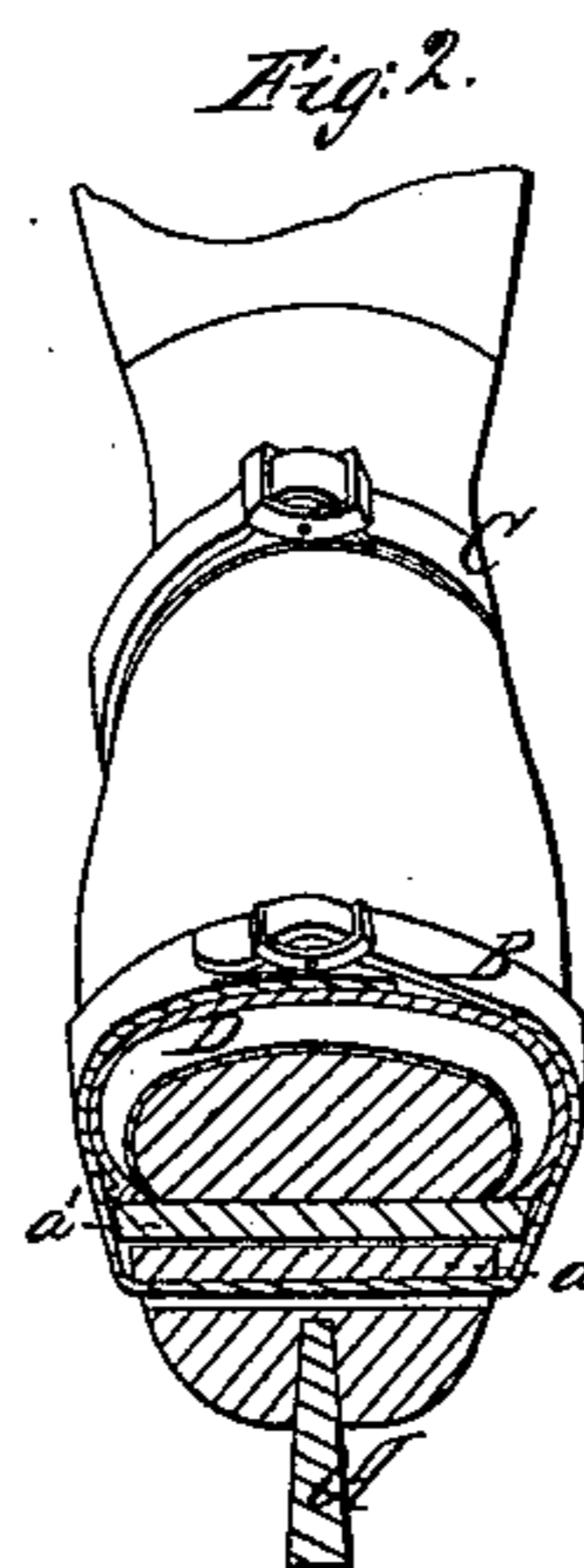
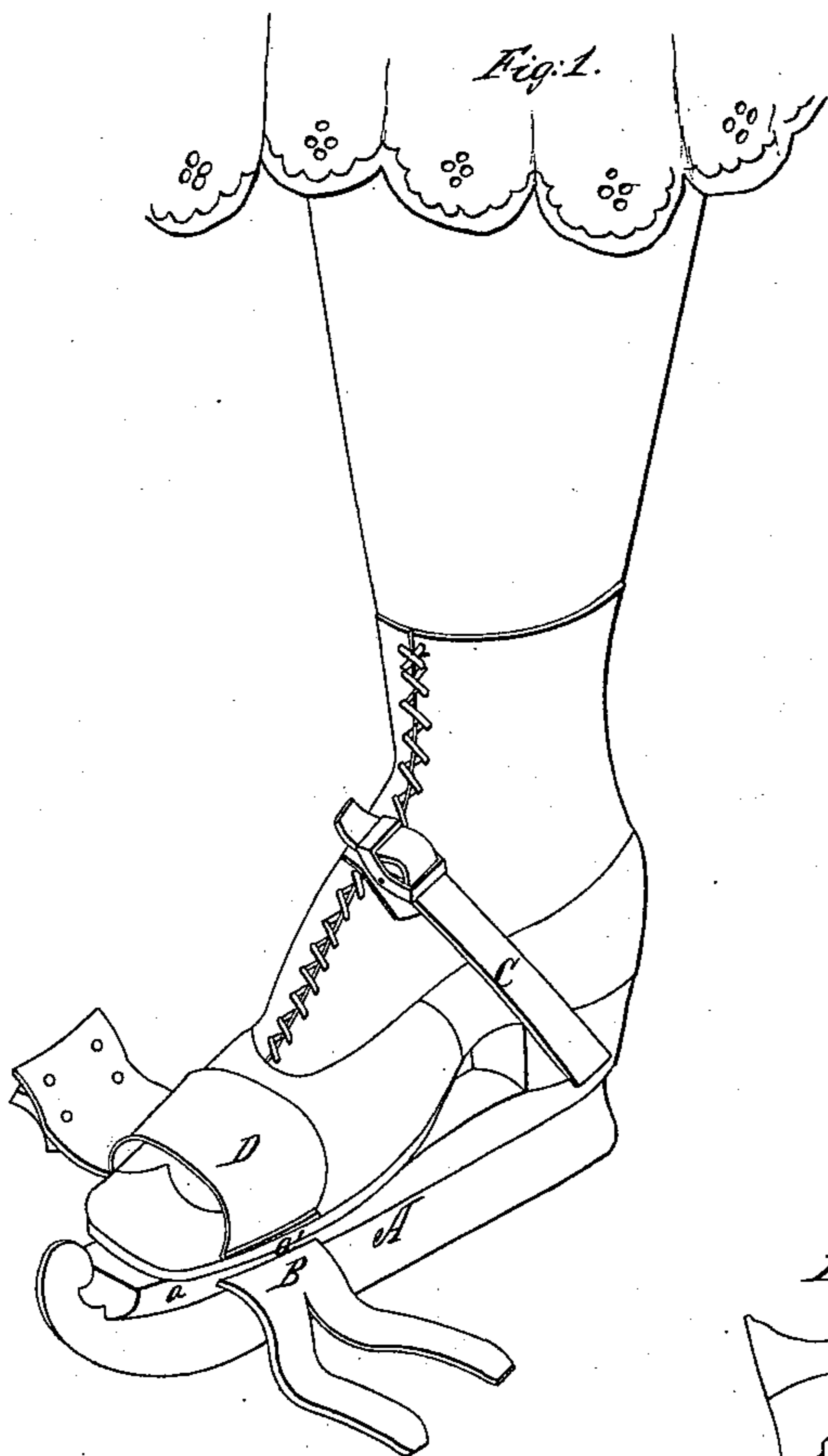


*De Witt C. Minans,*

*Skate,*

*N<sup>o</sup> 41,735,*

*Patented Feb. 23, 1864.*



*Witnesses:*  
*Thos. J. A. D.*  
*Geo. W. Reed*

*Inventor:*  
*De Witt C. Minans*

# UNITED STATES PATENT OFFICE.

DE WITT C. WINANS, OF NEW YORK, N. Y.

## IMPROVED FOOT-SHIELD.

Specification forming part of Letters Patent No. **41,735**, dated February 23, 1864.

*To all whom it may concern:*

Be it known that I, DE WITT C. WINANS, of the city, county, and State of New York, have invented a new and Improved Foot-Shield, the same being designed for protecting the feet against the pressure of skate-straps; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the accompanying drawings, making a part of this specification, in which—

Figure 1 is a perspective view of my invention applied to the foot; Fig. 2, a section of the same, the line of section being transversely through the skate and foot and through the center of the shield.

Similar letters of reference indicate corresponding parts in the two figures.

Straps are considered by experienced skaters to be the most efficient means for securing skates to the feet, as they insure a firm connection between the foot, boot, or shoe and the skate. There is one disadvantage, however, attending their use, which consists in the pressure of the straps upon the foot, preventing the free circulation of blood, and thereby causing cold feet—a great inconvenience—and, in case the wearer has corns, causing a great deal of pain.

My invention is designed to obviate this difficulty; and it consists in the employment or use of a shield constructed of metal or other suitable material, and of such a curved form that it will encompass the foot, like an arch, while its ends will rest upon the edges of the sole of the boot or shoe, and the strap or straps pass over the shield and press thereon when the skate is secured to the foot, thereby relieving the same of all pressure of the strap or straps.

To enable those skilled in the art to fully understand and construct my invention, I will proceed to describe it.

A represents a skate, which may be of the usual or any proper form.

B represents the toe-strap, and C the heel-strap, which may also be arranged in the usual way.

D represents the shield, which may be of cast or wrought metal or any other suitable material. This shield is designed as a protection for the toe or front part of the foot, and it is curved or arched, so as to extend over the boot or shoe, with its ends resting upon the sole *a'* of the same near its sides, as shown clearly in Fig. 2. This shield D is placed in such a position that the toe-strap B will, in being buckled, bear upon it and relieve the foot of all pressure. The strap, when drawn up and buckled, firmly secures the skate to the foot, and the shield D should be of such dimensions as to prevent any lateral or vertical movement of the boot or shoe within it.

I would remark that, if desired, a shield constructed on the same principle may be used for the heel-strap C, but it would be scarcely necessary, as the toe or front part of the foot is where the inconvenience of the pressure of the strap is chiefly, if not exclusively, felt.

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

The employment or use of a shield, D, constructed of metal or other suitable material, and of such a form as to encompass the foot, while its ends rest upon the sole of the boot or shoe, and placed or adjusted in such a position as to be interposed between the foot and the skate-straps to relieve the former of the pressure of the latter, substantially as set forth.

DE WITT C. WINANS.

Witnesses:

THOS. L. J. DOUGLAS,  
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