

No. 875,375.

PATENTED DEC. 31, 1907.

F. E. PENFOLD.
STREET SWEEPER.

APPLICATION FILED JAN. 24, 1907.

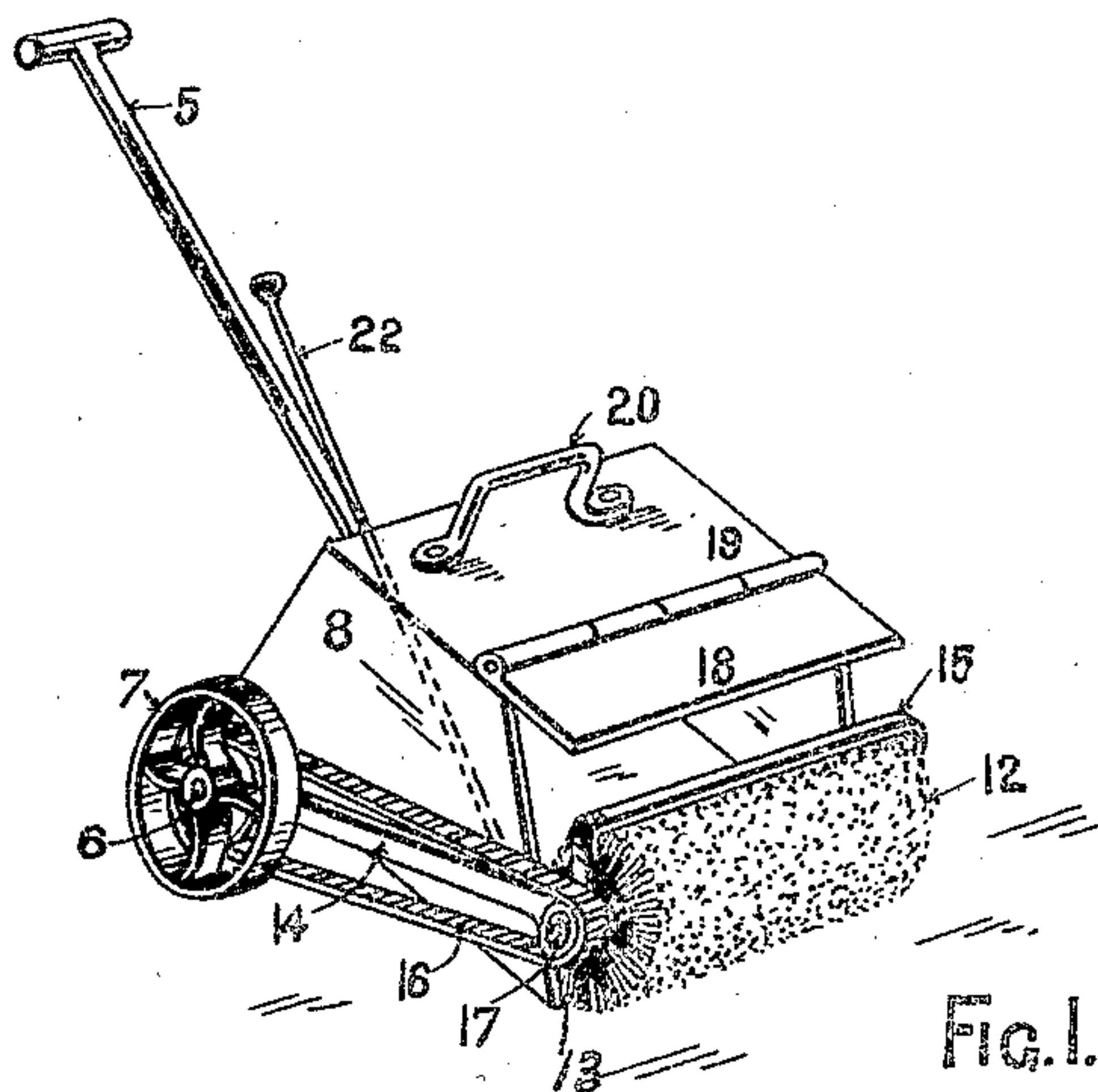


FIG. 1.

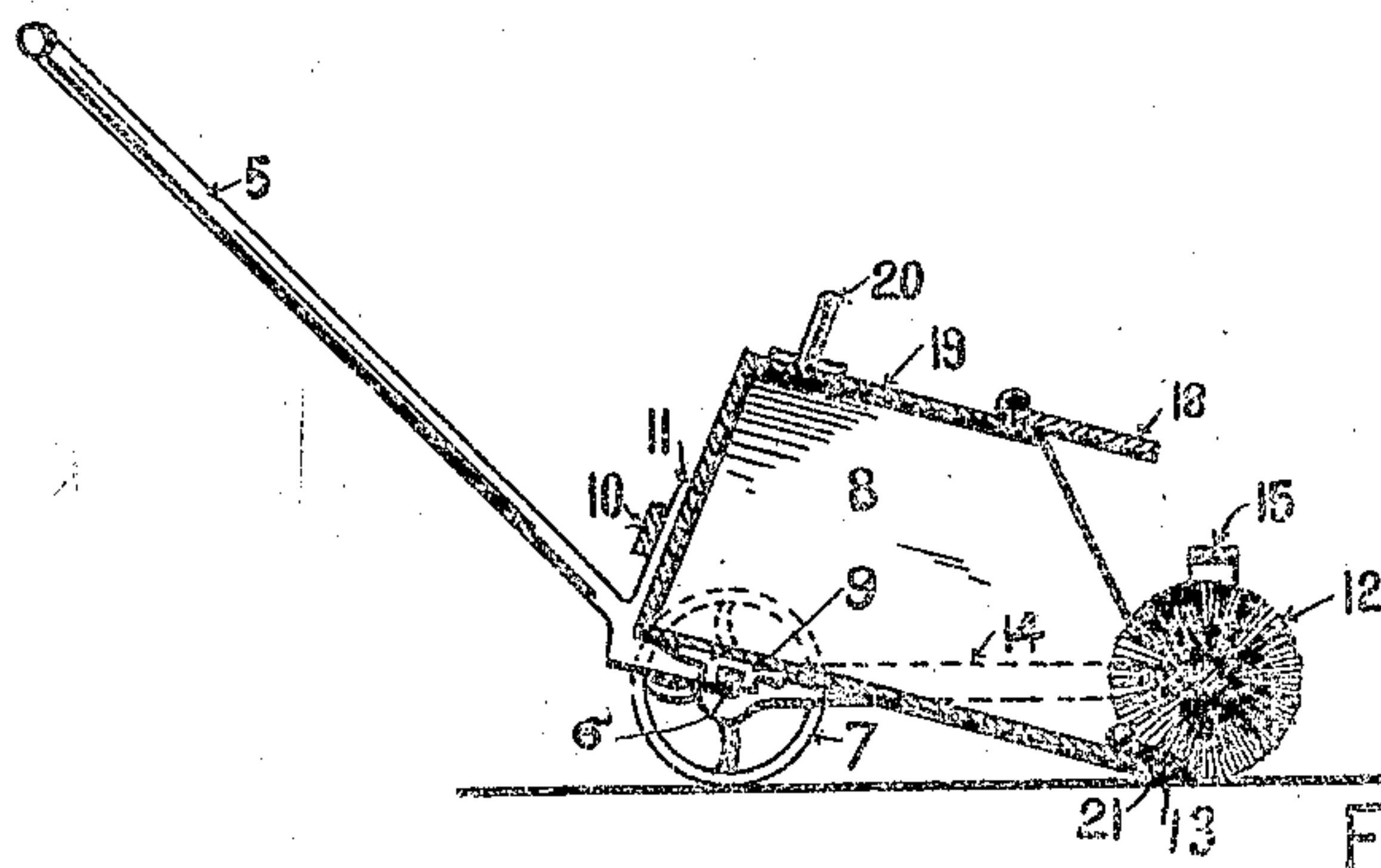


FIG. 2.

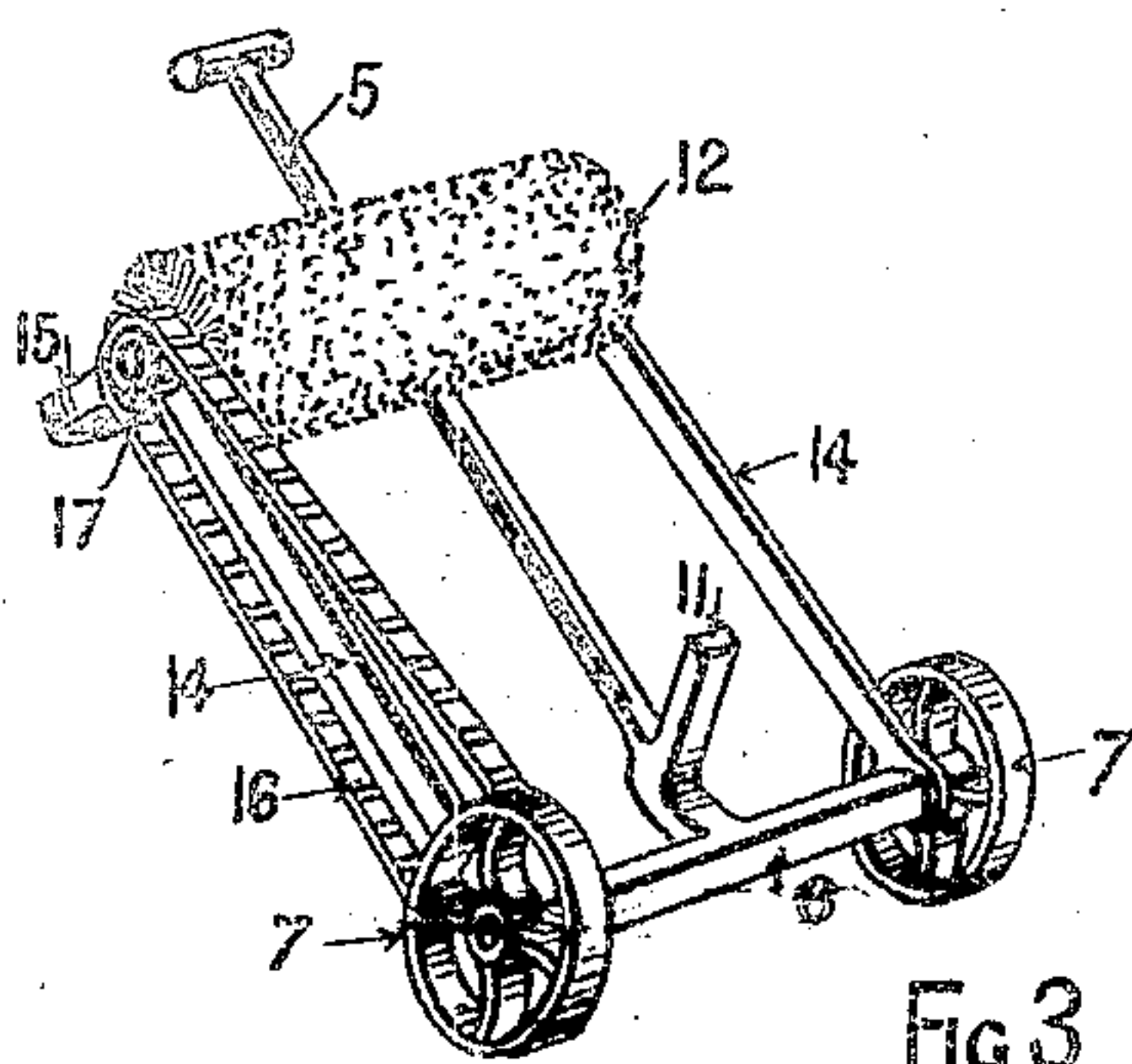


FIG. 3.

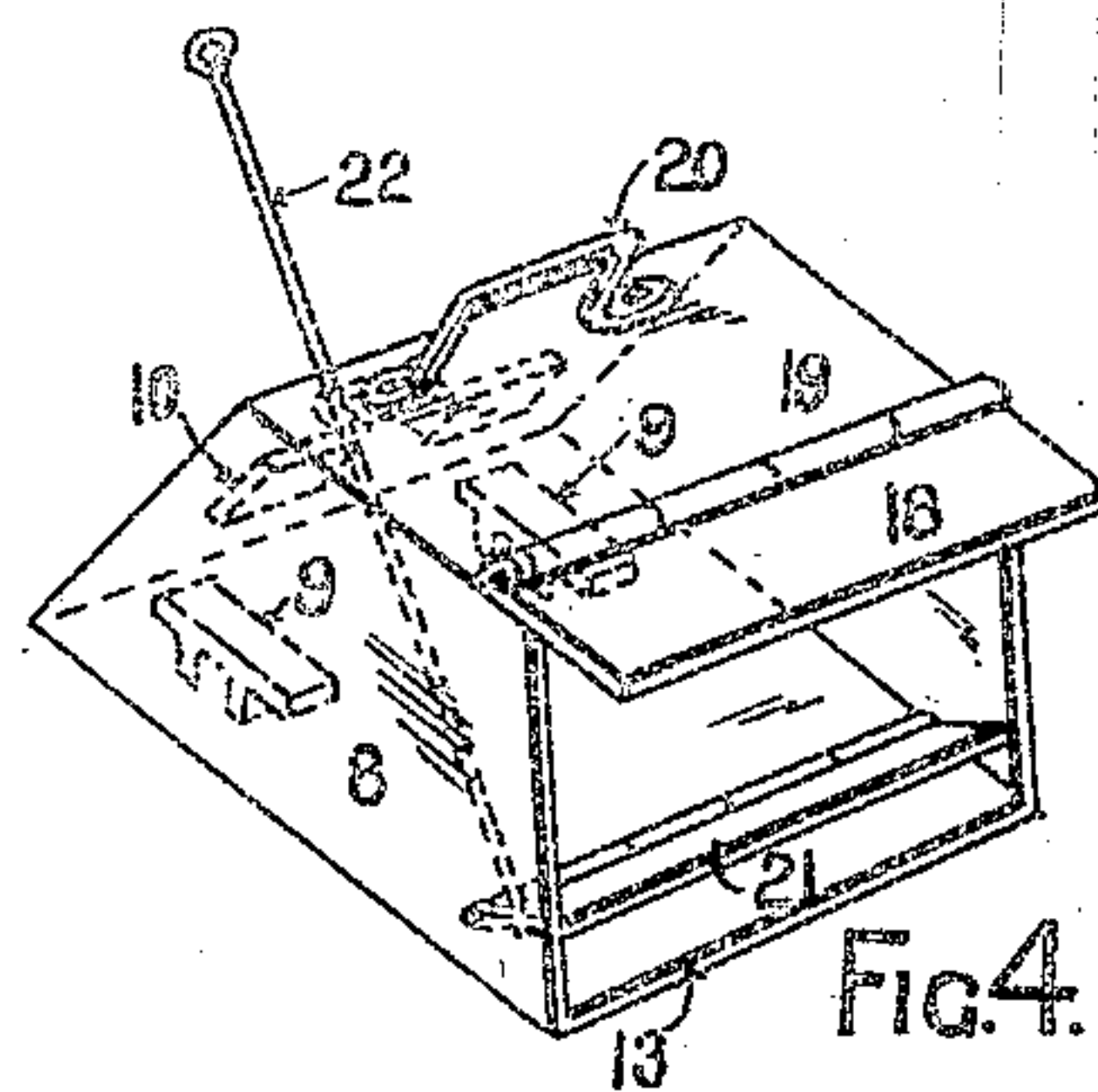


FIG. 4.

Witnesses.

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FREDERICK EDWIN PENFOLD, OF SYDNEY, NEW SOUTH WALES, AUSTRALIA.

STREET-SWEEPER.

No. 875,375.

Specification of Letters Patent.

Patented Dec. 31, 1907.

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To all whom it may concern:

Be it known that I, FREDERICK EDWIN PENFOLD, a subject of the King of Great Britain, residing at 183 Pitt street, Sydney, in the State of New South Wales, in the Commonwealth of Australia, have invented certain new and useful Improvements in Street-Sweepers, of which the following is a specification.

10 The purpose of this invention is to provide a light portable street sweeper capable of being used by a lad and which will be more speedy, effective and cleaner in operation than any means hitherto in use.

15 The essential features of the invention are a light detachable dust receptacle or lipped hopper, a revolving brush adapted to be moved into and out of contact with the road, and a light frame or carriage mounted on 20 wheels.

In order that my invention may be clearly understood reference will now be made to the accompanying sheet of drawings in which:—

25 Figure 1 is a perspective view of the machine. Fig. 2 a horizontal section of same. Fig. 3 is a perspective view of the carriage showing brush out of contact with the ground and thrown back on the handle of the carriage and the dust pan removed. Fig. 4 is a 30 perspective view of the dust pan.

In the drawings similar numerals of reference indicate similar parts in all the figures.

Referring to Figs. 1 and 2, 5 is the handle of the carriage of which 6 is the axle and 7 35 the wheels. The receptacle for the dirt consists of a lipped hopper 8. This lipped hopper is adapted to fit on the axle of the carriage and is provided with lugs 9, engaging therewith. To insure the rigidity of the lipped 40 hopper 8 on the carriage, a socket 10 is fastened on the back thereof, said socket being adapted to fit on a projecting lug 11 provided on the top of the handle 5 of the carriage.

The horizontal brush 12 is mounted in 45 front of the lip 13 of the hopper between a pair of shafts 14 extending one on each side of the hopper. These shafts 14 are pivoted on the axle of the carriage and integral or fastened to the ends of these two shafts 14 is 50 a bracket 15 passing over the brush. This bracket 15 is provided for the purpose of raising the brush out of contact with the ground, also for keeping the frame rigid.

The brush 12 is adapted to be revolved by 55 means of a chain 16 gearing with sprocket

wheel 17 provided on the end of the spindle of the brush and sprocket wheel provided on the inside of one of the wheels of the carriage, (see Figs. 1 and 3.) 18 is a hinged shield provided on the top 19 of the hopper 8 for the 60 purpose of preventing any of the material splashing or rising on to the operator. This shield is hinged for the purpose of allowing it to fall back on to the handle 20 of the hopper thereby permitting the brush to be lifted 65 back over the hopper.

To prevent the accumulation of dirt on lip of the hopper a hinged flap 21 (see Fig. 4) is provided thereon and is adapted to be raised by means of a rod 22 which is passed through 70 an orifice in the top 19 of the hopper, thus forcing the material accumulated thereon into the back of the hopper 8.

The operation of my invention is as follows:—The brush 12 being in contact with 75 the ground, it is revolved when the machine is propelled forward by means of the chain and gear thereby sweeping the dirt into the hopper 8. The operator occasionally pulls the rod 22 thereby forcing any dirt accumu- 80 lated on the lip into the body of the hopper by means of the hinged flap 21. When the hopper requires emptying, the operator throws the brush back on to the handle (see Fig. 3,) wheels the machine to the nearest 85 dust receptacle, lifts off the hopper and empties same.

What I claim as my invention is:

1. A street sweeper comprising a carriage, consisting of an axle and wheels mounted 90 thereon, a dirt receptacle removably carried by the carriage, arms pivotally connected to the carriage at the sides of the dirt receptacle and projecting in front thereof, a brush jour- 95 naled in the arms in front of the dirt receptacle, said arms being arranged to swing on the axle, and raise the brush above the dirt receptacle, and operable means for transmitting motion from the wheels to the brush.

2. A street sweeper comprising a carriage, 100 consisting of an axle, a handle connected with the axle having a receptacle engaging projection, wheels for the axle, a dirt receptacle detachably mounted on the axle having an 105 open side, lugs on the bottom of the dirt receptacle engaging the axle, a socket on the back of the dirt receptacle engaging the handle projection, arms pivoted on the axle, and projecting in front of the dirt receptacle, a 110 rotary brush revolvably mounted between the

arms and situated in front of the dirt receptacle, and means for causing the revolution of the brush as the wheels revolve.

3. A street sweeper comprising a carriage,
5 consisting of an axle, a handle connected with the axle having a receptacle engaging projection, wheels mounted on the axle, a dirt receptacle detachably mounted on the axle having an open side, lugs on the bottom
10 of the dirt receptacle engaging the axle, a socket on the back of the dirt receptacle engaging the handle projection, a shield hinged to the upper edge of the open side of the dirt receptacle, arms pivoted on the axle, and ex-
15 tending in front of the dirt receptacle, a

brush revolubly mounted between the arms and situated in front of the dirt receptacle, means for causing the revolution of the brush as the wheels revolve, a flap hinged to the lower edge of the open side of the dirt recep- 20 tacle, and means operated from the back of the sweeper for raising the flap in order to move the dirt backward in the dirt receptacle.

In testimony whereof he affixes his signa- 25 ture in presence of two witnesses.

FREDERICK EDWIN PENFOLD.

Witnesses:

WALTER SIGMONT,
T. C. ALLEN.