

(No Model.)

J. T. NULTY.
SPIKE.

No. 277,921.

Patented May 22, 1883.

Fig. 1

Fig. 2.

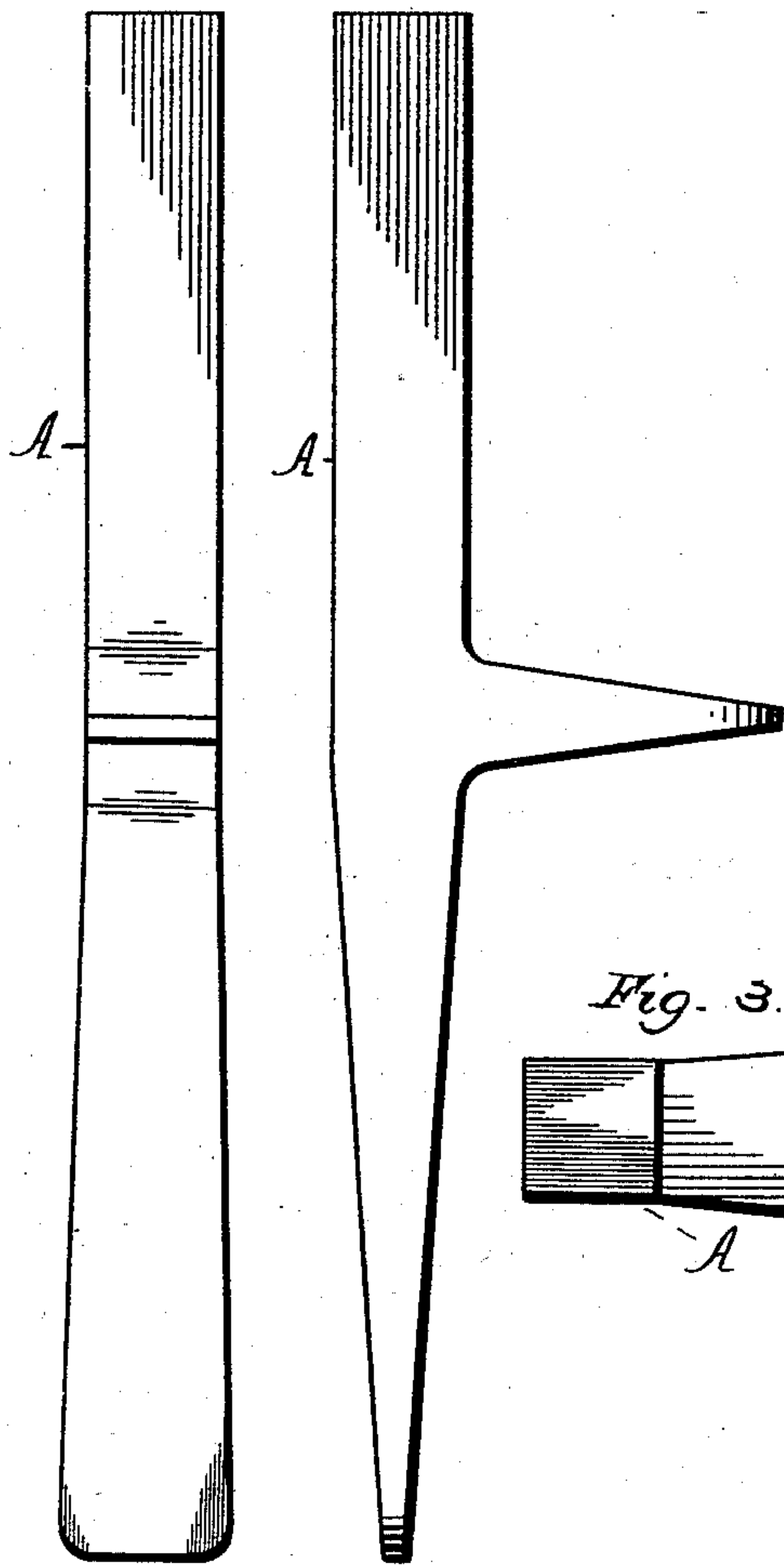


Fig. 4.

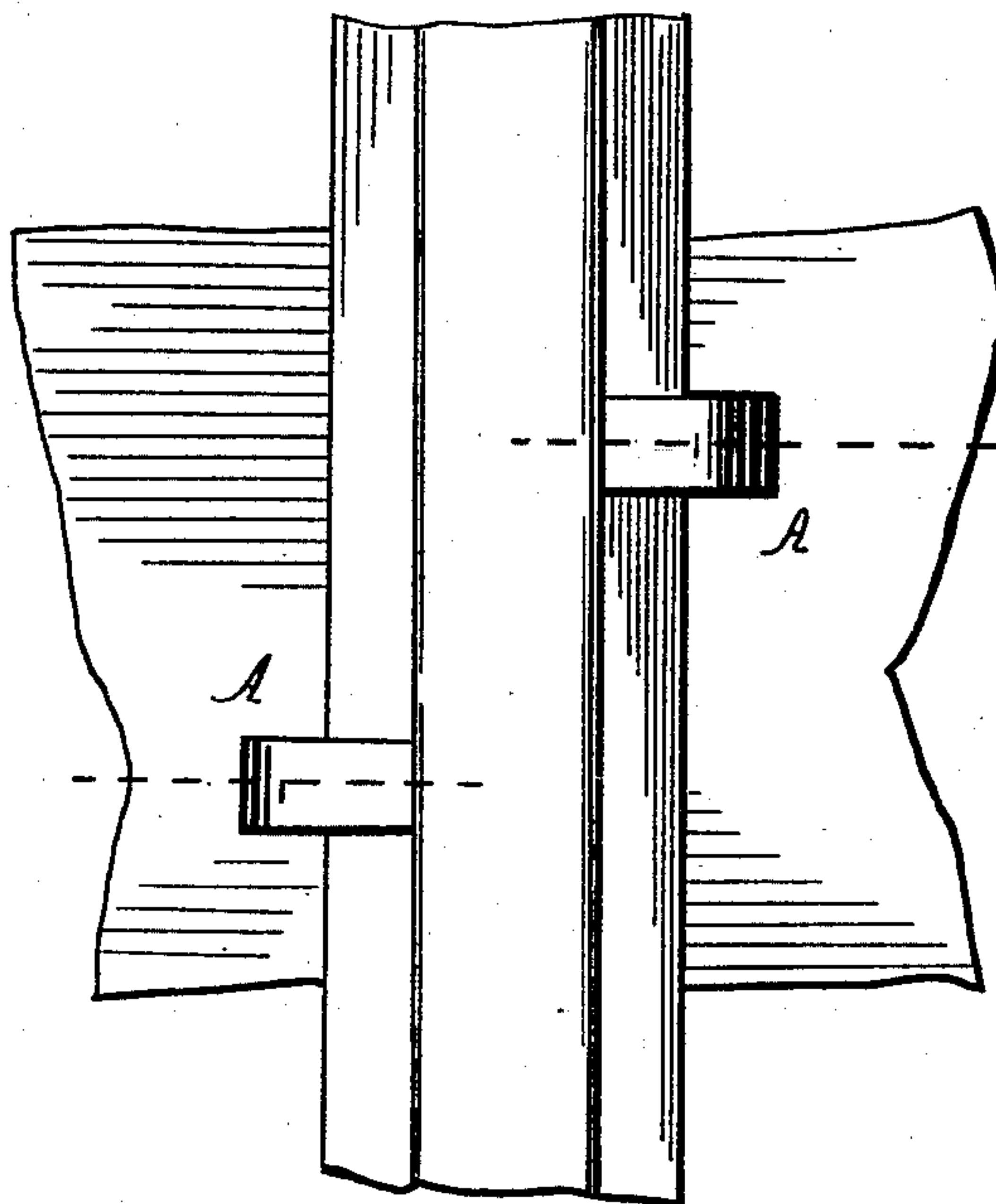


Fig. 3.

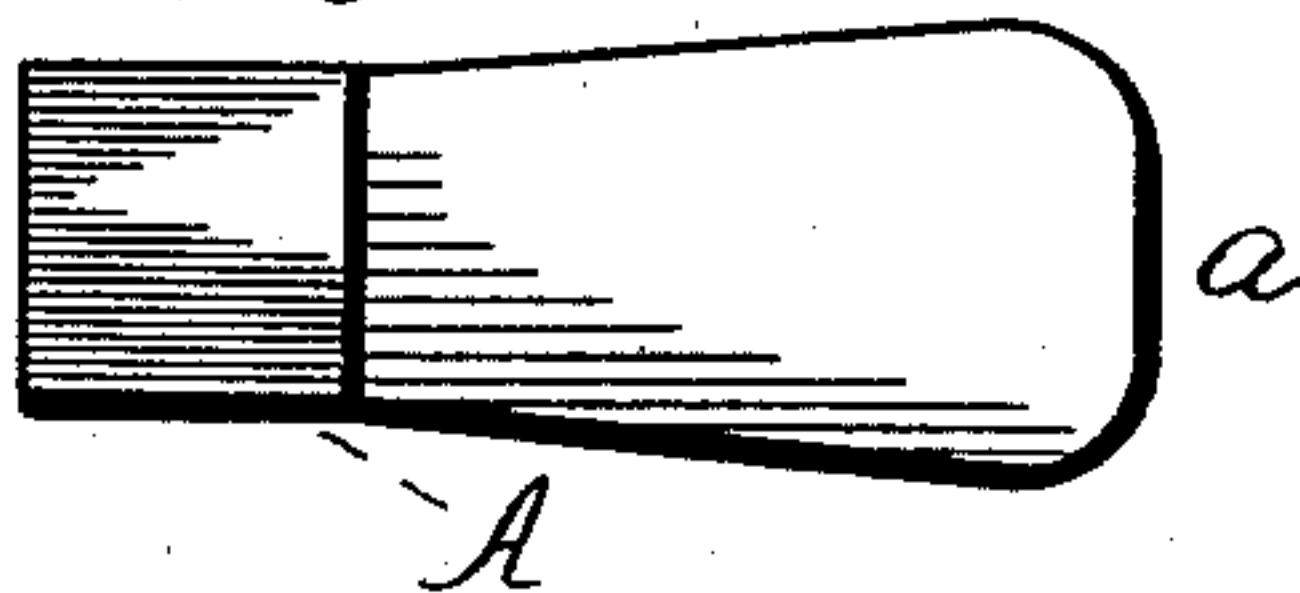


Fig. 5.

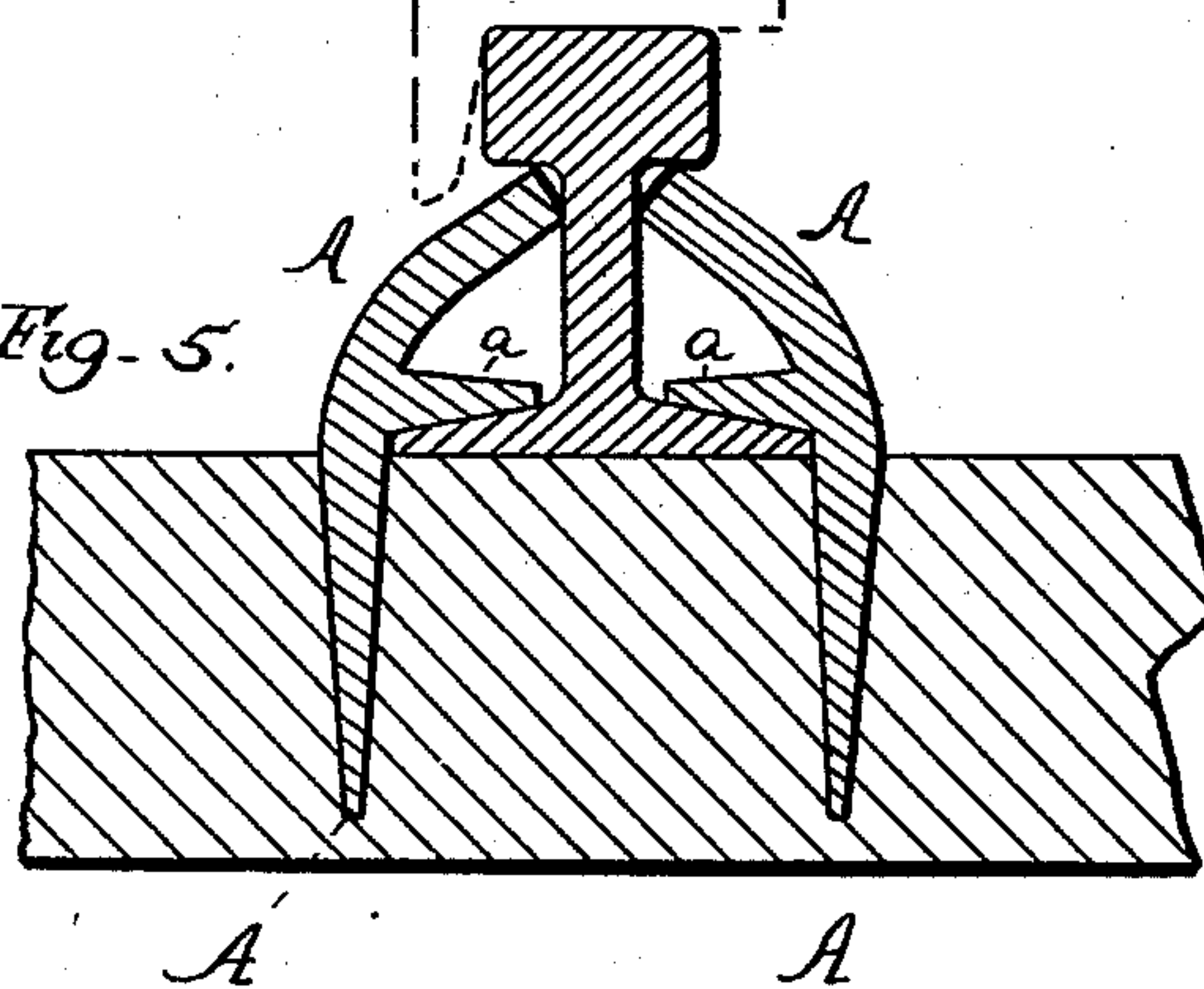
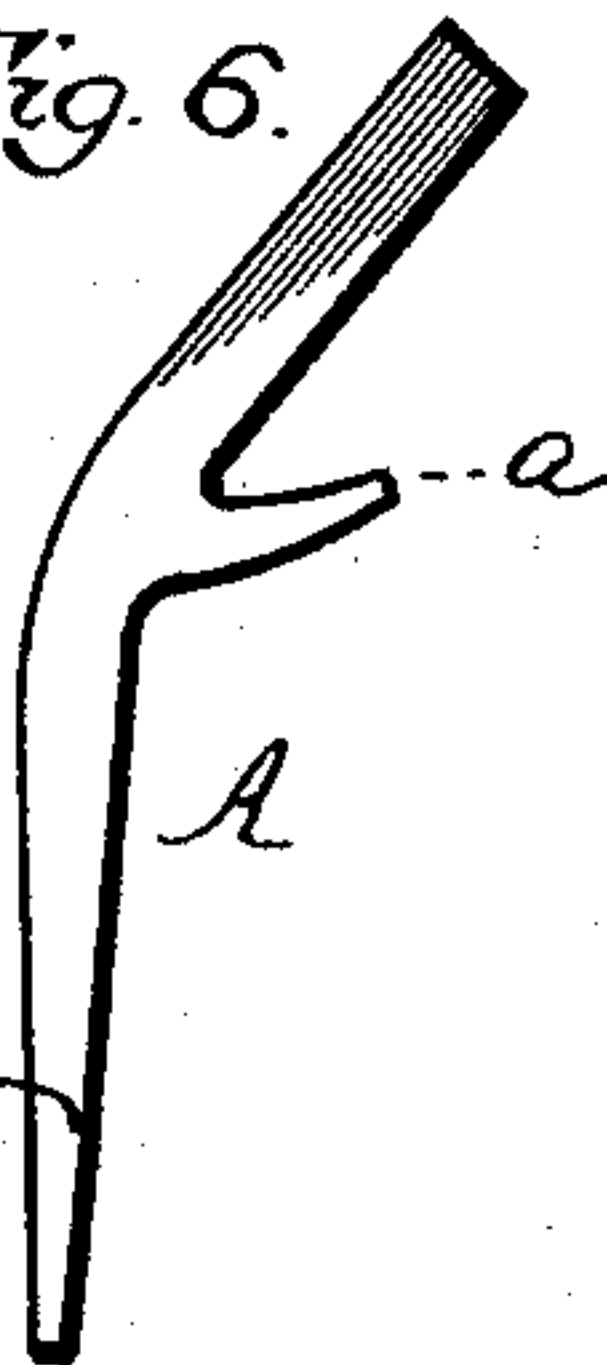


Fig. 6.



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JAMES T. NULTY, OF PHILADELPHIA, PENNSYLVANIA.

SPIKE.

SPECIFICATION forming part of Letters Patent No. 277,921, dated May 22, 1883.

Application filed July 20, 1882. (No model.)

To all whom it may concern:

Be it known that I, JAMES T. NULTY, of Frankford, Philadelphia, in the county of Philadelphia and State of Pennsylvania, have invented a new and useful Improvement in Spikes, which improvement is fully set forth in the following specification and accompanying drawings.

My invention relates to spikes.

It consists in a metallic pointed bar provided with a lug projecting from a side of said bar at a point near the center thereof, all of which will be more fully hereinafter described, and pointed out in the claim.

Referring to the drawings, Figure 1 is a front view of the form of a completed spike. Fig. 2 is a side view thereof. Fig. 3 is a top view thereof. Fig. 4 is a plan view, showing its application to the rail. Fig. 5 is a cross-section in the transverse line xx of Fig. 4. Fig. 6 shows the shape of the spike when removed from its working position.

Similar letters refer to similar parts throughout the several views.

In the annexed drawings, A represents the main body or stock, which, it will be seen, in general outline differs little in appearance to the common spike.

A projection or shoulder, a , extending at right angles to the main body A, is the main or special feature of this invention, the purposes of which I will now proceed to explain.

The difficulties in the present form of spike used in railroad construction are many, and two prominent among them is, through the tendency of the rail, to spring by the action of the weight of the cars. In so doing the rail, in rising, forces the spike from its hold, thus loosening it, and as the same is repeated the spike is left in the position the rail springs to, thus rendering it virtually inoperative as a means of holding the rail to the bed.

The next trouble in the present form of spike that this is designed to overcome is its entire freeness from danger in this: for the rail, in springing, to break the head from the stock, thus completely destroying the value of the spike in protecting the rail from moving laterly. When this form of spike, which is preferably constructed with a flat point, enters the sleeper or other bed of the rail, its progress is limited by the action of the projecting shoulder a with the base of the rail, then the upper part of the stock A is forced over and under the head of the rail, as shown in Fig. 5, to a point where the web and the head of the rail join. This insures a base between the base and head of the rail. The utility and value of such a means of fastening or holding the rail are at once apparent, for, while it admits of no lateral displacement or spreading of the rail—one of the greatest dangers in present style of spike should it lose its head by any one of the avenues it has from the position it is placed in—it also furnishes a continuous chair for the rail, placed, as they are, every few inches apart and upon each side of the rail. The danger from the use of this form of spike in the possibility of the flange of the wheel striking the same is entirely obviated by the position this portion of it is compelled to assume in forcing it home, and each time the weight is repeated have a recurring tendency to additionally hold it.

The constantly-recurring weight to which the rail is subjected will differ in its effects upon this kind of a spike, inasmuch as the rail carries it with it should it spring or be forced perpendicularly or laterally, the hold that the spike has to the rail by its position and form of contact, thus showing conclusively that with this form of spike you accomplish more by this in fastening the rail to its bed than by any other plan.

I do not confine myself to this special form of spike for this or any other purpose when its general shape is considered, but as specified.

Having thus described my invention, what I claim as new, and desire to secure by Letters Patent, is—

A railway-spike consisting of a metallic-pointed bar provided with a lug projecting from a side of said bar and at a point near the center thereof, whereby the spike may be secured in the sleeper, the base of the rail secured by the lug, and the web and under side of the head of said rail braced and supported by the head of the spike bent over against the rail, as specified.

JAMES T. NULTY.

Witnesses:

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