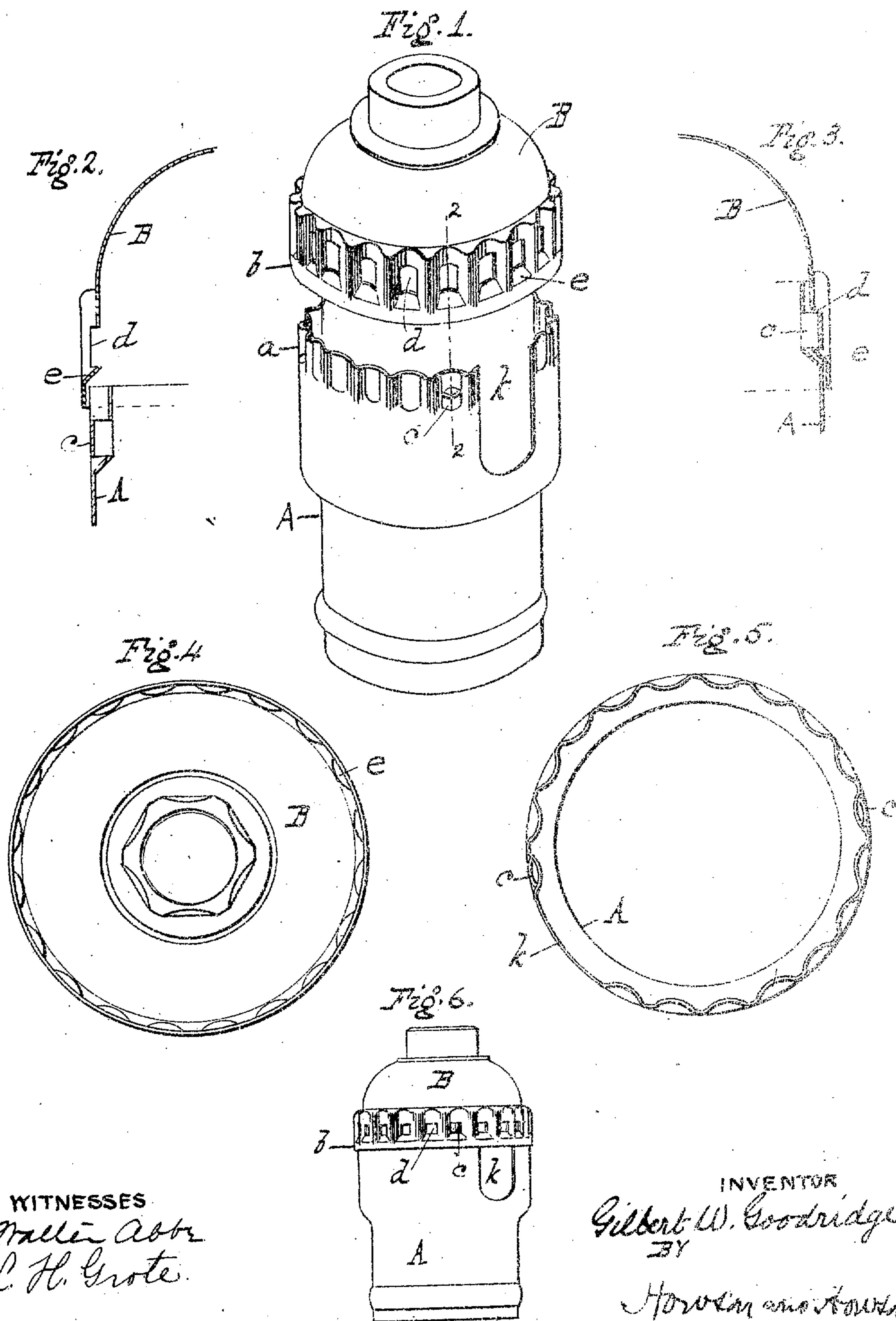


No. 872,283.

PATENTED NOV. 26, 1907

G. W. GOODRIDGE.
INCANDESCENT LAMP SOCKET.
APPLICATION FILED JULY 20, 1907.



WITNESSES
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UNITED STATES PATENT OFFICE.

GILBERT W. GOODRIDGE, OF BRIDGEPORT, CONNECTICUT, ASSIGNOR TO THE BRYANT ELECTRIC COMPANY, OF BRIDGEPORT, CONNECTICUT, A CORPORATION OF CONNECTICUT.

INCANDESCENT-LAMP SOCKET.

No. 872,283.

Specification of Letters Patent.

Patented Nov. 26, 1907.

Application filed July 20, 1907. Serial No. 384,732.

To all whom it may concern:

Be it known that I, GILBERT W. GOODRIDGE, a citizen of the United States of America, residing at Bridgeport, in the county of Fairfield, in the State of Connecticut, have invented certain new and useful Improvements in Incandescent-Lamp Sockets, of which the following is a specification.

In mounting an incandescent electric lamp socket upon a fixture or pipe, the cap is first screwed into place and then the insulated lamp socket terminals are connected up to the wires, and finally the socket shell is connected up to the cap. In mounting these sockets, particularly key sockets, on fixtures and elsewhere, with ornamental husks, the key has to be arranged to project through one part of the ornamental husk and consequently the shell has to be put on in a certain position, considered rotarily. With the construction of bayonet joints or other shell and cap fastenings now in use, those two parts, the cap and shell, can be fitted together only when brought into one certain relation to each other, and since that relation is apt to be such as not to permit the key to then pass into the key slot and through the necessary slot in the husk, the only remedy is for the wireman to unscrew the socket cap again and file down its nipple sufficiently to permit the cap when screwed on the pipe end again to be turned to a position where the socket key stem will suitably enter the key slot in the shell and also the slot in the husk. To meet this trouble I have devised a new socket and shell fastening, which permits the shell to be applied and attached to the cap in any relative rotary position of the two parts. This I accomplish by providing corrugations and cooperating latching means on the two parts, the latching element on one of the parts being many times repeated and arranged symmetrically around the circumference.

In the accompanying drawings Figure 1 is an enlarged perspective view of a socket embodying my invention; Fig. 2 is a sectional view on the line 2-2, Fig. 1; Fig. 3 is a similar section taken at the diametrically opposite side of the socket but showing the cap and shell parts latched; Fig. 4 is an inner face view of the cap; Fig. 5 is an end view of the shell; Fig. 6 is a view of the cap and shell united, drawn to a smaller scale.

In the form shown in the drawings, that

end of the shell A which is to sieve into the flange of the cap B is longitudinally corrugated at *a*, and the flange of the cap is corrugated at *b*. On one or on both of these parts the corrugations are many times repeated and are arranged symmetrically. In the form illustrated, the number of corrugations is the same on both parts, except for those lost in the shell by the cutting of the key slot *k*. In the standard socket, twenty of these corrugations are found a suitable number. As a means for latching these two parts together, I prefer to use projections on one part and openings on the other. In the drawing I have shown the shell as provided with two diametrically opposite outward projections *c*, punched up out of the metal of the shell, while in the flange of the cap are cut out openings *d*, which are many times repeated, and correspond in number to the number of corrugations in the cap.

I prefer not to carry the corrugations in the flange of the cap out to the rim, but to leave the latter plain and to form inclines *e* adjacent and leading to the openings *d*, so that when the shell has its end pushed into the cap (Fig. 2), the projections *c* on the shell will come into contact with the inclines *e*, and, owing to the presence of the key slot *k*, the walls of the shell will yield or spring inwardly until the said projections have passed the inclines *e*, whereupon the projections will snap outwardly into the openings *d* and latch the shell and cap together.

It will thus be seen that owing to the number of symmetrically arranged corrugations and openings the shell may be fitted and latched to the cap not only with a simple endwise movement but with the key slot *k* in almost any position (relatively to the cap rotarily) which the conditions may require. Furthermore owing to the series of bevels or inclines *e* adjacent to the openings *d* and merging as it were into the parts of the corrugations between the openings and back of the plain rim of the cap flange, the shell will be automatically guided into place when it is pushed endwise and the wireman will have no need to "feel" for position by turning the shell. This alone is a convenience and time saver even where the variation in rotary position of the shell is not important.

I do not wish to restrict myself to the construction of latching means shown, although I prefer them to others, nor do I wish to re-

strict myself to the corrugations shown, as they may be varied, as will be readily understood.

I do not claim in this application, apart from the corrugations, the feature of making the latching elements on one of the parts greater in number than on the other part and many times repeated symmetrically around its circumference, as that forms the subject of a divisional application for patent, filed by me October 26, 1907, Ser. No. 399,265.

I claim as my invention:

1. An incandescent lamp socket, having the end of the shell and the flange of the cap corrugated, one set of corrugations being symmetrical and the other part corrugated to fit, and latching means, the latching element on one part being repeated in proportion to the number of corrugations.
2. An incandescent lamp socket, having the end of the shell and the flange of the cap corrugated, the corrugations on one part being symmetrically repeated, and the other part corrugated to fit, a number of openings in one part proportioned to the number of

corrugations, inclines adjacent to the openings and projections on the other part to enter any of the openings.

3. An incandescent lamp socket, having the flange of the cap provided with symmetrically arranged longitudinal corrugations and openings in the corrugations in combination with a shell corrugated where it sleeves into the cap flange and having projections to engage the openings in the cap flange.

4. An incandescent lamp socket, having the flange of the cap corrugated back of the rim, which latter is left plain, and openings in the corrugations and inclines leading to the openings in combination with a shell having corrugations at its edge and projections to enter any of the openings in the flange of the cap.

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

GILBERT W. GOODRIDGE.

Witnesses:

F. E. SEELEY,
A. H. JONES.