No. 887,874. PATENTED MAY 19, 1908.

H. T. TOY.

STREET SCRAPER.

APPLICATION FILED MAR. 12, 1908.

Fig. 1.

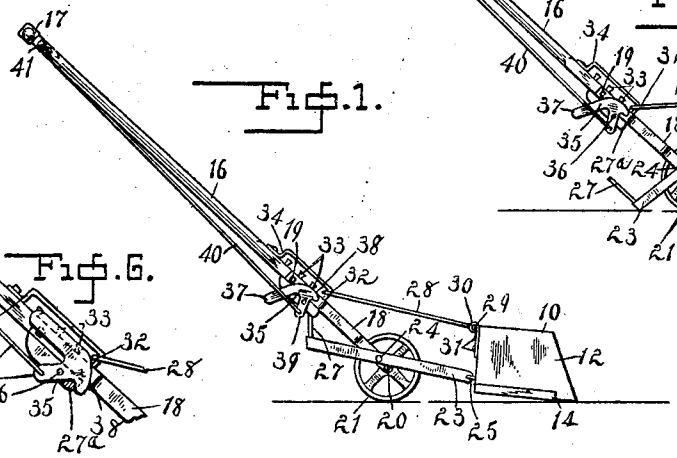


Fig. 3.

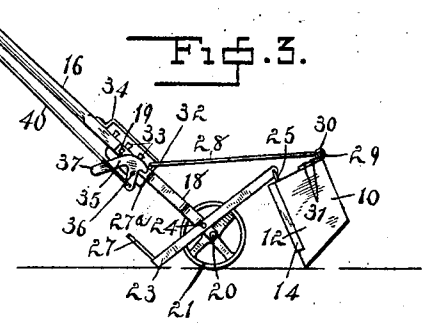


Fig. 6.

Fig. 2.

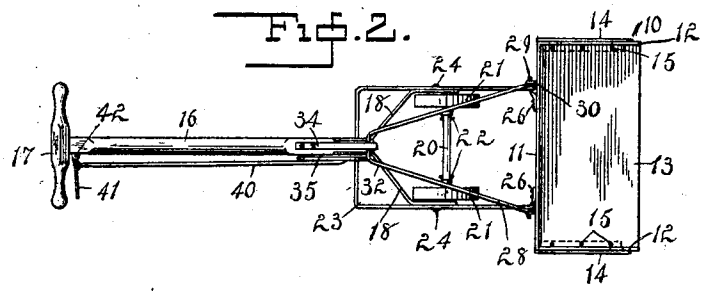


Fig. 4.

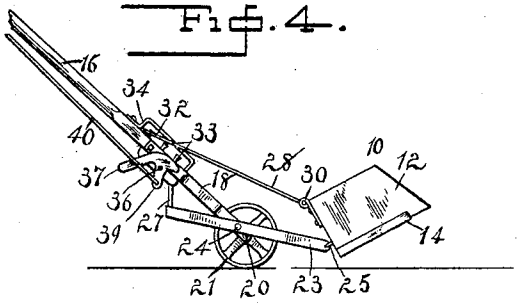
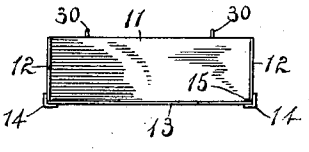


Fig. 5.



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STREET-SCRAPER.

No. 887,874. Specification of Letters Patent. Patented May 19, 1908.

Application filed March 12, 1908. Serial No. 420,599.

To all whom it may concern:

Be it known that I, HUGH T. TOY, citizen of the United States, residing at Sidney, in the county of Shelby and State of Ohio, have invented certain new and useful Improvements in Street-Scrapers, of which the following is a specification.

My invention relates to road or street scrapers and refers particularly to devices of this class operated by hand.

The chief objects of the improvements which form the subject matter of this application are, to provide a scraper and carrier for collecting and conveying dirt and refuse, that will enable one operator to accomplish a given amount of work with greater rapidity than when the ordinary form of appliance is used; to furnish a device for the purpose stated in which the receptacle for dirt may be caused to assume a variety of operative positions by manipulating mechanism attached to the handle, and to supply a more convenient and efficient apparatus than those in common use.

Further objects, stated in detail, are to provide means for dumping the scoop by means of the foot; to provide ground wheels for the device whereby the material to be removed may be conveyed with ease from place to place; to furnish a removable blade or scraper to facilitate repairs and thus prolong the life of the appliance, and to furnish a mechanism having unusual advantages that will be simple in construction, of durable material, and that can be manufactured economically since the parts will be few and of forms that can be shaped without recourse to elaborate or expensive tools and machinery.

I accomplish the above and other results of minor importance by the use of the appliance illustrated in the accompanying drawing, forming a part of this application, and in which:—

Figure 1 is a side elevation of my improved street scraper in position for the operation of scraping; Fig. 2 is a top plan view: Fig. 3 is a side elevation of the device in dumping position, the handle being partly broken away; Fig. 4 is a side elevation showing the position for conveying; Fig. 5 is a front elevation for the scoop, and Fig. 6 is a fragmentary view, enlarged, showing the operative position of the trigger.

Referring to the details of the drawing, the numeral 10 indicates a rectangular pan or scoop open above and in front, and composed of a plate 11 forming the back, the ends of the plate being bent at a right angle to form scoop ends 12. A bottom plate, or scraper 13, rests upon angle irons 14 secured to the ends 12, and is fastened to the angle irons by screws 15 which permit the scraper to be readily removed for repairs or renewal. The device is supplied with a tongue or handle 16, a cross bar 17 at the top serving for a hand grasp in operating the machine. To the lower end of the tongue are attached a pair of hounds 18 secured thereto by bolts 19 their forward ends having holes to receive the ends of an axle 20, upon which are loosely mounted ground wheels 21, held in position laterally by cotter pins 22. A frame or yoke 23 formed of a flat bar bent in the shape seen in Fig. 2 is pivoted at each side to the hounds 18 at 24, the forward ends having holes which are engaged by eyes 25 secured to the back plate 11 of the scoop by suitable fastenings 26. The transverse portion at the rear end of the yoke extends beneath the lower end of the tongue or handle 16 and directly beneath the handle said yoke is furnished with a stop finger 27 which engages a block 27^a to limit the movement of the yoke in one direction. The position of the scoop relatively to the yoke and handle is governed by a bail 28, composed of a rod bent in the shape shown in Fig. 2, its ends formed into hooks 29 to engage eyes 30 secured to the upper margin of the back plate 11 by bolts or rivets 31. The middle portion or loop 32 of the bail 28 is adapted to engage a series of pins 33 fixed in the upper side of the handle 16 near the lower end, a strap 34 serving as a guide to prevent the bail from being displaced. The loop 32 may be placed in engagement with the various pins 33 by taking hold of the bail with the hand. I prefer, however, to use an intermediate device for this purpose, so arranged as to be operated from the upper end of the handle as being more convenient. Upon one side of the handle adjacent the pins 33 is located a trigger 35, pivoted at 36 to the block 27^a. The trigger is formed with a head 37, the upper margin of which is straight throughout its greater extent, the lower end being curved at 38 eccentric to the pivot 36, and a stem 39. To the latter is attached a rod 40, its upper end being fixed to a lever 41, pivoted at 42 to the handle 16. When the lever 41 is pressed towards the cross bar 17, the rod 40 will throw the trigger

to the position shown in Fig. 6 and prevent engagement of the loop 32 with either of the pins 33 so long as the trigger is held in this position.

Having thus set forth the details of construction, a brief description of the manner of operating the appliance will now be given. When the loop of the bail is in the lowest position, as shown in Fig. 1, the front margin of the scraper will rest upon the ground, the weight of the scoop carrying the yoke to the position shown, with the stop 27 in engagement with the block 27^a. The operator then grasps the cross bars 17 and pushes the apparatus before him with the scraper in contact with the ground or pavement until a sufficient quantity of material has been gathered in the scoop. He then presses the lever 41 throwing the trigger to the position shown in Fig. 6 and holding it there while he raises the handle until the loop 32, riding along the upper margin of the trigger reaches the limit of its travel. The trigger is then allowed to drop to initial position by the action of gravity, and the loop will fall into engagement with one of the pins 33. If the upper end of the handle is now lowered the scoop will be raised from the ground by the yoke, and held by the bail with its front edge tilted up at the angle shown in Fig. 4 and the apparatus can then be wheeled to any point desired. To dump the contents of the scoop two methods may be employed; the loop of the bail having been placed in the lowest notch, raising the upper end of the handle will depress the front edge of the scoop, sufficiently to cause the contents to escape, or, holding the handle in lowered position the rear end of the yoke may be depressed thus carrying the lower margin of the back plate upwardly, the bail acting to thrust the upper margin forwardly, causing the scoop to assume the dumping position illustrated in Fig. 4.

Having thus described my invention, what I claim as new, is:—

1. In a street scraper, the combination of a handle, supporting wheels, a scoop having hinged connection with said handle and means for retaining the scoop in various positions relative to the handle.

2. In a street scraper the combination of a handle, supporting wheels, a scoop having hinged connection with the handle, and a removable bottom for the scoop.

3. In a scraper, the combination of a handle, supporting wheels, a scoop having hinged connection with said handle, means for holding the scoop in different positions relative to the handle, and a removable bottom for the scoop.

4. In a scraper, the combination of a handle supporting wheels, a scoop having hinged connection with said handle, a removable bottom for the scoop, means for locking said scoop in different positions relative to the handle, and means for releasing said locking means.

5. In a street scraper, a handle, supporting wheels, a rockable frame, a scoop hinged to said frame, an adjustable member connecting the scoop with said handle, and means attached to the handle for operating said member.

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

HUGH T. TOY.

Witnesses:
D. OLDHAM,
J. W. KOOGLER.