J. J. OLBRANTZ & J. EMANUEL.

SOLE PLATE.

APPLICATION FILED MAR. 5, 1914.

Patented Oct. 20, 1914.

1,114,022.

Fig. 1.

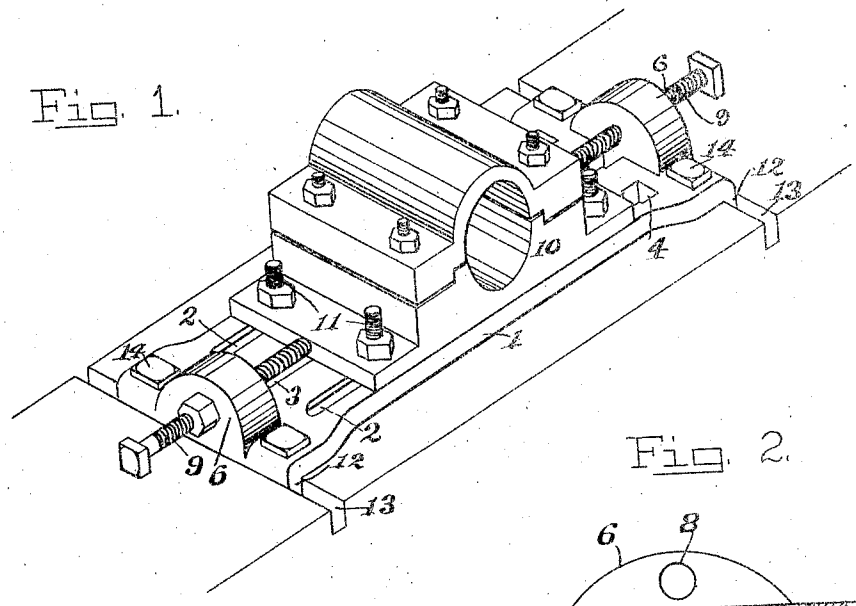


Fig. 2.

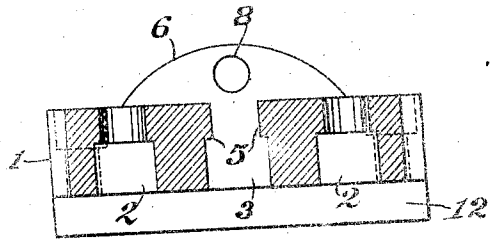
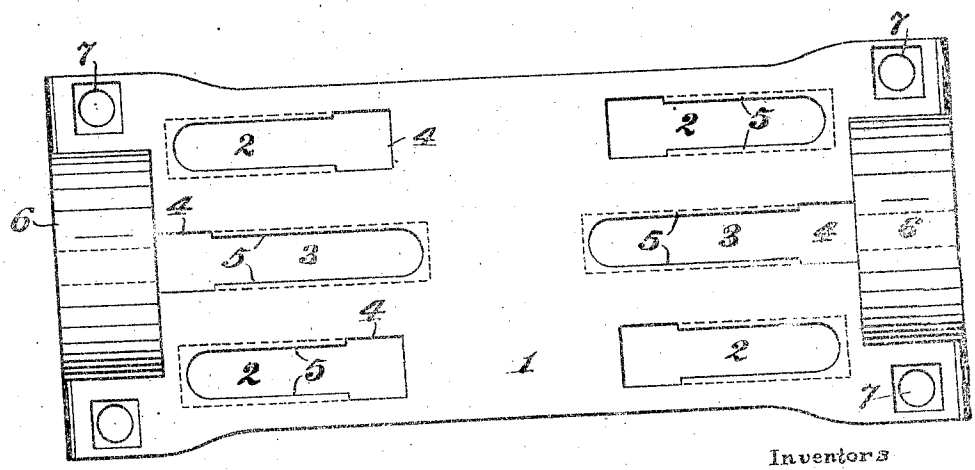


Fig. 3.



Witnesses

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UNITED STATES PATENT OFFICE.

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SOLE-PLATE.

1,114,022. Specification of Letters Patent. Patented Oct. 20, 1914.

Application filed March 5, 1914. Serial No. 823,268.

To all whom it may concern:

Be it known that we, JOHN J. OLBRANTZ and JOSEPH EMANUEL, citizens of the United States, and residents of the town of Larson, Whatcom county, Washington, have invented certain new and useful Improvements in Sole-Plates, of which the following is a specification.

Our invention relates to sole plates, or plates which are used as foundations or supports for journal boxes, and comprises the novel parts and combinations of parts which will be hereinafter described and particularly pointed out in the claims.

The object of our invention is to provide a sole plate of such design that it may be used in connection with boxes of different sizes without any modification of the sole plate, and also a sole plate which may be more securely held down upon the supporting timber.

Other objects of our invention will be hereinafter pointed out and the scope of our invention will be defined in the claims.

In the accompanying drawings we have shown our invention in the form which is now preferred by us.

Figure 1 is a perspective showing a journal block in place upon our special type of sole plate. Fig. 2 is a transverse sectional elevation of the sole plate. Fig. 3 is a plan view of the sole plate.

In mill and factory work it is common to provide a sole plate upon which to mount journal boxes, but these are lacking in certain features of adaptation to boxes of different sizes, which it is desirable that they should possess. It is with the idea of providing such features that we have produced the sole plate shown herein.

Journal boxes as kept in stock by supply houses have certain points standardized, as, for instance, the spacing of the bolt holes transversely of the block, so that a number of blocks, of sizes nearly related, will have the same transverse spacing of bolt holes. With this fact in view we have designed the sole plate herein shown.

The body of the sole plate is in the form of a flat plate 1, and is provided with a plurality of pairs of slots extending lengthwise the plate and designed for receiving the bolts by which the journal blocks are held down. As shown, these consist of a central pair 3, 3, located on the center line of the sole plate, extending from near each end toward the center, but having their inner ends separated a distance determined by the separation of the bolt holes on the smallest sized blocks which it is expected will be mounted thereon.

On each side of the center line and equally spaced therefrom, are other pairs of slots 2, 2, extending over approximately the same longitudinal extent of the plate. These slots, 2 and 3, are undercut along their side edges, thus forming flanges 5 which are engaged by the bolt heads, these flanges being at sufficient distance above the bottom surface of the sole plate to accommodate the thickness of the bolt heads and permit their being freely moved lengthwise the slots. At one end of each slot, it is enlarged by the removal of the side flanges, forming openings 4 which permit passage of the head of the block-securing bolt, thus making it possible to insert and remove these bolts as desired, after the sole plate is in place. This is particularly desirable in changing blocks, as for instance, using a block having two securing bolts at an end where a block had been used which had only one bolt at each end.

The central slots 3 are shown as having the enlargement which permits insertion of the bolt, at its outer end, while the other slots 2, 2, have this enlargement at their inner end. One reason for this is that, by this arrangement, the net cross section of the bars between the slots is slightly greater than would be if the openings 4 were all at the same end. Another reason is that the central slots would be most used for the smaller sizes of blocks, in which the distance between the bolt holes of opposite ends would be smaller than for the larger blocks, which larger blocks would be more apt to have two bolts at each end. In consequence the bolt-entering enlargements are made at the inner ends of those slots which would be most apt to be used for the larger blocks and at the outer ends of the slots which would be most apt to be used for the smaller blocks.

At each corner of the sole plate is a hole 7, for the bolts by which the sole plate is held down upon its timber. At each end is also an up-standing lug 6, which has a threaded hole for the reception of an adjusting bolt 9, by which the position of the block may be accurately determined. This bolt is, however, not relied upon to hold the strain which may be put upon the block, this being resisted by the holding down bolts 11.

To more securely hold the sole plate in proper position on the timber, we provide it with one or more transverse, downwardly projecting flanges 12, which enter grooves 13 formed in the supporting timber. These grooves may be formed by making two transverse cuts with a saw and cutting out the wood between. In this way the sole plate is thoroughly secured to the timber, so that it will not be possible to pull it loose by any strain to which it is likely to be subjected.

The spacing of the slots 2, 2, of opposite sides of the sole plate, is such as to fit the bolt holes of those blocks as use two bolts at each end, while a block using three bolts at each end will use all slots, and those using one bolt at each end will use the central slots only.

What we claim and desire to patent is:

1. A sole plate provided with means for anchoring it in fixed position upon a timber and having a plurality of series of complemental longitudinal slots toward each end, said slots comprising a centrally placed pair constituting one series and two pairs lying at opposite sides of the center and constituting another series, said slots having sides undercut to hold bolt heads and being enlarged at one end to pass the bolt heads, said enlargement being at the outer ends of the central slots and at the inner ends of the outer slots.

2. A sole plate provided with means for anchoring it in fixed position upon a timber and having a plurality of series of complemental longitudinal slots toward each end, said slots comprising a centrally placed pair constituting one series and two pairs lying at opposite sides of the center and constituting another series, said slots having sides undercut to hold bolt heads and being enlarged at one end to pass the bolt heads, said enlargement being at the outer ends of the central slots and at the inner ends of the outer slots, and an upstanding lug at each end threaded to receive adjusting bolts.

3. A sole plate having transverse ribs adapted to be let into a supporting timber and holes for securing bolts, and also having a plurality of series of complemental longitudinal slots toward each end, said slots comprising a centrally placed pair constituting one series and two pairs lying at opposite sides of the center and constituting another series, said slots having sides undercut to hold bolt heads and being enlarged at one end to pass the bolt heads, said enlargement being at the outer ends of the central slots and at the inner ends of the outer slots.

In testimony whereof we have hereunto affixed our signatures this 27th day of February, 1914.

JOHN J. OLBRANTZ.
JOSEPH EMANUEL.

Witnesses:
FRANK FLISS,
ALBERT E. PROCTOR.