W. COMEY.

GRINDER FOR HARVESTER KNIVES.

No. 192,816. Patented July 10, 1877.

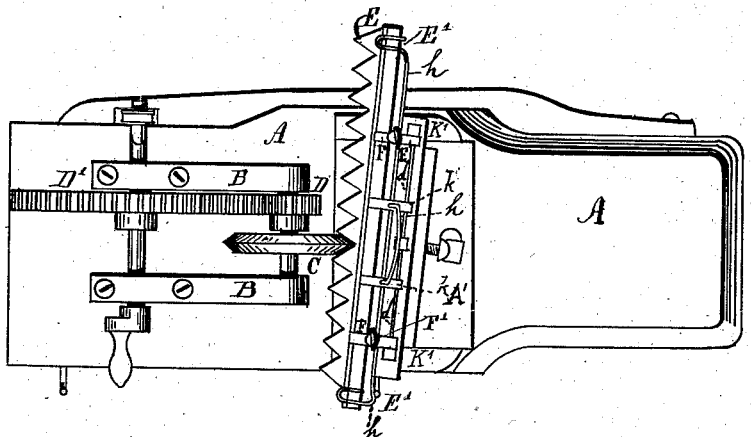

Fig. 1.

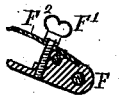

Fig. 4.

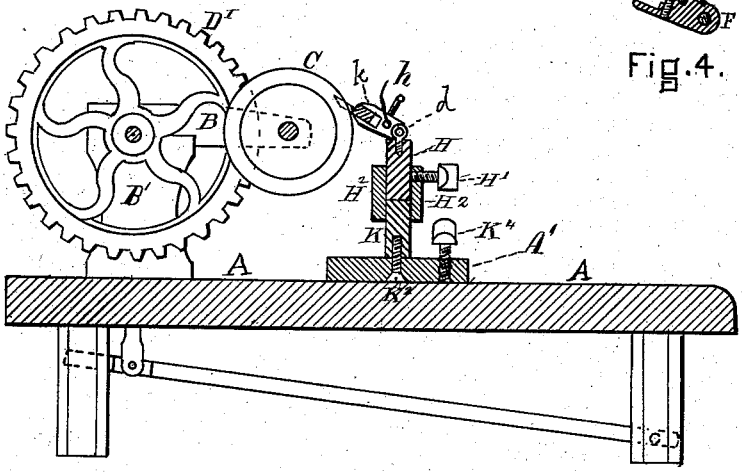

Fig. 2.

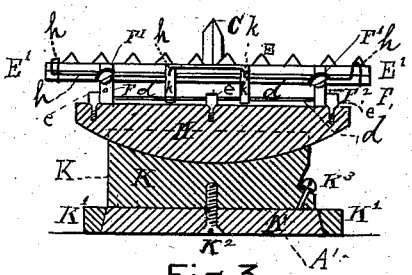

Fig. 3.

WITNESSES

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WILLARD COMEY, OF WESTBOROUGH, MASSACHUSETTS.

IMPROVEMENT IN GRINDERS FOR HARVESTER-KNIVES.

Specification forming part of Letters Patent No. **192,816**, dated July 10, 1877; application filed May 7, 1877.

To all whom it may concern:

Be it known that I, WILLARD COMEY, of Westborough, in the county of Worcester and State of Massachusetts, have invented a new and useful Improvement in Machines for Grinding Knives for Harvesters, of which the following is a specification:

The nature of my invention consists in combining with the grinding-wheel and its operating mechanism a reciprocating adjustable blade-holder, said blade-holder being so constructed and arranged that the blade to be ground may be presented to the grinding-wheel at any desired angle and position, and may be readily attached or removed from the holder.

Figure 1 is a plan of my invention. Fig. 2 is a vertical longitudinal section of the same. Fig. 3 is a vertical section, parallel with the knife-blade, showing the holding device. Fig. 4 is a section showing one of the clamps for holding the blade.

A represents a table, upon which are erected two vertical standards, B′, each of said standards being provided with a horizontal arm, B, Figs. 1 and 2, in which are hung the emery-wheel C and the gear-wheels D and D′, which serve to drive the emery-wheel.

Motion may be communicated to my wheels by a crank or foot-lever, or by power.

E represents the blade to be ground, which is held in a holder, E′ E′. This is constructed as follows: The rod *h* has attached to it, near the middle, two forked pieces, *k k*. (Shown in Figs. 1, 2, and 3.) The recesses formed by the fork serve as resting-places for the blade E. I also attach to this rod *h* two screw-clasps, F F, Fig. 1. (Shown in detail at Fig. 4.) These clasps are formed of a fixed part, which is fastened to the rod *h*, and a hinged part, F^2, which is operated by the screw F^1, and serves to clasp the blade E. These screw-clasps F F and the pieces *k k* all hinge on the pintle *d*. The extremities of the rod *h* are bent so as to form prongs for receiving the ends of the blade E. The pintle *d* is made fast by eye-piece *e e*, Fig. 3, to a rocking and sliding block, H. This block H has a curved bottom, as shown in Fig. 3, and is set in a concave recess formed by the parts H^2 H^2 and K, (see Fig. 2,) so that it, the block H, and the holder may be adjusted lengthwise, and also horizontally, and may be set at any desired angle, and may be held by the thumb-screw H^1, Fig. 2.

K is a block, which is fastened to a sliding base, A′, (see Figs. 2 and 3,) by means of a pivot, K^2, so that it may turn in any direction. The sliding block is held by ways K^1 K^1 to the table A. K^3 is a set-screw for holding the block K at the desired angle on the base A′.

I claim—

1. In combination with the grinding mechanism, the blade-holding device E′ E′ and the rocking sliding block H, all operating together, substantially as described, and for the purpose set forth.

2. The combination of the holder E′ E′ and the rocking sliding block H with the block K and sliding base A′, substantially as described, and for the purpose set forth.

WILLARD COMEY.

Witnesses:

WILLIAM EDSON,

NATHL. EVANS.