

# UNITED STATES PATENT OFFICE.

CHARLES ARKENBERG AND WILHELM ARKENBERG, OF MILAN, INDIANA.

## IMPROVEMENT IN PITMAN-JOINTS.

Specification forming part of Letters Patent No. **185,155**, dated December 12, 1876; application filed June 16, 1876.

*To all whom it may concern:*

Be it known that we, CHARLES ARKENBERG and WILHELM ARKENBERG, both of Milan, Ripley county, Indiana, have invented a new and useful Pitman-Joint, of which the following is a specification:

Our invention is more particularly designed for the joint which unites the pitman to the cutter-bar in a harvesting-machine, and is intended, while securely coupling these members, to be at the same time free from slack motion, or backlash, as well as from liability to any binding of the said bar within the guards.

In the accompanying drawings, Figure 1 is a perspective view of a joint embodying our invention. Figs. 2, 3, and 4 are sections at the lines X X, Y Y, and Z Z, respectively.

A represents a portion of the "heel end" of a harvester cutter-bar. B represents a portion of the pitman. The pitman-head C has the form of a spherical frustum, and occupies a corresponding cavity, D, in front of a lug-socket, E, upon the other side of the cutter-bar. The rear side F of the lug E is spherically convex, and concentric with the spherical cavity D, and is furnished with projections G H. The pitman-head C is perforated axially for a pivot, I, whose extremities project sufficiently to enter the eyes J of two bolts, K K', which, embracing the lug E, pass through a clamp, L, and receive on their screw-threaded

extremities nuts M m N n. The lug E is dished at e, to allow greater play for the bolts K K'. It will be seen that this construction of joint secures a perfectly-unrestricted play of the cutter-bar, either about the pivot I, as seen in Fig. 2, or about any other axis of oscillation, (see Figs. 3 and 4,) and consequently the duty of the pitman is restricted to merely pulling and pushing of the cutter-bar.

The joint can at any time be tightened or slackened by means of the nuts M N, and such adjustment having been made it may be rendered permanent by means of the jam-nuts m and n.

The sides of the lug E are recessed at e, to allow sufficient play to the bolts and their attachments.

O is a lubricating-duct.

We claim as new and of our invention—

The pitman-joint composed of spherical frustum C, socket D E F G H, pivot I, nuted bolts K J M m K' J N n, and clamp L, the whole being combined and adapted to co-operate as set forth.

In testimony of which invention we hereunto set our hands.

CHARLES ARKENBERG.  
WILHELM ARKENBERG.

Attest:

JNO. H. KNIGHT,  
HORACE E. JOHNSON.