No. 825,462. PATENTED JULY 10, 1906.

J. H. HUBBELL.

OIL PRESS BOX.

APPLICATION FILED MAR. 2, 1906.

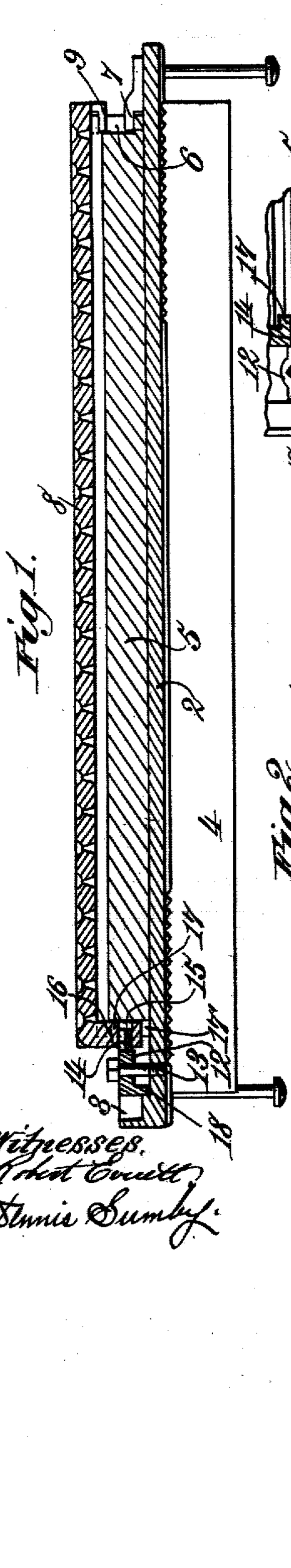

Fig. 1.

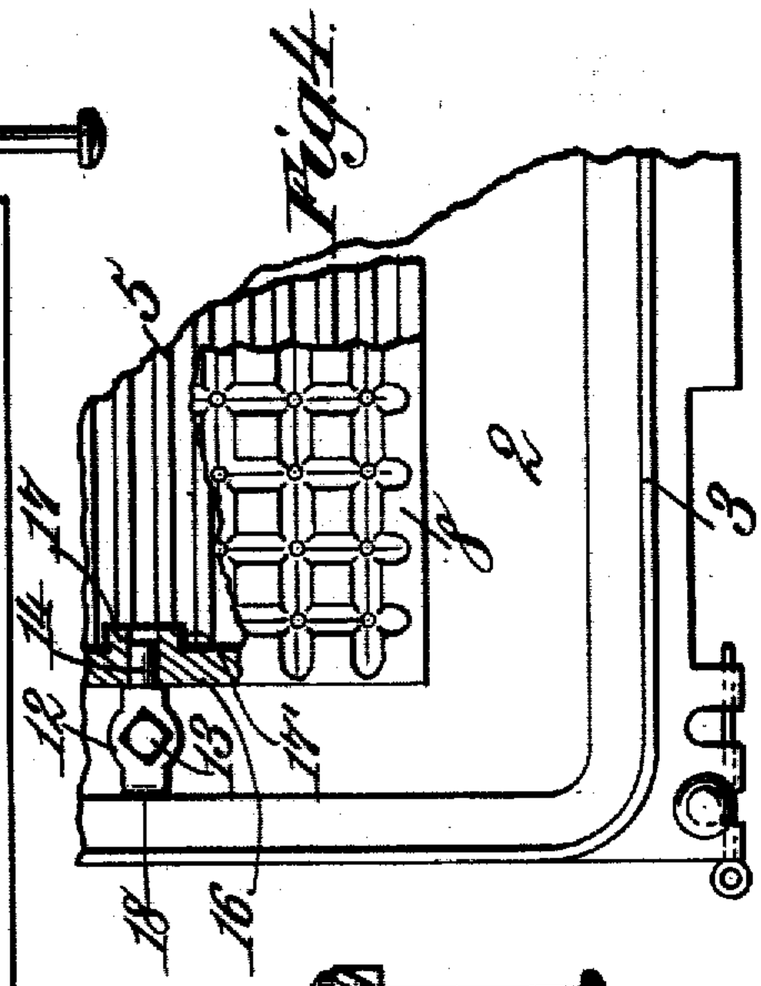

Fig. 4.

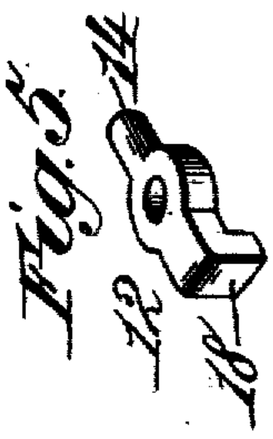

Fig. 5.

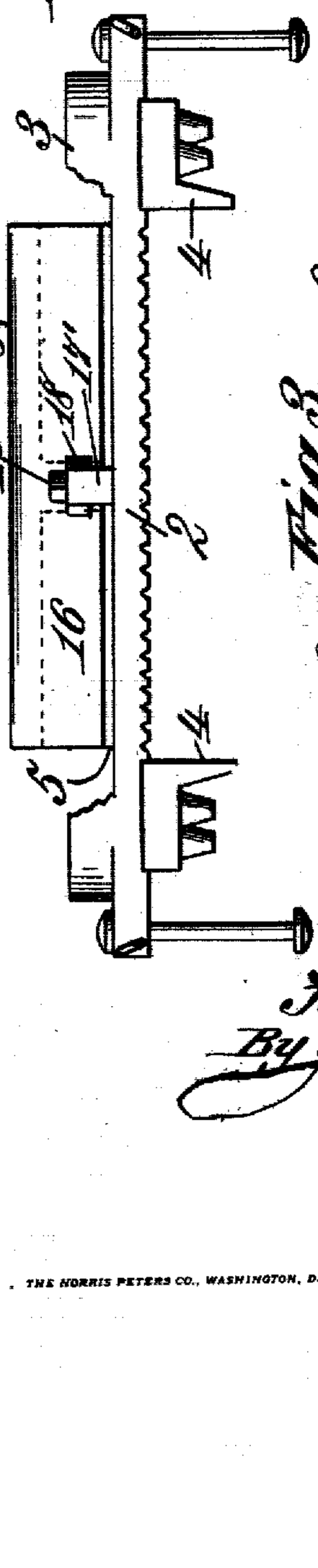

Fig. 2.

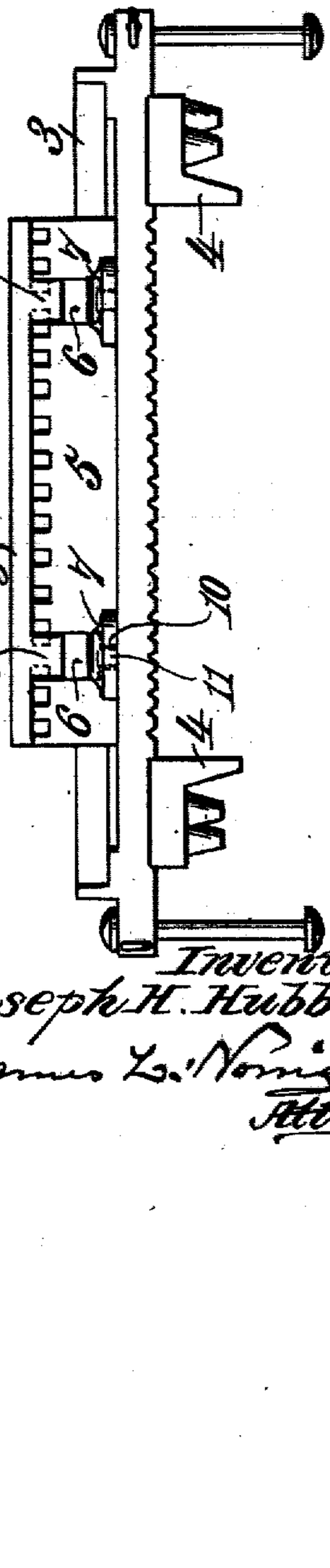

Fig. 3.

Witnesses.
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UNITED STATES PATENT OFFICE.

JOSEPH H. HUBBELL, OF DAYTON, OHIO, ASSIGNOR TO BUCKEYE IRON & BRASS WORKS, OF DAYTON, OHIO, A CORPORATION OF OHIO.

OIL-PRESS BOX.

No. 825,462. Specification of Letters Patent. Patented July 10, 1906

Application filed March 2, 1906. Serial No. 303,899.

To all whom it may concern:

Be it known that I, JOSEPH H. HUBBELL, a citizen of the United States, residing at Dayton, in the county of Montgomery and State of Ohio, have invented new and useful Improvements in Oil-Press Boxes, of which the following is a specification.

This invention relates to oil-press boxes.

One of the primary objects of the invention is the provision of a box of the character set forth having means for the removal of the ram-block and mat superimposed thereupon, by virtue of which the mat can be separated from the ram-block and the ram-block from its supporting-plate for the purpose of cleaning any one of these parts, for the purpose of repair, or for any other reason.

The construction is such that when the parts noted are assembled for work they are maintained solidly in such relation. The mat may be taken from the ram-block, and the ram-block may be taken from its supporting-plate without removing the latter from the press-frame, in view of which fact I am enabled to save considerable time and labor which are usually involved in cleaning the three parts mentioned.

In the drawings accompanying and forming a part of this specification I show a simple form of embodiment of the invention, which, to enable those skilled in the art to practice said invention, I will fully set forth in the following description, while the novelty of the invention will be included in the claims succeeding said description.

In the drawings, Figure 1 is a longitudinal sectional view of a press-box including my invention. Fig. 2 is a front elevation of the box with a portion of the marginal flange thereof removed. Fig. 3 is a rear elevation of the same. Fig. 4 is a top plan view of one corner of the box. Fig. 5 is a detail view in perspective of the clamping member.

Like characters refer to like parts throughout the several figures.

The press-box shown in the drawings includes in its make-up a supporting-plate, as 2. The plate 2 has on its opposite sides and at the front thereof flanges, each designated by 3, and which subserve their customary function. In addition to these flanges 3 the plate is provided with the customary pendent angle-irons 4, which also serve their usual purpose.

On the upper side of the supporting-plate 2 is mounted a ram-block, or, as it is sometimes known, "grate" 5, longitudinally grooved on its upper surface. The grate has in the rear edge thereof slots, as 6, shown as being two in number, although this is not essential. In the slots are fitted lugs, as 7, two, of course, of said lugs being illustrated, the lugs when the ram-block is in operative position serving to bear against the bottoms of the respective slots 6 to interlock the rear end of the said ram-block with the supporting or base plate 2. The lugs are not shown as being an integral part of the plate 2, although, if required, they may be. In the present case fastening devices unite the shanks or bodies of the lugs with the supporting-plate, and these fastening devices may consist of screws, bolts, or rivets, as may be desired.

The mat which fits upon the ram-block 5 consists of a perforated and longitudinally and transversely corrugated plate 8, and to this extent it follows the construction of certain mats at present in use. The rear end of the mat has an interlocking connection with the ram-block, for which purpose the mat is shown as provided with hook-shaped lugs 9 to enter the slots 6 in the rear of the ram-block. The slots are shown as intersected by vertical recesses 10, which receive fins 11 on the respective lugs 7, although this is not essential. The fins 11 may have a snug fit in the recesses 10, so as to more firmly maintain the mat or perforated plate 8 against lateral motion. At the front end of the box the mat 8 and ram-block 5 are held in clamping relation with the supporting-plate, and for this purpose I have shown a single clamping member, such as 12, through the hub or body of which is feeely passed a screw, as 13, tapped into the plate 2. From the inner side of the clamping member 12 there extends a projection, as 14, which passes through a hole or perforation 15 in the pendent apron 16 at the front end of the mat 8. On the inner side of the apron 16 is a lug 17, fitting an aperture 17′ in the front the of ram-block when the parts are assembled to prevent the mat from moving sidewise. The hole 15 extends through this lug. From the

outer side of the clamping member there is pendent the leg 18, which bears solidly against the upper side of the supporting-plate 2 and also abuts against the front flange 3.

When the parts are in working relation in a press, the lugs 7 on the plate 2 will be disposed in the slots 6 of the ram-block 5, while the lugs 9 on the mat 8 will be also in said slots, the apron or flange 16 at this time overlying the front face of the ram-block. The projection 14 will be in the hole 15, so that when the screw 13 is tightened up said projection 14 will bear down solidly upon the apron 16, drawing the same, and hence the mat and ram-block, in solid relation with the plate. In view of the way the ram-block and mat are held in operative position there is no possibility of their being accidentally displaced or moving in any direction. The head of the screw 13 is so shaped as to receive a wrench, so that the screw can be easily turned.

To separate the mat and ram-block from the supporting-plate, the screw 13 is taken from place to permit the removal of the clamping member 12. The mat or plate 8 is then raised sufficiently to carry the apron or flange 16 clear of the ram-block or grate 5, after which the mat can be easily separated from the ram-block by pushing the same rearward. To remove the ram-block or grate, it is moved forward sufficient to free it from the lugs 7.

The removal of the mat and the ram-block is one that can be quickly and easily accomplished for any purpose without removing the box from the frame of the press. The ram-block and mat are detachably associated with their supporting-plate to secure the result in question; but when in operative relation they are held solidly in position by simple and effective means, involving in the present case a clamping device which is readily accessible.

What I claim is—

1. An oil-press box comprising a supporting-plate, a ram-block on the supporting-plate, a mat on the ram-block, the ram-block and mat being detachably associated with the supporting-plate, and means for holding the ram-block and mat in assembled relation with the supporting-plate.

2. An oil-press box involving a supporting-plate, a ram-block interlocked at one end with the supporting-plate, a mat on the ram-block, interlocked at the same end with the ram-block, and clamping means operative against the opposite end of the mat and ram-block to hold them in solid relation with the supporting-plate.

3. In an oil-press box, a supporting-plate, a ram-block having an interlocking connection at one end with the supporting-plate, a mat on the ram-block, having an interlocking connection at the same end with the ram-block, and clamping means directly engaging the mat to clamp the mat and ram-block to the supporting-plate.

4. In an oil-press box, a supporting-plate provided with lugs, a ram-block in which the lugs are adapted to be fitted, a mat on the ram-block, having lugs to enter the ram-block, the several lugs being located at one end of the mat and ram-block, and means operative against the opposite end of the mat and ram-block to clamp the same to the supporting-plate.

5. In an oil-press box, a supporting-plate having lugs, a ram-block on the supporting-plate to receive the lugs, a mat having lugs to enter the ram-block, the several lugs being located at one end of the ram-block and plate, the opposite end of the mat being provided with a depending apron having a hole, and a clamping member connected with the supporting-plate and having a projection to enter the hole to clamp the ram-block and mat to the supporting-plate.

6. In an oil-press box, a supporting-plate having lugs, a ram-block on the supporting-plate arranged to receive said lugs at one end thereof, a mat on the ram-block having lugs at the same end to enter the ram-block and provided with a depending apron at the other end having a hole, a clamping member bearing against the supporting-plate and provided with a projection to enter the hole and a headed screw to extend through the clamping member and tapped into the supporting-plate.

7. In an oil-press box, a supporting-plate having lugs, a ram-block on the supporting-plate arranged to receive said lugs at one end thereof, a mat on the ram-block having lugs at the same end to enter the ram-block and provided with a depending apron at the other end having on its inner face a lug and also having a hole, the ram-block being provided with an aperture to receive said last-mentioned lug, a clamping member bearing against the supporting-plate and provided with a projection to enter the hole and a headed screw to extend through the clamping member and tapped into the supporting-plate.

In testimony whereof I have hereunto set my hand in presence of two subscribing witnesses.

JOSEPH H. HUBBELL.

Witnesses:
WILLIAM C. IMBODEN,
FREDERICK F. RIKE.