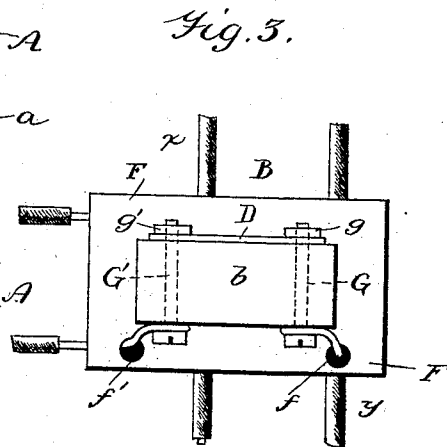
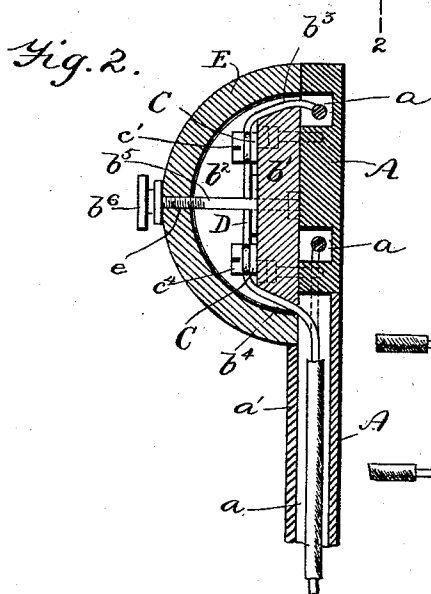
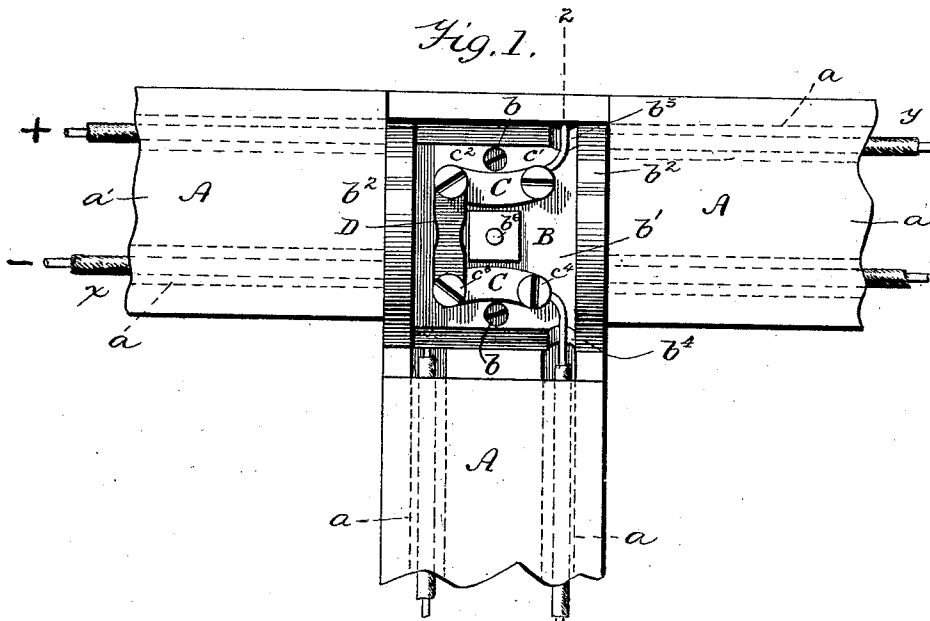


(No Model.)

F. BATHURST.  
CROSS OVER BLOCK.

No. 440,753.

Patented Nov. 18, 1890.



**WITNESSES:**

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# UNITED STATES PATENT OFFICE.

FREDERICK BATHURST, OF LONDON, ENGLAND.

## CROSS-OVER BLOCK.

SPECIFICATION forming part of Letters Patent No. 440,753, dated November 18, 1890.

Application filed March 31, 1890. Serial No. 345,953. (No model.) Patented in England January 12, 1889, No. 586.

*To all whom it may concern:*

Be it known that I, FREDERICK BATHURST, a subject of the Queen of Great Britain, residing at 111 King Henry's Road, London, England, have invented certain new and useful Improvements in Cross-Over Blocks for Electric Circuits, of which the following is a specification, the same having been patented to me in Great Britain in 1889, No. 586.

My invention relates to devices for securing the wires of an electric circuit where it is necessary that they shall cross; and the object of my invention is to produce a block or bridge-piece which will render short-circuiting at the crossing-point impossible, the said block forming, also, a convenient location for a fusible cut-out.

My invention consists in the construction and combination of parts, as hereinafter described and claimed.

In the accompanying drawings, Figure 1 is a plan view of my improved cross-over block, the cover being removed and portion of wall-molding leading to it. Fig. 2 is a section on line 2 2 of Fig. 1, the cover being in place; and Fig. 3 is a plan view of a modification hereinafter referred to.

Referring now to Figs. 1 and 2, A indicates the ordinary wall-molding having grooves  $a$  and cover-strips  $a'$ . At the point of intersection of the vertical molding with the horizontal molding a portion of the cover-strip is omitted and in its place is secured by screws  $b$  the cross-over block B, consisting of base-piece  $b'$ , of any suitable insulating material, and sides  $b^2$ , having rounded tops rising above the base. The base is grooved on its edges at  $b^3$   $b^4$  and carries two metallic plates C, said plates being provided with binding-screws  $c'$ ,  $c^2$ ,  $c^3$ , and  $c^4$ . A suitable cut-out D, of any preferred kind, connects the screws  $c^2$  and  $c^3$ . As shown in the drawings, the upper edge of the block or base does not entirely cover the horizontal molding, resulting in free communication of groove  $b^3$  with the upper groove of said molding. A connection is led from the upper main wire to screw  $c'$  and lies in groove  $b^3$ , and a similar connection is laid in groove  $b^4$  and

passes from screw  $c^4$  to one of the branch wires leading to a lamp or other translating device. The other wire from said device passes under the block B and connects with the other main wire. A cover E is provided with central hole  $e$ , through which rises a screw  $b^5$  from base  $b'$ , and a nut  $b^6$ , fitting said screw, serves to secure the cover in position.

I do not limit myself to the exact details and proportions shown. For instance, the plates C might be omitted and the fusible cut-out connect screws  $c'$  and  $c^4$ , and the base might be round instead of square, or the cover square instead of arched, or the plates C, their screws, and the cut-out might be omitted and the branch wires simply pass directly over the block and connect with the upper main wire.

In Fig. 3 I illustrate a modified form of block, in which the base is provided with a projecting flange F on all sides. This flange has a hole  $f$ , which, when the block is in position relative to the main and branch circuits, is directly over the upper main wire. A hole  $f'$  in the flange is located below the plane of the lower main wire  $x$ . Through the central portion of the block are two metallic pins G G', and a connection is made from one projecting end of pin G to the upper main wire  $y$  through hole  $f$ , and a connection from one projecting end of pin G' passes through hole  $f'$  to one of the branch wires. The other branch wire passes under the block to the lower main wire. The fusible cut-out D is connected to the ends of pins G G' opposite the connecting-wires by screws  $g$   $g'$ .

Having now described my invention, I claim—

1. The combination, with a pair of main wires and a pair of branch wires therefrom, of a cross-over block located at the junction, one of the branch wires leading over the top or face of the block to a main wire and the other branch wire leading underneath the block to the other main wire, substantially as described.

2. The combination, with the two strips of moldings, one carrying main wires and the

other branch wires therefrom, of a cross-over  
block located at the junction, one of the  
branch circuits passing from one main wire  
over or through the block and the other pass-  
5 ing directly from the other main wire under  
the block.

In witness whereof I have hereunto signed

my name in the presence of two subscribing  
witnesses.

FREDERICK BATHURST.

Witnesses:

A. W. HARRISON,  
THOMAS K. TRENCHARD.