

(No Model.)

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V. BORST.

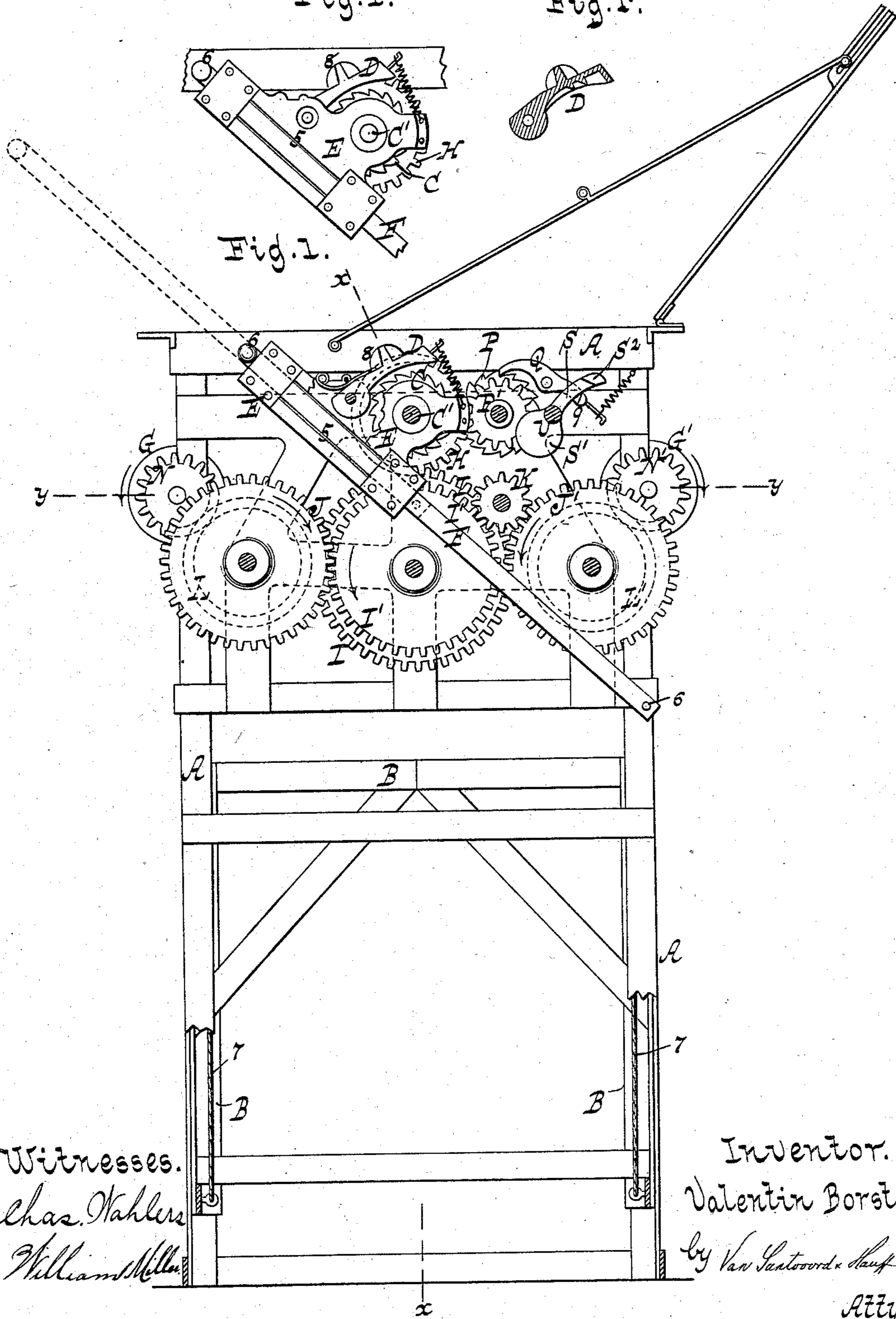
GARBAGE RECEPTACLE.

No. 249,576.

Patented Nov. 15, 1881.

Fig. 1a

Fig. 1b.



Witnesses.
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William Miller

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(No Model.)

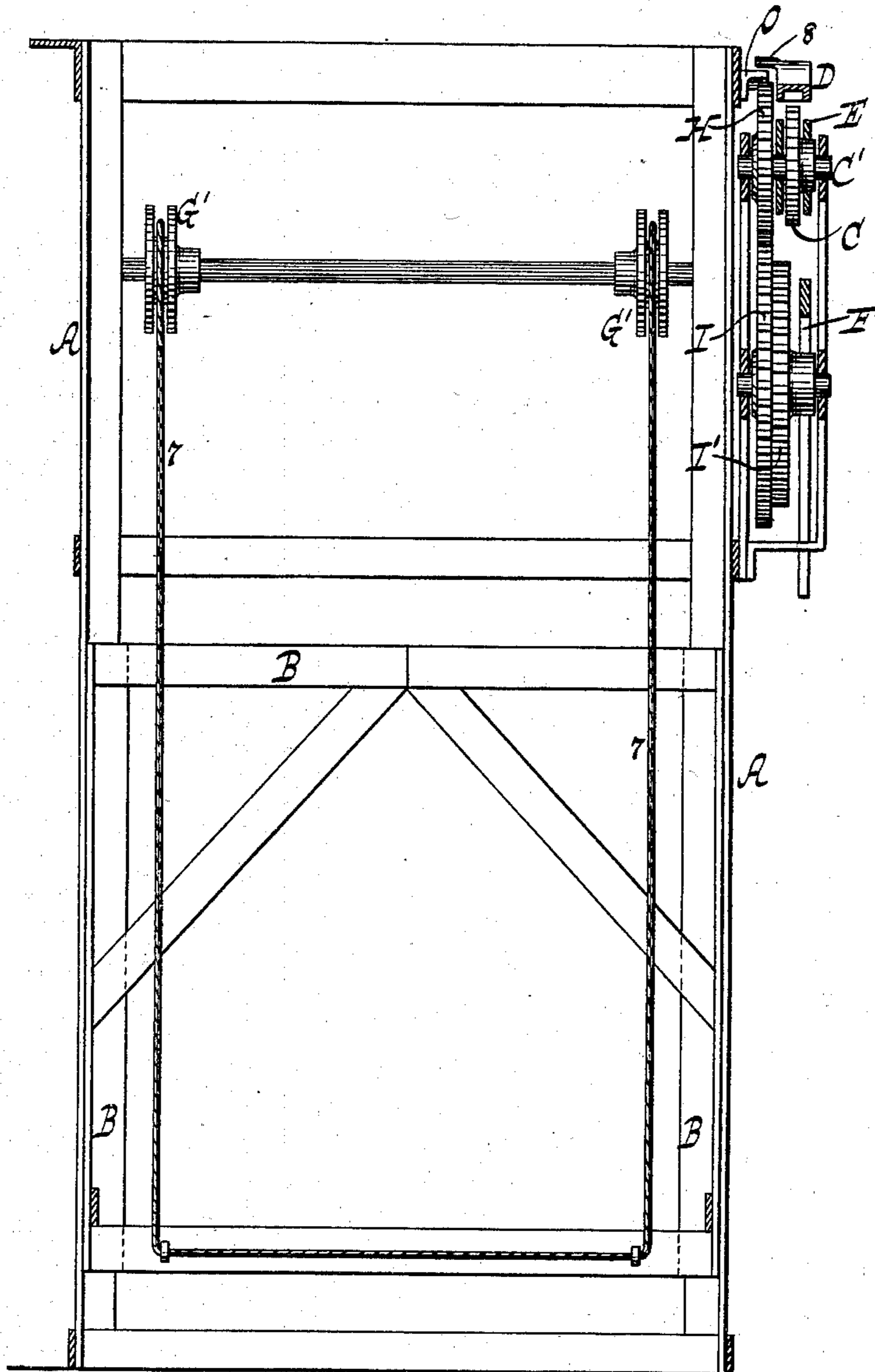
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Fig. 2.



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Fig. 3. Patented Nov. 15, 1881.

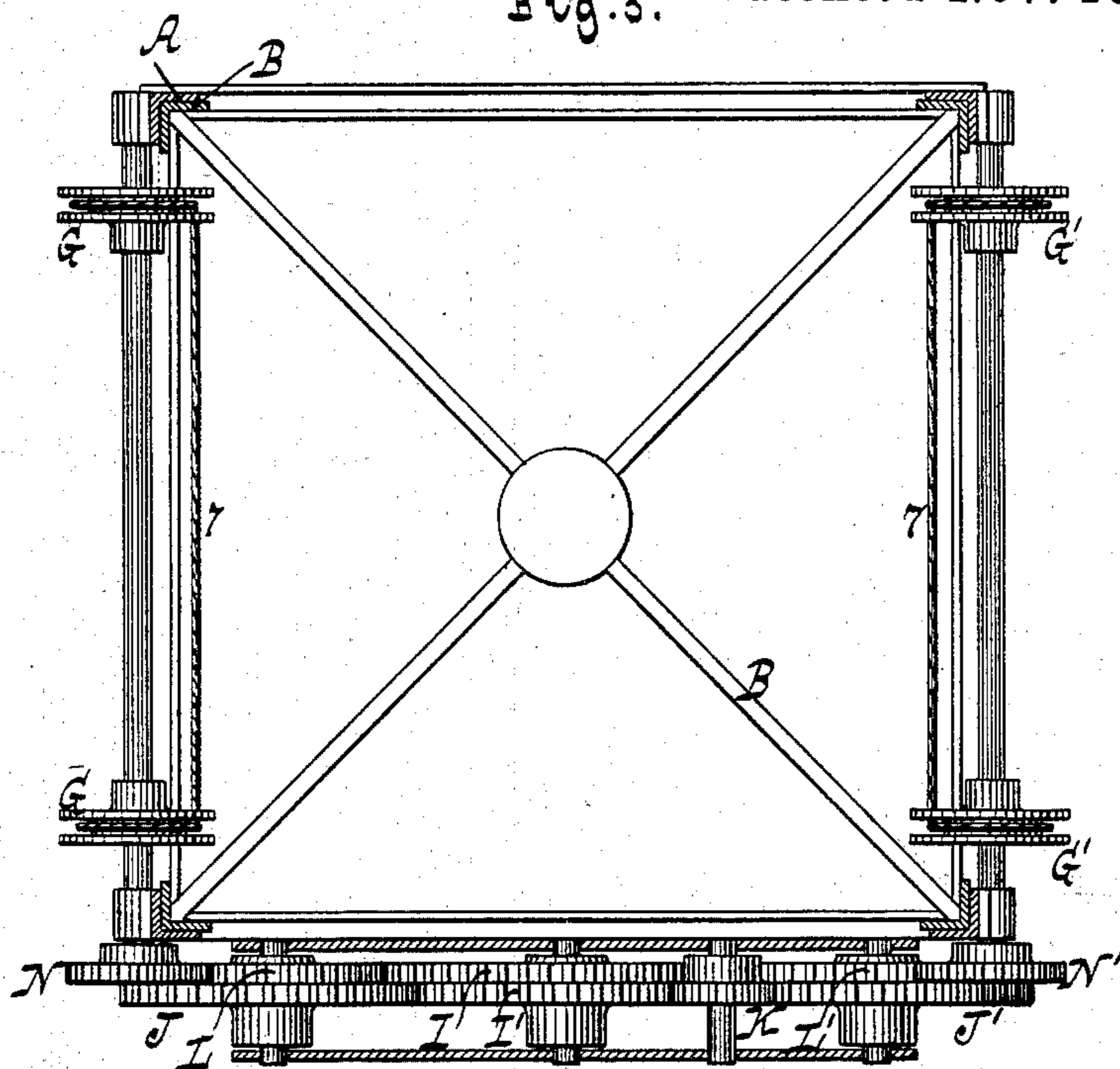
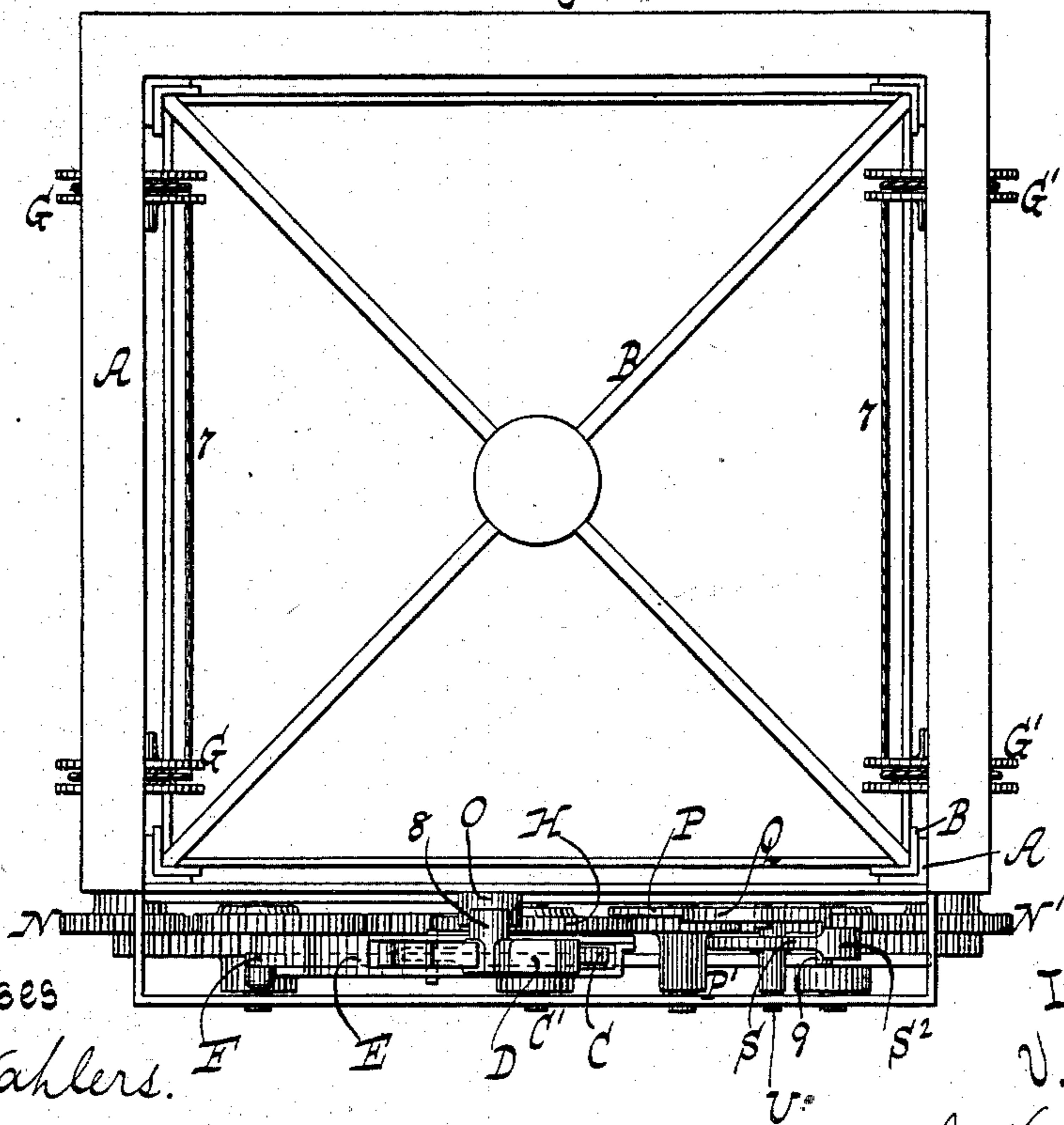


Fig. 4.



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UNITED STATES PATENT OFFICE.

VALENTIN BORST, OF NEW YORK, N. Y.

GARBAGE-RECEPTACLE.

SPECIFICATION forming part of Letters Patent No. 249,576, dated November 15, 1881.

Application filed May 13, 1881. (No model.)

To all whom it may concern:

Be it known that I, VALENTIN BORST, a citizen of the United States, residing at New York, in the county and State of New York, have invented new and useful Improvements in Apparatus for Raising and Lowering Garbage-Receptacles, of which the following is a specification.

This invention relates to certain improvements in that class of apparatus for raising and lowering garbage-receptacles for which Letters Patent No. 224,636 were granted to me on the 17th day of February, 1880; and the present invention consists in a certain novel combination of parts whereby the manual operation of the apparatus is facilitated, as hereinafter set forth in detail.

This invention is illustrated in the accompanying drawings, in which Figure 1 represents a front elevation, partly in section. Fig. 1^a is a detail view of the pawl-arm. Fig. 1^b is a like view of the pawl. Fig. 2 is a vertical cross-section on the line *x x*, Fig. 1, omitting the lid. Fig. 3 is a horizontal section on the line *y y*, Fig. 1. Fig. 4 is a plan or top view.

Similar letters indicate corresponding parts.

The letter A designates the main frame, forming the guides for a vertically-movable frame, B, which is for the purpose of receiving and carrying the usual garbage-receptacle, as in my patent hereinbefore mentioned. C designates a ratchet, constituting a driving-wheel, through the medium of which the carrier-frame B is elevated, as presently described, the motion of this wheel being produced by the action of a spring-pawl, D, pivoted to an arm, E, which is hung loosely on the shaft C' of the driving-wheel. The pawl-arm E is provided with a bar, F, constituting a handle, whereby the required oscillating motion can be imparted to the arm, and the handle is arranged to slide on the arm, being arranged in a guide-groove, 5, therein. When the apparatus is not in use, the handle F is allowed to slide to a lower position, as shown in Fig. 1, while when it is desired to work the elevating mechanism the handle is brought to an upper position, as indicated in dotted outline. The positions of the handle F are determined by stops 6 at its opposite ends, and when the handle is in a lower position its upper end is below the top of the main frame A, so that the handle is

practically no obstruction, while at the same time it can be readily got at for use. The weight of the handle F is such that it has a tendency to slide to a lower position when released by the operator.

The letters G G' designate windlasses having connected thereto cords or chains 7, which support the carrier-frame B, the windlasses being arranged on opposite sides of the main frame A. These windlasses G G' are connected with the driving-wheel C in the following manner: To the shaft C' of the driving-wheel is fixed a cog-wheel, H, gearing with a wheel, I, whose shaft carries a second wheel, I', gearing with wheels J J' on opposite sides thereof, a pinion, K, being interposed between it and the wheel J'. The shafts of the wheels J J' carry secondary wheels L L', (best seen in Fig. 3,) gearing with wheels N N', which are fixed to the shafts of the windlasses. The operation of this train of wheels will be readily understood and needs no description; and it is obvious that the desired object can be accomplished also with a different arrangement of wheels. The driving-pawl D engages the wheel C in the forward motion of the pawl-arm E; but in the return motion of the arm the pawl is automatically lifted to clear and free the wheel, as shown in Fig. 1, and to accomplish this object a cam, O, (see Figs. 2 and 4,) is fixed to the main frame, while the pawl is constructed with an offset, 8, which engages the cam by taking its place on the back thereof in the return motion of the pawl-arm, thus bringing the pawl to an upper position. A stop-wheel, P, geared with the shaft of the driving-wheel C, and a spring-pawl, Q, engaging the stop-wheel, act as a detent to the driving-wheel, and thence through the train of wheels to the windlasses, when the driving-pawl D is lifted by the cam O. If, however, the stop-pawl Q is thrown out of engagement with the stop-wheel P in the said position of the driving-pawl, the entire train of wheels is set free, and if the carrier-frame B is then in an upper position it is permitted to descend by gravity.

The stop-pawl Q is made in the form of a lever, and it is provided with a toe, 9, whereby it is adapted to engage with a releasing-lever, S, for throwing it out of gear with the stop-wheel P. This releasing-lever S has its fulcrum on a shaft, U, and it is so arranged that

the tail end thereof (marked S') is below and opposite to the hub P' of the stop-wheel, so that if the other or outer end of the releasing-lever is depressed it not only acts on the stop-pawl Q to throw it out of gear, but its tail end is at the same time brought in contact with the hub of the stop-wheel, thus acting as a brake to this wheel. By the action of the spring of the stop-pawl Q the tail end S' of the releasing-lever obtains a tendency to descend, and by moderating the pressure on the outer end of the lever its braking action on the stop-wheel may be controlled or taken off entirely, without, however, allowing the stop-pawl to fall into gear, the latter taking place only when the releasing-lever is set free. The outer end of the releasing-lever S is shaped to form a pedal, S², so that the lever can be readily operated by the foot, which is a desideratum, inasmuch as the entire apparatus is sunk below the surface of the ground.

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

1. The combination, substantially as hereinbefore set forth, of the driving-wheel, the driving-pawl, the pawl-arm, and the sliding handle of the pawl-arm, for the purpose described.

2. The combination, substantially as hereinbefore set forth, of the vertically-movable carrier-frame, the windlasses, the driving-wheel, the train of wheels connecting the driving-

wheel with the windlasses, the driving-pawl, the pawl-arm, and the sliding handle of the pawl-arm, for the purpose described.

3. The combination, substantially as hereinbefore set forth, of the pawl-lifting cam fixed to the main frame, the driving-pawl having an offset adapted to engage the lifting-cam, the driving-wheel, the pawl-arm, the stop-wheel, and the stop-pawl, for the purpose described.

4. The combination, substantially as hereinbefore set forth, of the driving-wheel, the driving-pawl, the pawl-arm, the stop-wheel, the stop-pawl, and the releasing-lever engaging the stop-pawl and acting as a brake to the stop-wheel, as described.

5. The combination, substantially as hereinbefore set forth, of the pawl-lifting cam fixed to the main frame, the driving-pawl having an offset adapted to engage the lifting-cam, the driving-wheel, the pawl-arm, the stop-wheel, the stop-pawl, and the releasing-lever engaging the stop-pawl and acting as a brake to the stop-wheel, as described.

In testimony whereof I have hereunto set my hand and seal in the presence of two subscribing witnesses.

VALENTIN BORST. [L. S.]

Witnesses:

W. HAUFF,
CHAS. WAHLERS.