

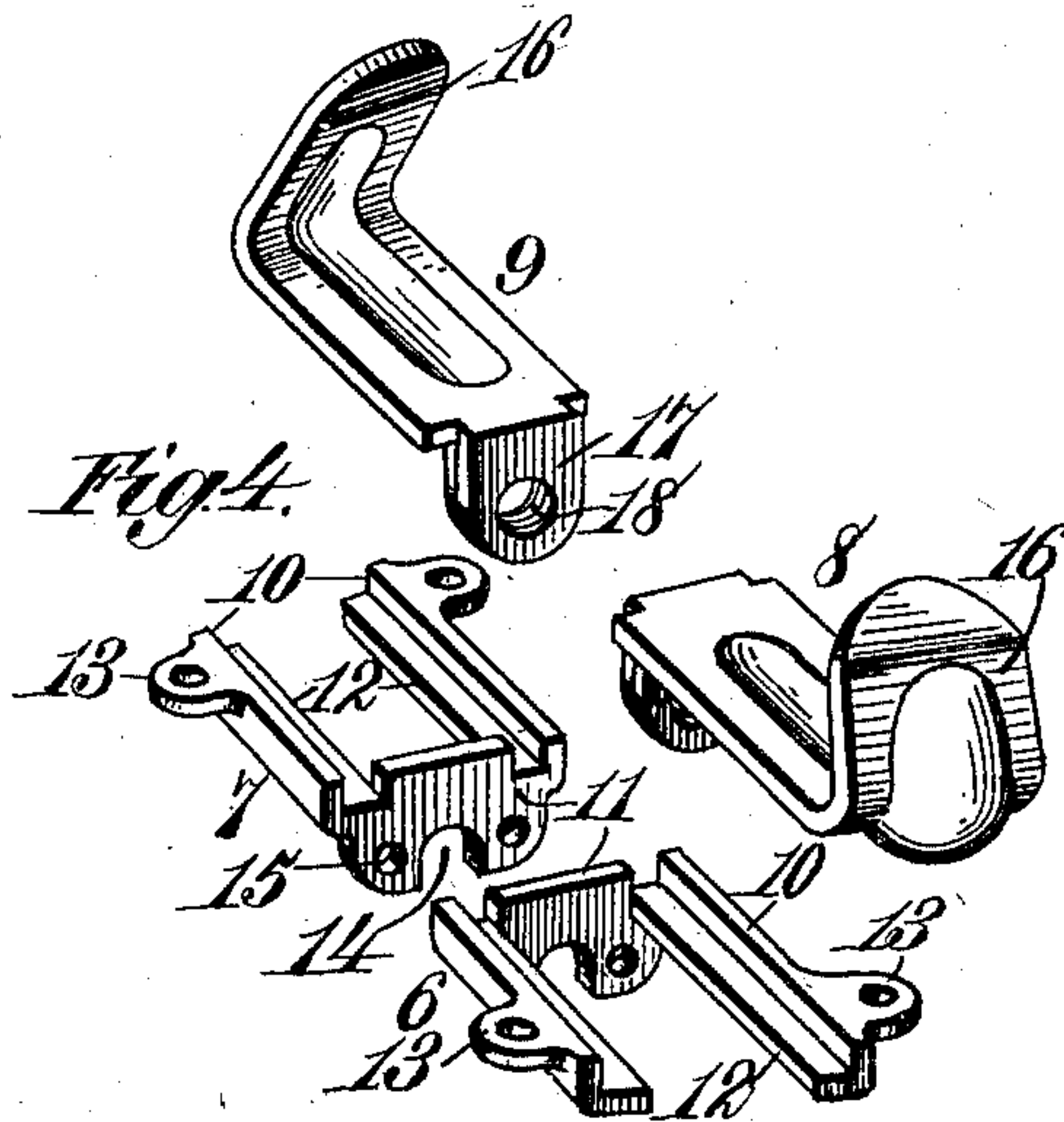
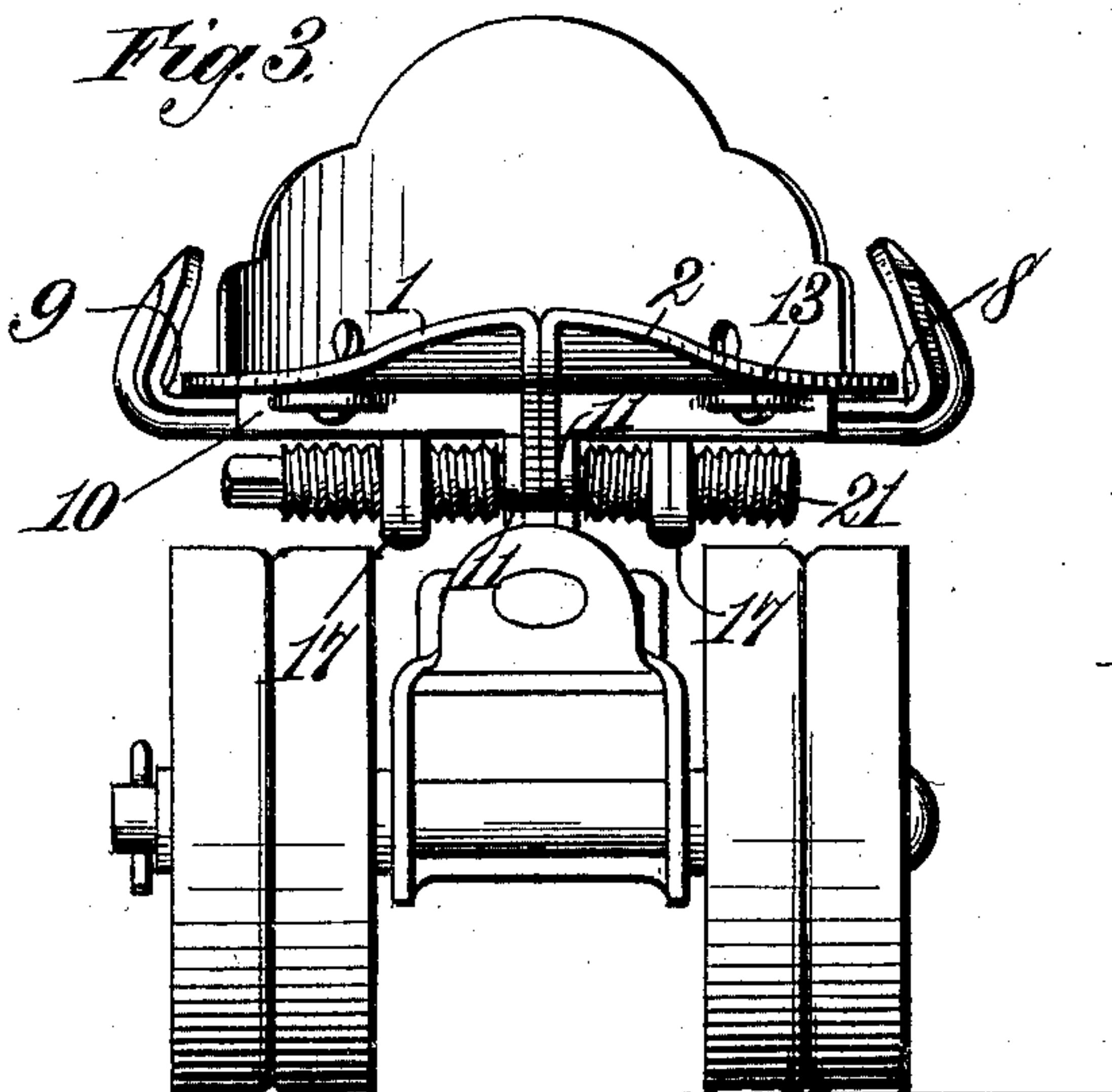
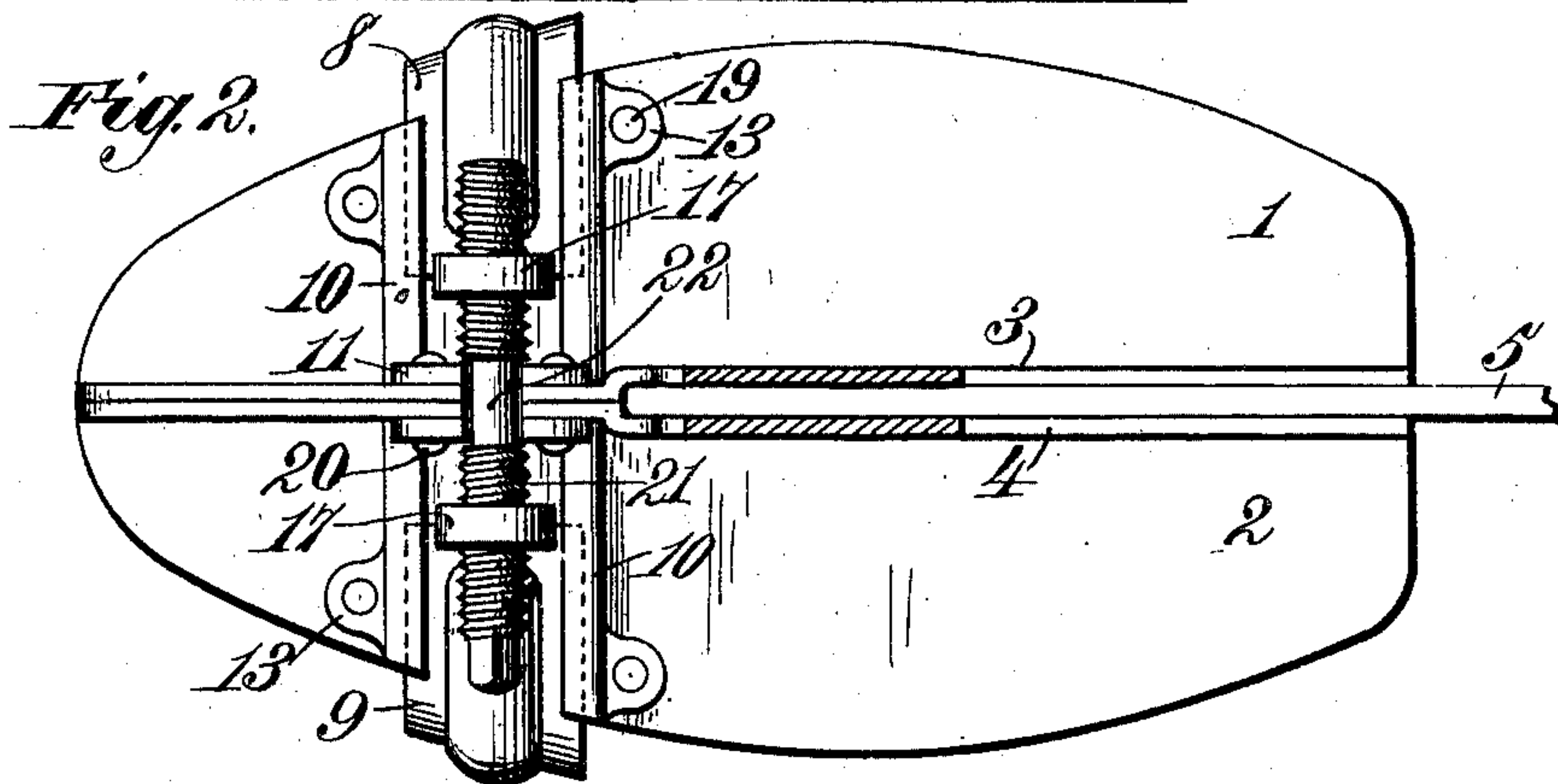
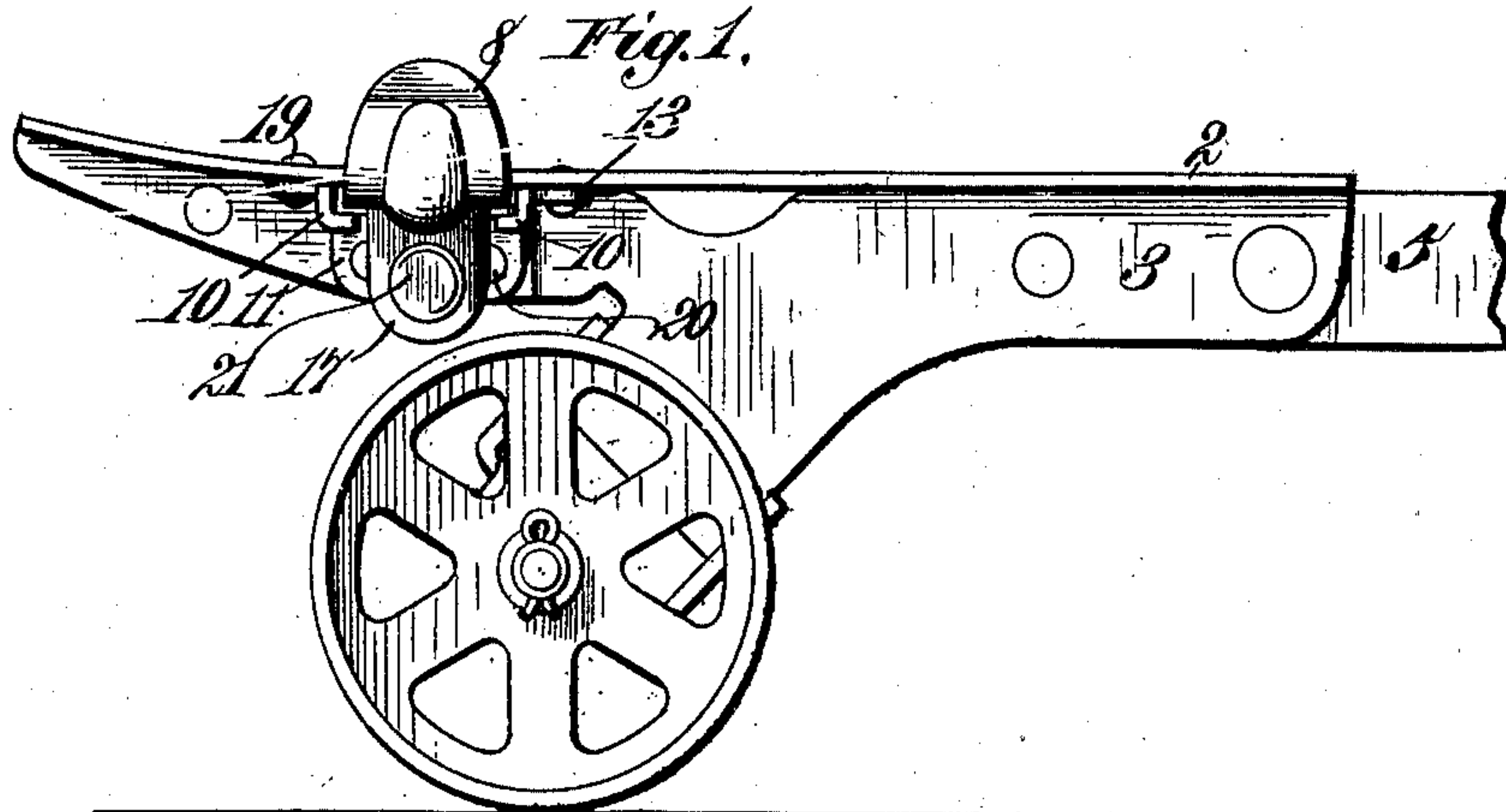
J. NUTTALL.

SKATE.

APPLICATION FILED OCT. 23, 1909.

967,825.

Patented Aug. 16, 1910.



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UNITED STATES PATENT OFFICE.

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SKATE.

967,825.

Specification of Letters Patent.

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To all whom it may concern:

Be it known that I, JOHN NUTTALL, a citizen of the United States, residing at Chicopee, in the county of Hampden and State of Massachusetts, have invented new and useful Improvements in Skates, of which the following is a specification.

The present invention is an improvement in skates, and more particularly in the sliding clamps and the guides or holders therefor.

Stated broadly, it comprehends the production of a clamp holder comprising a pair of counterpart members arranged in alinement with each other upon opposite sides of the depending flanges formed upon the two sections of the sole-plate, and fastened directly to said flanges, as well as to the body portions of the plate sections. The effect of such arrangement is that there is produced, virtually, a continuous holder which extends completely across the sole-plate and thus affords a materially increased bearing for the clamps proper, and prevents any lateral movement thereof during their adjustment. In this way, all strain is removed from the adjusting bolt, and in consequence, a freer movement of said bolt is insured.

The invention also resides in the construction of the clamps proper in such a manner as to facilitate their coöperation with the holder in obtaining the results above enumerated.

A practical embodiment of the invention is illustrated in the accompanying drawings, wherein:

Figure 1 is a fragmental side elevation of a roller skate, showing the application of the invention thereto. Fig. 2 is a bottom plan view of the sole-plate, to which the clamp holder is directly attached. Fig. 3 is a front elevation of the skate. Fig. 4 is a collective perspective view of the parts of the clamp considered as a whole.

The trucks, wheels and their associated parts shown in the said drawings may be of any preferred construction, and hence require no individual description.

In the structure illustrated, the sole-plate consists of two counterpart sections 1 and 2 formed at their inner longitudinal edges with depending flanges 3 and 4. These plates are spaced apart to receive the center

bar 5 between their flanges, which latter are riveted to said bar, as shown.

The clamp, as is customary, is arranged slightly in advance of the front axle. It comprises, essentially, a holder composed of a pair of counterpart members 6 and 7, and a pair of slides or clamps proper, 8 and 9, these parts being illustrated in detail in Fig. 4. The holder members are of skeleton formation and each comprises a pair of spaced parallel rails 10 connected at their inner ends by flat cross pieces 11. The base portions 12 of each pair of rails project toward each other from the inner or presented faces of said rails and are coincident in length therewith. At their outer ends, said rails are provided with perforated lateral ears 13 which project in opposite directions and have their upper faces flush with the flat upper edges of the rails. The lower portion of each cross piece 11 is cut away centrally as at 14, and in addition there is formed in each cross piece a pair of openings 15. The slides, or clamps proper, like the holder members above described, consist each of a single piece of metal the outer end of which is bent upward and slightly inward so as to form a jaw 16. The inner end of each slide terminates in a tongue 17 of reduced width, which is bent downward and folded directly upon itself, as shown. Through both thicknesses or folds of the tongue there is formed a threaded opening 18. The proportions of the holder members and slides with respect to each other are such that the latter will fit between the pairs of rails 10 with said sections are provided, the longitudinal edges of the slides resting upon the pairs of shoulders 12. The tongues 17 project downward between said pairs of shoulders, the intervening spaces being sufficiently wide to afford the tongues clear passage.

In positioning the various parts above specified, the two holder members are arranged directly in alinement with each other, with the presented faces of the cross-pieces 11 flat against the outer faces of the plate flanges 3 and 4, and the upper faces of the ears 13 and the upper rail edges flat against the under face of the sole-plate, the length of said rails being exactly equal to the distance between the flanges and the adjacent edges of the plate. (See Fig. 2.)

The aforementioned ears are fastened to the plate by rivets 19 which pass through the perforations therein, while the two cross pieces are directly connected together by
 5 rivets 20 passed through the openings 15 and through registering openings formed in flanges 3 and 4.

To move the slides toward and from each other, the customary adjusting bolt 21 is
 10 provided. The end portions of this bolt are threaded in opposite directions and extend through the tongue openings 18. The central portion 22 of said bolt is of slightly reduced diameter, as shown, is plain or un-
 15 threaded, and passes loosely through the cut-away portions 14 in the cross-pieces 11 and through similarly cut-away portions of flanges 3 and 4. At one end the bolt terminates in the usual key-engaging portion.

As a result of the above described position and arrangement of the parts of the clamp, it will be seen that there is provided, in effect, a continuous holder, which perfectly supports the slides, irrespective of
 25 their position, and thus relieves the strain upon the adjusting bolt. Consequently, the manipulation of the last mentioned part or element is greatly facilitated. Also by reason of the fact that the shoulders and rails
 30 extend the entire length of the holders, the slides will be guided during their movements and held against lateral displacement at such time, this effect being furthered to some extent by the projection of the tongues
 35 through the spaces between said shoulders. Finally, the formation of the cross pieces 11 and their direct attachment to the plate flanges materially strengthens the holders and renders their connection with the sole-
 40 plate more secure.

I claim as my invention:

1. The combination, with a skate sole-plate comprising a pair of sections formed at their inner edges with connected depend-
 45 ing flanges; of a clamp holder secured to the under face of said plate and composed of a pair of alining members arranged on opposite sides of said flanges, the inner ends of said members being fastened directly to
 50 said flanges; and a pair of sliding clamps carried by said members.

2. The combination, with a skate sole-plate comprising a pair of sections formed at their inner edges with connected depend-
 55 ing flanges; of a clamp holder secured to

the under face of said plate and composed of a pair of alining members arranged on opposite sides of said flanges, said members being provided at their inner ends with flat cross pieces disposed directly against and
 60 fastened to said flanges; and a pair of sliding clamps carried by said members.

3. The combination, with a skate sole-plate having a depending central longitudinal flange, of a clamp holder secured to the
 65 under face of said plate and comprising a pair of alining members provided at their inner ends with cross pieces arranged directly against and fastened to said flange; and a pair of sliding clamps carried by said
 70 members.

4. The combination, with a skate sole-plate; of a continuous clamp holder secured to the under face thereof and comprising a pair of separately constructed counterpart
 75 members arranged in alinement with each other and having their inner ends connected together; and a pair of sliding clamps carried by said holder.

5. The combination, with a skate sole-plate; of a continuous clamp holder secured to the under face thereof and comprising a pair of separately-constructed members ar-
 80 ranged in alinement with each other and provided at their inner ends with cross-
 85 pieces, said cross-pieces being removably connected together; and a pair of sliding clamps carried by said holder.

6. The combination, with a skate sole-plate; of a continuous clamp holder secured to the under face thereof and comprising a pair of separately-constructed members ar-
 90 ranged in alinement with each other, each of said members consisting of a pair of spaced rails having their inner ends con-
 95 nected by a cross-piece and their presented faces formed with supporting shoulders coincident in length therewith and projecting toward each other, said cross-pieces being re-
 100 movably connected together; and a pair of clamps slidable in said holder and having their side edges resting upon said shoulders.

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

JOHN NUTTALL.

Witnesses:

F. C. BREAKSPEAR,
 EDWARD O'KEEFE.