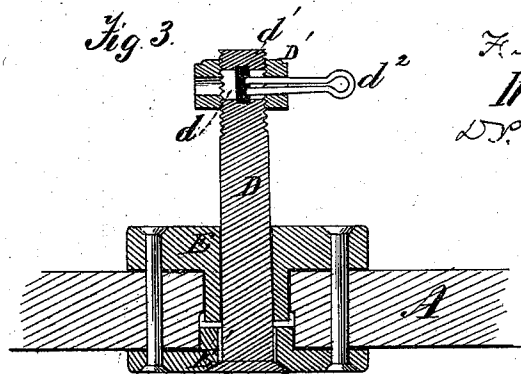
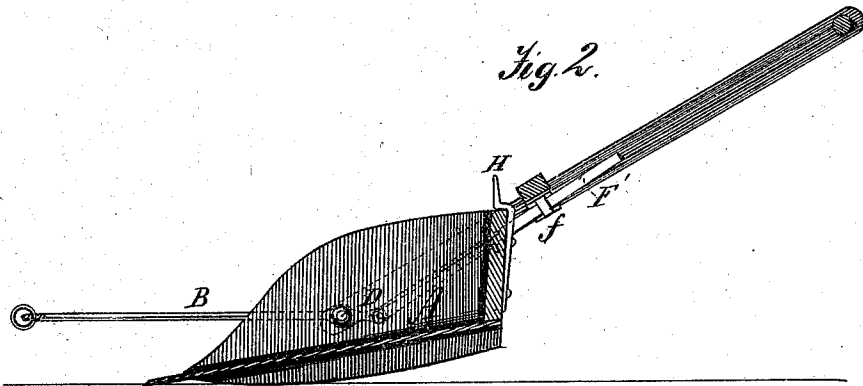
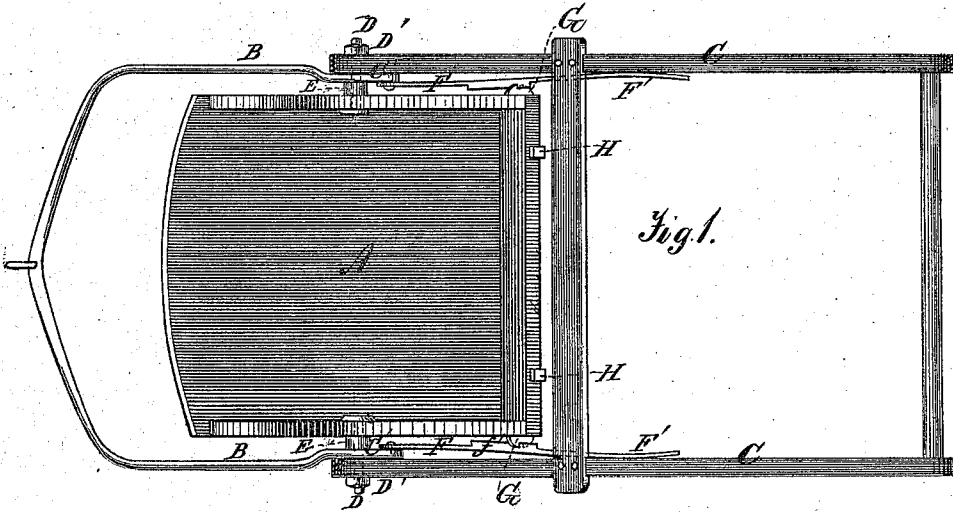


F. A. JACOBS.

Improvement in Revolving Road-Scraper.

No. 131,686.

Patented Sep. 24, 1872.



F. A. Jacobs
Inventor.
D. P. Holloway & Co
Attys

Witnesses.
A. Ruppert
O. Eder, J. E. Eils

UNITED STATES PATENT OFFICE.

FELIX A. JACOBS, OF COLUMBUS, OHIO, ASSIGNOR TO EDWARD M. DOTY
AND LEVI R. DOTY, OF SAME PLACE.

IMPROVEMENT IN REVOLVING ROAD-SCRAPERS.

Specification forming part of Letters Patent No. 131,686, dated September 24, 1872.

To all whom it may concern:

Be it known that I, FELIX A. JACOBS, of Columbus, in the county of Franklin and State of Ohio, have invented certain Improvements in Revolving Road-Scrapers, of which the following is a specification:

This invention relates to that class of revolving road-scrappers in which the scoop is locked to the handles by means of movable detents so arranged in relation to the bail-bars that, as the rear end of the machine is turned up beyond the necessary inclination for scraping, said detents are liberated from the catches on the scoop, permitting the latter to turn and discharge its load. My improvement consists in the employment, with the scoop, bail-bars, and handles, all turning upon common centers, of a movable detent which is pivoted to a lever-arm of the bail-bars, and, sliding in guides on the sides of the handles, operates in connection with the fixed catches on the scoop, in the manner briefly stated, and to be more fully explained hereinafter.

Figure 1 is a plan view. Fig. 2 is a vertical longitudinal section. Fig. 3 is a section of one of the pivot-bolts and lock-nut, drawn on an enlarged scale.

The same letters of reference are employed in all the figures in the designation of identical parts.

The scoop A is constructed with a metallic bottom suitably curved and sharpened at the front edge, and is provided with runners which are formed by extending the side boards below the bottom in the manner shown. Other forms of scoops may be substituted in lieu of the one shown. The bail-bars B B and handles C C are pivoted together with the side boards of the scoop by means of studs or bolts D D, which have their bearings in metallic boxes E E', as best illustrated in Fig. 3. The bail-bars are extended rearward beyond their fulcrums, and to these extensions C' C' are pivoted the bars F F, which, extending rearward, are passed through guides f f on the handles and terminate in springs F' F' which bear with their backs against the handles. At f' f' the bars F F have lips or detents of considerable length, and facing the side boards of the scoop to which the fixed catches G G are firmly secured in such a position that the detents may

engage with the notches in the catches when the scoop is resting on the runners or inclined to the proper position for doing work. The catches are suitably curved, so that the spring detents may ride over them into the notches to lock the rear end of the scoop to the handles. The scoop and handles turning upon centers different from the centers on which the bars F F turn, it follows that, in tilting the machine up at the rear end, the detents and catches will move on each other, and if the machine be tilted up far enough they must eventually disengage each other and thus liberate the scoop from the handles, so that it may revolve to dump its load. The detents being pivoted in rear of the bolts D, they will be disengaged at the rear ends from the catches, but should they be attached to the bail-bars in front of the bolts D, which is an obvious modification, the liberation will occur at the forward ends of the detents. D' D' are nuts screwed on the projecting ends of the pivot-bolts D to prevent the detachment of the several parts pivoted together by said bolts. A hole is bored transversely through the nut and the bolt is provided with two elongated slots, d and d¹, in its screw-threaded end for the reception of a locking-pin, d². The slots in the bolt stand at right angles to each other, so that the nut may be locked at every quarter turn. Thus a means is afforded for connecting the scoop, bail-bars, and handles, snugly together without clamping them together to such an extent as to interfere with their ready turning on the bolts; and the nuts are also secured against unscrewing. H H are spikes or grabs fastened to the tail-board of the scoop, and which, when the latter is turning to dump its load, strike into the soil and cause the scoop to complete its revolution.

I am aware that the use of a movable detent, so arranged with relation to the catches, bail-bars, and handles, as that in tilting the rear end of the machine up beyond a certain point it will be liberated from the catch, is not new in revolving-scrappers, as shown in the application of Joab A. Stafford, of even date herewith; and I therefore make no claim to this feature broadly; but

What I do claim, and desire to secure by Letters Patent, is—

In a revolving road-scraper, the combination, with the scoop, bail-bars, and handles, which turn upon common centers, of a movable detent attached to lever-arms of the bail-bars, and operating in connection with the fixed catches, substantially as set forth.

In testimony whereof I have signed my

name to this specification in the presence of two subscribing witnesses.

FELIX A. JACOBS.

Witnesses:

J. V. LEE,

W. L. JAMISON.