

No. 889,411.

PATENTED JUNE 2, 1908.

A. W. SUTHERLAND.
SHOE LAST OR FORM.
APPLICATION FILED AUG. 9, 1907.

2 SHEETS—SHEET 1.

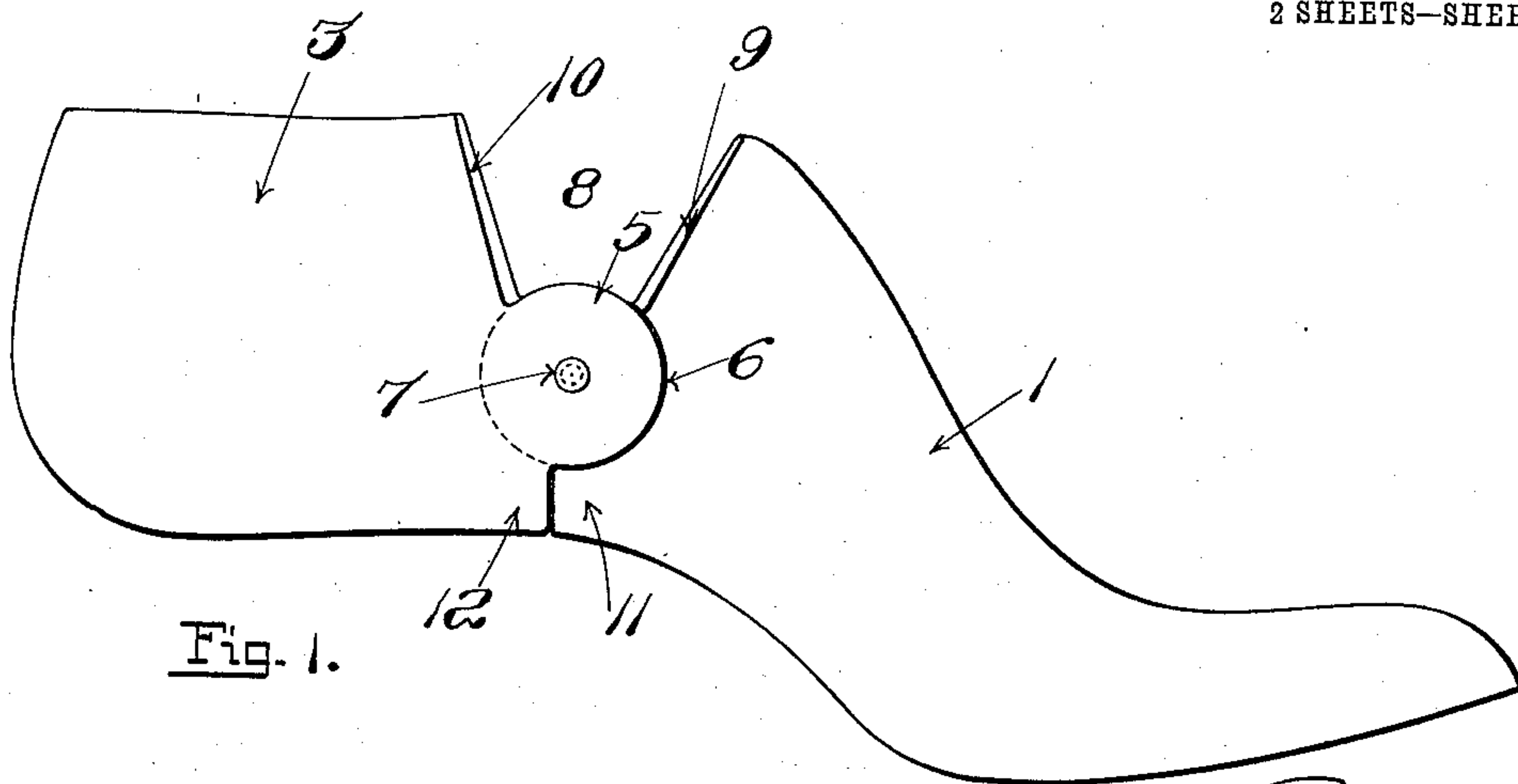


Fig. 1.

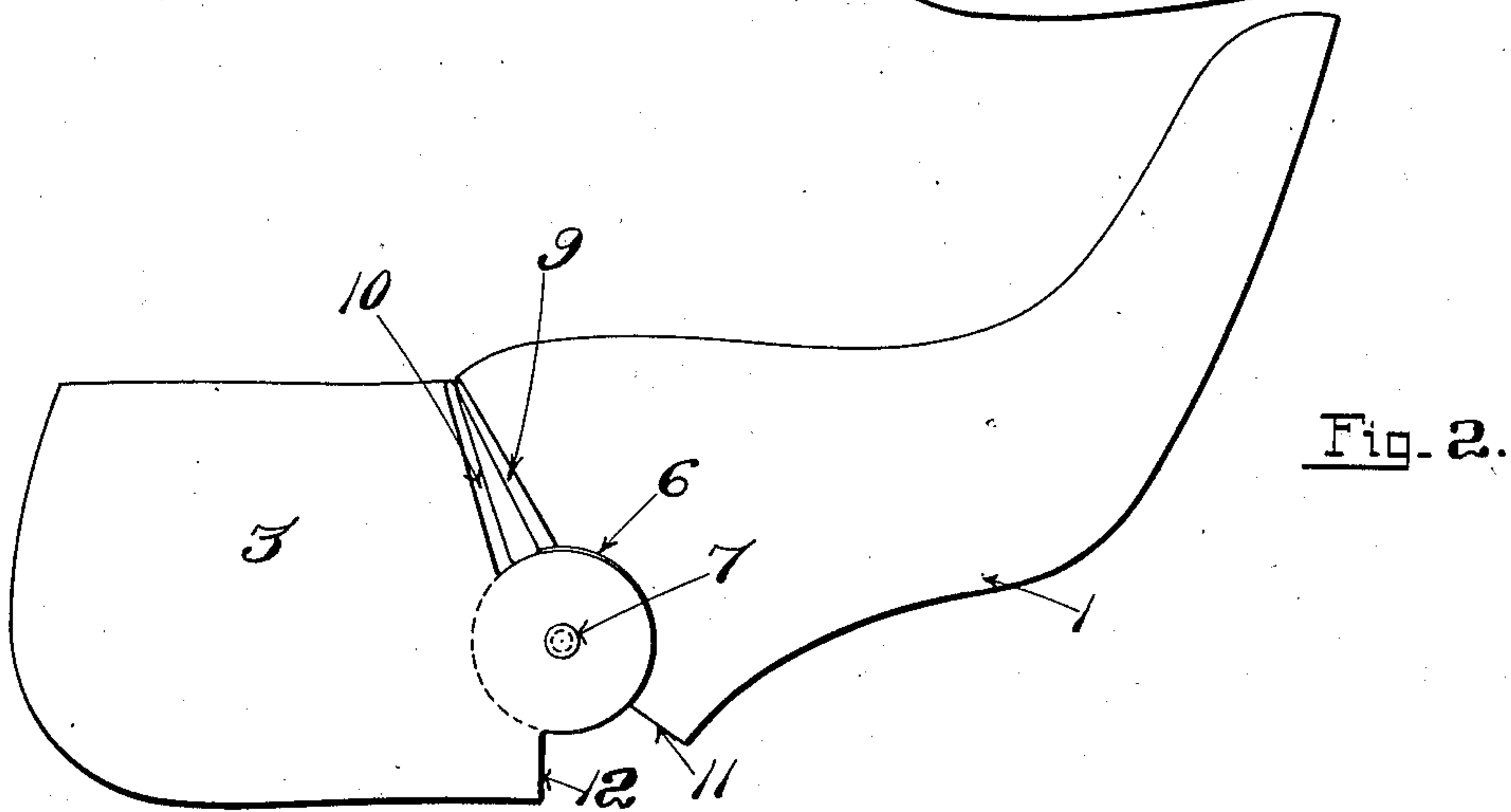


Fig. 2.

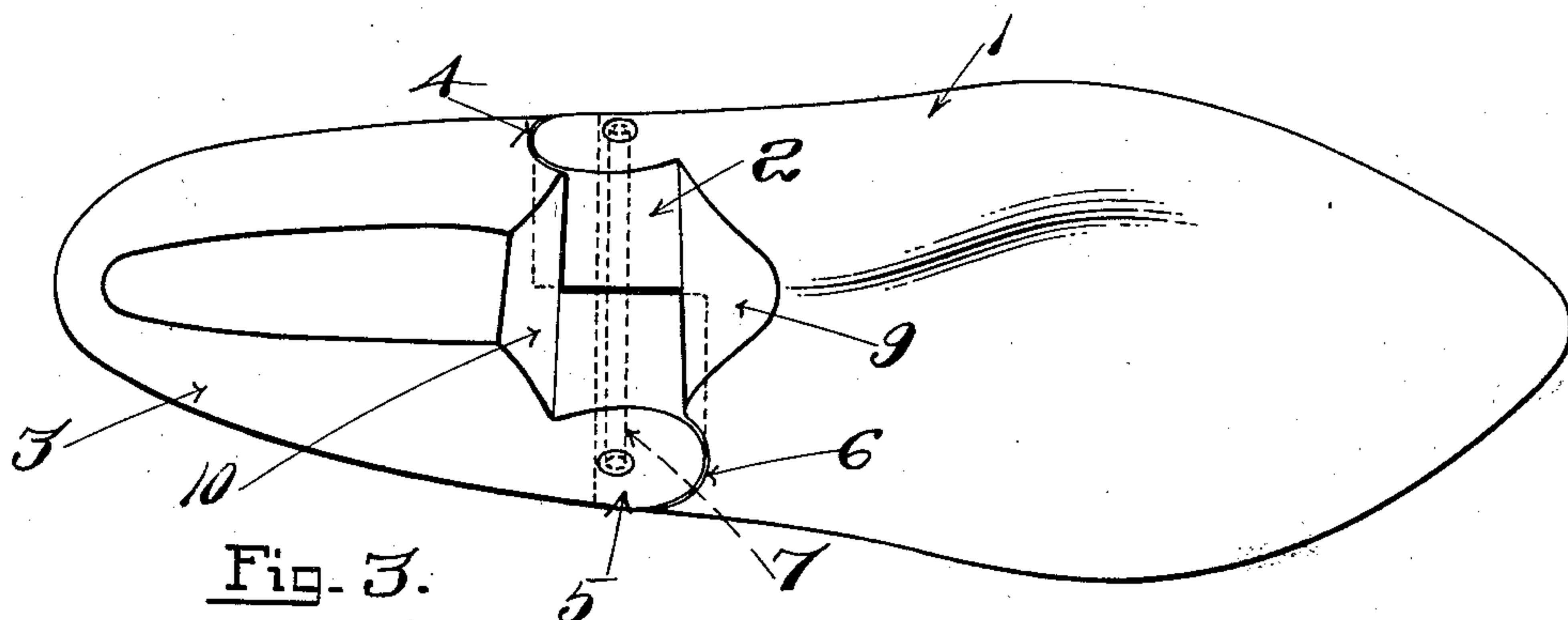


Fig. 3.

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John T. Parker

Inventor:

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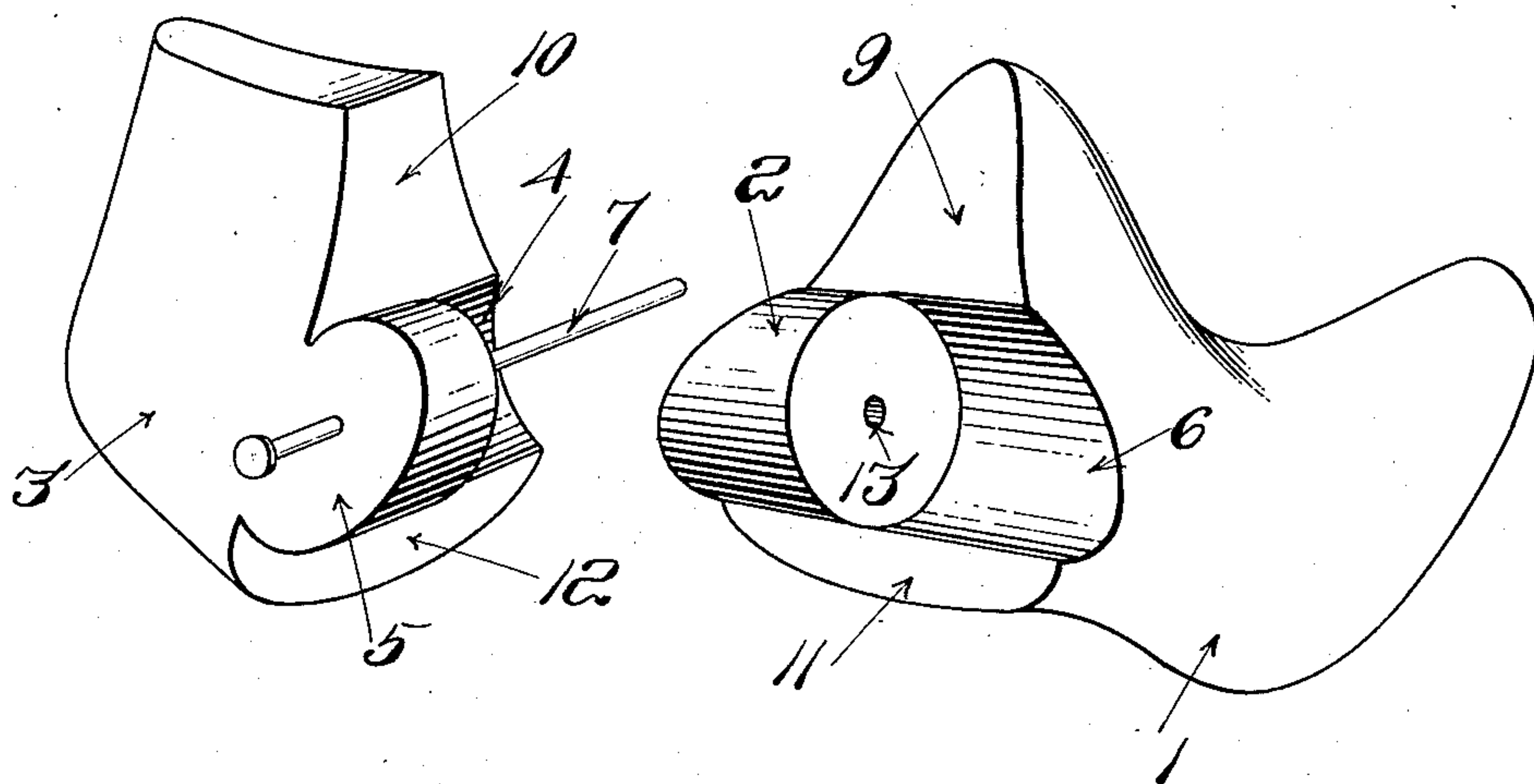
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2 SHEETS—SHEET 2.

Fig. 4.



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UNITED STATES PATENT OFFICE.

ALFRED W. SUTHERLAND, OF LYNN, MASSACHUSETTS.

SHOE LAST OR FORM.

No. 889,411.

Specification of Letters Patent.

Patented June 2, 1908.

Application filed August 9, 1907. Serial No. 387,818.

To all whom it may concern:

Be it known that I, ALFRED W. SUTHERLAND, a citizen of the United States, residing at Lynn, county of Essex, State of Massachusetts, have invented a certain new and useful Improvement in Shoe Lasts or Forms, of which the following is a specification, reference being had therein to the accompanying drawings.

The invention relates to a new and useful improvement in hinged shoe lasts or forms. In all hinged lasts or forms heretofore known to me the hinge which unites the fore part and the heel part is first made separate from those two members and is attached to the fore part and heel part to unite them together by a hinged joint.

The object of my invention is to reduce the number of parts and simplify and cheapen the cost of construction, by making the two leaves of the hinge integral respectively with the fore part and the heel part, uniting them by a pintle which passes through the two leaf portions thus formed.

The invention will be fully understood from the following description taken in connection with the accompanying drawings and the novel features thereof are pointed out and clearly defined in the claims at the close of the specification.

In the drawings, Figure 1 is a side elevation of a shoe last or form embodying the invention in its normal position. Fig. 2 is a side elevation showing the fore part turned up to shorten the last. Fig. 3 is a plan of the last in its extended position. Fig. 4 is a detail perspective view of the fore part and heel part detached from each other.

The fore part 1 is formed with a rearwardly extending lug 2 which preferably is about half of the width of the rear end of the fore part and is convexly curved in side view on the arc of a circle. The rear or heel part 3 is formed with a concave recess 4 formed on the arc of a circle corresponding with the contour of the lug 2. The rear part 3 is also formed with a forwardly projecting lug 5 of similar vertical contour as the rearward projecting lug 2 of the fore part but upon the opposite side of the last from the lug 2 so that the two lugs 2 and 5 fit closely side by side. The fore part 1 is also formed with a curved recess 6 at its rear end fitted to the contour of the lug 5 in the same manner that the recess 4 is fitted to the lug 2.

A pintle 7 passes horizontally through the

two lugs 2, 5, and forms a pivot for the turning of the two members of the last in a vertical plane with relation to each other.

There is an open space 8 between the upper portion 9 of the fore part and the upper portion 10 of the rear part of the last to allow for the hinged movement of the two members of the last with relation to each other.

Below the lugs 2 and 5 is a shoulder portion 11 on the fore part which engages with a shoulder portion 12 on the rear part when the last is in its normal extended position and prevents the last from turning downward on its hinge below a desired point. Preferably the fore part and the heel part are all formed out of a single piece of material such as wood. In thus forming the last it is first formed as a solid one piece last of substantially the form desired, then a portion is cut out of the top to form a space 8, it is then sawed or cut to form the curved ends of the lugs 2, 5, and sawed transversely through the shank to form the shoulders 11, 12, and the lug portion is cut lengthwise to form the two lugs 2, 5, thus dividing the whole block into two portions. A pintle hole 13 is bored transversely through the two lugs preferably before the fore part and heel part are separated from each other.

While as above stated it is preferable to form the fore part and heel part out of a single block yet this is not essential to the invention as the two may be made of separate blocks but of the proper shape to fit each other as above described.

What I claim is;

1. A hinged shoe last or form comprising a fore part and a heel part made out of a single block divided transversely into two members and cut in such manner that the fore part has for a portion of its width a rearwardly extending lug with convex end and for the remaining portion of its width a concave recess, and a heel part having a concave recess to receive the lug of the fore part and a convex lug to fit the recess in the fore part and a pintle which extends horizontally through both lugs, a portion of the upper side of the block being cut away to permit shortening of the last by movement on the pintle.

2. A hinged shoe last or form comprising a fore part and a heel part made out of a single block cut transversely and longitudinally in such a manner that the fore part has for a portion of its width a rearwardly

extending lug with convex end and for the remaining portion of its width a concave recess, and a heel part having a concave recess to receive the lug of the fore part and a convex lug to fit the recess in the fore part and a pintle which extends horizontally through both lugs, a portion of the upper side of the block being cut away to permit shortening of the last by movement on the pintle, the adjacent ends of the fore part and the heel part having sides which engage each other below the lugs to limit the hinge movement of the two members with relation to each other.

3. A hinged shoe last or form comprising a fore part having for a portion of its width a rearwardly extending lug which is convexly curved in side elevation and has for a portion of its width a recess which is inwardly curved in side elevation, and a heel part having a curved lug which fits in the said recess in the fore part and having a curved recess in which fits the lug of the fore part, and a horizontal pintle connection between the said lugs whereby one of said members is adapted to turn with relation to the other to shorten the last.

4. A hinged shoe last or form comprising a solid fore part having at its rear end transversely of a portion of its width from one

side and intermediate the top and bottom a rearwardly extending lug which is convexly curved in side elevation on the arc of a circle, the rear end of the fore part having for the remaining portion of its width a concaved recess curved in side elevation on the arc of a circle of the same diameter as said lug and a solid heel part having at its forward end a convexly curved lug which fits into said recess in the fore part and having a concaved recess in which fits the lug of the fore part, each of said lugs fitting within its cooperating concaved recess, a single horizontal pintle passing through both of said lugs, the adjacent ends of the fore part and heel part below the said lugs engaging with each other when the last is in its normal position, and the adjacent ends of the fore part and heel part above said lugs being cut back to form a space between them when the last is in its normal position, whereby one of said members is adapted to be turned on the pintle with relation to the other to shorten the last.

In testimony whereof I affix my signature, in presence of two witnesses.

ALFRED W. SUTHERLAND.

Witnesses:

WILLIAM A. COPELAND,
ALICE H. MORRISON.