No. 615,688. Patented Dec. 13, 1898.

C. DUFF.

SNOW PLOW.

(Application filed Apr. 21, 1898.)

(No Model.)

Fig. 1.

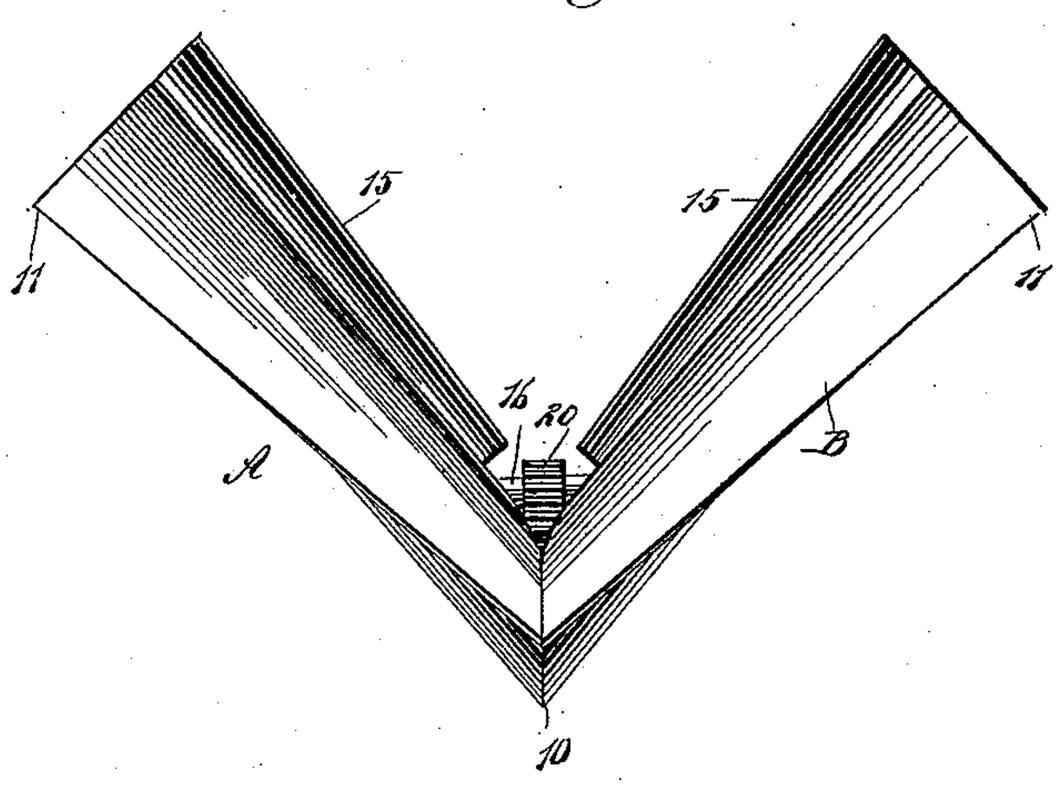


Fig. 2.

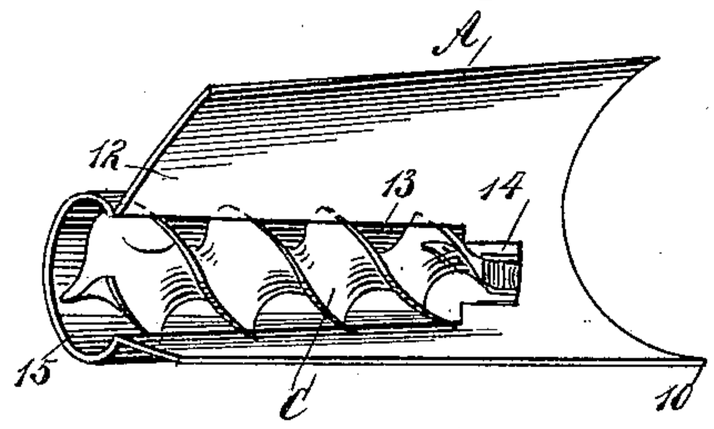


Fig. 3.

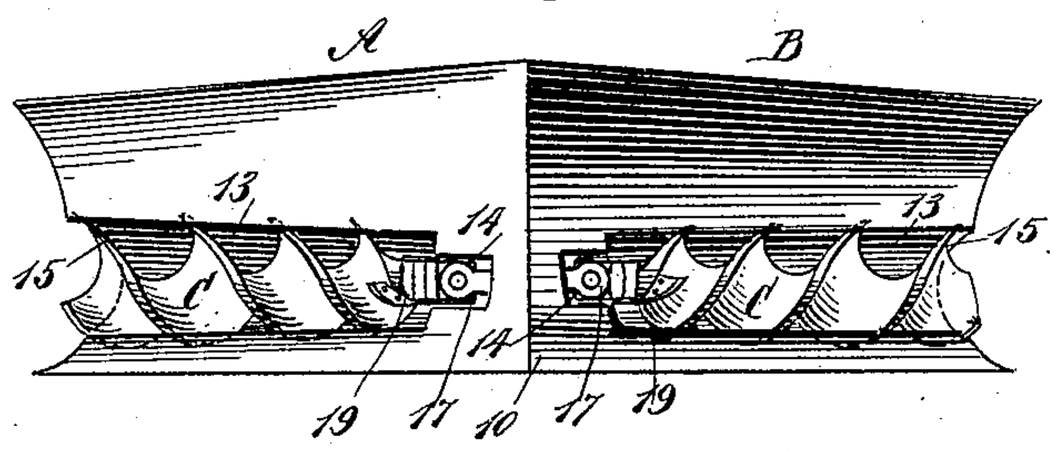


Fig. 4.

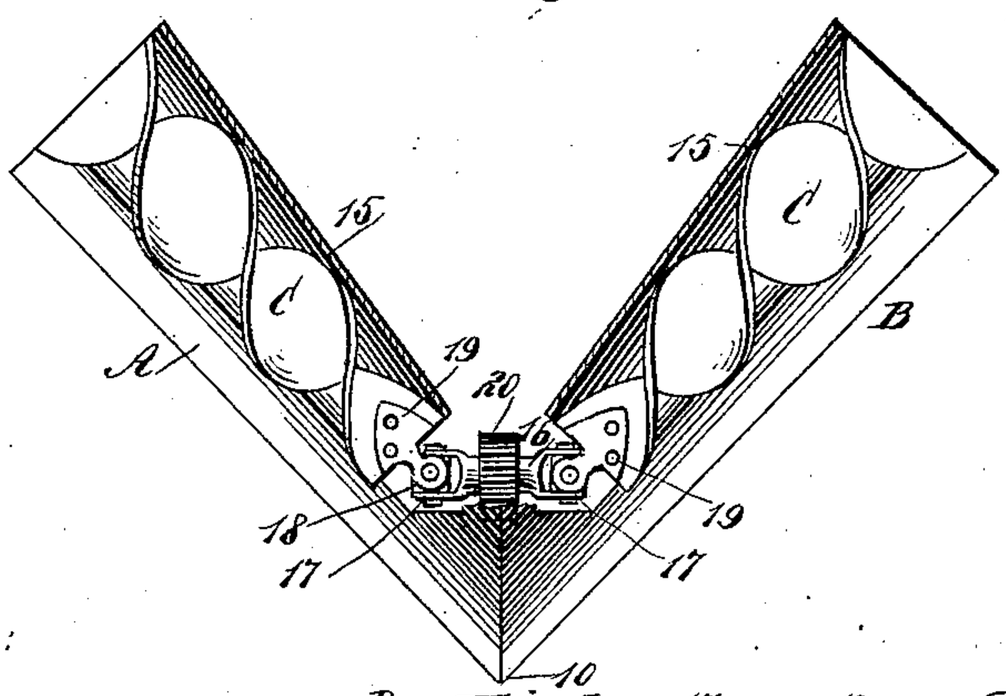
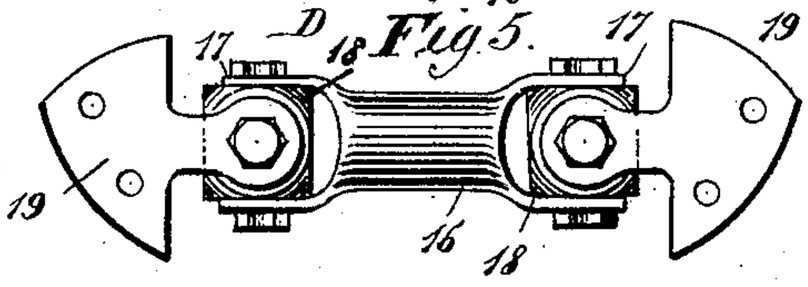


Fig. 5.



WITNESSES:

Paul Jakes

J. Fred Acker

INVENTOR

C. Duff.

BY

ATTORNEYS.

THE NORRIS PETERS CO., PHOTO-LITHO., WASHINGTON, D. C.

UNITED STATES PATENT OFFICE.

CYRILLE DUFF, OF MILLBURY, MASSACHUSETTS.

SNOW-PLOW.

SPECIFICATION forming part of Letters Patent No. 615,688, dated December 13, 1898.

Application filed April 21, 1898. Serial No. 678,371. (No model.)

To all whom it may concern:

Be it known that I, CYRILLE DUFF, of Millbury, in the county of Worcester and State of Massachusetts, have invented a new and Improved Snow-Plow, of which the following is a full, clear, and exact description.

The object of my invention is to provide a snow-plow capable of use in connection with any form of car and which will be simple, durable, and economic and practically self-cleaning.

The invention consists in the novel construction and combination of the several parts, as will be hereinafter fully set forth, and pointed out in the claims.

Reference is to be had to the accompanying drawings, forming a part of this specification, in which similar characters of reference indicate corresponding parts in all the figures.

Figure 1 is a plan view of the improved snow-plow. Fig. 2 is a side elevation of the same. Fig. 3 is a front elevation of the plow. Fig. 4 is a horizontal section through the plow, taken just above the screws; and Fig. 5 is a side elevation of the coupling between the screws of the plow.

The body of the plow consists of two shovel-blades A and B, which are connected together at an angle. The front faces of both blades are concaved and preferably their rear faces are convexed. The blades are so curved transversely that the lower end of the point 10, where the blades come together, extends beyond the upper portion of the point. The upper edges of the blades are so bent that the space between top and bottom at the rear ends of the blades is much more contracted than the space at or near the point, as shown at 12 in Fig. 2, and the upper edges of the blades from a point near their centers to their rear ends overhang the lower edges, as shown in Figs. 1 and 3. Each blade is provided with a horizontal opening 13, extending from the outer end near the nose or point of the plow, the forward ends of the slots or openings being contracted, as shown at 14 in the drawings. The slots are more or less tapering, their outer ends being much wider than their inner ends, and back of the main portion of each slot a segmental pocket 15 is secured to the back of each blade, the said pockets being made to taper, their outer ends being their wider ends.

A screw C is held to turn in each pocket 15, which pockets serve as bearings for the screws, their forward open portions being of less width than the diameter of the screws, whereby the screws are prevented from leaving said pockets. These screws taper correspondingly to the pocket, being of less diameter at their forward than at their rear ends. The two screws are connected by a coupler D, (shown best in Fig. 5,) which consists of a cross-bar 16, provided with a fork 17 at each end. Each fork 17 is pivotally attached to a block 18, and brackets 19 are pivotally connected with opposite sides of the blocks, the pivots of the brackets being at right angles to the pivots of the forks 17, and the said brackets are adapted for attachment to the forward end portions of the screws. Ordinarily a wheel 20 is secured upon the cross-bar 16, as shown in Fig. 4, which wheel by engagement with the ground will serve to turn the two screws, which screws will likewise be turned in a measure by the snow crowded upon them. The screws carry the snow backward, keeping the front faces of the blades properly cleaned and causing the bulk of the snow to be delivered at the rear ends of the blades. The rear inclination or contraction of the front faces of the blades serves to force the snow to the screws, and as the screws widen in direction of the rear they readily free themselves and quickly discharge the snow.

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

1. A snow-plow consisting of blades connected at an angle to each other, the front faces of the blades being concaved, the lower edges of the blades at the point of the nose extending beyond the upper edges while the upper edges of the said blades overhang the lower edges from a point near the center to their rear ends, rearwardly-extending tapering pockets formed in each blade, the outer ends of the pockets being the wider ends, correspondingly-tapering screws held to turn

in the said pockets, and a connection between the two screws, whereby the screws move together, for the purpose specified.

2. A snow-plow consisting of blades connected at an angle to each other, the front faces of the blades being concaved, the lower edges of the blades at the point of the nose extending beyond the upper edges while the upper edges of the said blades overhang the lower edges from a point near their center to their rear ends, longitudinal slots formed in each blade, the slots being of greater width at the rear end than at the forward end portion of the said blades, corresponding tapering segmental pockets secured to the rear of the blades at their slotted portions, a screw held to turn in each pocket, the screws being of greater diameter at their rear ends than at their forward ends, and a coupling for the said screws, consisting of a cross-bar provided with a fork at each end, blocks pivoted within the said forks, and brackets pivoted to the blocks at right angles to the members of the forks, the said brackets being arranged for attachment to the forward ends of the said screws, for the purpose described.

CYRILLE DUFF.

Witnesses:
D. GIRANARD,
FRENH FAVREAU.