

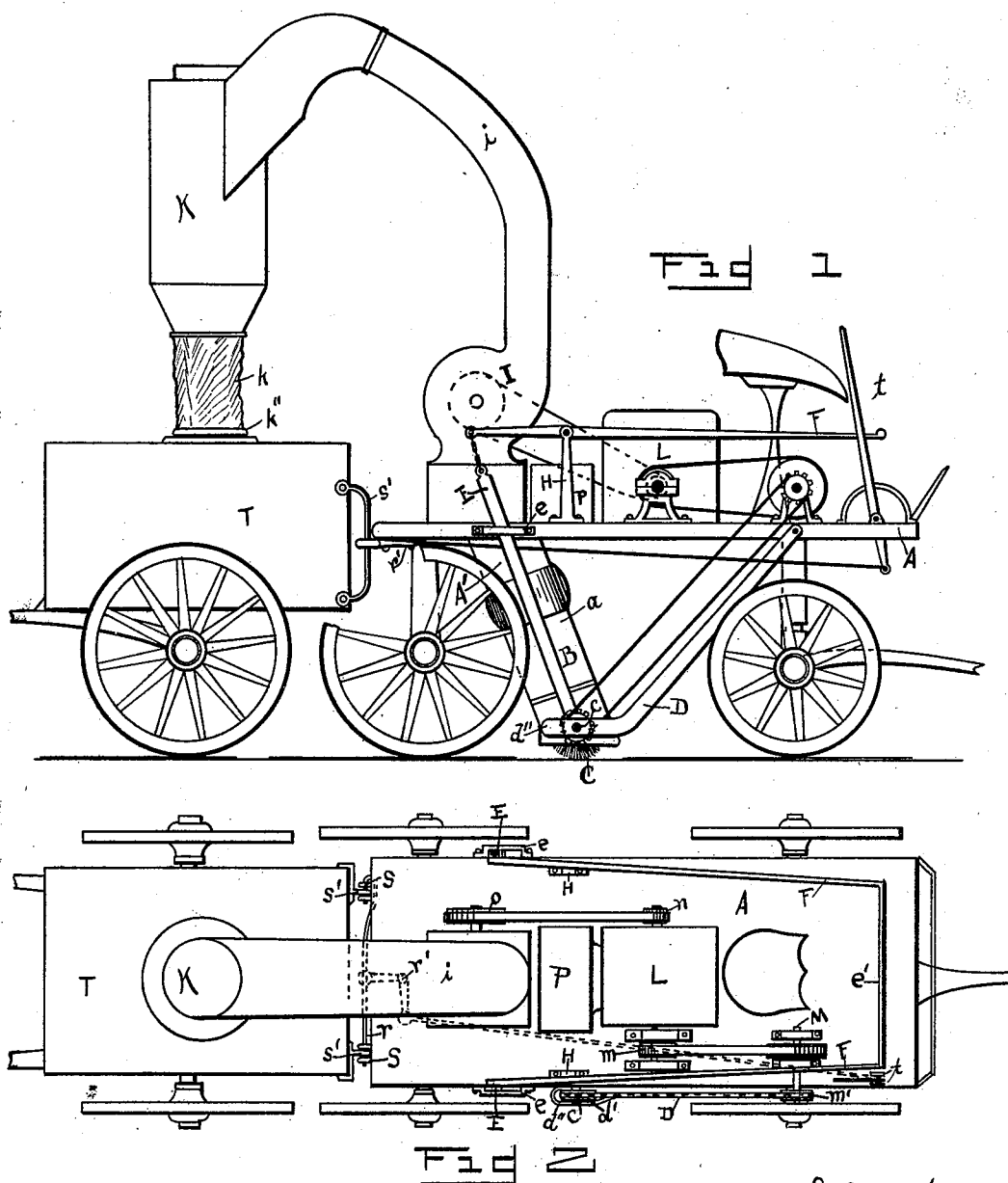
(No Model.)

2 Sheets—Sheet 1.

H. S. MOODY & F. R. SMITH.
STREET SWEEPER.

No. 507,628.

Patented Oct. 31, 1893.



WITNESSES:
A. J. Schmit
E. J. Schmit

Henry S. Moody
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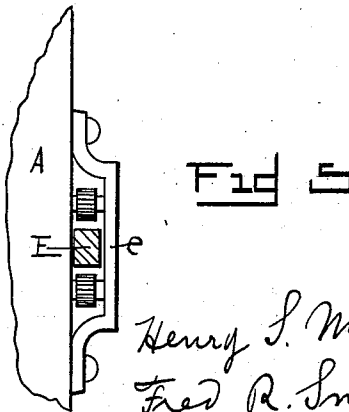
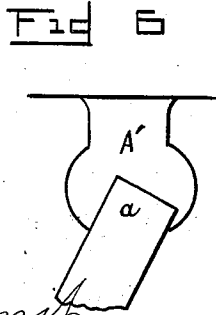
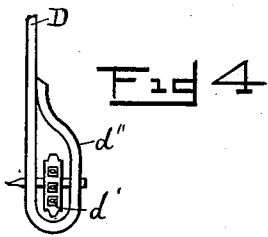
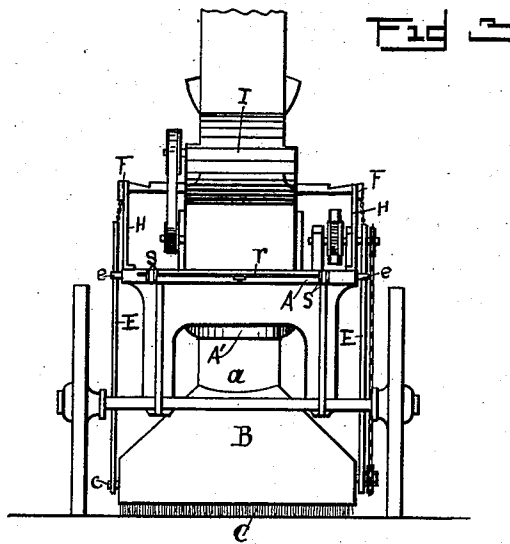
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2 Sheets—Sheet 2.

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UNITED STATES PATENT OFFICE.

HENRY S. MOODY AND FRED R. SMITH, OF OMAHA, NEBRASKA, ASSIGNORS
OF ONE-THIRD TO ALBYN L. FRANK, OF SAME PLACE.

STREET-SWEEPER.

SPECIFICATION forming part of Letters Patent No. 507,628, dated October 31, 1893.

Application filed August 26, 1892. Serial No. 444,243. (No model.)

To all whom it may concern:

Be it known that we, HENRY S. MOODY and FRED R. SMITH, of Omaha, in the county of Douglas and State of Nebraska, have invented certain useful Improvements in Street-Sweepers; and we do hereby declare that the following is a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, which form a part of this specification.

This invention has relation to a new and novel street sweeper.

The object of this invention is to provide a street sweeper that shall be simple of construction and be adapted to collect the dust as well as the loose dirt.

Figure 1 shows a street sweeper embodying our invention showing a dirt cart as attached. Fig. 2 is a top view of Fig. 1. Fig. 3 is a rear view of the sweeper with parts broken away. Fig. 4 shows a detail of the shoe of the pivot bar. Fig. 5 shows the retaining strap and Fig. 6 a broken detail of the lower end of the fan spout.

A represents a suitable platform, which is preferably mounted upon four wheels. Attached to the lower portion of the frame is the fan spout A', which is flared at its lower end, as shown. Working within this spout, is the upper cylindrical end *a* of the brush hood B, which is of sheet metal and within the lower end of which the preferably rotary brush C is journaled. The shaft *c* of the brush C projects through the hood upon both sides, and is adapted to run and be held within suitable bearings within the lower ends of the pivot bars D, D, which are pivoted to the forward end of the platform A. These bars have their lower ends bent at an angle so as to form a shoe within which the shaft runs. These bars D, D, drag the brushing apparatus along. Mounted upon the shaft *c* between the hood B and the shoes of the bars D, D, are the supporting bars E, E, which work loosely within the straps *e, e*, attached to the platform A, and are held at their upper ends by being secured to the lever arms F, F, which are united at their forward ends by

means of the bar *e'*, and are held by the brackets H, H.

I represents an ordinary exhaust fan, which at the top is connected by means of the spout *i* to a dust collector K to the lower end of which is attached the flexible spout *k*, provided with the ring *k''*, as shown.

Mounted upon the platform A, is the electric motor L, the projecting shaft of which is provided with the two pulleys *m, n*, the former being in belt connection with the stub shaft M, and the latter with the pulley *o* of the fan I.

The shaft M is provided with the sprocket wheel *m'* in chain connection with the sprocket *d'* upon the broom shaft *c*. This sprocket is within the recurved shoe *d''* of the bar D, and so protects the sprocket as shown in Figs. 1 and 4.

The motor is operated to stop and start by means of an ordinary switch key, as is usual in devices of this sort, and operates the broom C and the fan I. We carry sufficient cells P to run the motor while the broom is being used. At the rear we further provide the platform with the locking rod *r* which works within eyes S, and is adapted to secure the cart T the brackets *s'* of which work between the eyes S and are secured by the rod *r*. This rod *r* is operated by the bell crank *r'* which is in rod and lever connection *t* so that the locking rod *r* may be operated by the driver.

The cart T is preferably closed with the exception of a central opening provided with a stub spout *k²* over which the flexible spout *k* is placed.

The fan as well as the broom is operated by the electric motor, both being in belt connection, as shown. The fan I causes a powerful draft to pass below and under the broom hood, so that the dirt particles and dust are carried up the fan, and through the collector K into the cart. By virtue of the fan drawing all the dust into the collector, the sweeper may be used at any time independent of a dust cart, without creating the least particle of dust outside the hood. The broom can be readily raised or lowered by the driver, and if necessary the sweeper could be halted at one point, and the broom be oper-

ated even to work into depressions, being lowered by means of the bars D, D, so that an uneven as well as an even street could be thoroughly cleaned.

5 The device is exceedingly simple and readily operated, and,

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

10 1. In a street sweeper, the combination with a carriage and platform, of a flaring mouthed fan spout below said platform, a fan mounted above said spout, a brush hood below and communicating and telescoping within said
15 spout, a brush the projecting shaft of which projects beyond said hood, supporting bars pivoted to the platform the lower ends being provided with bearings adapted to hold the broom shaft, rods loosely working upon said
20 broom shaft, and held by means of guide strap operating levers connected to said rods for raising and lowering said brush hood, and a motor for operating said brush and fan, all arranged substantially as and for the purpose
25 set forth.

2. In a street sweeper the combination with a carriage and supporting frame, of a fan spout below said frame, a fan above said frame communicating with said spout, a brush
30 hood telescoping within said fan spout, a brush within said hood the shaft of which

projects beyond said hood, a sprocket upon one end of said shaft, bars pivoted to said supporting frame, the lower ends being adapted to contain the projecting shaft ends, rods
35 loosely working upon said broom shaft, levers for raising and lowering said rods, an electric motor in sprocket and chain connection with said broom and fan, and a dust collector connected to said fan, all arranged to
40 operate substantially as and for the purpose set forth.

3. In a street sweeper, a cart detacher, comprising two sets of supporting eyes secured to the frame of the sweeper, a bar having one
45 end recurved horizontally reciprocating within said supporting eyes, a bell crank secured to said frame, one end being secured to said rod, the other being attached to a connection rod, and a lever for operating said bar, so as
50 to secure or release the brackets of the dirt cart adapted to be attached to said sweeper, all substantially as and for the purpose set forth.

In testimony whereof we affix our signatures 55 in presence of two witnesses.

HENRY S. MOODY.
FRED R. SMITH.

Witnesses:

ALEXANDER MOORE,
G. W. SUES.