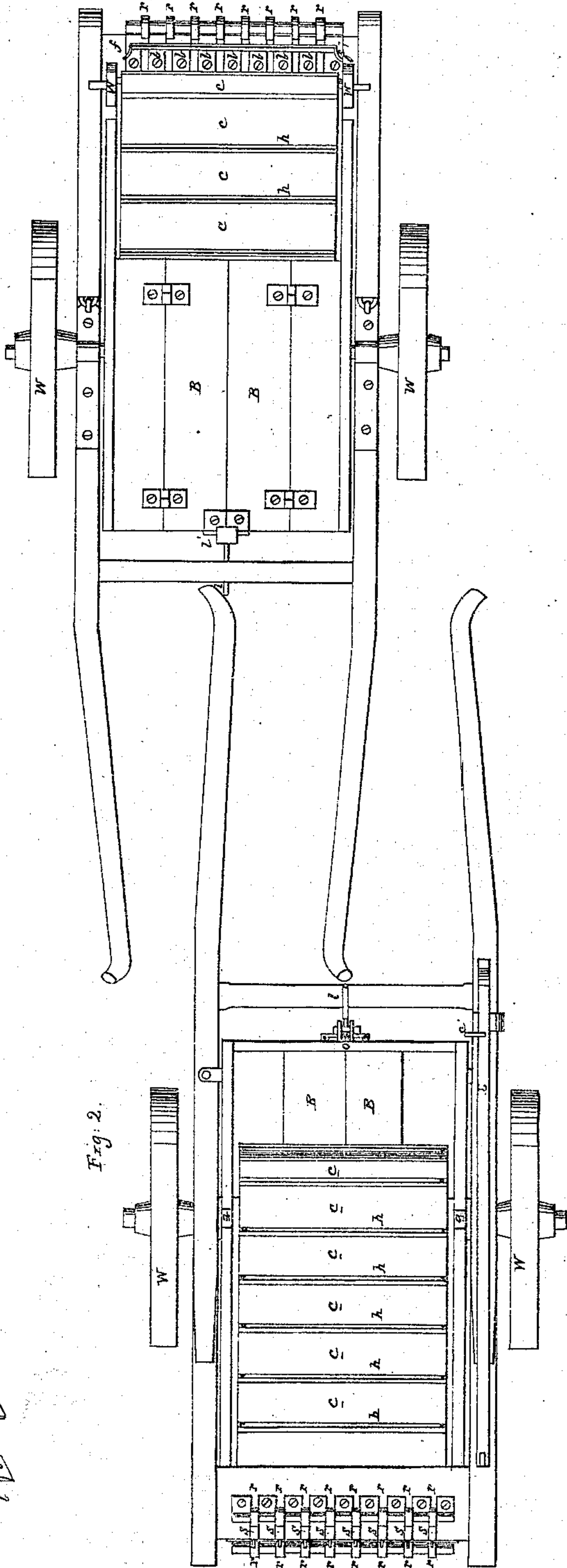
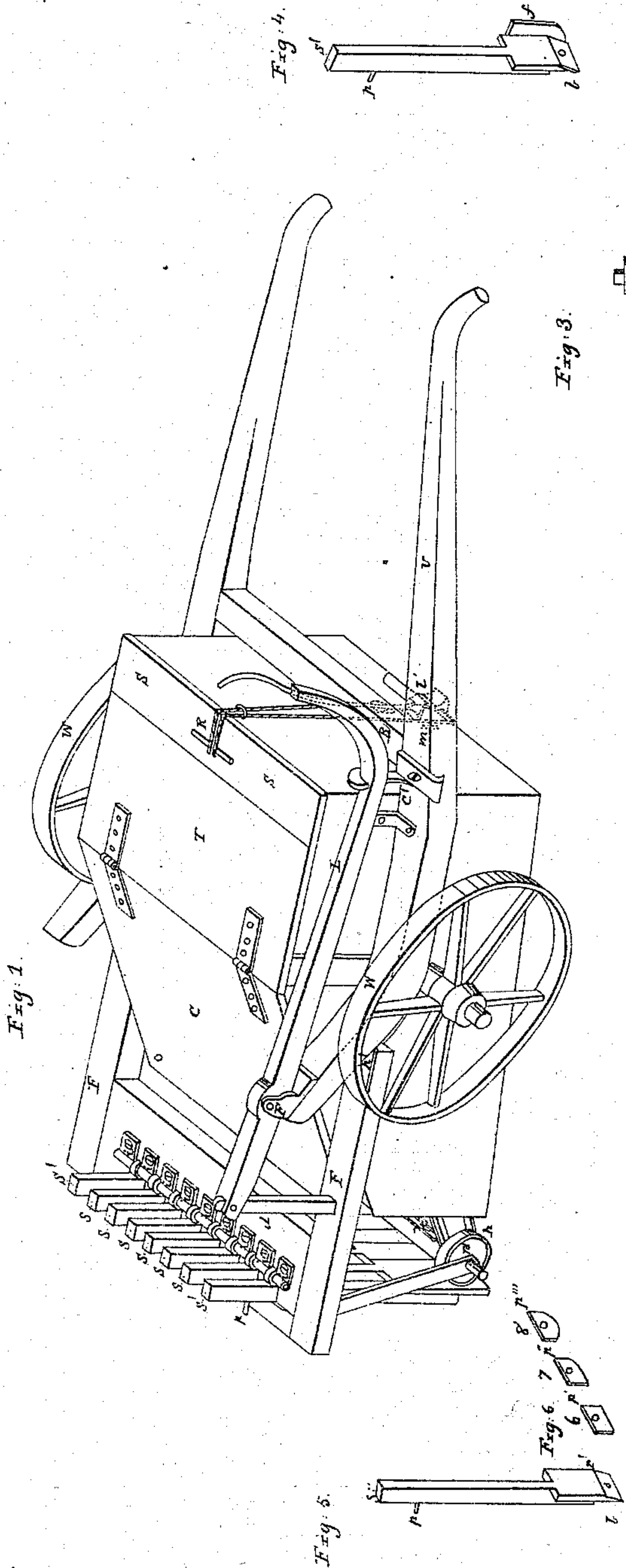


W. H. Hope.
Street Sweeper.

*N^o 1,230.
32,234.*

Patented Apr. 30, 1861.



Witnesses:

Julius H. Barrett
John M. Kelly

Inventor:

Wm. H. Hope

UNITED STATES PATENT OFFICE.

WM. H. HOPE, OF WASHINGTON, DISTRICT OF COLUMBIA, ASSIGNOR TO THOMAS B. FLORENCE, OF PHILADELPHIA, PENNSYLVANIA.

STREET-CLEANING MACHINE.

Specification of Letters Patent No. 32,234, dated April 30, 1861.

To all whom it may concern:

Be it known that I, WILLIAM H. HOPE, of Washington, in the District of Columbia, have invented a new and Improved Mode of
5 Cleaning or Scraping Streets; and I do hereby declare that the following is a full and exact description thereof, reference being had to the accompanying drawings and to the letters of reference marked thereon.

10 The nature of this invention consists in the peculiar formation and arrangement of the shovels, or scrapers, in combination with the endless apron, or conveyer, whereby the shovels, or scrapers, in gathering mud and
15 dirt, adjust themselves to the shape, or irregularities of roughly paved streets, alleys, or gutters, while the conveyer conducts the dirt or mud into the box or body of the machine.

20 It also consists in the mode described for opening and closing the bottom of the machine to let out its contents when necessary so to do.

To enable others to make and use my invention, I will proceed to describe its construction and operation.

In the drawings Figure 1 is a perspective view of the machine; Fig. 2 a top view showing the conveyer, lever for opening the
30 bottom and closing it, and the rollers and tops of the shovels, or scrapers. Fig. 3 is a bottom view, showing the latch of the lever, the hinged bottom, the conveyer, the points of the shovels, or scrapers and wheel sustaining the conveyer when in operation. Fig. 4 shows one of the outside flanged shovels. Fig. 5 shows one of the inside
35 shovels with its point off, and Figs. 6, 7 and 8 points for the shovels of different shapes.

40 F F is the frame for the shovels to work in, s s are the shovels or scrapers, a number of which work in frame F between rollers r arranged at the top and bottom of frame F; shovels s are made to play up and down between rollers r so that the handles of the
45 shovels will not bind and hold fast when they meet with any serious obstacle, as would be the case if there were only straight holes without rollers for them to work in. The shovels s are made of cast iron, in the form shown in the drawings, with removable wrought iron points p' p'' p''' that

have a hole in them for a bolt, or screw, to pass through so as to be taken from and
55 attached to the shovels at pleasure. Said iron points are in a beveled position, when on the shovel, and can be made of different shapes, as shown in the drawings, so as to suit the edge or entire form of a gutter or
60 other place to be cleaned. The shovels s have a pin p in or near the top of each, so that they will not slip out of frame F when raised off the ground by lever L.

b shows a beveled end to the shovels, said
65 beveled end is to enable the shovels to easily pass over a stone or any serious obstacle that may be met with while the shovels are in operation.

The advantages in having the points p'
70 of the shovels made of wrought iron, and removable, are that wrought iron is more durable than cast iron and not so apt to break, and by being able to remove them, only a new point has to be made when
75 worn out, instead of a new shovel.

The outside shovels s' s' are made with a flange f to prevent the dirt from passing out on either side as it is being collected. w w show the small wheels in front of the
80 shovels which are intended to support the conveyer c c and frame F when the machine is in operation.

L shows the lever and d the piece which connects the lever to frame F, said lever L
85 is used to raise the frame, shovels and conveyer, off the ground when the machine is not in operation.

B B is the hinged bottom which is opened to let the dirt out after a load is collected.
90

l shows the lever which has a latch l' at its bottom; said lever and latch is operated by spring o, which should be a strong spring so that it may firmly hold the latch in place.

m is a stout iron piece, as shown in the
95 drawings, in which lever l works and which connects it to the machine.

R R is a rope or strap, or chain, running through a ring in front of the machine and attached to the hinged bottom with which
100 the driver closes said bottom after emptying his load.

r' shows a recess in the shovel, in which the top of wrought iron points p' fits.

W W are the large driving wheels.

C is the cover to conveyer c.

T is the hinged top; S S the driver's seat.
 c' is the catch that holds the lever L when
 the frame F is raised from the ground; i i
 pieces of iron fastened to the frame to which
 5 the rollers r are attached.

h' shows where frame F is hinged or fastened to shaft U, and h h the buckets, or scoops, which gather the dirt onto conveyer c.

In using this machine adjustable shovels
 10 s s gather the dirt or mud and conveyer c, which revolves with the axle a a, carries it into the body or box of the machine.

The conveyer c should be made of a series of hard wood slats hinged, or hooked, together on stout gutta percha cloth and the
 15 buckets, or scoops h, screwed or bolted to said slats, or gutta percha cloth.

What I claim and desire to secure by Letters Patent is:

1. The peculiar construction and arrangement of the shovels, or scrapers s, as described, in combination with the endless apron or conveyer c frame F and lever L. for the purposes specified. 20

2. The combination with the hinged frame 25 F, and hinged bottoms B, B, of the levers L and l, the latch, spring, and cord, or its equivalent constructed and arranged in relation to the driver's seat, in the manner and for the purpose specified.

WM. H. HOPE.

Witnesses:

WM. LITTLE,
 JO. SEVERNS.