

Nov. 22, 1938.

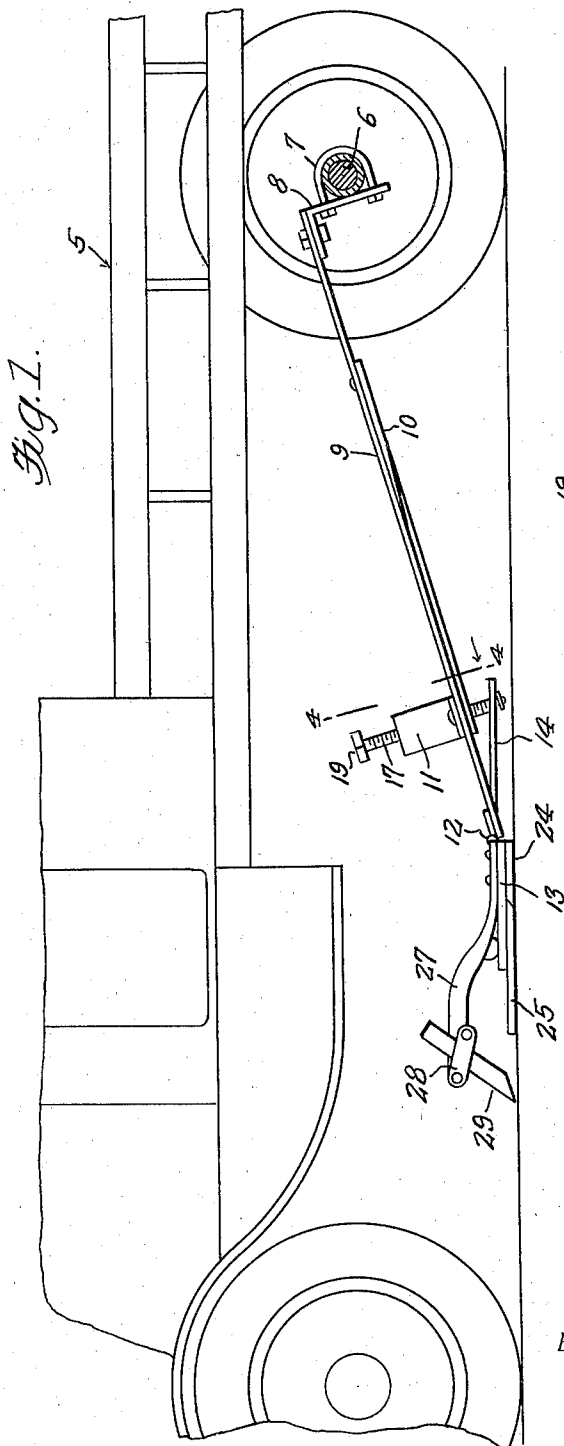
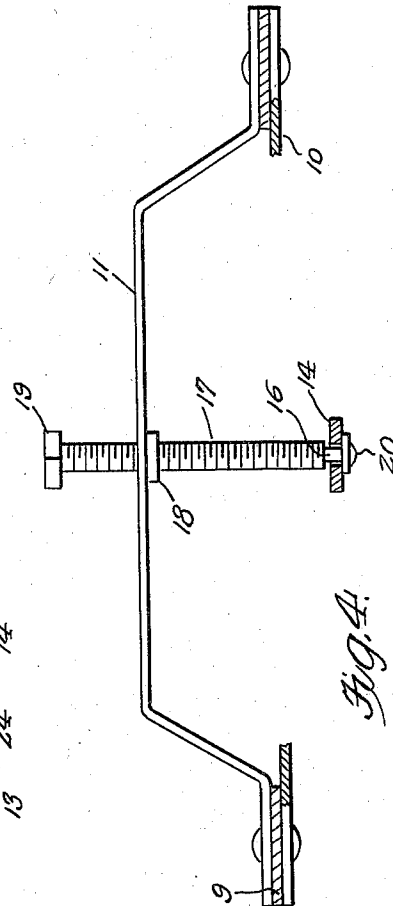
A. C. ZIMMERMAN

2,137,476

ICE CUTTER

Filed Oct. 5, 1937

3 Sheets-Sheet 1



Inventor
A. C. Zimmerman.

By *Clarence A. O'Brien*
Hyman Berman
Attorneys

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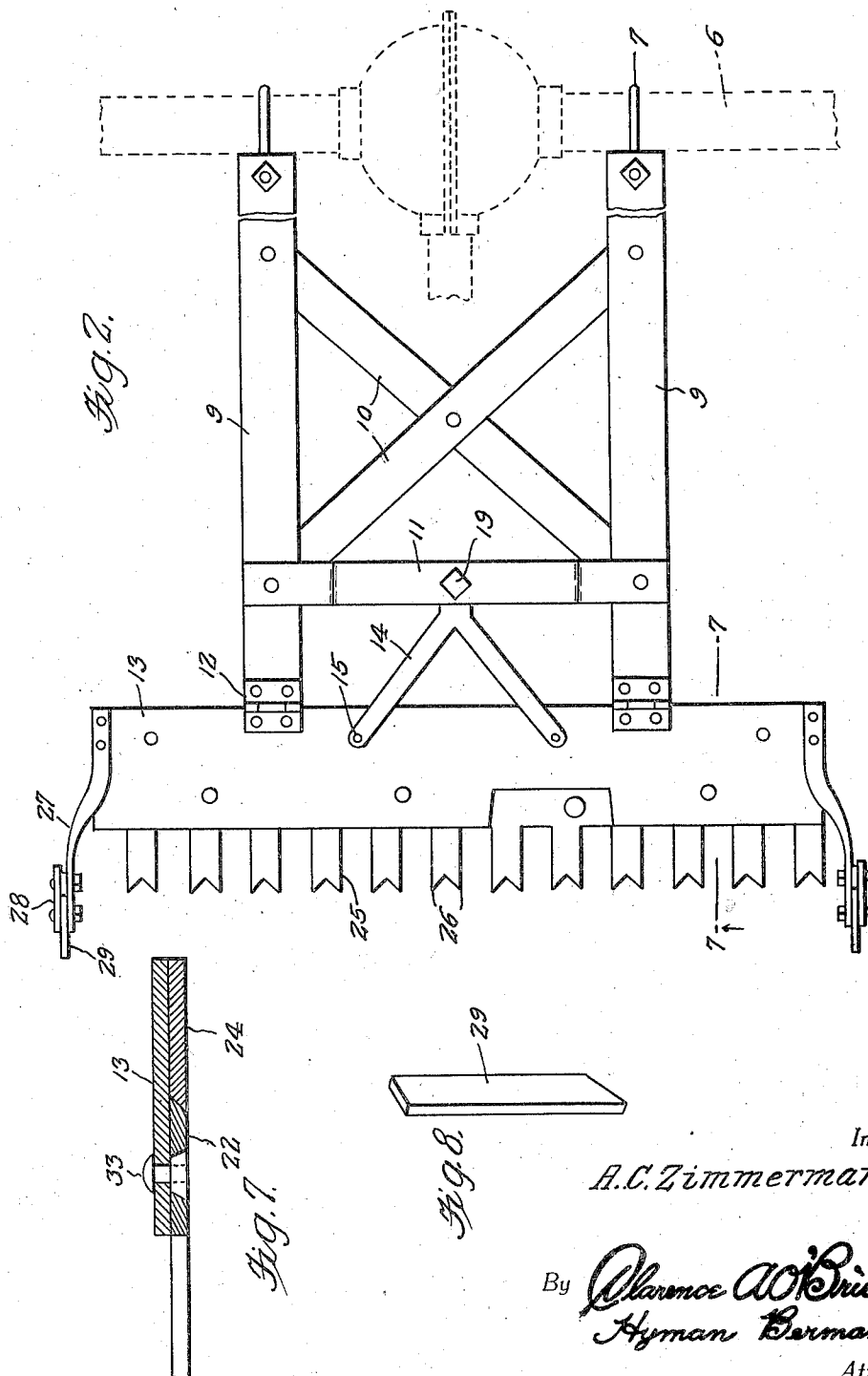
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3 Sheets-Sheet 2



Inventor

A.C. Zimmerman.

By

Clarence A. O'Brien
Hyman Berman

Attorneys

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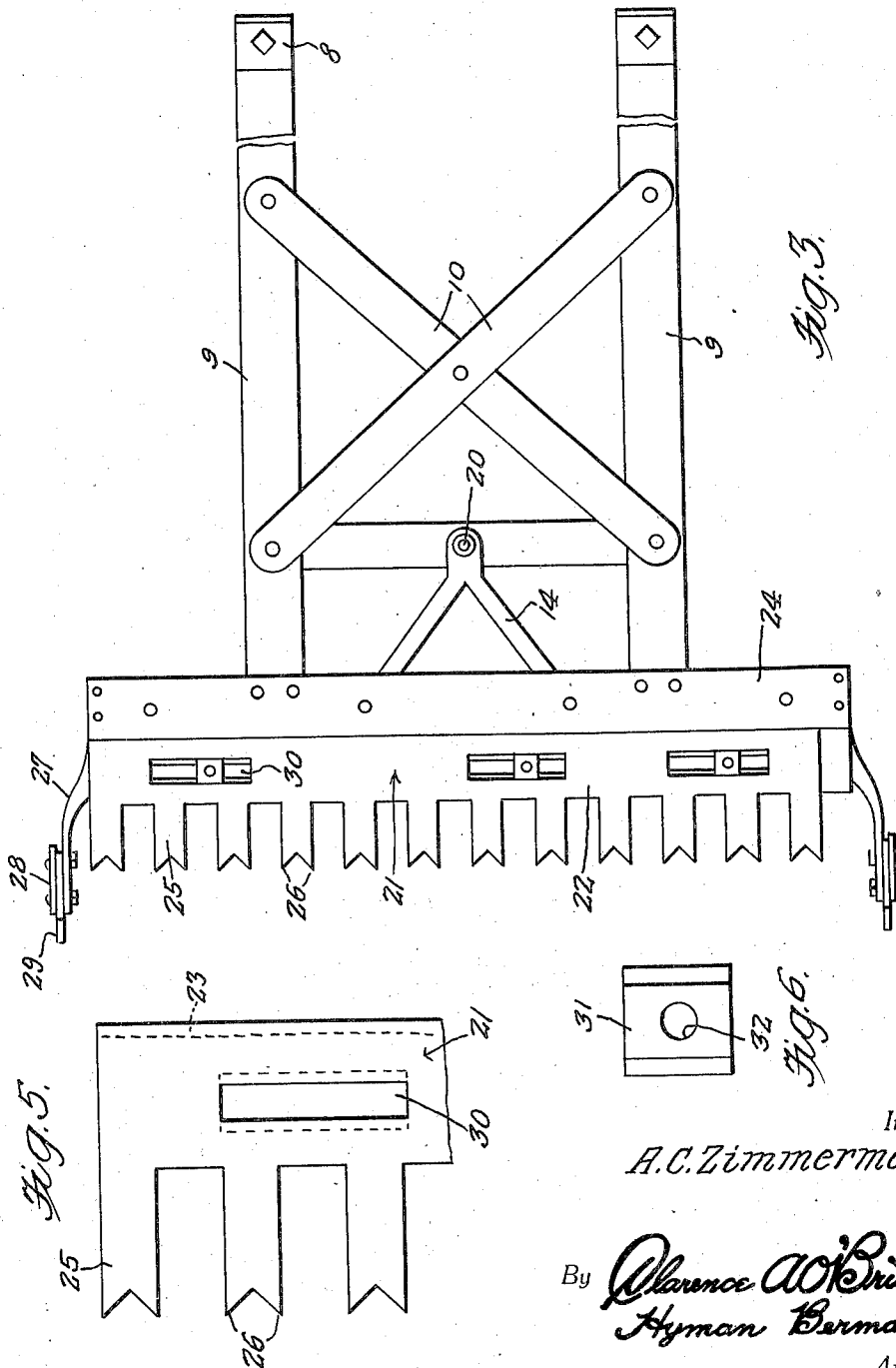
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UNITED STATES PATENT OFFICE

2,137,476

ICE CUTTER

Alva C. Zimmerman, Iowa City, Iowa

Application October 5, 1937, Serial No. 167,444

3 Claims. (Cl. 262-10)

This invention appertains to new and useful improvements in means for removing ice from pavements in a quick and efficient manner.

The principal object of the present invention is to provide a cutter attachment for trucks and other vehicles which can be moved along an ice covered street or pavement for the purpose of efficiently removing the ice without damaging the pavement.

Other important objects and advantages of the invention will become apparent to the reader of the following specification.

In the drawings:—

Figure 1 represents a fragmentary side elevational view showing the cutter applied to a truck.

Figure 2 is a top plan view of the cutter.

Figure 3 is a bottom plan view of the cutter.

Figure 4 is a cross sectional view taken substantially on the line 4—4 of Figure 1.

Figure 5 is a fragmentary top plan view of one end portion of the cutter bar.

Figure 6 is an elevational view of one of the slide blocks.

Figure 7 is a sectional view on the line 7—7 of Figure 2.

Figure 8 is a perspective view of one of the lead cutters.

Referring to the drawings wherein like numerals designate like parts, it can be seen in Figure 1 that numeral 5 generally refers to a conventional truck such as is generally employed in pushing snow plows and the like. This truck is provided with the usual rear axle housing 6 with which is engaged the U-clamp 7 on the tail portions 8—8 of the rearwardly disposed arms 9—9, which are provided with crossed braces 10. Adjacent the forward ends of these arms 9—9 is the bridge piece 11 raised at its intermediate portion. Hinge members 12—12 connect the forward ends of these arms 9—9 to the elongated plate 13. A Y-shaped member 14 has its diverged leg portions secured as at 15 to the plate 13 while its trunk portion underlies the bridge member 11 and is apertured to receive the reduced portion 16 at the lower end of the screw 17, which screw is threadedly disposed through the nut 18 on the bridge member 11 and is provided with a polygonal-shaped head 19 with which a wrench or other tool can be engaged. The lower end of the reduced portion 16, that is, the portion below the Y-shaped member 14 is provided with the head 20 to prevent displacement of the Y-shaped member from the screw 17.

Obviously, adjustment of the screw 17 will result in changing the inclination of the plate 13 and the cutter bar 21. This cutter bar 21 includes the elongated member 22, the edge portion 23 of

which is beveled to engage the beveled edge portion of the backing strip 24 which is secured to the bottom side of the plate 13.

Extending forwardly from the strip 22 are the notched teeth 25. These teeth are notched to provide spur-like ends 26 which cut into the ice and rip the same loose from the pavement.

Extending forwardly from the plate 13 and at the ends thereof are the arms 27—27 each of which has secured at its outer end by a clamp 28, a lead cutter tool 29 which serves to cut a path in the ice within which the cutter bar 21 is to operate.

The transversely slidable cutter bar 21 is provided with slots 30 therein having beveled edge portions for receiving the edge beveled blocks 31 which have threaded recesses 32 therein for receiving the screws 33. These screws are disposed through openings in the plate 13. Thus the cutter bar 21 is slidably mounted on the plate 13. While the foregoing specification sets forth the invention in specific terms, it is to be understood that numerous changes in the shape, size and materials may be resorted to without departing from the spirit and scope of the invention as claimed hereinafter.

Having described the invention, what is claimed as new is:—

1. An ice remover comprising a vehicle attaching structure, a transversely disposed plate on the attaching structure, and a cutter bar slidably disposed on the plate, and adjusting means between the plate and the vehicle attaching structure, said means consisting of a hinged connection between the vehicle attaching structure and the plate, a member extending from the plate to interlap the vehicle attaching structure, and a screw disposed through the vehicle attaching structure and connected to the said member.

2. An ice remover comprising a vehicle attached structure, an ice engaging blade hingedly connected to the vehicle attaching structure, said blade being provided with an arm projecting therefrom, and under the vehicle attaching structure, and adjusting means between the arm and the vehicle attaching structure.

3. An ice remover comprising a vehicle attached structure, an ice engaging blade hingedly connected to the vehicle attaching structure, said blade being provided with an arm projecting therefrom, and under the vehicle attaching structure, and adjusting means between the arm and the vehicle attaching structure, said adjusting means consisting of a screw feedably disposed through the vehicle attaching structure and having one end swivelly connected to the said arm.

ALVA C. ZIMMERMAN.