

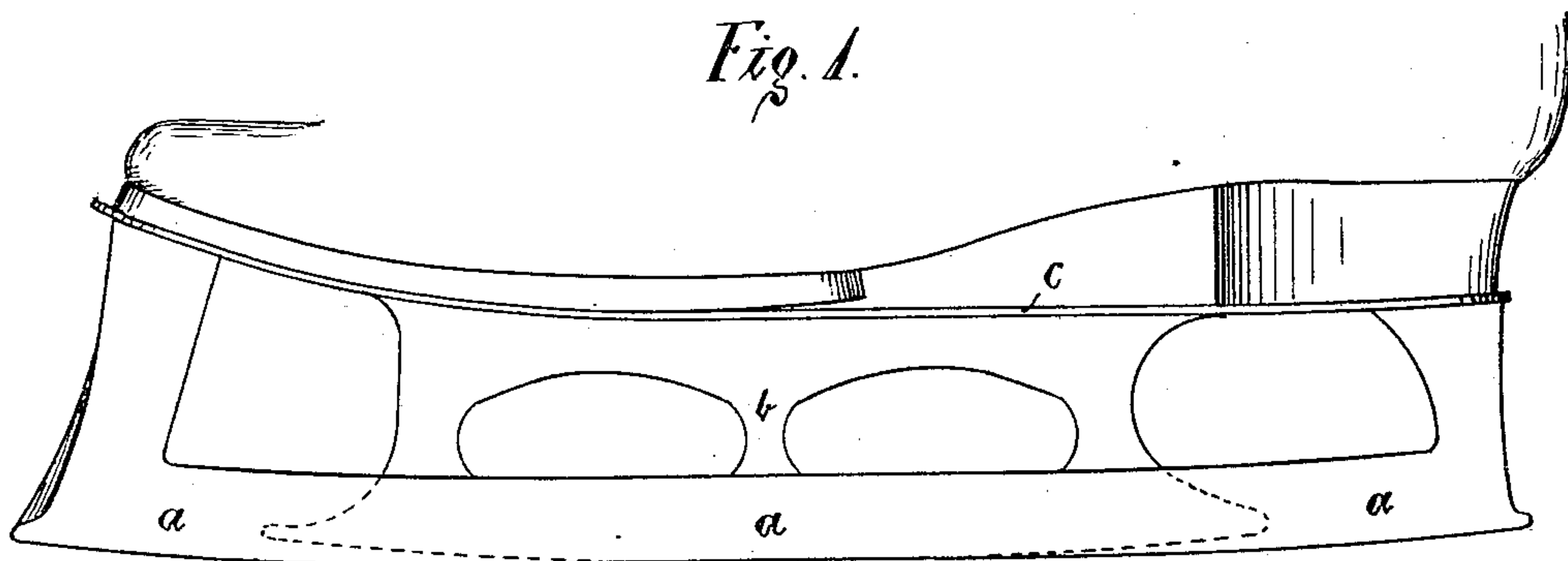
(No Model.)

L. KNERR.  
SKATE.

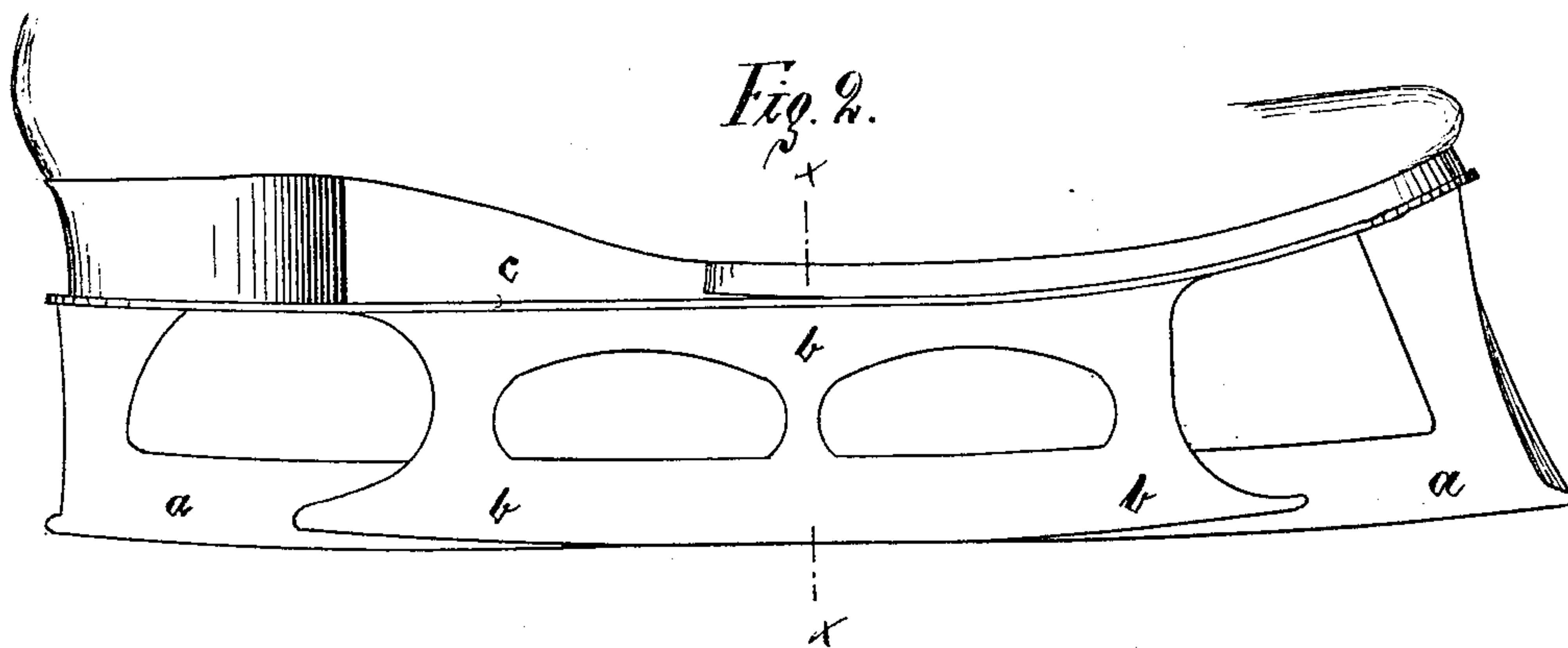
No. 405,779.

Patented June 25, 1889.

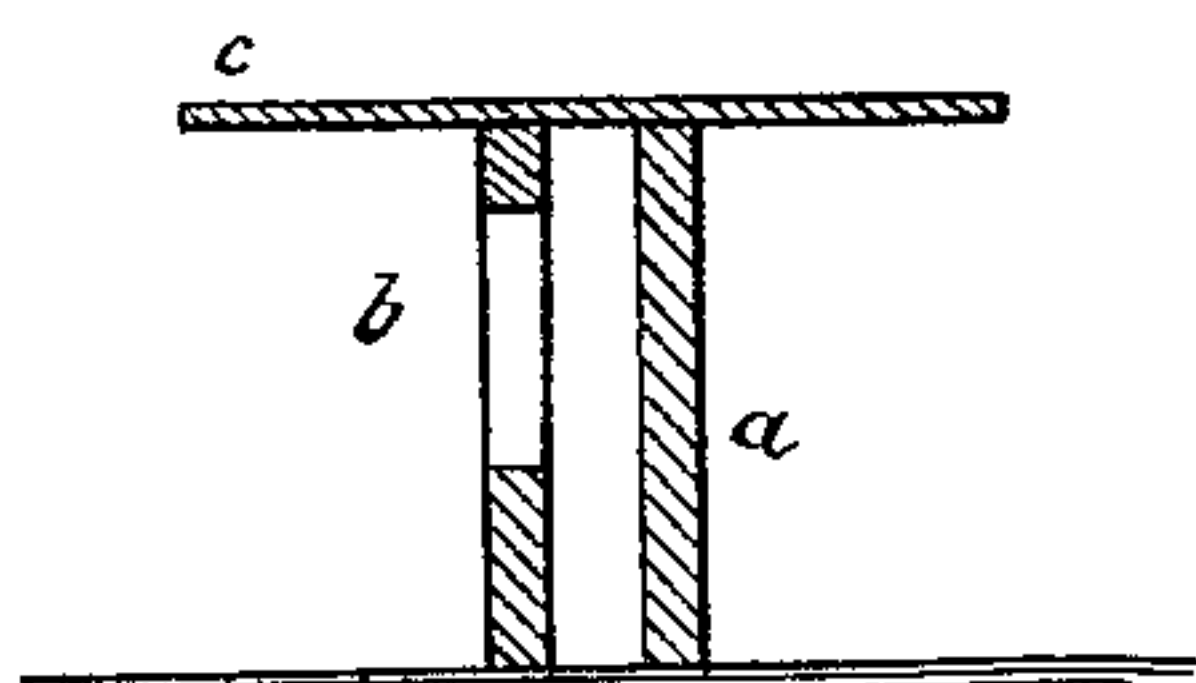
*Fig. 1.*



*Fig. 2.*



*Fig. 3.*



Witnesses:  
Henry Huber,  
Carl Kemp

Inventor  
Louis Knerr  
by Joseph P. Rogers  
Attorneys.

# UNITED STATES PATENT OFFICE.

LOUIS KNERR, OF WORMS, GERMANY.

## SKATE.

SPECIFICATION forming part of Letters Patent No. 405,779, dated June 25, 1889.

Application filed January 9, 1888. Serial No. 260,181. (No model.) Patented in Germany March 8, 1887, No. 43,141.

*To all whom it may concern:*

Be it known that I, LOUIS KNERR, of Worms, Germany, have invented certain new and useful Improvements in Skates with Two Runners, (for which Letters Patent were heretofore granted to me by the government of Germany, dated March 8, 1887, No. 43,141,) of which the following is a specification.

This invention relates to improvements in skates; and the object of my invention is to provide a skate of such construction as to prevent the leg being strained or bent laterally at the ankle, as is apt to occur when using skates with single runners.

The invention consists in a skate having two parallel runners adjacent to each other, the inner runner being shorter than the outer runner.

In the accompanying drawings, Figure 1 is an exterior side view; Fig. 2, an interior side view of the same; and Fig. 3 is a cross-sectional view on line *x x*, Fig. 2.

Similar letters of reference indicate corresponding parts.

The runners *a* and *b* are attached separately to the foot-plate *c*, or may both be secured to a plate or piece that is secured to the foot-plate *c*. The runner *b* is shorter than the runner *a*, and is at the inner side of the said runner *a*. Its length should be about two-thirds of the runner *a*. The middle parts of the bottom edges of both runners are made straight and in the same plane for about six

inches, and from the ends of the straight parts the bottom edges of the runners are slightly inclined or rounded upward toward the ends. As shown, the end parts of the inner runner are inclined or curved more than those of the outer runner.

Two runners give a good and secure bearing, so that elderly or stout persons who are not very agile can skate with perfect safety and without tiring rapidly.

As the inner runner is shorter than the outer runner, it does not interfere with cutting figures or curves on the ice.

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

1. A skate having two parallel runners, the inner runner being shorter than the outer runner, substantially as set forth.

2. A skate having two parallel runners, the inner runner being shorter than the outer runner and both runners having the middle parts of the bottom edges made straight and on the same plane, the bottom edges of both runners being inclined or curved upward toward the ends, substantially as set forth.

In testimony that I claim the foregoing as my invention I have signed my name in presence of two subscribing witnesses.

LOUIS KNERR.

Witnesses:

KARL MÜLLER,  
EDWARD HENN.