

H. B. BARTELTSEN.
SLED.
APPLICATION FILED APR. 17, 1907.

949,169.

Patented Feb. 15, 1910.

Fig. 1.

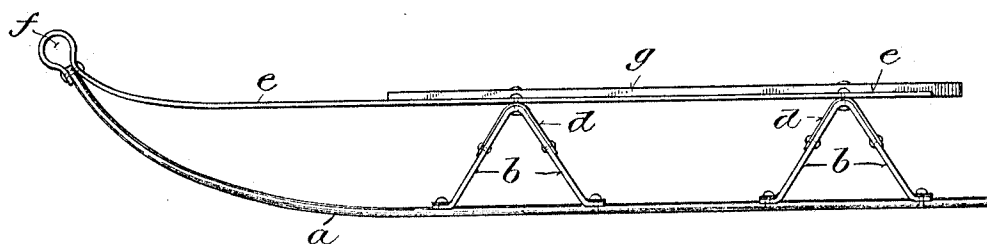
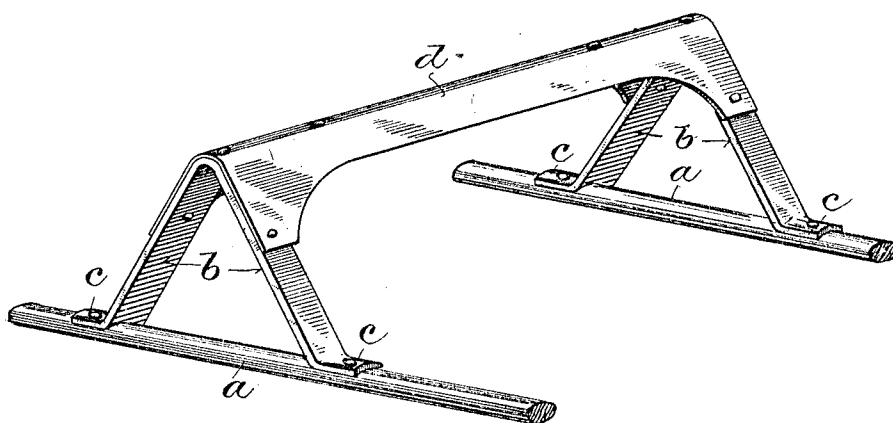


Fig. 2.



Witnesses:
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UNITED STATES PATENT OFFICE.

HENRY B. BARTELSEN, OF MILWAUKEE, WISCONSIN.

SLED.

949,169.

Specification of Letters Patent.

Patented Feb. 15, 1910.

Application filed April 17, 1907. Serial No. 368,624.

To all whom it may concern:

Be it known that I, HENRY B. BARTELSEN, a citizen of the United States, residing at Milwaukee, in the county of Milwaukee and State of Wisconsin, have invented certain new and useful Improvements in Sleds, of which the following is a specification, reference being had to the accompanying drawing, forming a part thereof.

The main object of this invention is to simplify, strengthen and generally improve the construction of sleds.

It consists in certain novel features of construction and in the peculiar arrangement and combination of parts as hereinafter particularly described and defined in the claims.

In the accompanying drawing like characters designate the same parts in both figures.

Figure 1 is a side elevation of a sled embodying the invention; and Fig. 2 is a perspective view on an enlarged scale of one of the combined cross beams and braces with the associated knees and parts of runners.

The runners *a* are preferably made of oval steel or metal bent upwardly at the front ends to the proper curve, as shown in Fig. 1. The knees *b* are preferably made of band steel or metal, bent as shown, to form downwardly diverging legs with outwardly turned concave feet *c* which fit over and are riveted or bolted to the runners. The knees are thus made self bracing in the vertical planes of the runners. The upper parts of the knees on opposite sides of the slide are connected by combined cross beams and braces *d*, which are formed of sheet metal and arched to make them stiff and strong and to fit over and laterally brace the runners and the knees to the diverging legs of which they are riveted or bolted. To provide for the desired vertical space between the cross beams and the ground and at the same time to firmly brace the knees laterally, the cross beams are cut away between their ends or made wider at the ends, as shown in Fig. 2.

A rave *e*, which may be made of band metal, is riveted on each side of the sled to the cross beams *d*, and is looped at its front end around and secured by a bolt or rivet to opposite sides of the upturned front end of the adjacent runner *a*, thereby forming an eye *f* for the attachment of a rope or tongue

to the sled and a finish for the upturned end of the runner. For an ordinary sled, two cross beams *d* are used, and a top board or plate *g* is riveted or secured thereto, as shown in Fig. 1, but for bob sleds, one pair of knees and one of the cross beams may be omitted in each bob.

By the construction and arrangement of parts shown and described, a very light, strong and durable sled is produced entirely or mainly of steel or metal, at a comparatively small cost.

I claim:

1. In a sled the combination with the runners and knees of a combined metal cross beam and runner brace arched in cross section to fit over and extend down upon the front and rear sides of the knees to which it is rigidly secured at and below the upper ends thereof so as to brace the runners laterally.

2. In a sled the combination with the runners, of knees having downwardly diverging legs fastened at their lower ends to the runners and a cross beam arched in cross section to fit over and extend down upon the diverging front and rear sides of the knees to which it is rigidly secured at and below the upper ends thereof so as to brace the runners laterally.

3. In a sled the combination with the runners, of knees having downwardly diverging legs attached at their lower ends to the runners, and a transversely arched cross beam widened at the ends which are attached to the diverging legs of the knees below their upper ends and form lateral braces therefor, substantially as described.

4. In a sled the combination of metal runners, band metal knees having downwardly diverging legs, a transversely arched sheet metal cross beam and brace attached at the ends to the divergent legs of the knees below their upper ends, and metal raves attached to the cross beam and looped around and secured to opposite sides of the upturned front ends of the runners, substantially as described.

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

HENRY B. BARTELSEN.

Witnesses:

CHAS. L. GOSS,

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