

(No Model.)

J. SAURER.
Cleaner for Grain Drill Hoe.

No. 230,068.

Patented July 13, 1880.

Fig. 1.

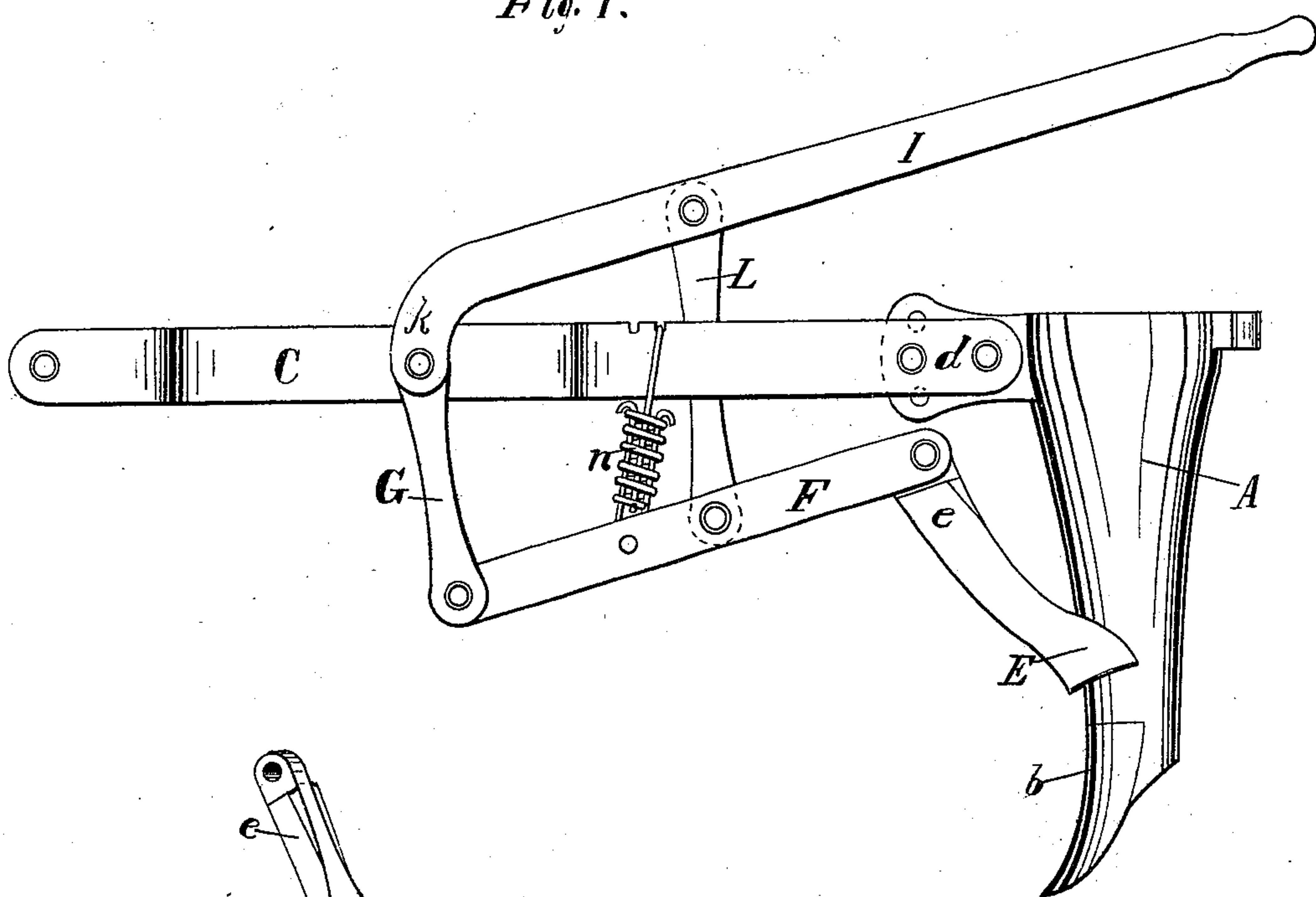
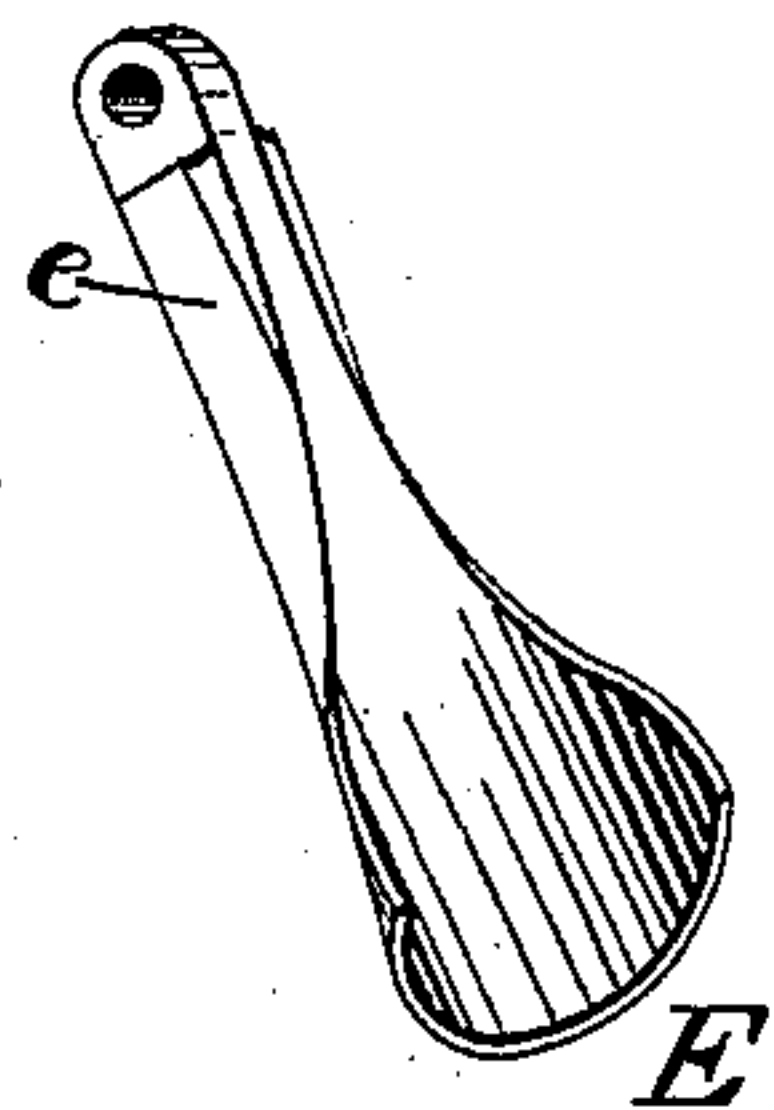


Fig. 2.



Witnesses:

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UNITED STATES PATENT OFFICE.

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CLEANER FOR GRAIN-DRILL HOES.

SPECIFICATION forming part of Letters Patent No. 230,068, dated July 13, 1880.

Application filed April 5, 1880. (No model.)

To all whom it may concern:

Be it known that I, JOHN SAURER, of Dalton, in the county of Wayne and State of Ohio, have invented a new and useful Improvement in Cleaners for Grain-Drill Tubes, of which the following is a specification.

My invention relates to an improvement in devices for cleaning the points or shares of grain-drill hoes, and will first be described and then designated in the claims.

In the drawings hereto annexed, Figure 1 is a side view of my device. Fig. 2 is a separate view of the scraper.

The letter A designates the drill tube or hoe, having a steel point or share, *b*.

C is the bar, which usually is pivoted at its forward end to the frame or body of the drill. The drill-tube is attached to this bar at *d*, preferably in such manner as to permit of changing its inclination relative thereto.

The letter E designates the scraper, its lower part having a shape, in cross-section, resembling a horseshoe, as seen in Fig. 2, thereby adapting it to fit around the front part of the tube.

The upper end or shank, *e*, of the scraper is secured in any suitable manner to one end of the horizontal bar F, the other end of which is suspended by the rod or hanger G from the bar C.

The letter I designates a lever or lifting-handle, one end, *k*, of which is pivoted to the bar C. A link or rod, L, connects the lifting-lever and the horizontal bar F, so that the end of the latter which carries the scraper may be raised or lowered.

It will be seen that while the end of the horizontal bar F which carries the scraper has an up-and-down movement, the entire bar may move endwise from or toward the drill-tube.

A spring, *n*, of any suitable kind—in this instance a spiral spring—is attached to the bar C and to the bar F in such manner as to press the latter endwise toward the drill-tube, thereby keeping the scraper in contact with the drill-tube. The action of the spring, further, is to raise the scraper and sustain it at an elevation above the ground.

The above-described means of suspending

the scraper by attaching it to that end of an endwise-moving horizontal bar which has a vertical movement affords to it all of the movements requisite for scraping the curved point of the drill-tube.

In practice, either one of the drill-tubes may be cleaned by depressing a lever, I, or the entire gang of tubes of a drill may be cleaned by raising the beam which supports the tubes, thereby drawing each tube along the horse-shoe-shaped scraper.

By the use of my device there is no necessity of stopping while at work to clean the drill tube or points, as each time the tubes are raised in turning the drill around to recross the field the scraper removes any adhering dirt and the tubes start in clean.

Having described my invention, I claim and desire to secure by Letters Patent of the United States—

1. In a grain-drill, the combination, with the drill-tubes, of a scraper the edge of which has a shape similar to a horseshoe, and means, substantially as described, attached to the scraper to raise and lower it, as set forth.

2. The combination, with the drill-tubes, of a device for cleaning the tubes and points, consisting of a scraper having a shape adapting it to fit around the front part of the tube, and attached to a horizontal bar adapted, by means substantially as described, to move vertically and endwise, and a spring attached to the bar to press it toward the drill-tube and to sustain it, as set forth.

3. A drill tube and point cleaner, consisting of a scraper adapted to fit about the front part of the tube, a bar, F, to which the scraper is attached, a hanger, G, by which one end of the bar is suspended, permitting it to have an endwise movement, a lever pivoted by one end above these parts, a link or rod, L, connecting the lever and the bar F, and a spring attached to the bar to keep the scraper in contact with the drill-tube, as set forth.

JOHN SAURER.

Witnesses:

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