

(No Model.)

P. R. HANSBURY.

APPARATUS FOR MELTING AND REMOVING SNOW.

No. 586,124.

Patented July 13, 1897.

Fig. 1

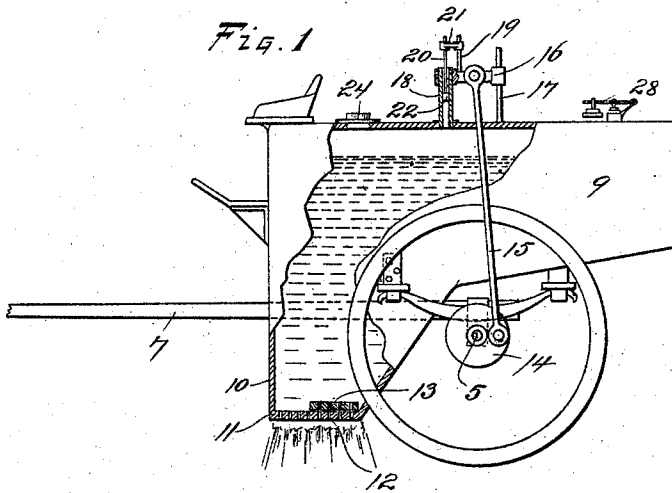


Fig. 2

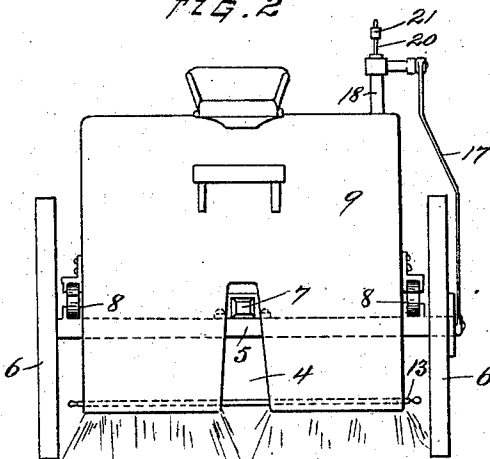
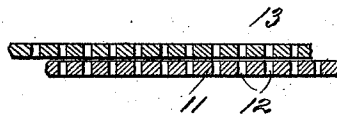


Fig. 3.



WITNESSES

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APPARATUS FOR MELTING AND REMOVING SNOW.

SPECIFICATION forming part of Letters Patent No. 586,124, dated July 13, 1897.

Application filed July 31, 1896. Serial No. 601,211. (No model.)

To all whom it may concern:

Be it known that I, PETER R. HANSBURY, a citizen of the United States, and a resident of New York, in the county of New York and State of New York, have invented certain new and useful Improvements in Apparatus for Melting and Removing Snow, of which the following is a specification, reference being had to the accompanying drawings, forming a part thereof, in which similar numerals of reference indicate corresponding parts wherever found throughout the several views.

This invention relates to apparatus for melting and removing snow; and the object of the invention is to provide an improved device of this class which is simple in construction and operation and comparatively inexpensive, while being well adapted to accomplish the result for which it is intended.

The invention is fully disclosed in the following specification, of which the accompanying drawings form a part, in which—

Figure 1 is a sectional side view of my improved apparatus; Fig. 2, a front view thereof, and Fig. 3 a section of a detail of the construction.

In the practice of my invention I provide a vehicle which consists of a shaft or axle 5, which is provided at each end with a wheel 6 and centrally thereof with a tongue or pole 7, and mounted on said axle, near each end thereof, are springs 8, which support a bed or body 9, which is preferably composed of sheet metal and which is of the form shown in Figs. 1 and 2, said bed or body extending backwardly rearwardly of the shaft and forwardly thereof a predetermined distance, and the forward portion is carried or extended downwardly to within a short distance of the ground, as shown at 10, and said forward portion is divided longitudinally at the center thereof or provided with an upwardly-directed longitudinal slot or space 4, through which the tongue or pole 7 passes, and said tongue or pole also serves, under certain circumstances, to support and steady the bed or body 9.

The bottom 11 of the downwardly-directed extension of the bed or body 9 is provided with a number of small perforations, as shown at 12, and placed thereon is a sliding plate or board 13, which is similarly perforated, said

sliding plate or board 13 being narrower than the bottom 11.

Secured to the hub of one of the wheels 6 is a circular disk or wheel 14, and eccentrically and pivotally connected therewith is a rod 15, which extends upwardly and is pivotally connected with a cross-head 16, which is vertically movable and mounted on a vertical standard 17 and a vertical tubular cylinder 18, and said cross-head is provided with an upwardly-directed rod 19, which is connected with a piston-rod 20 by a cross-head 21, and said piston-rod extends into the tubular cylinder 18 and is provided with a piston-head 22, and this device is adapted to serve, or designed to serve, as an air-pump for forcing air into the wagon bed or body 9.

The cover of the wagon bed or body 9 is provided at or near its rear end with any suitable safety-valve 23, and near the forward end thereof is an opening closed by a cap 24, and in practice the bed or body 9 is filled with gasoline or other light product of hydrocarbons, and the perforations in the bottom 11 are so fine that the gasoline will not flow therethrough to any considerable extent except when pressure is applied by forcing air into the wagon bed or body.

It will be understood that the air-pump is operated as the vehicle is moved, and air is continually forced into the wagon bed or body, and the escaping gasoline is ignited as it escapes through the bottom 11 of the front portion of the wagon bed or body, and the flame thus produced is projected upon the snow. It will be understood that a high degree of heat is produced in this manner, and the snow is rapidly melted.

The sliding plate or board 13, which projects at each side, as shown in Fig. 2, is adapted to close a portion of the holes or perforations in the bottom 11, so as to limit the amount of gasoline discharged, but it will be understood that this sliding plate or board may be so manipulated as to open all of said perforations whenever desired.

The projections in the bottom of the downwardly-directed portion of the bed or body are of such size as to prevent the emission of oil under ordinary circumstances, but allow the same to escape in fine jets under the influence of the pressure produced by the air-

pump constructed as described, and by means of this arrangement there will be no loss of oil, the latter being ignited when forced through the perforations and the apparatus is in operation.

This device is simple in construction and operation and is perfectly adapted to accomplish the result for which it is intended, and my invention is not limited to the style or construction of the vehicle or to the method of connecting the bed or body 9 therewith, and it is evident that various changes in and modifications of the construction herein described may be made without departing from the spirit of my invention or sacrificing its advantages.

Having fully described my invention, I claim as new and desire to secure by Letters Patent—

1. The herein-described apparatus for melting snow, the same consisting of a suitable vehicle, a bed or body mounted thereon, and filled with gasoline or similar material, a portion of said body being carried downwardly in proximity to the ground, and the bottom thereof being provided with fine perforations through which the gasoline or other material is adapted to be forced, and an air-pump which is operated by the vehicle, for forcing air into said bed or body whereby the gasoline or other material is forced through said perforations, substantially as shown and described.

2. The herein-described apparatus for melting snow, the same consisting of a suitable vehicle, a bed or body mounted thereon, and filled with gasoline or similar material, a portion of said body being carried downwardly in proximity to the ground, and the bottom

thereof being provided with fine perforations through which the gasoline or other material is adapted to be forced, and an air-pump which is operated by the vehicle, for forcing air into said bed or body whereby the gasoline or other material is forced through said perforations, said perforated body portion being also provided with a sliding plate or board which is mounted thereon, and adapted to close said perforations, substantially as shown and described.

3. The herein-described apparatus for melting snow, the same consisting of a suitable vehicle, a bed or body mounted thereon, and filled with gasoline or similar material, a portion of said body being carried downwardly in proximity to the ground, and the bottom thereof being provided with fine perforations through which the gasoline or other material is adapted to be forced, and an air-pump which is operated by the vehicle, for forcing air into said bed or body whereby the gasoline or other material is forced through said perforations, said perforated body portion being also provided with a sliding plate or board which is mounted thereon, and adapted to close said perforations, and said bed or body being also provided in the top thereof with a safety-valve, substantially as shown and described.

In testimony that I claim the foregoing as my invention I have signed my name, in presence of the subscribing witnesses, this 28th day of July, 1896.

PETER R. HANSBURY.

Witnesses:

W. W. HILL,
CHARLES S. ROGERS.