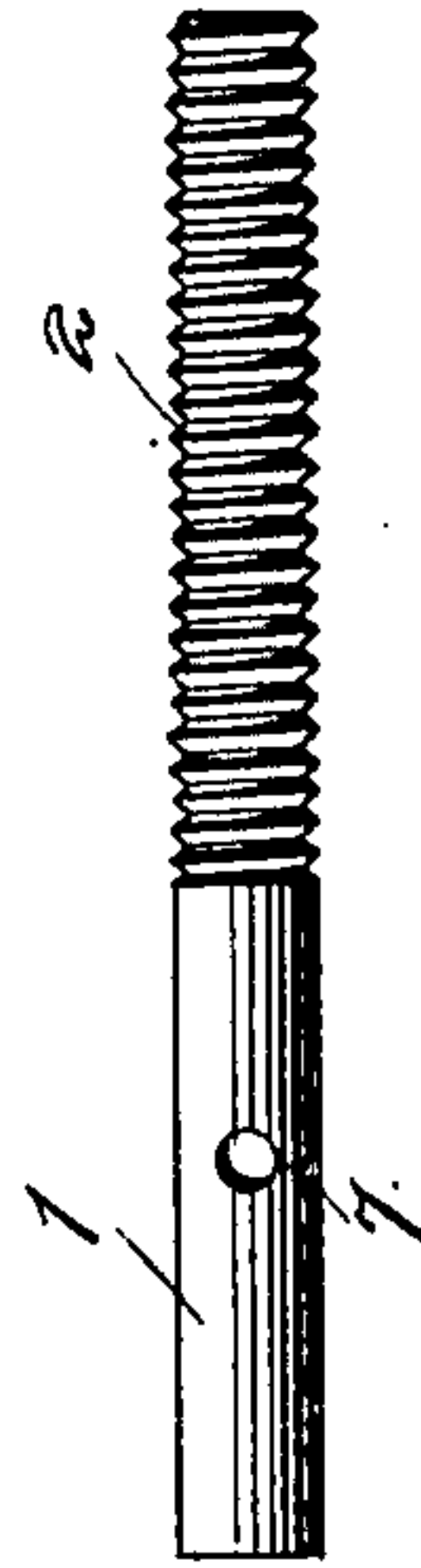
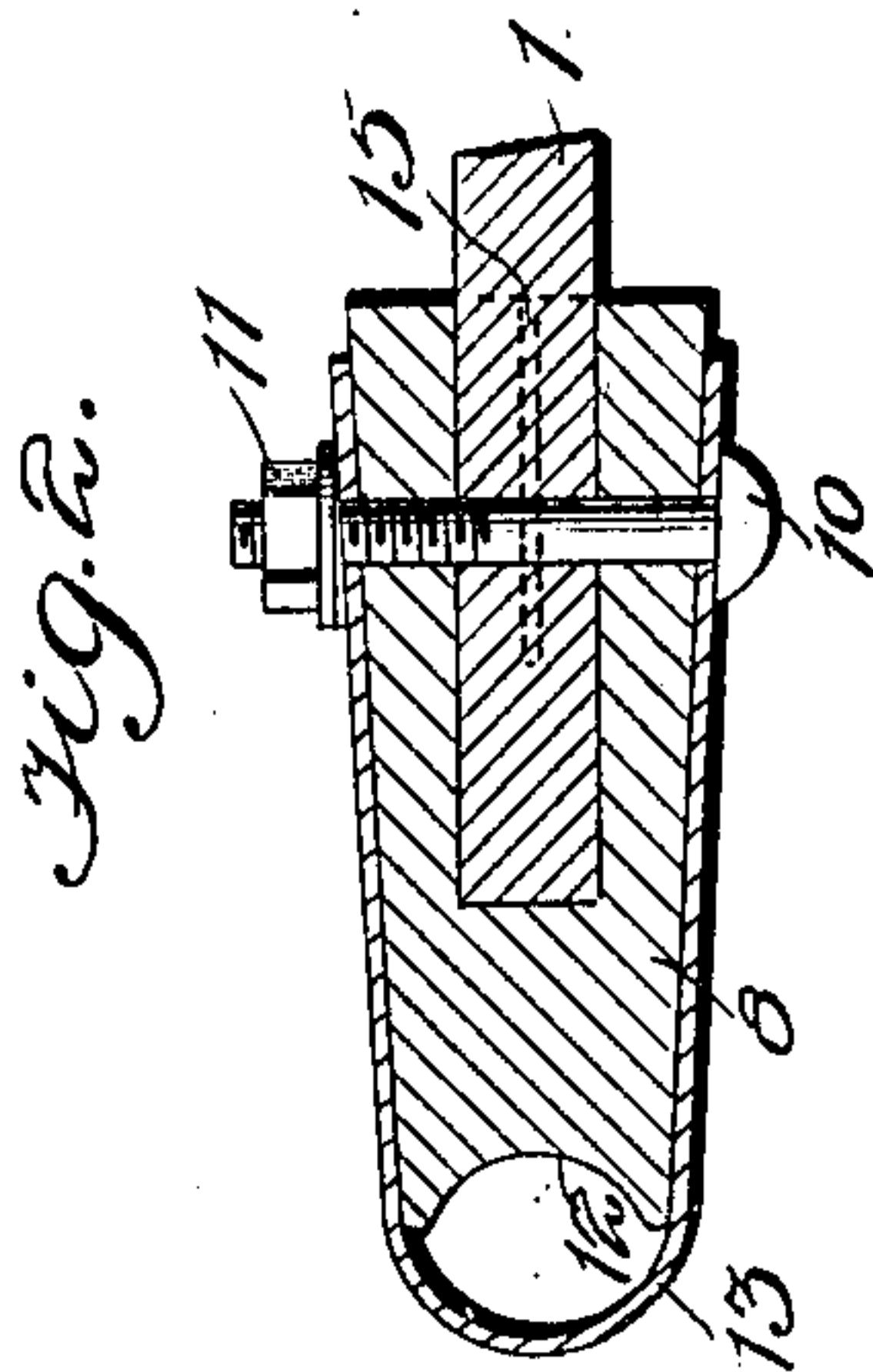
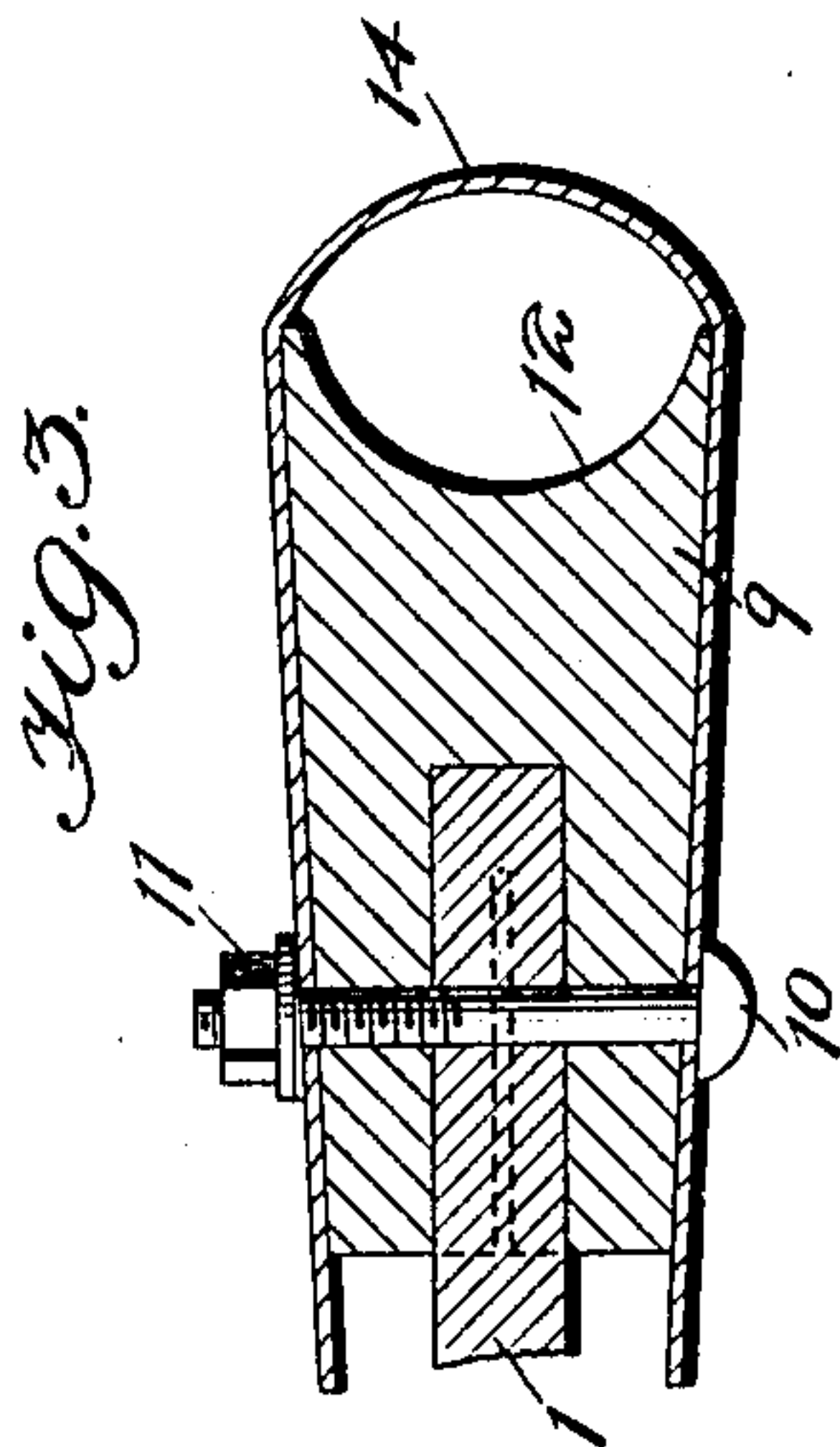
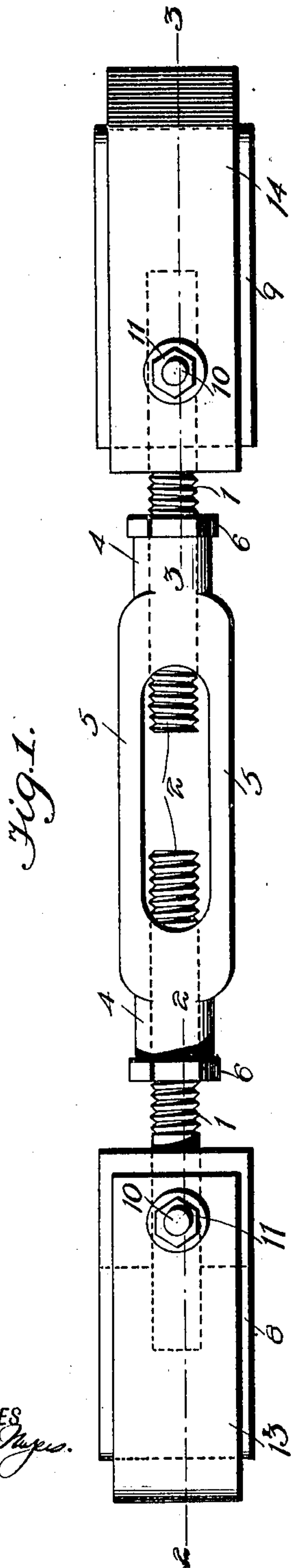


J. WARRENER, SR.
PITMAN.

APPLICATION FILED APR. 30, 1918.

1,298,424.

Patented Mar. 25, 1919.



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PITMAN.

1,298,424.

Specification of Letters Patent.

Patented Mar. 25, 1919.

Application filed April 30, 1918. Serial No. 231,631.

To all whom it may concern:

Be it known that I, JAMES WARRENER, Sr., a citizen of the United States, and a resident of Fall River, in the county of Bristol and State of Massachusetts, have invented certain new and useful Improvements in Pitmen, of which the following is a specification.

My invention is an improvement in pitmen, and has for its object to provide a device of the character specified especially adapted for use with looms for connecting the reed with its operating mechanism, wherein the pitman is made adjustable to permit compensation for wear.

In the drawings:

Figure 1 is a top plan view of the improved pitman;

Figs. 2 and 3 are sections on the lines 2—2 and 3—3, respectively, of Fig. 1;

Fig. 4 is a top plan view of one of the threaded rods.

In the present embodiment of the invention, a pair of rods 1 is provided, each of which has one end threaded as indicated at 2, and these threaded ends are adapted to engage one of the ends 4 of a double nut 5.

The rods 1 are oppositely threaded, as shown, as are also the ends of the double nut, and thus a turn buckle construction is provided. Lock nuts 6 engage the threaded portions of the rods at the ends of the double nut, for locking the parts in adjusted position. Each end of each rod 1 has a transverse opening 7, and the said ends are adapted to be received within sockets in wooden blocks 8 and 9.

These blocks, as shown, are tapering, and the rods are connected to the blocks by means of bolts 10 and nuts 11. Each of the blocks 8 and 9 forms one section of a bearing, the outer end of the said block being concave as shown at 12, and keepers 13 and 14 of metal coöperate with the blocks to form the other section of the bearing. These keepers, as shown, are metal straps and are of yoke or U-shape, each consisting of a body and arms which extend upon opposite faces of the block, and the arms of each keeper are provided with openings registering with the openings of the blocks and with the openings 7 for receiving the bolts 10. Thus the blocks and the keepers are connected to the rods 1.

Each rod has a transverse slot 15 at the opening 7, the slot extending in both directions from the opening. Thus a certain amount of resiliency is provided and some locking action when the nut is clamped down.

In use, the block 9 and the keeper 14 are connected with one of the moving elements and the block 8 and the keeper 13 with the other element. With the parts in the position of Fig. 1, it will be obvious that by turning the double nut 5 an adjustment may be had that will insure an even laying of the thread by the reed during weaving. In addition, the improved crank arm or pitman may be adjusted to any desired length to fit different looms. In the ordinary loom the pitman is of wood and when worn must be replaced.

With the present construction, all the elements except the wooden blocks are of metal and when the blocks become worn they can be replaced at a very slight expense. The metal parts will last as long as the loom. By using the improved pitman and providing the proper adjustment, there will be no thin or thick places in the cloth, nor will the weaver have the trouble of picking out misplaced threads.

I claim:

1. A pitman of the character specified, comprising a pair of rods, each having one end threaded, a double nut with which the threaded ends of the rods engage, said ends being oppositely threaded, wooden blocks each having at one end an opening for receiving the plain portion of the rod and having the other end concave transversely, a keeper of metal, comprising a body coöperating with the concave end of the block for forming a bearing, and arms extending along opposite faces of the block, said arms, the blocks and the rods having registering openings, a bolt passing through the openings, a nut engaging the bolt, and lock nuts threaded on to the rods at the opposite ends of the double nut.

2. A pitman of the character specified, comprising a pair of rods, each having one end threaded, a double nut with which the threaded ends of the rods engage, said ends being oppositely threaded, wooden blocks each having at one end an opening for receiving the plain portion of the rod and having the other end concave transversely,

a keeper of metal comprising a body co-operating with the concave end of the block for forming a bearing, and arms extending along opposite faces of the block, said arms, 5 the blocks and the rods having registering openings, a bolt passing through the openings, and a nut engaging the bolt.

3. A pitman of the character specified comprising a pair of rods, each having one 10 end threaded, a double nut with which the threaded ends of the rods engage, said ends being oppositely threaded, blocks, each having at one end an opening for receiving the

plain portion of the rod and having the other end concaved transversely, a keeper 15 comprising a body and arms, the body co-operating with the concaved end of the block for forming a bearing, the arms extending along opposite faces of the block, and a detachable connection between the 20 arms, the blocks and the rods.

JAMES WARRENER, Sr.

Witnesses:

THOMAS F. MONAGHAN,
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Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."