J. H. Dalbey,

Scraper.

No. 93281. Patented Aug. 3. 1869.

fig 1

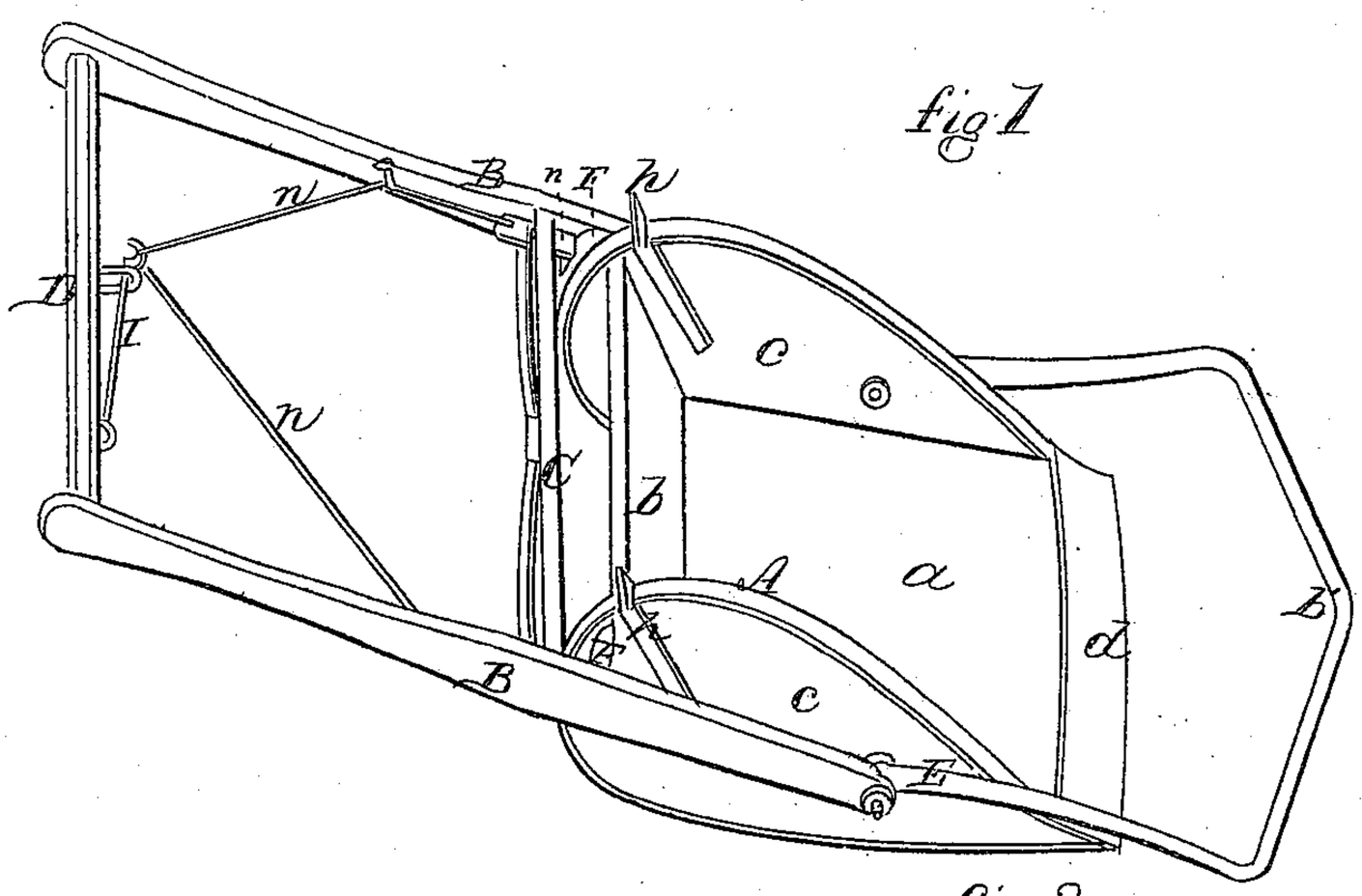


fig 2

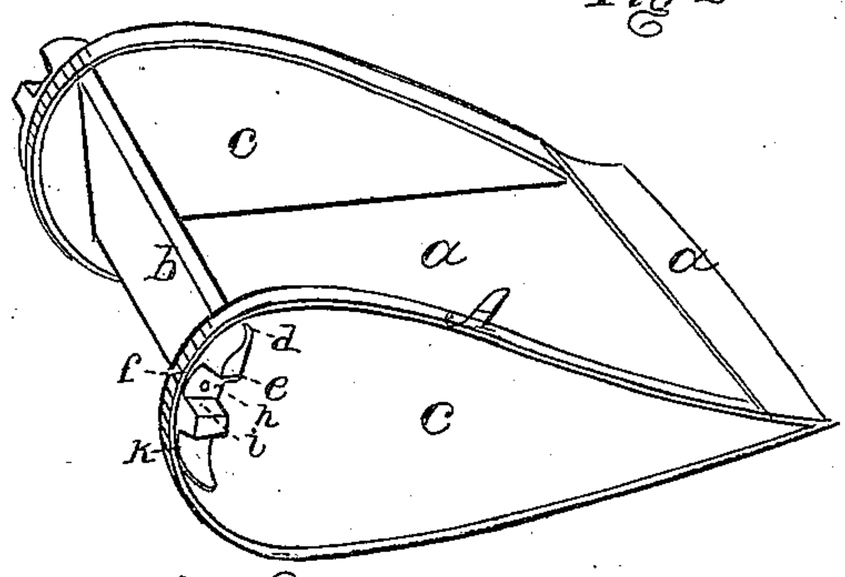
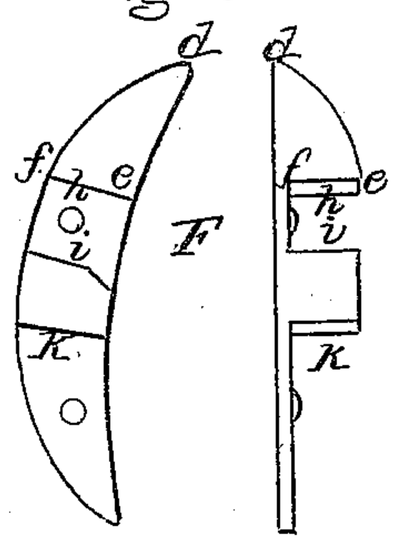


fig 3



Witnesses
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Atty.

UNITED STATES PATENT OFFICE.

JOEL H. DALBEY, OF SPRINGFIELD, OHIO.

IMPROVED EARTH-SCRAPER.

Specification forming part of Letters Patent No. **93,281**, dated August 3, 1869.

To all whom it may concern:

Be it known that I, JOEL H. DALBEY, of Springfield, in the county of Clarke, and in the State of Ohio, have invented certain new and useful Improvements in Dirt-Scrapers; and I do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings, and to the letters of reference marked thereon.

The nature of my invention consists in the construction and arrangement of a revolving dirt-scraper, but more especially in the arrangement for sustaining and releasing the scraper and revolving and resetting it for filling again.

In order to enable others skilled in the art to which my invention appertains to make and use the same, I will now proceed to describe its construction and operation, referring to the annexed drawings, which form a part of this specification, and in which—

Figure 1 is a perspective of the scraper mounted and ready for use. Fig. 2 is a perspective of the scraper alone, and Fig. 3 enlarged views of the metal blocks attached to the scraper, as will be hereinafter fully set forth.

A represents the scoop, of which *a* is the bottom, *b* the tail-board, and *c c* the sides or runners, which latter are around its edges provided with metal bands. The front edge of the bottom *a* is provided or shod with metal, marked *d*.

The scoop A is pivoted between two side rails or bars, B B, which are at a suitable point connected by the cross-tie C, and at their rear ends by the hand-rail D. The bolts which pivot the scoop to the side rails pass through the ends of the bail E, to the center of which the team is to be hitched.

On the outside of the scoop, near the rear edge of the sides or runners *c c*, is placed a metal block, F, of the peculiar curved construction shown in Fig. 3. Its upper end is beveled both on the outside from *d* to *e*, and also on the rear side from *d* to *f*. Below these bevels it forms a slot, having a shoulder, *h*, above and another, *i*, below. Then still farther below is another shoulder, *k*, the use of all of which I will fully describe hereinafter.

Through the ends of the cross-tie C are passed two spring-bolts, *m m*, of suitable size to engage between the shoulders *h* and *i* of the blocks F F. The spring-bolts *m m* are withdrawn by means of draw-bars *n n*, connected to a small lever or bar, I, attached to the hand-rail D, the draw-bars *n n* being held in proper line of draft by means of loops *o o*, attached to the inner sides of the side rails, B B. Near the rear ends, on the upper sides of the runners *c c*, are secured pointed bars or grabs, *p p*, which project upward, as seen in Fig. 1. When the scraper is in position for filling, the spring-bolts *m m* rest in the spaces between the shoulders *h* and *i*, thus holding the scoop firmly in position. The operator can then, by bearing on the hand-rail D, control the edge *d* of the scoop, so as to turn it down or up, to the right or to the left, as he may desire, until the scoop is filled.

To empty the scraper and reset it again for filling, the operator will first draw the spring-bolts *m m* from the spaces between the shoulders *h* and *i*, which is done by pressing on the lever I, then lower the handle D until the spring-bolts, when released, shall pass under the shoulders *k k*, then raise the handle until the edge *d* takes hold in the ground, when the scoop will be turned bottom upward and emptied of its contents. The grabs *p p* now sink into the ground, so as to prevent the scraper from sliding, and by the forward movement of the team the scoop is drawn over right side up. The bolts *m m*, passing down the bevels *d f*, are conducted into the spaces between the shoulders *h* and *i*, as at the first, and the scraper is ready for filling again. The bevels *d e* on the outer sides of the blocks F F serve as guides to the side rails, B B, and render the connection of the spring-bolts with the shoulders the more certain. The spaces between the shoulders *h* and *i* should be wider in front than in the rear, so that the spring-bolts may the more readily dislodge any dirt or other foreign substance that might accumulate in them.

The spring-bolts *m m* may either be constructed so that the bolts and springs are separate one from the other or they may be permanently attached together, as convenience of manufacture may suggest.

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

The arrangement of the scraper A, with blocks F F and grabs *p p*, handles B B, spring-bolts *m m*, bars *n n*, loops *o*, and lever I, the several parts being constructed and operating subtantially as specified.

In testimony that I claim the foregoing I have hereunto set my hand this 5th day of May, 1869.

JOEL H. DALBEY.

Witnesses:

R. M. DALBEY,

WM. W. RICE.