

(No Model.)

J. C. MATHUES.
ICE SHOE FOR WAGONS.

No. 362,641.

Patented May 10, 1887.

Fig. 1.

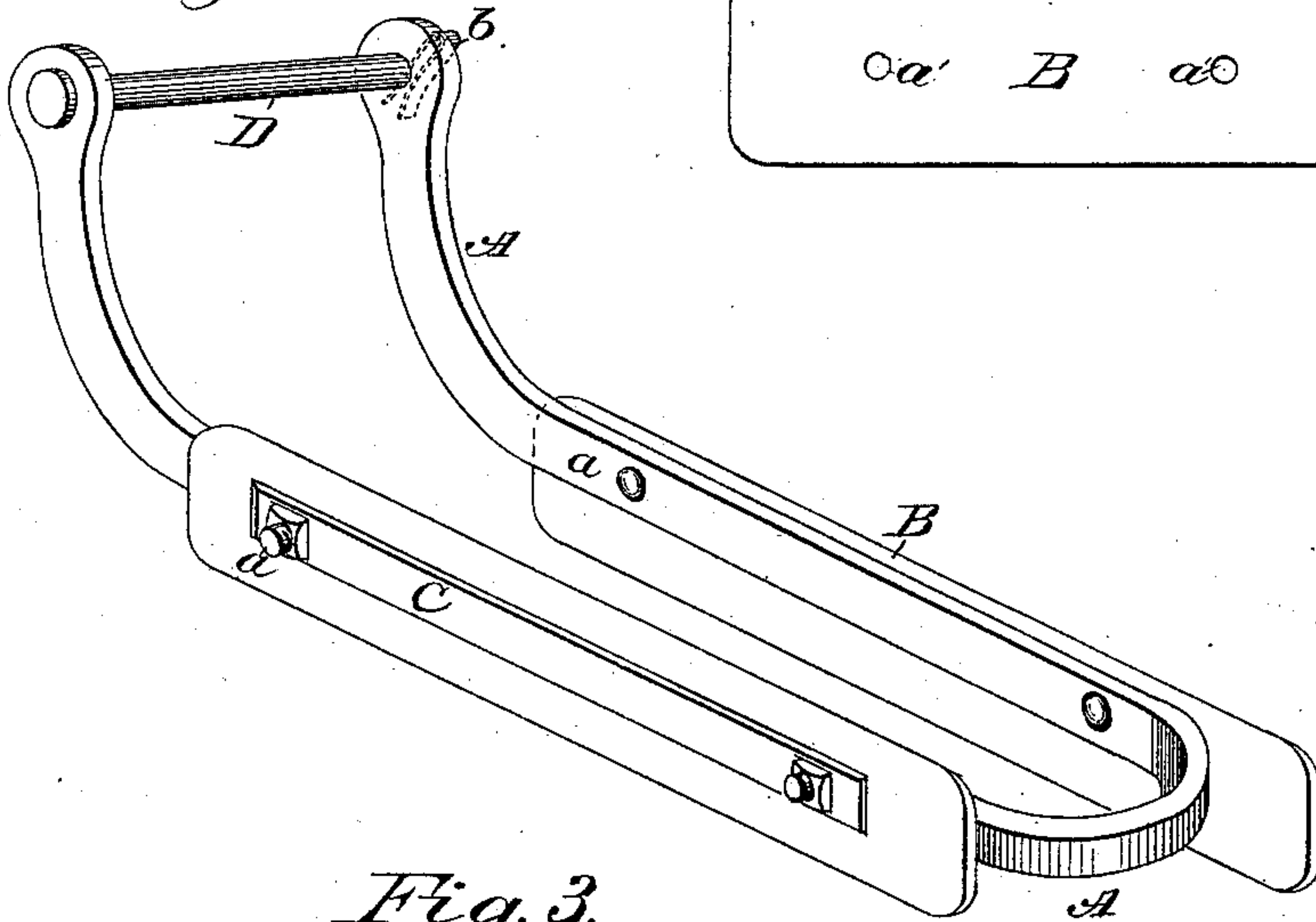


Fig. 2.

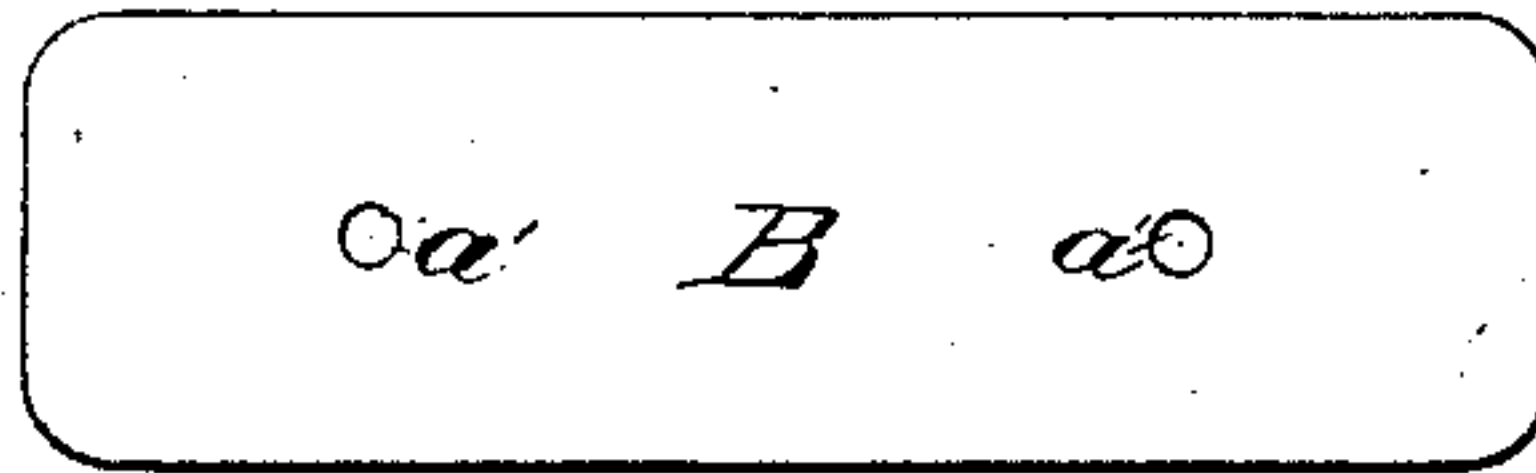


Fig. 3.

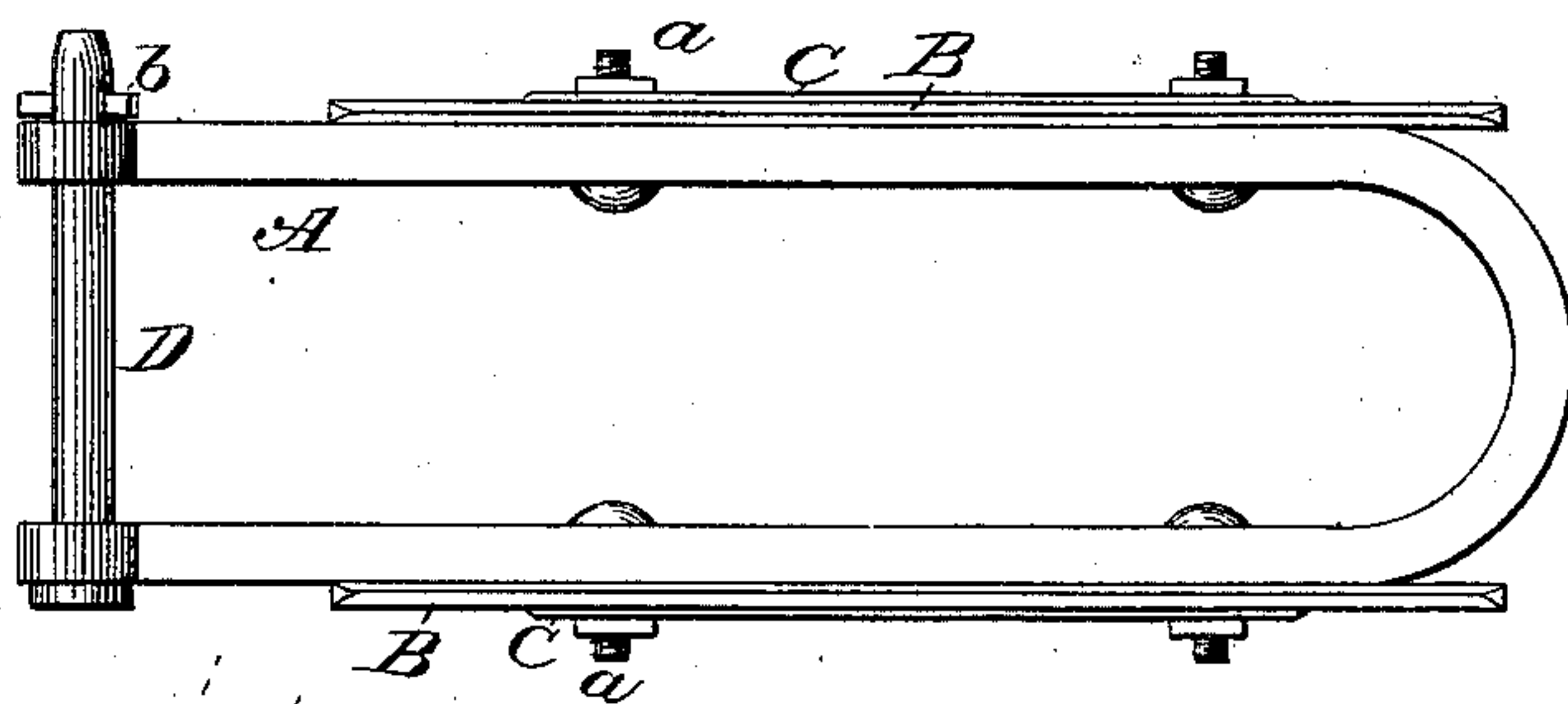
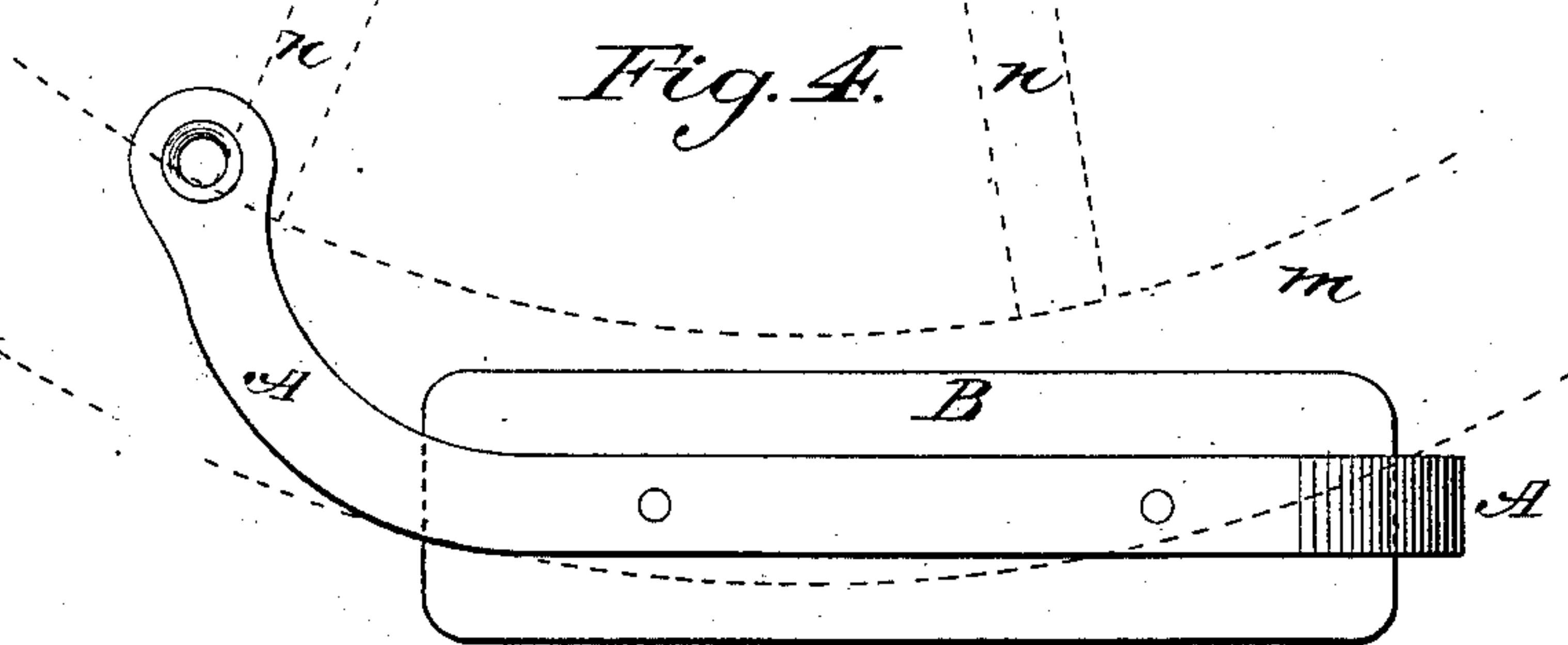


Fig. 4.



Witnesses:

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UNITED STATES PATENT OFFICE.

JOHN C. MATHUES, OF RICHMOND, INDIANA.

ICE-SHOE FOR WAGONS.

SPECIFICATION forming part of Letters Patent No. 362,641, dated May 10, 1887.

Application filed January 13, 1887. Serial No. 224,306. (No model.)

To all whom it may concern:

Be it known that I, JOHN C. MATHUES, a citizen of the United States, residing at Richmond, in the county of Wayne, State of Indiana, have invented certain new and useful Improvements in Ice-Shoes for Wagon-Wheels, of which the following is a specification, reference being had therein to the accompanying drawings.

My invention relates to that class of ice-shoes used upon wagons and other vehicles to prevent sliding sidewise on inclined icy roadways.

My invention consists in the devices herein described and claimed.

In the drawings, Figure 1 is a perspective view of my improved shoe. Fig. 2 is a side elevation of one of the runners or blades thereof. Fig. 3 is a top plan of the shoe. Fig. 4 is a side elevation of the shoe, showing it attached to a wheel, the felly and spokes of which are shown in dotted lines.

In Fig. 1 A A A is a framing of bar-iron in the form of a clevis, at the open end of which the bars are turned up or curved in the form of a sled-runner, each end being furnished with a hole to receive a horizontal bolt, D, which is held in place by a spring-key, b. The bars A A are curved in semicircular form at the rear end, and are parallel at a proper distance from each other to admit the felly of the wheel, as seen in Fig. 4. The blades or cutters B B are rectangular plates, preferably made of steel, of greater length than width, and of a thickness sufficient to support the loaded vehicle, made thinner at the edges and rounded at the corners, and are secured vertically to the framing A A, on the outside thereof, by screw-bolts a a a a, having a longitudinal brace or stay, c, secured between the nut of the screw-bolt and the vertical surface of the blade B.

It will be seen that the blades B by their construction are readily reversible, and can be used with either edge down or with either end in front, and are also interchangeable or capable of being used on either side of the frame.

To use my improved ice-shoe the wheel upon which it is to be applied is first locked by a proper locking-chain or otherwise, with slack enough on the chain to allow a slight forward motion of the wheel. The ice-shoe is then applied by removing the bolt D and placing the shoe under the wheel, so that the curved front of the frame will allow the bolt D to pass through the holes in the frame over the inner surface of the felly, which is thus embraced by the framing, said bolt resting immediately in front of and against the spoke n, as seen in Fig. 4. As the wheel is moved forward the distance allowed by the slack in the lock-chain, the wheel mounts the shoe and rests thereon, so that the weight of the wheel is thrown upon the blades B B, which penetrate the icy surface and prevent the lateral movement of wheel and vehicle. The shoe is readily removed by removing the bolt D and moving the wagon slightly ahead.

m represents the felly, and n n the spokes, of an ordinary wagon-wheel with my improved ice-shoe attached.

Having thus fully described my said improvement, what I claim as new, and desire to secure by Letters Patent, is—

1. In an ice-shoe for wagon-wheels, the clevis-shaped frame A A A, constructed as described, the blades or cutters B B, being reversible and interchangeable, the screw-bolts a a a a, and the stay-plate c, combined with the felly m and spokes n n of a wagon-wheel, in the manner and for the purpose substantially as herein set forth and described.

2. An ice-shoe composed of a frame having parallel horizontal sides circular at one end and open at the other, having reversible and interchangeable blades or cutters attached by bolts and nuts, with means for securing the same to the wheel of a wagon.

In testimony whereof I affix my signature in presence of two witnesses.

JOHN C. MATHUES.

Witnesses:

W. T. DENNIS,

WM. A. PEELLE.