J. H. Elward.

Harvester Pitman.

No. 77,181. Patented Apr. 28, 1868.

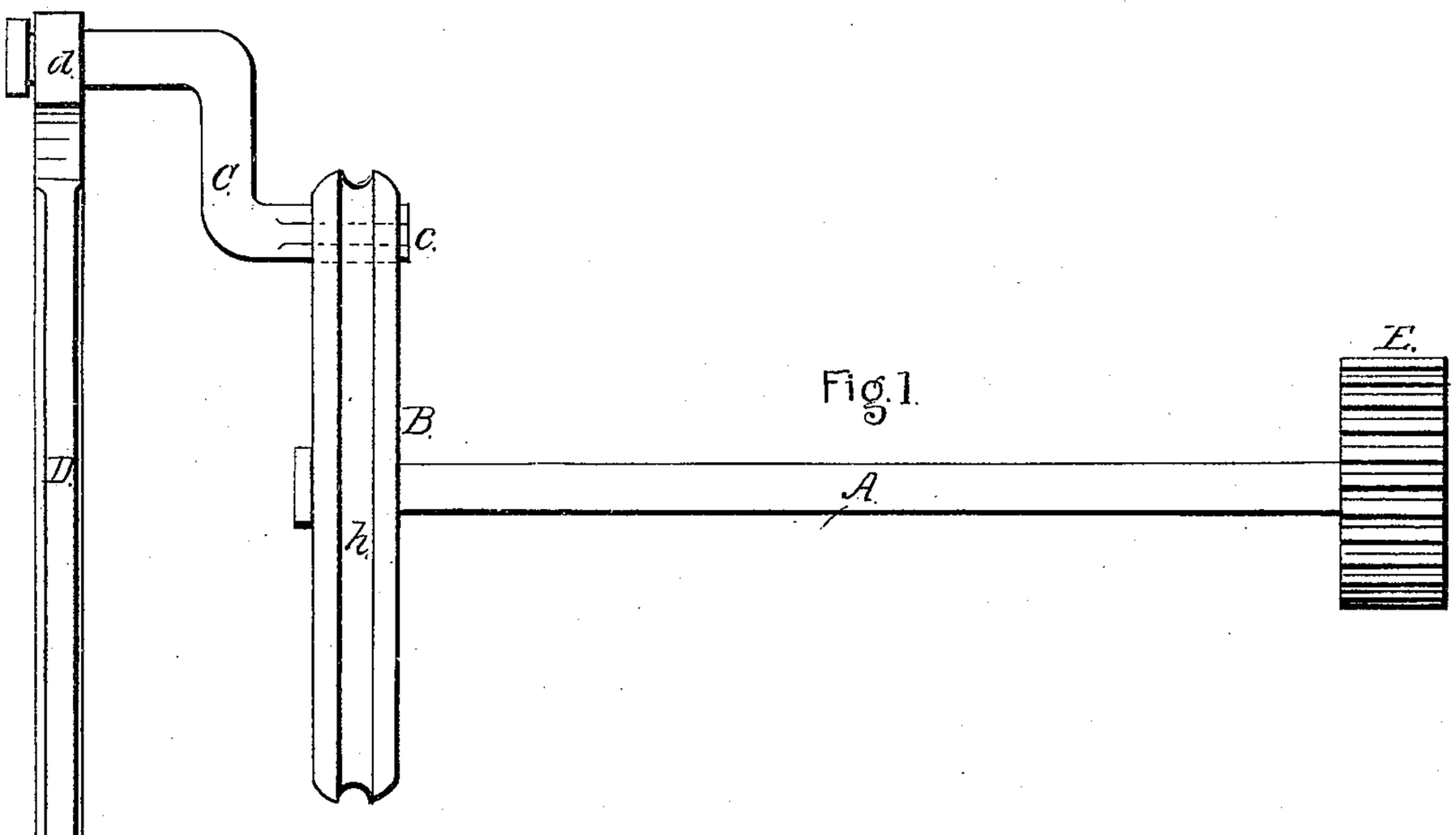


Fig. 1.

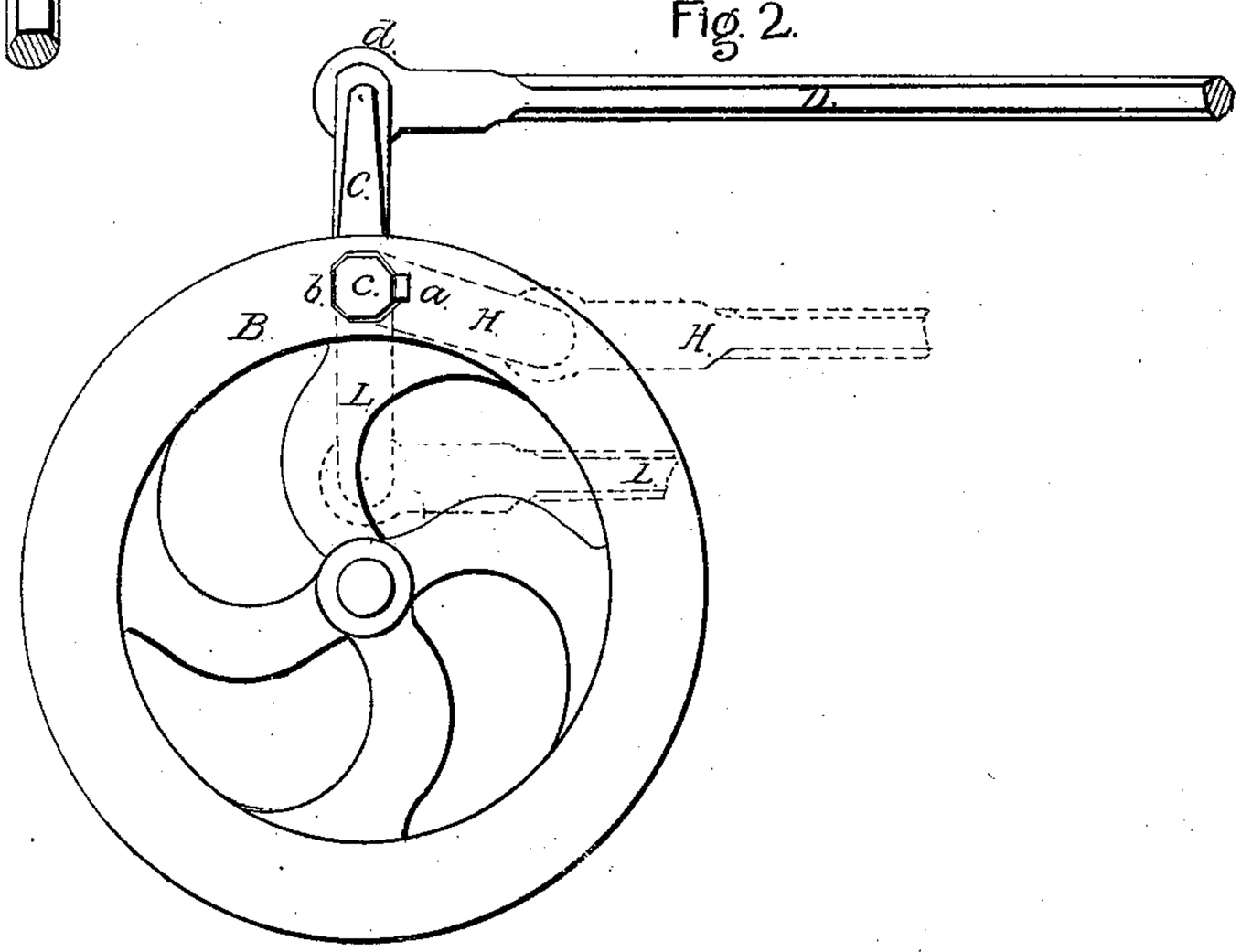
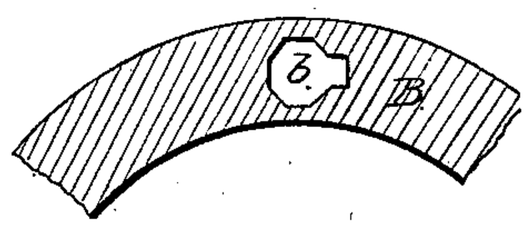


Fig. 2.

Fig. 3.



Witnesses:

A B Welsch

I 2 Hawk

Inventor:

John H Elward

by Cobum Mann'

United States Patent Office.

JOHN H. ELWARD. OF CHICAGO, ILLINOIS.

Letters Patent No. 77,181, *dated April* 28, 1868; *antedated April* 15, 1868.

IMPROVEMENT IN WRIST-PINS FOR REAPERS AND MOWERS.

The Schedule referred to in these Letters Patent and making part of the same.

TO ALL WHOM IT MAY CONCERN:

Be it known that I, JOHN H. ELWARD, of Chicago, in the county of Cook, and State of Illinois, have invented new and useful Improved Wrist-Pins for Harvesters; and I do hereby declare and make known that the following is a full, clear, and exact description of the same, reference being had to the accompanying drawings, and the letters and figures marked thereon, which form part of this specification.

My invention consists in so connecting the wrist or crank-pin to which the pitman-rod connected with the sickle is attached, that its distance from the centre of the crank-wheel may be varied or adjusted at pleasure, thereby producing longer or shorter and slower or more rapid strokes of the sickle, as may be desired.

To enable those skilled in the art to understand how to construct and use my invention, I will proceed to describe the same with particularity, making reference in so doing to the aforesaid drawings, in which—

Figure 1 represents a side elevation of my invention,

Figure 2 is an end view of the same, and

Figure 3 is a section through a part of the crank-wheel, showing the configuration of the hole in which the wrist-pin is inserted.

The same letters of reference in the several figures indicate like parts of my invention.

A represents the shaft of the crank-wheel B, which may be revolved by a belt or cord passing around said wheel in the groove *h*, or by means of a drum or gear-wheel, as shown at E.

In or near the periphery of the said wheel B there is made an octagonal or other angular hole, marked *b*, into which one end of the crank-pin or wrist-pin C, made of corresponding angular configuration, fits, as shown at *c*, and is secured therein, in any desired position, by means of a key, *a*, which enters an appropriate recess at one side, as shown.

D represents the pitman-rod, having a collar, *d*, at one end, fitting upon the other end of the wrist-pin, as shown, the other end of said pitman being attached to the sickle in the usual manner.

When it is desired to give a long and relatively fast stroke, the wrist-pin is adjusted in the position shown by the full lines in fig. 2. To decrease the relative velocity of the stroke and diminish its length, it may be adjusted as shown by the dotted lines H in said fig. 2; and to give the minimum relative velocity and minimum length of stroke, it is adjusted as shown by the dotted lines L in fig. 2.

Thus it is seen that the end of the wrist-pin to which the pitman-rod is attached is readily adjusted at any required distance from the centre of the wheel.

Having fully described the nature, construction, and operation of my invention, I will now specify what I claim, and desire to secure by Letters Patent.

I claim the combination of the wheel B, provided with an angular recessed or slotted opening, *b*, with the wrist-pin C, provided with angles corresponding with the said opening, and a key, *a*, all arranged and operating substantially as set forth.

JOHN H. ELWARD.

Witnesses:

W. E. MARRS,

L. L. COBURN.