(No Model.)

J. D. THOMAS.

WIRE SPLICER.

No. 504,638. Patented Sept. 5, 1893.

Fig. 1.

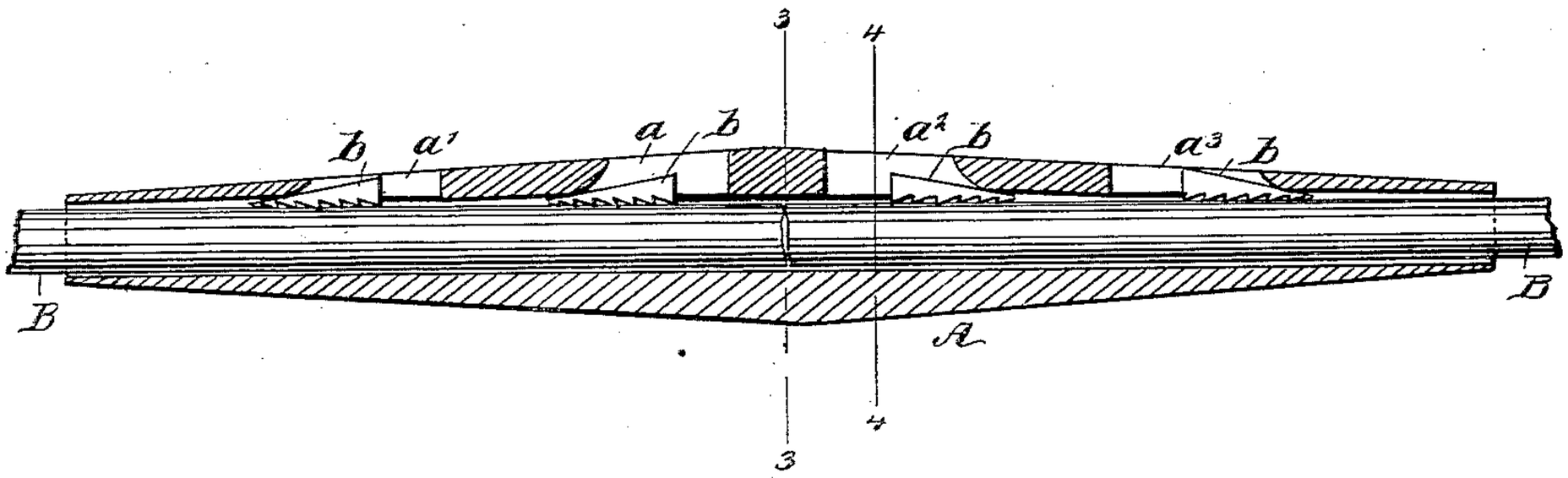

Fig. 2.

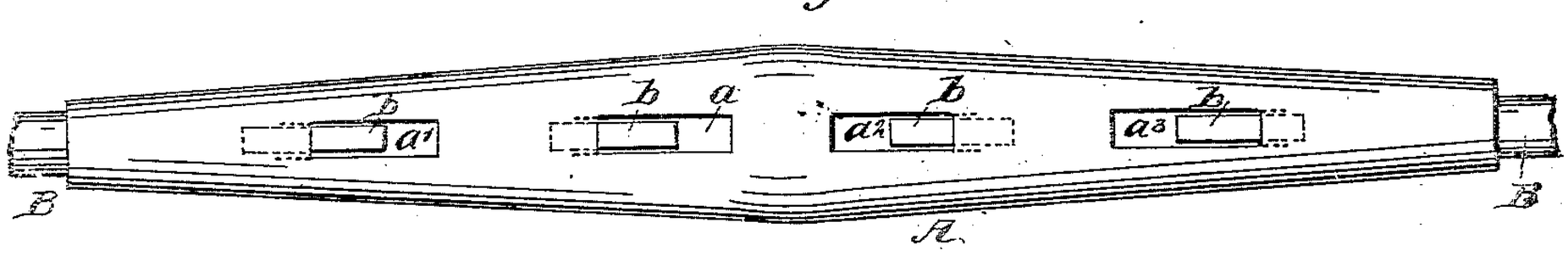

Fig. 3.

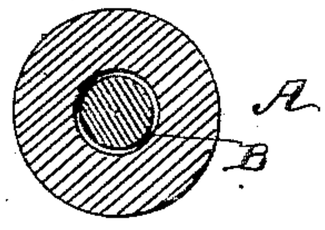

Fig. 4.

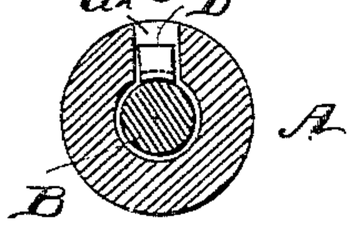

Fig. 5.

WITNESSES:

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UNITED STATES PATENT OFFICE.

JOHN D. THOMAS, OF SCRANTON, PENNSYLVANIA.

WIRE-SPLICER.

SPECIFICATION forming part of Letters Patent No. 504,638, dated September 5, 1893.

Application filed April 21, 1893. Serial No. 471,298. (No model.)

To all whom it may concern:

Be it known that I, JOHN D. THOMAS, of Scranton, in the county of Lackawanna and State of Pennsylvania, have invented a new and Improved Wire-Splicer, of which the following is a specification, reference being had to the annexed drawings, forming a part thereof, in which—

Figure 1 is a longitudinal section of my improved wire splicer. Fig. 2 is a plan view. Fig. 3 is a transverse section taken on line 3—3 in Fig. 1. Fig. 4 is a transverse section taken on line 4—4 in Fig. 1; and Fig. 5 is a detail view of one of the clamping dogs.

Similar letters of reference indicate corresponding parts in all the views.

My invention relates to wire splicers designed more particularly for use in connection with trolley wires. The object of my invention is to provide a simple and effective device for splicing broken trolley wires without the necessity of soldering them, thereby saving time and preventing delays on the road.

My invention consists in a tube bored cylindrically and tapered from the middle toward the ends, forming a spindle-shaped tube, the said tube being provided in the upper side with apertures having rounded or beveled walls, and in serrated wedges or dogs adapted to drop into the apertures and engage the wires inserted in the tube, all as will be hereinafter more fully described.

The tube A, forming the body of the splicer, has a bore of a little greater diameter than that of the wire B to be spliced, and to give the requisite strength and to facilitate the passing of the trolley over the joint, the tube is made thick and strong at the center and tapered toward the ends.

In the upper side of the tube are formed apertures a, a', a^2, a^3. The end walls of the said apertures are curved or cut away on the inner surface of the tube, and in the said apertures are inserted serrated dogs b, consisting of wedges having their under surfaces serrated to insure their engagement with the wire B. When the wire B is inserted in the spindle-shaped tube A, and the dogs b are dropped into the apertures a, &c., with their longer ends in the direction in which they are to be drawn, the sharp serrations on their under surfaces engage the wire B, and as the wire is drawn outwardly toward the ends of the splicer, the dogs b, acting as wedges, force the wire with great pressure against the inner surface of the lower part of the tube A, thus forming an effective splice, without the necessity of screws, riveting or soldering.

It is obvious that a splicer of this character can be readily and quickly applied without materially interrupting traffic.

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

1. A wire splicer, formed of a tube furnished with apertures for receiving dogs, and a series of dogs consisting of serrated wedges, substantially as specified.

2. A wire splicer, formed of a spindle-shaped tube furnished with apertures in the side thereof, and serrated wedges or dogs fitted to the apertures and adapted to engage the wire inserted in the spindle-shaped tube, substantially as specified.

JOHN D. THOMAS.

Witnesses:
W. S. JONES,
D. J. JENKINS.