J. S. DAVIS.

Harvester.

No. 75,383. Patented March 10, 1868.

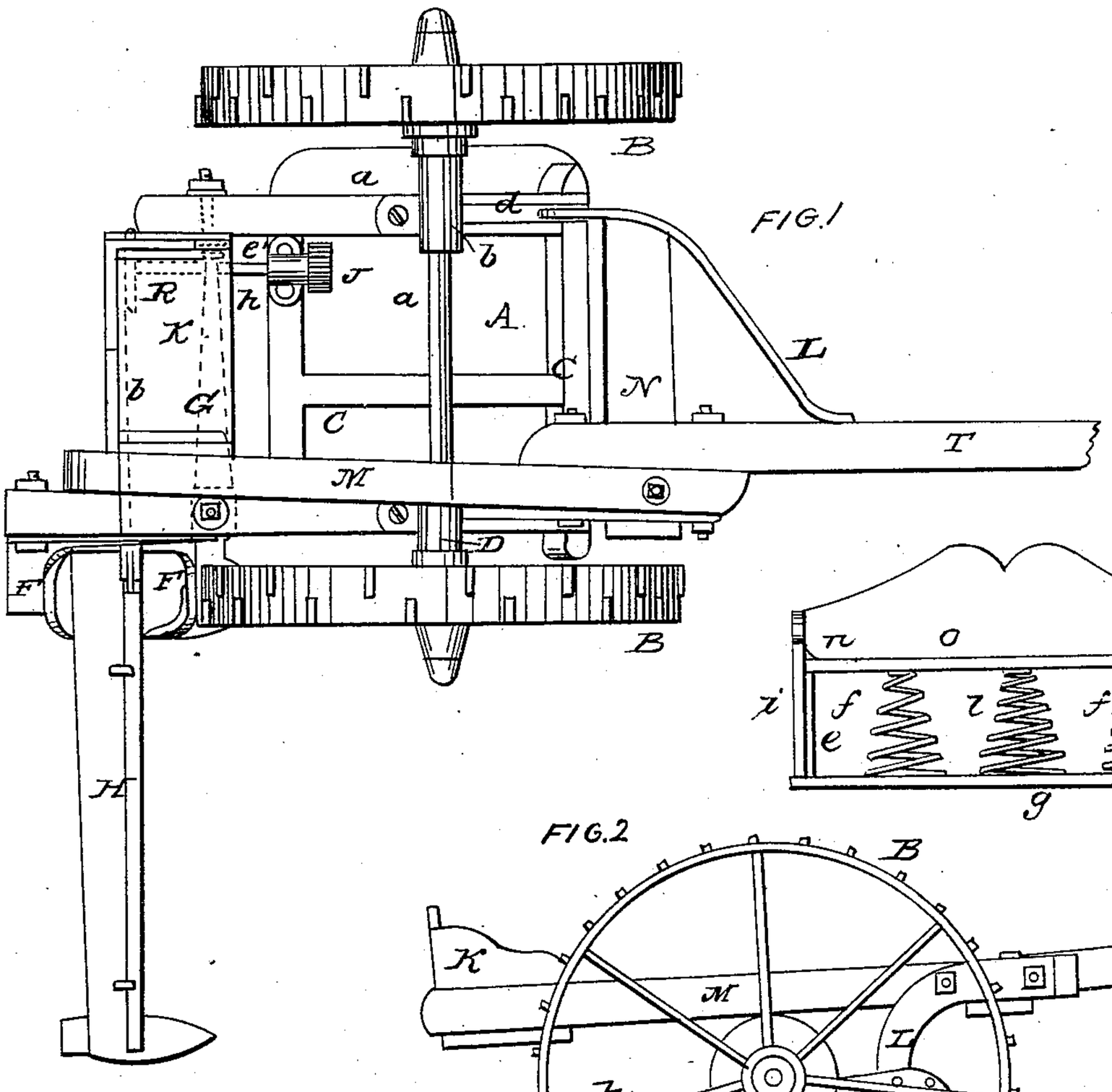


FIG. 1

FIG. 2

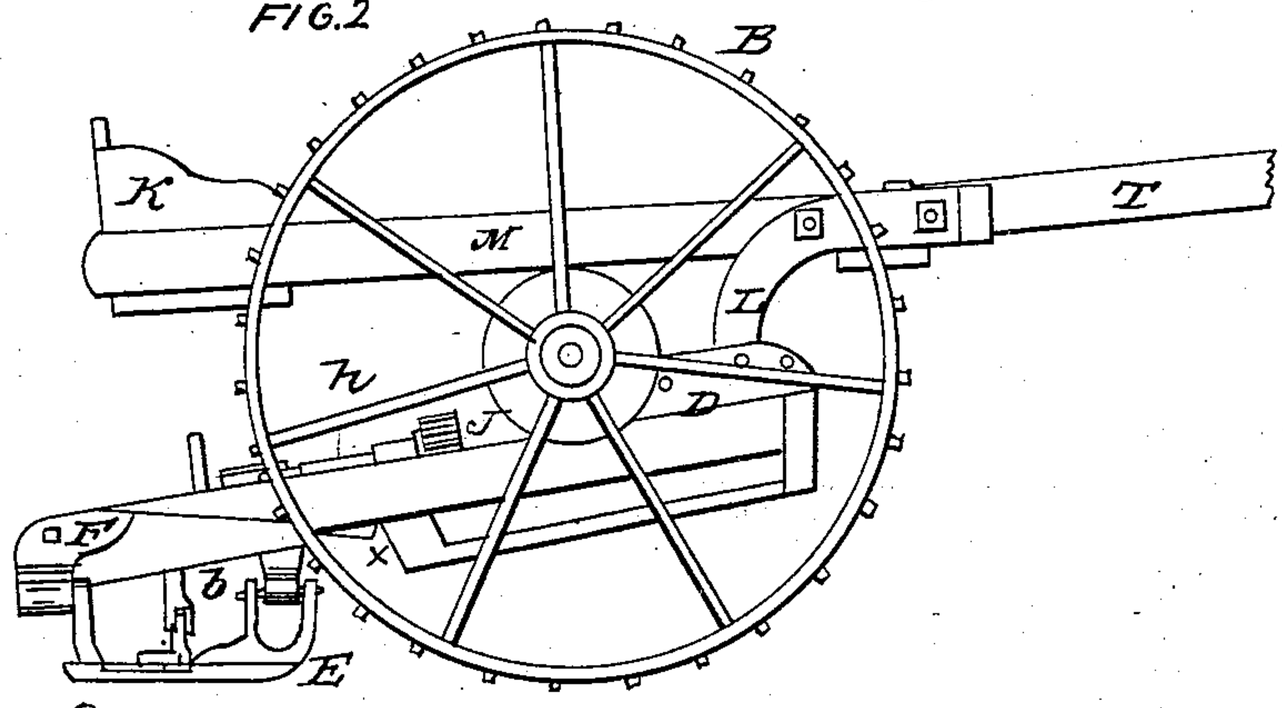
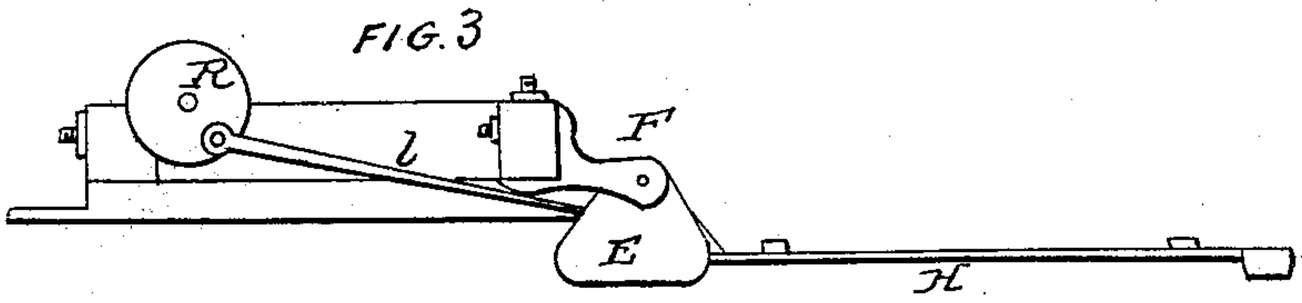


FIG. 3



WITNESSES

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JOHN S. DAVIS, OF TIFFIN, OHIO.

Letters Patent No. 75,383, *dated March* 10, 1868.

IMPROVEMENT IN HARVESTERS.

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 S. DAVIS, of Tiffin, in the county of Seneca, and in the State of Ohio, have invented certain new and useful Improvements in Combined Reaper and Mower; and do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings, and the letters of reference marked thereon.

In the annexed drawings, making a part of this specification, A represents the axle of a mowing or reaping-machine, and B B represent the drive-wheels of the same, made larger than the ordinary size for said machines, for the purpose of holding the axle farther from the ground, and thereby give room for the frame C, which is suspended beneath said axle A. C represents a rectangular frame or body, of suitable dimensions, and constructed of strong material, framed together in a substantial manner, and provided with a bottom, *a*, secured to the under side of the frame C, for the purpose of protecting the gearing of the machine from the ground, and for a rest for the feet of the driver when mounted thereupon. The frame C is suspended beneath the axle A by means of the peculiar-shaped journal-bearings D D, which are made so as to rest and work on the axle A, and elongated in that part below said axle, and screwed or bolted to the top and front end of the frame C. These bearings D D are provided with grooves *d d* in the top of the elongated part, and with holes through the sides or flanges to said grooves, at suitable distances apart, for the purpose of receiving and pivoting, at any required distance from the axle A, the bent or curved draw-irons L L of the tongue T to the frame C, and thereby to the machine. G represents an arm, threaded at one end where it passes through the left side of the frame C, and connected thereto by the nuts *e e'*. This arm extends diagonally from this side of the frame down under the other or right side of the frame C to the shoe E, and is hinged to said shoe. It will be seen that this arm is provided with a narrow slot where it rests against the right side of the frame C, and is secured thereto by a bolt passing through said slot. The arm G may be adjusted to the right or left by means of the nuts *e e'*, causing a movement of the front end of the shoe in a corresponding manner. The finger-bar H, being rigidly attached to the shoe E, may be adjusted and kept at right angles with the frame or in a line parallel with the axle A, notwithstanding the constant wear of the bearing and trunnions of the shoe E. It is desirable that the finger-bar H should be in the same line or in a line parallel with the connecting-rod *b*, and by means of the within-described arrangement, can always be so held. Under the supporter F and arm G, and between them and the right side of the frame C, is placed an adjustable wedge or block, *x*, for the purpose of elevating or depressing the front end of the shoe E, and thereby regulating the front edge of the finger-bar H and the knives or cutting-device of the machine, so as to cut close to the ground, or otherwise, as may be desired. The shoe E is hinged at its front end to the arm G, and at the other end is attached to the supporter F by means of a bolt, thereby forming a flexible fastening for said shoe, so that it may, together with the bar H, be turned up in a convenient manner when the machine is not at work. The supporter F is screwed or bolted securely to the frame C, for the purpose of holding or securing one end of the shoe E. R represents a crank-wheel, to which is attached, and which works, the connecting-rod *b*, and is itself attached to one end of the shaft *h*, which has the pinion *j* attached to the other end. T represents a tongue or draught-pole of the machine, and is attached to the frame C by means of the bent or curved draw-irons L L, which are pivoted at one end in the grooves *d d* of the bearings D D, the left-hand one passing upward and around the end of the cross-bar N, to which it is screwed, and thence diagonally to and fastened to the side of the tongue T, forming lateral brace thereto, the right-hand one passing upward and alongside of the bar M, and bolted through said bar and the tongue T, which is secured to and beside said bar M. The bar M is bolted to the cross-bar N as well as the tongue T, and extends backward diagonally over the axle A, and suspends the seat K, so that the middle of said seat is in a line with the middle of the axle A, thus making the seat steadier than if hung near one or the other side, there being less jar or jostle in the middle than at any other point in the machine or a carriage of any kind. The bar M being on the right side, and next to the knives and finger-bar H, acts as a convenient guard, and is therefore a protection to the driver against his being thrown off the machine on the side of the knives, and the other side being open, and the frame C near the ground, the driver can readily get off or on the machine from behind the wheel A, without any danger of harm whatever. The frame C being suspended beneath the axle A, and having the tongue T attached to it by the curved draw-irons L L, which may be adjusted at any desired distance from the axle A, the pressure on the

shoe E may be regulated thereby. When the machine is backed, the rear end of the frame C and the shoe E and the cutting-device are raised up so as to back more readily and without the dragging of any part of the machine, that is, the whole weight of the machine is thrown upon the axle and wheels. The seat K being suspended by means of the bar M, which is secured to the tongue T, is not thrown up when the machine is backed, but remains steady, and the driver is just as safe when backing the machine as when going ahead. The seat K is composed of a bottom board, *g*, secured to the under side of the bar M, and end-pieces *i i* provided with vertical cleats *c c* and back *l*. Secured to the bottom board *g* are a suitable number of spiral springs *f f*, and resting upon them, and fitting within the ends *i i* and back *l*, is a seat-board, *o*, provided with notches in each end to correspond with and work up and down on the cleats *c c*. Above the seat-board *o*, and to keep it in place, are secured to the end-pieces *i i*, cleats *n n*; the whole making a cheap, convenient, and excellent spring-seat for mowing and reaping-machines.

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

1. Attaching the adjustable bar G′ to a harvester in such a manner that the finger-bar H and connecting-rod *b* may be held in the same line, or parallel with each other, as and for the purposes set forth.

2. The adjustable arm G, in combination with the frame C and shoe E, as and for the purpose specified.

3. The block *x*, in combination with the adjustable arm G, shoe E, and frame C, substantially as and for the purpose set forth.

4. The arrangement of the seat K with the bar M, so that middle of said seat is in a line with the middle of the axle A, substantially as and for the purposes set forth.

5. The draw-irons L L, in combination with the cross-bar N, draught-pole T, and arm M, as arranged and for the purpose specified.

6. The arrangement of the frame C beneath the axle A with the draw-irons L L, tongue T, and bar M, so that the rear end of the said frame C may be raised or elevated without elevating or throwing up the driver in his seat, substantially as specified, and for the purpose set forth.

In testimony that I claim the foregoing, I have hereunto set my hand, this 16th day of December, 1867.

JOHN S. DAVIS.

Witnesses:

A. H. BYERS,

ELVERO PERSONS.