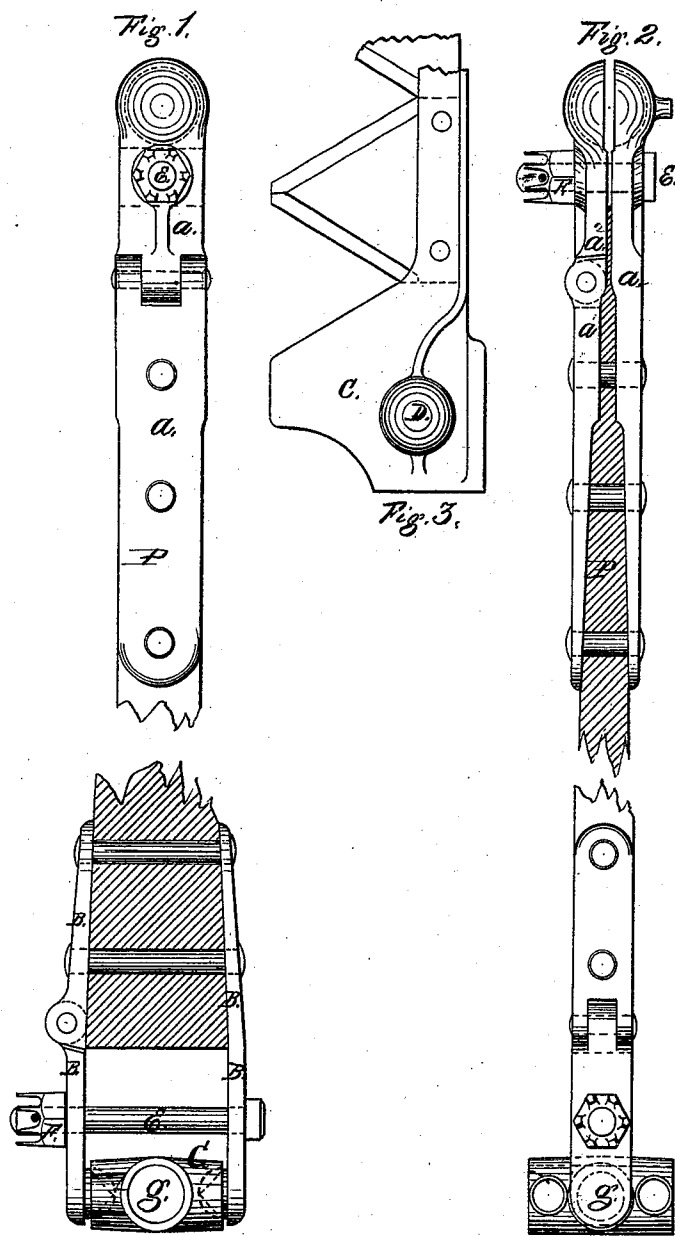


O. COOLEY.

PITMAN CONNECTIONS FOR HARVESTERS.

No. 173,161.

Patented Feb. 8, 1876.



Witnesses:

R. D. Dewey
J. C. Stevens

Inventor:

Owens Cooley

UNITED STATES PATENT OFFICE

ORVILLE COOLEY, OF BROCKPORT, NEW YORK, ASSIGNOR TO JOHNSTON
HARVESTER COMPANY, OF SAME PLACE.

IMPROVEMENT IN PITMAN-CONNECTIONS FOR HARVESTERS.

Specification forming part of Letters Patent No. **173,161**, dated February 8, 1876; application filed
December 18, 1875.

CASE B.

To all whom it may concern:

Be it known that I, ORVILLE COOLEY, of Brockport, in the county of Monroe and State of New York, have invented a new and Improved Adjustable Pitman-Connection for Reapers, Mowers, Harvesters, and other machinery; and I do hereby declare the following to be a full, clear, and exact description of the same, reference being had to the accompanying drawings forming a part of this specification, in which—

Figure 1 is a plan of the pitman complete; Fig. 2, a side elevation of the same; and Fig. 3 a section of knife with head attached.

Similar letters of reference in the accompanying drawings denote the same parts.

The object of this invention is to produce a simple and neat, but strong and durable, joint-connection for pitmen, which may be easily and readily adjusted so as to make the parts work closely and tightly, or loosely and flexibly, and in which the parts shall not be liable to become detached and lost. To these ends, the invention consists in the construction and combination of parts as I will now proceed to set forth.

In the drawings, P is the pitman, having, as here represented, a ball-and-socket connection at the knife end, and a swivel-and-socket connection at the crank end. One-half of the ball-and-socket connection is formed by a stout metal plate, *a*, bolted or riveted firmly to one side of the pitman. The other half is formed of a stout plate, *a'*, riveted to the opposite side of the pitman, preferably by bolts or rivets passing through and securing both plates, said plate *a'* having at its outer end a hinged leaf, *a²*, the outer end of which is formed into a half-socket, the counterpart of that shown on the plate *a*. The hinge gives the part *a²* all necessary flexibility, and prevents it under any circumstances from being disconnected and lost, either before or after attachment to the piston. A ball projection, D, formed on or attached to the head of the knife C, is adapted

to engage with the socket above described to complete the connection. The two parts *a* *a²* are held together by a screw-bolt, E, by means of which the joint may be tightened or loosened at will, or the pitman and cutter disconnected whenever necessary. To prevent the nut F from working off I employ any suitable lock-nut or locking device, preferably a notched nut, and a locking rivet or wire passing through a hole represented near the end of the bolt. At the opposite end of the pitman substantially the same construction is represented for making the connection to the driving-crank—a rigid plate, B, corresponding to the plate *a*, a jointed plate, B¹ B², corresponding to the jointed plate *a'* *a²*, and a bolt and screw-nut, *e* F, corresponding to the bolt and nut E F above described. Instead, however, of making hemispherical cavities in the plates to receive a ball, I provide the plates with internal studs or trunnions, which fit into recesses in the ends of the swivel-block G, holding it in place and permitting it a free swiveling movement. The crank-pin passes through a suitable box or socket in the swiveling-block. Substantially the same advantages are derived from this construction as from the ball-and-socket construction at the opposite end of the pitman, the difference between the two modes of construction being merely in their adaptations to their slightly different requirements.

Having thus described my invention, I claim as new—

In a pitman-joint connection, the combination of the rigid plate A or B with the hinged plate *a'* *a²* or B¹ B², the parts of which are permanently connected together, and with the bolt *e*, and ball or swivel block, substantially as described, for the purposes set forth.

ORVILLE COOLEY.

Witnesses:

R. D. DEWEY,
F. S. STEBBINS.