Oct. 27, 1925. 1,558,464

E. M. COX

SNOWPLOW

Filed June 10, 1925

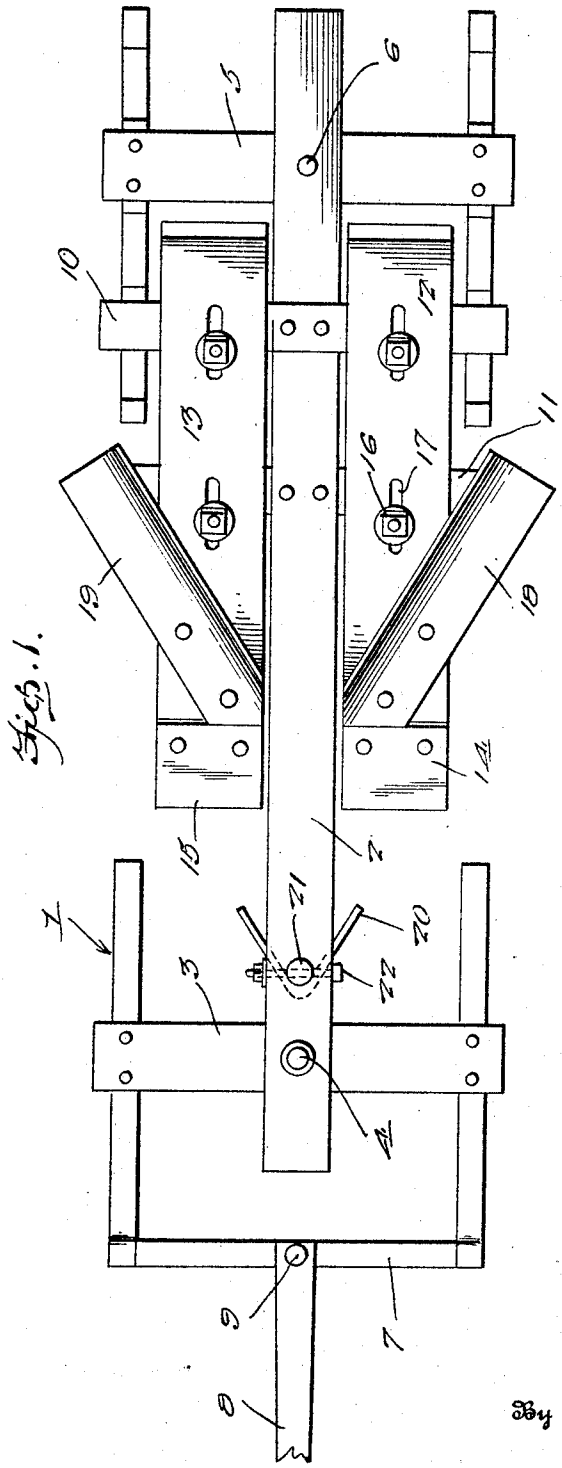


Fig. 1.

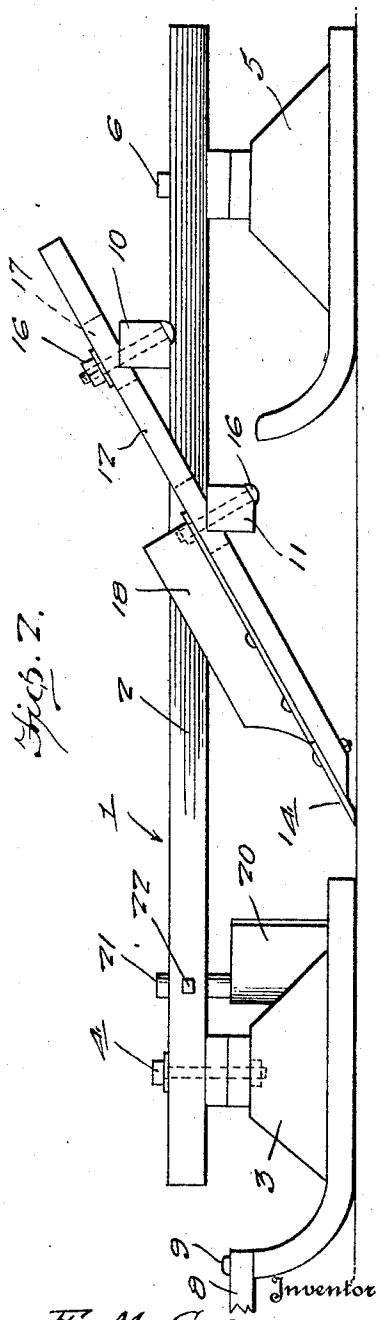


Fig. 2.

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EDWIN M. COX, OF EVART, MICHIGAN.

SNOWPLOW.

Application filed June 10, 1925. Serial No. 36,147.

To all whom it may concern:

Be it known that I, EDWIN M. COX, a citizen of the United States, residing at Evart, in the county of Osceola and State of Michigan, have invented certain new and useful Improvements in a Snowplow, of which the following is a specification.

This invention relates to improvements in snow plows, and has for its principal object to provide a highly novel means for clearing away the snow in such a manner as to form a pair of spaced tracks in which the wheels of a vehicle may travel.

A further object of the invention is to provide a snow plow of the above mentioned character which includes a pair of spaced scraper members, the same being adapted to form a pair of tracks for the wheels of vehicles, means being associated with the scraper members for forcing the snow which has been scraped by the scrapers to the sides of the tracks formed by the scraper members.

A still further object is to provide a snow plow of the above mentioned character which includes a pair of spaced scraper members, and a central snow clearer, the latter being disposed forwardly of the scraper members.

A still further object is to provide a snow plow of the above mentioned character which is simple in construction, inexpensive, strong and durable and further well adapted to the purpose for which it is designed.

Other objects and advantages of the invention will become apparent during the course of the following description taken in connection with the accompanying drawings.

In the accompanying drawing forming a part of this application, and in which like numerals designate like parts throughout the same:

Figure 1 is a top plan view of the snow plow embodying my invention, and

Figure 2 is a side elevation thereof.

In the drawing wherein for the purpose of illustration is shown the preferred embodiment of my invention, the numeral 1 designates generally my improved snow plow, the same comprising an elongated beam 2. A front sleigh designated generally by the numeral 3 is pivotally supported at the forward end of the beam as is illustrated at 4, a rear sleigh 5 being pivotally supported at the rear end of the beam as illustrated at 6. As the sleigh construction is well known in the art, the same forms no important part of the present invention, a further detailed description thereof is not thought necessary. Any suitable means may be provided for moving the snow plow in a forward direction, and in the present instance I have shown a cross bar 7 which extends transversely across the forward ends of the runners of the front sleigh 3, a draft bar 8 being connected at its rear end to the intermediate portion of the cross bar 7 as at 9.

Extending transversely across the upper face of the beam 2, adjacent the rear sleigh 5, and having its intermediate portion secured to the beam is the cross bar 10. An additional cross bar 11 has its intermediate portion secured to the bottom of the beam and is disposed forwardly of the first mentioned cross bar. This construction is clearly illustrated in Figure 2 of the drawing. A pair of scrapers 12 and 13 respectively are disposed on the opposite sides of the beam 2, the scraper 12 is adapted to extend across the upper portions of the cross beams 10 and 11 on one side of the beam 2, while the other scraper member extends across the upper portion of the cross bars adjacent the opposite side of the beam. The upward forward corners of the cross bars are cut out to receive the scraper members in a manner as clearly illustrated in Figure 2.

In this manner, the scrapers will be disposed upwardly, and inclined rearwardly, suitable scraper blades 14 and 15 are secured on the lower end of the scrapers 12 and 13 respectively, the same being adapted for engagement with the snow in the manner to be hereinafter more fully described.

Each of the scrapers is adapted for vertical adjustment through the adjusting means designated generally by the numeral 16, the same in the present instance comprising bolts which extend upwardly from each of the cross bars, and through the longitudinally extending slots 17 provided therefor in each of the scraper members 12 and 13, suitable lock nuts being associated with the upper threaded ends of the bolts. It is however to be understood that I do not wish to limit myself to the particular means for holding the scrapers in their various adjusted positions with respect to the beam and the adjusting means enables the scraper blade of the scraper members to cut at various depths.

A pair of rearwardly diverging curved wings 18 and 19 respectively are secured on the upper face of the scrapers 12 and 13 adjacent the scraper blades 14 and 15 thereof and the purpose of these wings will also hereinafter be more fully described.

A substantially V-shaped snow clearer 20 is supported below the beam 2 by the supporting means 21, the latter including a vertically extending pin, the lower portion of which is secured in the apex of the V-shaped member 20, and the upper end thereof extending through the forward portion of the beam directly rearwardly of the front sleigh 3. A transversely extending securing bolt 22 extends through the beam and through the upper portion of the vertically disposed pin 21. The arms of the V-shaped snow clearer 20 diverge rearwardly. This snow clearer is arranged forwardly of the scrapers 12 and 13, and also intermediate the same.

The operation of my improved snow plow may be briefly stated as follows, the scrapers 12 and 13 being adjusted to the proper depth, as the plow moves forwardly, the substantially V-shaped snow clearer 20 will clear the snow from the central portion of the road, and the scraper blades 14 and 15 will form a pair of spaced tracks in which the wheels of a vehicle may travel. The snow which is removed by the scraper blades 14 and 15 will be delivered to the sides of the road through the medium of the rearwardly diverging wings 18 and 19, as is obvious from the construction illustrated.

A snow plow of the above mentioned character will at all times be positive and efficient in its operation and will form a path in the road whereby vehicles may pass over the road without any difficulty of the wheels becoming stuck in the snow particularly so when the snow is deep.

While I have shown the preferred embodiment of my invention, it is to be understood that minor changes in the size, shape and arrangement of parts may be resorted to without departing from the spirit of the invention and the scope of the appended claims.

Having thus described the invention, what I claim as new and desire to secure by Letters Patent is:—

1. A snow plow comprising an elongated beam, front and rear sleighs supported at the respective ends thereof, a cross bar extending transversely across the top of the beam adjacent the rear end thereof, an additional cross bar secured to the bottom of the beam and arranged forwardly of the aforementioned cross bar, a pair of angularly disposed spaced scrapers, means for adjustably securing the same on said cross bars on the opposite sides of the beam, and rearwardly diverging wings secured on the lower portions of the scrapers for directing the snow to the sides of the road.

2. A snow plow comprising an elongated beam, front and rear sleighs supported at the respective ends thereof, a cross bar extending transversely across the top of the beam adjacent the rear end thereof, an additional cross bar secured to the bottom of the beam and arranged forwardly of the aforementioned cross bar, a pair of angularly disposed spaced scrapers, means for adjustably securing the same on said cross bars on the opposite sides of the beam, rearwardly diverging wings secured on the lower portions of the scrapers for directing the snow to the sides of the road, and a central snow clearer supported below the beam and forwardly of said scrapers.

3. A snow plow comprising an elongated beam, front and rear sleighs supported at the respective ends of said beam, a cross bar having its intermediate portion secured on the upper face of the beam adjacent the rear end thereof, an additional cross beam having its intermediate portion secured to the bottom face of the beam and disposed forwardly of the aforementioned cross bar, a pair of scraper members adapted to engage the upper portions of said cross bars and disposed on opposite sides of said beam, means adjustably securing the scraper members on said cross bars, scraper blades carried by the lower ends of said scraper members, rearwardly diverging wings secured on the upper faces of the respective scraper members adjacent the scraper blades for directing the snow removed by said scraper blades to the side of the road, and a central snow clearer supported below the beam and arranged forwardly of said scraper members.

In testimony whereof I affix my signature.

EDWIN M. COX.