C. WHEELER, Jr.

Pitman-Holder for Harvesting-Machines.

No. 162,328. Patented April 20, 1875.

Fig. 1.

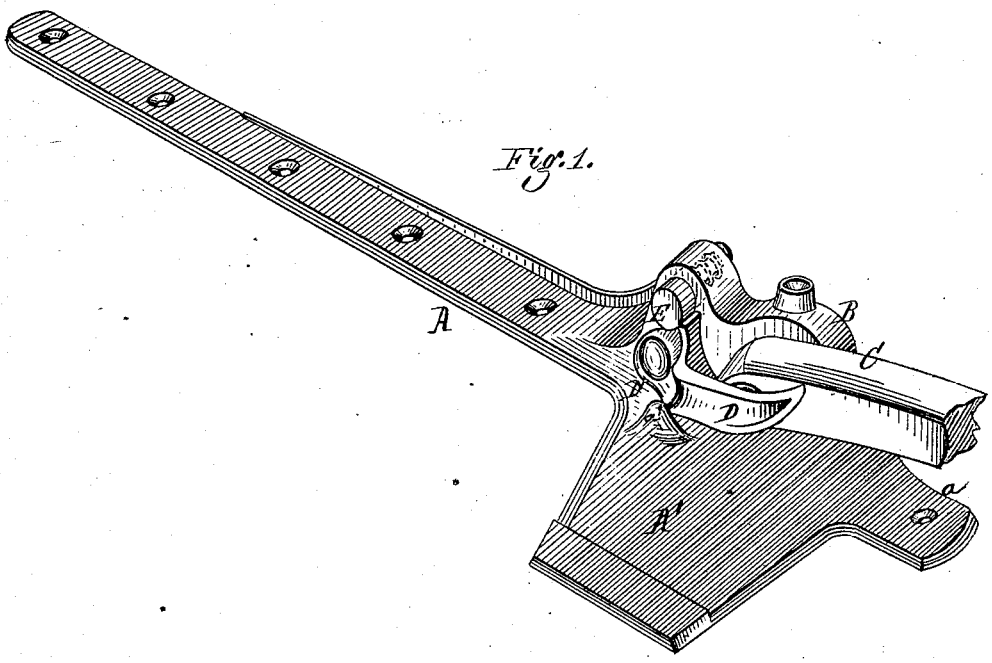


Fig. 2.

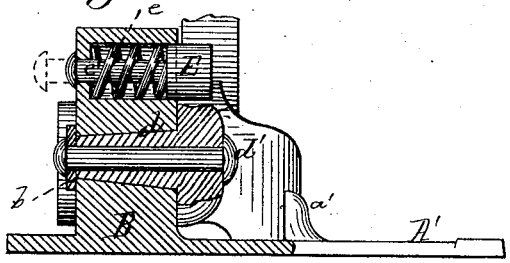
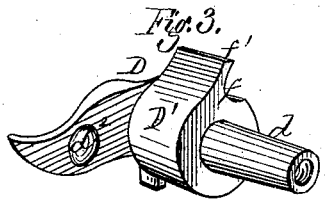


Fig. 3.



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UNITED STATES PATENT OFFICE.

CYRENUS WHEELER, JR., OF AUBURN, NEW YORK.

IMPROVEMENT IN PITMAN-HOLDERS FOR HARVESTING-MACHINES.

Specification forming part of Letters Patent No. **162,328**, dated April 20, 1875; application filed March 19, 1875.

To all whom it may concern:

Be it known that I, CYRENUS WHEELER, Jr., of Auburn, county of Cayuga and State of New York, have invented certain new and useful Improvements in Knife-Heads and Pitman-Connections for Harvesters, of which the following is a full, clear, and exact description, reference being had to the accompanying drawing making part of this specification, in which—

Figure 1 represents a perspective view of the knife-head and pitman-connection. Fig. 2 is a vertical section of the same taken through the latch-pivot and spring-locking bolt, and Fig. 3 is a perspective view of the latch detached.

Similar letters of reference denote corresponding parts in all the figures.

The invention consists in the combination, with the reciprocating sickle or knife-head, of a pivoted locking-latch, moving with said head and overhanging the pivoted end of the pitman, for effectually holding the pitman engaged with the knife-head, as hereinafter explained.

In the drawings, A represents the knife-head, provided in the direction of its length with a series of perforations for the reception of the rivets or bolts which unite it to the knife-bar. The inner end of this head has a clearer-blank, A′, formed upon it, which works in guideways in the inner shoe, and the rear edge of the head for a portion of its length has a vertical rib or flange, *a*, formed upon it for stiffening the head and adapting it to be made lighter than would otherwise be practicable. The inner end of the head, in rear of the clearer blank or tooth, has a standard, B, formed upon it, provided with an eye or perforation to receive the pin or spur formed on the end of the pitman C; and outside of the eye for the pitman is formed a second perforation, at *b*, in which is mounted the tubular pivot *d* of the latch or button D, said latch being secured in place in the knife-head standard B by a through-bolt, d^1, as shown in Fig. 2. The latch proper D has a hub or boss, D′, formed at its heel end, of a length or thickness conforming to the diameter of the pitman, for bringing the latch forward or outside of the pitman end, as shown in Figs. 1 and 3.

Directly over the pivot *d* the height of the standard is slightly increased to accommodate a spring-bolt, E, fitted in a cylindrical socket in the forward face of the standard, and forced outward or forward by a spring, *e*, located in the socket behind the bolt and surrounding the guiding pin or stem *e′*, as shown in Fig. 2. The hub D′, directly over its pivot, is enlarged, and has a semi-cylindrical socket formed in it at *f*, into which the slide or spring-bolt E is projected by the spring *e*, when the latch D is in proper position for holding the pitman connected with the sickle-head, and a spur or lip, *f′*, formed on said hub D′ effectually prevents any movement of the latch D until the retaining pin or bolt E is forced back into its socket. The rear face of the latch, at a point in line with the connection between the knife-head and pitman, is provided with a conical or semi-spherical spur, d^2, (see Fig. 3,) which forms the frictional and pivotal point of contact between the latch and the pitman, and serves to greatly reduce the friction between said parts.

By the construction described the knife-head is provided with a light and small, but efficient, latch or lock for holding the pitman engaged with the head, and the usual stationary holders heretofore employed on the inner shoe or clip, and covering the entire extent of the throw of the sickle-head, are dispensed with.

Instead of the spring locking-bolt E the latch D may be held down by a spring wrapping its pivot, or otherwise connected with it, if preferred, and the bolt E dispensed with.

A lug or spur, *a′*, on the knife-head in front of the latch prevents any undue strain upon the pivotal pin of the latter when in operation.

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

1. The combination, with the reciprocating knife-head, of the latch D, pivoted to and vibrating with said head, and operating to hold the pitman connected therewith, substantially as described.

2. The latch D, pivoted to the reciprocating knife-head, in combination with the spring bolt or pin E, arranged and operating substantially as described.

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