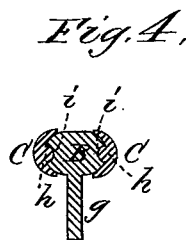
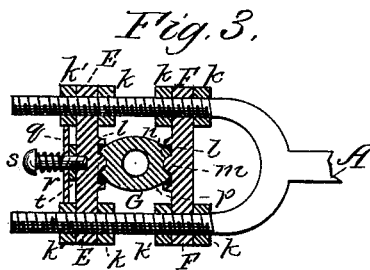
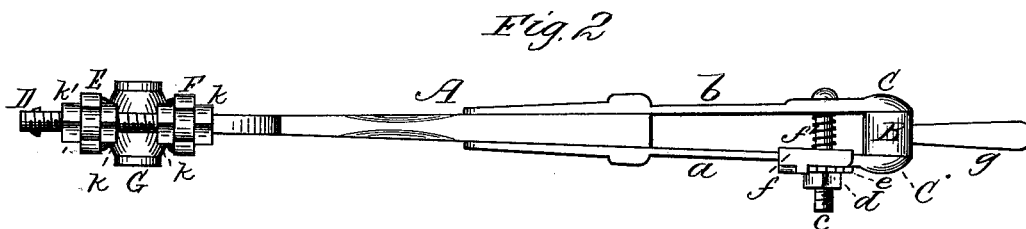
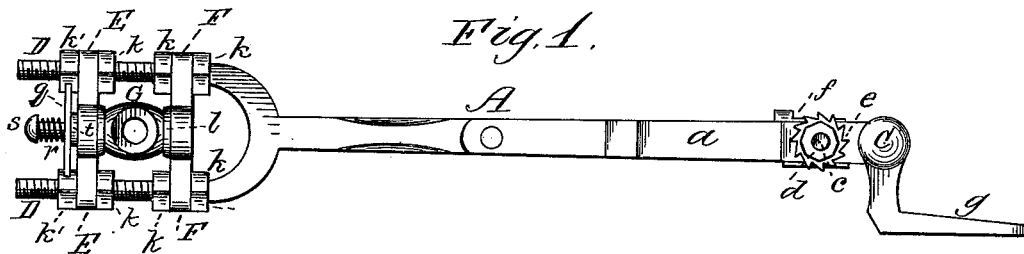


D. S. BLUE.
 Pitman for Harvesters.

No. 220,696.

Patented Oct. 21, 1879.



Witnesses

Nat. E. Oliphant.
 Geo. R. Porter,

Inventor
 Dennis S. Blue,
 per
 Chas. H. Fowler,
 Attorney.

UNITED STATES PATENT OFFICE.

DENNIS S. BLUE, OF FREMONT, OHIO.

IMPROVEMENT IN PITMEN FOR HARVESTERS.

Specification forming part of Letters Patent No. **220,696**, dated October 21, 1879; application filed September 15, 1879.

To all whom it may concern:

Be it known that I, DENNIS S. BLUE, of Fremont, in the county of Sandusky and State of Ohio, have invented a new and valuable Improvement in Pitmen for Harvesters; and I do hereby declare that the following is a full, clear, and exact description of the construction and operation of the same, reference being had to the annexed drawings, making a part of this specification, and to the letters and figures of reference marked thereon.

Figure 1 of the drawings is a representation of a side elevation of my invention. Fig. 2 is a top-plan view of the same; Figs. 3 and 4, detail views, partly in section.

This invention has relation to pitmen for harvesters or mowers and reapers; and the object thereof is to construct an effective means for connecting the box which receives the wrist-pin to the pitman-bar, and also forming a peculiarly-constructed joint between said box and the plates that hold the same to the pitman-bar; also in forming the pitman-bar with spring-jaws, with cup-shaped ends, to hold a ball having the arm to which the cutter-bar is secured, as will be hereinafter described, and subsequently pointed out in the claims.

In the accompanying drawings, A represents the bar of the pitman, of any suitable metal, and having a bifurcated end, consisting of the two arms *a b*, through which passes a bolt, *c*, having screw-threads upon its end for the reception of a screw-threaded nut, *d*. This nut is formed with or has rigidly secured to its inner face a ratchet-wheel, *e*, so that the nut may be locked and prevented from turning by a plate, *f*, held against the teeth by a coiled spring, *f'*, passing around the bolt *c*, and bearing against the face of the plate *f*.

The free ends of the arms or jaws *a b* have sufficient elasticity or spring to hold between them the ball B, said ball having the arm *g*, for connecting thereto the knife or sickle-bar by any of the well-known means. The free or outer ends of the spring-jaws *a b* are formed with sockets C, having axial centers *h*, which fit in correspondingly-formed recesses *i* in the sides of the ball B. This means of forming the joint renders it at all times perfectly tight, as it wears to a joint, and when properly fast-

ened by the bolt and nut can get comparatively little play or loose motion.

The opposite end of the bar A terminates in a U-shaped connection, consisting of the screw-threaded rods D, over which loosely pass plates E F, held at the required distance apart by nuts *k*, between which the ends of the plates are clamped.

The plates E F have upon their inner faces sockets *l* and axial centers *m*, which fit into correspondingly-formed recesses *n* in the box G, for receiving the wrist-pin.

The ends of the box G are of such shape as to fit snugly within the sockets *l*, or, in other words, they have convex faces *p*.

The outer nuts, *k'*, are prevented from turning by a locking-plate, *q*, held against the periphery of the nuts by a spring, *r*, upon a pin, *s*, the end of said pin entering a screw-threaded opening in the outer face of the plate E, and having a washer, *t*, interposed between the plate E and locking-plate *q*.

The box G turns upon the wrist-pin in an opposite direction to the joint upon the opposite end of the bar A, so as to accommodate it to the cutter or sickle bar when the guards are thrown up or down.

When it is desired to remove the box G or adjust its bearings, the pin *s* and plate *q* may be removed, thus allowing the removal of the nuts and plates E F; or the locking-plate may be pressed out in a direction toward the head of the pin *s* sufficiently to free the ends of the plate from contact with the nuts, after which it is turned around at right angles to its former or locking position, after which the nuts are free to be removed.

The ball-connection B *g* is removed from the bar A by first pressing in the plate *f* sufficiently to disconnect it from the ratchet-wheel *e*, after which the nut *d* is removed and the spring-jaws *a b* spread apart sufficiently to remove the ball B with its arm *g*.

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

1. The pitman-bar A, spring-jaws *a b*, socketed or cup-shaped ends C, and the ball B, with arm *g*, in combination with the bolt *c*, spring *f'*, locking-plate *f*, and nut *d*, having

ratchet-wheel *e*, substantially as and for the purpose specified.

2. The pitman-bar A, having screw-rods D and plates E F, in combination with nuts *k k'*, locking-plate *g*, spring *r*, and pin *s*, as a means for securing the box G to the pitman-bar, substantially as and for the purpose set forth.

3. The pitman-bar A, having spring-jaws *a b*, with socketed or cup-shaped ends C, for holding the ball B and arm *g*, in combination

with the box G, held by socket-plates E F, nuts *k k'*, locking-plate *g*, spring *r*, and pin *s*, substantially as and for the purpose set forth.

In testimony that I claim the above I have hereunto subscribed my name in the presence of two witnesses.

DENNIS S. BLUE.

Witnesses:

GEORGE FLUMERFELT,
M. L. BINKLY.