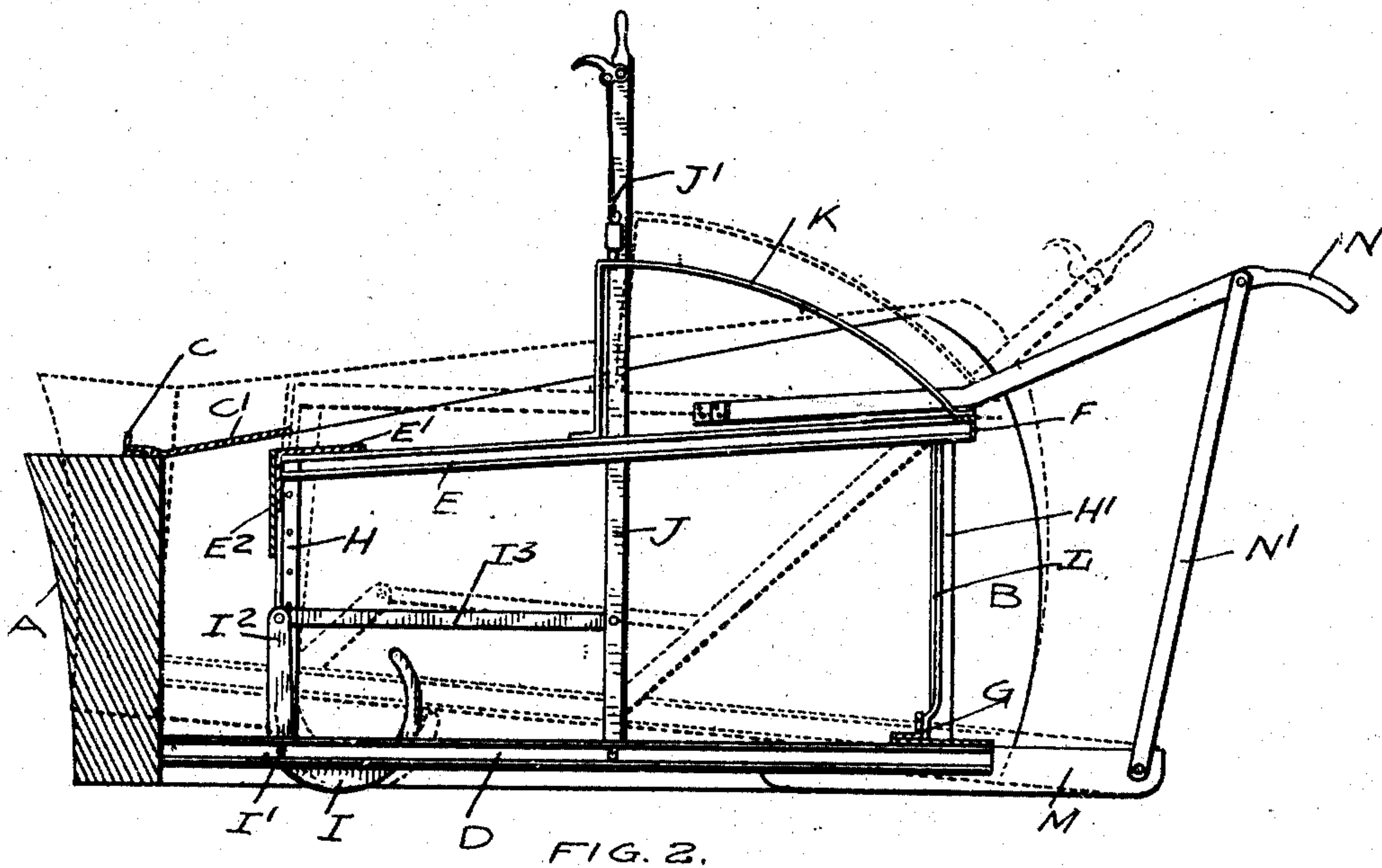
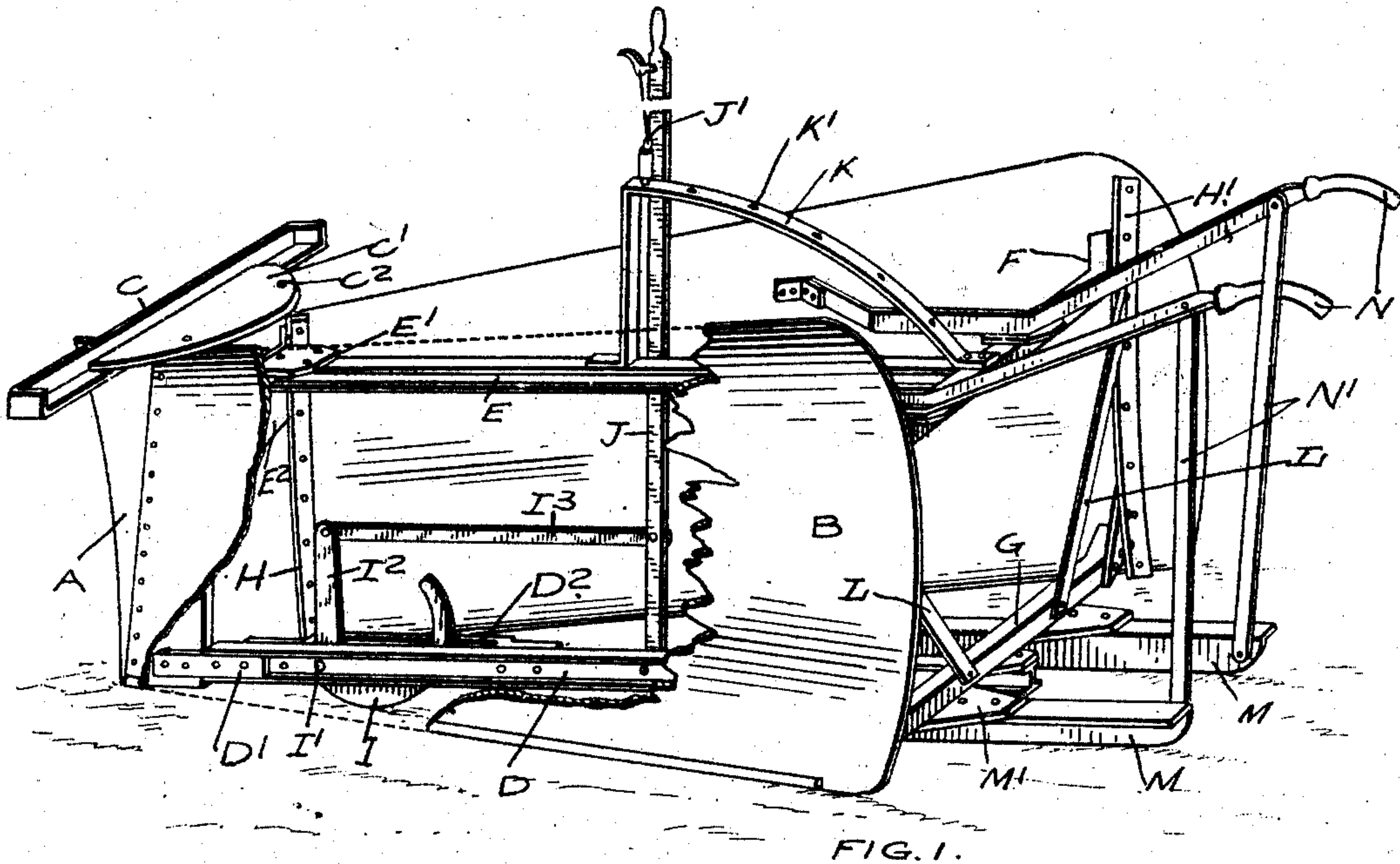


W. W. COWAN.  
SNOW PLOW FOR SIDEWALKS AND HIGHWAYS.  
APPLICATION FILED DEC. 8, 1908.

928,363.

Patented July 20, 1909.



WITNESSES  
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ATTYS.



# UNITED STATES PATENT OFFICE.

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## SNOW-PLOW FOR SIDEWALKS AND HIGHWAYS.

No. 928,363.

Specification of Letters Patent.

Patented July 20, 1909.

Application filed December 8, 1908. Serial No. 466,556.

*To all whom it may concern:*

Be it known that I, WILLIAM WESLEY COWAN, of the city of Stratford, in the county of Perth, in the Province of Ontario, Canada, have invented certain new and useful Improvements in Snow-Plows for Sidewalks and Highways, of which the following is the specification.

My invention relates to improvements in snow plows for sidewalks and highways, and the object of the invention is to devise a means whereby the nose of the plow may be raised as the plow is being drawn without the necessity of stopping the plow to effect the adjustment and thereby provide ready means for carrying the plow over projecting portions of the walk or roadway, such as curbs, without unnecessary delay.

A further object is to produce a plow of a strong, durable construction and of easy draft, and capable of continuous work without the necessity of frequent repairs.

A still further object is to provide means whereby the plow may be readily turned.

My invention consists of a snow plow comprising the usual plowshares, the front standard, a front cross beam supported on the standard, and shares, an internal frame comprising longitudinal bars and cross bars to which they are connected and which connect the rear ends of the shares, an arc-shaped cam shoe pivoted in the lowermost longitudinal bar near the nose of the plow, a lever and connections for adjusting the shoe to vertically adjust the point of the plow and rear shoes secured to the lower cross bar connecting the rear shares, and handles connected to the frame at the rear, the parts being otherwise constructed and arranged as hereinafter explained.

Figure 1, is a perspective view of a plow of the class described, one of the shares being partially broken away to exhibit the parts involved in my invention. Fig. 2, is a longitudinal section showing the center beams of the frame in full.

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

A is the standard forming the nose of the plow to which the plowshares B are riveted or otherwise fastened as indicated.

C is a draft cross bar to which the whiffle trees are attached.

C' is a semi-circular plate, the straight edge of which is secured to the bar C, which

is substantially an angle bar and the round edge of which extends rearwardly and is fastened by bolts C<sup>2</sup> to the top of the plow shares. It will thus be seen that the bar C is secured from displacement being braced by the plate C' in its position.

D is the longitudinal lower bar of the frame, which is secured to the stem or standard A by straps D', one at each side. The bar D is preferably an eye-bar.

E is the upper longitudinal bar of the frame, which is secured to the front angle plate E', which is attached to a cross plate E<sup>2</sup>. The rear ends of the bars D and E are secured to cross bars F and G respectively connecting the rears of the plow shares.

H are bracing angle bars, which follow the curve of the plowshares at the front and are designed to reinforce the same. The plate E<sup>2</sup> is secured at each end to the angle bars H. H' are similar bars at the rear ends of the plowshares.

I is a cam-shaped shoe, which is pivoted on a bolt I' extending through the bar D and a supplemental bar D<sup>2</sup> securely bolted to the bar D. The cam-shaped shoe I is provided with an upwardly extending portion I<sup>2</sup>.

J is a lever connected to the upwardly extending portion I<sup>2</sup> of the cam I by a bar J<sup>3</sup>.

K is a quadrant provided with orifices K' with which the usual form of hand controlled plunger J' on the lever J is designed to co-act, so that the lever may be held in any position to which it may be adjusted.

It will now be seen that by manipulating the lever J, that as the cam shoe I is pivoted on the short radius of the cam, that the cam may be raised to any desired position, in fact adjusted to any position, so as to raise or lower the nose of the plow the required distance from the ground to override obstructions.

L are braces extending from the cross bar G to the bars H', so as to stiffen the shares B at the rear end.

M are the rear shoes or sleds, which are secured to the plates M' attached to the cross bar G.

N are the guiding handles of the plow, which extend rearwardly in the form shown, are secured intermediately of the bar F and are bent at the front and secured to the shares B as indicated.

The rear ends of the handles are supported and braced by uprights N' extending be-



tween the handles and the shoes M to both of which they are suitably bolted or otherwise secured.

Such a construction of plow as I describe  
5 is light, strong, durable, readily manipulated, may be turned readily and the nose may be raised and lowered without stopping the horse, or motor connected to the plow.

What I claim as my invention is:

10 A snow plow comprising a nose, a pair of plow shares diverging therefrom, cross bars connecting said shares together, rear runners

supported by the lower rear cross bar, handles connected to the upper rear cross bar, and to the runners, a cam located in rear of the nose at the lower part of the plow and serving as a runner, and means for raising and lowering the cam to adjust the height of the plow from the ground. 15

WILLIAM WESLEY COWAN.

Witnesses:

B. BOYD,

R. COBAIN.