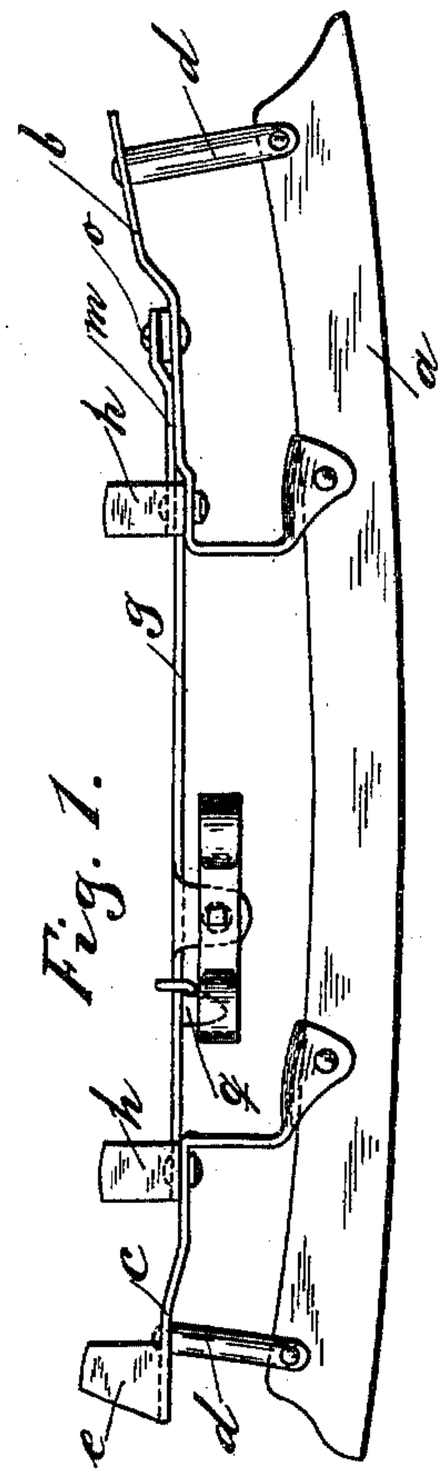
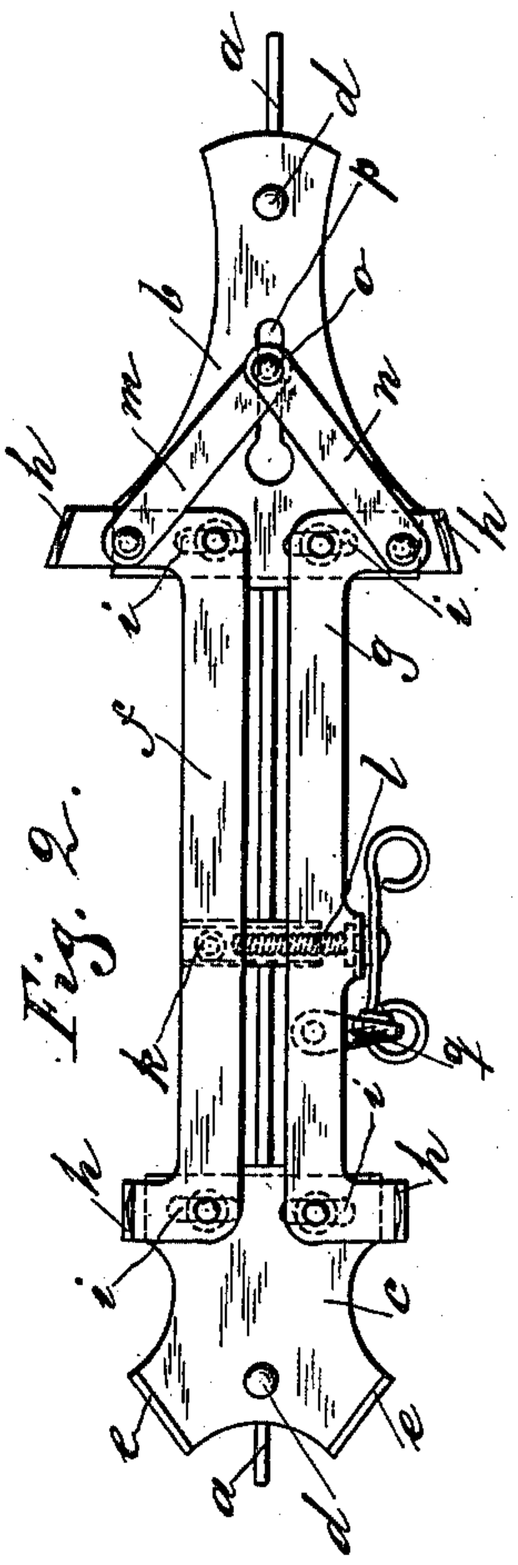
(No Model.)

D. W. MATTHIESEN.

SKATE.

No. 600,436. Patented Mar. 8, 1898.





Witnesses
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UNITED STATES PATENT OFFICE.

DAVID WAY MATTHIESEN, OF STOCKHOLM, SWEDEN.

SKATE.

SPECIFICATION forming part of Letters Patent No. 600,436, dated March 8, 1898.

Application filed January 23, 1897. Serial No. 620,483. (No model.) Patented in Sweden July 22, 1896, No. 8,159.

To all whom it may concern:

Be it known that I, DAVID WAY MATTHIESEN, a subject of the King of Sweden and Norway, and a resident of Mästersamuelsgatan 13, Stockholm, Sweden, have invented a new and useful Improvement in Skates, (for which I have obtained Swedish Patent No. 8,159, dated July 22, 1896,) of which the following is a specification, reference being had to the drawings accompanying and forming a part thereof.

This invention relates to improvements in skates in which the fastening of the skate to the shoe or boot is accomplished by means of two flat bars placed longitudinally along the skate and at the ends provided with check-pieces or lugs, said bars being pressed together by means of a screw or the like, so that the check-pieces catch and grip the soles of the shoe or boot.

The object of the invention is to overcome the wabbling peculiar to such fastening mechanisms.

The invention consists principally in providing special guides at one or both ends, which prevent the said bars from moving to one side. This and other features of this invention will be pointed out in the claims at the end of this specification.

In the accompanying drawings, Figure 1 is a side view of a skate according to this invention, and Fig. 2 a plan view of the same.

Referring to the drawings, *a* represents the runner, to which foot-plates *b* and *c* are fastened, by means of supports *d*, at one end of the plates and by the other end of the plates themselves being bent down and formed like a claw or fork which grasps around and is riveted to the upper edge of the runner.

The foot-plate at the back of the skate is provided with check-pieces (lugs) *e*, which serve to keep the heel of the shoe or boot from coming too far back. Said plate is bent so that its hind part, on which the heel rests, is on a higher level than its front part. In the same manner the fore part of the foot-plate at the fore end of the skate is on a somewhat higher level than the back part of the same and serves as a rest for the sole of the boot or shoe. The object of this elevating of parts of the foot-plates is to allow two flat bars *f* and *g* to rest with one end on the upper side of each of the said foot-plates without being touched by the shoe or boot. Said bars *f* and *g* may be of any known form and provided with suitable check-pieces or lugs *h* for gripping on the side of the sole and heel of the boot, and are held to the foot-plates by means of bolts moving crosswise in slots *i* in the foot-plates. Below one of the said bars a nut *k* is pivoted to the same, and a screw *l* is journaled in an ear or the like of the other bar and passes through the said nut, so that when the screw is turned it will make the bars *f* and *g* move toward or from each other until the check-pieces grip the soles or are released from them, as the case may be. To keep opposite points on the said bars *f* and *g* equidistant from the center line of the skate, one end of links *m* and *n* or the like are connected to the ends of the bars, the other ends of said links being connected together by means of a bolt which runs in a lengthwise slot *p* in the foot-plate. In the drawings is shown only one pair of links, (at the front ends of the bars;) but such links may be provided at the back end also, though the same may be dispensed with when, as in this case, the check-pieces on the heel-plate are so placed as to prevent the heel of the boot from moving sidewise or backward. The said screw *l* is on the outer side provided with ears, lever-arms, or the like, and a check-piece *q* is fastened below the nearest bar. The object of this check-piece is that when the screw-ears have been turned so that the check-pieces *h* on the ends of the bars firmly grip the sole and heel of the shoe or boot the said check-piece *q* may be turned so as to hook into or otherwise engage with one of the ears of the screw, so that it cannot turn back.

The mechanism may of course be modified in minor details without departing from this invention. For instance, the nut *k*, screw *l*, and check-piece *q* may be placed on the top side of the bars *f* and *g*.

What I claim, and desire to secure by Letters Patent, is—

1. In a fastening mechanism for skates, the combination with two longitudinal bars, one on each side of the central line of the skate, movably connected to foot-plates and provided with lugs or check-pieces and mechanism for moving them toward or from each

other of one or more pairs of links, one end of each link being connected to one of the said bars and the other ends of each pair of links being connected together and guided by a lengthwise slot in the corresponding foot-plate, substantially as and for the purpose set forth.

2. In a fastening mechanism for skates, the combination with two longitudinal bars, placed one on each side of the center line of the skate, with their ends movably connected to foot-plates for the heel and toe and provided with check-pieces or lugs and screw mechanism for moving them toward or from each other, of one or more pairs of links, two ends one of each link in the pair being connected together and guided by a lengthwise slot or the like in the foot-plate, the other two ends one of each link in the pair being connected one to each bar, and a check-piece adapted to be placed in or out of engagement with ears, lever-arms or the like on the said screw, substantially as and for the purpose set forth.

3. In a skate the combination with the runner, of foot-plates for the heel and toe, one part of each being on a higher level than the other and resting on a post attached to the runner, the lower part of said foot-plates being bent down and the end formed like a claw which grips around and is fastened to the upper edge of the runner, two longitudinal bars provided with check-pieces and placed one on each side of the center line of the skate, the ends of said bars being movably connected with the said foot-plates, means such as a screw mechanism for moving said bars toward or from each other and one or more pairs of links, two ends (one of each link in the pair) being connected together and guided by a lengthwise slot in the corresponding foot-plate, the other ends of each pair connected one to each of the said longitudinal bars, substantially as and for the purpose set forth.

In testimony that I claim the foregoing as my invention I have signed my name, in presence of two witnesses, this 5th day of January, 1897.

DAVID WAY MATTHIESEN.

Witnesses:
BERTIL BRANDER,
E. MALMERFELT.