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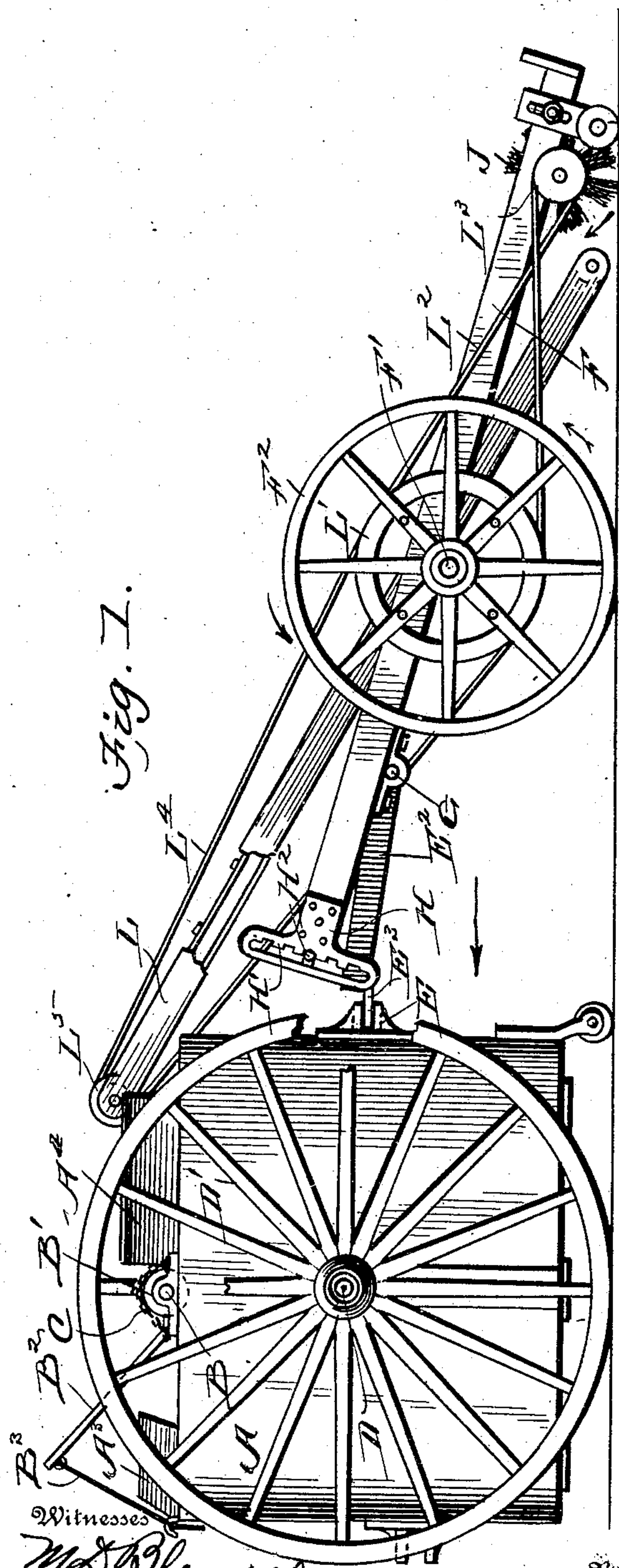
PATENTED APR. 9, 1907.

V. HOULE & A. W. KONKLE.

STREET SWEEPER.

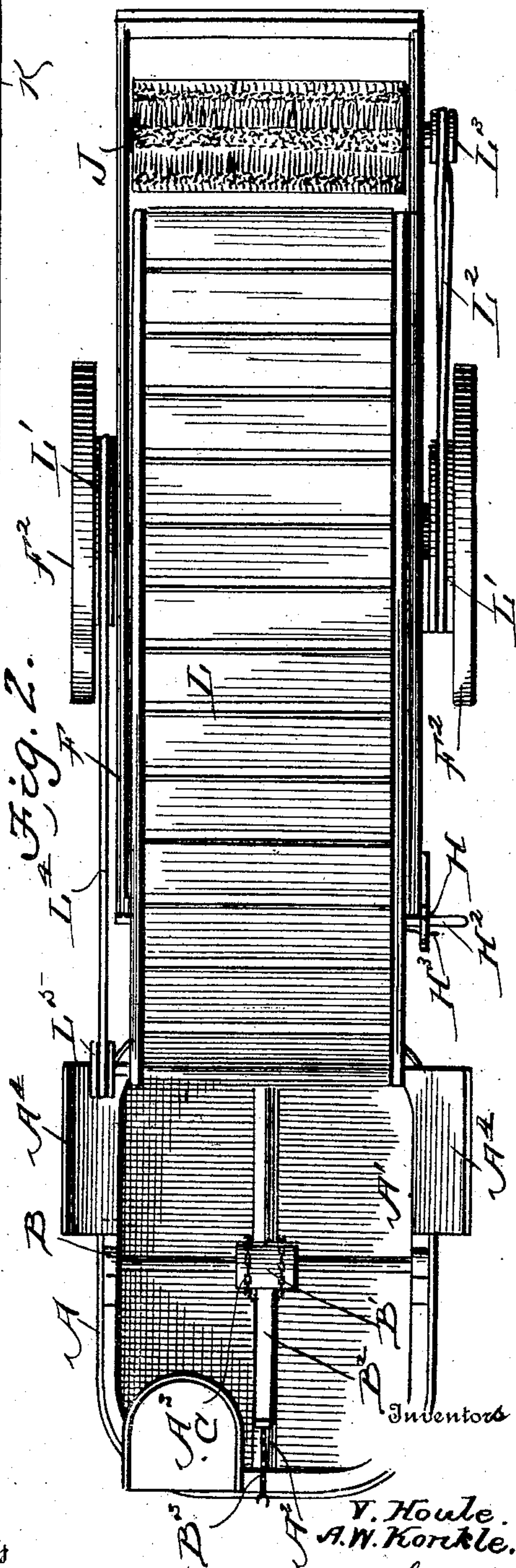
APPLICATION FILED NOV. 3, 1906.

3 SHEETS—SHEET 1.



Witnesses

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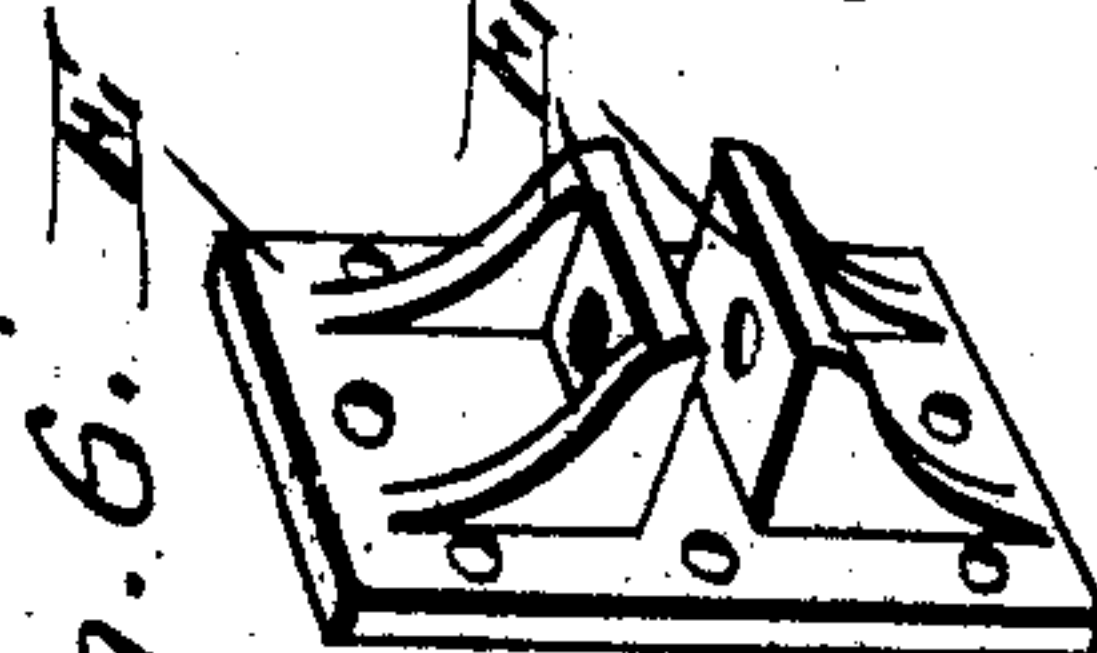
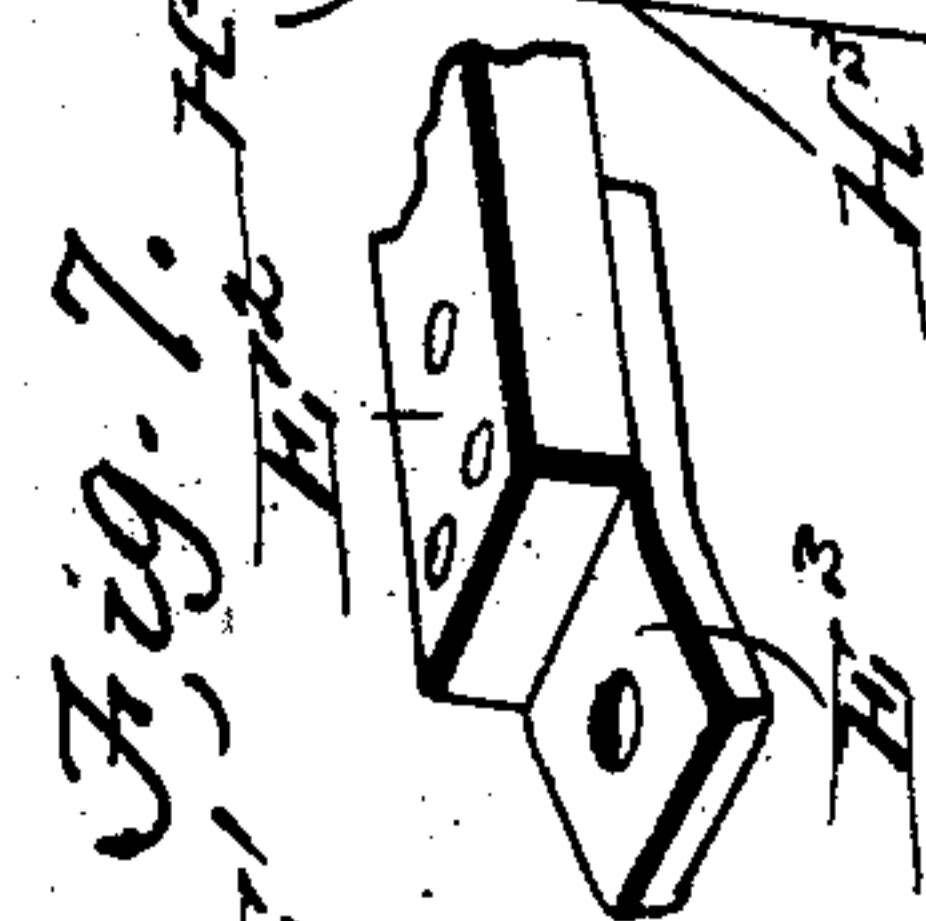
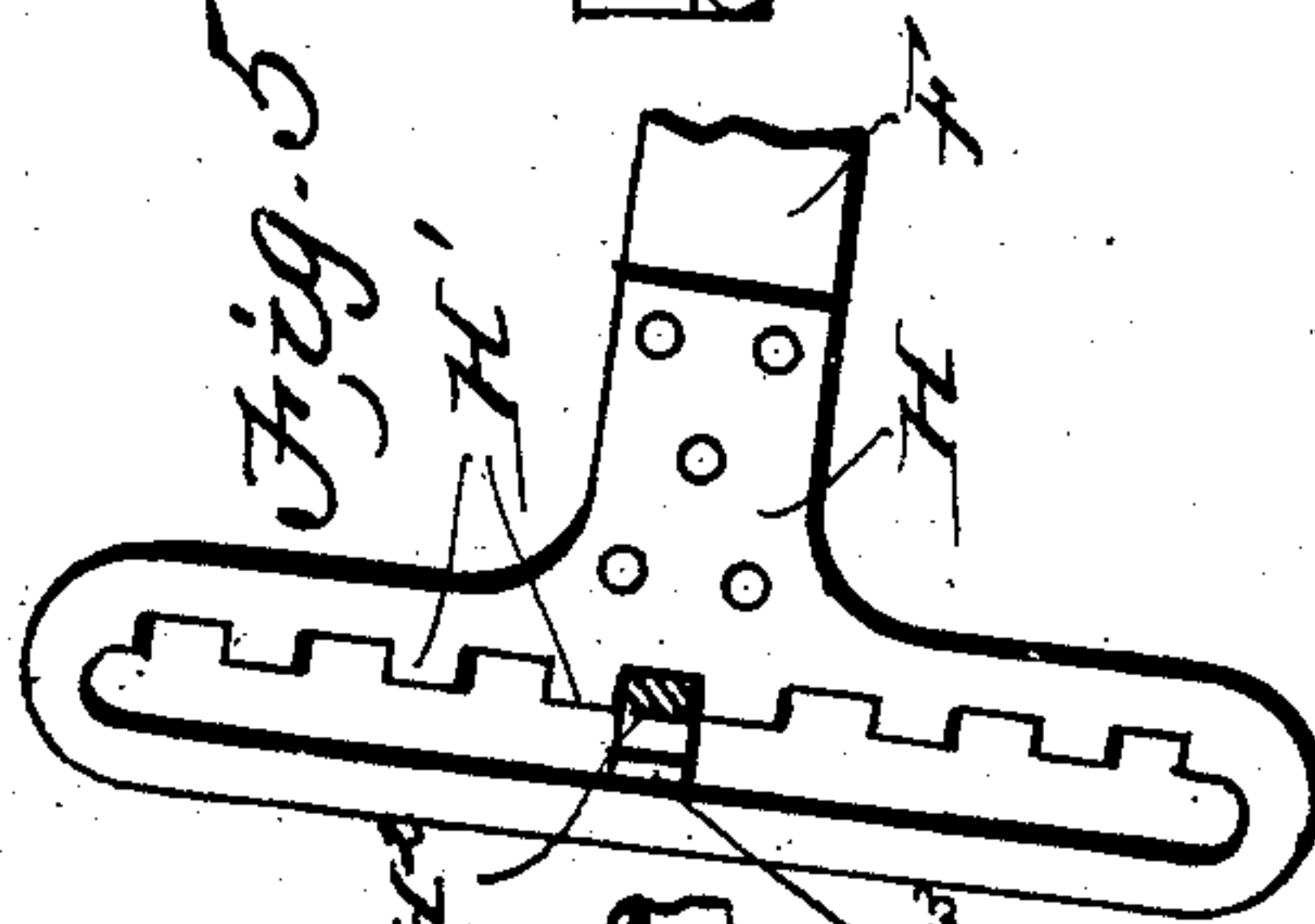
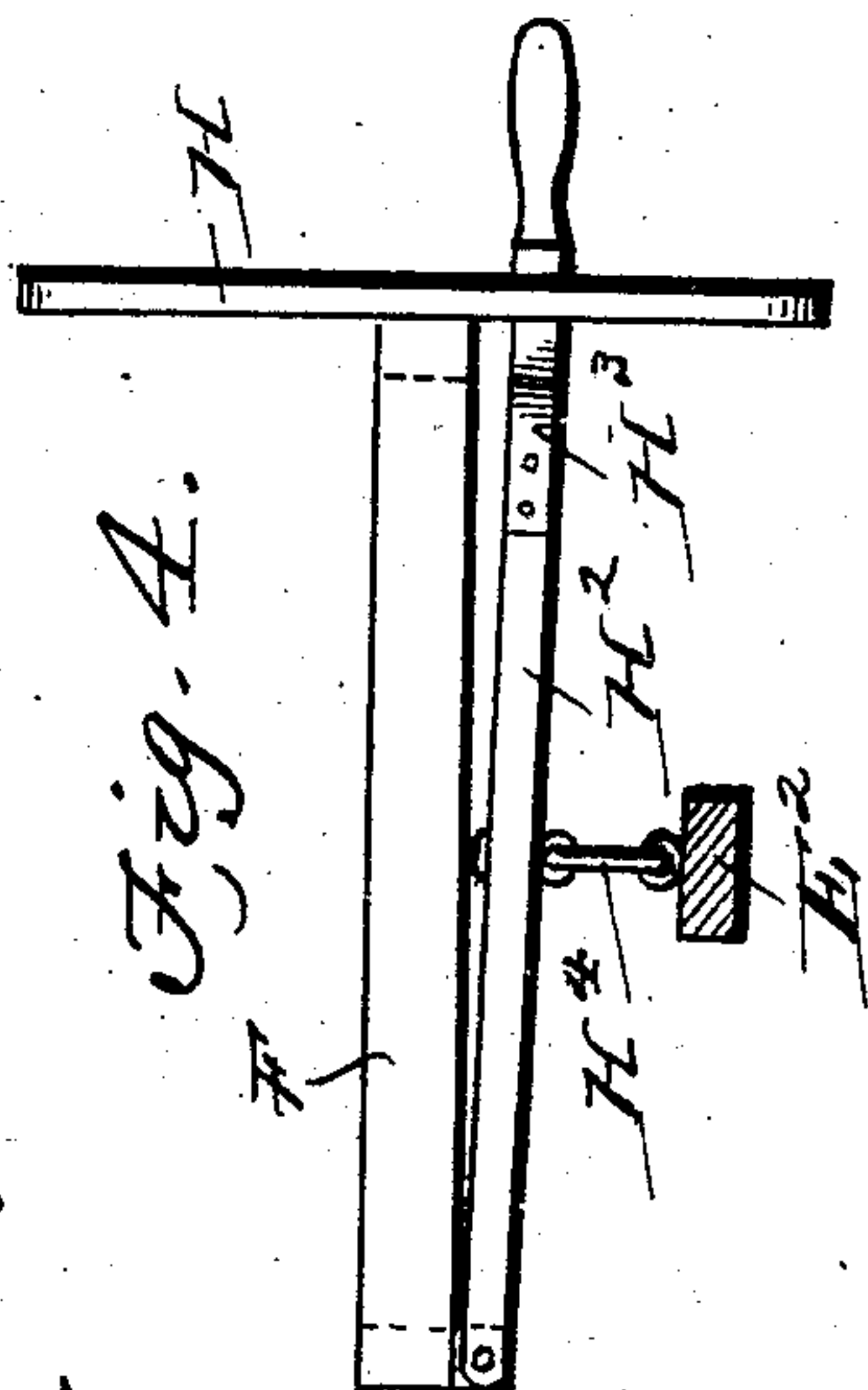
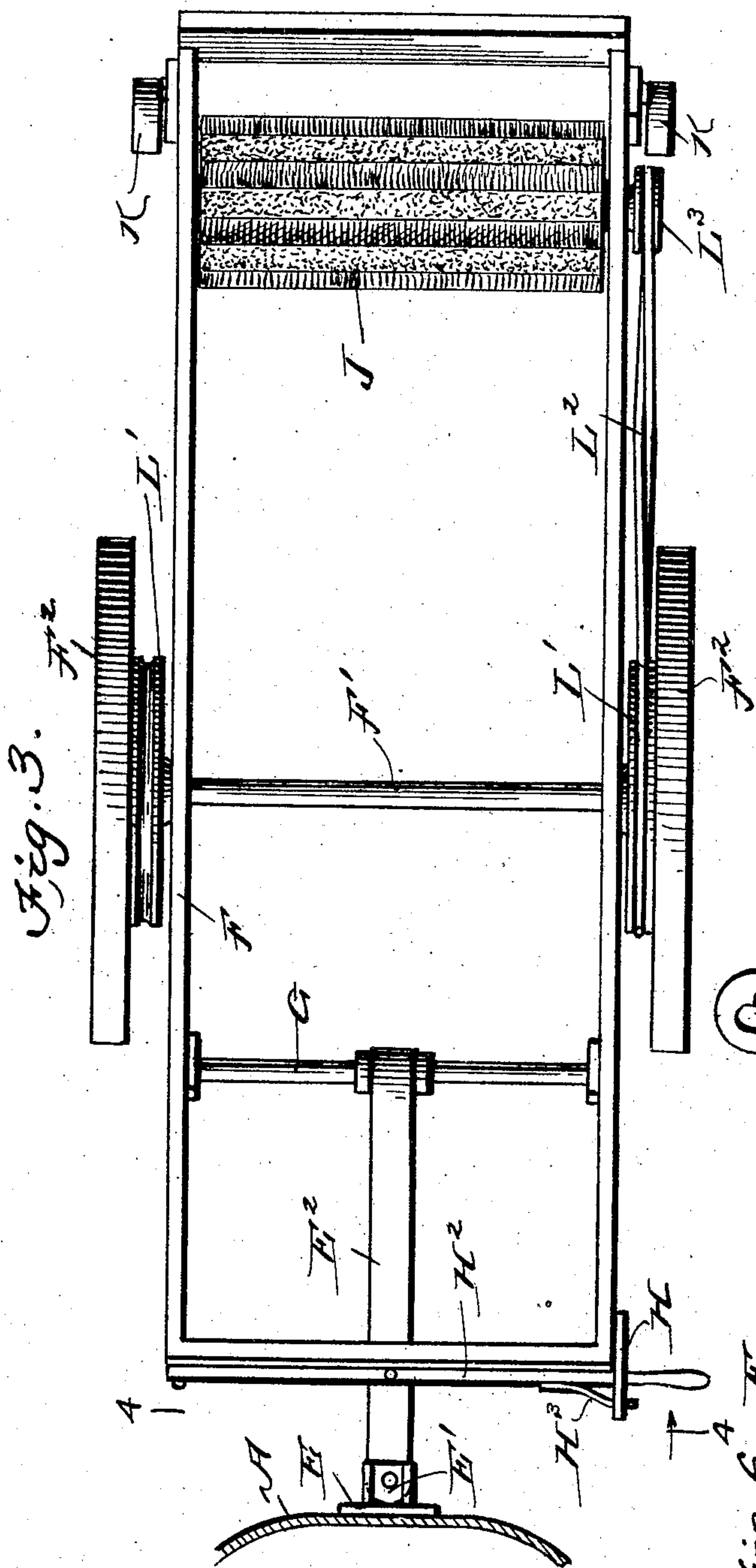
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3 SHEETS—SHEET 2.



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Fig. 6.

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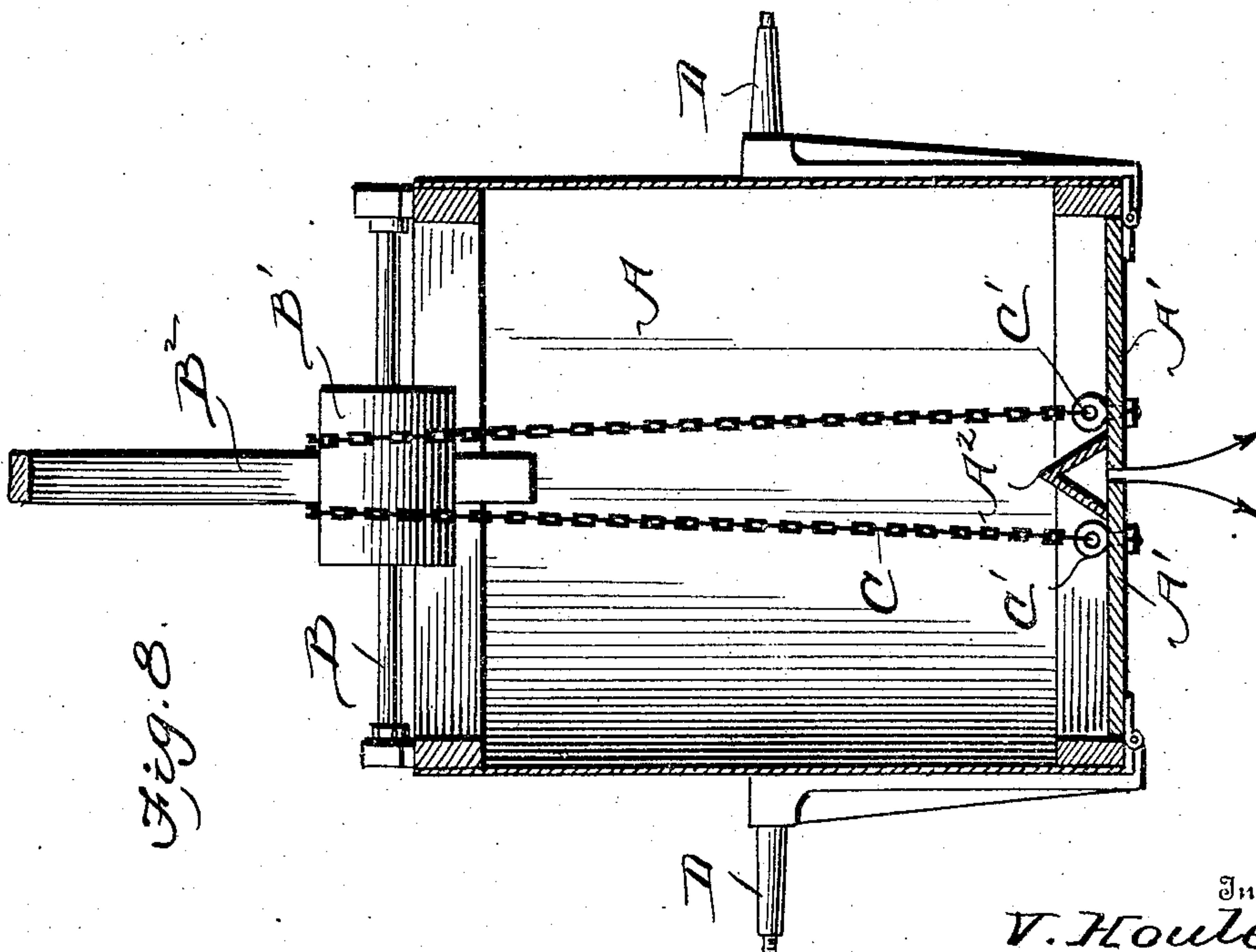
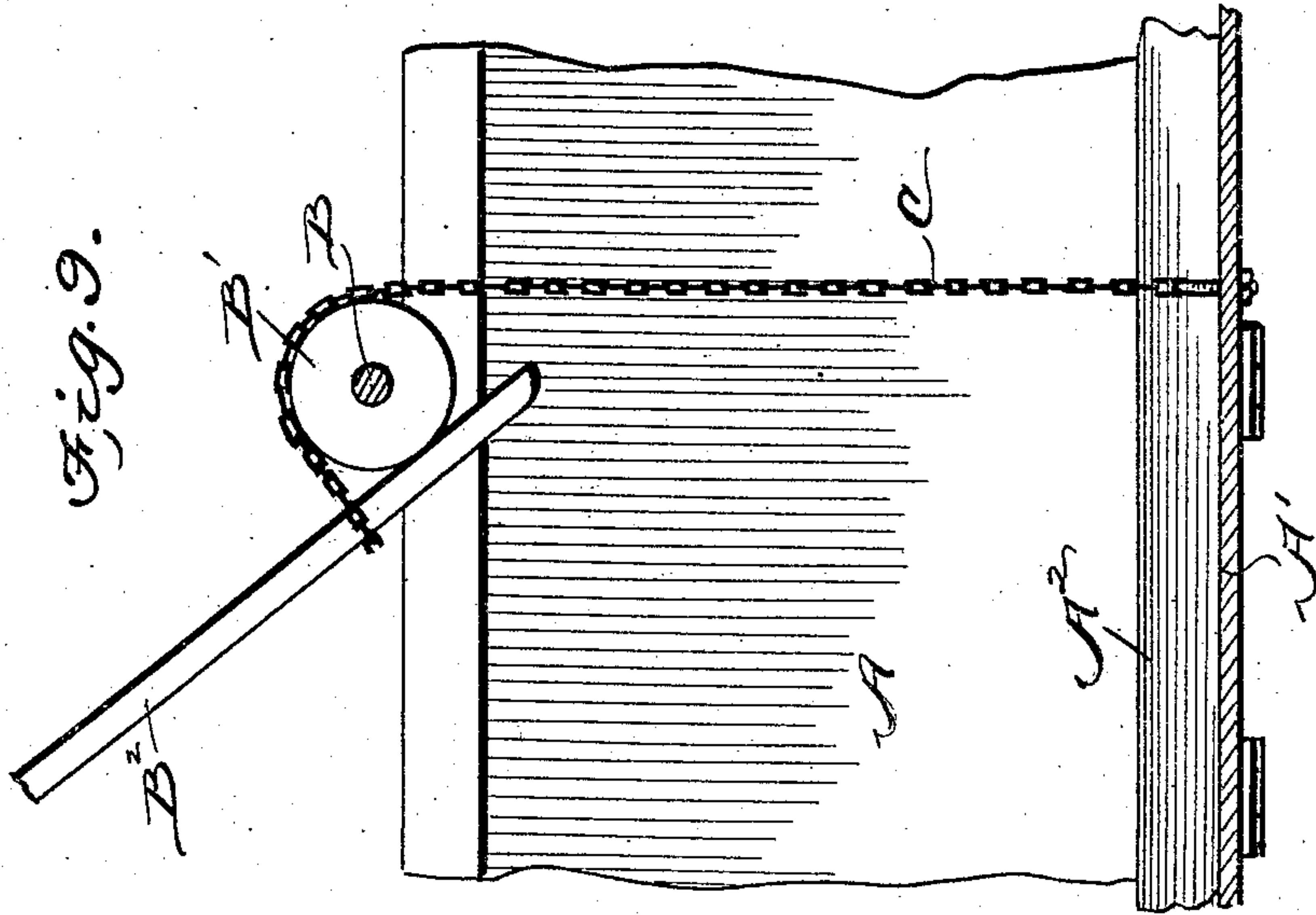
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UNITED STATES PATENT OFFICE.

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STREET-SWEEPER.

No. 850,005.

Specification of Letters Patent.

Patented April 9, 1907.

Application filed November 3, 1906. Serial No. 341,949.

To all whom it may concern:

Be it known that we, VELO HOULE and ABRAM W. KONKLE, citizens of the United States, residing, respectively, at Muskegon and Manistee, in the counties of the same name and the State of Michigan, have invented a new and useful Improvement in Street-Sweepers, of which the following is a specification.

This invention relates to street-sweepers comprising a brush, a receptacle, and a conveyor, and relates especially to means for connecting a frame carrying the brush and conveyor to the dirt-receptacle.

The invention consists in providing a tank mounted on wheels, a wheeled pivotally-mounted frame having a brush at its rear end, and a pivoted vertically-adjustable tongue for connecting the frame and tank.

In the accompanying drawings, Figure 1 is a side elevation of the device. Fig. 2 is a plan view. Fig. 3 is a plan view of the brush and frame, the conveyor being omitted. Fig. 4 is a section on the line 4-4 of Fig. 3. Fig. 5 is a detail view of the forward end of one side of the brush-carrying frame, a lever being shown in section. Fig. 6 is a detail perspective view of a coupling-plate. Fig. 7 is a detail of an end of a tongue. Fig. 8 is a transverse section through the tank. Fig. 9 is a section through the tank at right angles to the section shown in Fig. 8.

In the drawings, A represents a tank having a sectional hinged bottom A' and a cross-piece adjacent the bottom A'-shaped in cross-section, as shown at A², to cover the space between the two bottom sections A'.

A shaft B is transversely journaled on the tank and carries a drum B', on which bears a lever B².

A chain C passes over the lever and over one side of the drum and is secured at its ends to eyes C', secured to the bottom sections.

A chain B³ is connected at one end to the upper end of the lever B² and at the other end to the front edge of the tank A.

A seat A³ is provided on the tank and also flanged side extensions A⁴.

Suitable axles D are connected to the sides of the tank, and on these axles are mounted wheels D'.

On the rear of the tank is secured a coupling-plate E, provided with parallel perfor-

ated horizontal lugs E', and a tongue E² is provided at its front end with a flange E³, which fits between the lugs E' and is pivotally connected thereto by a coupling-pin of the usual kind.

A frame F is pivotally mounted upon an axle F', and this axle is provided with wheels F².

In advance of the axle F' the frame F carries a shaft G, to which the rear end of the tongue E² is pivotally connected.

On one side of the frame F and slightly projecting in advance of the frame is a rack-plate H, provided with rack-teeth H'. A lever H² engages these teeth and is pivoted to the front end of the frame F adjacent the side opposite the rack-plate H. This lever is connected by a link H⁴ to the tongue E² and is held in engagement with the teeth H' by a spring H³.

Adjacent the rear end of the frame F is mounted a brush J, journaled in the frame, and the rear end of the frame F is supported by small wheels K.

A conveyor L is mounted on the axle F' and conveys the sweepings collected by the brush J to the tank A.

To drive the conveyor and brush, we form pulleys L' on the inner sides of the wheels F². A belt L² runs from one of these pulleys to a pulley L³, carried at one end of the brush J, and from the remaining pulley L' a belt L⁴ runs to a pulley L⁵, carried by a shaft or roller of the conveyor L.

The operation is as follows: By swinging the lever H² the frame F is moved vertically at its ends rocking on the shaft F' and bringing the roller J into contact with the ground or elevating it, as may be desired. When the sweeping operation is completed or the tank A is filled, the tongue E² is uncoupled from the plate E and the tank driven to the dumping-grounds. The chain B³ is unhooked from the front of the tank A and the hinged bottom permitted to open, the sections A' falling downward and away from each other, thus dumping the load. The sections are closed again by drawing on the lever B².

It will be obvious that in use it is preferable to incase the brush J and a portion, or even the entire casing, in a suitable boxing or hood to prevent dust from flying; but we have omitted any casing from the drawings to more clearly show those parts which we

consider new, the construction of the casing being optional.

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

1. A device of the kind described comprising a tank, a tiltable frame, a sweeper carried by the frame, a conveyer carried by the frame adapted to discharge into the tank, a pivoted tongue carried by the frame, a lever adjustable vertically on the frame, means for locking the lever in its adjusted position, connecting means between the tongue and lever, and means for detachably securing the free end of the tongue to a fixed point on the tank.

2. In a device of the kind described, a frame pivotally mounted upon a supporting-axle, a shaft carried by the frame, a tongue

pivotally connected to the shaft, a tank, means for connecting the tongue and tank, a rack-plate having teeth carried by the frame, a lever pivoted to the frame and engaging the teeth of the rack-plate, a link connecting the lever and tongue, a brush carried by the frame, and a conveyer supported on the axle and discharging into the tank.

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