

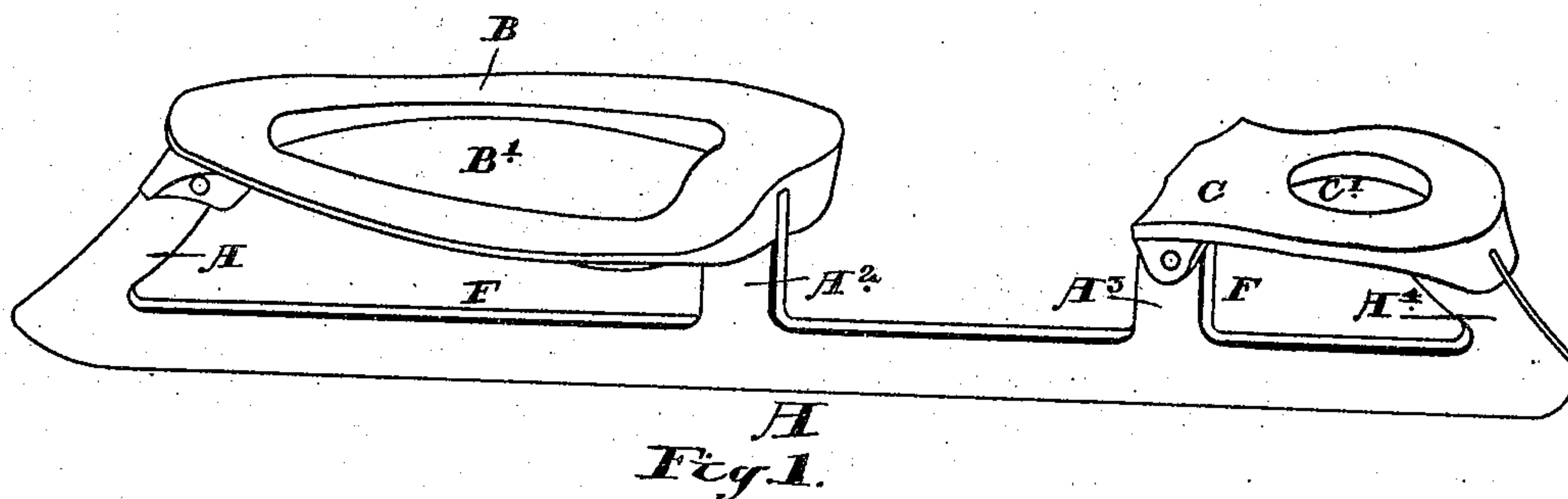
No. 815,121.

PATENTED MAR. 13, 1906.

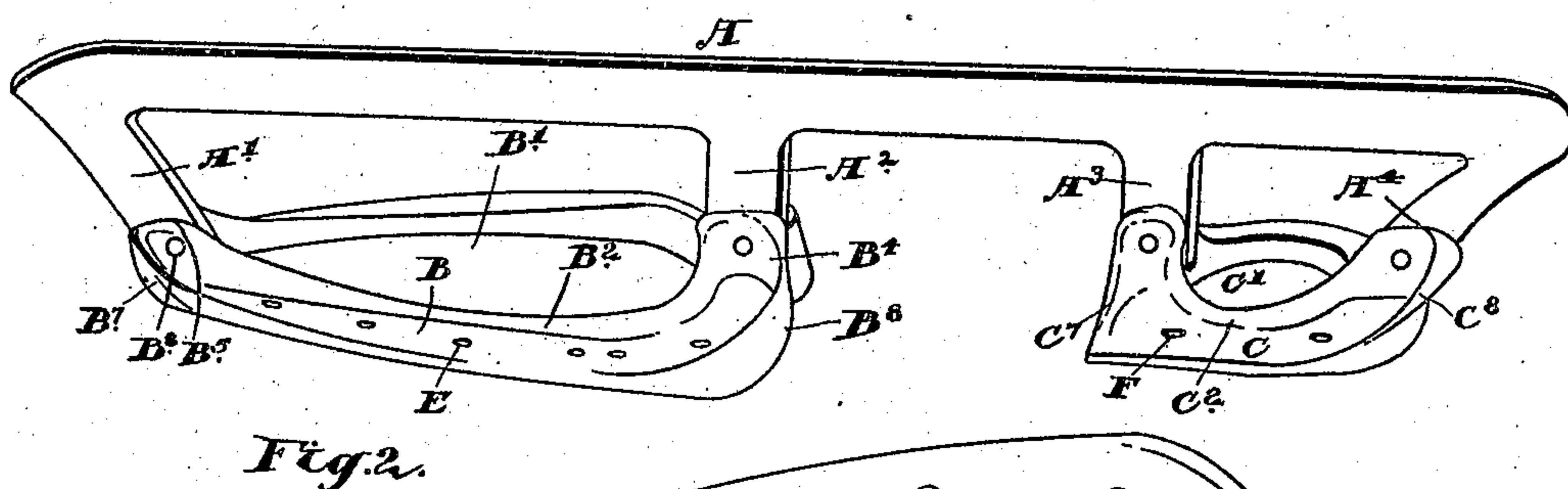
T. A. RUSSELL.

SKATE.

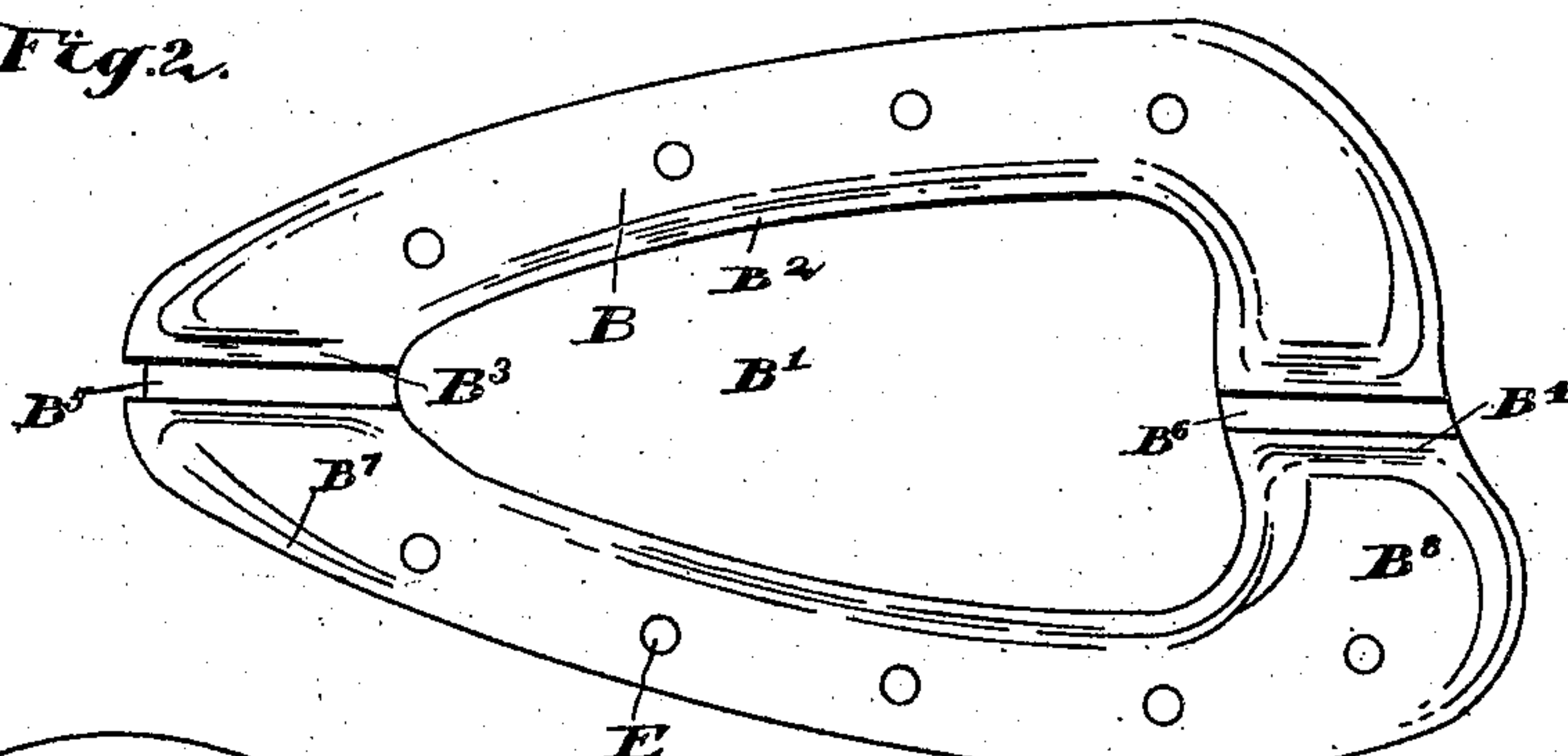
APPLICATION FILED APR. 27, 1905.



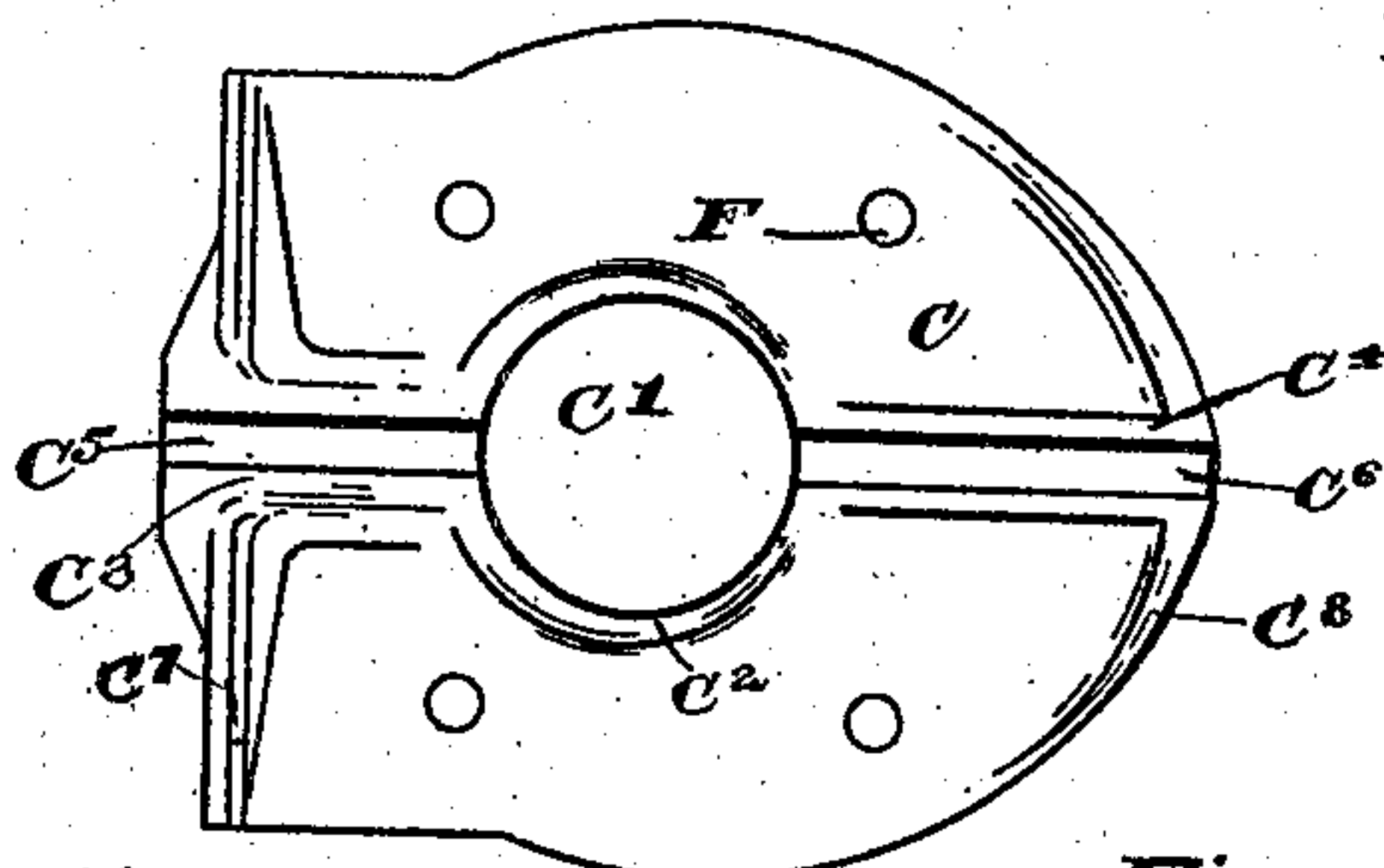
*Fig. 1.*



*Fig. 2.*



*Fig. 3.*



*Fig. 4.*

# Witnesses.

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**Inventor**

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# UNITED STATES PATENT OFFICE.

THOMAS ALEXANDER RUSSELL, OF TORONTO, CANADA, ASSIGNOR TO  
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CANADA, A CORPORATION OF CANADA.

## SKATE.

No. 815,121.

Specification of Letters Patent.

Patented March 13, 1906.

Application filed April 27, 1905. Serial No. 257,743.

*To all whom it may concern:*

Be it known that I, THOMAS ALEXANDER RUSSELL, manufacturer, residing at the city of Toronto, in the county of York, in the Province of Ontario, Canada, have invented certain new and useful Improvements in Skates, of which the following is a specification.

My invention relates to improvements in skates; and the object of the invention is to devise a skate to be attached to a boot or shoe which will be light, strong, and durable and which will require a minimum amount of cleaning after use; and it consists, essentially, of a blade provided with projecting standards forming part of the same and sole and heel plates formed of aluminium alloy having a smooth upper surface and webbed or ribbed underneath in such a manner as to give lateral and longitudinal strength to the plates, such webbing being recessed centrally to receive the standards forming part of the blade which are pinned in position in the recesses, the parts being otherwise arranged and constructed in detail as hereinafter more particularly explained.

Figure 1 is a perspective view of my improved skate complete. Fig. 2 is a view showing the skate in the reverse position. Fig. 3 is a plan view of the sole-plate. Fig. 4 is a plan view of the heel-plate.

In the drawings like characters of reference indicate corresponding parts in each figure.

A is the blade of the skate, which is provided with a toe-standard A' and the intermediate sole-standard A<sup>2</sup>, the front heel-standard A<sup>3</sup>, and the back heel-standard A<sup>4</sup>. The toe-standard and back heel-standard are both preferably inclined inwardly, and the intermediate standards are preferably arranged vertical.

B is the sole-plate, which is preferably made of aluminium alloy for lightness and strength. The plate B is provided with a central opening B', having a bounding rib or web B<sup>4</sup>, terminating at each end substantially midway of the lateral width of the opening in webs B<sup>3</sup> and B<sup>4</sup>, which are provided with recesses B<sup>5</sup> and B<sup>6</sup> to receive the standards A' and A<sup>2</sup>.

It will be noticed that the opening B' is

substantially triangular, and necessarily the webs extend not only longitudinally but also laterally, so as to form a longitudinal and lateral bracing to the body of the plate.

A supplemental rib B<sup>7</sup> merges in the central rib B<sup>3</sup> on each side and dies away in the plate, forming a laterally-extending brace in the plate on each side of the standard A'. I also provide a supplemental rib B<sup>8</sup>, which merges in the rib B<sup>4</sup> and dies away in the plate, forming a substantially laterally-extending brace on each side of the standard A<sup>2</sup>. The ends of the ribs B<sup>2</sup> also extend laterally and merge in the ribs B<sup>3</sup> and B<sup>4</sup>, as hereinbefore described, and form necessarily laterally-extending braces in the plate.

C is the heel-plate, which is formed with a central opening C'. Around the central opening C', which is substantially circular in form, is formed the ribs C<sup>2</sup>, which terminate or merge in the center in the central ribs C<sup>3</sup> and C<sup>4</sup>, in which are formed the central recesses C<sup>5</sup> and C<sup>6</sup> to receive the standards A<sup>3</sup> and A<sup>4</sup>, respectively. The rib C<sup>2</sup> forms a longitudinal brace for the plate and also a lateral brace on each side of the central ribs C<sup>3</sup> and C<sup>4</sup>. C<sup>7</sup> and C<sup>8</sup> are bracing-ribs which merge in the central ribs C<sup>3</sup> and C<sup>4</sup> and die away in the plate C, a rib C<sup>7</sup> being located on each side of the standard A<sup>3</sup> and a rib C<sup>8</sup> on each side of the standard A<sup>4</sup>, as indicated.

The plate B is secured to the blade by means of the pin 2, which extends through the rib B<sup>3</sup> and standard A', and the pin 3, which extends through the rib B<sup>4</sup> and standard A<sup>2</sup>, and the heel-plate C is secured to the blade by means of the pin 4, which extends through the ribs C<sup>3</sup> and standard A<sup>3</sup>, and the pin 5, which extends through the ribs C<sup>4</sup> and the standard A<sup>4</sup>. The pins in all cases, however, are suitably riveted.

Suitable holes E are provided in the foot-plate and holes F in the heel-plate in order to fasten the skate onto the boot.

A skate constructed as I describe of aluminium alloy, with the ribbed or webbed under portion, is light, strong, and durable, being braced laterally as well as longitudinally. The plates being of aluminium alloy, it is only necessary to clean the blade, which may be made of nickel-steel, and consequently but a minimum amount of labor is necessary in



cleaning, as aluminium is not liable to corrode or rust. There is also no danger of blood-poisoning in handling the plates.

What I claim as my invention is—

- 5 1. In a skate, the combination with the blade, of a foot-supporting plate provided with reinforcing-ribs on each side of the blade so disposed as to form bracing-supports from the outside edges of the plate to the blade and means for centrally fastening the plate to the blade as specified.
- 10 2. The combination with the blade having the front and intermediate standards or uprights, of a foot-plate smooth at the top and having a central opening provided with a reinforcing-rib extending longitudinally and laterally on each side of the opening, a central rib in which the aforesaid rib merges provided with recesses into which the standards fit, and supplemental ribs located on each side of the same merging into the central rib and dying away in the plate as and for the purpose specified.
- 15 3. The combination with the blade, and the back and intermediate standards or uprights, of a heel-plate smooth at the top and having a central opening and provided with a reinforcing-rib extending around the opening on each side, central ribs in which the aforesaid rib merges provided with recesses into which the standards fit and supplemental ribs located on each side of the same merging into the central ribs and dying away in the plate as and for the purpose specified.
- 20 35 4. The combination with the blade and standards, of a foot-plate having central ribs

provided with recesses in which the standards are secured and ribs extending laterally on each side of the central ribs and merging into the aforesaid ribs and forming a bracing-reinforcement for the plate as and for the purpose specified. 40

5. The combination with the blade and standards, of a foot-plate having central ribs provided with recesses in which the standards are secured and ribs extending laterally and longitudinally on each side of the central rib and merging into the aforesaid ribs and forming a bracing-reinforcement for the plate as and for the purpose specified. 45 50

6. In a skate, a foot-supporting plate having central bottom ribs provided with recesses in which the standards of the blade are secured, reinforcing-ribs merging into the aforesaid ribs and extending out from both sides thereof as and for the purpose specified. 55

7. In a skate, a foot-supporting plate having central bottom ribs provided with recesses in which the standards of the blade are rigidly secured as and for the purpose specified. 60

8. In a skate, a foot-supporting plate having central bottom ribs provided with recesses in which the standards of the blade are rigidly secured and the internal and front and back reinforcing-ribs for the central rib and outside edge as and for the purpose specified. 65

THOMAS ALEXANDER RUSSELL.

Witnesses:

B. BOYD,  
EDGAR SHEPPARD.