

(No Model.)

T. REGAN.
PITMAN.

No. 575,008.

Patented Jan. 12, 1897.

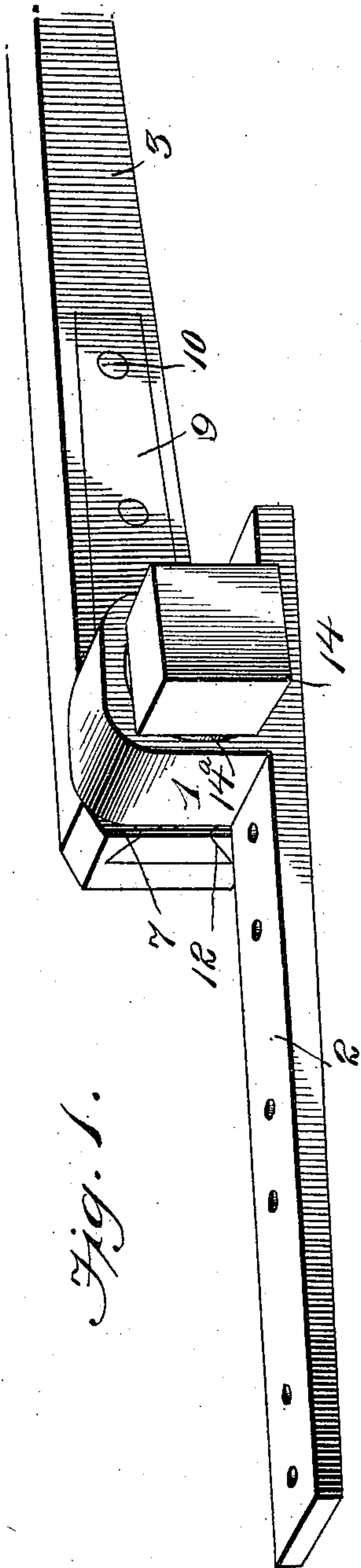


Fig. 3.

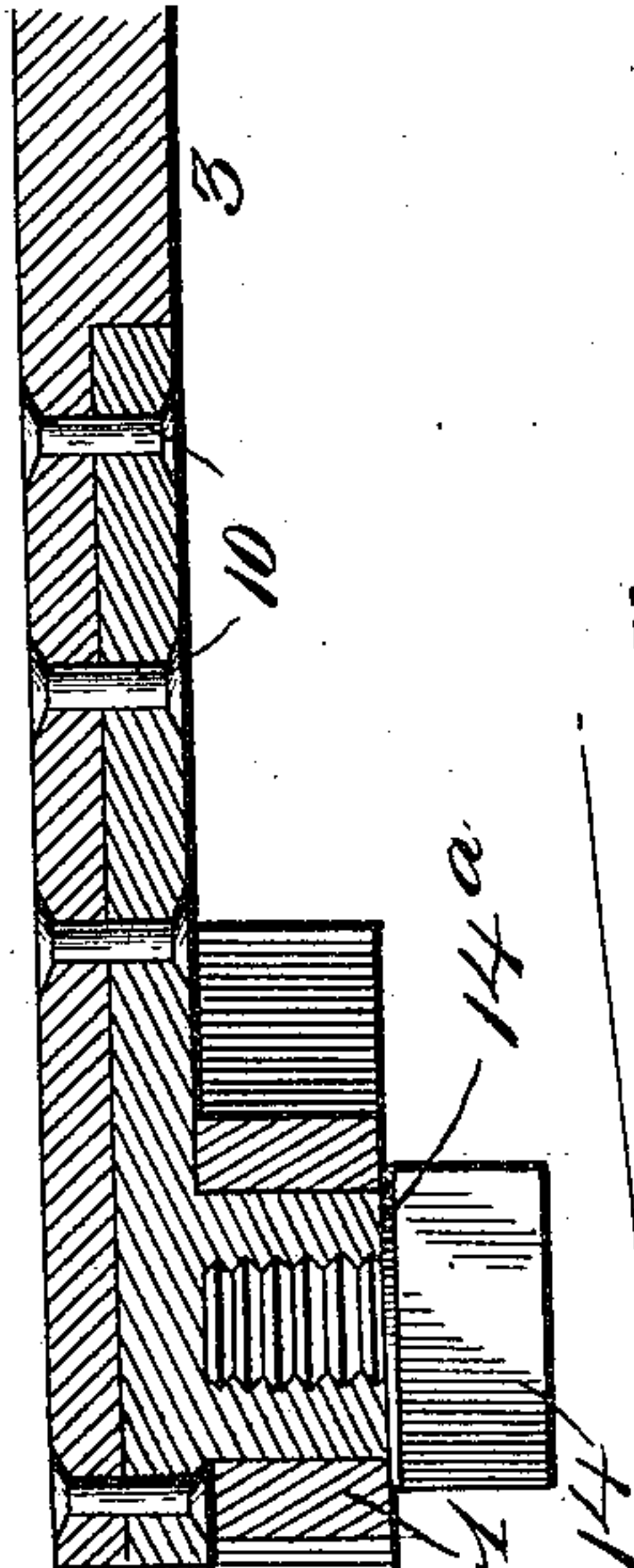


Fig. 2.

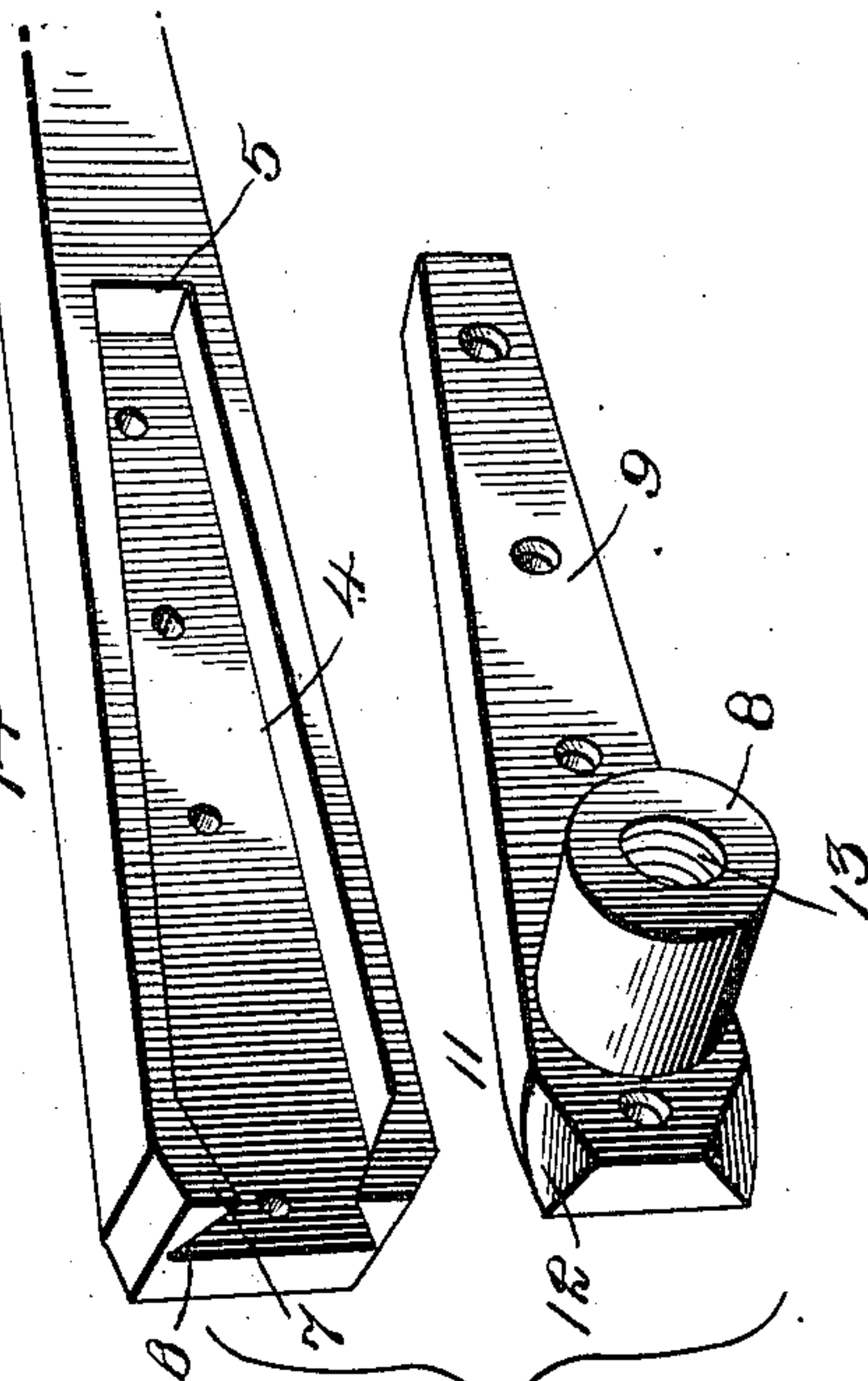
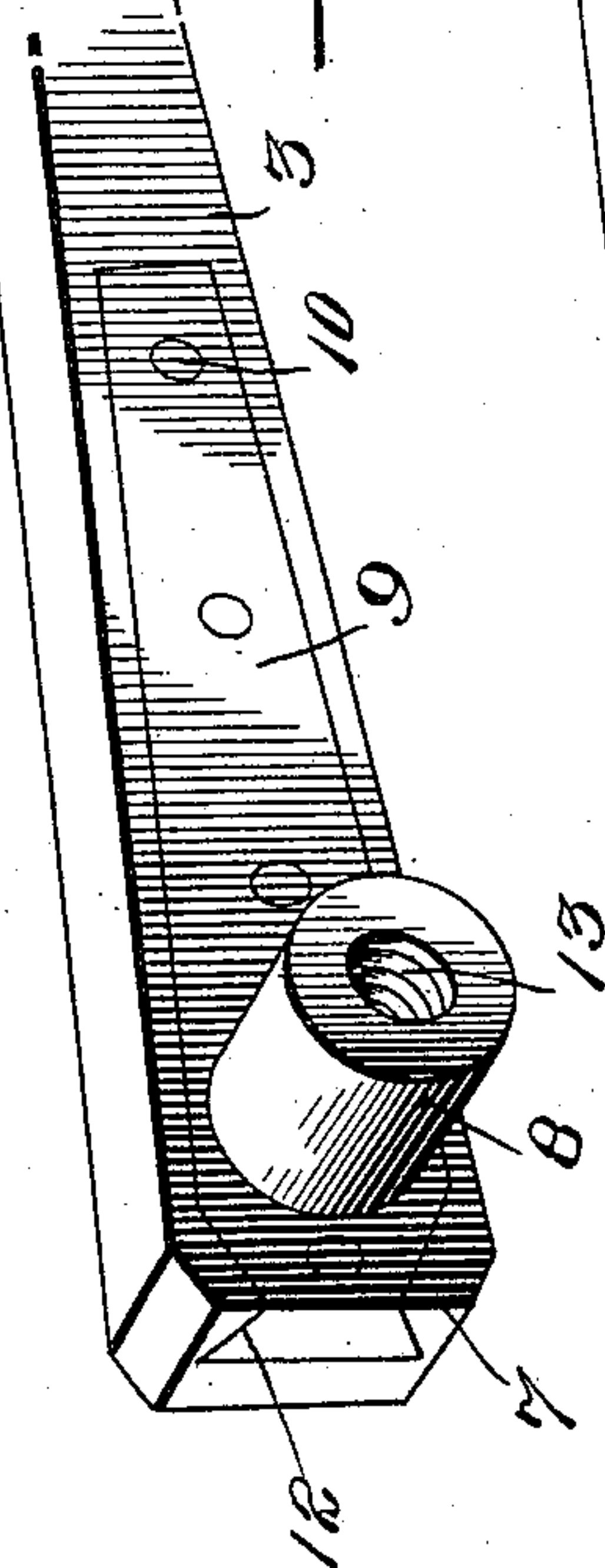


Fig. 4.

Witnesses

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PITMAN.

SPECIFICATION forming part of Letters Patent No. 575,008, dated January 12, 1897.

Application filed December 26, 1895. Serial No. 573,353. (No model.)

To all whom it may concern:

Be it known that I, THOMAS REGAN, a citizen of the United States, residing at Crawford, in the county of Dawes and State of Nebraska, have invented a new and useful Pitman, of which the following is a specification.

My invention relates to pitmen, and particularly to that class adapted for use in connection with the sickle-bars of mowing-machines and similar agricultural implements, the object in view being to provide improved means whereby the journal or connection between the head of a sickle-bar and the pitman through which it receives motion may be replaced when worn, to avoid lost motion, without replacing the pitman, and at a cost less than would be incurred by replacing the pitman.

Further objects and advantages of this invention will appear in the following description, and the novel features thereof will be particularly pointed out in the appended claims.

In the drawings, Figure 1 is a perspective view of a pitman embodying my invention applied in the operative position to a sickle-bar head. Fig. 2 is a similar view of the pitman detached. Fig. 3 is a longitudinal section of the pitman. Fig. 4 is a detail view of the body portion of the pitman and the journal separated.

Similar numerals of reference indicate corresponding parts in all the figures of the drawings.

1 designates the bearing-eye of a sickle-bar having a base-plate 2, by which it is secured to the sickle-bar, said eye being of the ordinary or any preferred construction, and 3 represents a pitman embodying the essential features of my invention, by which motion is communicated from any suitable operating mechanism (not shown) to the sickle-bar.

The pitman is provided in one side with a longitudinal recess or seat 4, which is tapered or reduced uniformly in width from its outer toward its inner end and terminates at the latter end in an abrupt shoulder 5. The outer end of this recess or seat is tapered in the opposite direction, as shown at 6, and is transversely dovetailed to form the overhanging ears 7. (Shown clearly in Fig. 4.)

The journal 8, which is constructed to fit

in the eye of the sickle-head and may be of the ordinary or any preferred construction, is formed integral with a securing-plate 9, constructed to fit snugly in the recess or seat 4 with its exposed surface flush with the corresponding side of the pitman, and adapted to form, when in place, a removable section of said pitman. Said securing-plate is tapered in width from its outer toward its inner end to correspond with the inwardly-convergent walls of the recess or seat and terminates at said inner end in an abrupt extremity to bear against the shoulder 5, whereby the securing devices by which said plate is attached to the body portion or main section of the pitman, and which may consist of rivets, screws, or other equivalents, are relieved of strain due to the communication of motion from the pitman to the sickle-head. In the construction illustrated these securing devices consist of rivets, as shown at 10, and they pass through the securing-plate and the body portion of the pitman and are headed in countersinks in the exposed surfaces of said parts. The outer end of this securing-plate is tapered in the opposite direction, as shown at 11, and is transversely dovetailed, as shown at 12, to correspond with the construction of the overhanging ears 7 of the recess or seat, this dovetailed construction being designed to cooperate with the securing device or devices at the extreme outer end of the pitman to prevent the displacement of the contiguous extremity of the securing-plate when a lateral strain is applied to the journal.

It is obvious that when the journal and the bearing-eye become worn the journal may be detached from the pitman, with the securing-plate with which it is provided, and replaced by a new journal having a securing-plate of the same size and construction; but in order to take up wear in the bearing-eye this new journal may be of larger diameter, and therefore in practice I propose to construct the journals of assorted or graduated sizes, and may provide each machine having my improved pitman with a plurality of these journals, whereby when one is worn another having a journal of slightly larger diameter may be arranged in its place to avoid lost motion between the pitman and the sickle-bar.

I have described and shown rivets as the means of fastening the base-plate of the journal to the pitman for the reason that screws of the ordinary construction are liable, by reason of the jarring incident to the operation of a mowing-machine, to become loosened and eventually to drop out; but the use of rivets does not prevent the replacement of a journal by another provided with a securing-plate of the same size and construction, for the reason that the heads of the rivets may be readily cut or knocked off by the operator of the machine. No skilled labor is necessary in order to accomplish the substitution described.

In the construction illustrated the journal is provided with a threaded bore 13 for the reception of a securing-screw 14, introduced through the bearing-eye with its head in contact with a washer-plate 14, as clearly shown in Fig. 3.

To place the detachable journal-carrying plate in its recess in the pitman, the outer enlarged extremity of the former is inserted in the cavity and forced outwardly until the beveled angles thereof fit closely against the undercut overhanging ears 7, the body portion of said plate being arranged as close to the plane of the pitman during its movement as possible. When the beveled angles of the plate are in close contact with the undercut ears, the inner end of the plate is opposite the recess and may be forced transversely thereinto.

From the above description it will be seen that the journal-attaching devices embodying my invention may be employed in connection with an ordinary pitman having a body portion consisting of a simple bar, and, inasmuch as the securing-plate is let into or countersunk in the side of the bar forming the pitman and is flush at its outer surface with that of the pitman, the attachment may be employed in connection with a pitman now in use. The securing devices embodying my invention take up no space beyond the inner surface of the pitman.

Various changes in the form, proportion, and the minor details of construction may be resorted to without departing from the spirit or sacrificing any of the advantages of this invention.

Having described my invention, what I claim is—

1. A pitman having a longitudinal recess or seat tapered in width from an intermediate point toward its extremities and terminating at its inner end in an abrupt shoulder, a journal adapted to fit in a bearing-eye and provided with a securing-plate removably fitted in said recess or seat, said plate being constructed to correspond with and fit snugly in the recess or seat, and means for detachably securing the plate in place, substantially as specified.

2. A pitman provided in one side with a longitudinal tapered recess or seat terminating at its inner end in an abrupt shoulder and provided at its outer end with dovetailed inwardly-projecting or overhanging ears, a journal adapted to be fitted in a bearing-eye, a securing-plate carried by said journal and constructed to fit snugly in said recess or seat, the inner end of the securing-plate being abrupt to bear against said shoulder and the outer end thereof being dovetailed to engage the under surfaces of the overhanging ears at the outer end of the recess or seat, and means for detachably securing said plate against lateral displacement at its inner end, the thrust of the plate in opposite directions being resisted, respectively, by the abrupt shoulder and the overhanging ears respectively at the inner and outer ends of the recess or seat, substantially as specified.

In testimony that I claim the foregoing as my own I have hereto affixed my signature in the presence of two witnesses.

THOMAS REGAN.

Witnesses:

HOWARD L. HOPPER,
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