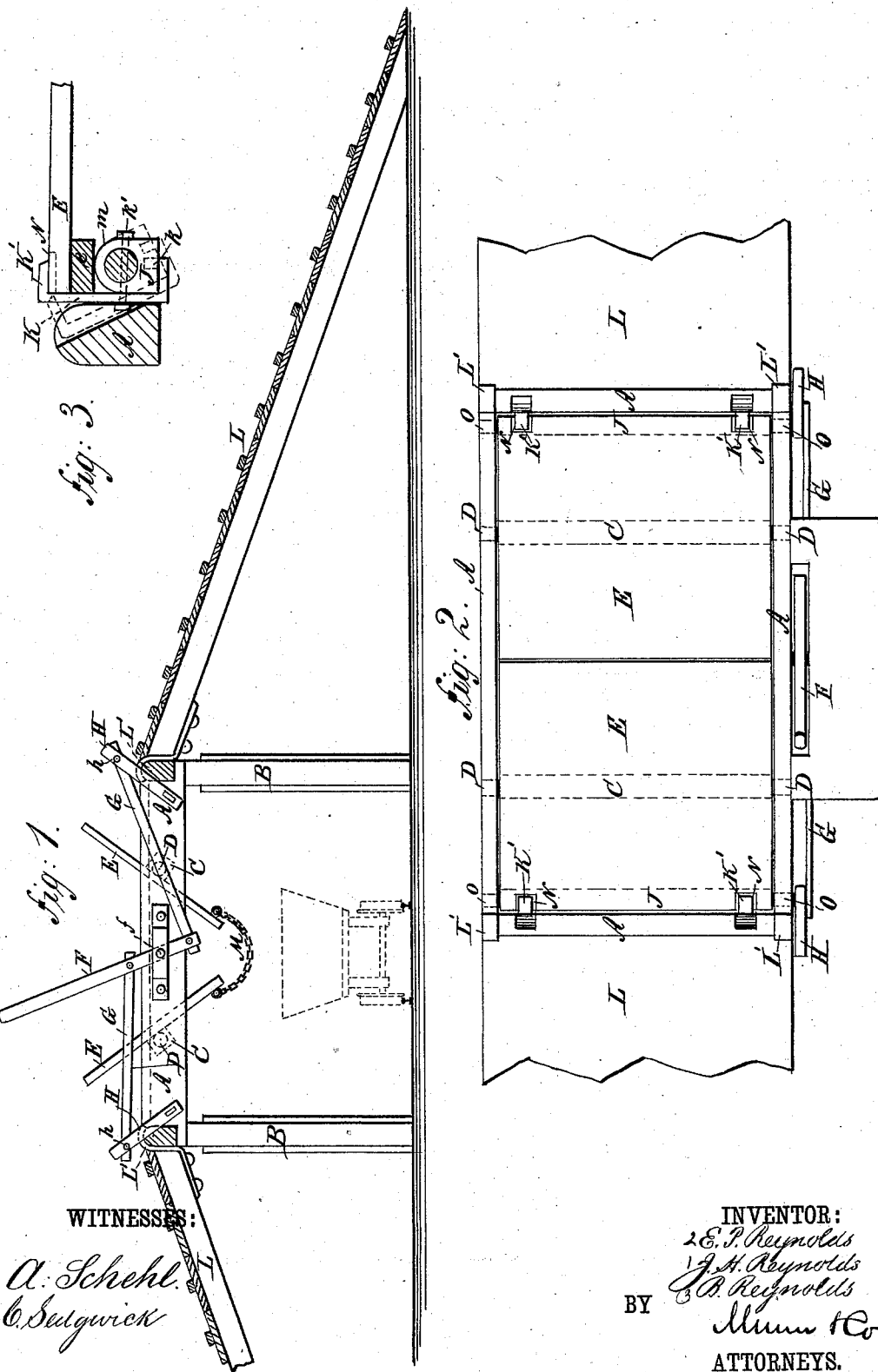


(No Model.)

J. H., E. P., & B. REYNOLDS.
Dumping Trap.

No. 242,694.

Patented June 7, 1881.



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UNITED STATES PATENT OFFICE.

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DUMPING-TRAP.

SPECIFICATION forming part of Letters Patent No. 242,694, dated June 7, 1881.

Application filed April 30, 1881. (No model.)

To all whom it may concern:

Be it known that we, JOHN H. REYNOLDS, of Emerson, in the county of Mills and State of Iowa, ELISHA P. REYNOLDS, of Rock Island, in the county of Rock Island and State of Illinois, and BEN REYNOLDS, of La Mine, in the county of Cooper and State of Missouri, have invented a new and useful Improvement in Dumping-Traps, of which the following is a full, clear, and exact description.

Figure 1 is a longitudinal sectional elevation of our improved apparatus, one of the approaches to the dumping-platforms being broken away. Fig. 2 is a plan, showing portions only of the inclined approaches on a larger scale than Fig. 1. Fig. 3 is a cross-section through the rolling lock and adjacent portion of a platform.

Similar letters of reference indicate corresponding parts.

The object of our invention is to provide an improved self-dumping trap which shall automatically discharge its load of earth or other material into any receptacle below its dumping-platforms on the release of gripping-irons by the operation of a conveniently-placed hand-lever.

Our invention consists in supporting one or more pivoted dumping-platforms in an elevated frame-work, said frame-work supporting the upper end of "ramps" or inclined approaches thereto, whereon teams drawing loaded vehicles may ascend to the platforms to deposit their load of earth or other material thereon and descend therefrom.

Our invention consists, also, in the method of holding or locking the said pivoted platforms in a horizontal position while they are being loaded with earth or other material, and in the method of unlocking or releasing said platforms to permit a dumping of said material into a car, wagon, or other receptacle placed below said platforms.

We more particularly describe our invention as follows:

Our apparatus, as shown in the drawings, consists of the horizontal frame-work A, supported on braced trestle-work B.

The transverse beams C, provided with end bearings, D, journaled suitably in the frame-

work A, are secured to and support the dumping-platforms E, which may also have cross cleats or braces *e* bolted thereto, as shown.

The lever F is suitably fulcrumed in the frame-work at *f*, and has pivoted thereto, at about equal distances above and below its fulcrum *f*, the bars or links G, the opposite ends of which are pivoted to the arms H at *h*. Said arms H are rigidly fastened to the rolling lock-bars J, which are properly journaled in the frame-work A at each end, as at O, and are provided with gripping or locking irons K, which may be secured to the bars J by shoulders extending into the under side of said bars and the bolts *k'*, or in any other manner which shall secure a proper rigid fastening. The upper faces or sides of the bars J are rounded over to allow them sufficient horizontal revolving movement beneath the pivoted platforms E to release the latter from the upper gripping portion, K', of the irons K, as indicated in dotted lines in Fig. 3.

The operation of the lever F causes a simultaneous release of both platforms E at either end of the frame-work A, when they will tilt on the bearings D and discharge the material deposited thereon by vehicles, scrapers, or other means into any car or other vehicle below them, as in Fig. 1.

The inner upper corner only of the lock-bars J is required to be rounded over, as at *m*, to secure the release of the platforms E from the gripping-irons. Said platforms are limited in their downward-swinging movement by the chains M, secured to each, as shown, and after they have discharged their load they may be brought back to a horizontal position prior to locking them by pressing on them with the foot, or by the use of cords and pulleys or any other suitable means.

Metal plates N may also be secured to the platforms E, to protect that portion thereof over which the gripping-shoulders K' act.

The ramps or inclined approaches L are shown removably connected at their upper ends with the frame-work A by hook-irons L'; but they may be rigidly bolted to said frame-work when the apparatus is to be permanently located.

We have shown our improved dumping-trap

provided with two pivoted platforms, E, each being held in the horizontal position by a rolling lock, J K, and especially adapted to load cars or other vehicles from an elevation; but it is evident that a single platform hinged at one end or side, and provided at its opposite end or side with a rolling lock, J H, may be employed, if more convenient in any special location.

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

1. A dumping-trap containing the following elements, namely: an elevated frame-work supporting pivoted dumping-platforms, devices for locking and releasing the platforms, means for operating said locking and releasing devices, and inclined approaches to the said elevated platforms, substantially as set forth.

2. The frame-work A, provided with tilting or dumping platforms E, and elevated upon a

trestle-work, B, to permit vehicles to pass beneath said platforms to receive the material discharged therefrom, substantially as herein specified.

3. The rolling lock-bars J, rounded as described, and journaled in the frame-work adjacent to the platforms E, and carrying the gripping-irons K, adapted to hold said platforms in a horizontal position to receive their load and to discharge the same, substantially as herein specified.

4. The lever F, fulcrumed as specified, and adapted to operate one or more rolling locks, J K, through the medium of connecting-links G, substantially as herein set forth.

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Witnesses:

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