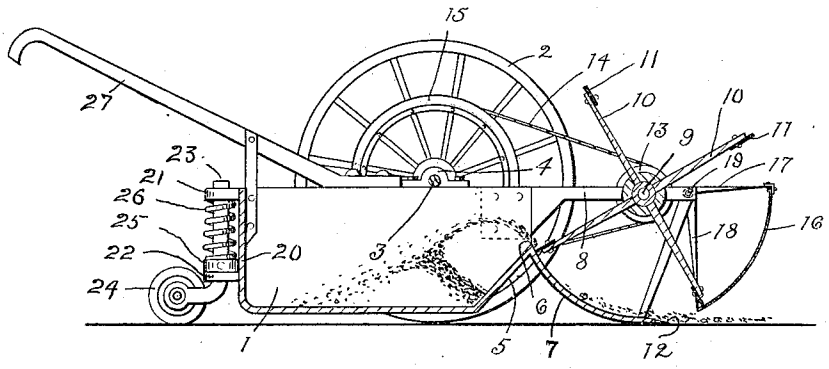
H. YESSNE.

STREET CLEANING DEVICE.

APPLICATION FILED SEPT. 25, 1916.

1,224,349. Patented May 1, 1917.



WITNESSES:

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HARMAN YESSNE, OF DULUTH, MINNESOTA.

STREET-CLEANING DEVICE.

1,224,349. Specification of Letters Patent. Patented May 1, 1917.

Application filed September 25, 1916. Serial No. 121,970.

To all whom it may concern:

Be it known that I, HARMAN YESSNE, a citizen of the United States, residing at Duluth, in the county of St. Louis and State of Minnesota, have invented certain new and useful Improvements in Street-Cleaning Devices, of which the following is a specification, reference being had therein to the accompanying drawing.

This invention consists of certain improvements in street cleaning machines and relates particularly to a manually operated device of this character which is designed more especially for the removing of coarse material and refuse or snow from street surfaces.

I am aware that street sweeping machines of somewhat similar design are old, but the principal novel feature of my present invention resides in forming what might be termed a vehicle scraper in that the revolving members are not designed especially to contact with the surface of the street but only to gather and force along the material scraped up by the machine.

The object is to produce a simple and inexpensive device of this character and one having certain advantageous features heretofore unknown in the art.

In the accompanying drawing in which like reference characters indicate like parts, a central vertical sectional view of my improved machine is shown and which is considered sufficient for all purposes of illustrating the novel features of the device.

1 represents an open topped rectangular shaped receptacle preferably formed of metal and suspended upon two wheels 2—2, of which but one is illustrated in the drawing.

These wheels are mounted upon a single axle 3 upon the upper side edges of the receptacle 1 in suitable bearing boxes 4. The lower front end 5 of the receptacle is inclined upwardly and outwardly and terminates approximately half way up the box as at 6 and from which termination there extends forwardly and downwardly the curved apron 7, the office of which is to act as a scraper in gathering and directing the material being removed from the street.

From each front corner of the receptacle projects forwardly an arm 8 upon which is revolubly carried in any desired manner the cross shaft 9 which has rigidly fixed thereupon the revolving blades 10.

These blades may be of solid pieces of metal or wood as desired, but I prefer to make them of solid pieces of thin metal and having attached to the extreme edges thereof suitable rubber strips 11 which engage the material being gathered and convey it upwardly upon the surface of the apron 7 into the receptacle 1, as clearly illustrated.

The forward edge 12 of the apron 7 preferably extends slightly beyond a point vertically below the center of the shaft 9 and is designed to rest normally upon the surface of the street being cleaned to act as a scraper and the revolving blades contact with the material being gathered in front of the apron and force it thereupon and upwardly into the receptacle as they revolve upon the axle 9.

The axle 9 is revolved by means of a suitable sheave 13 and belt 14 thereabout and deriving its power from the rim sheave 15 fixed to the spokes of one of the wheels 2 and which form of transmitting power is well known.

The relative size of the sheaves 13 and 15 is such as to produce the proper speed of the shaft 9 when the machine is in motion.

A curved sheet metal shield 16 is supported by suitable arms 17 and 18 fixed to the extreme front end of the arms 8 and designed to prevent the wind produced by the revolving blades from disadvantageously disturbing the material being gathered and which may be entirely dispensed with when the machine is being used for scraping and gathering snow or the like or adjusted upwardly out of the way by loosening the bolts 19 which hold the braces 17 and 18 and resetting them when the shield is suitably raised.

Upon the rear end 20 of the receptacle 1 is vertically pivotally carried in the fixed bearings 21 and 22 the stem 23 of a suitable caster wheel 24 and of which there may be one or more as desired.

To the stem 23 is rigidly fixed a collar 25 and between this collar and the bearing 21 and about the stem 23 is an expansion spiral spring 26 which tends to raise the rear end of the receptacle to its maximum height as governed by the collar 25. The maximum expansive adjustment of the spring 26 is just sufficient to keep the forward edge 12 of the apron 7 in engagement with the street surface when the latter is level and by

the operator bearing down upon the handles 27, the forward edge of the apron may be raised to suit circumstances. The handles 27 may be of any desired form, but preferably rigidly fixed to the rear corners of the receptacle.

While I have shown four blades 10 on the shaft 9 it is to be understood that in the event of handling deep and light snow, but two such blades would be sufficient as their sole object is to carry the snow upward upon the apron 7 and into the receptacle.

From the foregoing it is evident that I have devised an exceedingly simple hand manipulated scraper having an auxiliary revolving attachment for assisting in the gathering of the material being scraped.

Having thus described my invention what I claim and desire to secure by Letters Patent, is:

In combination, a substantially rectangular shaped receptacle, mounted upon wheels, and having an upwardly and forwardly extending inclined portion in the bottom thereof, terminating in a forwardly extending downwardly curved receiving apron, forwardly projecting extensions of the upper side walls of the receptacle, a revoluble shaft mounted within said extensions, blades carried upon the shaft and designed to engage the apron but not to engage the surface being cleaned, an adjustable curved wind shield extending from a point parallel with the center of the blade carrying shaft to within close proximity of the surface being cleaned, means for maintaining the forward edge of the apron normally in contact with the surface being cleaned, and means for operating the device.

In testimony whereof I hereunto affix my signature in the presence of two witnesses.

HARMAN YESSNE.

Witnesses:
W. H. DENHAM,
S. GEO. STEVENS.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."