

(No Model.)

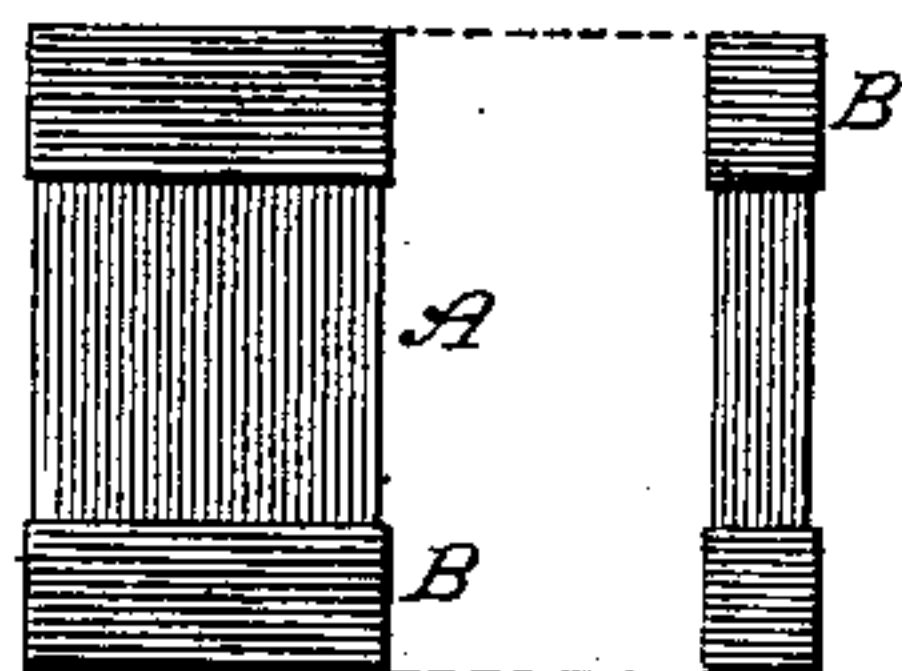
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FUSIBLE SAFETY STRIP FOR ELECTRIC CIRCUITS.

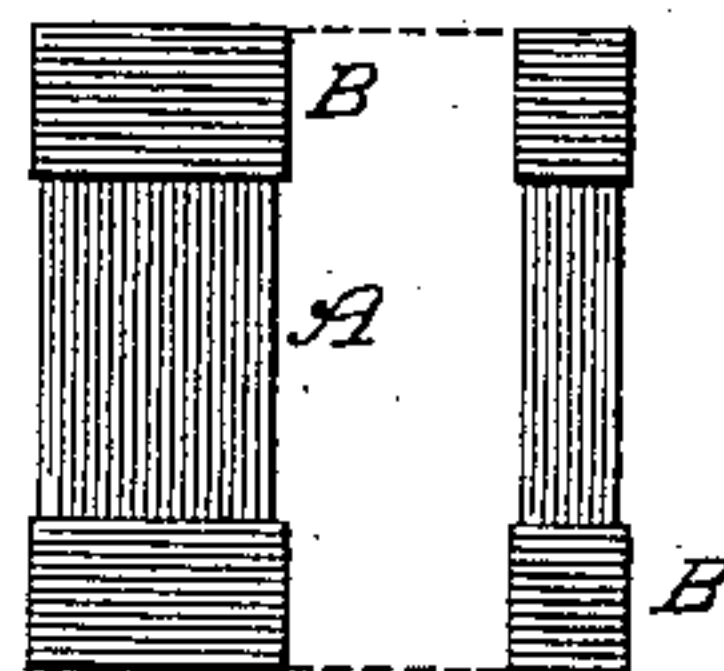
No. 292,713.

Patented Jan. 29, 1884.

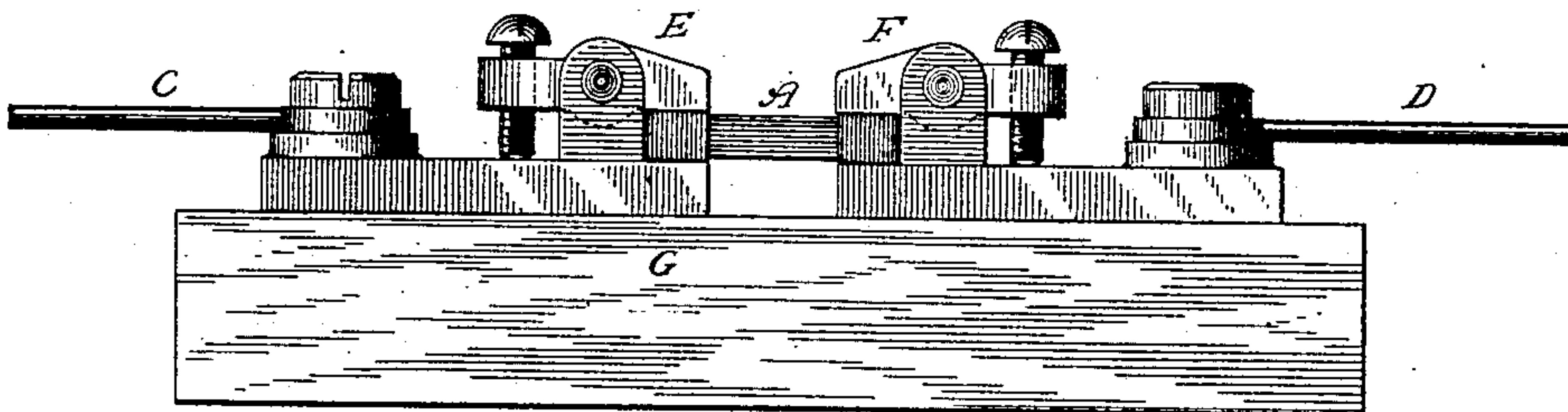
*Fig. 1.*



*Fig. 2.*



*Fig. 3.*



*Attest:*

*Raymond W. Barnes.*  
*H. Frisby*

*Inventor:*

*Edward Weston*  
*By Parker W. Page*  
*atly.*

# UNITED STATES PATENT OFFICE.

EDWARD WESTON, OF NEWARK, NEW JERSEY, ASSIGNOR TO THE UNITED STATES ELECTRIC LIGHTING COMPANY, OF NEW YORK, N. Y.

## FUSIBLE SAFETY-STRIP FOR ELECTRIC CIRCUITS.

SPECIFICATION forming part of Letters Patent No. 292,713, dated January 29, 1884.

Application filed September 12, 1883. (No model.)

*To all whom it may concern:*

Be it known that I, EDWARD WESTON, a subject of the Queen of Great Britain, and a resident of Newark, in the county of Essex

5 and State of New Jersey, have invented certain new and useful Improvements in Fusible Safety-Strips, of which the following is a specification, reference being had to the drawings accompanying and forming a part of the same.

10 My present invention is an improvement on the safety-strips invented by me, and described in Letters Patent of the United States No. 259,614. The strips referred to are composed of a soft and easily-fused alloy, and are inserted

15 in a circuit, or any branch of the same, to prevent an abnormal flow of current over the line by fusing, and so interrupting the circuit before any injury can be done by the heat produced by an excess of current. In using such

20 strips it is usual to employ clamping-jaws or some similar means that are electrically connected with the conductors of a severed circuit. The fusible strips are inserted in these jaws, and bridge over the break in the circuit.

25 To secure good contact between the strips and the jaws, considerable pressure is required; but I have found that, owing to the extreme softness of the fusible metal, the ends of the strips, or those portions which are held by the

30 jaws, slowly spread under the necessary pressure, so that the contact is impaired or the strip rendered unfit for use.

To adapt the strips to withstand the pressure of the clamps or jaws is the object of my invention, and I accomplish this by forming

35 by electro-deposition around the ends of the strips protecting caps or jackets of some harder metal, such as copper. When thus protected, I have found the strips to be capable

40 of withstanding considerable pressure without spreading, and to be much more serviceable for general use.

In carrying out my invention I form strips, bars, or blocks of an easily-fused metal, by

45 preference such as that described in my pat-

ent referred to, the size and shape of the strips varying, of course, according to the circuits with which they are to be employed. I then immerse their ends in an electroplating-bath and deposit upon them caps or jackets of some

50 harder metal, such as copper. The thickness of the caps may vary; but in all cases it should be thick enough to re-enforce the ends of the strip to such a degree as to prevent them from spreading under the pressure of the clamps.

55 In the drawings hereto annexed, Figures 1 and 2 are face and side views of strips of different sizes, and Fig. 3 is a view in elevation of a clamping device containing a strip.

The body or main portion of the strip is 60 designated by the letter A, the re-enforcing caps on the ends by B.

Fig. 3 is a conventional representation of a clamping device for illustrating the manner in which the strips are held in a circuit.

65 C D designate the conductors of the line; E F, the clamping-jaws connected with them, and G a base upon which they are mounted.

I am aware that safety-strips have been combined with pieces of harder metal applied

70 to their ends on one or both faces; but the nature and the objects contemplated by this plan are widely different from that above described.

What I claim as my invention is—

75 1. A safety-strip for electric circuits, having electro-deposited caps or jackets of harder metal on its ends, as and for the purpose set forth.

2. The combination, with a fusible safety- 80 strip, of protecting caps or jackets of harder metal, surrounding or inclosing its ends, substantially in the manner described.

In testimony whereof I have hereunto set my hand this 7th day of September, 1883.

EDWARD WESTON.

Witnesses:

PARKER W. PAGE,  
W. FRISBY.