

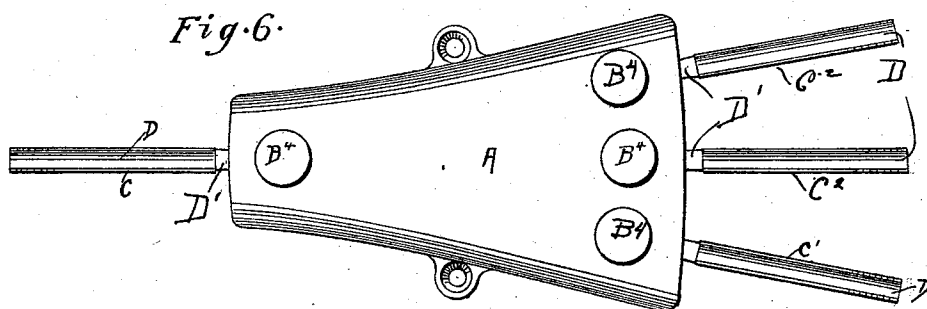
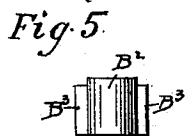
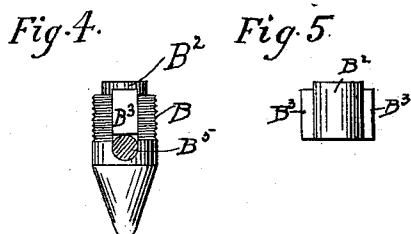
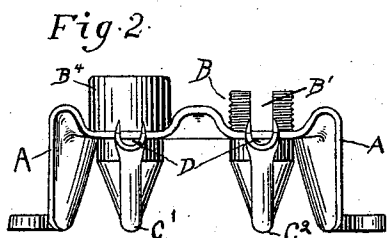
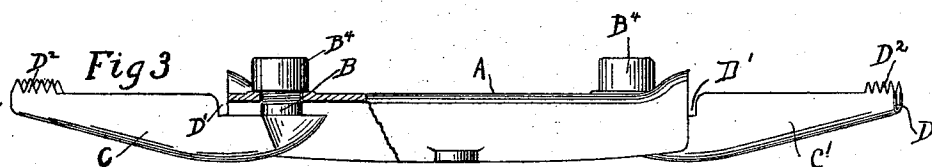
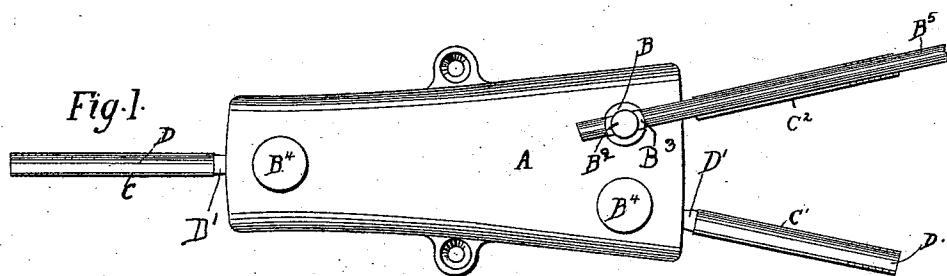
(No Model.)

M. M. WOOD.

ADJUSTABLE SWITCH FOR TROLLEY SYSTEMS.

No. 536,250.

Patented Mar. 26, 1895.



Witnesses
Jno. H. Coulter
D. M. Carter

Inventor:
M. M. Wood
by M. M. Wood,
Attorney

UNITED STATES PATENT OFFICE.

MONTRAVILLE M. WOOD, OF CHICAGO, ILLINOIS.

ADJUSTABLE SWITCH FOR TROLLEY SYSTEMS.

SPECIFICATION forming part of Letters Patent No. 536,250, dated March 26, 1895.

Application filed July 14, 1894. Serial No. 517,567. (No model.)

To all whom it may concern:

Be it known that I, MONTRAVILLE M. WOOD, a citizen of the United States, residing at Chicago, in the county of Cook and State of Illinois, have invented certain new and useful Improvements in Adjustable Switches, of which the following is a specification.

My invention relates to switches for trolley systems and has for its object to provide a new and improved adjustable switch, of which the following is a description, reference being had to the accompanying drawings, wherein—

Figure 1 is a plan view of the adjustable switch. Fig. 2 is an end view of same. Fig. 3 is a side view of same. Figs. 4 and 5 are details. Fig. 6 is a view of a three way switch.

Like letters refer to like parts throughout the several figures.

Referring to Figs. 1, 2 and 3, I have here shown a two-way switch. A is the plate or body of the switch and is provided with holes into which are inserted the upturned ends B of the tongues C, C', C² of the switch. These holes are preferably circular and the ends B just fit them, but are loose enough to allow the tongues to be rotated or moved so that they can be set at different angles with each other. The tongues C, C', C² are each provided with the groove D for the trolley wire. Each tongue is cut away at D' so that the bottom of the groove D will be substantially on a level with the top of the plate or body A.

D² D² are projecting teeth on the ends of each of the tongues. The upturned ends B are cut away on a line with the grooves D so as to form the slots B' B'. Within the hollow of the end B of each tongue is the solid piece B² preferably of some hard metal as iron. (See Figs. 4 and 5.) These pieces B² are provided with the projecting lugs B³ B³ which fit into the slots B' when said pieces are in position. Said pieces B² fit loosely in the ends B so as to be easily moved therein. The caps B⁴ are screwed upon the ends B, said ends being threaded for that purpose.

B⁵ is the trolley wire.

The three way switch is substantially the same as the two-way switch shown in Fig. 1 but there are three tongues at one end instead of two. It is evident that these several parts may be varied in construction and arrangement without departing from the spirit of my

invention, and I therefore do not wish to be limited to the exact form shown.

The use and operation of my invention are as follows: Referring to the switch as shown in Figs. 1, 2, and 3, when it is desired to attach the trolley wires to the switch, the caps B⁴ and pieces B² are removed and the wire inserted in the slots B' and the grooves D. The pieces B² are thus inserted and will project beyond the end of the part B' as shown in Fig. 1. If now the cap B⁴ is screwed down its top comes in contact with the piece B² and presses it forcibly against the trolley wire and said trolley wire will be firmly gripped between the piece B and the plate or body A, and held in place. Before the caps B⁴ are fully tightened the tongues C' C² can be moved so as to vary the angles between them, and hence any switch can be used equally well as a right hand, left hand or Y turn out. The teeth D² D² on the end of the tongues, can be bent over so as to prevent the wire from moving away from the ends of the tongues under the pressure of the trolley wheel. In the three-way switch the three tongues are arranged as indicated and they may be set as desired.

I claim—

1. The combination in a switch for trolley systems, of one or more tongues adjustably attached to a plate or body portion and a separate mechanical clamping device associated with each of said tongues by which they are firmly clamped and held in any desired position.

2. The combination in a switch for trolley systems, of one or more tongues adjustably attached to a plate or body portion and a mechanical clamping device associated with each of said tongues and adapted to be manipulated so as to clamp or unclamp the trolley wire at will.

3. An adjustable switch for trolley systems comprising tongues, each having a hollow upturned end passing through an opening in the body of the switch, an opening in said ends for the trolley wire, a plug fitting in the hollow of said ends and resting on the trolley wire and means of forcing said plug against the trolley wire so as to firmly grip and hold it in position.

4. A tongue for an adjustable switch hav-

ing a hollow upturned end, a slot or slots in
said end for the trolley wire, a plug or the
like adapted to fit in said upturned end and
a cap adapted to be screwed on the end so as
5 to force the plug against the trolley wire and
hold it in position, substantially as described.

5. The combination in a switch for trolley
systems of one or more tongues adjustably at-
tached to a plate or body portion, and a me-

chanical clamping device associated with said ro
tongues by which they are firmly clamped and
held in any desired position, said mechanical
clamping device also adapted to grip and
clamp the trolley wire.

MONTRAVILLE M. WOOD.

Witnesses:

DONALD M. CARTER,

JNO. H. COULTER.