

O. A. RINGBOM.
 APPARATUS FOR MELTING SNOW AND THE LIKE.
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982,531.

Patented Jan. 24, 1911.

Fig. 1.

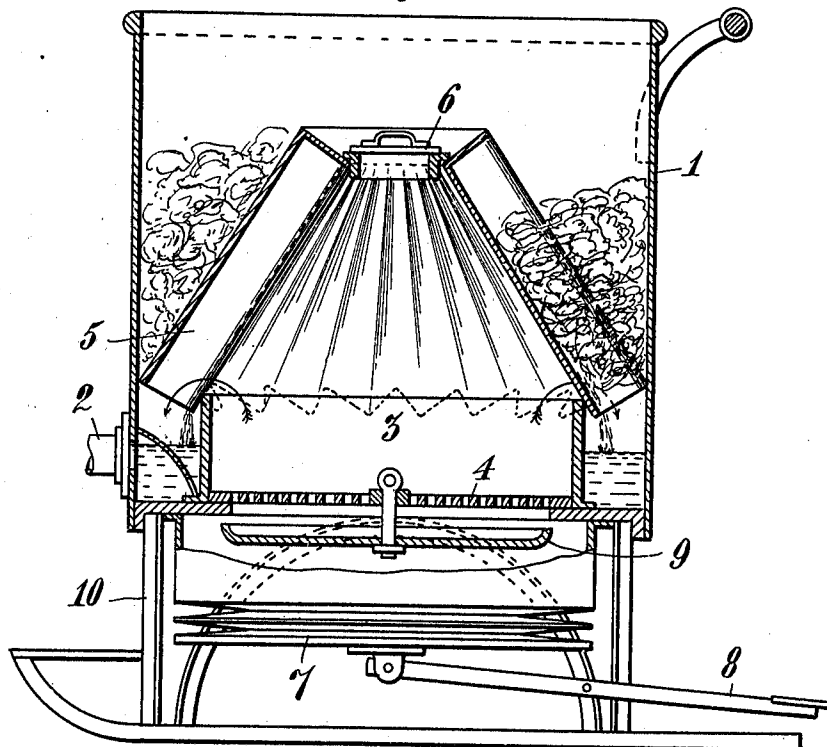
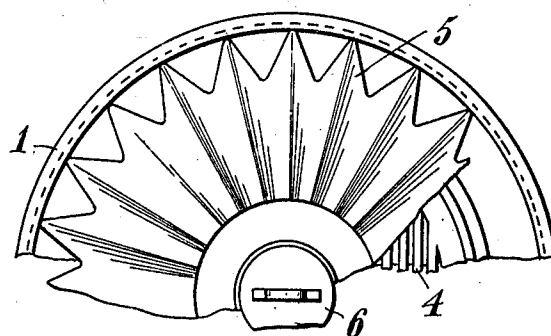


Fig. 2.



Witnesses

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APPARATUS FOR MELTING SNOW AND THE LIKE.

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To all whom it may concern:

Be it known that I, OSSIAN ALBERT RINGBOM, a subject of the Emperor of Russia, residing at Helsingfors, in the Grand Duchy of Finland, Russia, have invented a new and useful Apparatus for Melting Snow and the Like, of which the following is a specification, reference being had to the drawing accompanying and forming a part hereof.

This invention relates to an apparatus for melting snow and the like.

The object of the invention is to provide an apparatus of the said kind which is simple in construction and effective in working and which does not occupy any great space.

The invention consists, chiefly, in the combination of the following parts, viz., a fan or blower, a furnace or fire-place and a receiver for the snow, said parts being connected to each other in such a manner that the fan or blower will press air through the fire-place from which the combustion gases are driven by the air-current into the snow-receiver or through the snow therein which is thereby rapidly melted. If desired, the apparatus may be made transportable, to which end it may be placed on a sledge or carriage.

The invention further comprises the construction and combination of parts herein-after more particularly set forth.

In the drawing I have shown a snow-melting apparatus embodying the invention.

Figure 1 is a side elevation and partial vertical section of the said apparatus. Fig. 2 is a top plan view of part of the snow receiver.

Referring to the drawing, the apparatus consists, chiefly, of a snow receiver 1 open at the top, said receiver being provided at the bottom with a discharge pipe 2 for the melted snow-water. Placed in the lower part of the receiver 1 is a fire-place 3 with a grate 4. The upper part of the fire-place is formed by a conical mantle or casing 5 of sheet metal the walls of which are suitably corrugated for increasing the heating surface. The casing is shown closed at the top by a cover 6 which may be removed for making up the fire. Placed below the fire-place are bellows 7 driven by a treadle 8 for blowing air through the grate 4 into the fire-place. Suspended beneath the grate 4 is an ash-plate 9 serving to prevent the ash from

dropping on the bellows. The whole apparatus is, preferably, placed on a sledge 10.

When a fire has been made up in the fire-place and the cover 6 has been placed in position, the bellows are operated so as to press air from below through the grate 4 into the fire-place, by which the combustion will be considerably increased. The hot combustion gases are driven below the edges of the mantle 5 into the receptacle 1, as indicated by arrows in Fig. 1. When snow is thrown into the receiver, it is hit by the flames or the combustion gases and thereby rapidly melted, whereby the water formed by the melting snow collects in the lower, annular part of the receiver and runs off through the pipe 2. From the said pipe the water may be led off through a hose or a channel into a sewer. When the place around the apparatus has in this manner been freed from snow, the apparatus is slid to another place, and so on.

The embodiment shown may be modified in various ways without departing from the spirit and scope of the invention. Thus, for instance, instead of the bellows 7 any suitable device for compressing air, such as a fan or blower, may be used.

I claim:

1. In an apparatus for melting snow and the like, the combination of a snow-receiver, a fire-place situated in the said snow-receiver, a sheet-metal casing placed at the top of the said fire-place and serving as a contact heating surface for the snow outside the same, said casing being closed at the top and open at the bottom, and means for pressing air and combustion gases through the said fire-place into the said casing and along the inner side thereof from the top downward and around the lower edge of the same into the receiver and through the snow therein, substantially as and for the purpose set forth.

2. In an apparatus for melting snow and the like, the combination of a snow-receiver, a fire-place situated in the said snow-receiver, a corrugated sheet-metal casing placed at the top of the said fire-place and serving as a contact heating surface for the snow outside the same, said casing being closed at the top and open at the bottom, and means for pressing air and combustion gases through the said fire-place into the said casing and along the inner side thereof

from the top downward and around the lower edge of the same into the receiver and through the snow therein, substantially as and for the purpose set forth.

5 3. In an apparatus for melting snow and the like, the combination of a snow-receiver, a fire-place situated in the said snow-receiver, a sheet-metal cone placed at the top of the said fire-place and serving as a contact heating surface for the snow outside
10 the same, a removable cover at the top of the said cone, and means for pressing air and combustion gases through the said fire-place into the said cone and along the inner
15 side thereof from the top downward and around the lower edge of the same into the receiver and through the snow therein, substantially as and for the purpose set forth.

4. In an apparatus for melting snow and

the like, the combination of a snow-receiver, 20 a fire-place situated in the said snow-receiver, a corrugated sheet-metal cone placed at the top of the said fire-place and serving as a contact heating surface for the snow outside the same, a removable cover at the 25 top of the said cone, and means for pressing air and combustion gases through the said fire-place into the said cone and along the inner side thereof from the top downward and around the lower edge of the same into 30 the receiver and through the snow therein, substantially as and for the purpose set forth.

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Witnesses:

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