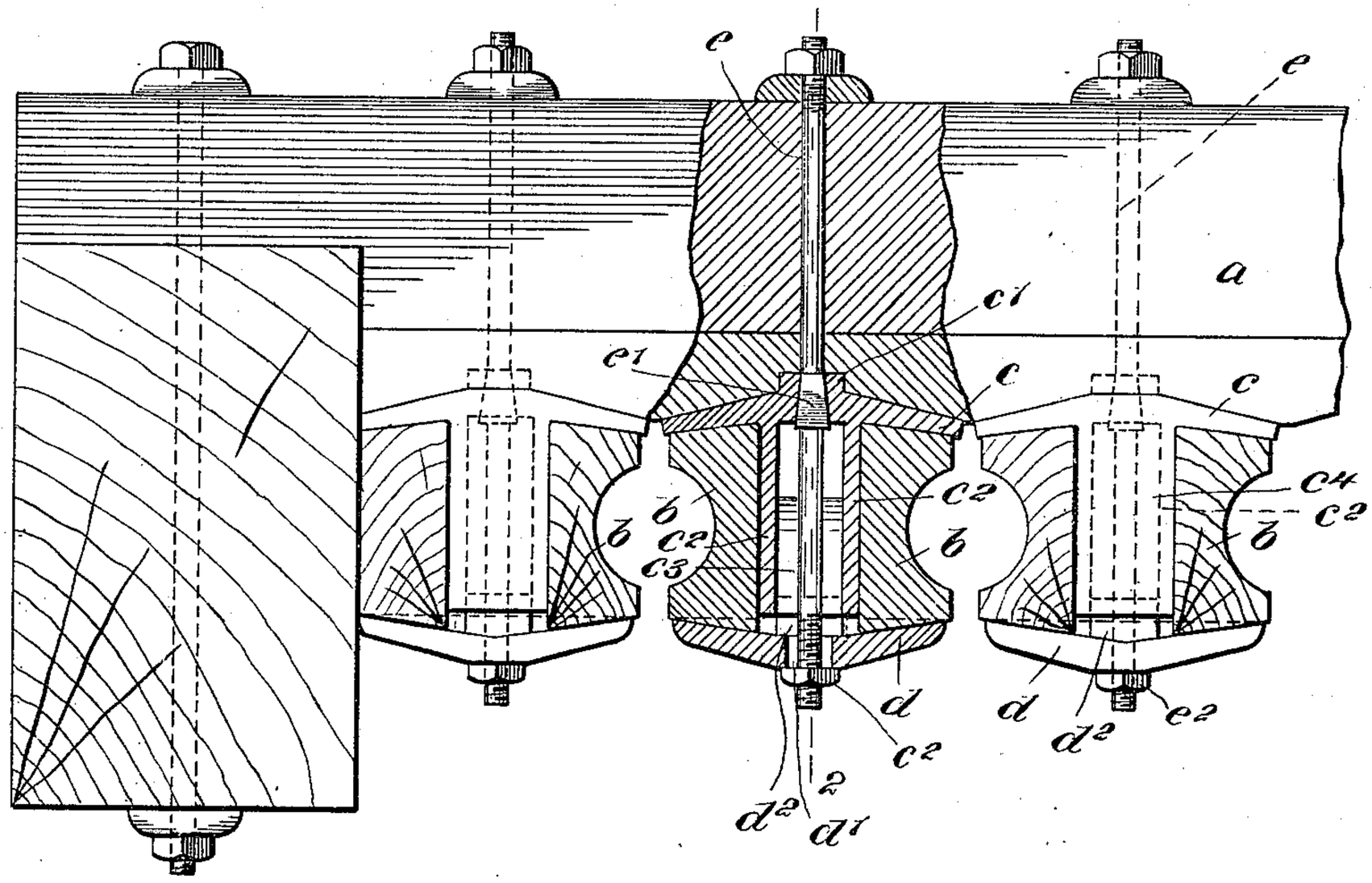
E. MAJOR.

GUIDE FOR STAMP MILLS.

(Application filed Jan. 12, 1901.)

(No Model.)

Fig. 1



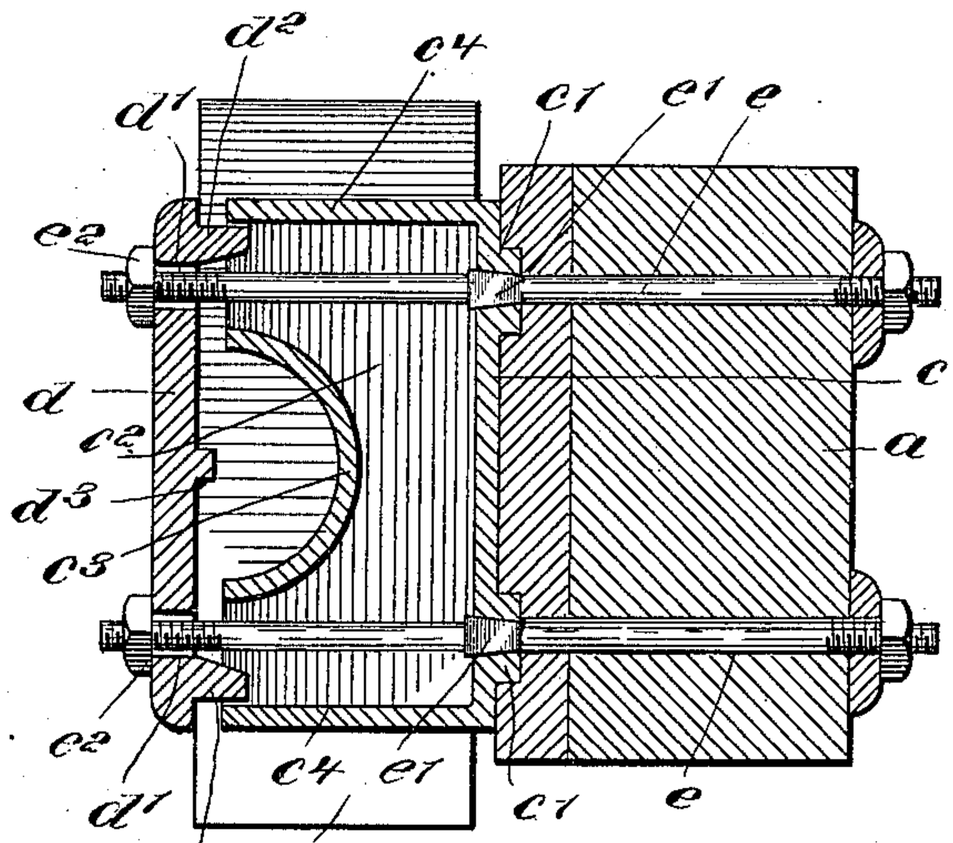


Fig. 2

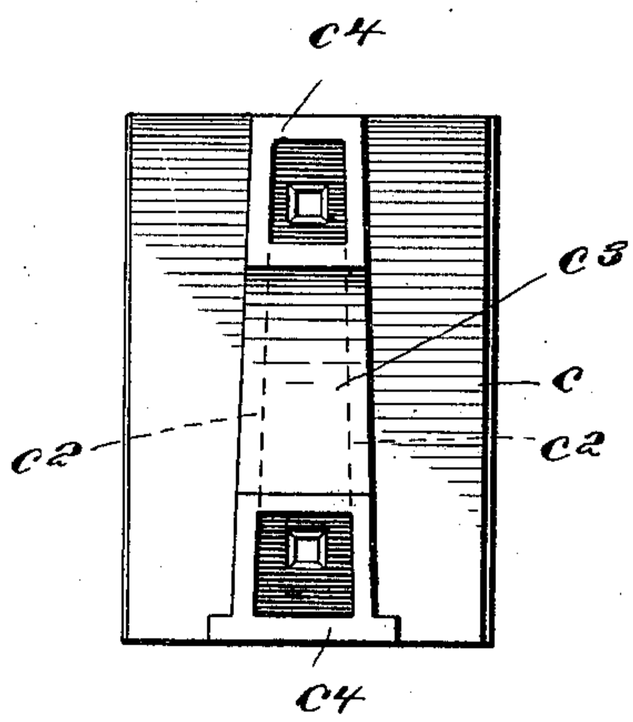


Fig. 3

WITNESSES:

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EDMUND MAJOR, OF DENVER, COLORADO.

GUIDE FOR STAMP-MILLS.

SPECIFICATION forming part of Letters Patent No. 685,622, dated October 29, 1901.

Application filed January 12, 1901. Serial No. 43,000. (No model.)

To all whom it may concern:

Be it known that I, EDMUND MAJOR, a citizen of the United States, and a resident of Denver, in the county of Arapahoe and State of Colorado, have invented a new and Improved Guide for Stamp-Mills, of which the following is a full, clear, and exact description.

This invention relates to a guide for the stems of stamps in stamp-mills; and it consists in certain hereinafter-described improvements over the structures previously patented by me, as follows: Patent No. 469,157, dated February 16, 1892; No. 490,973, dated January 31, 1893, and No. 499,130, dated June 6, 1893.

This specification is a specific description of one form of the invention, while the claims are definitions of the actual scope thereof.

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

Figure 1 is a plan view of the invention with parts in section. Fig. 2 is a section on the line 2 2 of Fig. 1, and Fig. 3 is a front elevation of the back clamping-plate.

a represents a girth-beam, which may be formed in two parts, as shown, or in one part, as desired. *b* represents the blocks which form the guides for the stamp-stems. These guides are held on the girth-beam *a* in pairs, as shown, by the clamping-plates *c* and *d*, the plates *c* being the rear or back plates and the plates *d* being the front plates. Passing through the girth-beam *a* and the plates *c* and *d* are bolts or tie-rods *e*, which hold the several parts together, as shown.

The back plates *c* are dished rearward, as shown in Fig. 1, and the girth-beam is intended to receive the plates snugly. These plates *c* are formed with rearwardly-projected bosses *c'*, surrounding tapered square or pyramidal openings in the plate, which openings are two in number and which receive the tapered or swaged enlargements *e'* of the bolts *e*. These enlargements *e'* bind in the openings in the back plates *c*, and the tie-rods or bolts pass through the girth-beam and are secured at the rear side thereof by nuts or other analogous devices, as illustrated. Two flanges c^2 are formed on the back plates *c*, these flanges projecting forwardly and being connected at their front edges by a semicircular web c^3. The tie-rods or bolts *e* pass between the flanges c^2 and project forwardly beyond these flanges, the tie-rods being arranged on opposite sides of the web c^3. The flanges c^2 are connected at their top and bottom edges by webs or walls c^4, and the bottom wall c^4 is extended beyond the respective flanges c^2 to form ribs adapted to engage with the guide-blocks *b* and assist in holding them in place. The flanges c^2 stand at an angle to each other, as shown in Fig. 3, and when the back plates *c* are arranged side by side in pairs a tapered space is formed, in which the guide-blocks *b* are fitted and held.

The front plates *d* are dished forwardly, as illustrated in Fig. 1, and lie against the front walls of the guide-blocks *b*. These plates *d* are formed with openings *d'* therein, through which the front ends of the tie-rods *e* pass. Nuts e^2 are mounted on the front ends of the tie-rods and engage the plate *d* to press the same firmly against the guide-blocks *b*. The front plate *d* is provided with rearwardly-extending lugs d^2, which enter the spaces between the flanges c^2 to fit together the plates *c* and *d*, and the plate *c* is further provided with a rib d^3, located at approximately the middle thereof and projecting rearwardly to engage the guide-blocks and steady them in their proper position. The openings *d'* are sufficiently large to permit the swaged portions *e'* of the tie-rods or bolts *e* to pass through them. This enables one of the tie-rods to be withdrawn forwardly without necessitating the removal of the front plate *d*. The parts being thus constructed, when adjusted as shown in Figs. 1 and 2 the guide-blocks *b* are held securely in place, and should one of the bolts break the other will hold the parts in place until the broken bolt may be repaired. It will be observed that the swaged portions *e'* on the bolts cause the back plates *c* to be held in position independently of the front plates *d*, and owing to the peculiar construction of these parts all of them are held with the utmost security. The dished shapes of the plates *c* and *d* and the blocks *b*, correspondingly formed, together with the various ribs projecting from the parts which engage the guide-blocks, cause these blocks to be held properly in position.

To adjust or replace the guide-blocks *b*, the front clamping-plate should be loosened, and

the block may then be moved upward to displace it or downward to place it. To adjust the blocks to take up the wear caused by the stamp-stem, the front clamping-plate should be loosened and a bushing of the required thickness placed back of the guide-block to be adjusted.

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

1. A guide for stamp-mills, comprising front and back clamping-plates, and a tie-rod or bolt having an enlarged or swaged portion intermediate of its ends to engage one of the clamping-plates and hold it in position independent of the other plate, and one end of the tie-rod serving to hold the other clamping-plate.

2. In a guide for stamp-mills, the combination with the girth-beam, of a bolt or tie-rod secured thereto, and a front and a back clamping-plate, the back clamping-plate engaging the girth-beam, the tie-rod having an enlarged or swaged portion intermediate its ends and engaging the back clamping-plate and having its outer end arranged to be engaged with the front clamping-plate.

3. In a guide for stamp-mills, the combination with a girth-beam, of front and back clamping-plates, the back clamping-plate being dished rearwardly and engaging the girth-beam and the front clamping-plate being dished forwardly, and a bolt or tie-rod extending through the clamping-plates and girth-beam for holding the clamping-plates in position, the said tie-rod being arranged to independently engage both plates.

4. In a guide for stamp-mills, the combination with the girth-beam, of a tie-rod, one end of which is fastened thereto, a back clamping-plate through which the tie-rod extends, such rod having connection with the back clamping-plate to hold the same in position on the girth-beam, and a front clamping-plate to which the tie-rod extends and is connected, to hold the same independently of the back clamping-plate.

5. A guide for stamp-mills, comprising two clamping-plates, and a bolt or tie-rod extending through them, the bolt or tie-rod having an integral enlargement intermediate of its ends engaging one of the plates and the other plate having an opening therein receiving the tie-rod, such opening being sufficient to permit the passage of such enlargement through the same.

6. A guide for stamp-mills, comprising two clamping-plates, one of which is provided with flanges standing alongside of each other, and the other of which is provided near the top and bottom with lugs adapted to enter between the flanges, and fastening-bolts extending through the two plates near the top and bottom thereof for holding the clamping-plates together.

7. A guide for stamp-mills, comprising two clamping-plates one of which is provided with flanges standing alongside each other and connected at the top and bottom edges by webs or walls, the bottom web extending beyond the flanges and forming ribs for engaging the guide-blocks, and a fastening device for holding the clamping-plates together.

8. A guide for stamp-mills, comprising a front and a back clamping-plate for the guide-blocks, the back plate being provided with forwardly-extending flanges connected at their front edges by a semicircular web, and also connected by webs at the top and bottom, and fastening-bolts extending through the two plates and passing between the flanges above and below the said front web.

9. A guide for stamp-mills, comprising two clamping-plates, one of which is provided with flanges extending alongside each other and connected by a top and bottom wall, and a semicircular web connecting the ends of the flanges, the other clamping-plate being provided near the top and bottom with lugs adapted to enter between the flanges, and having a rib arranged between the said lugs, and fastening-bolts extending through the two plates and passing between the flanges above and below the semicircular web respectively.

10. In a guide device for stamp-mills, the combination with the girth-beam, of a back clamping-plate engaging the girth-beam, a front clamping-plate, a bolt extending through the clamping-plates and girth-beam and provided intermediate its ends with a tapered enlargement adapted to engage a corresponding opening in the back clamping-plate, and nuts engaging the ends of the bolt to hold it in position, as set forth.

11. In a guide device for stamp-mills, the combination with the girth-beam, of a back clamping-plate dished rearwardly and having rearwardly-projecting bosses, the girth-beam being constructed to correspond with the rear face of the plate, the said back clamping-plate being provided with two forwardly-extending flanges connected by a web at their front edges, a front clamping-plate dished forwardly and provided near the top and bottom with rearwardly-extending lugs adapted to enter the space between the flanges of the back plate, guide-blocks held between the clamping-plates and engaging the said flanges, and bolts extending through the clamping-plates and the girth-beam, the said bolts passing between the flanges of the rear plate and having tapered enlargements intermediate of their ends adapted to engage tapered openings extending through the bosses of the back plate, the ends of the bolts being secured to the girth-beam and the front clamping-plate, as set forth.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

EDMUND MAJOR.

Witnesses:
F. W. JOHNSON,
JOHN H. O'BRIEN.