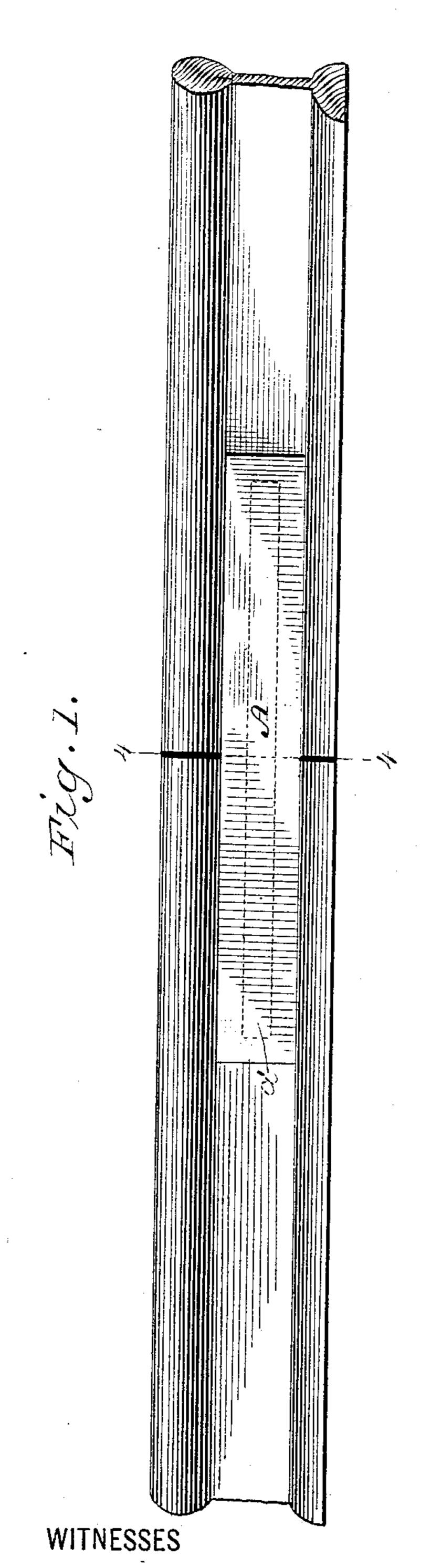
(No Model.)

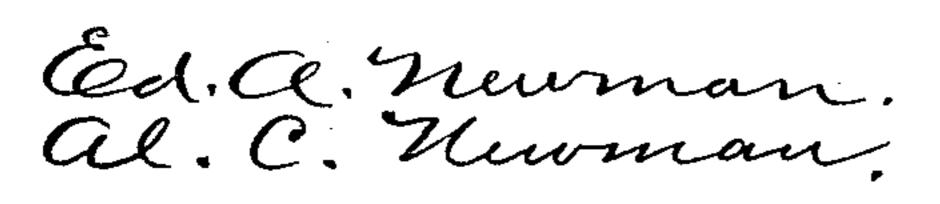
## J. L. CATHCART.

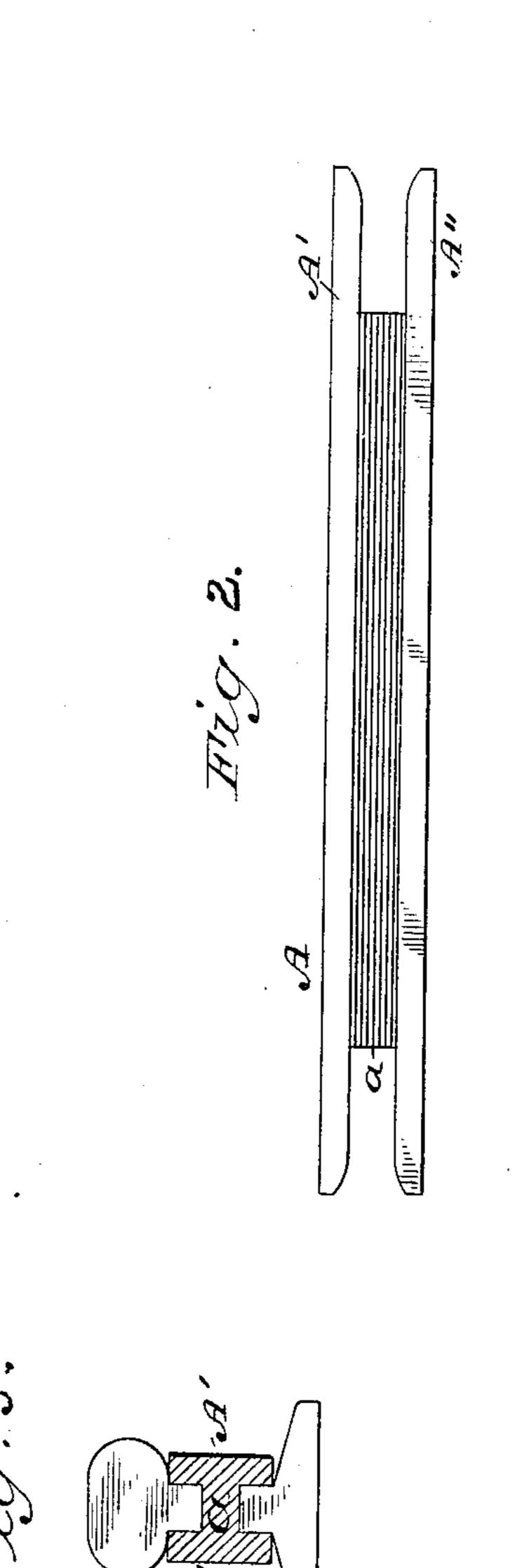
## RAILROAD FISH PLATE.

No. 329,622.

Patented Nov. 3, 1885.







INVENTOR

James L. Cathcart;

By his Attorney

Challed Litter

## United States Patent Office.

JAMES L. CATHCART, OF ALEXANDRIA, VIRGINIA, ASSIGNOR TO MRS. M. J. COLLEY, JAMES E. BELL, C. M. BELL, AND J. WOOD BELL, ALL OF WASHINGTON, DISTRICT OF COLUMBIA.

## RAILROAD FISH-PLATE.

SPECIFICATION forming part of Letters Patent No. 329,622, dated November 3, 1885.

Application filed April 10, 1885. Serial No. 161,852. (No model.)

To all whom it may concern:

Be it known that I, James L. Cathcart, a citizen of the United States, residing at Alexandria, in the county of Alexandria and State of Virginia, have invented certain new and useful Improvements in Railroad Fish-Plates; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to letters or figures of reference marked thereon, which form a part of this specification.

railroad fish-plate that will admit of ready engagement of the rails therewith, that will securely connect the rails, allow for expansion and contraction, and obviate the difficulty arising from the working loose of the nuts commonly used in securing fish-plates to the rails. To accomplish this I employ a rail slotted transversely through the web and a girder-shaped fish-plate made in one piece and of the form substantially as shown.

Figure 1 shows my invention in use. Fig. 2 is a plan view of the same. Fig. 3 is a ver-

tical transverse view of the invention, divided by dotted line 4.

A is the fish-plate. A' A'' are the two bars 30 of the same, beveled at each end, as shown in Fig. 2, and a is the web. a' is the slot cut in the end of the rail, into which the web a fits closely when the fish-plate is in use.

In applying my invention for use the web is 35 forced into the slot a' as far as the same will allow. The next rail is then placed in position and crowded forward, leaving only enough space between the ends of the rails to allow for expansion and contraction. The joint is 40 then complete, and the rails are securely held in place.

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

A railway fish - plate constructed in one 45 piece and having the ends of its bars beveled for the purpose specified, and as shown and described.

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

JAMES L. CATHCART.

Witnesses:

A. C. JENKINS, S. H. WALKER.