No. 717,098. Patented Dec. 30, 1902.

J. W. JESTER.

PITMAN CONNECTION.

(Application filed May 21, 1902.)

(No Model.)

Fig. 1.

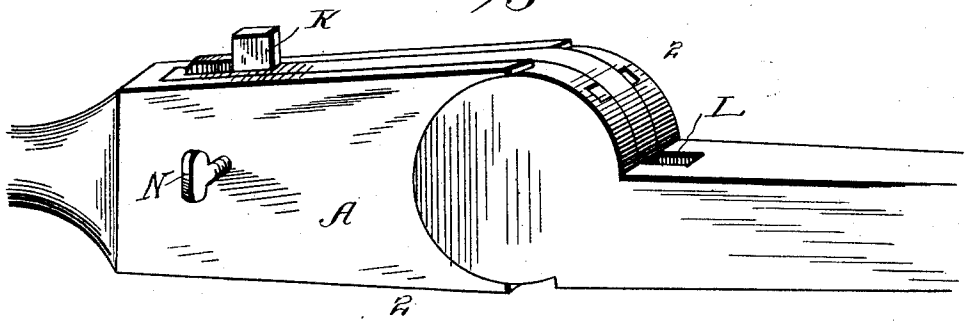


Fig. 2.

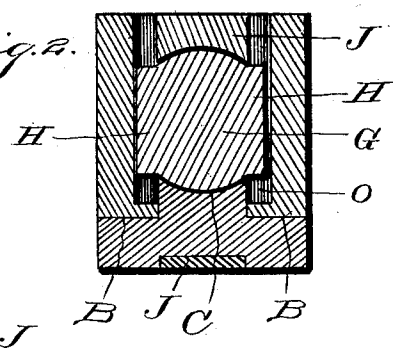


Fig. 3.

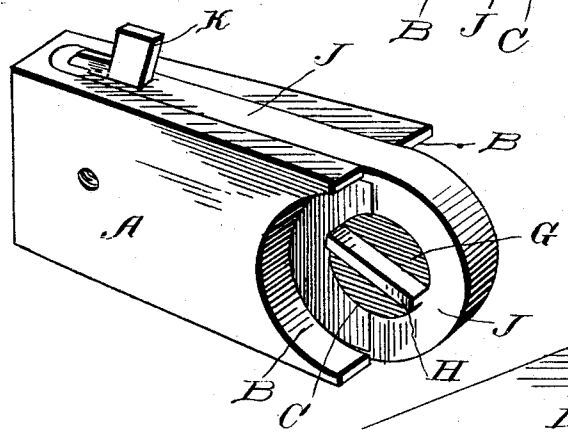
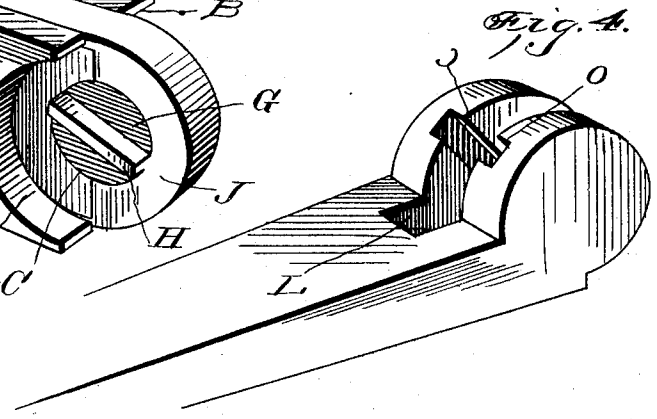


Fig. 4.



Witnesses

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PITMAN CONNECTION.

SPECIFICATION forming part of Letters Patent No. 717,098, dated December 30, 1902.

Application filed May 21, 1902. Serial No. 108,385. (No model.)

To all whom it may concern:

Be it known that I, JOHN W. JESTER, a citizen of the United States, residing at South English, in the county of Keokuk and State of Iowa, have invented certain new and useful Improvements in Pitman Connections; and I do declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to the letters of reference marked thereon, which form a part of this specification.

My invention relates to an improvement in pitman connections; and it consists in a pitman having semicircular sockets formed in its end, a roller-pivot provided with a flange upon each end, and a strap for connecting the roller-pivot to the pitman, combined with a connecting member to the pitman, which has its inner end slotted longitudinally and formed into two grooved ears, which catch over the flanges upon the end of the roller-pivot, as will be more fully described hereinafter.

The objects of my invention are to provide a pitman-joint which is to be used upon mowers, reapers, windmills, locomotives, and other similar machines in which the connecting member to the pitman has a free pivoted movement within a certain range without any possibility of its becoming disconnected, but which when turned down below a right angle to the pitman automatically disconnects from the roller-bearing, and to do away with all nuts, bolts, and other similar fastenings which are liable to become detached while in operation.

In the accompanying drawings, which form a part of my invention, Figure 1 is a side elevation of a pitman connection which embodies my invention. Fig. 2 is a vertical cross-section taken through the joint and showing the flanges in the grooves. Figs. 3 and 4 are perspective views of the ends of the pitman and connecting member to the pitman, respectively.

A represents the pitman, which has its inner end thickened and broadened and which has formed in this thickened and broadened end the two semicircular sockets B to receive the ears upon the sickle-head, and a third semicircular socket C, formed midway between the two sockets B, but upon a different plan. The central socket C is considerably smaller than the other two, and in this socket is placed the roller-pivot G, which is provided with the flanges H upon opposite ends, and which flanges project slightly beyond the edge of the pivot-bearing at one end, so as to facilitate making connection with the connecting member to the pitman, and this pivot-roller is loosely secured in position upon the end of the pitman, so as to have a free turning movement by means of the strap J, which is secured rigidly upon the end of the pitman by the keys K. This roller-pivot revolves freely between the strap and the end of the pitman, but cannot by any possibility become detached from the pitman until the strap is disconnected. The connecting member to the pitman has a longitudinal slot L made through its end, and the two ears N are made nearly circular and are provided with corresponding grooves O in their inner sides. These grooves extend at an angle to the length of the connecting member to the pitman and receive the flanges upon the end of the roller-pivot, as shown in Fig. 2.

In order to connect and disconnect the connecting member from the pitman, the roller-pivot is turned so that its flanges stand at an angle to the length of the pitman, and then the two ears are made to straddle or catch over the bent end of the strap and the roller-pivot, the two flanges entering the grooves in the ears. As the two ears are pressed downward so as to enter the two sockets prepared for them in the end of the pitman-rod they are given a turning movement. The connecting member to the pitman is straightened out into a line with the pitman, and by the time these two parts have been brought into a line with each other the roller-pivot has been turned so that the two flanges extend at an angle to the head of the pitman. As these two ears fit against opposite ends of the roller-pivot and the two flanges upon the end of the roller-pivot catch in the grooves in the inner side of the ears, there is no possibility of the head and pitman becoming discon-

nected, because when the head and pitman are in a line with each other the roller-pivot is turned so that the flanges stand at an angle to the two parts. When it is desired to disconnect the head and pitman, the pitman is turned until the ends of the sockets B strike against the side of the head, and then these ends serve as bearing-points to push the flanges of the roller-pivot out of the grooves in the connecting member to the pitman. In connecting the two parts, the two grooves are made to catch over the two flanges upon the pivot-roller, and then as these flanges are forced into their sockets the head is given a turning movement, so as to bring it into line with the pitman.

The great advantages of my invention consist in doing away with all bolts, nuts, and other detachable fastenings, which are liable to work loose, and substituting therefor a part which can never become accidentally detached and which will never allow the two parts to become accidentally separated while in operation. This joint allows a pivotal movement through a large range, and after the parts have been turned at more than a right angle the pressure of one part upon the other helps to disconnect the pitman from the flanges. The keys passed through the ends of the strap take up all wear of the pivot-roller, and these keys may be held in place by a set-screw, which passes through the side of the head and bears against the locking-key. This set-screw will also serve to keep the key from falling out while the pitman is folded down and out of use while moving over the road.

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

1. A pitman provided with sockets in its end, a flanged pivotal roller connected thereto, and a strap for holding the pivot-roller in place, combined with a sickle-head provided with ears upon its end to catch over opposite ends of the pivot-roller, and provided with grooves to receive the flanges upon the pivot-roller, substantially as described.

2. The pitman provided with the two corresponding sockets in its end, and an intermediate socket, a flanged pivot-roller which is placed in the intermediate socket, and the strap for securing the pivot-roller in position, combined with the sickle-head slotted longitudinally, and provided with two ears to fit in corresponding sockets in the end of the pitman, and provided with two grooves to receive the flanges upon the end of the pivot-roller, substantially as set forth.

In testimony whereof I affix my signature in presence of two witnesses.

JOHN W. JESTER.

Witnesses:
C. W. CAMPBELL,
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