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W. A. MILNE.

TUBULAR PEAT COLLECTOR.

APPLICATION FILED NOV. 25, 1903.

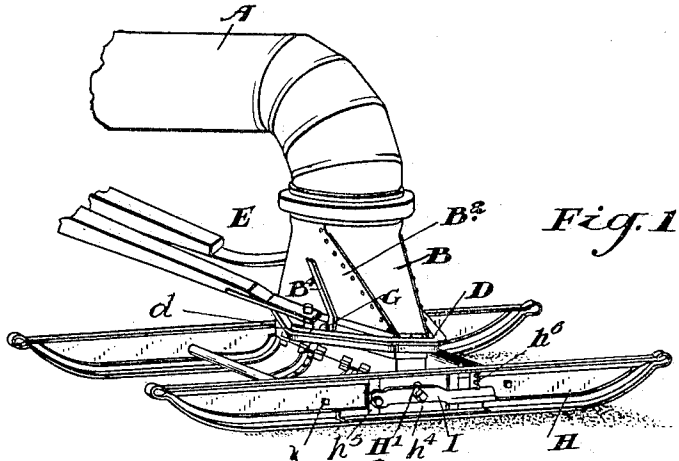


Fig. 1.

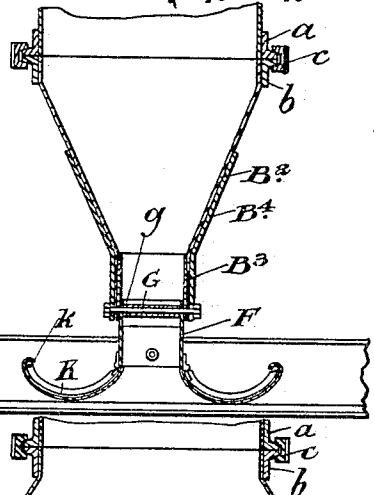


Fig. 2.

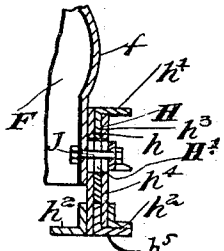
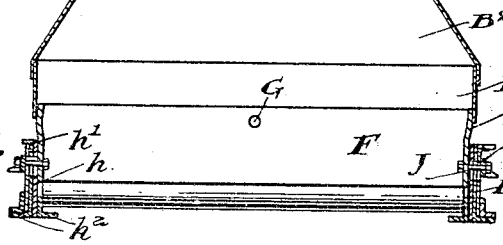


Fig. 4.

Fig. 3.



Witnesses.
H. J. S. Young.
A. S. Bate.

Inventor:
W. A. Milne
by Fred B. Whittemore & Co.
Attys.

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UNITED STATES PATENT OFFICE.

WILLIAM ATKINSON MILNE, OF BROWN'S CORNERS, CANADA.

TUBULAR PEAT-COLLECTOR.

SPECIFICATION forming part of Letters Patent No. 782,260, dated February 14, 1905.

Application filed November 25, 1903. Serial No. 182,649.

To all whom it may concern:

Be it known that I, WILLIAM ATKINSON MILNE, of the village of Brown's Corners, in the county of York, in the Province of Ontario, Canada, have invented certain new and useful Improvements in Tubular Peat-Collectors, of which the following is the specification.

My invention relates to improvements in tubular peat-collectors; and the object of the invention is to improve the construction of the mouth of the peat-collector whereby not only may the capacity of the machine be increased, but also so arranged that the mouth will follow closely the inequalities of the surface of the bog on which the dried peat lies, and thereby insure perfect suction; and it consists, essentially, of a tubular peat-collector having the runners adjustably supported at the ends of the mouth of the suction-tube and lips flexibly connected to the runners and hinged to the sides of the mouth, the parts being arranged and constructed in detail, as hereinafter more particularly explained.

Figure 1 is a perspective view showing the construction and arrangement of the mouth of the suction-tube of my improved peat-collector. Fig. 2 is a cross-section through the mouth. Fig. 3 is a longitudinal section through the mouth. Fig. 4 is an enlarged detail showing the adjustable form of connection of the runner to the end of the mouth.

In the drawings like letters of reference indicate corresponding parts in each figure.

A is the suction-tube of my peat-collector, and B is the mouth thereof, which is provided with a ring *b*, which with the ring *a* on the end of the tube and a surrounding ring *c* forms a swivel connection between the mouth and the bent end of the tube. D is a frame which is secured around the lower portion of the mouth B, such frame having connected to apexes *d* thereof the braces E, which may be secured on the car on which the opposite end of the tube is located and placed in any desired position on the car so as to give the desired set to the mouth. It will be noticed that the front and rear faces B′ of the mouth are inclined inwardly and the sides B^2 are flared outwardly, so as to form an elongated opening at the bottom of the mouth, which is provided with a vertical extension-wall B^3.

B^4 represents strengthening-bars, which are secured to the side walls B′ and extension-wall B^3, such strengthening-bars extending down to the bottom of the wall.

F is an extension-mouth which fits within the extension-wall B^3 and is provided with arc-shaped end portions *f* to permit of a limited endwise-rocking movement within the extension-wall B^3 of the mouth.

G is a bolt which extends through the extension-mouth and extension-wall and bars B^4 and a central sleeve *g*. This bolt is situated midway between the ends of the extension-mouth and is the pivot upon which the mouth rocks from side to side. H represents runners which are located at each end of the extension-mouth, and each comprises the sheet-metal wall *h*, the top angle-iron reinforcing-strip *h′*, and the bottom angle-iron reinforcing-strips h^2. I also further provide a central reinforcing inner plate h^3 and an outer plate h^4 and an angle-iron reinforcing-strip h^5 at the bottom, all as clearly shown in Fig. 4. Through the wall *h* and reinforcing-plates h^3 and h^4 is cut a slot H′.

I is an adjusting-lever which is pivoted at one end on one of the vertical plates h^5 and at the other end is provided with a handle, the end of which is designed to engage notches in the strip h^6.

J is a bolt which extends through each side of the extension-mouth F and through the slots in the plates *h′*, h^3, and h^4 into the lever I.

K represents curved lips, which are hinged to the bottom of the sides of the extension-mouth F, being formed, preferably, of sheet metal and suitably reinforced. The ends of the outer edge are held by suitable bolts *k* in the runners H.

Although I have only described one lever I and one runner, it will of course be understood that runners and levers are provided at both ends of the mouth, and by means of the levers the relative position or height of the runners in reference to the mouth may be adjusted, at the same time adjusting the lips K. Such adjustment is effected so as to accommodate the mouth to the varying condition of

the peat, depending whether it is a thin or light layer on the bog or a heavy one.

It will be seen from this description that not only have I provided for handling a thin or light or a heavy layer of peat, but I have also provided means whereby the bottom of the mouth may be caused to pass over the ground readily and may also be adapted to rock laterally or longitudinally, so as to insure a sufficient suction, so that the fan operating at the opposite end of the suction-tube may operate to elevate the peat from the surface with the greatest possible effect.

What I claim as my invention is—

1. In a peat-collector, the combination with the suction-tube having a bent outer end and an external flange attached to said end, of the mouth provided with an external flange designed to abut the aforesaid flange, and an internal grooved ring separate from both the suction-tube and the mouth and designed to straddle both abutting flanges as and for the purpose specified.

2. In a peat-collector, the combination with the suction-tube having a bent outer end, of a mouth having a swiveled connection to such bent end, a strengthening-frame surrounding the mouth and braces connected to such frame, one at each face of the mouth and extending to a suitable portion of the supporting-frame of the tube as and for the purpose specified.

3. In a peat-collector, the combination with the suction-tube, of a mouth having outwardly-flaring sides and inwardly-inclined front and rear faces forming an elongated opening to the mouth, and an extension-mouth adjustably held in the main mouth as and for purpose specified.

4. In a peat-collector, the combination with the suction-tube, of a mouth having outwardly-flaring sides and inwardly-inclined front and rear faces forming an elongated opening to the mouth, and an extension-mouth pivotally held in the main mouth as and for the purpose specified.

5. In a peat-collector, the combination with the suction-tube, of a mouth having outwardly-flaring sides and inwardly-inclined front and rear faces forming an elongated opening to the mouth, an extension-mouth having arc-shaped upper ends and a pivot-pin extending centrally across the mouth as and for the purpose specified.

6. In a peat-collector, the combination with the suction-tube, of a mouth having outwardly-flaring sides and inwardly-inclined front and rear faces forming an elongated opening to the mouth, an extension-mouth having arc-shaped upper ends, a pivot-pin extending centrally across the mouth and runners secured to the ends of the mouth as and for the purpose specified.

7. In a peat-collector, the combination with the suction-tube, of a mouth having outwardly-flaring sides and inwardly-inclined front and rear faces forming an elongated opening to the mouth, an extension-mouth having arc-shaped upper ends, a pivot-pin extending centrally across the mouth, and runners pivotally secured to the ends of the mouth as and for the purpose specified.

8. In a peat-collector, the combination with the suction-tube, of a mouth having outwardly-flaring sides and inwardly-inclined front and rear faces forming an elongated opening to the mouth, an extension-mouth having arc-shaped upper ends, a pivot-pin extending centrally across the mouth, runners secured to the sides of the mouth and lips connected to the face of the extension-mouth and extending lengthwise of the mouth between the runners as and for the purpose specified.

9. In a peat-collector, the combination with the suction-tube, of a mouth having outwardly-flaring sides and inwardly-inclined front and rear faces forming an elongated opening to the mouth, an extension-mouth having arc-shaped upper ends, a pivot-pin extending centrally across the mouth, runners secured to the sides of the mouth, the lips hinged to the face of the extension-mouth and extending lengthwise of the mouth between the runners as and for the purpose specified.

10. In a peat-collector, the combination with the suction-tube, of a mouth having outwardly-flaring sides and inwardly-inclined front and rear faces forming an elongated opening to the mouth, an extension-mouth having arc-shaped upper ends, a pivot-pin extending centrally across the mouth, and runners provided with central slots, bolts extending through the central slots and the sides of the mouth as and for the purpose specified.

11. In a peat-collector, the combination with the suction-tube, of a mouth having outwardly-flaring sides and inwardly-inclined front and rear faces forming an elongated opening to the mouth, an extension-mouth having arc-shaped upper ends, a pivot-pin extending centrally across the mouth, and runners provided with central slots, levers pivoted on the runners, bolts extending through the levers, slots in the runners and ends of the mouth, and means for retaining the free through the sides of the levers in position as and for the purpose specified.

12. In a peat-collector, the combination with the suction-tube, of a mouth having outwardly-flaring sides and inwardly-inclined front and rear faces forming an elongated opening to the mouth, an extension-mouth having arc-shaped upper ends, a pivot-pin extending centrally across the mouth, and runners provided with central slots, levers pivoted on the runners, bolts extending through the levers, slots in the runners and through the sides of the mouth, and notched racks or strips as and for the purpose specified.

13. In a peat-collector, the combination with

the main mouth and extension-mouth and runners pivotally connected to the sides of the extension-mouth, of the curved lips hinged to the front and rear faces of the extension-mouth and having the ends of the outer edges secured in the runners as and for the purpose specified.

14. In a peat-collector, the combination with the mouth, of curved lips hinged to the faces of the mouth as and for the purpose specified.

WILLIAM ATKINSON MILNE.

Witnesses:
B. BOYD,
C. H. BATE.