J. D. NIX.

PITMAN.

No. 173,046. Patented Feb. 1, 1876.

Fig. 1.

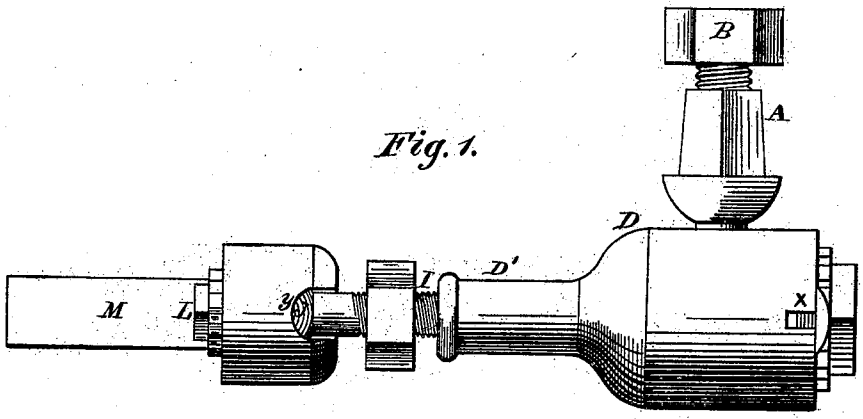


Fig. 2.

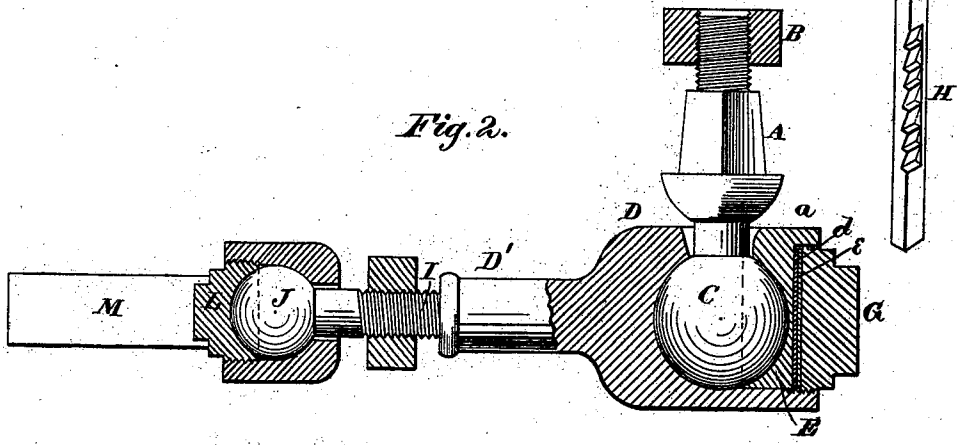
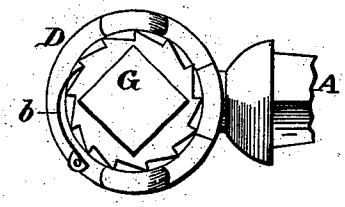


Fig. 3.

Fig. 4.



WITNESSES

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IMPROVEMENT IN PITMEN.

Specification forming part of Letters Patent No. **173,046**, dated February 1, 1876; application filed December 9, 1875.

To all whom it may concern:

Be it known that I, JOHN D. NIX, of Ashley, in the county of Washington and in the State of Illinois, have invented certain new and useful Improvements in Pitmen; and do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings, and to the letters of reference marked thereon, making a part of this specification.

The nature of my invention consists in the construction and arrangement of a pitman-connection for harvesters or other machines, as will be hereinafter more fully set forth.

In order to enable others skilled in the art to which my invention appertains to make and use the same, I will now proceed to describe its construction and operation, referring to the annexed drawing, in which—

Figure 1 is a plan view of my invention. Fig. 2 is a longitudinal section of the same. Figs. 3 and 4 are end views of the pitman-connection.

A represents the wrist-pin, made square and tapering on that portion which goes through the fly-wheel, and fastened by a nut, B, on the inner end. On the outer end of the wrist-pin A is formed or attached a ball, C, which is placed within a chamber, D. This chamber or socket is open at its rear end, and has a slot for the passage of the wrist. In the open end of the chamber D is inserted a concave box, E, provided with a guide-key, *a*, to fill the slot in the side of the chamber. The box E is then held up to the ball by means of a ratchet-plug, G, screwed into the open end of the chamber, and prevented from turning backward by means of a spring-pawl, *b*. Between the box E and plug G are placed a rubber washer, *d*, and a metal washer, *e*, as shown. By turning the plug G, so as to screw the same farther in, the lost motion caused by wear of the parts is easily taken up.

In place of the plug G to hold the box E and take up the lost motion, I may use a ratchet-key, H, which is passed through slots *x x* in the end of the socket D, and the spring-pawl *b* prevents the same from slipping out. To take up lost motion one or more additional metal washers are inserted under the key H.

The chamber or socket D is, opposite the open end, provided with a hollow arm, D′, into which the pitman I is screwed, the other end of the pitman being provided with a ball, J, inserted in a socket, K. This socket is formed with a slot, *y*, in which the pitman I works, and has a concave screw-plug, L, inserted in its end, to retain the ball in position and take up all lost motion. This screw-plug is formed with a ratchet, as shown in Fig. 3, and a spring, *b′*, takes into the same to prevent the plug from unscrewing. The socket K is made fast on a strip, M, which is to be riveted or otherwise permanently secured on the sickle-bar, or the socket K may be fast directly on the sickle-bar. *h h* are the guides that work in the shoe at the heel of the sickle.

This pitman-connection is applicable to all classes of machinery as well as to harvesters.

Having thus fully described my invention, what I claim as new, and desire to secure by Letters Patent, is—

1. The combination of the wrist A, with ball C, the chamber or socket D, concave box E, with guide *a*, the disks *d e*, and ratchet screw-plug G, with spring *b′*, substantially as and for the purposes herein set forth.

2. The combination of the chamber or socket D, with arm D′, the pitman I, with ball J, socket K, and ratchet screw-plug L, with spring *b′*, substantially as and for the purposes herein set forth.

In testimony that I claim the foregoing I have hereunto set my hand this 11th day of November, 1875.

JOHN D. NIX.

Witnesses:
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