

No. 773,551.

PATENTED NOV. 1, 1904.

I. K. DIXON.
TONGUE SWITCH.

APPLICATION FILED MAR. 10, 1904.

NO MODEL.

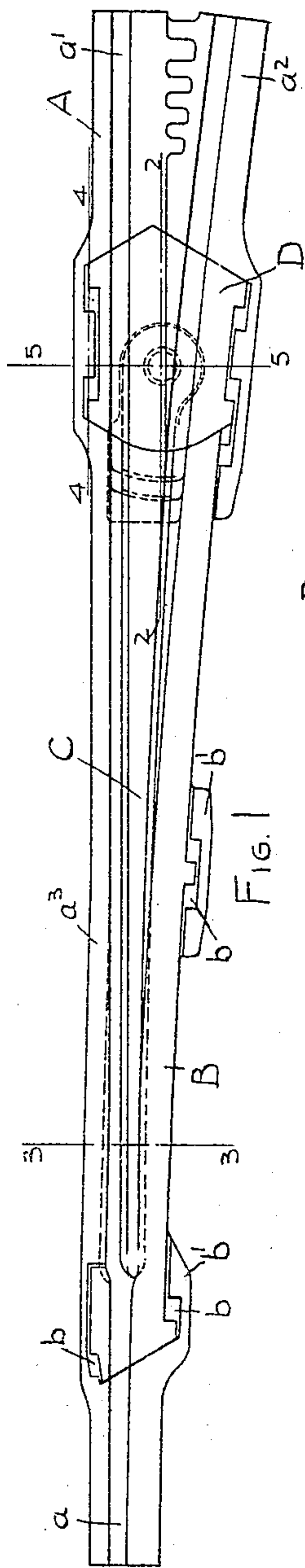


Fig. 1

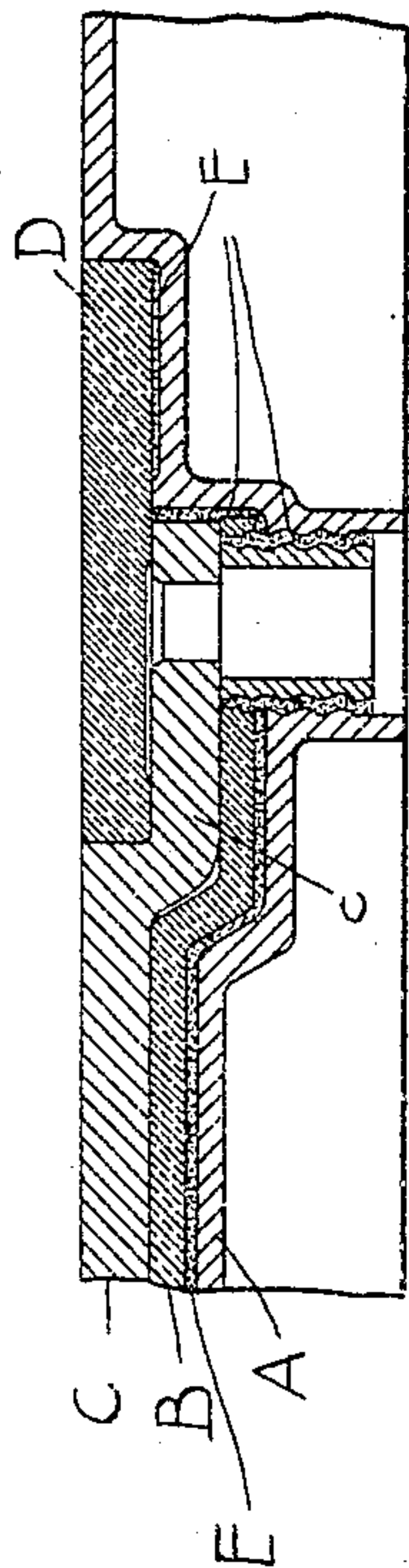


Fig. 2



Fig. 3

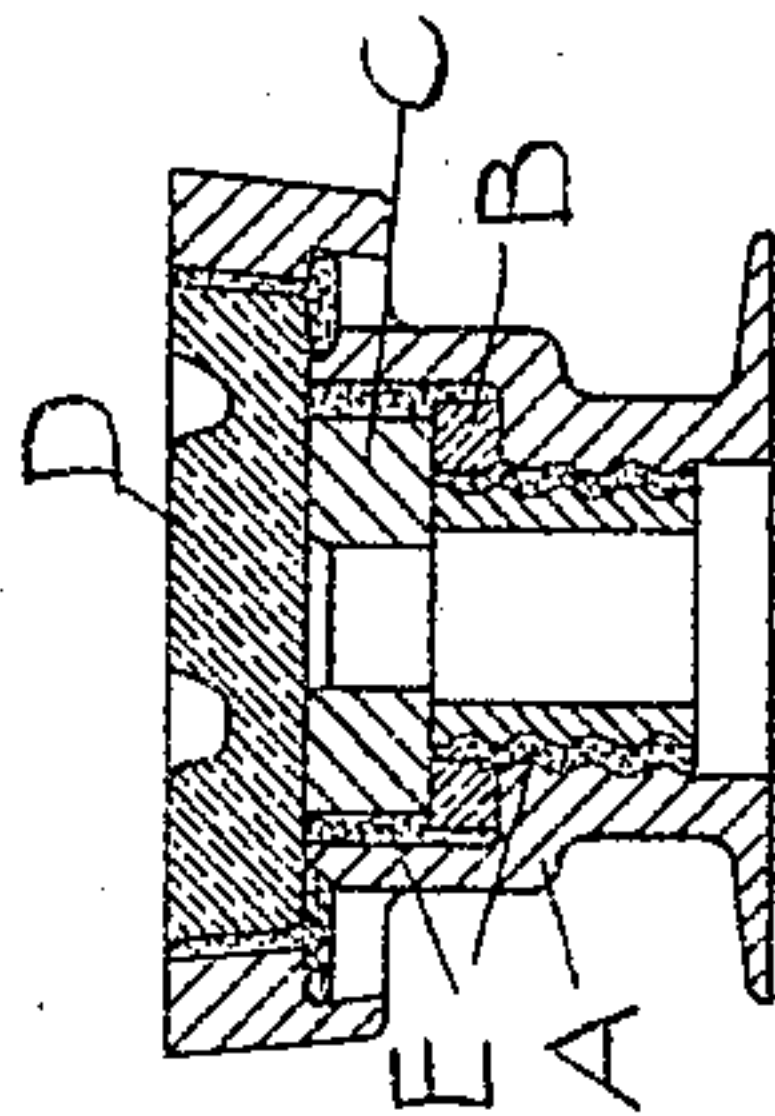


Fig. 4

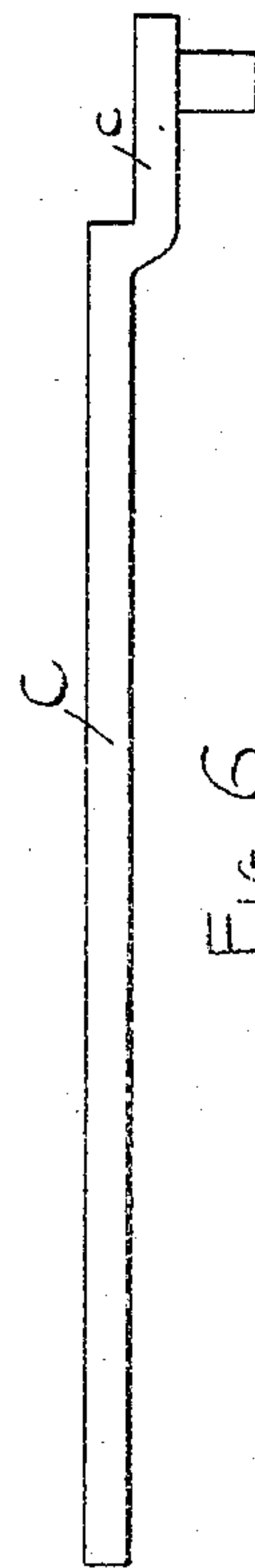


Fig. 5

WITNESSES:

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INVENTOR

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BY

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UNITED STATES PATENT OFFICE.

ISRAEL K. DIXON, OF JOHNSTOWN, PENNSYLVANIA, ASSIGNOR TO THE
LORAIN STEEL COMPANY, A CORPORATION OF PENNSYLVANIA.

TONGUE-SWITCH.

SPECIFICATION forming part of Letters Patent No. 773,551, dated November 1, 1904.

Application filed March 10, 1904. Serial No. 197,562. (No model.)

To all whom it may concern:

Be it known that I, ISRAEL K. DIXON, 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 tongue-switches of that type in which the parts subject to the greatest wear are made of harder material and renewable and in which the heel portion of the tongue is covered by a renewable plate of hard metal which prevents the tongue from kicking and also protects it from the pounding action of car and other street traffic.

The object of my invention is to improve the general construction of a switch of this type and in particular to provide an improved construction of the switch-tongue which will possess greater strength and stiffness than those heretofore employed in this type of switches.

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, a section on the line 2 2 of Fig. 1; Figs. 3, 4, and 5, sections taken, respectively, on the lines 3 3, 4 4, and 5 5 of Fig. 1; and Fig. 6, a side view of the switch-tongue detached.

The letter A designates the body of the structure formed, preferably, by steel casting, having the rail-connecting arms a a' a^2 and the guard-forming portion a^3 . In this casting is formed a seat for the renewable tongue-bearing plate B, which extends underneath the tongue from its heel to a point in advance of its point, fitting at one edge underneath the guard portion a^3 and at its opposite edge portion rising to the track-level and forming the tread-surface for the branch-

ing track side of the structure. This plate B is removably secured to the casting by suitable fastenings, such as the keys b , to form seats for which the casting has the upwardly-projecting portions b' .

C designates my improved tongue, which is of substantially uniform thickness throughout its length, its heel portion c being depressed to the extent of its thickness, or substantially so, to receive the protecting-plate D. Heretofore in this type of switch it has been customary to cut away this portion of the tongue to receive the protecting-plate, thereby weakening the tongue to such an extent as to seriously impair its strength and rigidity. This objection I entirely overcome by forming the tongue as shown and by depressing the heel portion of the plate B to receive the full thickness of the tongue at this point. This construction also permits of increased thickness for the plate D and permits those portions of the under surface of the plate which bear upon the tongue to be ground to an accurate fit therewith.

E, wherever seen, indicates spelter or similar material for bedding the parts.

The plate D is removably secured to its seat in order to permit the tongue C to be readily removed when desired.

I do not wish to limit myself to the precise details of construction and combination of parts as herein shown and described, as these may be changed without affecting the spirit and scope of my invention.

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

1. In a tongue-switch of the type described, a switch-tongue of substantially uniform thickness throughout its length, and having its heel portion depressed to seat a protecting-plate.

2. In a tongue-switch of the type described, a switch-tongue of substantially uniform thickness throughout its length, and having its heel portion depressed, a hard bed-plate forming the seat for said tongue and having a depressed portion to receive the depressed

portion of the tongue, and a plate sealing over the depressed portion of the tongue.

3. In a tongue-switch of the type described, a switch-tongue of substantially uniform
5 thickness throughout its length, and having its heel portion depressed to an amount substantially so, to seat a protecting-plate.

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

ISRAEL K. DIXON.

Witnesses:

LORETTO O'CONNELL,
H. W. SMITH.