E. E. CLEMENT.

ELECTRICAL CONTACT.

APPLICATION FILED SEPT. 29, 1906.

1,105,489. Patented July 28, 1914.

Fig. 1.

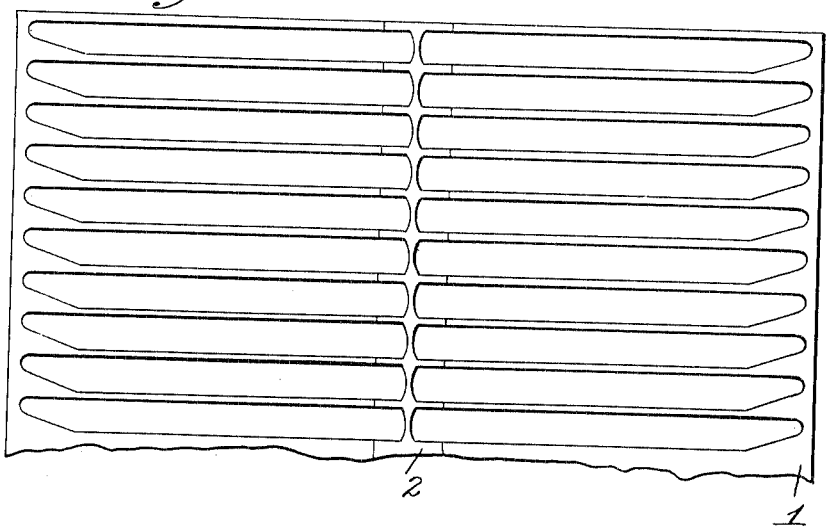


Fig. 2.

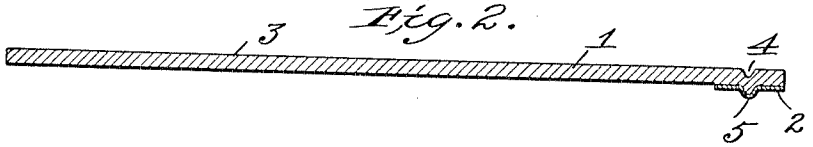
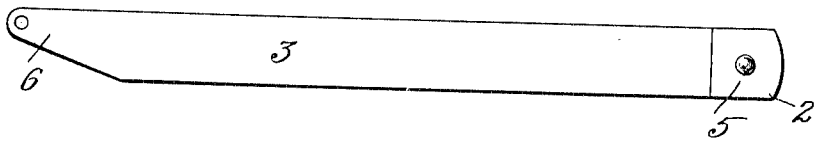


Fig. 3.



Witnesses,
H. C. Whiting
E. E. Clement

Inventor
Edward E. Clement

UNITED STATES PATENT OFFICE.

EDWARD E. CLEMENT, OF WASHINGTON, DISTRICT OF COLUMBIA.

ELECTRICAL CONTACT.

1,105,489. Specification of Letters Patent. Patented July 28, 1914.

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To all whom it may concern:

Be it known that I, EDWARD E. CLEMENT, a citizen of the United States, residing at Washington, in the District of Columbia, have invented certain new and useful Improvements in Electrical Contacts, of which the following is a specification, reference being had therein to the accompanying drawing.

My invention relates to contact springs and the contact points thereof, especially to the latter and more especially to contact points used upon the springs of relays or any other spring controlled switches.

The object of the invention is to eliminate the use of expensive platinum rivets which are now used for the contact points of the springs in relays and all other circuit changing springs, which not only reduces the labor and time consumed in placing the contact points on the spring, but reduces the expense of each spring to a minimum.

The invention consists in forcing or rolling a strip of thin platinum foil across the middle of a rectangular blank from which the contact springs are punched. This blank is preferably of German silver, and the springs are punched with their inner ends projecting into the foil-covered portion thereof. After the springs are blanked out, those which ought to have a projecting point receive a center punch on the German silver side of the blank so as to form a platinum-covered projection or point on the platinum-covered side. It will be understood that the platinum may be rolled upon the German silver blank or it may be placed thereon by plating, or by any other well known process of covering a base metal with a refined metal. Those springs, which, in use, abut against the punched springs are not operated upon after stamping and are left with a flat platinum face for the contact point, formed by the center punch in the opposing spring, to abut against.

My invention is illustrated in the accompanying drawings in which:

Figure 1 is a plan view of the German silver blank showing a platinum facing or coating thereon after the springs are punched out. Fig. 2 is a longitudinal section of a spring and its accompanying contact point, and Fig. 3 is a bottom plan view thereof.

Referring now to the drawings 1 represents a German silver blank and 2 indicates the platinum foil which is rolled, plated or forced thereon in such position that the contact springs 3 when blanked out will have their inner ends approximately abutting each other within the platinum coated area. Each spring is punched out in the form shown in Fig. 3 and where they are to have a projecting point they are depressed upon their upper side at 4 to form a projecting platinum covered point 5 upon the opposite side. If the spring is to have no point the depression made by center punching is omitted and the spring left perfectly flat as taken from the blank in Fig. 1. I may reverse the order of operation by rolling the foil on each end of the blank and stamping the springs out in reversed order with their reduced ends 6 meeting with the opposite end of the spring which is alined with it in stamping.

It will be seen from the foregoing that very little platinum is required to properly coat the contact points of the springs, and only 3 operations, comprising very little labor are needed to complete the springs for use.

All such modifications as do not depart from the spirit of the invention are considered within the scope and purview of the appended claim.

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

A blank for electrical contacts, comprising a sheet of base metal, having a narrow strip of unoxidizable precious metal applied longitudinally to its central portion and forced into close adherence with its substance, so as to form an integral mass therewith.

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

EDWARD E. CLEMENT.

Witnesses:

JAMES H. MARR,

E. EDMONSTON, Jr.