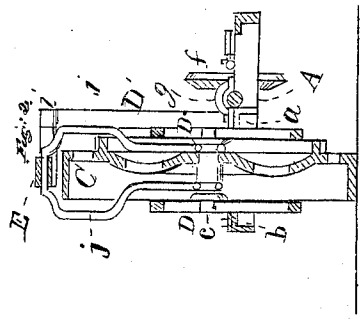
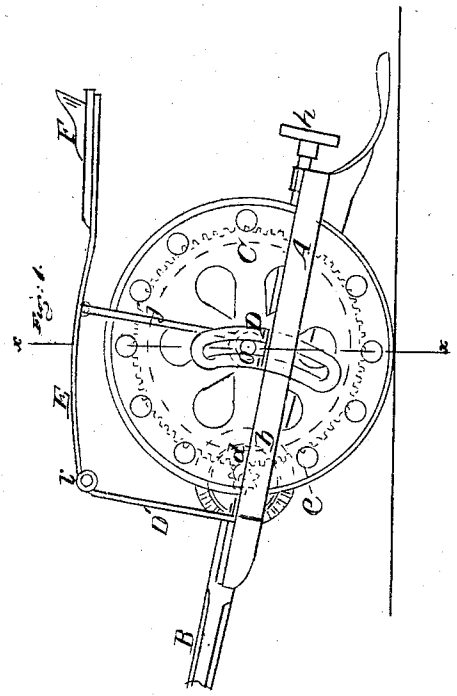
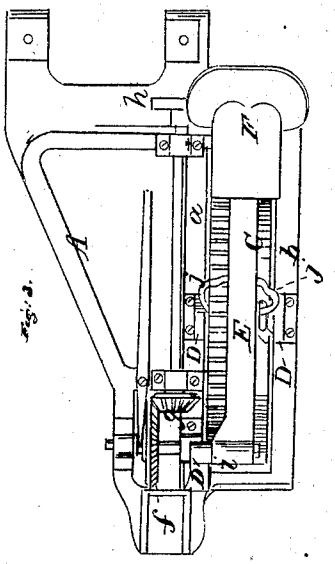
J. Scoville,
Mower.

No. 27010 Patented Jan. 31. 1860.







Witnesses:
Albert H. Bishop.
Augustus B. Titcb

Inventor
J. Scoville

UNITED STATES PATENT OFFICE.

J. SCOVILLE, OF BUFFALO, NEW YORK.

IMPROVEMENT IN HARVESTERS.

Specification forming part of Letters Patent No. **27,010**, dated January 31, 1860.

To all whom it may concern:

Be it known that I, J. SCOVILLE, of Buffalo, in the county of Erie and State of New York, have invented a new and Improved Grain and Grass Harvester; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the annexed drawings, making a part of this specification, in which—

Figure 1 is a side view of my invention. Fig. 2 is a vertical section of the same, taken in the line *x x*, Fig. 1. Fig. 3 is a plan or top view of the same.

Similar letters of reference indicate corresponding parts in the several figures.

To enable those skilled in the art to fully understand and construct my invention, I will proceed to describe it.

A represents the main frame of the machine, which may be of triangular or an approximate form, a draft-pole, B, being attached to its front end and the cutting device (not represented) attached to its back end. The main frame A is provided with a longitudinal bar, *a*, between which and the side bar, *b*, of the frame the supporting and driving wheel C is placed. The axis *c* of the wheel C has its end fitted in slotted journal-boxes D D, attached one to the bar *a* and the other to the bar *b* of the main frame, the curvature of the slots corresponding to the curve the main frame would describe in rising and falling in order to keep the pinion *d* of the sickle-driving mechanism in gear with the toothed rim *e* on the driving-wheel; or, in other words, the curved slots are struck from the axis of the pinion *d*. This will be clearly understood by referring to Fig. 1. This is the only attachment existing between the main frame and the driving and supporting wheel. The sickle, which may be of the ordinary reciprocating kind, is driven from the wheel C by the gearing *d e*, already alluded to, in connection with gearing *f g* and crank-pulley *h*. This constitutes a driving mechanism common to many harvesting-machines.

To the front end of the main frame A an upright, D′, is attached, and to the upper end of the upright D′ an elastic lever-seat bar, E, is secured by a joint, *i*. The elastic lever-seat bar E has pendants *j j* attached to it at about its center, and the lower ends of these pendants are fitted in the axis *c* of wheel C, the axis being allowed to turn freely in the pendants. On the back end of lever-seat bar E the driver's seat F is placed.

From the above description it will be seen that the main frame A may rise and fall independently of the wheel C, in consequence of its axis *c* being placed loosely in the slotted journal-boxes D, and it will also be seen that the weight of the driver on the seat F is transmitted by the pendants *j j* to the axis *c* of the wheel C, as also is a portion of the weight of the frame A. The wheel C therefore will be prevented from slipping as the machine is drawn along, and the wheel and main frame, while being connected together, still allowed an independent movement, so that the sickle may conform to the inequalities of the ground without being at all affected by the movement of the wheel in passing over undulating surfaces.

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

1. The combination of the hinged lever-seat bar E with the slotted journal-boxes D and axis *c*, as and for the purpose herein shown and described.

2. The employment of the slotted journal-boxes D, in combination with the traction-wheel C and pinion *d*, as herein shown and described, whereby said traction-wheel is left free to rise and fall independently of the frame A, for the purposes set forth.

J. SCOVILLE.

Witnesses:
ALBERT W. BISHOP,
AUGUSTUS B. FITCH.