

W. S. McHARG & A. B. HILL.

Sewer-Cleaning Trucks.

No. 140,059.

Patented June 17, 1873.

fig. 1.

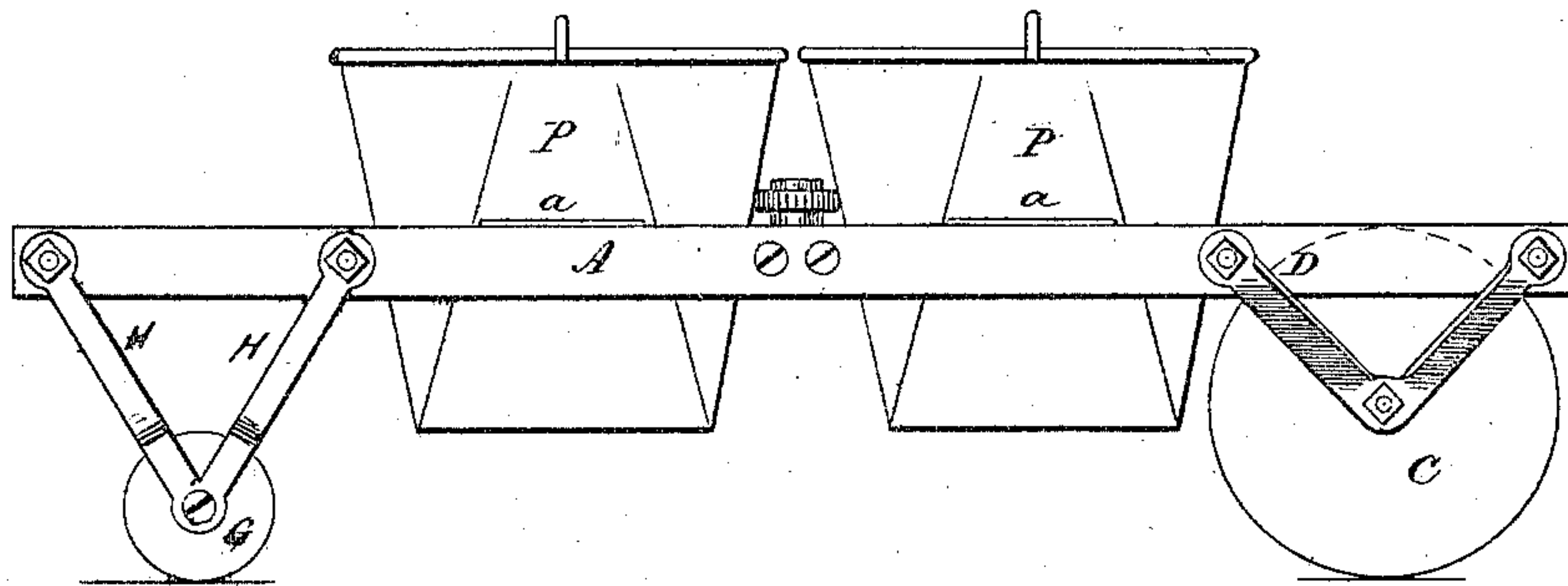


fig. 2.

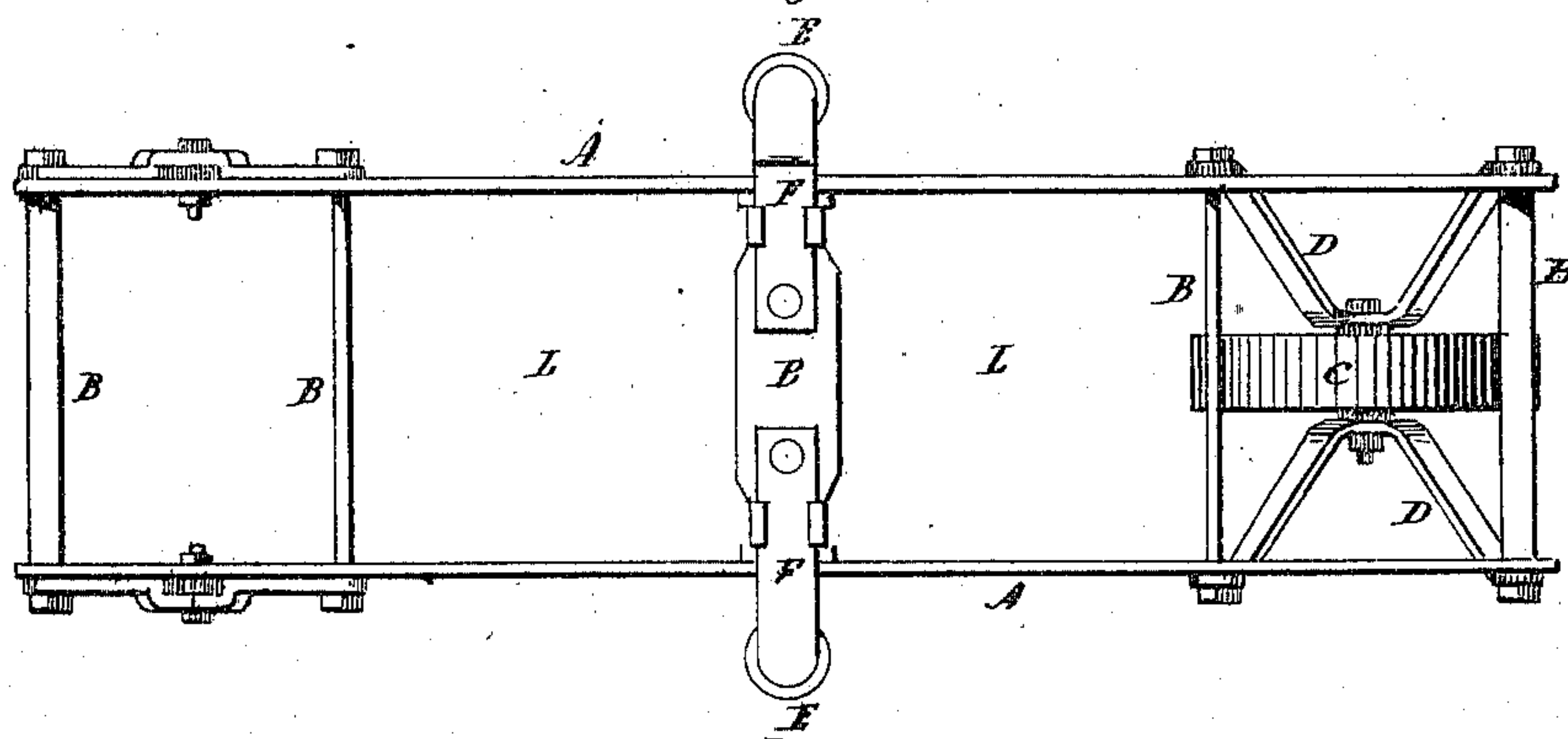


fig. 4.

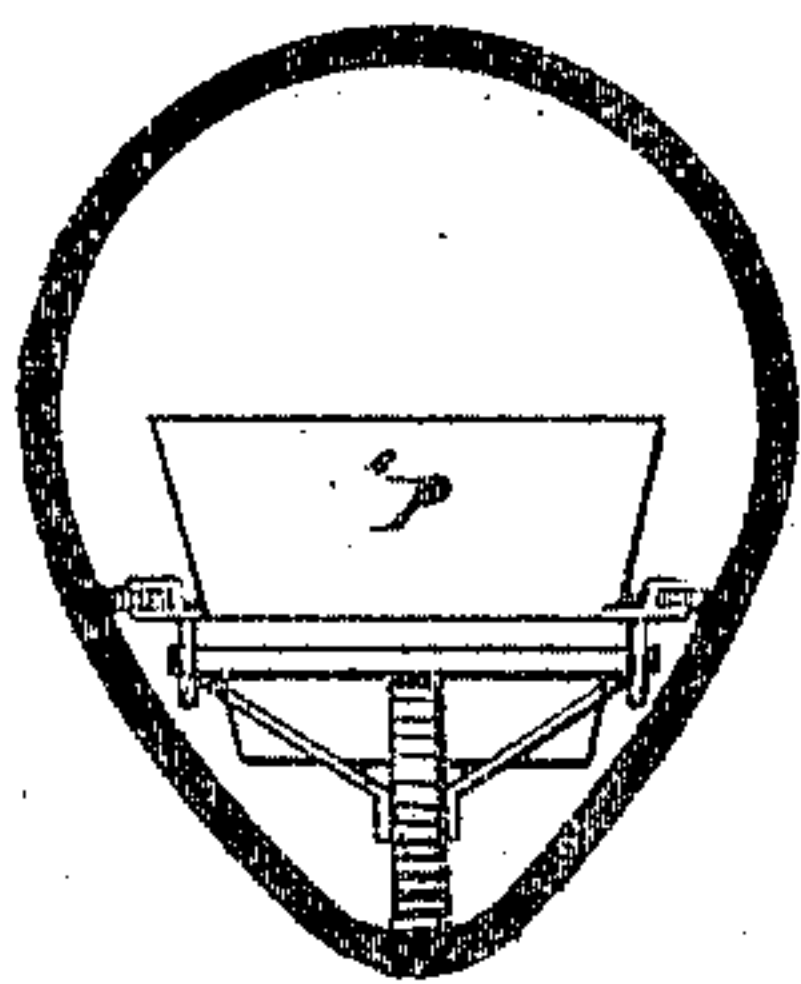


fig. 3.

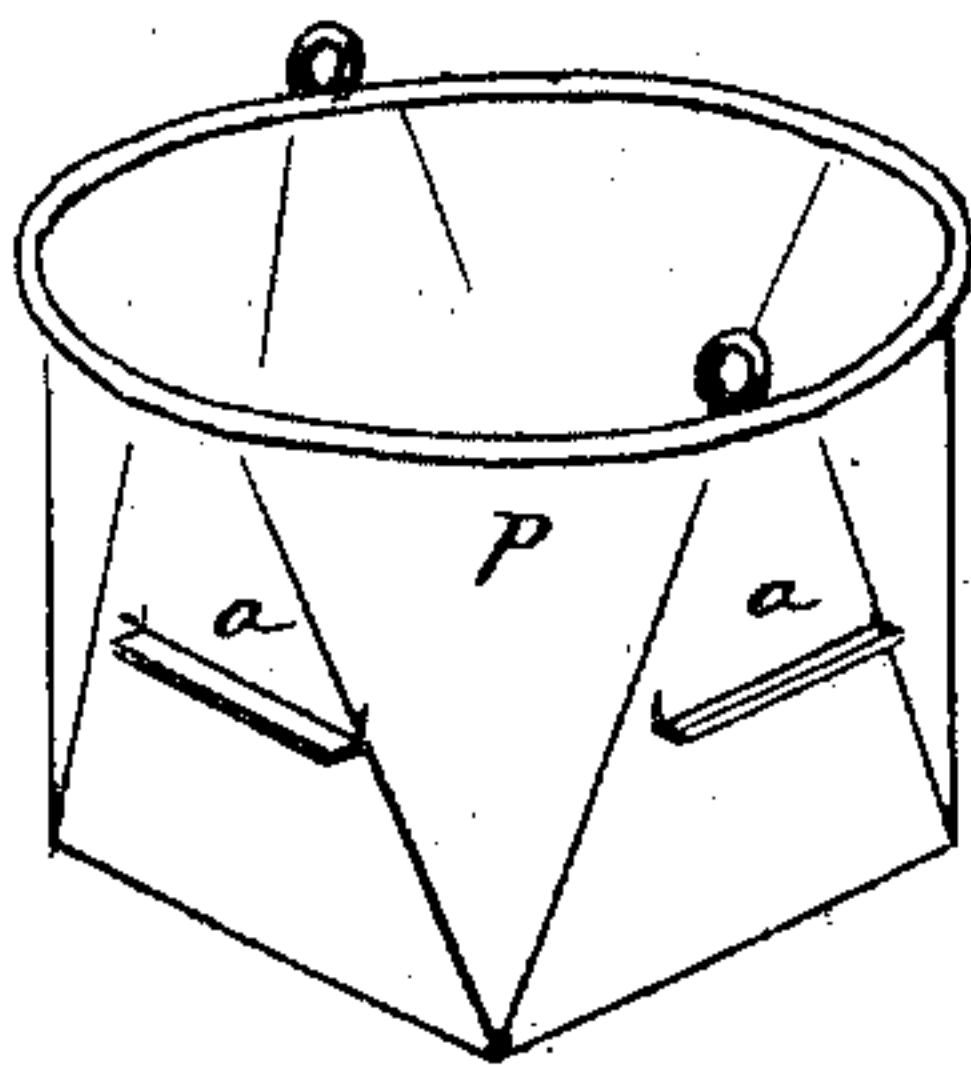
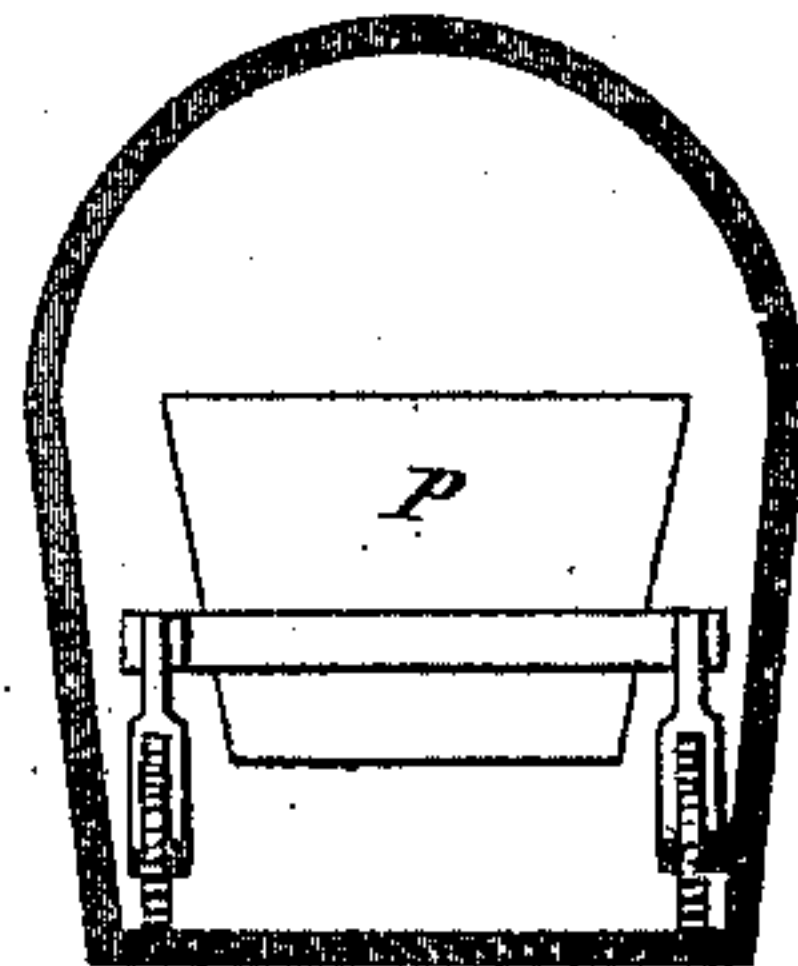


fig. 5.



Witnesses.

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# UNITED STATES PATENT OFFICE.

WILLIAM S. MCHARG AND ALBERT B. HILL, OF NEW HAVEN, CONNECTICUT.

## IMPROVEMENT IN SEWER-CLEANING TRUCKS.

Specification forming part of Letters Patent No. 140,059, dated June 17, 1873; application filed May 28, 1873.

*To all whom it may concern:*

Be it known that we, WILLIAM S. MCHARG and ALBERT B. HILL, of New Haven, in the county of New Haven and State of Connecticut, have invented a new Improvement in Truck for Cleaning Sewers; and we do hereby declare the following, when taken in connection with the accompanying drawings and the letters of reference marked thereon, to be a full, clear, and exact description of the same, and which said drawings constitute part of this specification, and represent, in—

Figure 1, a side view; Fig. 2, a top view of the frame with the buckets removed; Fig. 3, a perspective view of one of the buckets; Fig. 4, a section of one class of sewer with the truck therein; and in Fig. 5, a section of a sewer of the second class.

This invention relates to the construction of a device for transporting the sediment in sewers along the line of the sewer to the man-holes. The sediment or material which naturally collects on the bottom of sewers occasionally requires to be removed, and this has usually been done by means of hoes or scrapers, or similar device, to gather the material at or near the man-hole, there to be removed by buckets. The object of this invention is to facilitate the cleaning of sewers by the construction of a truck which may be introduced into the sewer, the said truck carrying buckets, and run within the sewer to the man-hole, the buckets to receive the material and transport the same to the man-holes.

A A are the two sides of the frame, preferably made from metal and connected by bars B. The width of the frame is a little less than the diameter of the sewer, and is supported upon wheels arranged according to the class of sewer, as seen in Fig. 4, in which the wheels only in a central line can be used to advantage. For such a wheel, C, is arranged in a central position at each end, its axle supported by braces D extending up to the frame and bolted thereto; and, to support the frame laterally, a roll, E, is arranged upon each side, preferably upon the central

bar, and extending out so as to roll against the side of the sewer, as seen in Fig. 4. These rolls E are made adjustable on slides F to accommodate sewers of different diameters; but in a flat-bottom sewer, and others of that class, as seen in Fig. 5, the rolls E may be dispensed with. In such case we arrange a pair of wheels, G, at one end, and may be at both ends, these wheels supported from the frame by braces H. This frame is constructed so as to be readily taken to pieces for introduction into sewers through the man-hole in cases where no other entrance is convenient. The openings L L through the frame are made to receive the buckets P P, one of which is shown detached in Fig. 3. These buckets are constructed with projecting flanges *a* upon their sides so as to rest upon these flanges within the frame, as seen in Fig. 1.

The truck placed in the sewer, the laborer fills the buckets, then runs the truck to the man-hole, where the buckets are raised from the truck, emptied, and returned, and so continuing, running the truck along the sewer, clearing from man-hole to man-hole, and avoiding the labor usually required in transporting or removing the material from one part of the sewer to another, enabling one man to do many times the amount of labor which he could do by the usual process.

It will be understood that the height of the apparatus is constructed according to the size of the sewer, the buckets extending down through the frame.

We claim as our invention—

1. The truck herein described for transporting sediment in sewers, consisting of the frame A, cross-bars B, and supporting-wheel G, and with or without the lateral rolls E.

2. The buckets P provided with side flanges *a* to support the bucket in the truck, substantially as set forth.

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Witnesses:

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