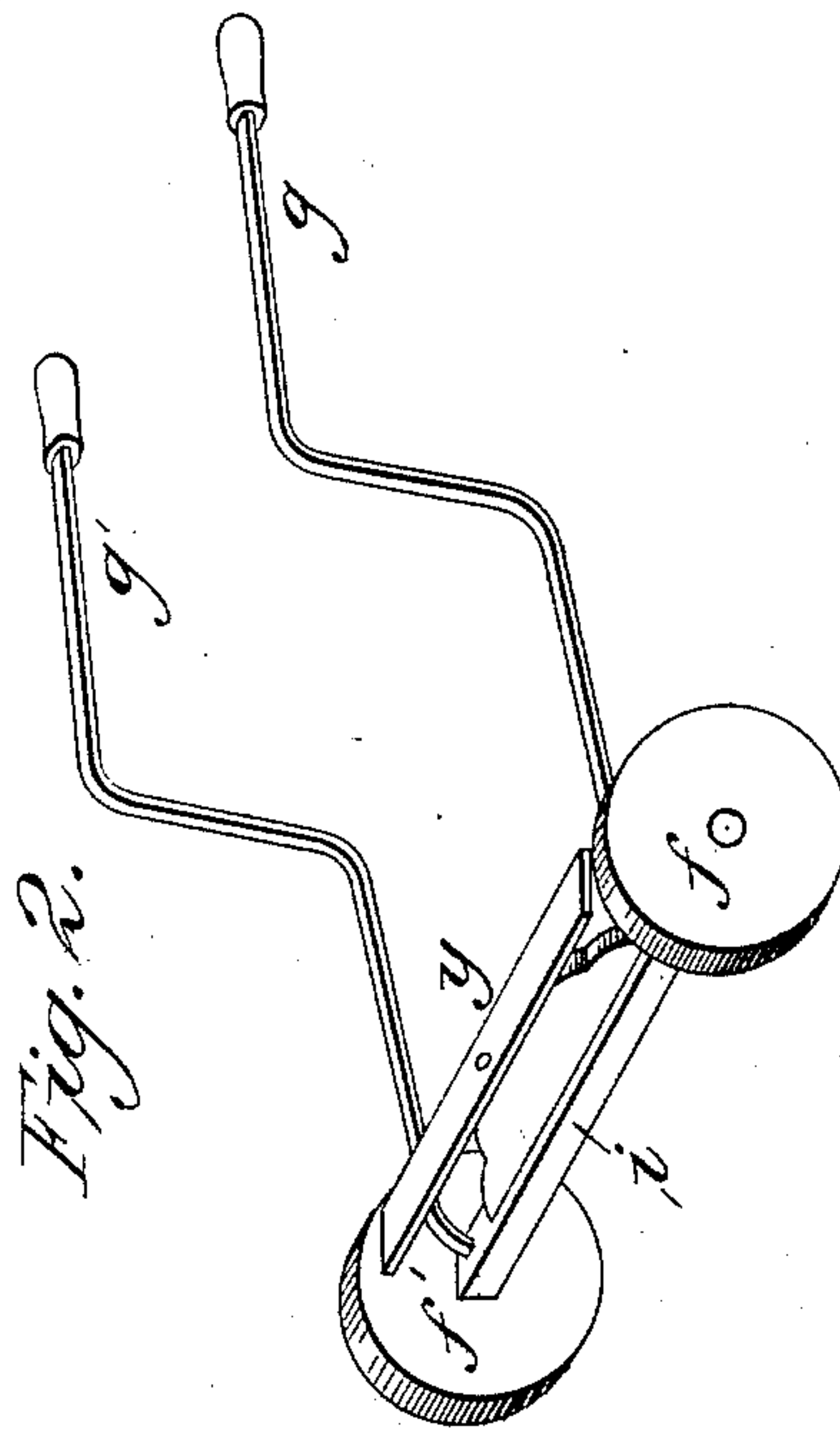
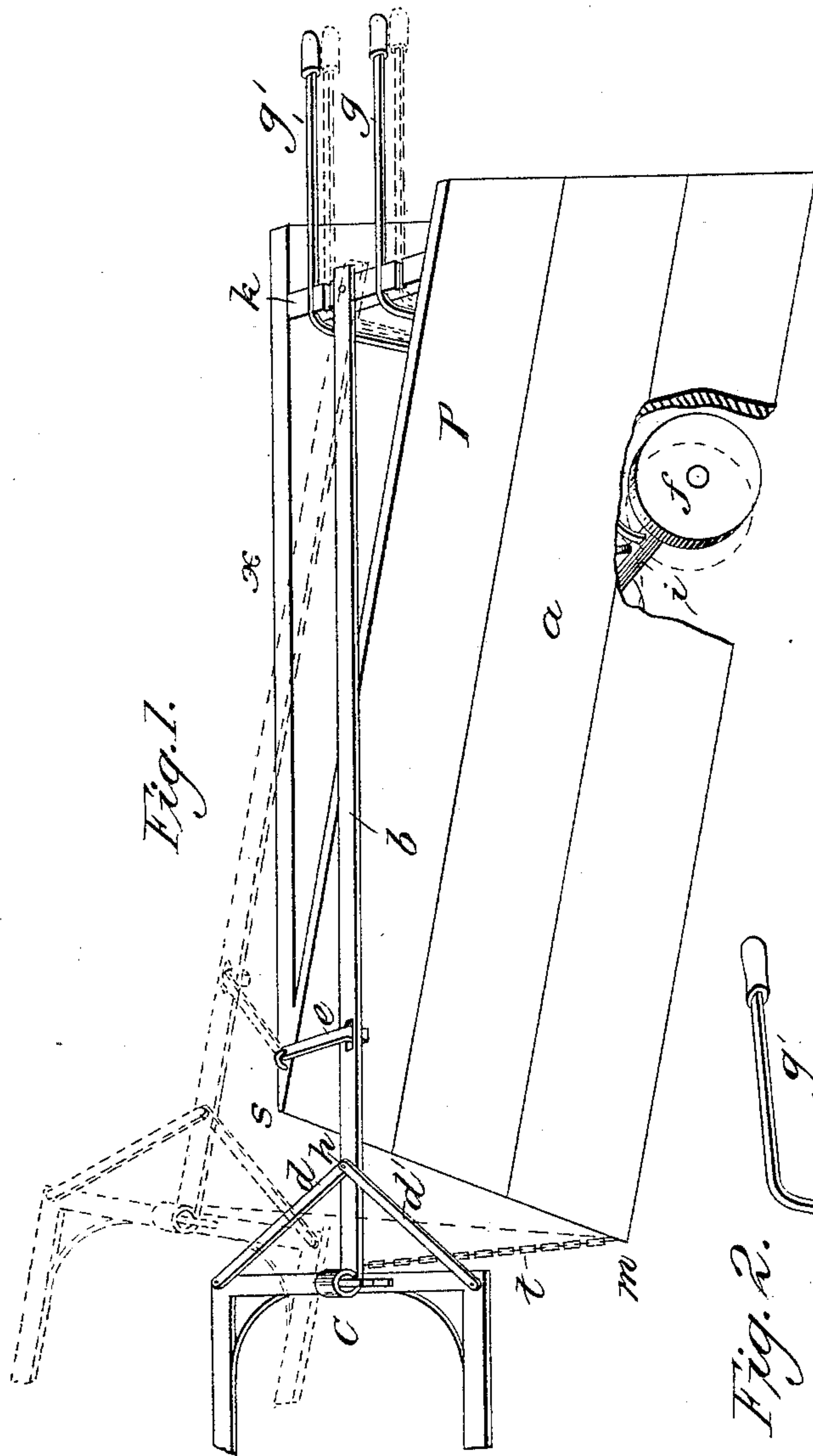


(No Model.)

I. OSGOOD.
SNOW PLOW.

No. 424,616.

Patented Apr. 1, 1890.



Witnesses:

Kurtis R. Foster
Leslie Jordan

Inventor:

Erving Oxford

UNITED STATES PATENT OFFICE.

IRVING OSGOOD, OF ELLSWORTH, MAINE.

SNOW-PLOW.

SPECIFICATION forming part of Letters Patent No. 424,616, dated April 1, 1890.

Application filed March 11, 1889. Serial No. 302,919. (No model.)

To all whom it may concern:

Be it known that I, IRVING OSGOOD, of Ellsworth, in the county of Hancock and State of Maine, have invented certain new and useful
5 Improvements in Snow-Plows for Sidewalks, Roads, &c.; and I do hereby declare that the following is such a full, clear, and exact description of the invention that it will enable
10 others skilled in the art to which it appertains to make and use the same, reference being had to accompanying drawings, forming a part of this specification, in which—

Figure 1 represents a perspective view of my improved snow-plow, the side *p* being
15 partly broken away to show the wheels and interior construction. Fig. 2 is a perspective view of the guide-wheels with their axle and attached arms.

Similar letters of reference refer to correspondingly like parts throughout both figures.

The object of my invention is to produce a new and improved snow-plow for breaking out sidewalks, roads, and other purposes, constructed in such manner that it can be easily
25 and quickly adjusted to cast all snow upon one, both, or either side, and reversed at any time at the will of the operator.

Referring to the drawings, *a* represents a
30 V-shaped plow constructed from wood or other material, to the desired height, and provided at its rear portion with a cross-bar *k*, rigidly fastened to the side pieces and suitably braced to resist the strain. Pivoted to the
35 upper and central portion of the cross-bar *k* is the longitudinal draw-bar *b*, extending forward over the end of the plow *a* and attached at its free end at the point marked *c* to the thills or draft-pole, which are so confined as
40 to allow vertical movement, and prevented from side or lateral motion by the braces *d* and *d'*, as shown in Fig. 1 of the drawings.

The draw-bar *b* is allowed to play over and either side of the forward end of the plow *a*,
45 and it is held fixed in the position desired by a gage-bar *e*, pivoted by one end at or near the upper point of the plow, and its opposite or remaining end constructed to engage with and hold the draw-bar *b* by being bent down-
50 ward at right angles and entering a hole

drilled through the said bar or by other equally suitable means.

I attach to the forward and lower point *m* of the plow *a* an adjusting-chain *t*, which passes upward and is confined at its upper
55 end to the draw-bar *b* in such manner that it can easily be lengthened or shortened, as occasion requires. The object of this adjusting-chain *t* is to regulate the cutting depth of the point of the plow.

Within the body of the plow *a* and parallel with the rear cross-bar *k* is rigidly secured a cross-piece *y*, to which is pivoted at its center the axle *i*, carrying wheels *f f'*, projecting
65 below the bottom plane of the plow. The whole weight of the latter in operation is carried upon the wheels *f f'*, and they serve to guide and hold the position of the plow against lateral strain.

Handles *g* and *g'*, attached to the axle *i*, extend upward and over the cross-bar *k* to a
70 sufficient height to accommodate the driver, and they are adapted to engage in notches cut in said cross-bar *k*, to rigidly hold them in a set position and prevent the strain in guiding
75 from coming entirely upon the driver's arms.

With the draw-bar *b*, in the position shown in Fig. 1 of the drawings, at the left side of the point of the plow and parallel with the right side of the latter, the wheels *f f'* should
80 be set parallel with the last-mentioned side by moving the handles *g g'* to the right and dropping them in the notches cut in the cross-bar *k* to receive them. Now, as the draft is from the rear portion of the plow and the
85 whole weight of the latter rests upon the wheels *f f'*, the point *m* is adjusted to cut a certain depth by taking up the adjusting-chain *t*, and the gage-bar *e* serves to hold the draw-bar *b* in position. Taking this position
90 it can now be readily understood that in drawing the plow forward all snow in its path will be thrown from the right toward the left, the side *p* casting the furrow, and its opposite side will simply aid in holding the plow
95 steady against the wall cut by the point. The wheels *f f'*, projecting below the bottom of the plow, assist in receiving the lateral strain borne against the side *p* and serve to steady the machine.

By confining the draw-bar *d* at the right hand of the point of the plow and tracking the wheels parallel with the left side the snow will be cast to the right.

5 I claim—

1. The combination, with the triangular-shaped plow, of the draw-bar *b*, the cross-bar *k*, and the gage-bar *e*, the draw-bar being pivoted to the cross-bar, substantially as shown
10 and described.

2. The combination of the plow and the draw-bar pivoted at the center of the cross-bar, the thills attached to forward end of the draw-bar and braced thereto, as described,
15 and the adjusting-chain *t*, connecting the point of the plow to the draw-bar, substantially as set forth.

3. The combination, with the plow, of the wheels *ff'*, mounted upon axle *i*, said axle
20 swiveling on a central pivot in the bar *y*, said axle being provided with the arms *g g'*, and

the said wheels being adapted to revolve below the bottom plane of the plow and parallel with the draw-bar, substantially as shown and described.

4. The combination, with the plow, of the rear cross-bar, the draw-bar pivoted centrally thereto, adjusted and held laterally by the gage-bar *e*, and vertically by adjusting-chain *t*, the wheels revolving below bottom plane of
25 30 plow and provided with the guiding-handles, whereby the plow may be reversed to throw the snow to right or left, and in either case may be directed to follow the line of draft, substantially as shown, and for the purpose
35 set forth and described.

In testimony that I claim the foregoing I have hereunto set my hand.

IRVING OSGOOD.

Witnesses:

J. H. BRIMMER,

ERNEST F. OSGOOD.