

(No Model.)

HERMAN WESLE & HENRY WESLE.  
SLEIGH KNEE.

No. 572,847.

Patented Dec. 8, 1896.

Fig. 1.

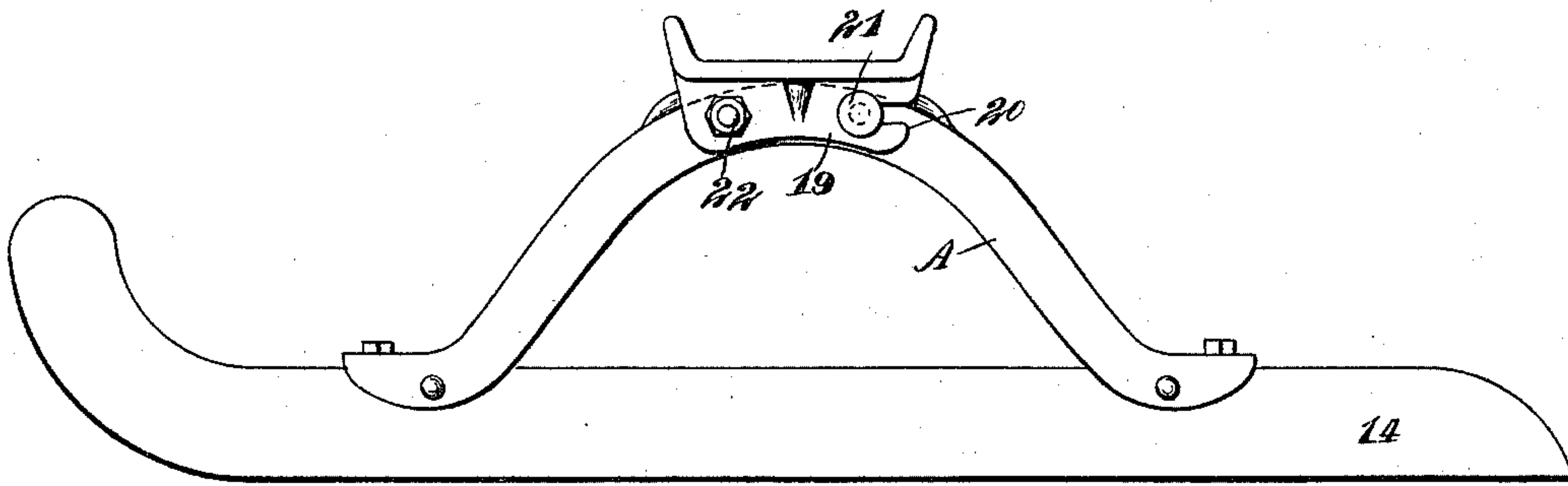


Fig. 2.

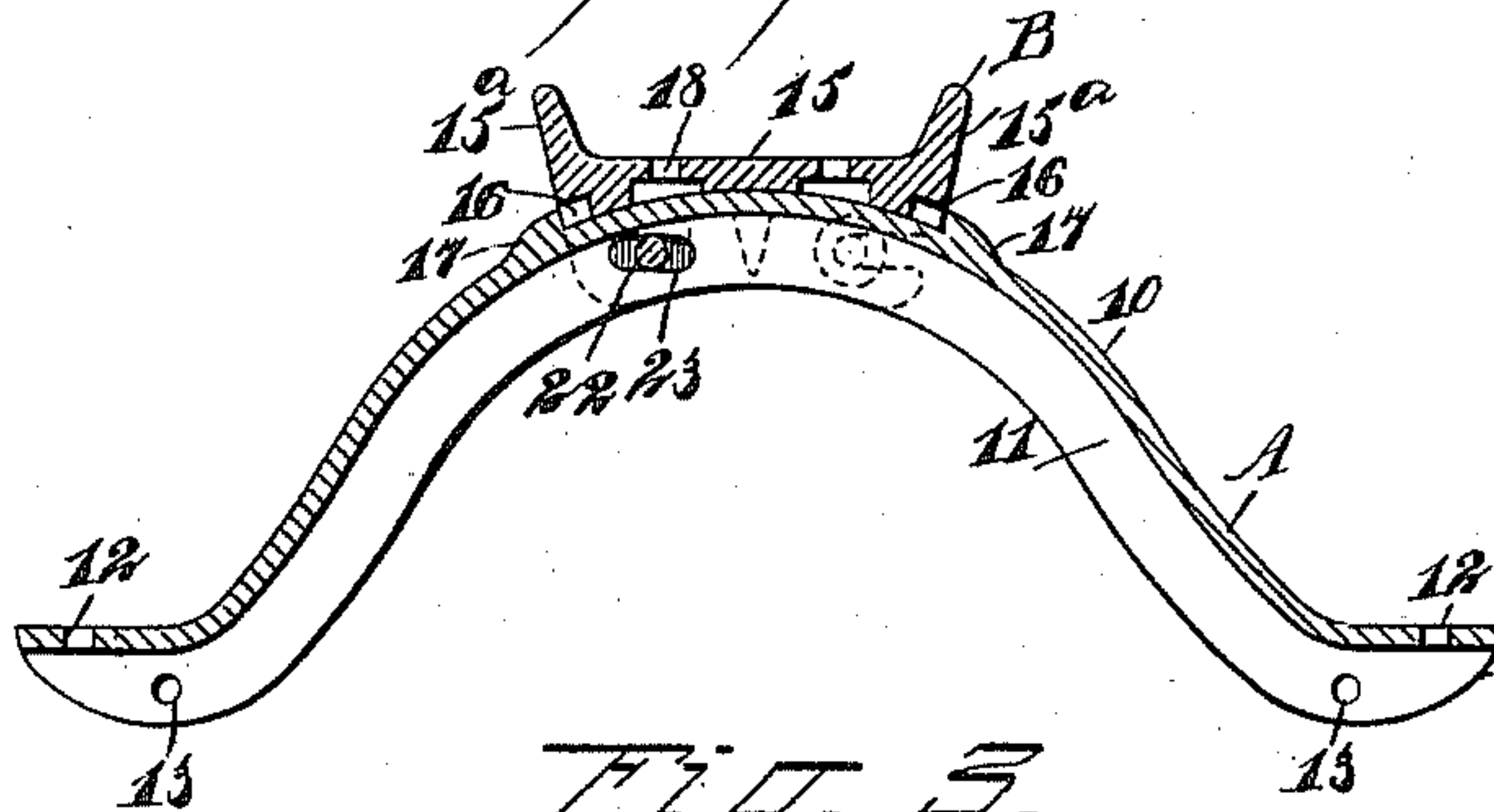
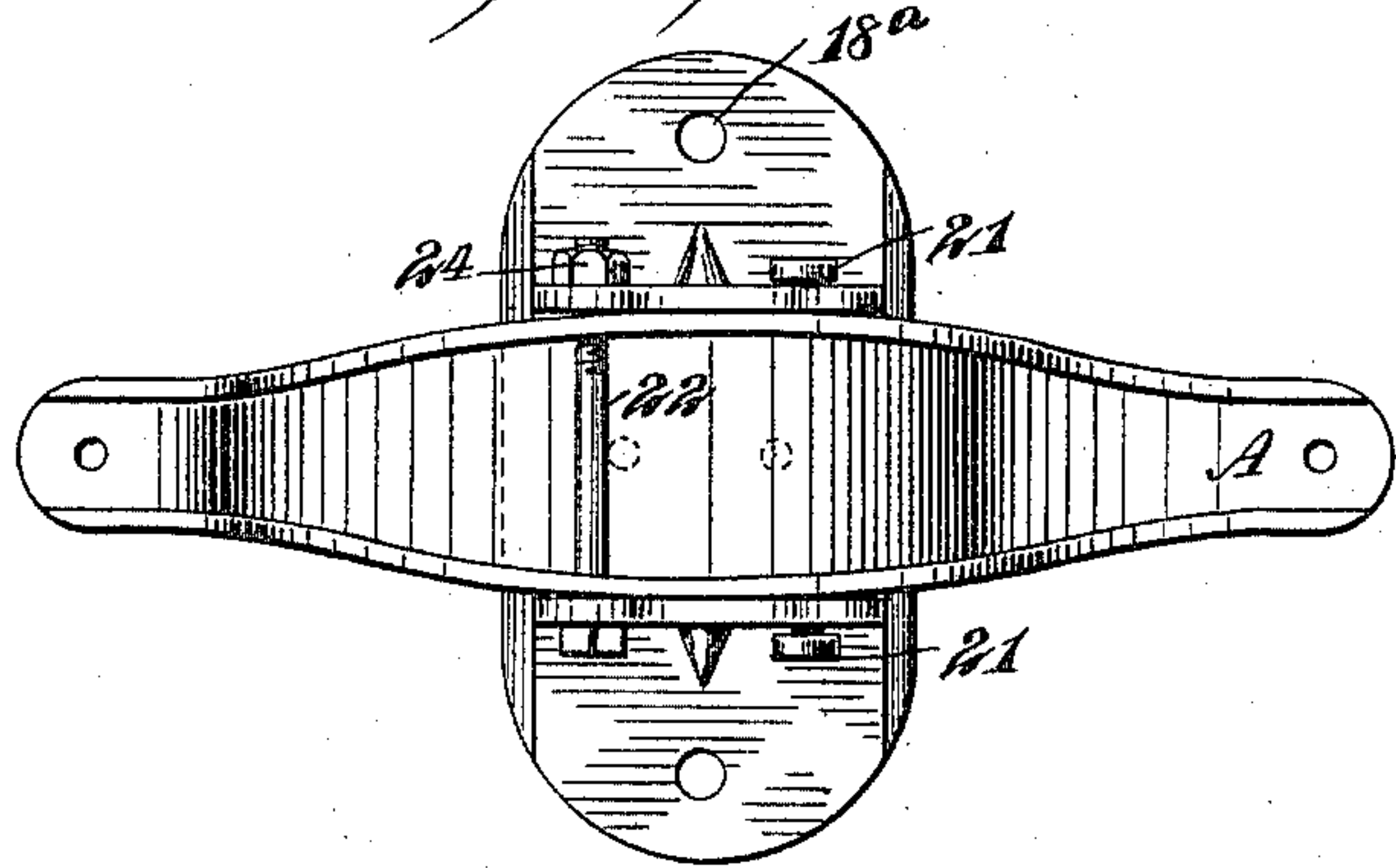


Fig. 3.



WITNESSES:

Henry T. Hirsch.  
Franklin

INVENTORS  
H. Wesle.  
H. Wesle.

BY

Wm. J. [Signature]  
ATTORNEYS.



# UNITED STATES PATENT OFFICE.

HERMAN WESLE AND HENRY WESLE, OF MEDFORD, WISCONSIN.

## SLEIGH-KNEE.

SPECIFICATION forming part of Letters Patent No. 572,847, dated December 8, 1896.

Application filed April 4, 1896. Serial No. 586,202. (No model.)

*To all whom it may concern:*

Be it known that we, HERMAN WESLE and HENRY WESLE, of Medford, in the county of Taylor and State of Wisconsin, have invented a new and useful Improvement in Sleigh-Knees, of which the following is a full, clear, and exact description.

Our invention relates to an improvement in sleigh-knees; and the object of the invention is to provide a means whereby the body of the sleigh may have lateral play on the knee to a limited extent; and a further object of the invention is to construct a sleigh-knee upon which the aforesaid movement may be obtained in an exceedingly simple, durable, and economic manner, the knee being applicable to any sleigh-runner.

The invention consists in the novel construction and combination of the several parts, as will be hereinafter fully set forth, and pointed out in the claims.

Reference is to be had to the accompanying drawings, forming a part of this specification, in which similar characters of reference indicate corresponding parts in all the figures.

Figure 1 is a side elevation of the knee and its attachment applied to the sleigh-runner. Fig. 2 is a vertical section through the knee and the attachment, the knee being detached from the runner; and Fig. 3 is a bottom plan view of the knee and likewise of its movable attachment adapted for application to the body of the sleigh.

In carrying out the invention the knee A is preferably made of metal, and the said knee comprises a body portion 10 and a flange 11, formed at each side of the body, extending downwardly therefrom. The main portion of the knee is arched, as shown in Figs. 1 and 2, and the extremities of the knee are carried horizontally outward to form feet, and the foot portions of the knee are adapted to receive the runner 14 of the sleigh, as shown in Fig. 1, and each foot portion is provided with preferably an opening 12 in the body and openings 13 in the flange-sections for the admission of bolts or rivets which are to be passed through or into the sleigh-runner, as occasion may demand.

A clamp B is located upon the knee A, the said clamps being adapted to receive a cross-bar which is attached to the sleigh-body or the

platform constituting the body of the sleigh. This clamp comprises a substantially horizontal base or body section 15 and a flange 15<sup>a</sup>, which extends upward from the side portions of the body, and the clamp is of such length that when placed in position on the knee it will extend a predetermined distance beyond the sides of the latter.

In the lower side edges of the clamp, preferably at its central portion, recesses 16 are made, adapted to receive lugs 17, formed on the outer surface of the body portion of the knee, one at each side of its center, and the bottom surface of the clamp is made to conform to the upper central curvature of the knee, and the extent to which the clamp will have lateral movement on the knee is controlled by the depth of the aforesaid recesses 16, the lugs 17 limiting the forward and rearward movement of the said clamp.

Countersunk openings 18 are made in the body portion of the clamp to receive the screws or other fastening devices whereby the clamp is attached to the body portion of the sleigh, and the countersinks are made so that the fastening devices will not interfere in the least with the movement of the clamp, and other openings, 18<sup>a</sup>, are usually provided at the extremities of the said clamp, as shown in Fig. 3, for the same purpose as the openings 18.

Two flanges 19 are projected from the under side of the body portion of the clamp, the said flanges being so spaced that when the clamp is placed on the knee its flanges will engage with the outer faces of the flanged portions of the knee, and each flange of the clamp at one end is provided with a longitudinal recess 20, these recesses being adapted to receive the shanks of buttons or studs 21, which are projected laterally from and are usually integral with the flanged portions of the knee, as illustrated best in Fig. 1.

A bolt 22 is passed through apertures in the opposite or forward ends of the clamp-flanges, the apertures being of just sufficient size to receive the aforesaid bolt, and the bolt is likewise passed through elongated openings 23, made in the flanged portions of the knee, as illustrated in Fig. 2, so that the said bolt may have a movement in the openings 23 of the knee corresponding to the ex-



tent of the movement of the clamp on the knee permitted by the recesses 16 in the clamp. A suitable lock-nut 24 is screwed upon one end of the bolt 22. Under this  
 5 construction it will be observed that the clamps of the sleigh to which the body is to be secured will have lateral movement, or practically a semioscillatory movement, on the knees supporting the clamps, the lugs 17  
 10 preventing undue strain being brought to bear on the buttons or studs 21, attached to the knees.

Having thus described our invention, we claim as new and desire to secure by Letters  
 15 Patent—

1. A sleigh-knee, comprising an upper or body portion and side flanges, the upper or body portion having a lug located at each side of its center, a clamp adapted for at-  
 20 tachment to the body of the sleigh and located upon the upper central portion of the knee and having lateral movement between the said lugs, the said clamp being provided with side flanges adapted to engage with the  
 25 side flanges of the knee, and guide devices connected with the flanges of the clamp and controlled by stop devices on the flanges of the knee, as and for the purpose specified.

2. The combination with an arched sleigh-  
 30 knee, comprising an upper or body portion and depending side flanges provided with elongated slots at one side of the center, and outwardly-projecting studs at the opposite  
 35 side of the center, of a clamp adapted for attachment to the body of the sleigh and located upon the upper central portion of the knee having lateral movement thereon, flanges pro-  
 40 jected from the said clamp, and slotted to receive the studs of the knee, and a pin passed through the flanges of the clamp and through the elongated openings in the flanges of the knee, as and for the purpose set forth.

3. The combination, with an arched sleigh-  
 45 knee, comprising an upper or body portion and side flanges, the upper or body portion

having a lug at each side of its center, the flanges being provided with elongated slots at one side of the center and outwardly-projecting studs at the opposite side of the center, of a clamp adapted for attachment to the  
 50 body of the sleigh, having recesses in its sides whereby it may have lateral movement on the knee, the said recesses registering with the lugs of the knee, flanges projected from the said clamp, slotted to receive the studs  
 55 of the knee, and a pin passed through the flanges of the clamp and through the elongated openings in the flanges of the knee, as and for the purpose specified.

4. The combination, with a sleigh-knee hav-  
 60 ing an upwardly-arched center and horizontal feet at its extremities, the knee comprising substantially an upper body portion and side flanges pendent therefrom, the body portion  
 65 being provided with a lug at each side of its center upon its outer face, the flanges of the knee having each an elongated horizontal slot at one side of its center, and a stud consist-  
 70 ing of a head and shank projected from the outside of each flange at the opposite side of their centers, of a clamp adapted for attach-  
 75 ment to a sleigh-body, located between the said lugs and fitted to the convexity of the central portion of the knee, the said clamp being provided with recesses in its side sur-  
 80 faces arranged to receive the lugs on the knee, whereby the clamp may have lateral movement on said knee, flanges projecting from the bottom portion of the said clamp, each flange having a slot in one end to re-  
 85 ceive the shank portion of the studs on the knee, and a bolt passed through the flanges of the clamp and through the elongated openings in the flanges of the knee, for the purpose set forth.

HERMAN WESLE.  
 HENRY WESLE.

Witnesses:

GUST LUPINSKY,  
 AUGUST GRIEPENBROG.