July 22, 1924. 1,502,265

W. PATERSON

QUICK RELEASE PITMAN

Filed June 10, 1921

Fig. 1.

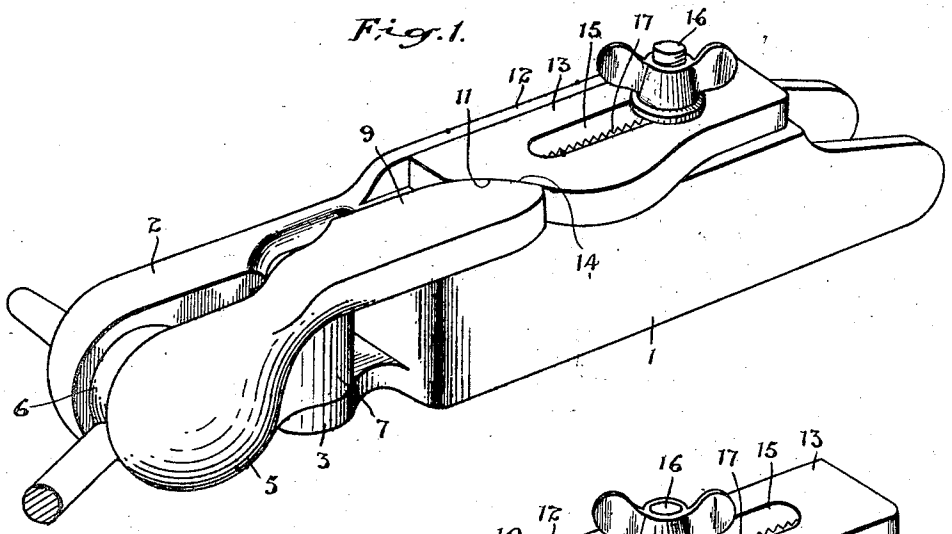


Fig. 2.

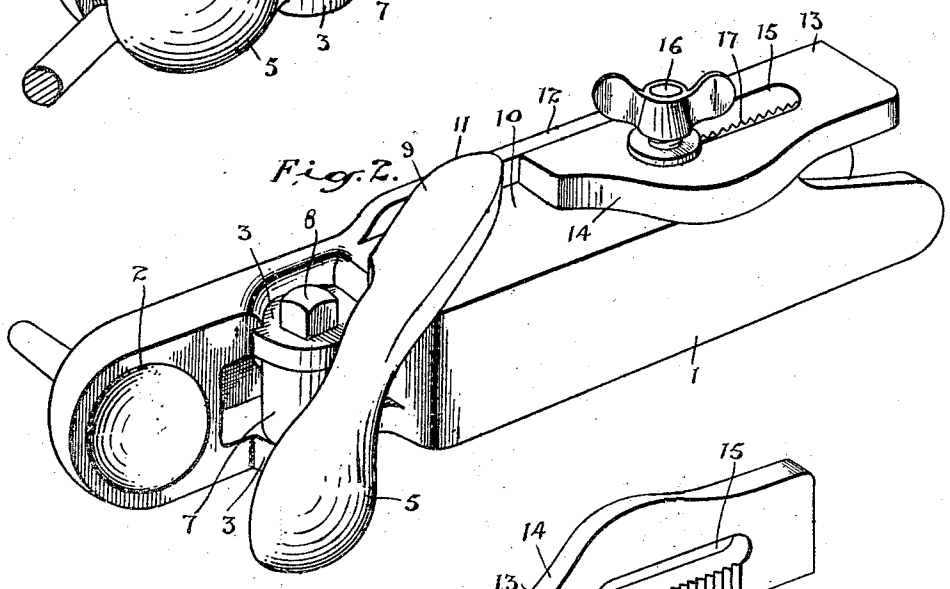
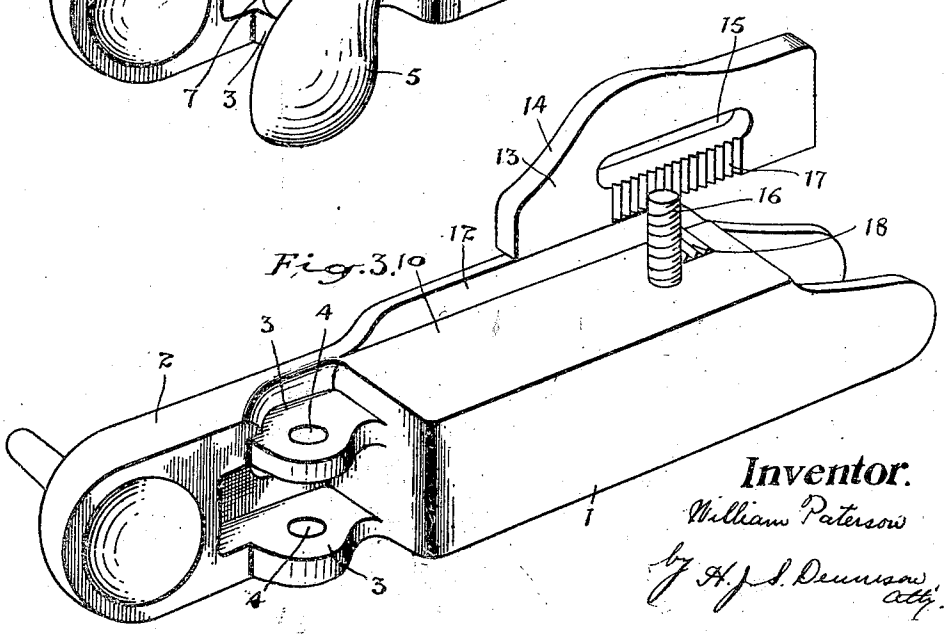


Fig. 3.



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UNITED STATES PATENT OFFICE.

WILLIAM PATERSON, OF TORONTO, ONTARIO, CANADA, ASSIGNOR TO DAVID PATERSON, OF LINDSAY, ONTARIO, CANADA.

QUICK-RELEASE PITMAN.

Application filed June 10, 1921. Serial No. 476,627.

To all whom it may concern:

Be it known that I, WILLIAM PATERSON, a subject of the King of Great Britain, and resident of the city of Toronto, county of York, Province of Ontario, in the Dominion of Canada, have invented certain new and useful Improvements in a Quick-Release Pitman, described in the following specification and illustrated in the accompanying drawings, that form part of the same.

The principal objects of the invention are to enable the ready detachment of the pitman in a harvesting implement from the knife and to devise a very simple form of mechanism for securely connecting the knife blade and pitman which may be locked very securely and may be very quickly released.

The principal feature of the invention consists in the novel construction and arrangement of parts whereby the pivotally supported member for holding the ball end of the knife blade is held in a locked position by an adjustable cam plate movably secured in a guide-way on the pitman end.

In the drawings, Figure 1 is a perspective view of my improved pitman end construction showing it locked in engagement with the ball end of the knife.

Figure 2 is a perspective view showing the holding member thrown open.

Figure 3 is a perspective detail of the pitman end with the holding member removed and showing the cam plate raised from its operative position.

In the use of harvesting machines it is necessary to frequently remove the blade for the purpose of sharpening and it is highly desirable that a form of attachment be devised for connecting the blade with the pitman which will allow of a quick removal and replacement and which will be very simple in construction so that it will not be readily damaged or get out of order.

In the construction herein shown, the pitman end is formed of a metal casting having a rectangular socket 1 in which the pitman rod is secured. One end of this socket member projects forwardly and is provided with a half ball socket end 2 and between the ball socket 2 and the body portion 1 are arranged a pair of parallel lugs 3 each having a bolt hole 4 therethrough. A half ball socket member 5 adapted to co-operate with the ball socket 2 in holding the ball end 6 of the knife blade, is provided with a lug portion 7 adapted to fit between the lugs 3, being pivotally secured in position by the bolt 8.

The member 5 is formed with a lug projection 9 which is adapted to swing over the flat face 10 of the member 1 and is formed with a rounded edge 11 on the inward side.

The socket member 1 is formed with a flange 12 which forms a guide-way for a cam plate 13 which is formed with a curved edge 14 adapted to engage the rounded edge 11 of the member 5. The plate 14 is formed with a longitudinal slot 15 through which the stationary bolt 16 extends and the underside of the cam plate is provided with a transversely notched surface 17 which is adapted to engage a raised toothed portion 18 of the surface of the member 1. A suitable thumb nut and lock washer is arranged upon the bolt 16 at the outer side of the plate 13.

The plate is thus held securely in adjusted positions by means of the thumb nut and when it is desired to release the knife it is merely necessary to loosen the nut and slide the cam plate back to allow of the swinging of the member 5 on its pivot.

A device such as described will hold the harvester bar very securely. Its simplicity of construction ensures its being maintained in proper working condition and it is very easily manipulated to release or secure the knife.

What I claim as my invention is:—

A quick release pitman, comprising, a socket member adapted to receive the pitman and having a ball socket extension, a socket member pivotally secured to the aforesaid member and having a lug extending over the pitman socket, a rib formed on the upper side of the pitman socket, toothed projections formed on the face of the rigid member adjacent to said rib, a cam plate slidably engaging said rib and having a toothed under surface and a curved end surface to engage the projecting lug on the pivotal socket member, said cam plate having a longitudinal slot therein, and a bolt extending through the pitman socket and the slot in the cam plate.

WILLIAM PATERSON.