A. J. SPAULDING & J. R. HIBBS.

Harvester Safety Attachment.

No. 204,509. **Patented June 4, 1878.**

Fig. 1

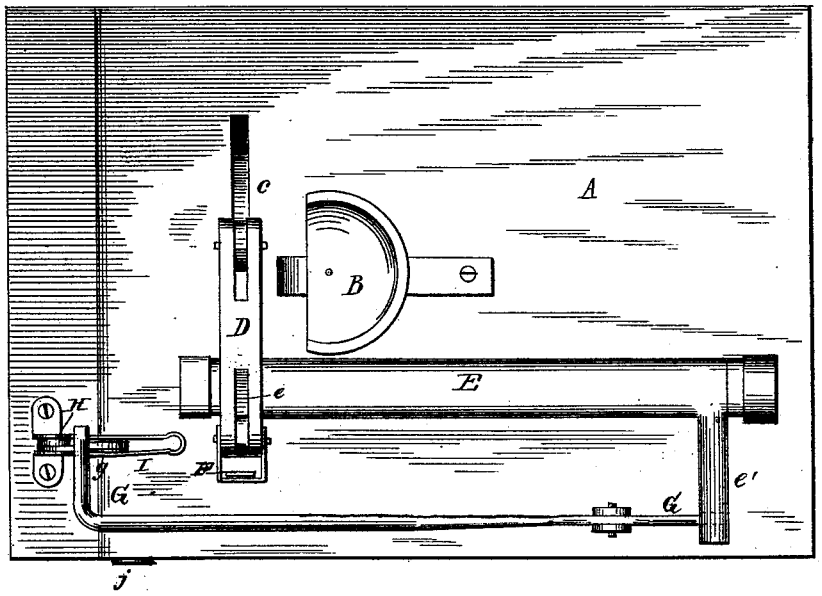


Fig. 2.

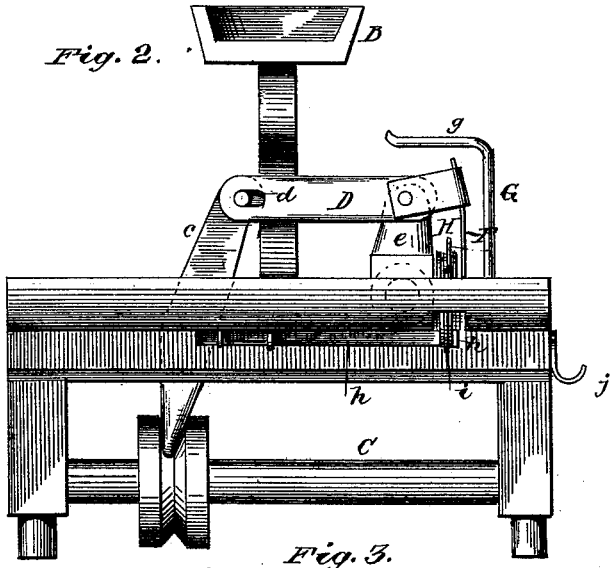
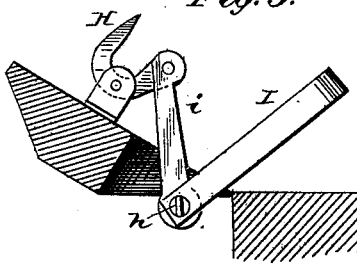


Fig. 3.



Witnesses
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UNITED STATES PATENT OFFICE.

ALBERT J. SPAULDING AND JOHN R. HIBBS, OF SMYRNA, OHIO.

IMPROVEMENT IN HARVESTER SAFETY ATTACHMENTS.

Specification forming part of Letters Patent No. **204,509**, dated June 4, 1878; application filed March 27, 1878.

To all whom it may concern:

Be it known that we, ALBERT J. SPAULDING and JOHN R. HIBBS, of Smyrna, in the county of Harrison and State of Ohio, have invented certain new and useful Improvements in Safety Attachments for Harvesters; and we do hereby declare the following to be a full, clear, and exact description thereof, reference being had to the accompanying drawing, and to the letters of reference marked thereon, and in which drawing—

Figure 1 represents a plan view of our improvement. Fig. 2 represents a front view of the same, and Fig. 3 is a detached sectional view thereof.

The same part in the several figures is designated by the same letter.

This invention appertains to certain improvements in safety attachments for harvesters, the object of which is to bring the throwing of the knives out of motion under the control of the foot of the driver, to avoid, in the event of his being thrown or falling from his seat, the mutilating, cutting, or mangling the limbs or body by the knives.

The nature of our invention consists of mechanism which, by the weight or slight downward pressure of the foot of the driver or attendant, will move the clutch of the operating mechanism of the knives so as to put said knives in motion, and the instant the foot is removed be thrown out of motion, substantially as hereinafter more fully set forth.

In the annexed drawing, A represents the seat-supporting platform or frame of a harvester, and B the driver's seat, suitably mounted in position thereon. C marks the driving-shaft, having a clutch which serves to engage and disengage the operating mechanism of the knives with said shaft. From this clutch extends upwardly through the platform A a lever, *c*, provided with arms or projections to connect it to a horizontal lever or bar, D. The arms or projections of the lever *c* enter elongated slots *d* in the bar or lever D, the object of which is to insure the immediate unclutching of the operating mechanism of the knives upon the removal of the foot from the clutch-operating mechanism, as by thus slotting the lever or bar D more or less jar or concussion is imparted to the clutch, which facilitates its movement. The other end of the lever or bar D is fulcrumed to one arm, *e*, of a rock-shaft, E, journaled in studs or uprights fastened to the platform A. This bar and rock-shaft are acted upon by a spring, F, so as to hold the parts in an unclutched position. The spring F is fastened at one end to the platform A, and at its other end to the bar or lever D.

G refers to a foot-lever, fulcrumed to a stud fastened upon the platform A, the rear or short arm of which extends beneath a second arm, *e'*, of the rock-shaft E, to effect its operation. The forward end of the lever G is provided with a foot-rest, *g*.

H marks a hook, pivoted between or in suitable means fastened to the platform A, and connected to a spring, *h*, upon the front end of said platform by means of a link or connection, *i*, by which spring and connection the hook or lever H is held so as to permit the foot-rest of the lever G to pass its beak and be held thereby, as presently more fully described. I refers to an upwardly-projecting foot-rest or stirrup attached to the spring *h*.

It will be seen by the transference of the foot from the foot-rest *g* of the lever G, when the latter has been depressed, putting the knives in operation, to the second rest or stirrup I, and pressing outwardly until the leg of the driver is about straight, the foot-rest *g* of lever G will be caught by the beak of the hooked lever H, and thus be held in a depressed position, and with less effort on the part of the driver.

By this construction and combination of parts it will be further observed that, at the moment the driver's foot is removed from the lever G, or its holding device just described, the knives are instantly put out of motion; they are brought entirely under the control of the foot of the driver, and governed in a very simple and expeditious manner, so that in the event of the throwing or falling of the driver from his seat, the knives, being out of operation, will be prevented from mutilating his limbs and body.

Among others may be mentioned the following modifications or equivalents for operating our invention: One is by the use of a disk or plate or other similar device mounted upon

the platform A, having a slot which receives a pin from the clutch-lever *c*, and having a crank answering to the foot-lever G and its foot-rest eccentrically fastened to said disk. Another is by a screw or worm mounted upon the platform A, one end of which screw is swiveled to the clutch-lever *c*, and to the other end is attached a disk having an eccentrically-connected arm or crank, the same as in the first-described modification. In each instance, of course, a spring is used for the same purpose as the spring F, to throw the clutches apart.

A hook, *j*, or other suitable means may be used to hold the lever G down when the driver may be walking.

We do not limit ourselves to the precise construction and adjustment of parts as herein shown, as the said parts may demand more or less variation in shape and adjustment in adapting them to machines of various patterns and styles.

Having thus described our invention, what we claim, and desire to secure by Letters Patent, is—

1. In a safety attachment for harvesters, the combination, with the clutch-operating mechanism and the foot-lever G, of the holding device, consisting of the hook-shaped lever H, spring *h*, and foot-lever or stirrup I, substantially as and for the purpose set forth.

2. The combination of the clutch, its operating-lever *c*, connection or bar D, rock-shaft E *e e'*, spring F, lever G *g*, hook-shaped lever H, the spring *h*, foot-lever or stirrup I, and hook *j*, substantially as and for the purpose set forth.

In testimony whereof we have hereunto signed our names in presence of two subscribing witnesses.

ALBERT J. SPAULDING.
JOHN R. HIBBS.

Witnesses:
O. ALDRICH,
JAMES H. LANGE.