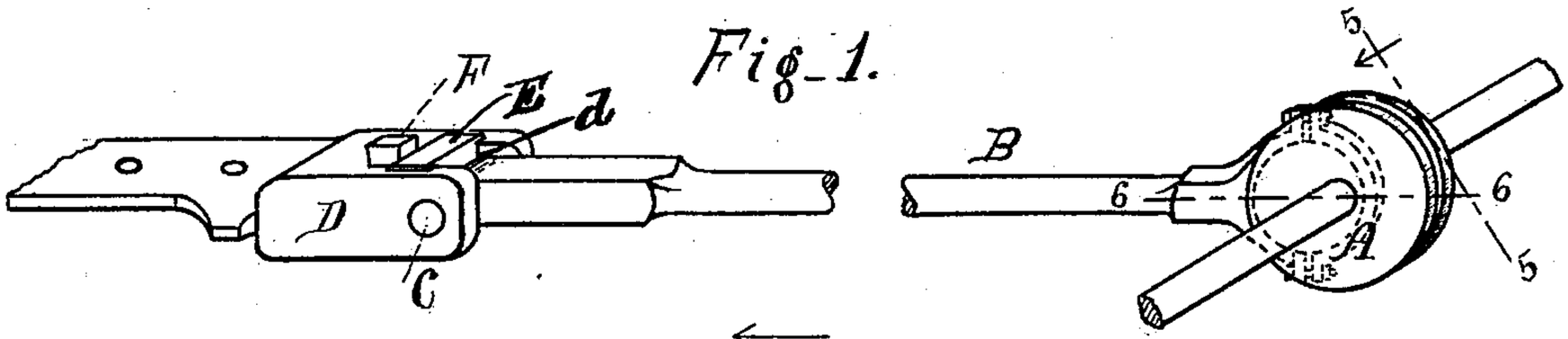
(No Model.)

L. C. SWEET.

PITMAN ROD CONNECTION FOR HARVESTERS.

No. 475,358. Patented May 24, 1892.

Fig. 1.



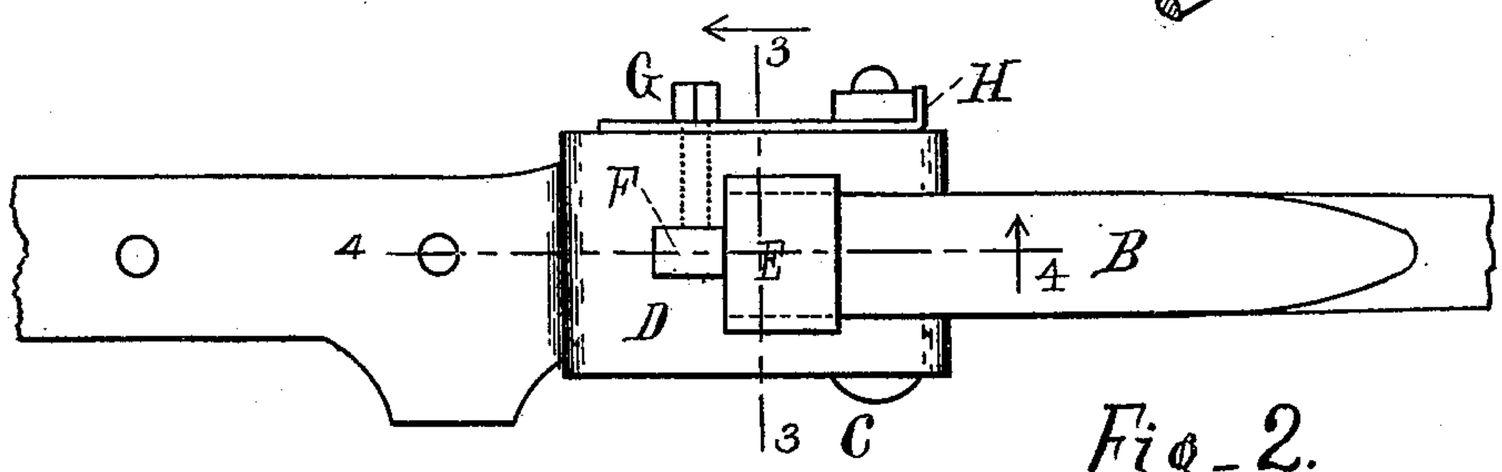
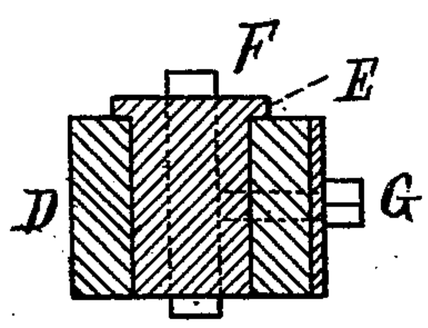


Fig. 2.



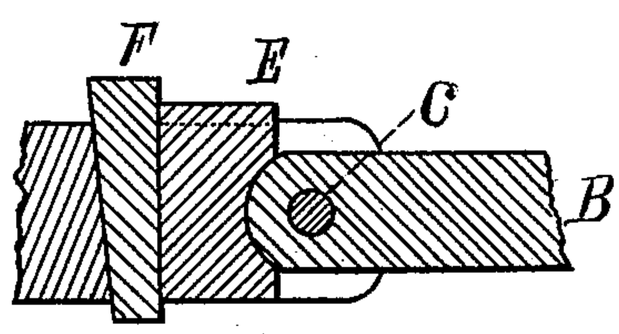


Fig. 3.

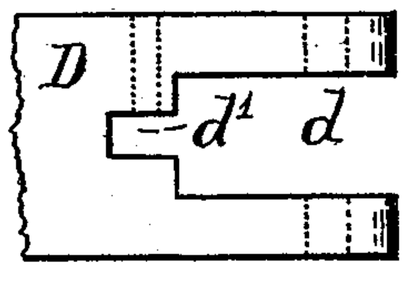


Fig. 7.

Fig. 4.

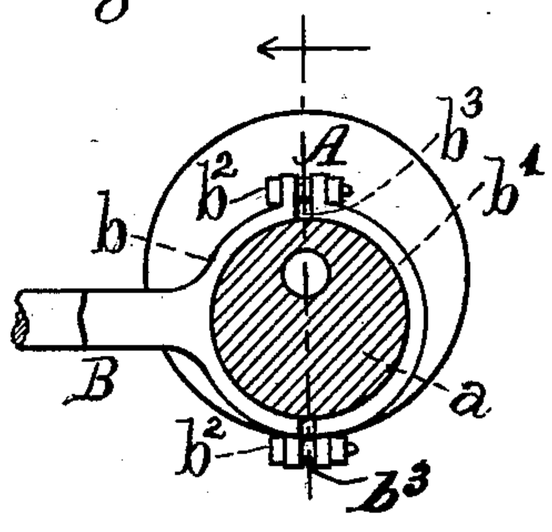


Fig. 5.

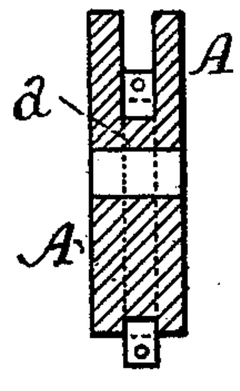


Fig. 6.

Witnesses,
Otis White.
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Inventor.
Lawrence C. Sweet,
by N. DuBois his atty

UNITED STATES PATENT OFFICE.

LARNTINE C. SWEET, OF LOAMI, ILLINOIS, ASSIGNOR OF TWO-THIRDS TO WILLIAM G. MILLER, OF SAME PLACE, AND EDWARD R. THAYER, OF CHATHAM, ILLINOIS.

PITMAN-ROD CONNECTION FOR HARVESTERS.

SPECIFICATION forming part of Letters Patent No. 475,358, dated May 24, 1892.

Application filed 1, February 1892. Serial No. 419,974. (No model.)

To all whom it may concern:

Be it known that I, LARNTINE C. SWEET, a citizen of the United States, residing at Loami, in the county of Sangamon and State of Illinois, have invented a new and useful Pitman-Rod Connection for Harvesters, of which the following is a specification.

To enable those skilled in the art to make and use the same, I have in this specification and the accompanying drawings fully described, shown, and claimed my said invention.

My invention is primarily intended to apply to grain-harvesting machines—such as reapers, mowers, corn-harvesters, &c.—but it may obviously be applied to other machines in which pitman-rods running at high speed are used. With the pitman-rods and connections heretofore used with harvesting-machines great annoyance and inconvenience has been experienced on account of the wear of the bearings, causing constant rattle and resulting in frequent breakage of operating parts.

The purposes of my invention are to provide simple and effective means whereby the wear of the operating parts may be taken up; to provide means for securing in place the box and the connecting-pin, so that those parts may not loosen or become detached, and to provide a balanced eccentric of improved construction. I attain these objects by the mechanism shown in the accompanying drawings, in which—

Figure 1 is a view of the complete mechanism. Fig. 2 is an enlarged top view of the pitman connection with the cutter-bar. Fig. 3 is a vertical transverse section on the line 3 of Fig. 2. Fig. 4 is a partial longitudinal section on the line 4 of Fig. 2. Fig. 5 is an enlarged detached section through the eccentric on the line 5 of Fig. 1. Fig. 6 is an enlarged transverse section on the line 6 of Fig. 1. Fig. 7 is a detached top view showing the openings in the cutter-bar head.

Similar letters refer to similar parts in all the views.

The eccentric consists of two parallel circular side plates A and a central part *a*, integral with, lying between, and eccentric to said side plates. The side pieces A are concentric with the shaft; but the integral central part *a* between the side pieces is eccentric to the shaft. The peripheries of the side pieces A, being greater than that of the part *a*, the weight is so distributed as to form an eccentric which is well balanced and runs true. The pitman-rod B has at one end an integral strap member *b* and connecting therewith another strap *b'*, which is adjustable relative to the eccentric part *a* and the strap *b* by means of clamping-screws b^2.

Between the members *b* and *b'* is a gasket b^3 of yielding material, which may be compressed by means of the screws b^2 to compensate for wear of the members *b b'* and the part *a*. The other end of the pitman-rod is rounded, as shown, and is provided with a transverse hole, through which the bolt C passes to connect the rod with the cutter-bar head. The head D is provided with a longitudinal opening *d* to receive the pitman-rod and the adjustable box E, and is also provided with a keyway *d'* to receive the key F. The head is also provided with transverse holes to receive the bolt C and the set-screw G.

The nut-lock H consists of a strip of zinc or other pliable metal having openings, through which the set-screw G and the bolt C pass. The head of the set-screw being larger than the hole in the strip serves to hold the strip in position on the head D, and the end of the strip being turned up, as shown in Fig. 2, prevents the nut from turning on the bolt C.

The box E consists of a block of Babbitt metal or brass having in its front a concave recess adapted to fit on the end of the pitman-rod B. The key F, being inserted in the keyway, serves to adjust the block E to the end of the rod B, and the set-screw G serves to secure the key in any desired position. The operation of the device is obvious from the drawings and description. When the eccentric-bearings become worn, the members *b b'* are drawn together by means of the clamping-screws b^2 to take up the wear. When the box E becomes worn, the set-screw G is loosened and the key F is then driven down, sliding the box E so as to take up the wear. The set-screw is then tightened to hold the key in place.

To remove the bolt C, the upturned end of the strip H is bent down, so that the nut may turn on the bolt, and when the bolt is restored the end of the strip is again turned up to hold the nut in place.

What I claim as new, and desire to secure by Letters Patent, is—

1. In a pitman-rod connection for harvesters, the combination of a head provided with a keyway and a longitudinal opening, a box having a concave face conforming to the rounded end of the pitman-rod and movable in said longitudinal opening, a bolt pivotally connecting the pitman-rod with the head, a key fitting in the keyway and engaging with the box, a set-screw clamping the key in position, and a pitman-rod connected with and driven by an eccentric, as set forth, and for the purpose stated.

2. In a pitman-rod connection for harvesters, the combination of a head provided with a longitudinal opening and a keyway, a box adjustable in said opening, a key moving in said way and engaging with said box, a pitman-rod, a bolt pivotally connecting said rod with the head, and a perforated strip on said head adapted to turn up and lock the nut on said bolt, as set forth, and for the purpose stated.

LARNTINE C. SWEET.

Witnesses:
E. R. THAYER,
WILLIAM G. MILLER.