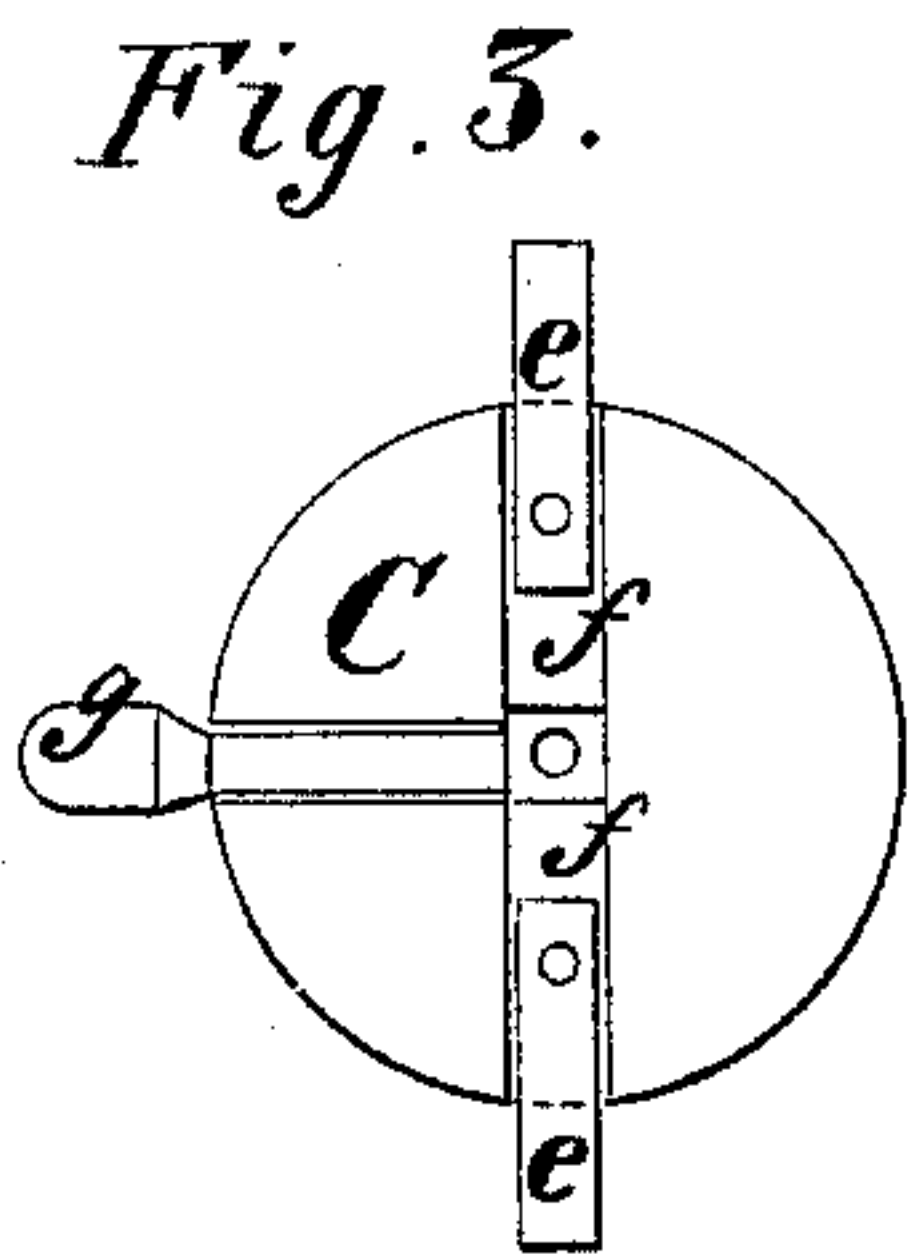
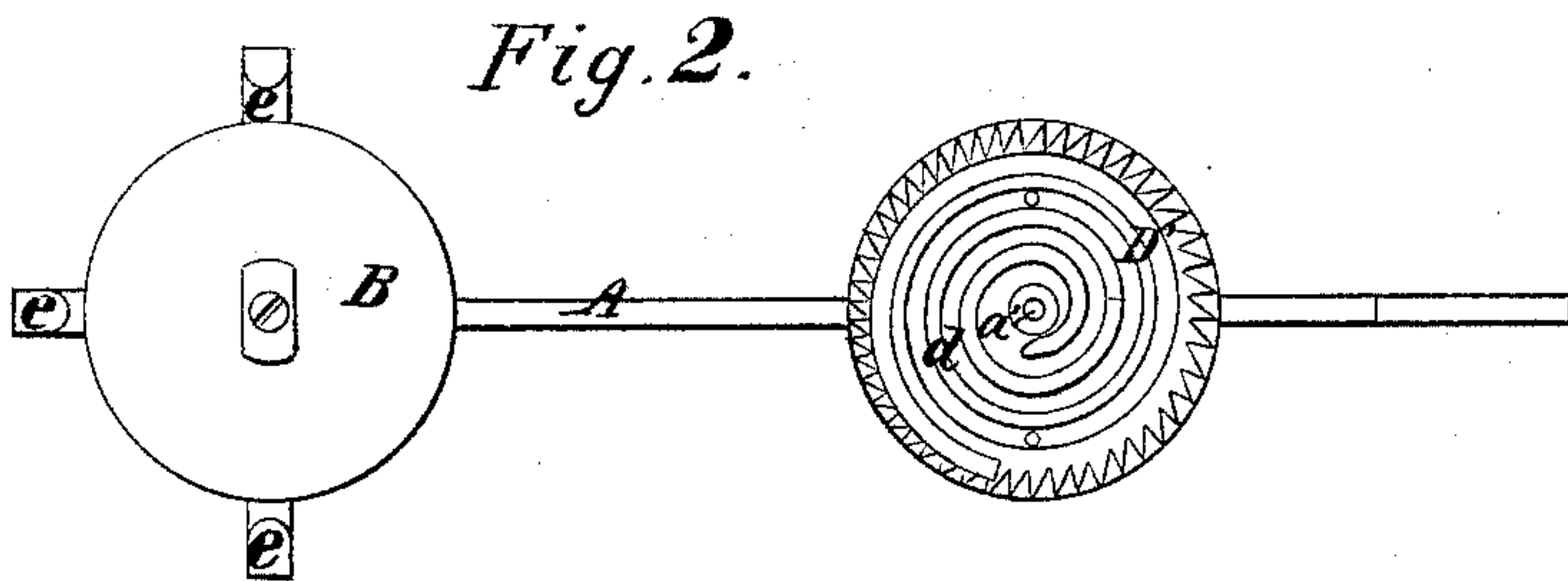
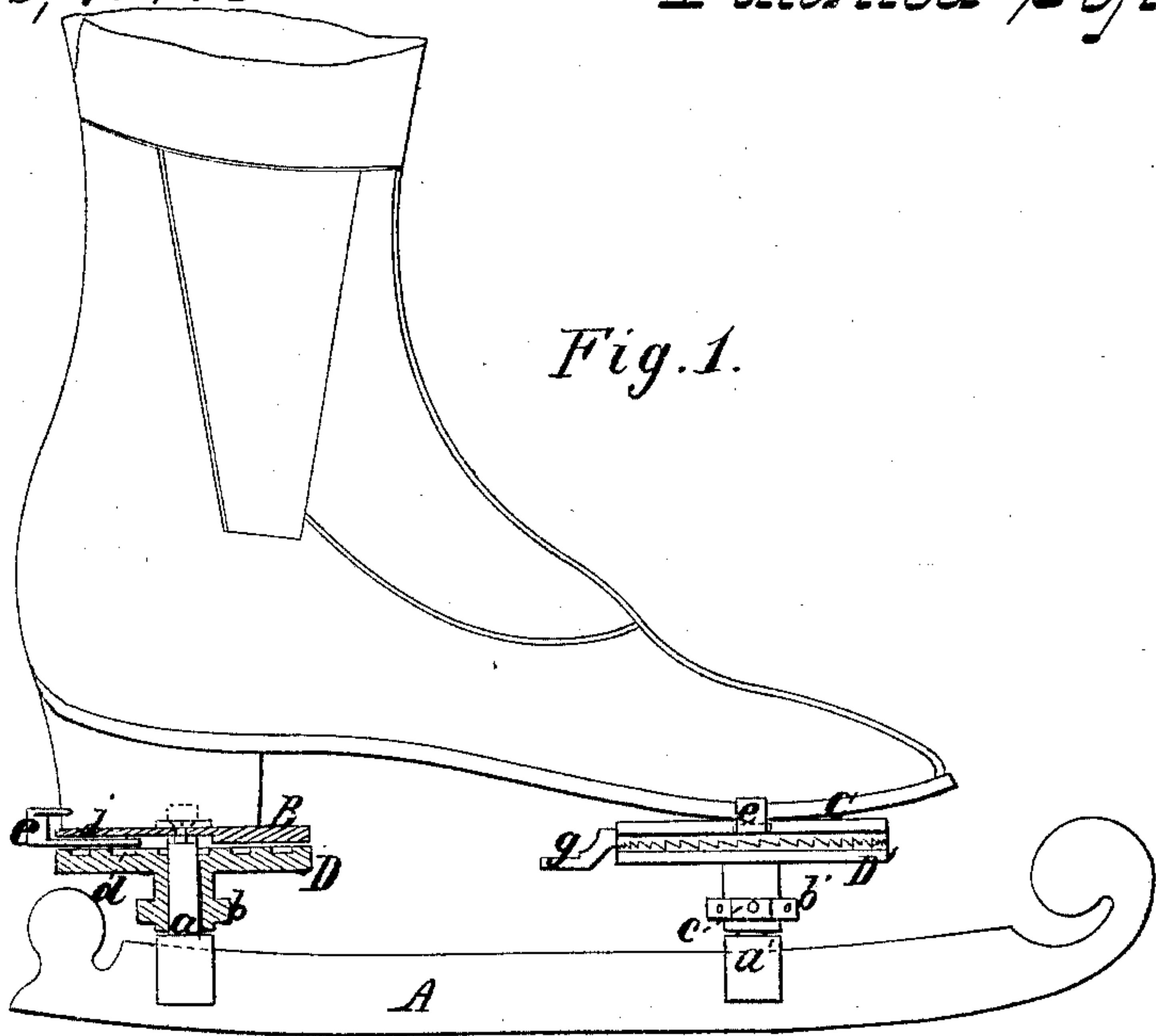


D. J. Farmer,

Skate,

N^o 49,741.

Patented Sep. 5, 1865.



Witnesses

C. L. Tophill
I'm in London

Inventor

D J Farmer
Bytham
awp

UNITED STATES PATENT OFFICE.

DAVID J. FARMER, OF NEWARK, NEW JERSEY.

IMPROVED SKATE.

Specification forming part of Letters Patent No. 49,741, dated September 5, 1865.

To all whom it may concern:

Be it known that I, DAVID J. FARMER, of Newark, in the county of Essex and State of New Jersey, have invented a new and useful Improvement in Skates; and I do hereby declare that the following is a full, clear, and exact description thereof, which will enable others skilled in the art to make and use the same, reference being had to the accompanying drawings, forming part of this specification, in which—

Figure 1 represents a sectional side elevation of this invention. Fig. 2 is a plan or top view of the same, the toe-plate having been removed to expose the working parts. Fig. 3 is an inverted plan of the toe-plate.

Similar letters of reference indicate like parts.

This invention relates particularly to a new and improved method of attaching the skate to a boot or shoe; and it consists in the use of a stationary disk forming the guide for two or more radially-sliding hooks, the inner ends or shanks of which catch in a scroll rising from or sunk in the surface of a revolving plate, two such scrolls and hook-carrying disks being employed, one under the heel and one under the toes; or, if desired, only one such disk may be used under the heel, the toe part being secured by any other suitable means in such a manner that when the foot of the skater has been adjusted—the heel on the heel-plate and the toes on the toe-plate—the skate is readily fastened by simply turning the scrolls in the proper direction, whereby the hooks are made to catch simultaneously from different sides over the edge of the heel and of the sole, and by turning the scroll in the opposite direction the hooks are simultaneously withdrawn and the skate is unfastened.

In order to prevent the scrolls turning back spontaneously they may be provided with ratchet-teeth which engage with a spring-pawl attached to the stationary heel or toe plate, and which have to be raised when the skate is to be unfastened.

A represents the runner of my skate, which is made in the ordinary or any suitable manner. From this runner rise two studs, *a a'*, one to support the heel-plate B and the other to support the toe-plate C. Said studs are round, and form the bearings for plates D D',

which are provided with a long hub, *b b'*, and to which a rotary motion can be imparted by inserting a suitable pin or rod into holes *c* in the hub, or by any other suitable means. The upper surfaces of the plates D D' are provided with scrolls *d*, which are either sunk in, as shown in the drawings, or which may be raised, and the form of which is shown particularly in Fig. 2. Said scrolls act upon the shanks of hook-catches *e e'*, which slide in and out in radiating grooves *f* in the under surfaces of the plates D D', as shown particularly in Fig. 3. Two or more such grooves may be made in each of the plates to receive a corresponding number of hook catches. The points of the hook-catches are sharp, so that the same readily bite into the leather of the sole or heel, and said catches are so placed that their points are at equal distances from the center of the scroll. By turning the scrolls in one direction the hook-catches move in toward the center, and by turning them in the opposite direction they move out from the center.

The plates B C are firmly secured to the upper ends of the studs *a a'* by screws or any other suitable means, and, if desired, one or both of them may be furnished with spring-catches *g*, which engage with ratchet-teeth cut in the edges of the revolving plates D D', so that the scrolls are prevented from receding spontaneously. In fastening the skate the hook-catches *e e'* catch simultaneously over the edges of the sole and over those of the heel, and the spring-catch holds the scroll in position.

When it is desired to unfasten the skate the spring-catch has to be raised before the scroll can be turned back.

I claim as new and desire to secure by Letters Patent—

1. The use of a scroll, D or D', in combination with radially-sliding hooks fitted into the heel-plate or toe-plate of a skate, or in both, substantially as and for the purpose described.

2. The application of a spring-catch, *g*, in combination with the heel-plate or toe-plate, or with both, and with the revolving scroll-plates D D', substantially as and for the purpose set forth.

DAVID J. FARMER.

Witnesses:

M. M. LIVINGSTON,
J. M. COVINGTON.