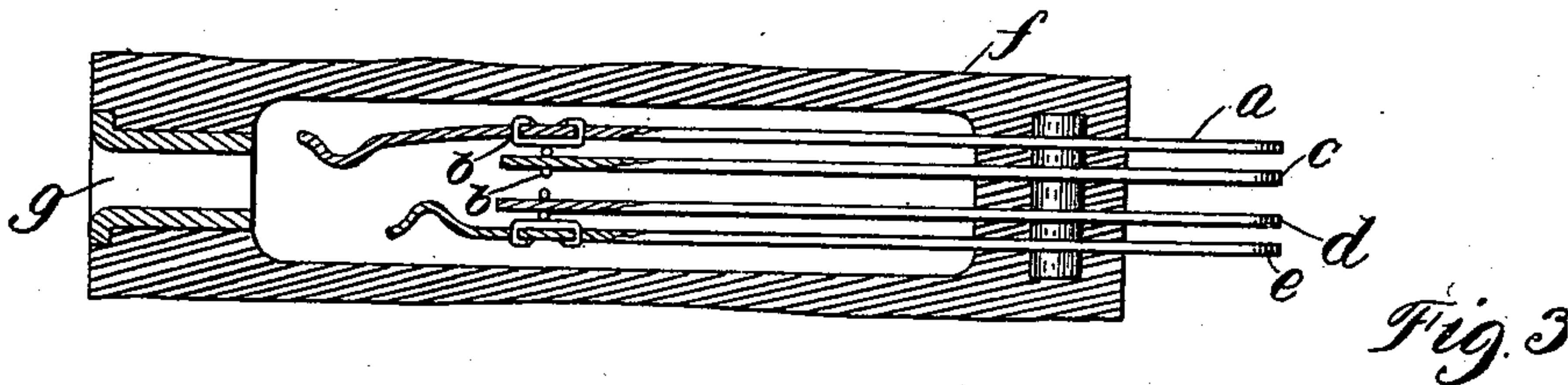
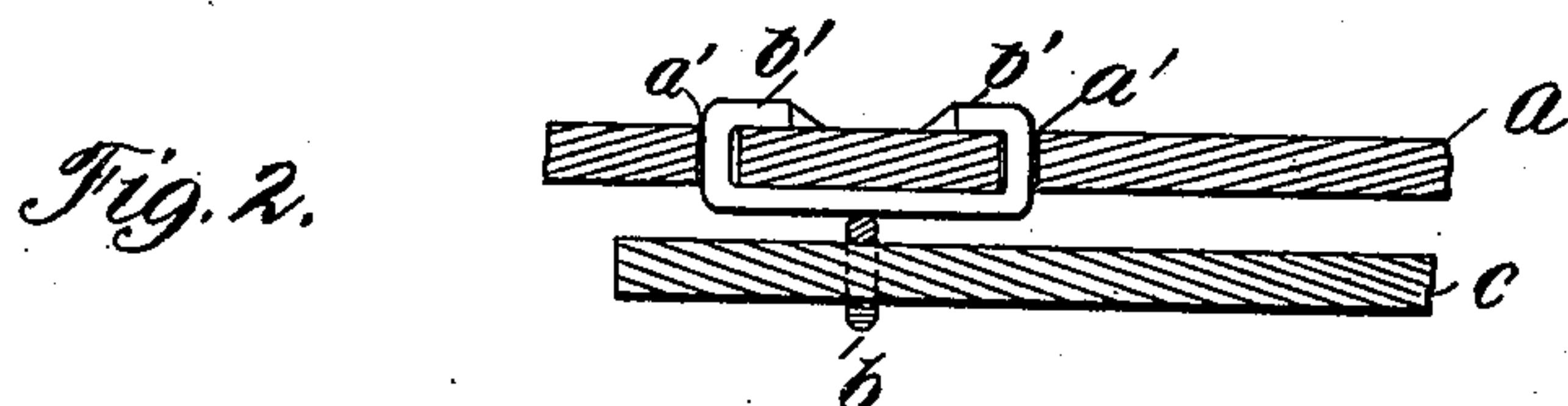
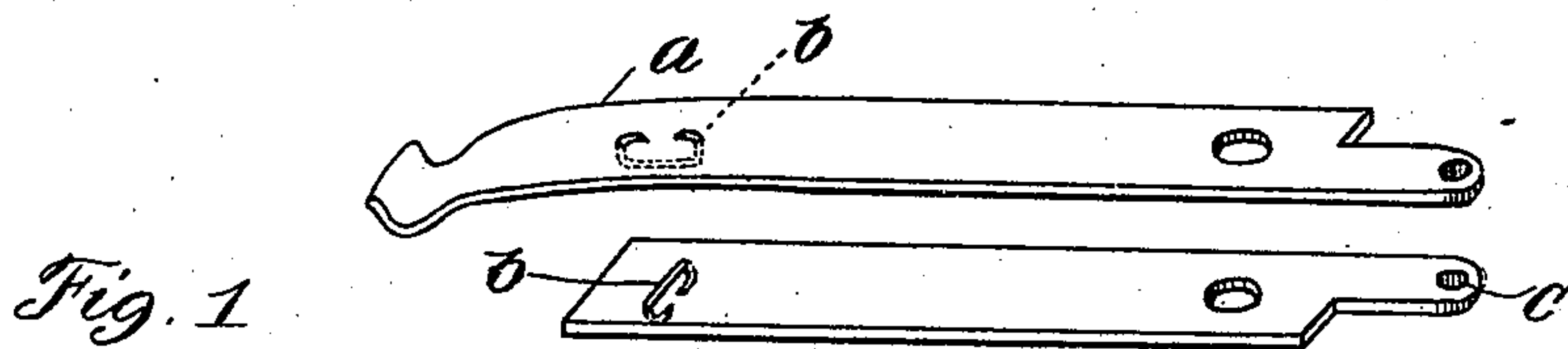


(No Model.)

C. E. SCRIBNER.  
CONTACT POINT FOR ELECTRICAL INSTRUMENTS.  
No. 563,326. Patented July 7, 1896.



Witnesses:

George L. Bragg  
W. Clyde Jones

Inventor:

Charles E. Scribner.  
By Borton Brown  
Attorneys.

# UNITED STATES PATENT OFFICE.

CHARLES E. SCRIBNER, OF CHICAGO, ILLINOIS, ASSIGNOR TO THE WESTERN  
ELECTRIC COMPANY, OF SAME PLACE.

## CONTACT-POINT FOR ELECTRICAL INSTRUMENTS.

SPECIFICATION forming part of Letters Patent No. 563,326, dated July 7, 1896.

Application filed August 17, 1895. Serial No. 559,629. (No model.)

*To all whom it may concern:*

Be it known that I, CHARLES E. SCRIBNER, a citizen of the United States, residing at Chicago, in the county of Cook and State of Illinois, have invented a certain new and useful Improvement in Contact-Points for Electrical Instruments, (Case No. 402,) of which the following is a full, clear, concise, and exact description, reference being had to the accompanying drawings, forming a part of this specification.

My invention is an improved mode of constructing contact points or surfaces from non-corrosive metal for the switch-contacts of electrical instruments, which effects economy in the metal employed and affords increased facility of manufacture. This mode of construction consists in securing comparatively thin wires of the contact-metal—such as platinum—upon the adjacent surfaces of the switch, the wires being arranged in planes at right angles to each other.

I have applied my invention particularly in spring-jacks for telephone-switchboards, in which compactness and durability of the contact-surfaces are essential and a limited area of contact is desirable. In such spring-jacks I fix platinum wires upon the adjacent surfaces of the contact-springs of the jack, in planes substantially at right angles to each other, by inserting the ends of the wires through perforations in the switch-springs. If desired, the extremities of the wires may be soldered to the switch-springs at the reverse surfaces of the springs. These short portions of wire I find are less expensive than the usual disks of non-corrosive metal, and they also afford an exceedingly small area of contact, which is very slightly liable to incrustations of dust between the contact-surfaces.

My invention is shown applied in a telephone spring-jack in the accompanying drawings.

Figure 1 is a perspective view of a pair of switch-springs equipped with wire contact-points in accordance with my invention. Fig. 2 is an enlarged longitudinal section of such a pair of springs. Fig. 3 is a longitudinal section of a spring-jack of the "five-point" type having such contact-points.

As shown in the section of Fig. 2, the switch-spring *a* is perforated with two small openings *a'*. Through these openings the extremities of a short piece of thin platinum wire *b* are inserted and bent over toward each other on the rear surface of the switch-spring. If desired, the extremities *b'* of this wire may be soldered to the switch-spring *a*. The wire *b* on spring *a* lies longitudinally upon the spring. That upon the strap or spring *c* lies transversely. Hence the wires come into contact at right angles to each other. The area of contact is limited to the point at which the two cylindrical surfaces touch each other. Hence a firm contact is secured and one which is not liable to interference from incrustations of dirt.

Fig. 3 represents a spring-jack in which the springs *a*, *c*, *d*, and *e* are arranged in a bundle, which is inserted in a slot or groove in a plate *f* of insulating material, the free extremities of the lever-springs *a* and *e* being presented before the opening of a tubular thimble *g*. Both pairs of springs and contact-straps *a c* and *d e*, respectively, are provided with wire contact-surfaces, as described.

I claim as new and desire to secure by Letters Patent—

1. The combination with a pair of switch-springs, of contact-wires of platinum or other non-corrosive metal on the adjacent surfaces of the switch-springs in planes substantially at right angles to each other, the ends of each wire being passed through perforations in the spring and bent back upon the spring to secure the wire thereto, as described.

2. The combination with two switch-springs, of platinum contact-wires carried on the adjacent surfaces of the springs in planes substantially at right angles to each other, the ends of each wire being passed through perforations in the spring and soldered to the spring on its rear surface, as described.

In witness whereof I hereunto subscribe my name this 12th day of July, A. D. 1895.

CHARLES E. SCRIBNER.

Witnesses:

ELLA EDLER,  
MYRTA F. GREEN.