

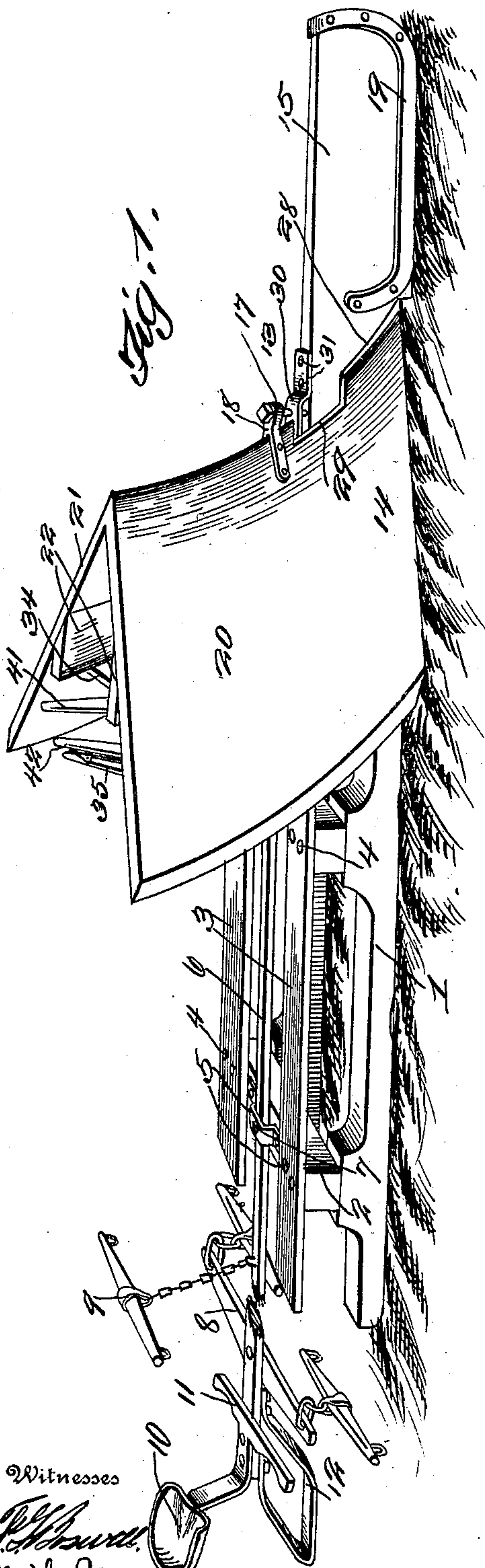
SNOW PLOW.

APPLICATION FILED MAR. 29, 1909.

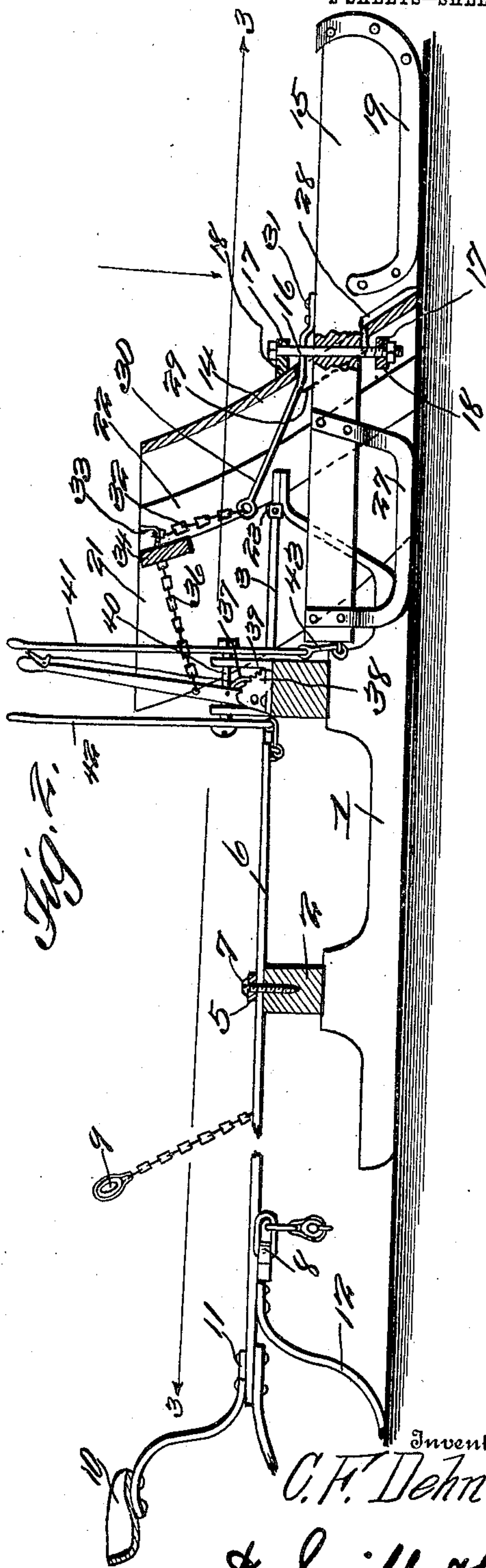
934,798.

Patented Sept. 21, 1909.

2 SHEETS—SHEET 1.



Witnesses  
J. H. [unclear]  
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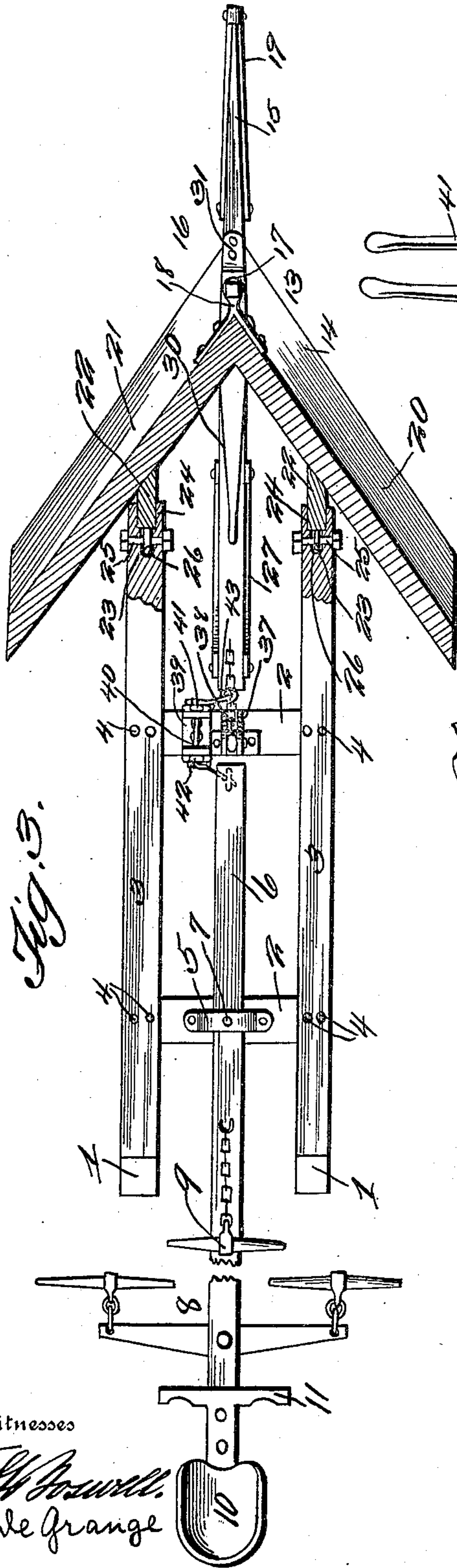


Fig. 3.

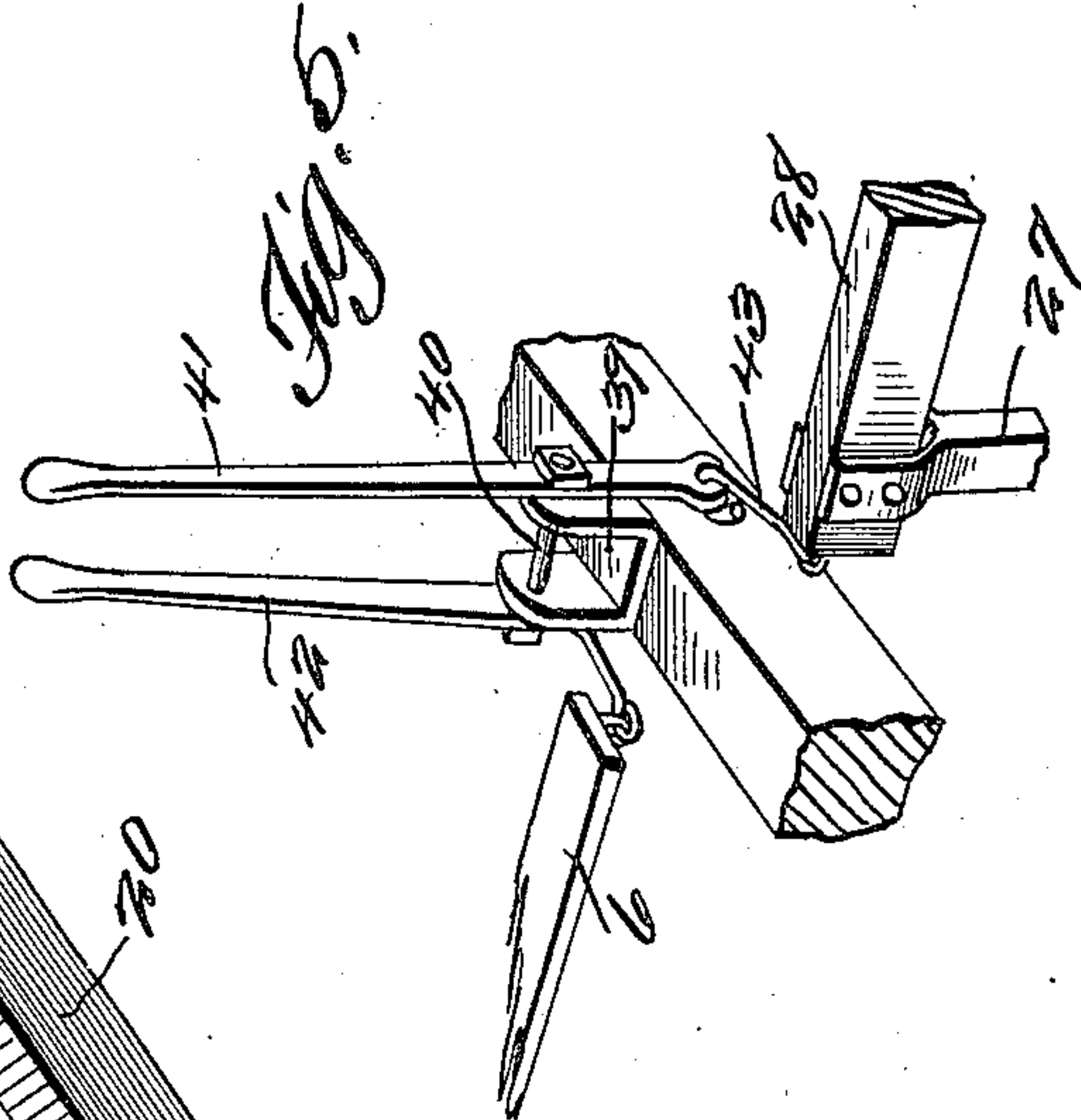


Fig. 5.

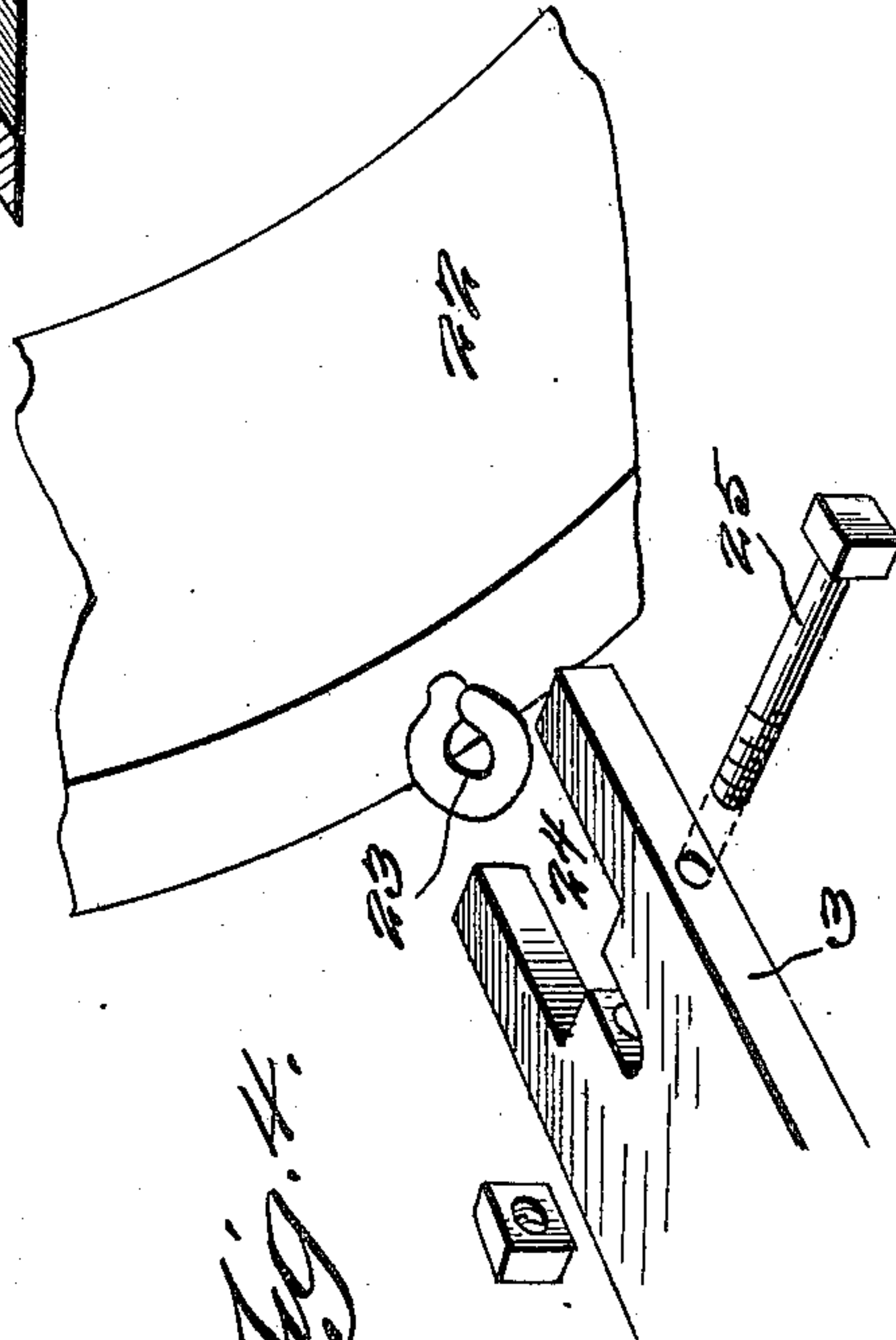


Fig. 4.

Witnesses

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# UNITED STATES PATENT OFFICE.

CHARLES F. DEHN, OF HARRIETTE, MICHIGAN.

SNOW-PLOW.

934,798.

Specification of Letters Patent. Patented Sept. 21, 1909.

Application filed March 29, 1909. Serial No. 486,440.

*To all whom it may concern:*

Be it known that I, CHARLES F. DEHN, a citizen of the United States, residing at Harriette, in the county of Wexford and State of Michigan, have invented a new and useful Snow-Plow; and I do hereby 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.

This invention belongs to the class of devices designed for removing and plowing heavy snow, or, in other words, a snow plow, and the object thereof is to provide a device of this design, whereby an ordinary sled may be utilized, but with the exception of a few slight changes, so as to permit of the attachment of the new and novel snow plow proper thereto, and in such manner as to allow the same to be raised and lowered and easily steered.

A further object of the invention is to provide means, by the manipulation of which the entire sled and plow are allowed to make short turns, and, while doing so, the horses are allowed to walk slowly.

A further object is to provide a snow plow proper having two parts, which are pivoted together, one acting as a steering medium, while the other acts as the plow, the mold boards of which are so disposed as to throw the snow outward and from the path left behind the plow when being drawn through the snow.

A further object of the invention is to provide means whereby the plow portion proper may be rocked and held so, as to allow the same to escape projections, stumps or other objects as the device is drawn through the snow. When the plow portion proper is rocked upon a pivot and the rear portion of the guiding medium is raised, the trailer, at the rear of the guiding or steering medium, performs the function of guiding the apparatus in the desired direction.

This invention comprises further objects and combinations of elements, which will be hereinafter more fully described, shown in the accompanying drawings, and the novel features thereof will be pointed out by the appended claims.

The features, elements and the arrangement thereof, which constitute the above entitled invention, may be changed and varied, that is to say, in an actual reduction to practice with the understanding that the changes

and variations accruing from said reduction to practice are limited to the scope of the appended claims.

To obtain a full and correct understanding of the details of construction, combinations of features, elements and advantages, reference is to be had to the hereinafter set forth description and the accompanying drawings in connection therewith, wherein—

Figure 1 is a perspective view of a snow plow embodying the features of the invention. Fig. 2 is a vertical sectional view through the snow plow, clearly illustrating its structure. Fig. 3 is a sectional view horizontally through the plow upon line 3—3 of Fig. 2. Fig. 4 is an enlarged detail perspective view showing one of the connections between the plow portion proper and the sled. Fig. 5 is a detail view of the connection between the steering medium and the plow portion proper.

In regard to the drawings, wherein similar reference characters indicate corresponding parts in the several illustrations, 1 designates the runners of an ordinary sled, and 2 designates cross beams connecting the runners together and in parallel relation.

3 designates the beams or members which are disposed above the runners and parallel thereto, and also at right angles to the beams 2. The beams or members 3 are secured to the beams 2 by suitable bolts 4.

5 indicates a metallic U-shaped strap, in which the tongue or beam 6 is pivoted, by means of the king bolt 7. The rear portion of the tongue or beam 6 is provided with the usual doubletree or equalizer 8, to which a team of horses may be attached, so as to drive the apparatus through the snow.

Extending from the beam or tongue 6 and in front of the doubletree or equalizer is the usual device 9 designed for connection to the collars of the harness. From the rear extremity of the said beam or tongue 6 extends a seat 10 for the operator, and transversely of the said tongue or beam is a foot rest 11 for the feet of the operator. Protruding below the tongue or beam 6 is a runner 12, which is designed mainly for the purpose of supporting the rear of the said tongue, and it also assists in steering the apparatus when the said tongue or beam 6 is swung laterally upon its pivot, especially when the apparatus is making sharp turns.

13 designates the snow plow, which consists of the plow portion proper 14, and the



steering medium 15, which are pivotally connected together by the king bolt 16, which is positioned in bearings 17 of the metallic straps 18 carried by and secured to the plow portion proper. The steering medium and the plow portion proper may be constructed of any suitable material, and, if constructed of hard wood, the steering medium may be provided with a metallic protecting plate 19, as shown clearly in Fig. 1 of the drawings, so as to prevent wear upon the said steering means. The plow portion proper comprises two moldboards 20 and 21 which extend at angles to each other and sufficient so as to throw the snow from the plow, when the same is being used. The moldboards 20 and 21 are provided upon their inner faces with standards or members 22, which are provided with eye bolts 23, as clearly shown in Figs. 2 and 4. The members or beams 3 are extended beyond the runners of the sled and are bifurcated, as shown at 24, and the rears of these bifurcations are again bifurcated, to receive the eyebolts 23, as shown clearly in Figs. 2 and 4 of the drawings.

25 designates pivot bolts which extend transversely of the recesses or bifurcations 26 of the rear of the bifurcations 24, and are designed to extend through the eyebolts, as clearly shown. The steering medium is provided at its rear portion with a trailer 27, which performs the function of steering the apparatus when the said steering medium and the plow portion proper are raised upon their pivots. The said steering medium has its rear portion cut away, as shown at 28, which extends through an opening 29 of the plow portion proper.

The plow portion proper may be rocked, and, when rocked, the same may be held in such position, by means of the lever 35. The lever 30 is secured to the steering medium, as at 31, and is designed to receive the king bolt 16, as shown clearly in the sectional views of the drawings. This lever 30 has connected to its rear end a chain 32, which may be lengthened or taken up, when the same is connected to the hook 33. This hook 33 is carried by a cross beam or member 34 which extends from one standard 22 to the other, as shown clearly in the drawings. The lever 35, is pivoted to the upper face of one of the beams 2 and, between this lever and the cross beam or member 34, a chain 36 is connected, as shown clearly in Fig. 2 of the drawings. This lever 35 is swung backward, and may be held in a rearward position by means of the raked quadrant and

pawl 37 and 38, so as to hold the entire plow in a rocked position when swung upon its pivot. When the plow portion proper is rocked, the forward lower portion thereof, and the connections 30 and 32 has a tendency to raise the rear portion of the guiding medium. As the plow portion proper is rocked, the member 30 slightly rises, and in so doing, the plow portion proper is assisted in its rocking movement. Also secured to the upper face of the forward beam 2 is the standard or pivot block 39, in which the pivot bolt 40 is positioned. Pivoted upon the bolt 40 are the levers 41 and 42, the lever 41 having a rod connection 43 with the rear of the steering medium, for the purpose of moving it upon its pivot, while the lever 42 is pivoted at its lower end to the beam or tongue 6, the purpose of which is to allow the said beam 6 and its runner to assist the steering medium 15 in guiding the apparatus.

From the foregoing, the essential features, elements and the operation of the device, together with the simplicity thereof, will be clearly apparent.

Having thus fully described the invention, what is claimed as new and useful, is:—

1. In a snow plow, a sled, said plow comprising a steering member and a plow portion proper, means for pivoting the plow and the sled together, and means for raising the plow portion proper and the steering member as one body upon its pivot with the sled.

2. In a snow plow, a sled to which the plow is pivotally connected, said plow comprising a steering member and a plow portion proper, said steering member having a trailer, and means for raising the plow portion and the steering member as one body upon its pivot with the sled, and, when so raised, the trailer performing the functions of a steering member.

3. In a snow plow, a sled to which the plow is pivotally connected, said sled having a pivoted tongue member provided with a runner, said plow comprising a steering member and a plow portion proper, means for manipulating the tongue member and means for manipulating the steering member.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

CHARLES F. DEHN.

Witnesses:

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WILL BARRY.