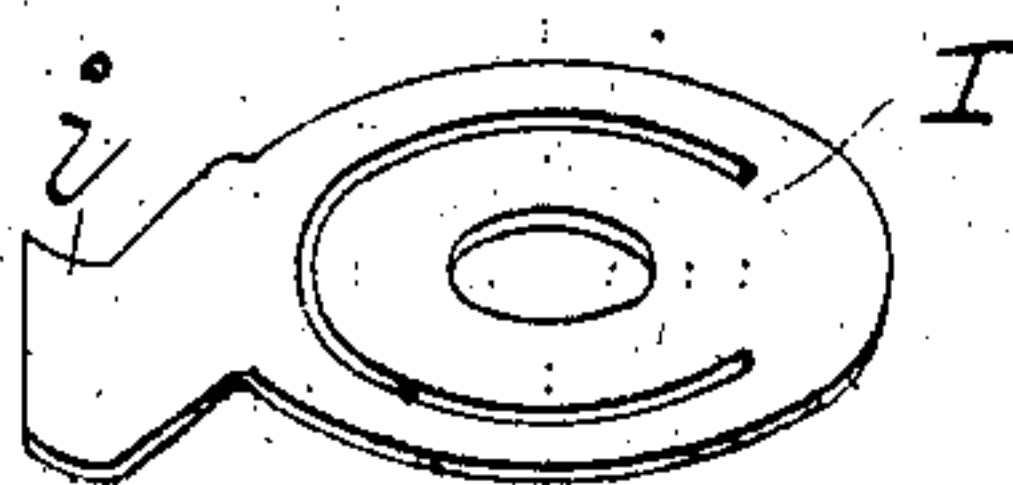
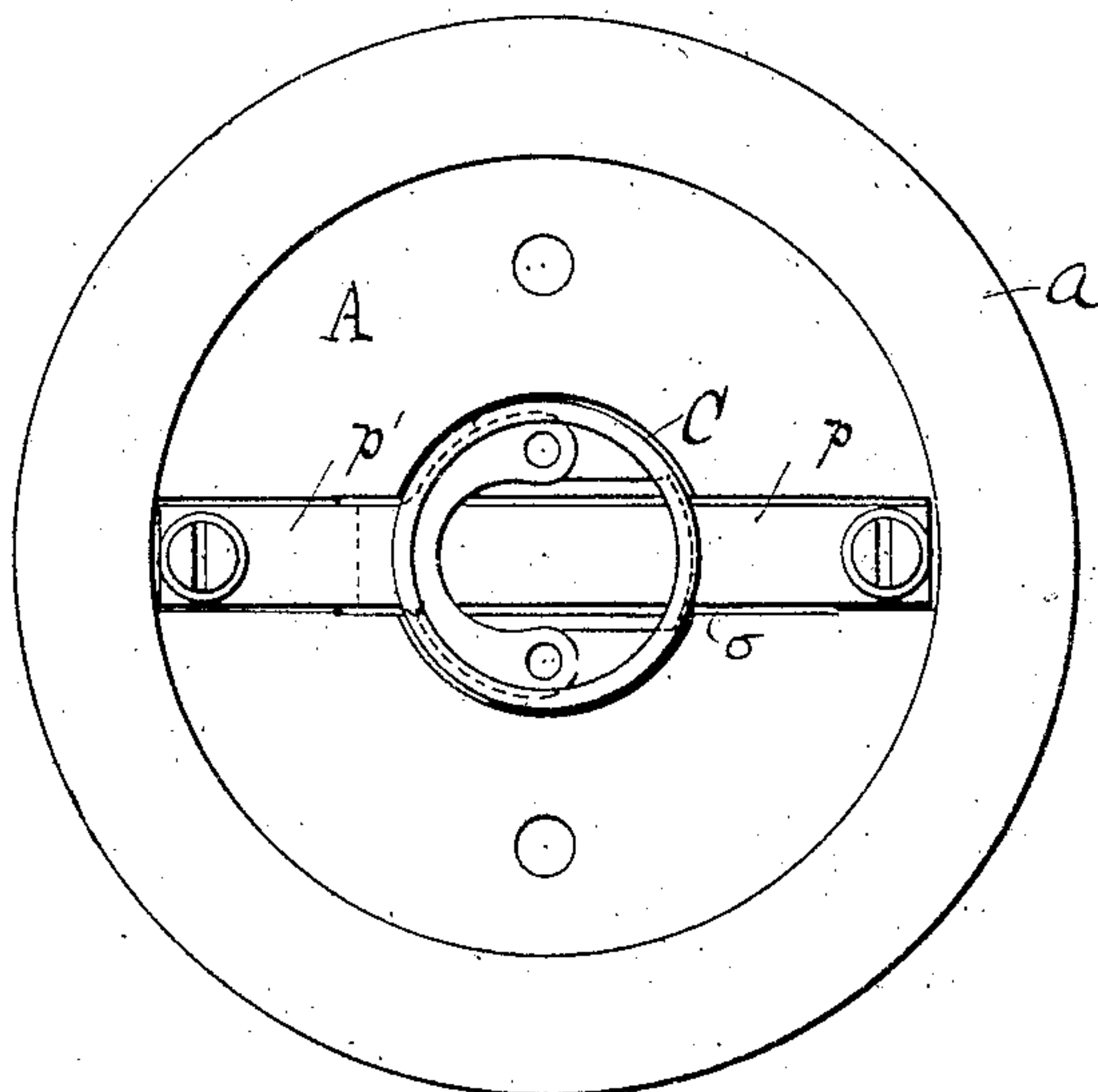
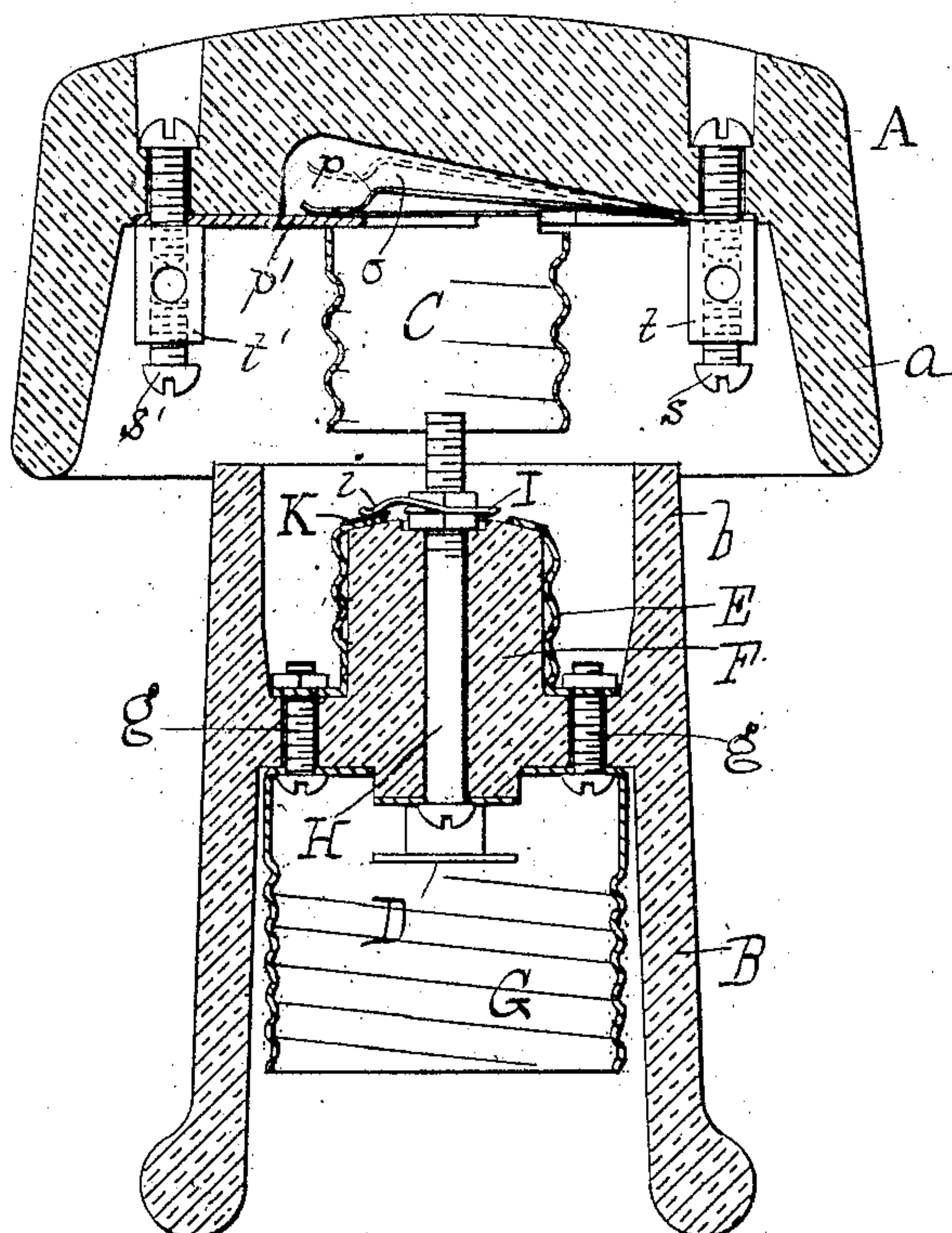


960,808.

2 SHEETS—SHEET 1.



W. E. Kerr
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 INCANDESCENT LAMP RECEPTACLE.
 APPLICATION FILED DEC. 23, 1909.

960,808.

Patented June 7, 1910.

2 SHEETS—SHEET 2.

Fig. 4.

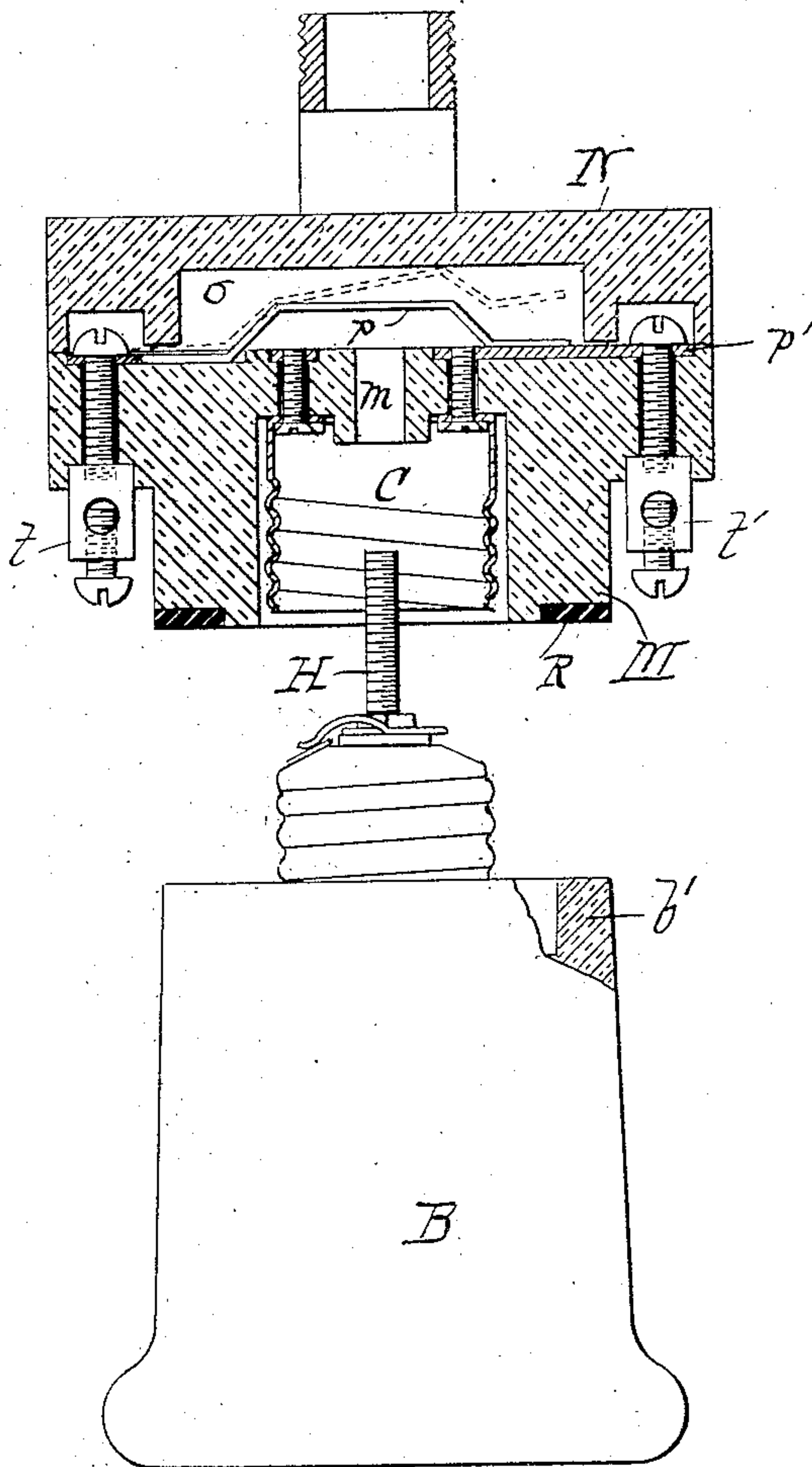
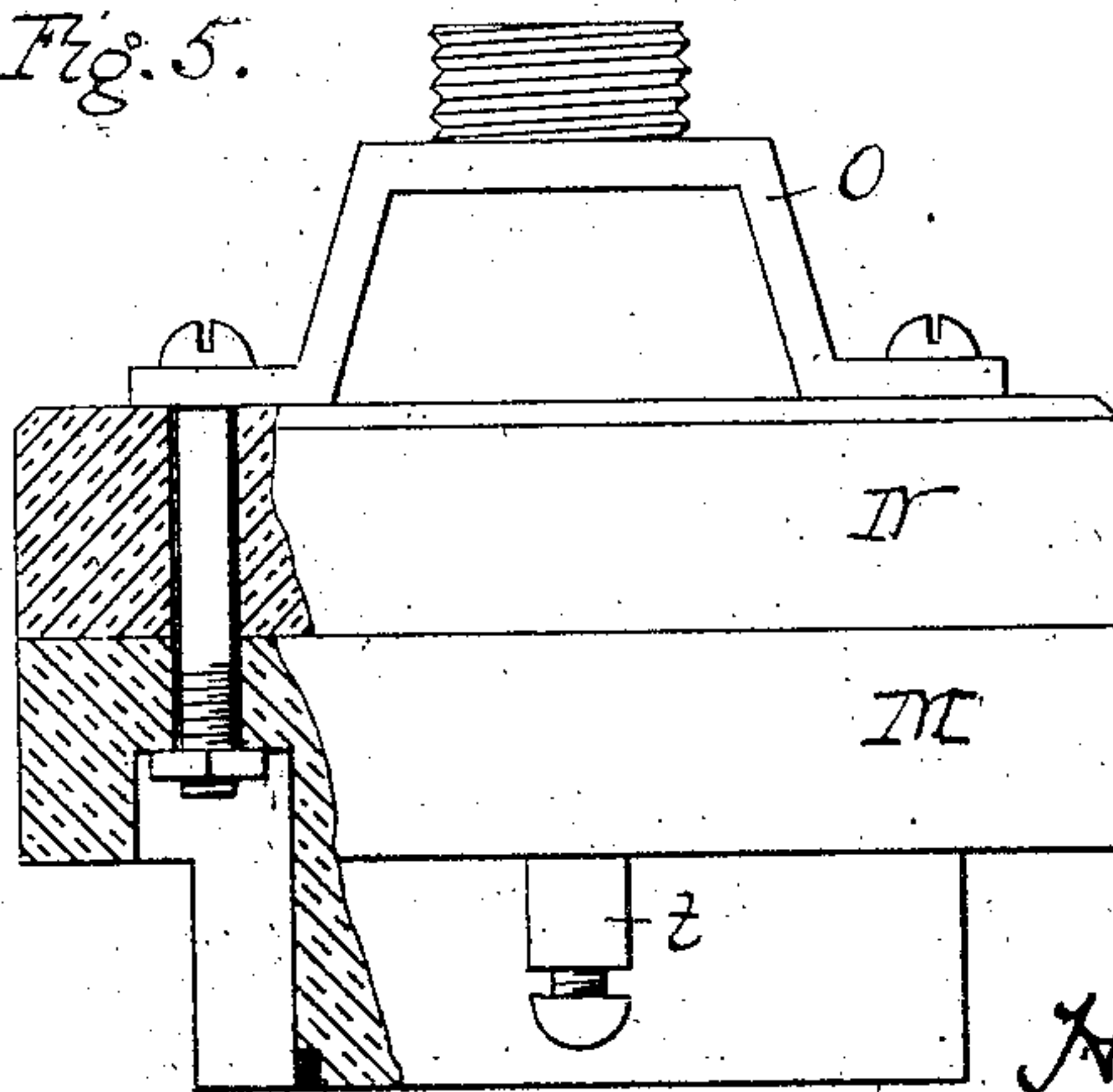


Fig. 5.



WITNESSES:

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UNITED STATES PATENT OFFICE.

HARRY U. BADEAU, OF BRIDGEPORT, CONNECTICUT, ASSIGNOR TO THE BRYANT ELECTRIC COMPANY, OF BRIDGEPORT, CONNECTICUT, A CORPORATION OF CONNECTICUT.

INCANDESCENT-LAMP RECEPTACLE.

960,808.

Specification of Letters Patent.

Patented June 7, 1910.

Application filed December 23, 1909. Serial No. 534,655.

To all whom it may concern:

Be it known that I, HARRY U. BADEAU, a citizen of the United States of America, and residing in the city of Bridgeport, in the county of Fairfield and State of Connecticut, have invented a certain new and useful Improvement in Incandescent-Lamp Receptacles, of which the following is a specification.

My invention relates to sockets for incandescent lamps and particularly to a receptacle intended for use in series lighting.

The object of my invention is to provide an improved receptacle for this purpose possessing several advantages of construction and operation, some of which are pointed out hereinafter.

In the accompanying drawings, Figure 1 is a vertical section of a receptacle in which my invention is incorporated, the parts being detached; Fig. 2 is an inverted plan view of the upper portion of the receptacle; Fig. 3 is a perspective of a detail drawn to enlarged scale; Fig. 4 is a side elevation of a modified structure, with parts detached and partially in section to show the modified structure; and Fig. 5 is a side elevation at right angles to Fig. 4, showing only the upper portion and this partially broken away.

In a series lighting system it is desirable to provide means for completing the circuit in case the filament of one lamp is rendered defective, for example, by burning out or breaking and also to provide means for closing the circuit so as not to interrupt service of the remaining lamps in the series in case one of the lamps is removed from its socket. Furthermore it adds an element of safety if the contacts are so arranged that no arc is formed when the lamp is removed from its socket. It is highly desirable also that the contacts, by means of which the circuit is maintained, should be protected from the corroding action of the atmosphere and from the dirt which is apt to find its way to the receptacle when suspended in the highway as is customarily the case, and also that the method of connecting the lamp socket to the receptacle be such that the filament be subjected to the least possible jar or sudden vibration. It will be seen that these advantages are all secured by the present construction.

In the embodiment of my invention shown

in Figs. 1 to 3 inclusive, the receptacle comprises a canopy A preferably of insulating material and provided with a depending skirt *a* to form a rain shed. On the inner face of the canopy are secured conducting strips *p* and *p*¹, the former being of spring metal and being free to rise out of contact with the strip *p*¹, into the recess *o*. Wire terminals *t*, *t*¹ are secured directly to the plates *p*, *p*¹ by the screws *s*, *s*¹, which are let into recesses in the upper face of the canopy. A screw shell C is secured in position and in contact with the strip *p*¹ by screws passing through perforations in the canopy and through the forked inner end of the strip *p*¹ which lies over the base of the shell. The lamp base B, also preferably of insulating material, carries a lamp socket of common type comprising a screw shell G and central contact D. The shell G is secured by means of bolts *g* the nuts on the other ends of which engage an annular flange on the screw plug E mounted on the boss F of the base. The center contact D is secured by the rod H which passes through an axial perforation of the boss F and projects beyond the end thereof. A disk I with spring contact lug *i* cut therefrom is carried by the rod H in any suitable fashion, for instance by means of nuts threaded thereon, and is shaped so that the spring lug *i* lies over the inturned edge of the screw plug E and actually comes into contact therewith in case the sheet of onion paper K or other material of low dielectric value which is interposed between said contact lug and shell, is destroyed by an excess of current or otherwise. It is obvious that upon screwing the plug E into the shell C the rod H leading to the center contact D for the lamp, raises the strip *p* from its normal engagement with the strip *p*¹ and leads the current therefrom to the center contact D, while the current from the strip *p*¹ passing through the shell C, plug E and the bolts *g* is led to the lamp socket shell G. Should the lamp filament be injured from any cause and the flow of current therethrough be interrupted, the current tension between the plug E and the disk contact lug *i* would become so great that the onion paper would break down, the lamp thus be shunted and the service of current to the remaining lamps in the series go on without interruption. Obviously also the lamp base B may

be unscrewed without danger of arcing during the current service, since the two strips p and p^1 return into contact with each other before the plug E leaves the shell C. The shell C and the base B are protected from dust by the skirt b which incloses them when the plug E is screwed into the receptacle C.

In the modification shown Figs. 4 and 5, the upper portion of the receptacle is made independent of the lamp socket base proper, and comprises an independent base M which is recessed to receive the screw shell C and carries on its upper face the strips p , p^1 , the center contact rod H passing through a perforation m . An independent canopy N is provided to cover the upper contacts and protect them from moisture and dirt. The skirt b^1 bears against a rubber gasket R and thus incloses the shell C and contacts on the base B.

It will be noted that in both constructions illustrated, the lamp socket is screwed into the receptacle. This is a feature of great practical value inasmuch as it avoids all shock to the lamp such as occurs in a snap connection, which is a common form now employed in sockets of this type. The sudden jar imparted by such a snap, is sufficient to rupture the filament in many cases, particularly where a frail filament such as tungsten is employed in the lamp.

Obviously my invention may be embodied in other structures than the particular forms shown without departing from my invention and I do not limit myself to the details illustrated and above described, but claim as my invention:—

1. In series incandescent lighting, a re-

ceptacle having automatic line closing contacts, an independent lamp socket and means to establish the socket circuit upon the parting of said line closing contacts, in combination with means to protect said automatic line closing contacts from the action of the elements.

2. In series incandescent lighting, a receptacle having automatic line closing contacts, a lamp socket and means to part said line closing contacts and establish the lamp circuit therefrom, said line closing contacts being inclosed and protected from the action of the elements, substantially as described.

3. In a device of the character described, a receptacle having line closing contacts and an independent lamp receptacle adapted to be secured thereto and brought into the line circuit, said receptacles being shaped to inclose their coöperating contacts when said receptacles are secured together, whereby the device is rendered substantially weather proof, as described.

4. In a device of the character described, a recessed receptacle having automatic line closing contacts located in said recess, in combination with a coöperating independent lamp receptacle having a member in the lamp circuit adapted to enter said recess and engage and displace one of said line contacts, substantially as and for the purpose described.

In testimony whereof I have signed my name to this specification, in the presence of two subscribing witnesses.

HARRY U. BADEAU.

Witnesses:

G. W. GOODRIDGE,

H. W. GOLDSBOROUGH.