

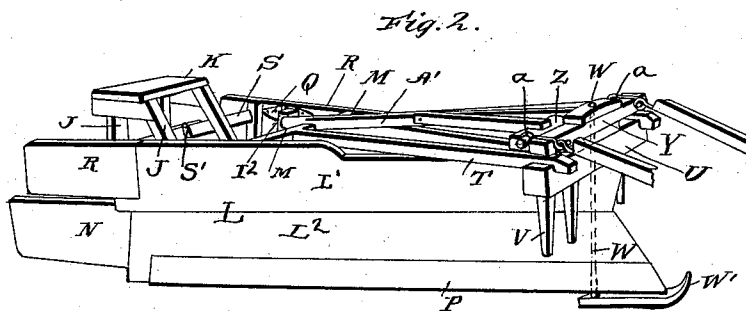
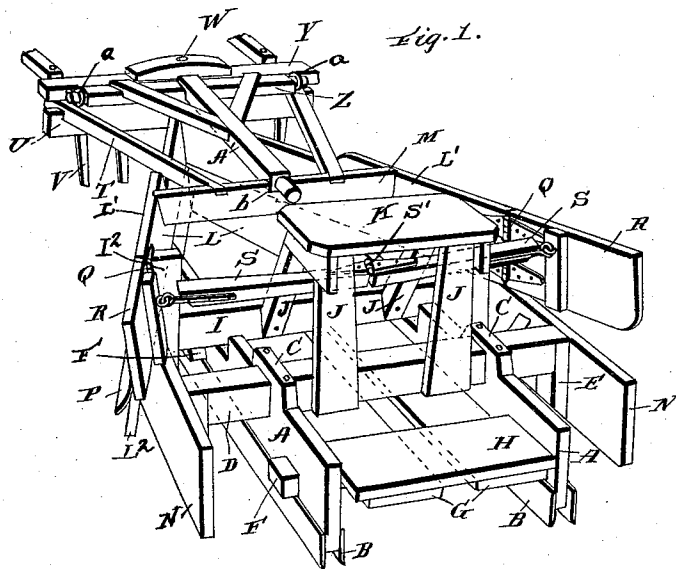
(No Model.)

2 Sheets—Sheet 1.

I. F. CURREY.
SNOW PLOW.

No. 466,328.

Patented Jan. 5, 1892.



Witnesses.

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ISAAC FRANKLIN CURREY, OF FLINT, MICHIGAN.

SNOW-PLOW.

SPECIFICATION forming part of Letters Patent No. 466,328, dated January 5, 1892.

Application filed July 17, 1891. Serial No. 399,835. (No model.)

To all whom it may concern:

Be it known that I, ISAAC FRANKLIN CURREY, a citizen of the United States, residing at Flint, in the county of Genesee and State of Michigan, have invented certain new and useful Improvements in Snow-Plows; and I do declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

My invention is an improvement in snow-plows, and has for its object to provide a capable snow-plow embodying devices whereby it is kept in a straight line during operation and the objectionable zigzag movements so often experienced in this class of devices is obviated.

A further object of the invention is to provide a snow-plow with adjustable side wings, whereby the distance to which the snow is to be thrown may be regulated.

A still further object of the invention is to provide such a connection between the shafts or pole and the plow that the said shafts or pole is normally fixed upon the plow, but may be turned by the manipulation of devices presently to be described, so that sharp corners may be readily turned.

Other objects and advantages will appear from the following description and claims, when taken in connection with the accompanying drawings, in which—

Figure 1 is a perspective view of my improved plow, looking at the rear thereof. Fig. 2 is a similar view of the same, looking at the side. Fig. 3 is a central vertical longitudinal sectional view.

Referring by letter to the said drawings, A indicates the longitudinal runners of the supporting-sled of my improved plow, which are preferably formed of wood and of a height and length in proportion, substantially as illustrated.

Attached in a suitable manner to the lower longitudinal edges of the sled-runners A are metal shoes B, which extend below said runners and have their lower edges beveled, so as to be better adapted to bind upon the ground and prevent any wobbling or zigzag motion of the plow.

Connected in a suitable manner, as by straps C, at a suitable point to the upper edge of the

runners A is a transverse beam D, which is provided at its ends with depending hanger branches E for the attachment of the rear sides of the plow, as will be presently described.

Taking through the sled-runners A adjacent to the front and rear ends thereof are the transverse beams F, upon which are mounted and suitably fastened the longitudinal boards G, upon which a transverse board H is fastened above the rear transverse beam F, to provide a base for the driver to stand upon.

Arranged in front of the beam D is another transverse beam I, to the ends of which the beveled vertically-disposed strips I² are connected for the attachment of the converging sides L of the plow, presently to be described.

As illustrated in Fig. 1 of the drawings, the beam I takes loosely through notches I³, cut in the upper edges of the runners A, so as to allow the sides to oscillate, as is desirable.

Rising from the transverse beams D and I are vertically-disposed uprights J, upon the upper ends of which a seat K is mounted, by reason of the situation of which the weight of the driver will be placed in the middle of the sled, and he will be within convenient reach of the lever-arm A', presently to be described.

L indicates the rigid forwardly-converging sides of the plow, which are connected to the beveled vertically-disposed strips I² upon the ends of the forward transverse beam I, as described, and are suitably connected at their forward ends to form a sharp plow adapted to readily cut into the snow. The said converging sides L, which are each formed by an upper vertically-disposed longitudinal strip or board L¹ and a lower longitudinal outwardly-inclined board L², are braced, as better shown in Fig. 1, by a transverse strip M. The forward ends of the lower longitudinal board L² of the converging sides are so formed and connected together as to afford a forwardly and downwardly beveled prow, which is a form best adapted to penetrate snow-drifts, as is obvious, while the forward ends of the upper longitudinal boards L¹ are beveled upwardly and forwardly, which latter form operates to an advantage, in conjunction with the beveled forward end of the lower

boards, by preventing the snow from overflowing at the front of the plow.

Attached in a suitable manner to the inside of the lower converging boards L^2 , adjacent to the rear ends thereof, are side boards N, which are preferably arranged parallel with the sled-runners, as better shown in Fig. 1.

Attached to the lower longitudinal edges of the lower boards L^2 of the converging sides L are metal shoes P, which extend the full length of said boards and have their lower edges flared laterally outward, whereby their efficiency is increased.

Flexibly connected, as by hinges Q, to the rear ends of the upper boards L' of the converging sides L are wing-boards R, which are connected by two transversely-disposed strips S, which are hinged together, as shown at S' , so that the said strips S being raised more or less toward a rectilinear position the wings may be adjusted outward to keep the snow from falling on the machine.

Connected to and extending forwardly from the transverse strip M are hounds T, the forward ends of which are attached to a transverse beam U, which is rigidly connected in a suitable manner to the forward end of the converging sides.

Secured to and depending from the transverse beam U at intervals in its length are pins V, which are preferably formed of metal and are designed and adapted to break a snow-drift, so as to render the operation of the plow easier.

Keyed in a suitable manner at its upper end is a transverse strip Y, to which shafts or a pole is attached, and taking through the beam U is a vertical pivot-bolt W, to the lower end of which a shoe W' is welded, which shoe has its forward end curved upwardly and is designed to serve in carrying the plow over obstructions, as well as to materially assist in turning it.

Pivotally connected, as by the eyes a , to the rear side of the transverse strip Y is a transverse strip Z.

Connected and braced to the pivotal strip Z at about the middle thereof is a rearwardly-extending lever-arm A' , which is preferably rectangular in cross-section and is designed

to normally rest in a notch b in the upper edge of the transverse strip M, whereby the strip Y is held rigid and prevented from turning.

By this construction it will be seen that when in operation it is desired to turn a short corner, the lever A' is simply lifted out of the notch b , when the beam Y will become the equivalent of a fifth-wheel and the plow may be easily turned without labor or damage thereto.

Having described my invention, what I claim, and desire to secure by Letters Patent, is—

1. In a snow-plow, the combination, with the sled-runners connected by transverse beams, and the metallic shoes connected to the lower longitudinal edges of said runners and depending below the same, of the converging sides connected at their forward ends to form a forwardly-beveled prow and suitably connected with the sled-runners, substantially as specified.

2. In a snow-plow, the combination, with the forwardly-converging sides connected at their forward ends to form a plow, of a transverse beam fixed on the upper edge of said sides, a transverse beam pivotally mounted on the fixed beam and adapted for the connection of a pole or shafts, a rearwardly-extending lever pivotally connected to the pivotally-mounted beam so as to swing vertically upon it and horizontally with it, and a suitable means for detachably securing the said lever in the longitudinal center of the plow, substantially as and for the purpose described.

3. In a snow-plow, the combination, with the transverse beam mounted upon the forward end of the plow and the transverse strip carrying the shafts, of a vertical pivot-bolt connected at its upper end to the transverse strip and taking loosely through the transverse beam and the plow, and a shoe fixed upon the lower end of the pivot-bolt, substantially as specified.

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

ISAAC FRANKLIN CURREY.

Witnesses:

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GILES L. DENHAM.