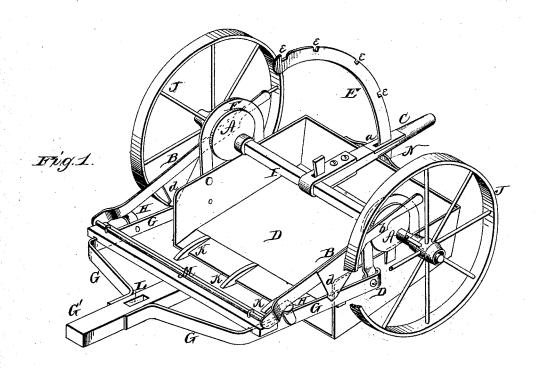
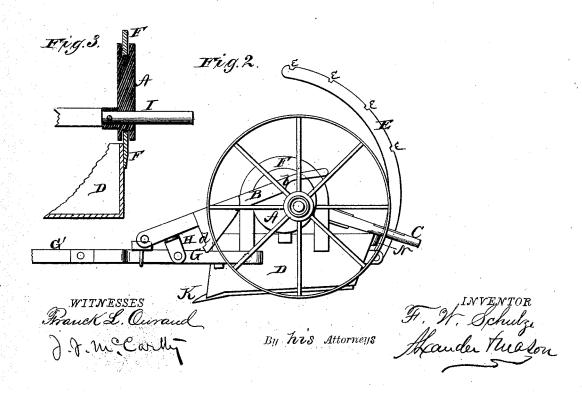
## F. W. SCHULZ. Self-Loading Cart.

No. 211,429.

Patented Jan. 14, 1879.





## UNITED STATES PATENT OFFICE.

FRIEDRICH W. SCHULZ, OF MOUNT PLEASANT, IOWA.

## IMPROVEMENT IN SELF-LOADING CARTS.

Specification forming part of Letters Patent No. 211,429, dated January 14, 1879; application filed July 1, 1878.

To all whom it may concern:

Be it known that I, FRIEDRICH WILHELM SCHULZ, of Mount Pleasant, in the county of Henry and State of Iowa, have invented certain new and useful Improvements in Self Loading and Dumping Carts; and I do hereby declare the following to be 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 cart which shall be self-loading and easily dumped, as will be hereinafter more fully set forth.

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 view of my improved earth-eart. Fig. 2 is a side elevation of the same, and Fig. 3 is a detail view of a part of the machine.

I represents the axle, having the wheels J J placed loosely on its ends, so that the axle can turn in the hubs of the wheels. On the axle I are secured two eccentrics, A A, which are grooved around their circumference, and in said grooves are placed semicircular bands or irons F F, to the ends of which is secured the box D. This box is thus suspended from the axle by means of the bands F and eccentrics A. The front of the box is open, and to its bottom are attached teeth K, which project in front thereof, for the purpose of loosening the earth.

In the center of the axle is a lever, C, rigidly attached to it, and projecting a suitable distance in rear thereof, by means of which the box D may be adjusted to scrape off one, two, or more inches of earth. By means of the lever C the box is also raised above the ground when loaded for carrying to the dumping-place, and there the box can be entirely turned over for emptying the earth.

The box D is held at any point desired by means of a curved bar or arc, E, which is pivoted to a lug on the rear end of the box, and passes upward through a mortise in the lever

C, and through a plate, a, fastened on the lever. The bar or arc E is, on its outer edge, provided with a series of notches, e e, at suitable measured distances apart, for holding the box at certain heights by the metal plate a taking into said notches, and supporting and holding the lever C from moving either up or down. A spring, N, is arranged between the bar E and the back of the box, as shown in Fig. 2, whereby the bar is held in place.

To the front portion of the box D is pivoted a metal frame, G, which forms connection with the tongue G'. A cross-bar is fastened to the front part of the frame G, and on the same, in suitable boxes or bearings, is placed a rod, M, to the ends of which are secured arms B B. These arms are provided with two hooks, b and  $d_i$  said hooks pointing in opposite directions, as shown. The hooks b b take on the axle I when the box is depressed to scrape, to prevent the box being raised; and when the box is unloaded and inverted the hooks or stops d d take over the axle, to prevent the box from turning back into a horizontal position without first loosening said arms.

The tongue G' is formed with a mortise, L, for the arc E to pass through when the box is inverted.

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

- 1. The combination of the box D, semicircular bands F F, circumferentially grooved eccentrics A A, axle I, and wheels J J, substantially as and for the purposes herein set forth.
- 2. The combination of the box D, suspended by the bands F from the eccentrics A on the axle I, the pivoted are E, having the notches e, the spring N, and the lever C, having the plate a, substantially as and for the purposes herein set forth.

3. The arms B B, having hooks or stops b d, in combination with the axle and box, for the purposes herein set forth.

FRIEDRICH WILHELM SCHULZ. Witnesses:

M. I. BABB, Jno. S. Woolson.