

(No Model.)

J. AMMON.  
SLED KNEE.

No. 428,876.

Patented May 27, 1890.

Fig. 1.

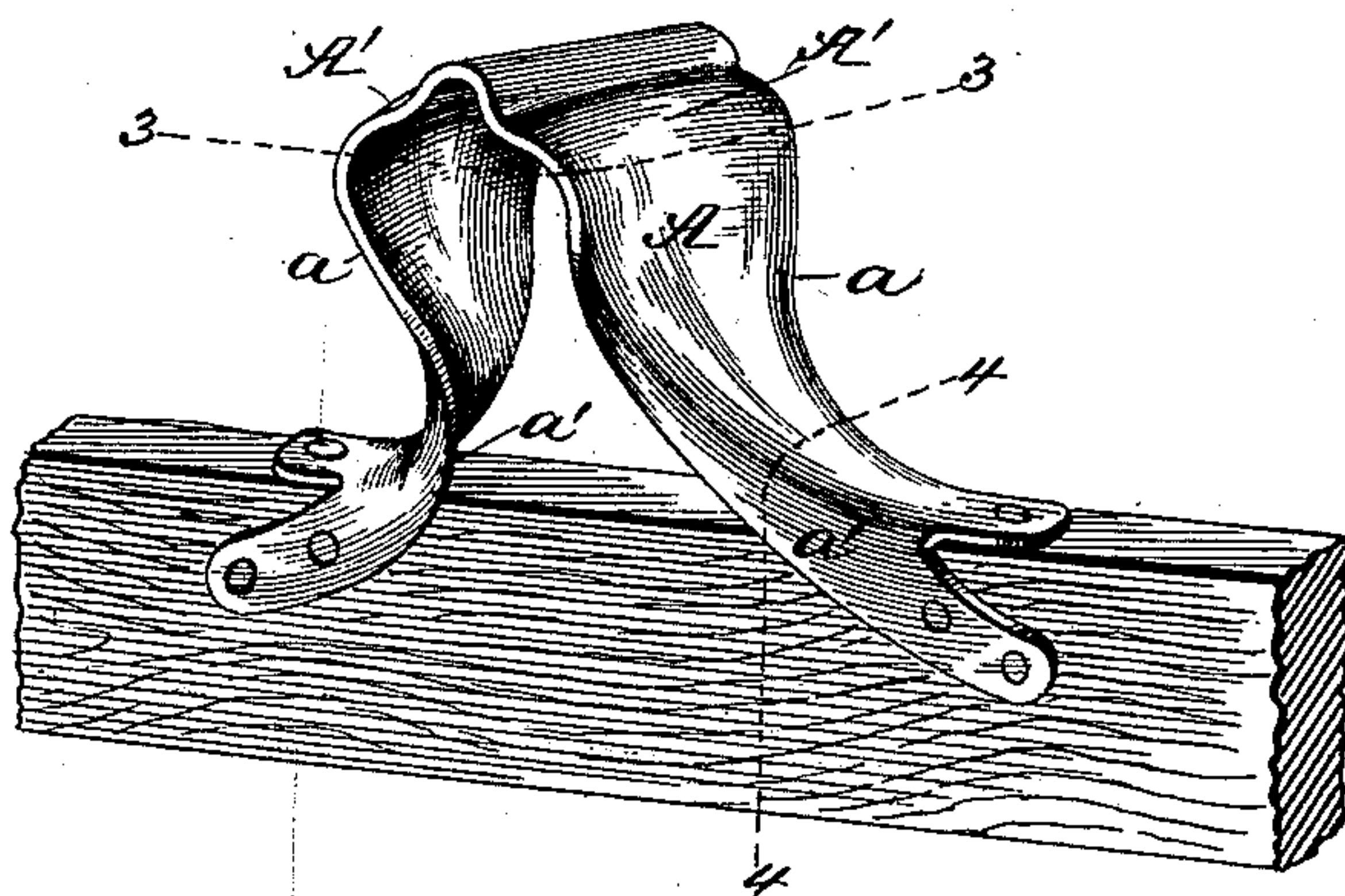


Fig. 2.

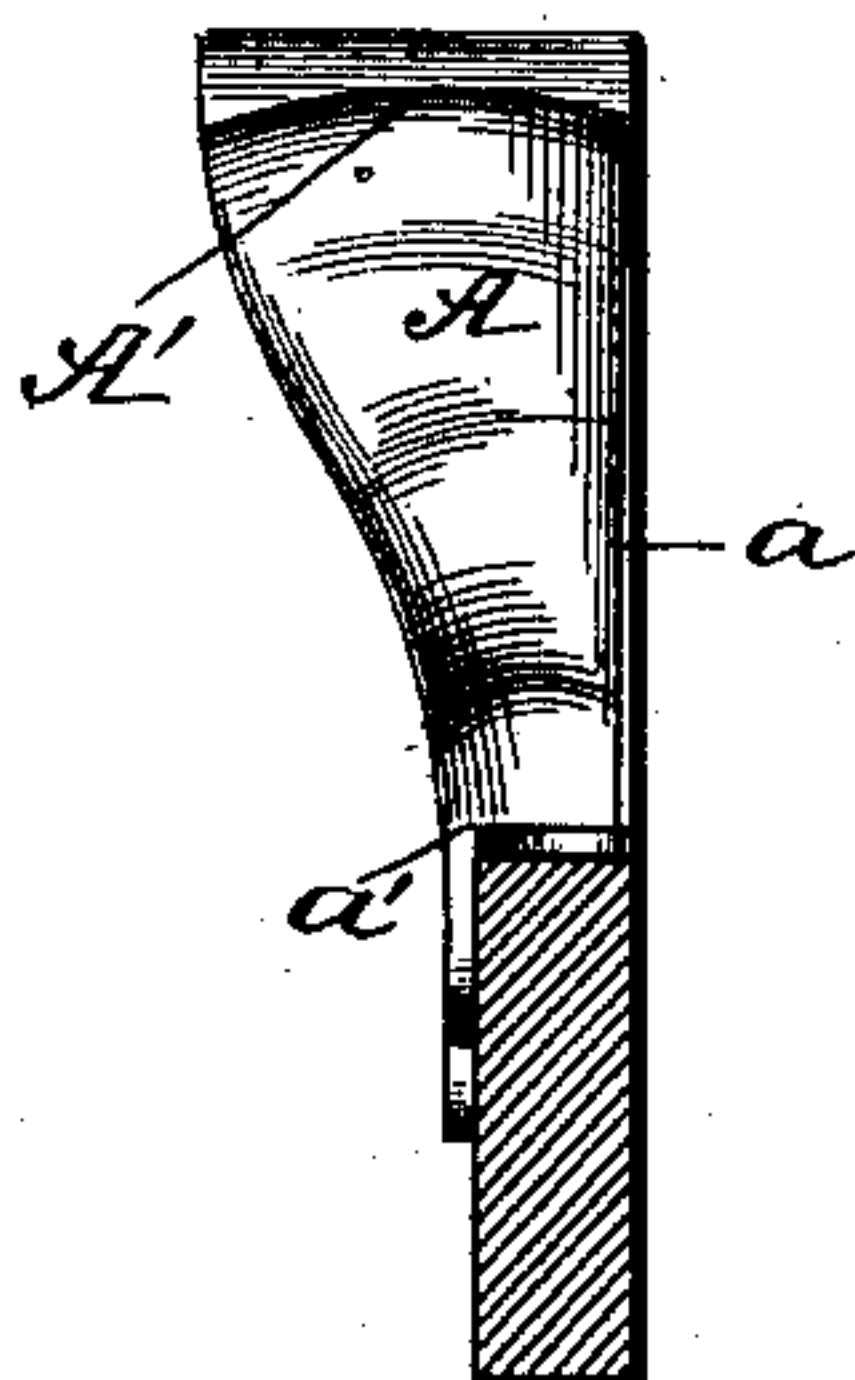


Fig. 3.

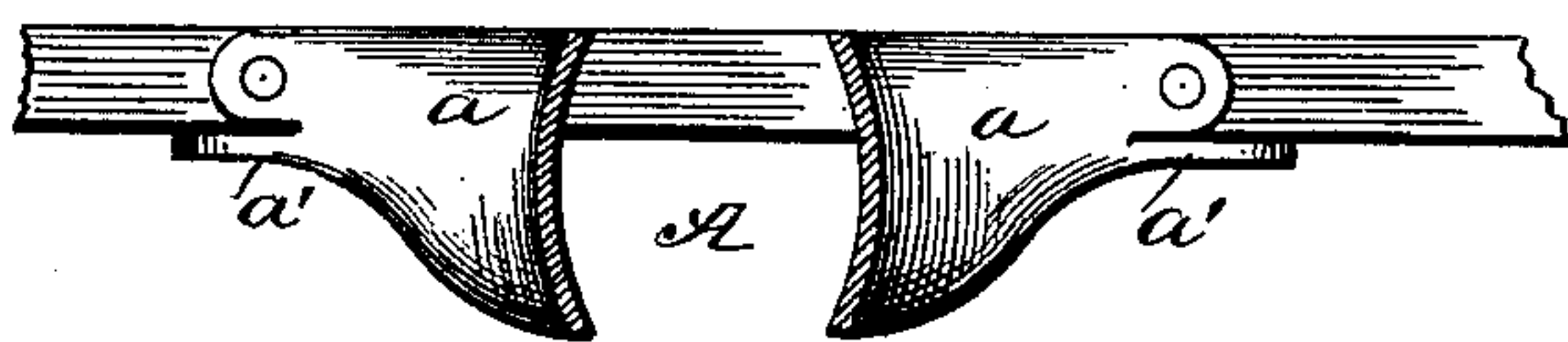
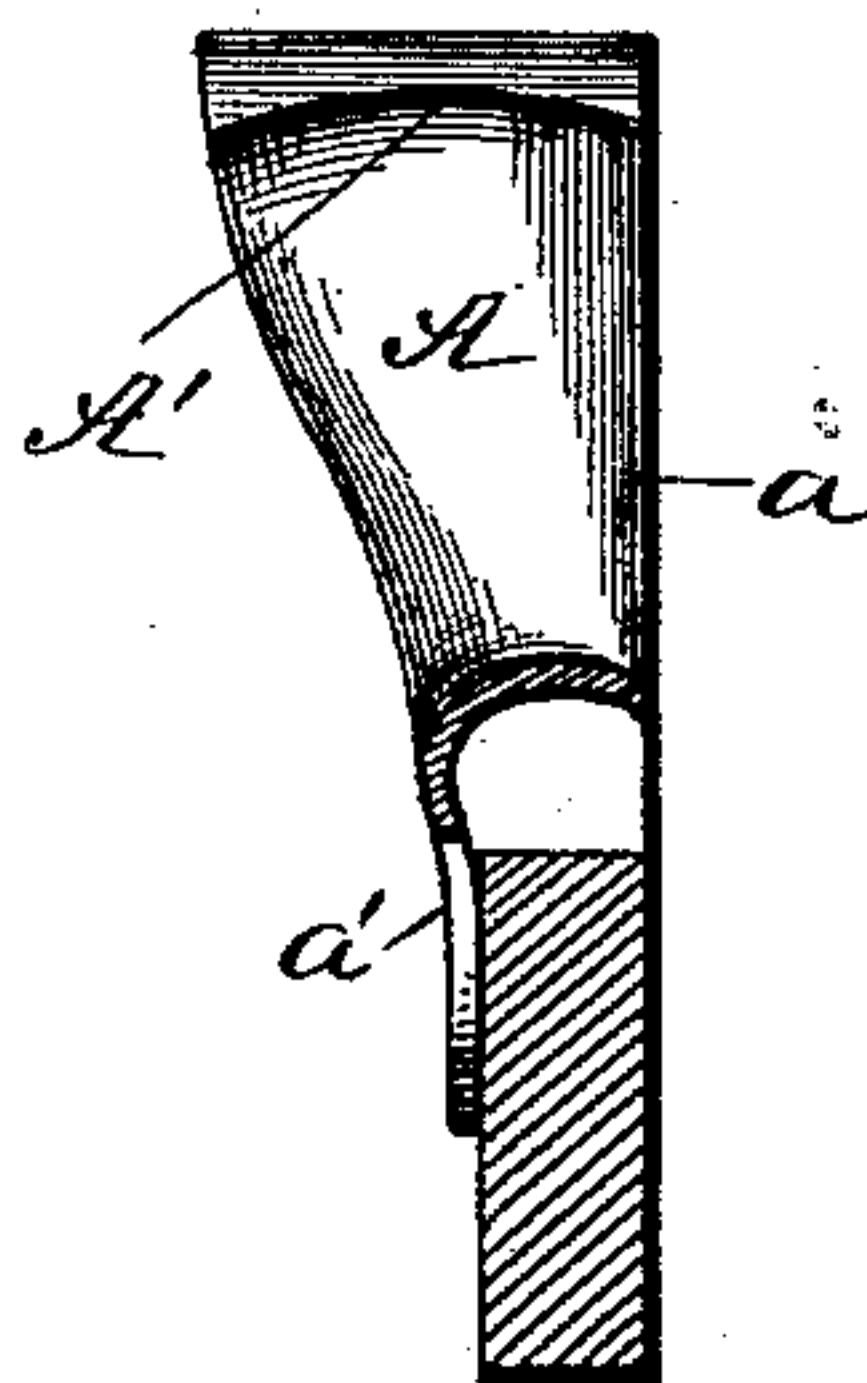


Fig. 4.



WITNESSES:

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# UNITED STATES PATENT OFFICE.

JOHN AMMON, OF STOUGHTON, WISCONSIN.

## SLED-KNEE.

SPECIFICATION forming part of Letters Patent No. 428,876, dated May 27, 1890.

Application filed November 20, 1889. Serial No. 331,001. (No model.)

*To all whom it may concern:*

Be it known that I, JOHN AMMON, of Stoughton, in the county of Dane and State of Wisconsin, have invented a new and useful Improvement in Sled-Knees, of which the following is a specification.

My invention is an improved sled-knee, and has for its object to provide a simple, novel construction of knee, whereby the strength and strain resisting powers of the knee will be greatly increased.

The invention consists in the novel construction of the knee, as will be hereinafter more fully described and claimed.

In the drawings, Figure 1 is a perspective view. Fig. 2 is an end view. Fig. 3 is a section on the line 3 3, Fig. 1, and Fig. 4 is a section on the line 4 4, Fig. 1.

The knee A is made of plate metal, usually steel or iron, and may be forged or pressed into the shape shown and presently described. Being made of plate metal, it is quite desirable to so form the knee as to cause it to brace itself and be strengthened to bear the strains to which it is subjected in use.

The knee is shown as formed with upright portions *a* and side portions *a'*, the said side portions *a'* being bent from the inner side of upright *a*, and the lower ends of said portions *a a'* being separated and extended, respectively, along the top and side of the runner and secured by bolting, or in other suitable manner. In bending or otherwise manipulating the knee to form the upright and side

portions the knee is curved in cross-section, strengthening it against endwise strain from end to end of the side portion. On its upper side the knee is adapted to receive the ravesupport and has its upper side or top portion curved or arched in cross-section at A', the convexity of the curve being upward, so that the top of the knee will form a crown or arch and enable the plate-metal knee to be made practically as strong as the ordinary cast-iron knees.

It will be seen that by the construction of knee as shown and described it is strengthened throughout and braced to stand the strains to which it is subjected in use.

Having thus described my invention, what I claim as new is—

1. An improved knee for sleds, formed of plate metal and having its top portion or crown curved or arched upward from side to side, substantially as and for the purposes set forth.

2. As a new and improved article of manufacture, the sled-knee herein described, constructed of plate metal, with upright, side, and top or crown portions, having its upright portions curved in cross-section and having its top or crown portion curved or arched upward from side to side, substantially as described, and for the purposes specified.

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Witnesses:

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