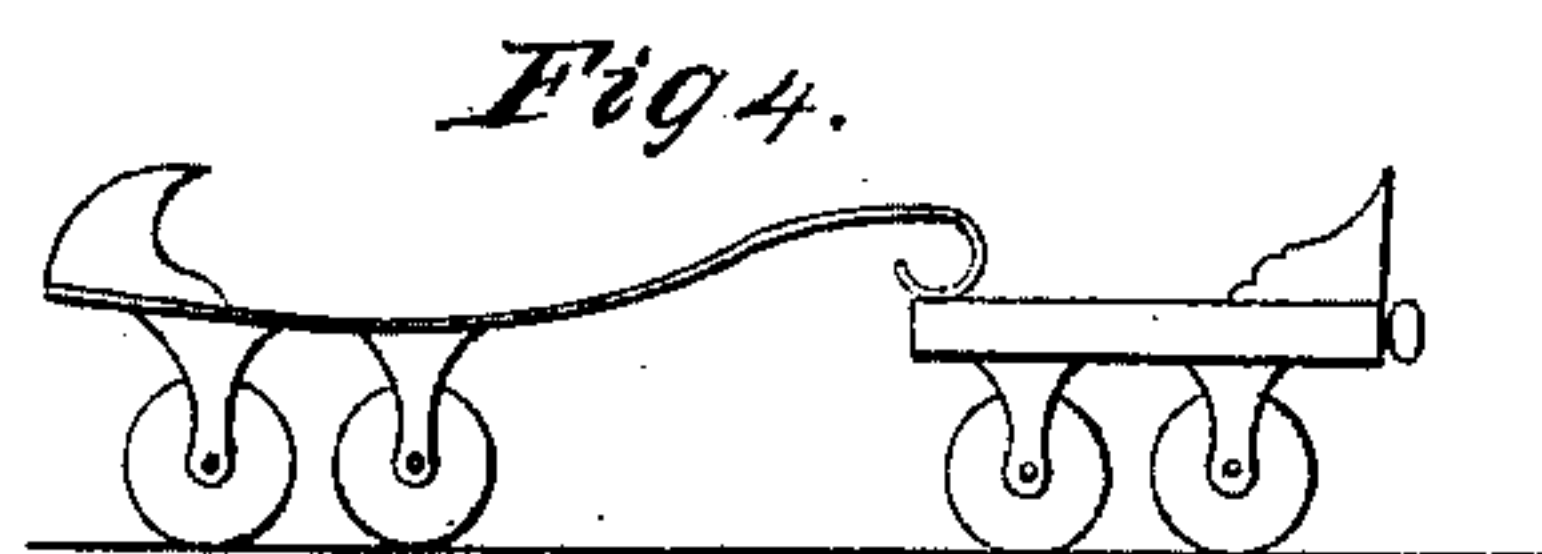
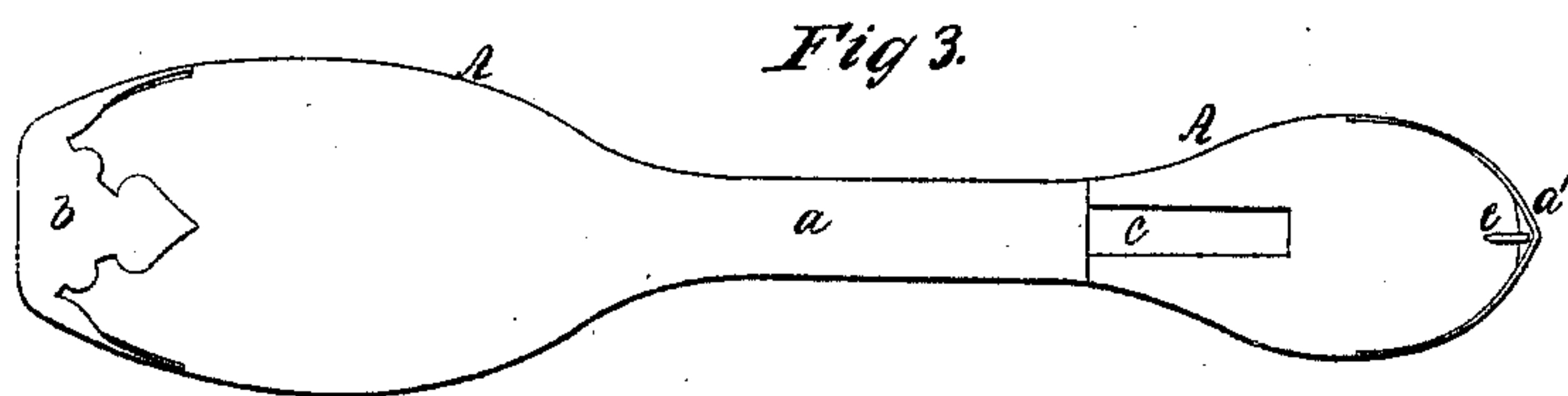
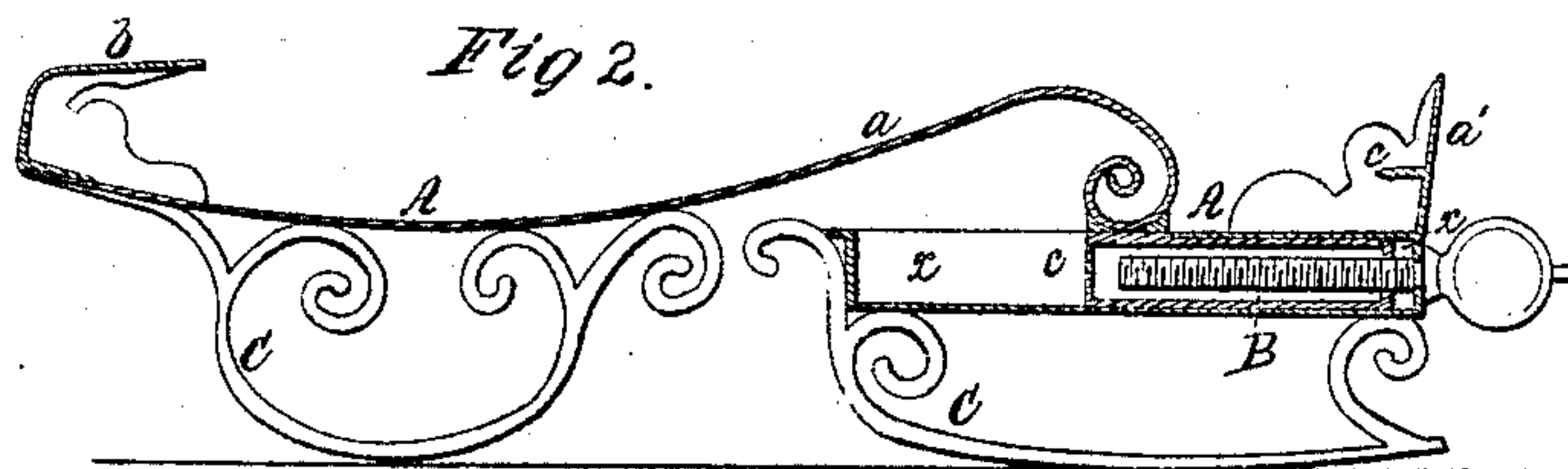
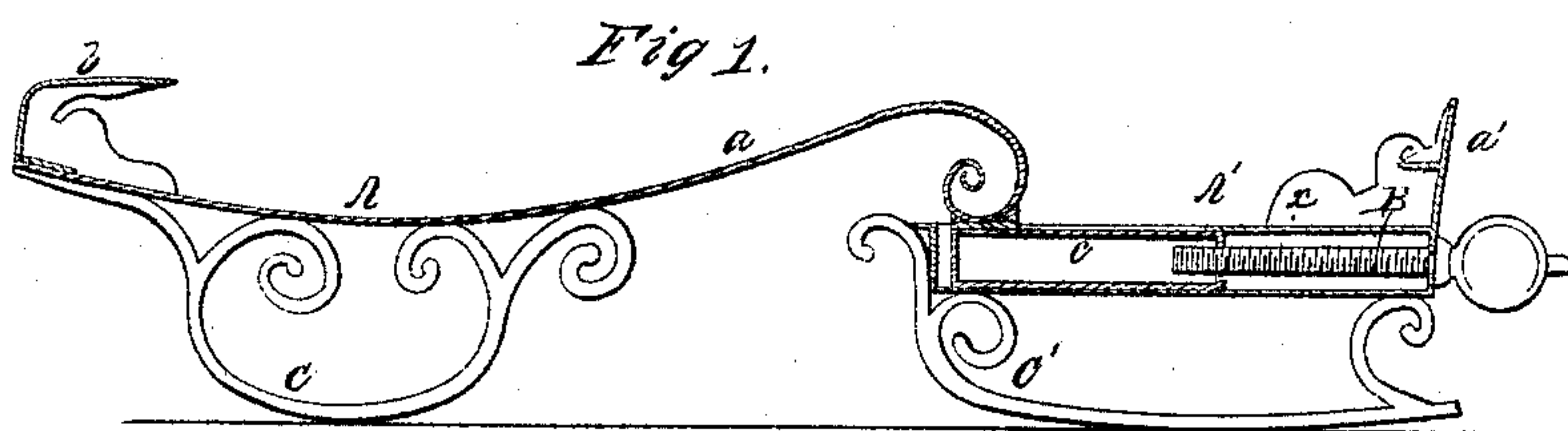


E. G. Chormann,

Skate,

No 56,369,

Patented July 17, 1866.



Witnesses.

*W. H. Allen
John Parker*

*Inventor.
E. G. Chormann
By his attorney
Henry Cowson*

UNITED STATES PATENT OFFICE.

E. G. CHORMANN, OF PHILADELPHIA, PENNSYLVANIA.

IMPROVEMENT IN SKATES.

Specification forming part of Letters Patent No. 56,369, dated July 17, 1866.

To all whom it may concern:

Be it known that I, E. G. CHORMANN, of Philadelphia, Pennsylvania, have invented certain Improvements in Skates; and I do hereby declare the following to be a full, clear, and exact description of the same, reference being had to the accompanying drawings, and to the letters of reference marked thereon.

My invention consists of a skate constructed in the peculiar manner fully described hereinafter, so that it can be extended or contracted at pleasure, and readily adjusted to boots or shoes of different sizes, my said invention being as applicable to parlor-skates as to those used on the ice.

In order to enable others to make and use my invention, I will now proceed to describe its construction and operation.

On reference to the accompanying drawings, which form a part of this specification, Figures 1 and 2 are sectional views of my improved skate; Fig. 3, a plan view of Fig. 1, and Fig. 4 a view illustrating the adaptability of my invention to parlor-skates.

A is a metal plate, the rear end of which is formed into a narrow flexible tongue, *a*, and to the front end is secured a cap, *b*, which is so constructed as to form a spring-socket for the reception of the toe of a boot or shoe.

The end of the tongue *a* is bent to the spiral form shown in the drawings, and is secured to a hollow block, *c*, which is arranged to slide in a recess in a plate, A'. In this plate A' turns a screw-spindle, B, which extends into the interior of the sliding block *c*, the position of the latter being controlled by the screw-threads of the said spindle. At the rear end of the plate is a curved flange, *a'*, adapted to the heel of a boot or shoe, and from the inside of this flange projects a pin, *e*.

To the plates A and A' are secured blades or runners C and C', of the form substantially as shown in the drawings.

The toe of the boot or shoe to which the skate is to be secured is introduced into the socket *b* and the heel is brought against the plate A'. The thumb-screw B is then turned so as to carry back the sliding block *c* until the heel of the boot is brought close against the flange *a'*, the pin *e* penetrating the heel

and preventing the latter from rising from contact with the plate A'.

In skates of the ordinary construction the foot is confined to a rigid plate, beneath and throughout the entire length of which extends a single runner.

The ordinary rigid skates tend to restrict the free movement of the foot and to impede the free circulation of blood, the foot frequently becoming paralyzed to such an extent as to greatly interfere with the movements of the skater and to demand the removal of the skate.

In the ordinary skates, also, the length of the runner cannot be altered, so that a skate suitable for one person cannot be used by another having a foot of a different size.

Practical experiments have shown there is no necessity for making the runner in one continuous piece, inasmuch as during all the evolutions of the skater the runner bears on the ice either near its front or its rear end. By forming the runner in two sections, therefore, one beneath the heel and the other below the ball of the foot, and connecting the two by a flexible plate, as above described, the bearing-points necessary to execute any desired evolutions are obtained, while the free movement of the foot is not interfered with.

By making the runner in two sections the latter may be so adjusted in respect to each other that one skate may be used equally well by persons having feet of different sizes, the bearing-points of the runner in all cases being directly beneath the ball and heel of the foot.

The mode of constructing the skate also admits of the latter being secured to the foot by the simple device above described, the usual complicated and troublesome straps and other securing appliances being thus dispensed with.

The upper portion and opposite sides of the socket *b* are made elastic, so as to readily yield and adapt themselves to differently-formed toes of boots and shoes. The opposite curved sides of the heel flange or socket *a'* are also made elastic for the same purpose.

The adaptability of my improvement to parlor-skates will be readily understood by reference to Fig. 4 without explanation.

It will also be seen that the socket *b* and

adjustable socket *a'* may be used with skates of the ordinary construction.

I do not desire to claim, broadly, a skate having two runners connected by a flexible tongue; but

I claim as my invention and desire to secure by Letters Patent—

1. The combination of the plate A and its runner C, the plate A' and its runner C', and the screw B, and sliding block *c*, or equivalent device, whereby the runners may be adjusted at any required distance from each

other, the whole being constructed and arranged substantially as described.

2. The combination, substantially as illustrated in Fig. 4, of the adjustable plates A A' with the rollers, for the purpose described.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

E. G. CHORMANN.

Witnesses:

CHARLES E. FOSTER,
JOHN WHITE.