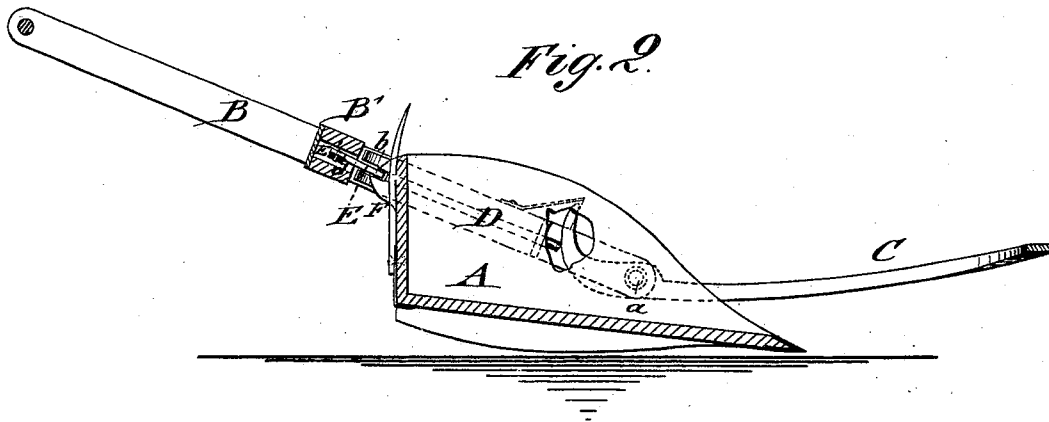
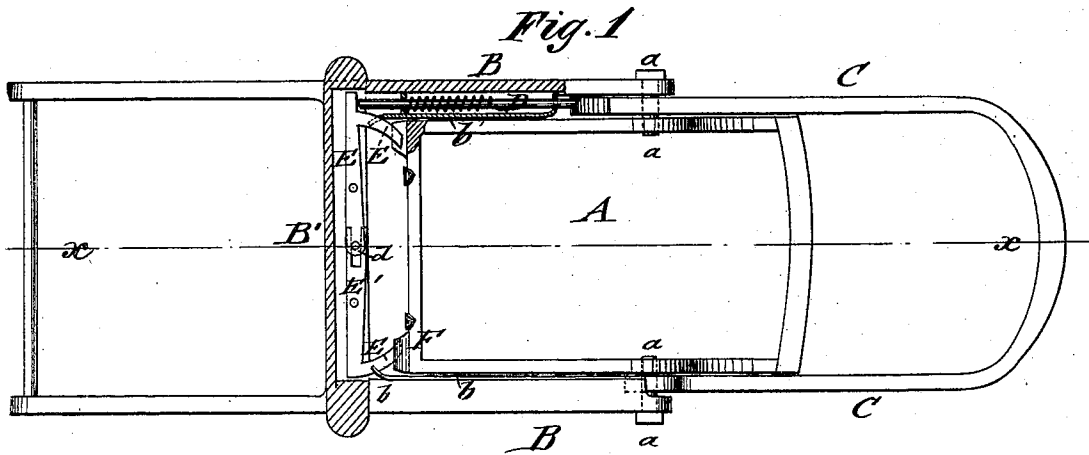


W. H. BOWMAN.
ROAD-SCRAPER.

No. 171,762.

Patented Jan. 4, 1876.



WITNESSES:

A. W. Almgren
A. F. Terry

INVENTOR:

W. H. Bowman

BY

Munn & Co

ATTORNEYS.

UNITED STATES PATENT OFFICE.

WILLIAM H. BOWMAN, OF LONDON, OHIO.

IMPROVEMENT IN ROAD-SCRAPERS.

Specification forming part of Letters Patent No. **171,762**, dated January 4, 1876; application filed July 24, 1875.

To all whom it may concern:

Be it known that I, WILLIAM H. BOWMAN, of London, in the county of Madison and State of Ohio, have invented a new and Improved Road-Scraper, of which the following is a specification:

In the accompanying drawing, Figure 1 represents a top view, partly in section, of my improved road-scraper, and Fig. 2 is a vertical longitudinal section of the same on the line *x x*, Fig. 1.

Similar letters of reference indicate corresponding parts.

The object of my invention is to construct a road-scraper that is not liable to get out of order by dirt or gravel, breaks readily the connection of scraper and handles, and revolves with ease, all the operating parts being protected to secure the reliable working of the scraper.

The invention relates to a revolving scraper pivoted to a handle-frame, with independently-swinging front bail that breaks by a curved end at one side only the connection of scraper and handles, by pressing on a sliding-spring rod and releasing the retaining-latches of the scraper. The catches are jointly operated by their fulcrumed connecting-lever rods, and lock into a notched casting at each corner of the scraper, and the face-plates or side-bars of the handles are recessed to receive the sliding rods which operate the lower catches, as hereinafter described.

In the drawing, A represents a scraper of the usual shape, with bottom runners, sharp cutting-edge, and grab-irons at the hind part. The rear corner of the scraper is strengthened by an angle-iron, to which the grab-irons are also bolted. This dispenses with the nailing of the bottom and rear part, and allows their ready replacing when worn out. The scraper A is hung by strong pivots *a* to the front ends of the handles B, which are laterally connected back of the scraper by a recessed cross-bar, B', in which the locking-mechanism is arranged. The front bail C is also hung to the pivots *a*, to swing independently of the handles and be carried below the scraper for taking up less room in storing the implement after use. One side of the bail C is extended

back of the pivot *a* in the shape of a curved hook, forming connection with spring-acted rod D sliding within a recess of handle B. The sliding rod D is girded and inclosed by a metallic face-plate, *b*, of the handle, the opposite handle being stiffened by a similar face-plate, *b*, which are both curved inwardly at their ends and slotted, to guide the swinging catches E projecting from cross-bar B'. A hood or guard, C', of handle B covers the end of rod D against dirt, while a stop projection, *a'*, of the other handle arrests the backward swinging of the bail. Rod D strikes when carried back the end of a lever-rod, E', that is fulcrumed to the cross-bar, and engages, by a pin, *d*, at its opposite end, the forked end of a symmetrically-fulcrumed lever-rod E'. The rods E' extend by the projecting catches E at each end toward notched castings F, at the rear part of the scraper, to lock the same firmly to the handle-frame. The action of the bail on the sliding rod carries both catches almost simultaneously back, so as to release the scraper and allow its dumping. The notched castings F are made, not with equal lugs or parts, but with the lower parts projecting beyond the upper smaller lugs, so that when the scraper is entirely swung around by the action of the horse and the grab-irons, the castings are not liable to pass the catches without being locked by the same, which is frequently the case with the scrapers in common use, and necessitates again the entire revolving of the scraper. The projecting lower parts of castings F bind securely over the catches, and render thereby the locking mechanism of the scraper more reliable. The lever-rods of the cross-bar are also inclosed, to prevent the entrance of dirt or gravel, which is also prevented from getting between scraper and handles or any other parts, so that the working of the scraper is not interrupted, nor any parts injured by the same. The bail breaks connection of scraper and handles at one side only, and makes, thereby, the construction not only simpler and cheaper, but also more reliable, as the bending of any part of the bail does not render the whole implement inoperative.

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

1. The combination of the curved bail end, sliding spring-rod, fulcrumed lever-rods, having projecting catches with notched castings at rear part of scraper to break contact of scaper and handles, substantially as set forth.

2. The combination of the locking-catches with the curved and recessed ends of the handle face-plates, to guide catches, substantially as described.

WILLIAM H. BOWMAN.

Witnesses:

B. BLAKE,

R. M. BOWMAN.