No. 843,879. PATENTED FEB. 12, 1907.

E. B. ENTWISLE.

TONGUE SWITCH.

APPLICATION FILED APR. 11, 1906.

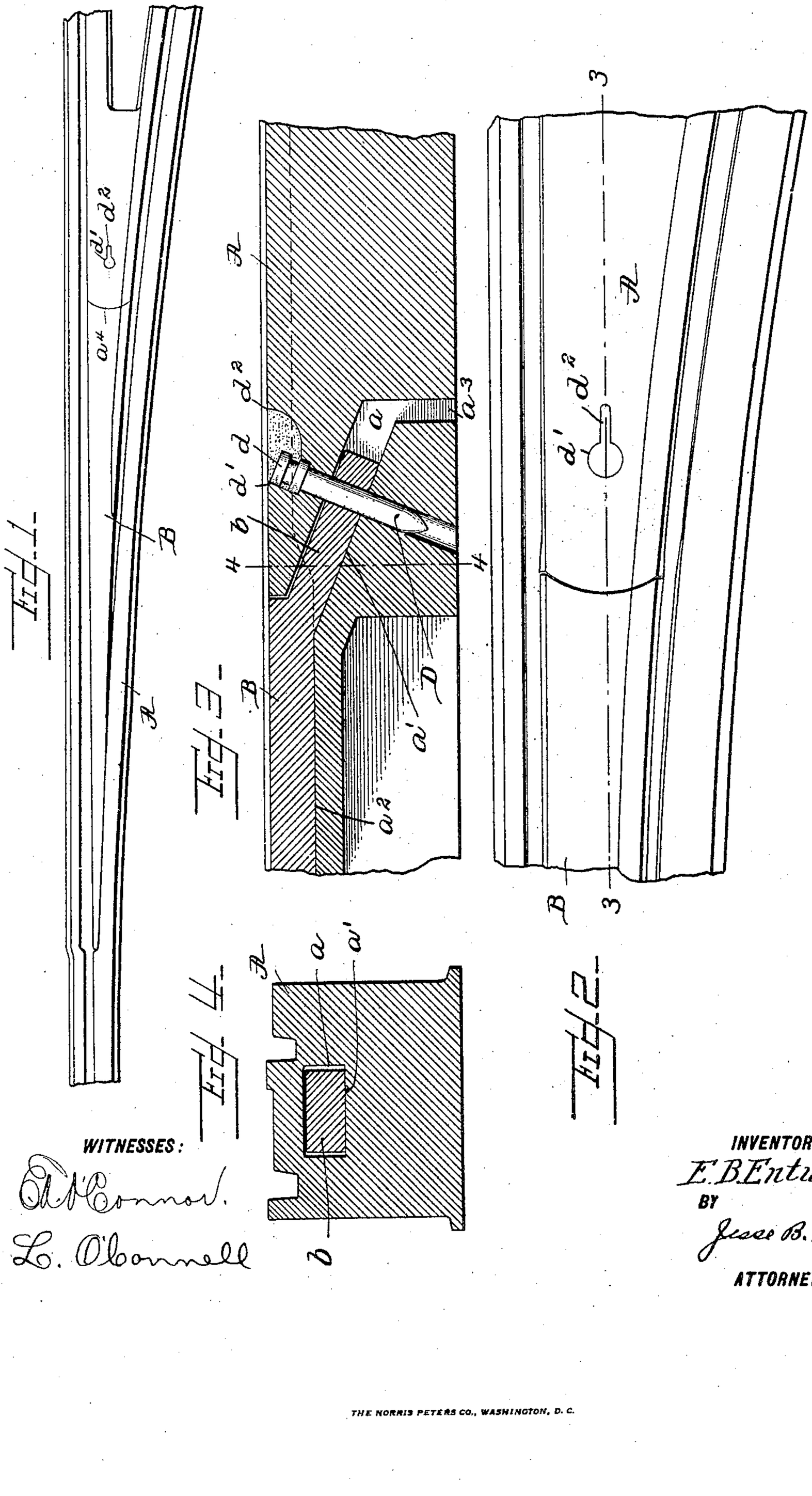

FIG. 1.

FIG. 3.

FIG. 4.

FIG. 2.

WITNESSES:

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TONGUE-SWITCH.

No. 843,879. Specification of Letters Patent. Patented Feb. 12, 1907.

Application filed April 11, 1906. Serial No. 311,049.

To all whom it may concern:

Be it known that I, EDWARD BRADBURY ENTWISLE, of Johnstown, in the county of Cambria and State of Pennsylvania, have invented a new and useful Improvement in Tongue-Switches, of which the following is a full, clear, and exact description, reference being had to the accompanying drawings, which form a part of this specification.

My invention has relation to certain new and useful improvements in that class of tongue-switches known as "protected" or "armored" heel switches.

Prior to my invention in this type of switch it has been customary to reduce the thickness of the tongue at the heel portion thereof an amount equal to the thickness of the plate or the thickness of the metal above the heel of the tongue.

The object of my invention is to reinforce the heel of the tongue without adding to the thickness of the tongue throughout its length.

Another object of this invention is to relieve the strain on the pivot-pin by throwing a portion of the strain on the lower face of the heel of the tongue.

With these objects in view my invention consists in the novel construction, arrangement, and combination of parts, all substantially as hereinafter described, and pointed out in the appended claims, reference being had to the accompanying drawings, in which—

Figure 1 is a plan view of a switch embodying my invention. Fig. 2 is an enlarged plan view of a portion of the switch. Fig. 3 is a sectional view on the line 3 3 of Fig. 2. Fig. 4 is a sectional view on the line 4 4 of Fig. 3.

A is the body portion of the switch, having the depressed portion a^2; a, the opening in the body of the switch to receive the heel of the tongue, and a^3 is a drain for the opening a.

B is the tongue, the heel having portion b, which is at an angle to the body of the tongue, the under side of the heel resting on the face a'.

D is the pivot-pin, having the grooved head d. This pin D is placed at right angles to the heel of the tongue, thereby throwing the top of the orifice at a greater distance to the rear of the point a^4 without lengthening the heel of the tongue. Projecting longitudinally from the orifice d', in which the head d of the pivot-pin is seated, is a slot d^2, into which a bar may be inserted to engage the groove in the head of the pivot-pin to withdraw the pin.

As can be seen by reference to Fig. 3, a portion of the forward strain will be against the face a', thereby relieving the pin of a portion of the load.

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

1. In a tongue-switch, a body structure having depressed floor portions forming the bed for the tongue, the bed for the heel of the tongue being at an angle to the bed for the body of the tongue, for the purpose set forth.

2. In a tongue-switch, a body structure having a depressed floor portion forming the bed for the body of the tongue, and a rearwardly and downwardly diverging portion forming the bed for the heel of the tongue.

3. In a tongue-switch, a body structure having a depressed floor portion forming the bed for the body of the tongue, and a rearwardly and downwardly diverging orifice forming the seat for the heel of the tongue.

4. In a tongue-switch, a body structure having depressed floor portions at an angle to each other, a tongue seated thereon, the body of the tongue seated on one portion and the heel of the tongue on the other portion at an angle thereto.

5. In a tongue-switch, a body structure having depressed floor portions at an angle to each other, a tongue seated thereon, the body of the tongue seated on one portion, and the heel of the tongue on the other portion, and a pivot-pin at right angles to heel of the tongue.

6. In a tongue-switch, a body structure having an overhung opening diverging at an angle to the body of the tongue, in combination with a tongue having its heel portion at a corresponding angle and seated on said diverging portion.

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

EDWARD BRADBURY ENTWISLE.

Witnesses:

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