## F. B. WAHMHOFF.

SLED RUNNER.

No. 344,697.

Patented June 29, 1886.

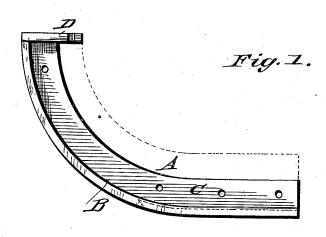
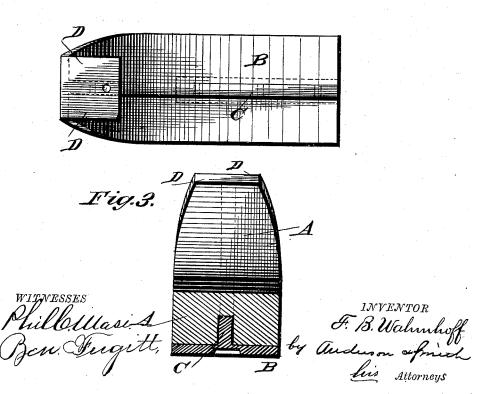


Fig.R.



## United States Patent

## FRANK B. WAHMHOFF, OF DELPHOS, OHIO.

## SLED-RUNNER.

SPECIFICATION forming part of Letters Patent No. 344,697, dated June 29, 1886.

Application filed October 24, 1885. Serial No. 180,852. (No model.)

To all whom it may concern:

Be it known that I, FRANK B. WAHMHOFF, a citizen of the United States, residing at Delphos, in the county of Van Wert and State of Ohio, have invented certain new and useful Improvements in Sled-Runners; and I do 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 ap-10 pertains to make and use the same, reference being had to the accompanying drawings, and to letters or figures of reference marked thereon, which form a part of this specification.

Figure 1 of the drawings is a representation 15 of a side elevation. Fig. 2 is a plan view.

Fig. 3 is a sectional view.

My invention relates to sled runners; and it consists in the construction and novel combination of parts, as will be hereinafter fully de-2c scribed, and particularly pointed out in the

Referring by letter to the accompanying drawings, A designates one of the runners of a bob-sled, which sufficiently illustrates the 25 invention, which is, however, equally applicable to log-sleds, mud-sleds, and the like; and B is one of the improved soles, which is made of cast-iron, with a central longitudinal rib, C, along its upper face, and stop-shoulders D D 30 on its upper face at its upper end. The casting is curved to fit the contour of the wooden runner.

The sole is secured to the runner by bolts, the heads of which rest in countersinks, so 35 that the bottom of the metal shoe presents a smooth surface to the snow or mud, as the case

The bolster holes and rivet-holes are cast in

the shoe, and but six long bolts, six rivets, and two short bolts are required to connect 40 the parts.

The strain comes upon the shoulders D D,

and not upon the rivets.

It is obvious that where similar shoes are attached directly to the standards, the latter 45 being grooved to receive the flange of the shoe, the sled will be greatly weakened, and I attach importance to the fact that the shoe engages the runner by the shoulders D D.

I am aware that it is not new to provide a 50 metallic shoe with a vertical longitudinal rib to receive the lower forked end of the standards, and bent at its forward end to overlap the forward end of the side rails of the sled. I am also aware that similar shoes have been 55 provided with a flange which may engage the runner its entire length, and therefore do not

claim such devices, broadly.

Having thus fully described my invention, what I claim as new, and desire to secure by 60 Letters Patent of the United States, is-

The combination, in a sled, of the runner A, having an under vertical longitudinal groove, and the metallic shoe B, having a vertical longitudinal rib, C, extending its entire length, 65 and rearwardly-directed shoulders D D at its forward end, the said runner engaging by its forward upturned end the shoulders of the shoe, and bolts for connecting the same, substantially as specified.

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

FRANK B. WAHMHOFF.

Witnesses:

F. H. STALLTRURY, WM. F. KLAGES.