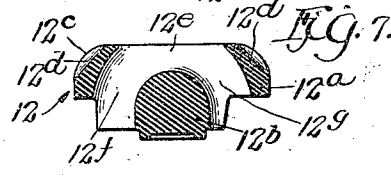
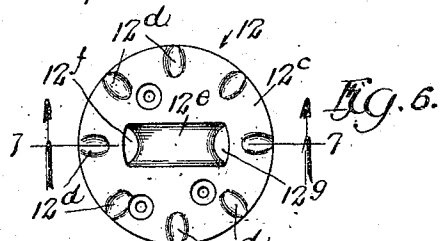
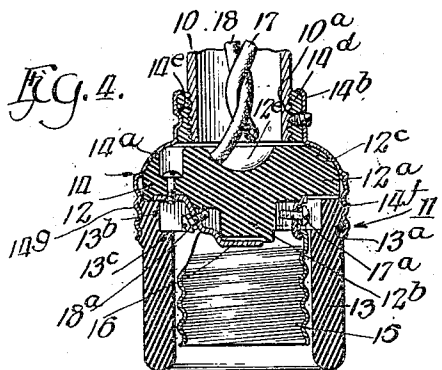
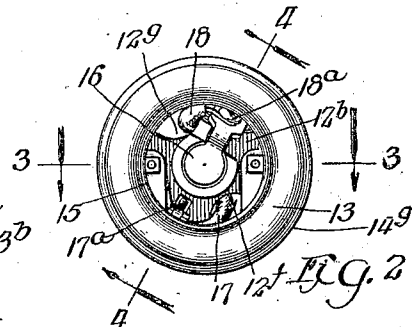
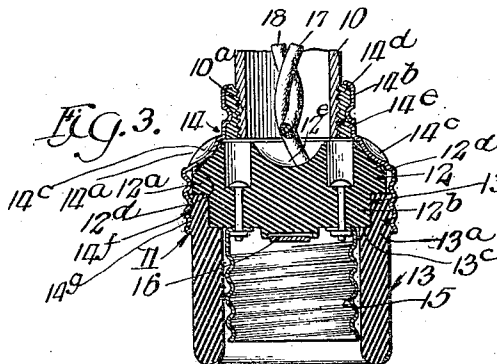
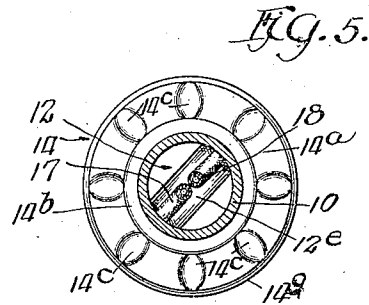
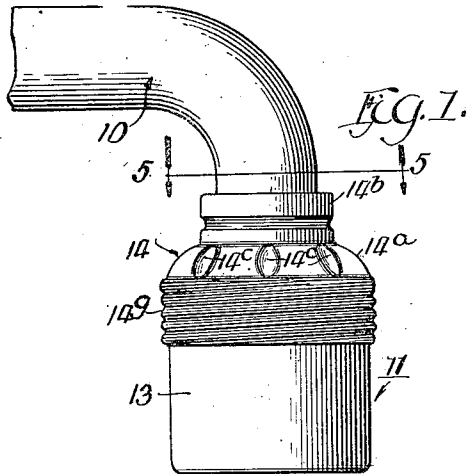


J. H. GOEHST.
ELECTRIC LAMP SOCKET.
APPLICATION FILED NOV. 7, 1910.

1,017,260

Patented Feb. 13, 1912.

2 SHEETS—SHEET 1.



Witnesses:
J. H. Goehst
A. R. Williams

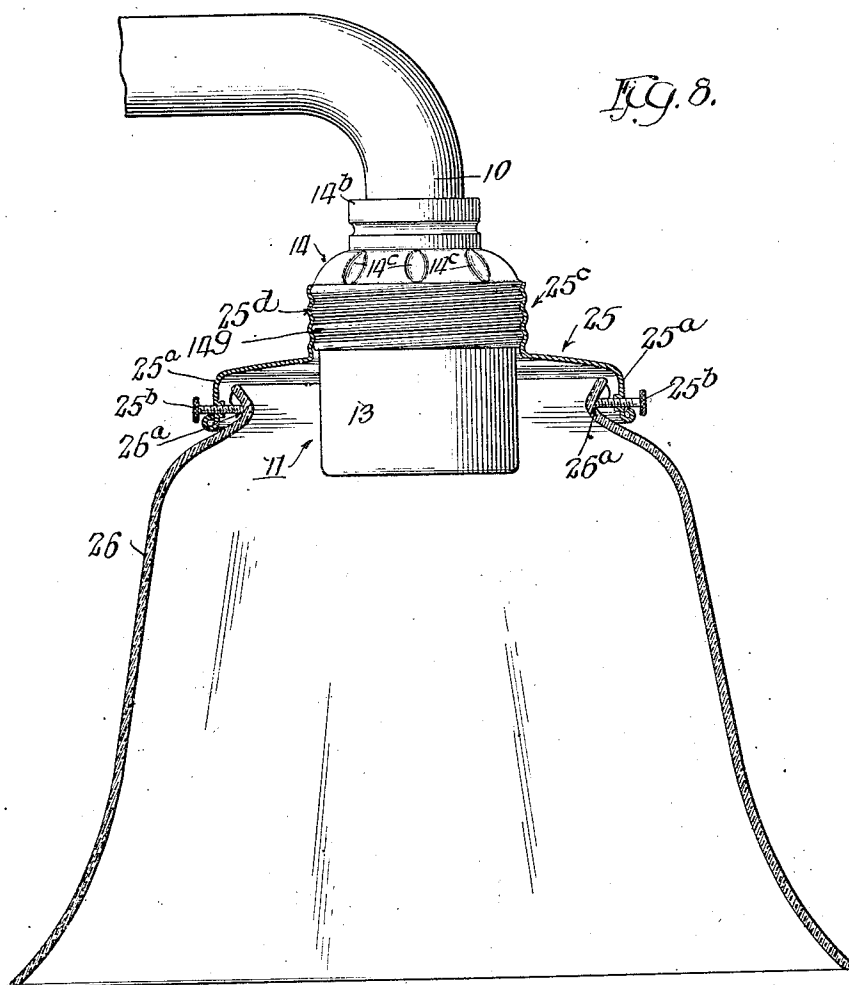
Inventor
John H. Goehst
by Pole & Brown Attys

J. H. GOEHST.
ELECTRIC LAMP SOCKET.
APPLICATION FILED NOV. 7, 1910.

1,017,260.

Patented Feb. 13, 1912.

2 SHEETS—SHEET 2.



Witnesses:
J. H. Goehst
A. R. Wilkins

Inventor:
John H. Goehst
by Poole & Brown
Attys

UNITED STATES PATENT OFFICE.

JOHN H. GOEHST, OF CHICAGO, ILLINOIS, ASSIGNOR TO FEDERAL ELECTRIC COMPANY,
OF CHICAGO, ILLINOIS, A CORPORATION OF ILLINOIS.

ELECTRIC-LAMP SOCKET.

1,017,260.

Specification of Letters Patent.

Patented Feb. 13, 1912.

Application filed November 7, 1910. Serial No. 591,009.

To all whom it may concern:

Be it known that I, JOHN H. GOEHST, a citizen of the United States, and a resident of Chicago, in the county of Cook and State of Illinois, have invented certain new and useful Improvements in Electric-Lamp Sockets; and I do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings, and to the letters of reference marked thereon, which form a part of this specification.

This invention relates to an improvement in electric light sockets, and the object of the invention is to provide a water-proof socket of simple and economical construction, and one which may be readily and quickly attached to a supporting arm without twisting the conductor wires and without any danger of damaging the binding posts when securing the parts in place.

The invention consists of the matters hereinafter described and more particularly pointed out in the appended claims.

In the drawings:—Figure 1 is a side elevation of my improved socket shown attached to a supporting arm. Fig. 2 is a bottom plan view of the same. Fig. 3 is a vertical sectional view through the socket and the lower end of its supporting arm on the line 3—3 of Fig. 2. Fig. 4 is a vertical sectional view on the line 4—4 of Fig. 2. Fig. 5 is a transverse section through Fig. 1 on the line 5—5 thereof. Fig. 6 is a top plan view of the upper insulating block of the socket. Fig. 7 is a vertical section through Fig. 6 on the line 7—7 thereof. Fig. 8 is a sectional side elevation showing a shade attached to my socket.

In that embodiment of my invention illustrated in the drawings, 10 indicates the pipe which comprises the supporting arm for the socket and through which the conductor wires are led to the socket.

11 indicates the socket as a whole. The socket embraces a terminal and contact supporting insulating block 12, an insulating tubular block 13 which incloses the threaded contact shell, and a metallic shell member 14 by means of which the two insulating blocks 12 and 13 are secured together, and which serves as the means for attaching the socket to the threaded end of the pipe 10. The block 12 is made of porcelain or other suitable insulating material and comprises

an annular base 12^a provided on its lower face with a central boss 12^b to which are secured, in any usual or convenient manner, a shell contact 15 and a central contact 16. The upper edge 12 of said disk is preferably rounded in cross-section, and is provided with a plurality of radially disposed notches 12^a. The metallic shell 14 has a dome-shaped body 14^a formed to provide a chamber to receive the base 12^a of the insulating block 12, and is indented to form rounded shoulders 14^c on its inner surface which are adapted to engage within the notches 12^a of said block. Above said dome-shaped body the shell member 14 is provided with a tubular extension 14^b within which is secured an internally threaded, reinforcing ring 14^d, adapted to be screwed upon the threaded end 10^a of the pipe 10. As shown in the drawings, said ring 14^d has an annular groove 14^e formed in its outer surface and the wall of the tubular extension is spun into said groove to secure the parts together.

The upper end of the tubular insulating block 13 engages against the margin of the lower face of the base 12^a of the block 12, and has an external screw-thread 13^a which engages with an internal thread 14^f formed in the shell member 14. The upper end of said tubular block 13 is recessed as indicated at 13^b to receive the boss 12^b of the block 12. Said recess terminates in an annular shoulder 13^c on the inner surface of the tubular block, which shoulder abuts against the lower face of said boss 12^b.

In the top of the block 12 is formed a recess 12^c and communicating with said recess at each end are apertures 12^d, 12^e extending through the block for the passage of line wires, 17, 18, which are connected to oppositely disposed binding screws 17^a, 18^a screwed transversely into the boss 12^b which is cut away at the points where said binding screws are attached so that said screws will be located well within the recess 13^b of the tubular block 13 without danger of contact between said screws and block.

The manner of assembling the sockets is as follows: The shell 14 is first screwed upon the threaded end of the arm 10. The wires 17, 18 are then drawn down and inserted through the apertures 12^d, 12^e of the insulating block 12 and connected to the screws 17^a, 18^a. The block 12 is then pushed up

into the shell member 14, and is shifted or turned slightly in order to engage the notches 12^d with the shoulders 14^c formed on the inner surface of said shell. The tubular block 13 is then screwed into the threaded end of the shell member 14, until it engages with the block 12 in the manner described.

It will be noted that in this socket in assembling it and in attaching it in place, there is no twisting of the wires, and the binding screws and parts are so arranged that in screwing the parts together no moving part is caused to rub against said binding screws.

In Fig. 8 is illustrated an improved shade holder particularly adapted for use with my improved socket. 25 indicates the shade holder and 26 the shade or globe supported thereby. The shade holder 25 has a depending flange 25^a carrying the usual set screws 25^b which engage within the usual annular groove 26^a formed at the top of the shade 26. Said shade holder also has a central tubular extension 25^c which has an internal thread 25^d. The shell 14 of the socket has an external thread 14^e adapted to be engaged by the thread 25^d of the shade holder. The shade holder may thus be screwed upon the socket. This construction furnishes a simple and economical construction for attaching the shade since, by reason of the thinness of the shell 14, the internal thread 14^e and the external thread 14^e may be readily formed by the same operation.

I claim as my invention:—

1. A socket embracing a hollow shell member adapted to be attached to a support and provided with an internal thread at its lower end, an insulating block adapted to fit within said shell member and to which are secured a center contact and a shell contact together with their associated binding posts, said insulating block having apertures for the passage of the conductor wires, said shell member and insulating block being provided with engaging parts adapted to prevent rotation of said block with reference to said shell member, and a tubular insulating block surrounding said contacts and said binding posts and adapted to engage at its upper end against said insulating block, said tubular block being provided with an external thread adapted to engage with the internal thread of said shell member.

2. A socket embracing a hollow shell member having a dome-shaped body provided at its lower end with an internal screw-thread and having a tubular internally threaded extension at its top, an insulating block adapted to fit within said dome-shaped body of the shell member and provided with apertures for the line wires, said insulating block and shell member be-

ing provided with engaging parts adapted to prevent the block from rotating with reference to the shell member, said block being provided with a central boss to which are secured a center contact and a shell contact and their associated binding posts, and a tubular insulating block surrounding said contacts and binding posts and engaging at its upper end against the lower face of said insulating block, said tubular block being provided with an external thread adapted to engage with the internal thread at the lower end of said shell member.

3. A socket embracing a hollow shell member having a dome-shaped body provided at its lower end with an internal screw-thread and having a tubular extension at its top, an internally threaded, reinforcing ring secured within said tubular extension, an insulating block embracing a base conformed to fit within the dome-shaped body of said shell member, and a central boss, said insulating block and said shell member having engaging parts adapted to prevent the rotation of one with reference to the other, said boss being cut away at its opposite sides and said insulating block being provided with oppositely disposed apertures for the conductor wires, a center contact and a shell contact secured to said boss, associated binding posts secured to said insulating block adjacent said apertures at the points where said boss is cut away, and a tubular insulating block recessed at its upper end to receive said boss and engaging at its upper end against said insulating block, said tubular block being provided with a thread adapted to engage with the internal thread at the lower end of said shell member.

4. A socket embracing a hollow shell member adapted to be attached to a support and provided with an internal and external thread at its lower end, an insulating block adapted to fit within said shell member and to which is secured a center contact and a shell contact, together with their associated binding posts, said insulating block having apertures for the passage of the conductor wires, said shell member and insulating block being provided with engaging parts adapted to prevent rotation of said block with reference to said shell member, and a tubular insulating block surrounding said contacts and said binding posts and adapted to engage at its upper end against said insulating block, said tubular block being provided with an external thread adapted to engage with the internal thread of said shell member.

5. A socket embracing a hollow shell member adapted to be attached to a support at its upper end, an insulating block adapted to fit within said shell member and to which is secured a center contact and a shell contact, together with their associated

binding posts, said insulating block having
apertures for the passage of the conductor
wires, said shell member and insulating
block being provided with means adapted
5 to prevent rotation of said block with ref-
erence to said shell member, and a tubular
insulating block surrounding said contacts
and said binding posts adapted to engage
at its upper end against said insulating
10 block, and means provided on said tubular

block adapted to engage the lower end of
said shell member.

In testimony, that I, claim the foregoing
as my invention I affix my signature in the
presence of two witnesses, this 24th day of 15
October A. D. 1910.

JOHN H. GOEHST.

Witnesses:

GEORGE R. WILKINS,

T. H. ALFREDS.