

(No Model.)

C. H. HINDS.

JOINT FOR ELECTRIC LIGHT BRACKETS.

No. 282,317.

Patented July 31, 1883.

Fig. 1.

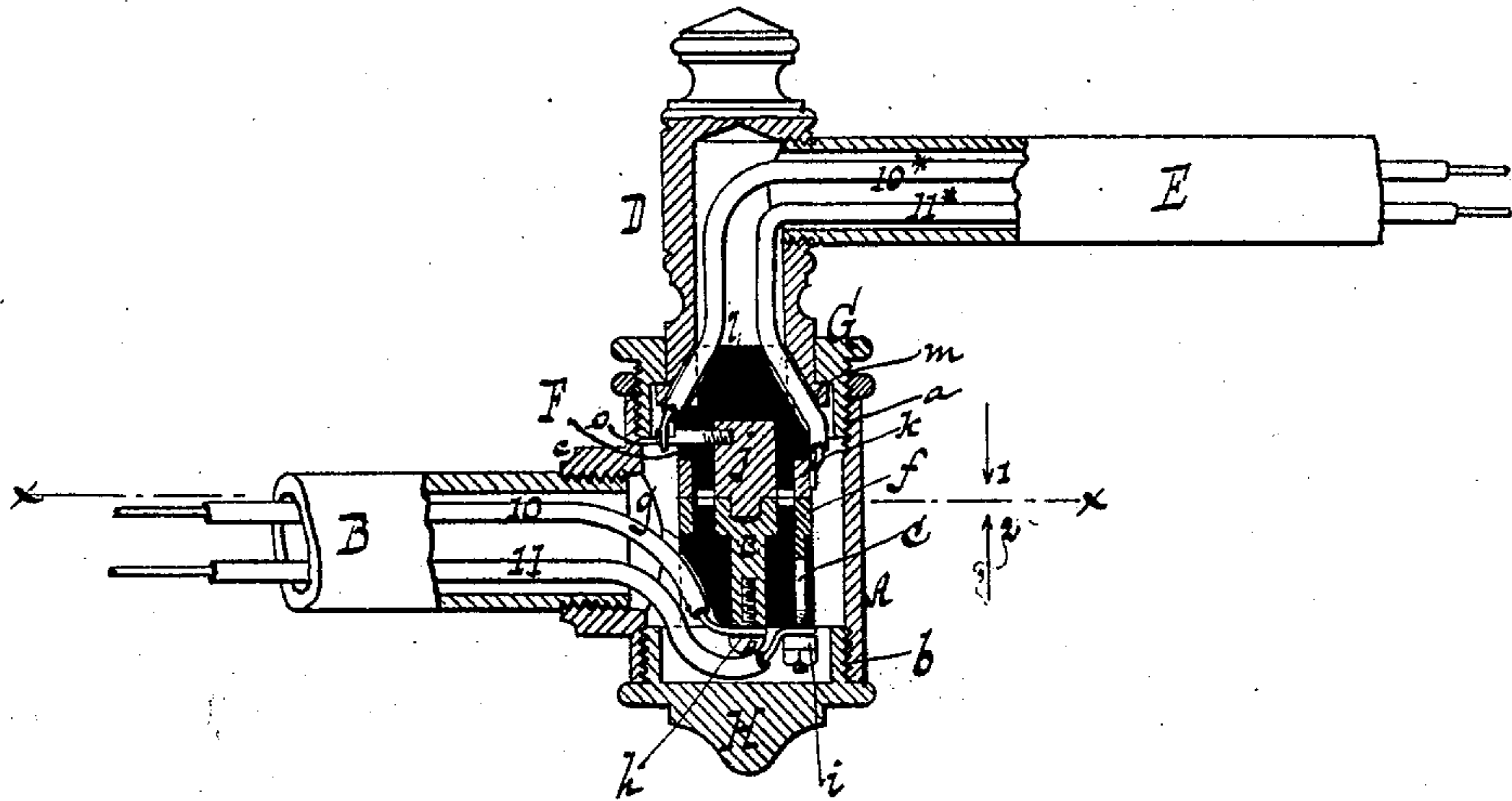


Fig. 2.

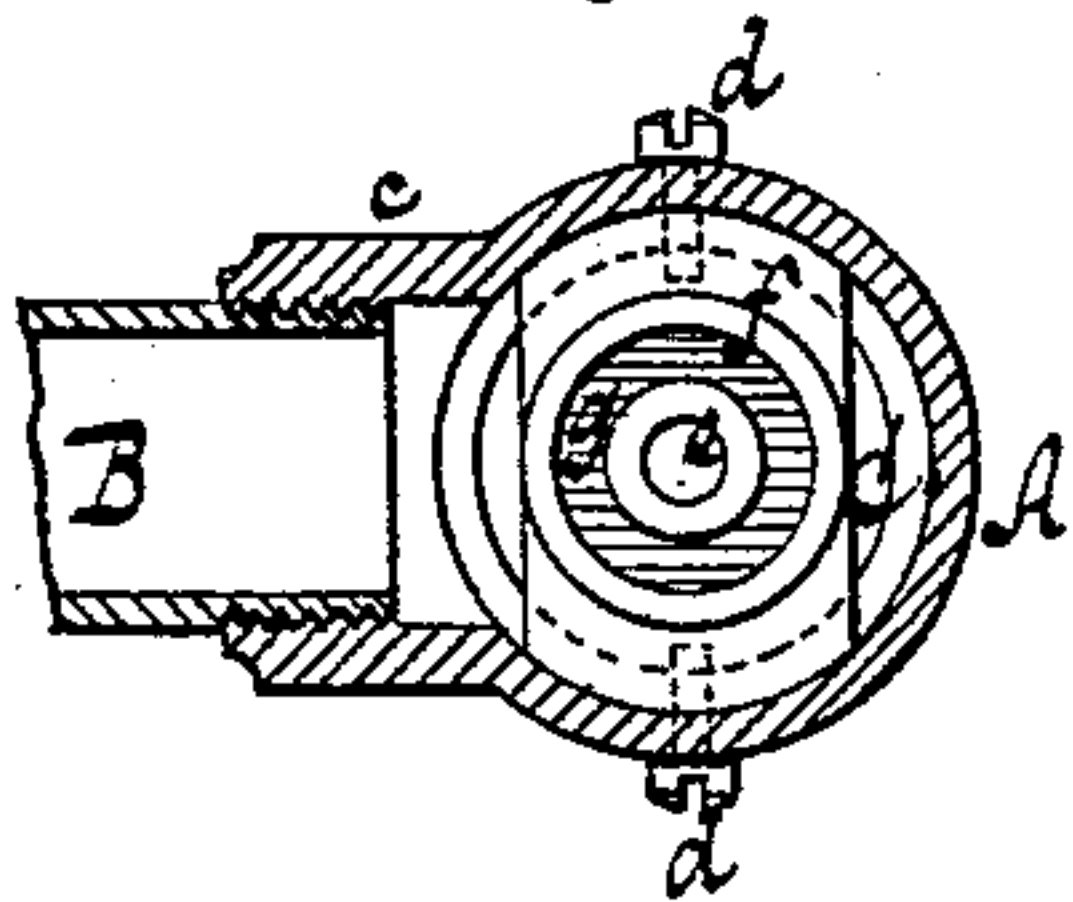
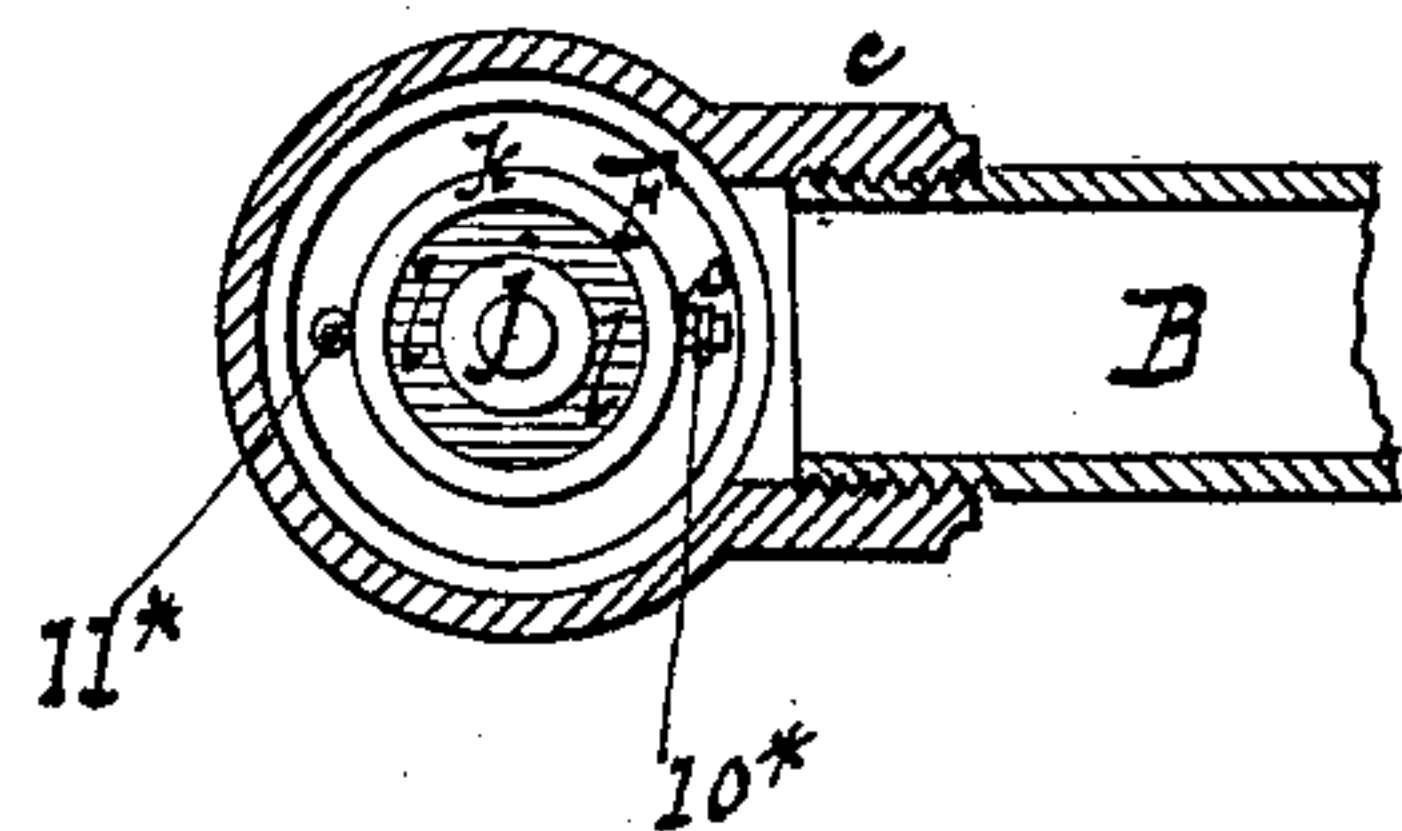


Fig. 3.



Witnesses

Otto Hupfand  
William Miller

Inventor  
Charles H Hinds  
by Van Santvoord & Co.  
his att'ys

# UNITED STATES PATENT OFFICE.

CHARLES H. HINDS, OF NEW YORK, N. Y.

## JOINT FOR ELECTRIC-LIGHT BRACKETS.

SPECIFICATION forming part of Letters Patent No. 282,317, dated July 31, 1883.

Application filed December 20, 1882. (No model.)

*To all whom it may concern:*

Be it known that I, CHARLES H. HINDS, a citizen of the United States, residing at New York, in the county and State of New York, have invented new and useful Improvements in Joints for Electric-Light Brackets, of which the following is a specification.

This invention relates to a bracket-joint which is so constructed that a permanent and positive connection of the conducting-wires is maintained, whatever may be the position of the joint, and at the same time an open passage for illuminating-gas is maintained.

The peculiar and novel construction of my bracket-joint is pointed out in the following specification and illustrated in the accompanying drawings, in which—

Figure 1 represents a vertical central section. Fig. 2 is a horizontal section in the plane  $xx$ , Fig. 1, looking in the direction of arrow 1. Fig. 3 is a similar section of the same, looking in the direction of arrow 2.

Similar letters indicate corresponding parts.

In the drawings, the letter A designates a short tube, which is provided with internal screw-threads,  $a$   $b$ , at both ends, and with a tubular projection,  $c$ , on one side, into which is fitted a pipe, B. In the interior of the tube A is firmly secured by set-screws  $d$   $d$ , Fig. 2, a compound plug, C, two sides of which are cut away, so as to leave open spaces for the passage of the illuminating-gas. Said compound plug consists of a central metallic stud,  $e$ , a metallic ring,  $f$ , and an insulating-support,  $g$ , the stud  $e$  extending through the center of this support, while the ring  $f$  embraces the same at its top. The upper surfaces of the stud and of the ring project above the surface of the insulating-support. To the metallic stud  $e$  is secured by a clamping-screw,  $h$ , the conductor 10, while the other conductor, 11, is secured to the plug C by a clamping-screw,  $i$ , which is in metallic contact with the ring  $f$ , but insulated from the stud  $e$ .

Into the top of the tube A is fitted the swivel-head D, from one side of which extends the pipe E. Into the inner end of said swivel-head is fitted the compound plug F, which consists of a central metallic stud,  $j$ , a metallic ring,  $k$ , and an insulating-support,  $l$ ,

Fig. 4, the stud  $j$  and ring  $k$  being made to project beyond the exposed surface of the insulating-support.

On the inner edge of the swivel-head D is formed a shoulder,  $m$ , and over this shoulder is placed a screw-cap, G, which fits the screw-thread in the upper end of the tube A. By means of this screw-cap the swivel-head is depressed and the exposed surfaces of the stud  $j$  and ring  $k$  of the plug F can be brought in close contact with the exposed surfaces of the stud  $e$  and ring  $f$  of the plug C.

In order to insure perfect metallic contact, the exposed surfaces of the studs  $j$   $e$  and rings  $k$   $f$  are ground together, so that the swivel-head can be turned round without disturbing such contact. The shoulder  $m$  of the swivel-head is ground against the inner surface of the screw-cap G, and this cap is provided with a jam-nut,  $n$ , so that it can be locked in the required position.

The conductor 10\* is secured to the plug F by the clamping-screw  $o$ , which is in metallic contact with the stud  $j$ , and the conductor 11\* is either soldered or otherwise firmly secured to the metallic ring  $k$ . The bottom end of the tube A is closed by screw-cap H, and the conductors 10\* 11\* pass freely through channels formed for this purpose in the insulating-support  $l$  of the plug F, leaving sufficient space for the passage of the illuminating-gas.

From this description it will be seen that if the pipe B is stationary the pipe E, with the swivel-head D, plug F, and conductors 10\* 11\*, can be freely turned in either direction without disturbing the positive metallic contact between the conductors 10\* 10 and 11\* 11, respectively, while the illuminating-gas may pass freely through the bracket-joint. In the same manner, if the pipe E is fixed, the pipe B may be swung around without breaking the positive metallic contact of the conductors or interrupting the passage of the illuminating-gas. The contact was produced by springs heretofore, and if one of the springs becomes slack an arc is produced, which is liable to ignite the gas.

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

The combination, substantially as hereinbe-

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fore described, of the tube A, the compound  
plug C, composed of the metallic stud *e*, me-  
tallic ring *f*, and insulating-support *g*, the  
swivel-head D, the compound plug F, com-  
5 posed of the metallic stud *j*, the metallic ring  
*k*, and the insulating-support *l*, and the con-  
ductors 10\* 11\* 10 11, fastened to the studs *e j*  
and rings *f k*, respectively, so as to preserve  
a permanent positive metallic contact between

the conductors 10\* 10 and 11\* 11, respective- 10  
ly, if the swiveled head is turned round.

In testimony whereof I have hereunto set  
my hand and seal in the presence of two sub-  
scribing witnesses.

CHAS. H. HINDS. [L. S.]

Witnesses:

W. HAUFF,

E. F. KASTENHUBER.