

2 Sheets—Sheet 1.

No. 576,747.

Patented Feb. 9, 1897.



Witnesses
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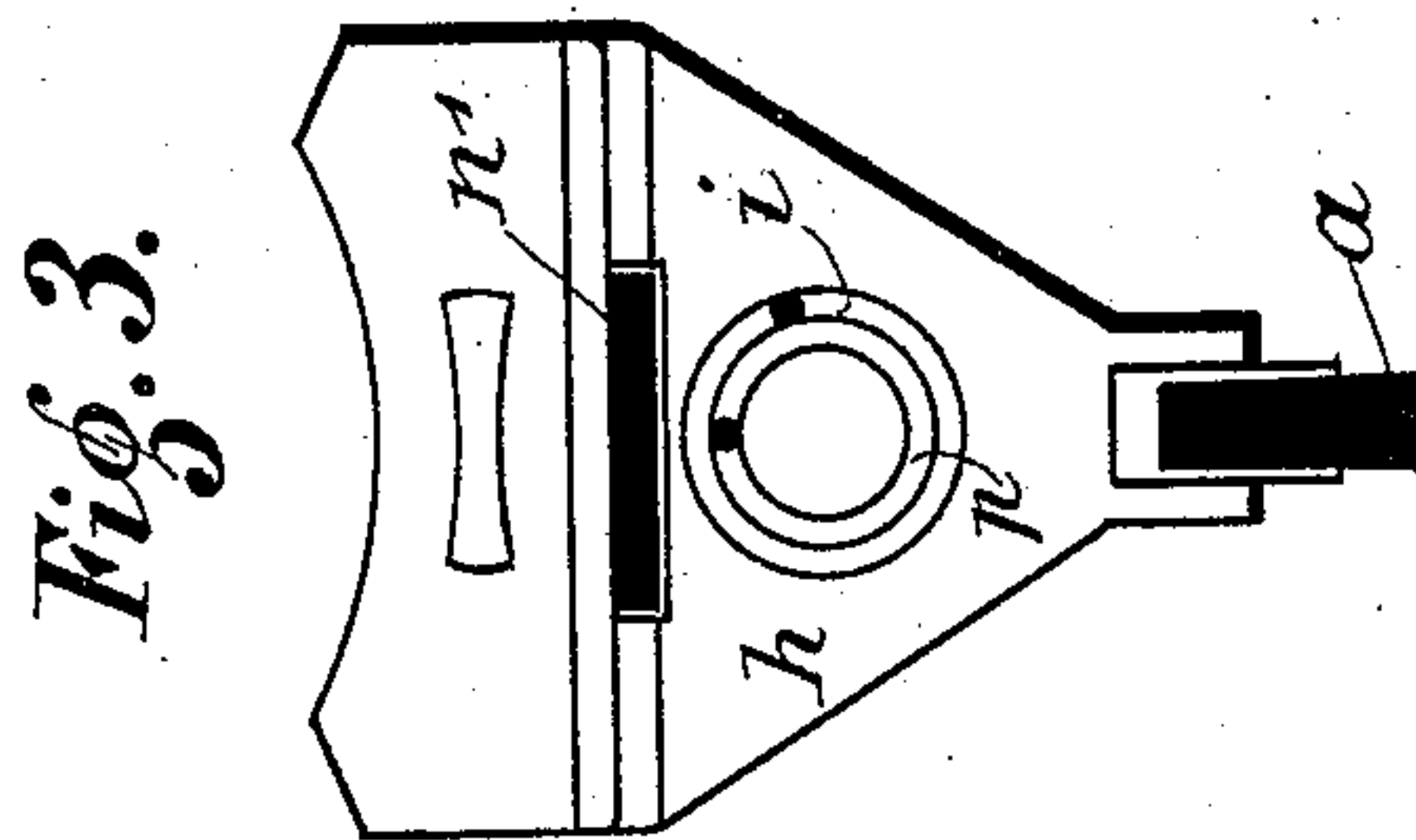
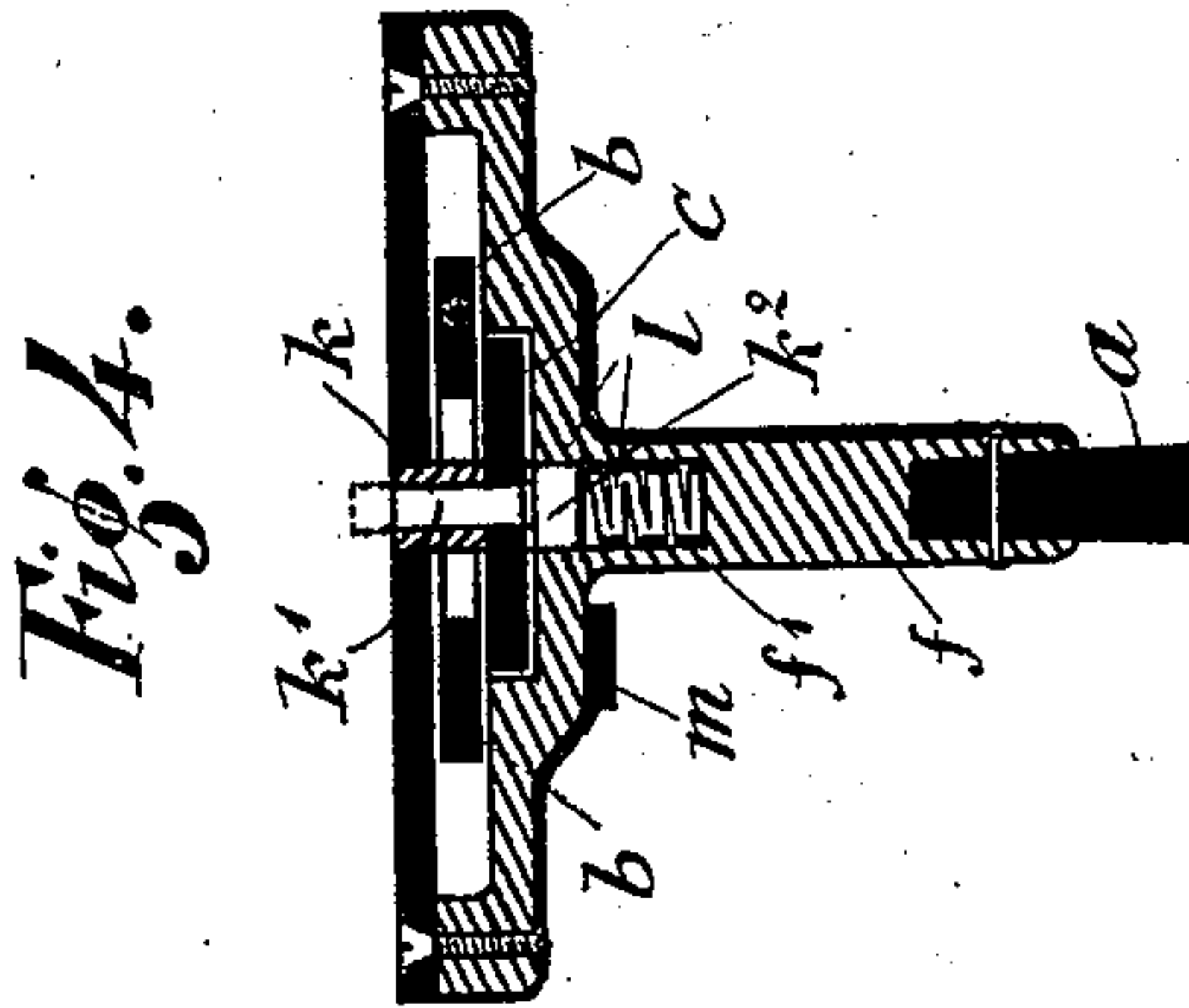
(No Model.)

2 Sheets—Sheet 2.

J. STUTZ-MÜLLER.
SKATE.

No. 576,747.

Patented Feb. 9, 1897.



Witnesses
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UNITED STATES PATENT OFFICE.

JAKOB STUTZ-MÜLLER, OF KEMPTEN, SWITZERLAND.

SKATE.

SPECIFICATION forming part of Letters Patent No. 576,747, dated February 9, 1897.

Application filed July 31, 1896. Serial No. 601,189. (No model.)

To all whom it may concern:

Be it known that I, JAKOB STUTZ-MÜLLER, a citizen of Switzerland, residing at Kempten, in the canton of Zurich, Switzerland, have
5 invented certain new and useful Improvements in Skates, of which the following is a specification.

The improvement in skates which forms the object of the present application for Letters Patent consists, essentially, in forming
10 the sole-clips and the heel-clip to close by means of draw-springs independently of each other, and that by means of a bar engaging in the draw-bar of the sole-clips and capable
15 of being pressed down by the foot of the skater the stretched springs are disengaged and a firm attachment of the skate to the foot of the skater is obtained.

The accompanying drawings show one
20 method of carrying into effect the above invention.

Figure 1 shows the elevation; Fig. 2, the view from below; Fig. 3, a section of the skate on the line $x x$ of Fig. 2; Fig. 4, a section
25 of the skate on the line $y y$ of Fig. 1.

In the above-named drawings, a represents the blade, b the sole-clips of the usual kind, and c the draw-bar adjustable in longitudinal axis and with which the clips b are
30 adjustably connected by means of the screw d and the slot e . The front end of the bar c is carried in the support f and the rear end of the same is provided with a slot c' . Projection c^2 , engaging in a slot g of the foot-plate g' , serves to guide the bar c . In the
35 front part of the bar c a longitudinal slot c^3 is formed, the rear end of which is enlarged. The spring i , fastened at one end to the rear support h and at the other end to the pin c^4 of
40 the bar c , strives to draw back the bar c and thereby to close the clips b . In a central depression f' in the front support f is placed the bar k , with the spring l pressing it upward. The bar k has two parts of different
45 thicknesses, of which the thinner part k' corresponds with the width of the slot c^3 and the thicker part k^2 corresponds with that of the widened portion of the said slot.

For the purpose of pushing the bar c forward, that is, in opposition to the draw of
50 the spring i , there is arranged upon the un-

der side of the foot-plate g' , revoluble around the peg g^2 , the lever m , acting upon the guide-bar c^2 . When the bar c is sufficiently pushed forward by means of the lever m , the widened
55 part of the slot c^2 comes to lie over the part k in such a manner that this latter under the pressure of the spring l can move upward. Hereupon the part k^2 of the bar k presses into the widened portion of the slot c^3 and
60 stops the bar c , while the part k' of the same projects somewhat over the foot-plate g' . (See the dotted position of Fig. 4.) On the advance of the bar c the spring i is stretched and the clips are opened. The pin n , en-
65 gaged in the slot c' of the bar c , which is connected with the sliding bar n' of the heel-clip o , is hereby also pushed forward, the clip o opened, and the spring p stretched, which is connected on the one side with the
70 support h and on the other side with the pin n . The springs i and p are placed one within another. If the skater places his foot upon the skate, his bodily weight presses down the projecting bar k , whereby the part k^2 of the
75 latter escapes from the widened portion of the slot c^3 and the bar c becomes free. The latter now springs back under the influence of the spring i and closes the clips b . Simultaneously with the bar c , but independently
80 thereof, the bar n' also springs back under the pressure of the spring p and closes the heel-clip o .

When it is desired to remove the skate from the foot, it is only necessary to take
85 hold of the lever m and to push the bar c forward again, whereby all clips are opened.

By means of the screw q and the slot q' the heel-clip o is adjustable upon the bar n' . The closing of the heel-clip o is effected in-
90 dependently of those of the sole-clips b , while on opening the clips the slot c' of the bar c carries with it the pin n of the bar n' , and so causes the advance of the latter to be dependent on that of the former.

Having now particularly described and ascertained the nature of the said invention and in what manner the same is to be performed, I declare that what I claim is—

1. A skate comprising a foot-plate and runner, sole-clips, a movable bar c carrying the sole-clips, a spring engaging said bar, a heel-

clip, a sliding bar *n'* carrying the heel-clip and a spring engaging said bar *n'*, said springs being located one within the other, substantially as described.

- 5 2. A skate comprising a front plate and runner, sole and heel clips, independent springs for each set of clips and a spring-holding device for the sole-clips operated by

the pressure of the foot, substantially as described. 10

In witness whereof I have hereunto set my hand in presence of two witnesses.

JAKOB STUTZ-MÜLLER.

Witnesses:

HERMANN KIRCHHOFFER,
E. GERMAIN.