

W. H. BURKHART.

Harvester.

No. 52,526.

Patented Feb. 13, 1866.

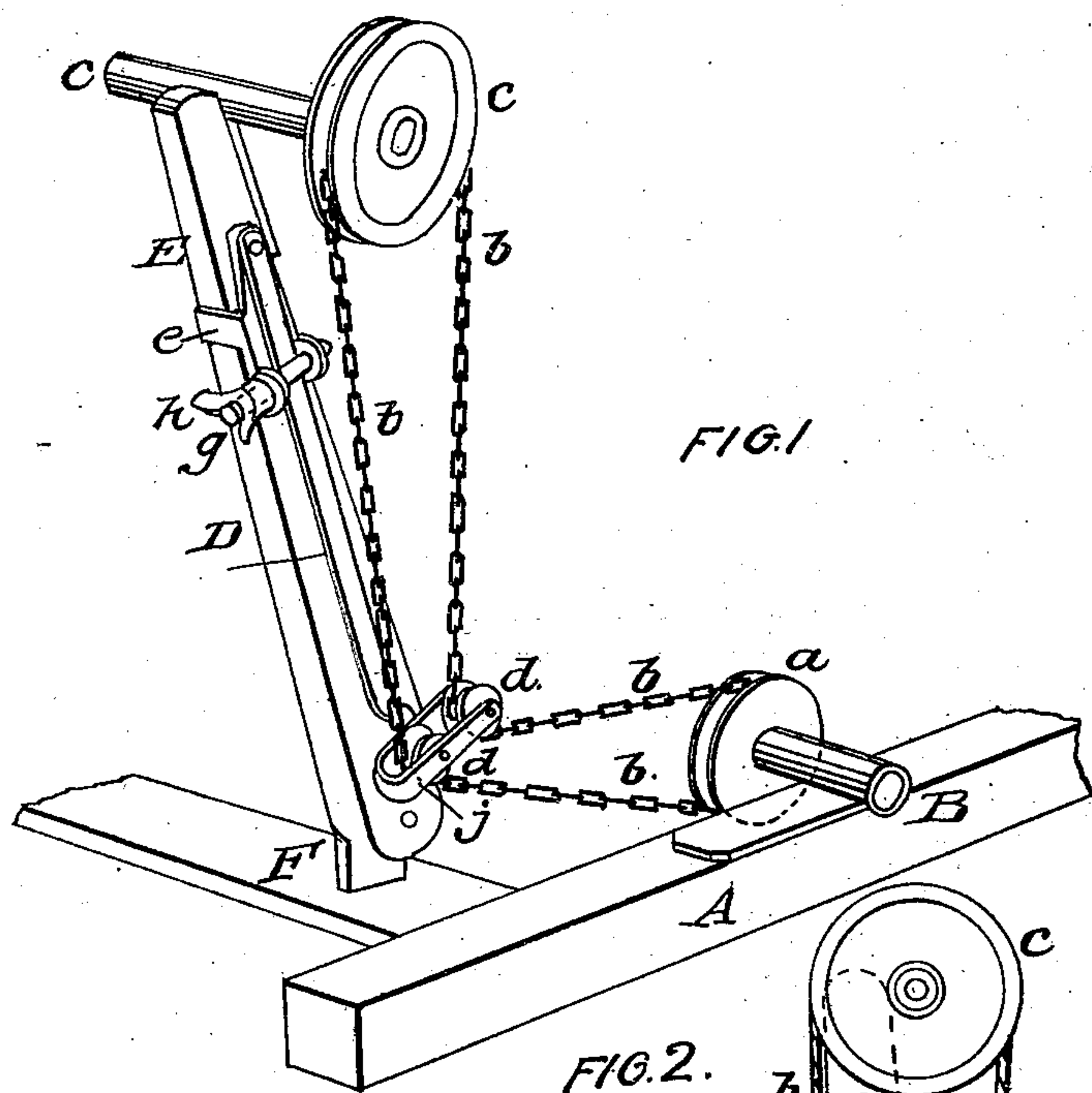


FIG. 1

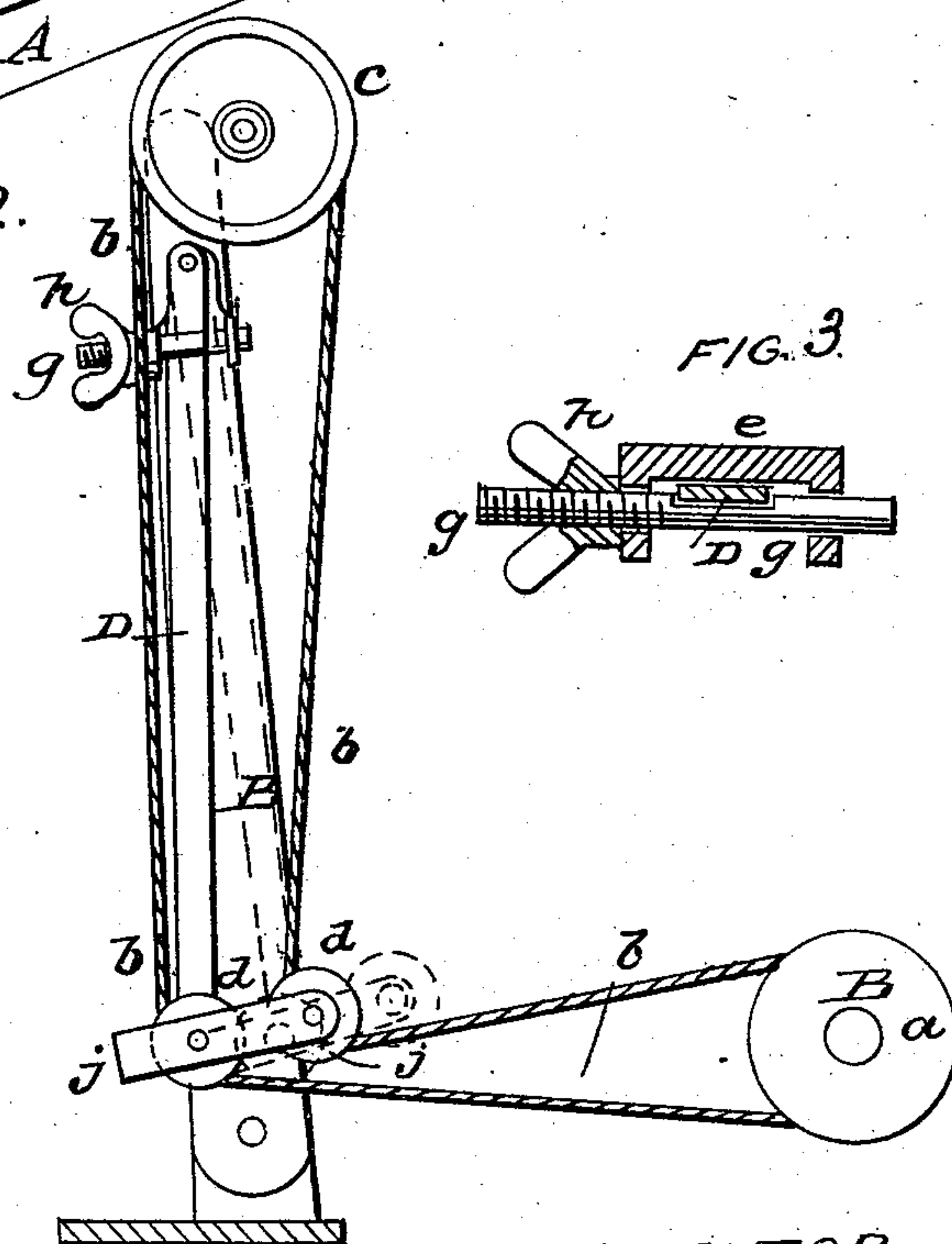


FIG. 2

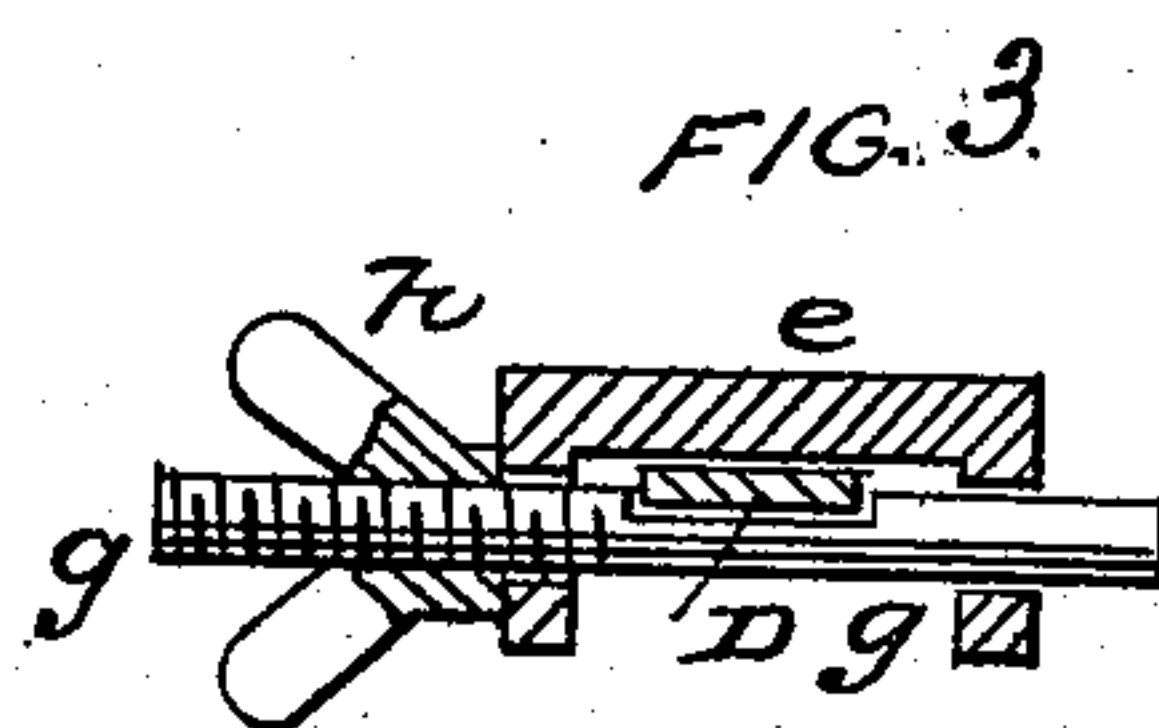


FIG. 3

WITNESSES

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UNITED STATES PATENT OFFICE.

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IMPROVEMENT IN HARVESTERS.

Specification forming part of Letters Patent No. 52,526, dated February 13, 1866.

To all whom it may concern:

Be it known that I, WILLIAM H. BURKHART, of Bucyrus, Crawford county, State of Ohio, have invented a Mode of Adjusting the Reel-Bands of Harvesting-Machines; and I do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings, making a part of this specification, in which—

Figure 1 is a perspective view, representing my invention applied to the reel-band of a harvesting-machine. Fig. 2 is an elevation, indicating the adjustable suspension-spring in two positions. Fig. 3 is a sectional view, showing the adjusting-screw and a mode of connecting the suspension-spring to it.

This invention relates particularly to harvesting-machines wherein the finger-beam is attached to the frame of the machine by means of a joint in such manner that this finger-beam can rise or fall and accommodate itself to inequalities of the surface of the ground over which the machine is drawn.

In such machines it is important to provide for allowing the belt which communicates motion from a driving-shaft to the reel-shaft to accommodate itself to the vibrations of the finger-beam without liability of slipping off its pulleys, and to this end I invented, and secured by Letters Patent bearing date 1865, a spring-stirrup, which was attached rigidly to the inner side of the inner reel-post, as fully set forth in said patent.

The object of my invention is to provide for adjusting said spring or its equivalent so that the driving-belt can be tightened at pleasure and always kept under proper tension, as will be hereinafter described.

To enable others skilled in the art to understand my invention, I will describe its construction and operation.

In the accompanying drawings, A represents one of the longitudinal beams of the frame of a harvesting-machine, and B is a driving-shaft or axle, to which a grooved pulley, *a*, is keyed outside of the frame. This pulley communicates a rotary motion to the reel-shaft C through the medium of a belt or chain, *b*, which passes over the pulleys *a* and *c*, and also under two small pulleys, *d d*, which have their bear-

ings in a frame that is pivoted to the lower end of a spring, D. The spring D is pivoted at its upper end to a plate, *e*, which is secured to the inner side of the inner reel-post, E, as shown in Figs. 1 and 2. This reel-post is suitably secured to the finger-beam F, and of course partakes of the movements of this beam when the machine is in operation.

g represents a screw-rod, which is passed loosely through ears that are formed on the plate *e*, and which has a thumb-nut, *h*, on one end, by turning which said rod can be adjusted in a direction with its length. This rod is notched to receive the spring D, as clearly shown in Fig. 3, so that by adjusting this rod the lower end of the spring, with its small pulleys *d d*, can be moved toward or from the driving-pulley *a* on shaft B.

By this simple contrivance a person can adjust the belt or chain *b* so as to keep it under proper tension without changing the relative positions of the two pulleys *a* and *c* or removing the chain therefrom. It is not only necessary to adjust the tension of chains which have become loose in consequence of long usage, but it is important to provide for applying chains of different lengths to the pulleys and to keep them sufficiently tight to give motion to the reel-shaft. This can all be done by simply turning the nut *h* on the screw-rod *g*.

The frame *j*, to which the pulleys *d d* are applied, is pivoted to the spring D, so that it will accommodate itself to the adjustments of this spring and always maintain a proper relation to the chain which passes under the pulleys *d d*.

Having thus described one mode of carrying out my invention, what I claim as new, and desire to secure by Letters Patent, is—

The adjusting-bolt, in combination with the spring pendent pulley-support for regulating the tension of the reel-band, substantially as described.

Witness my hand in matter of my application for a patent for improved mode of adjusting the reel-bands of harvesting-machines.

WM. H. BURKHART.

Witnesses:

J. R. CLYMER,
JOHN KALER.