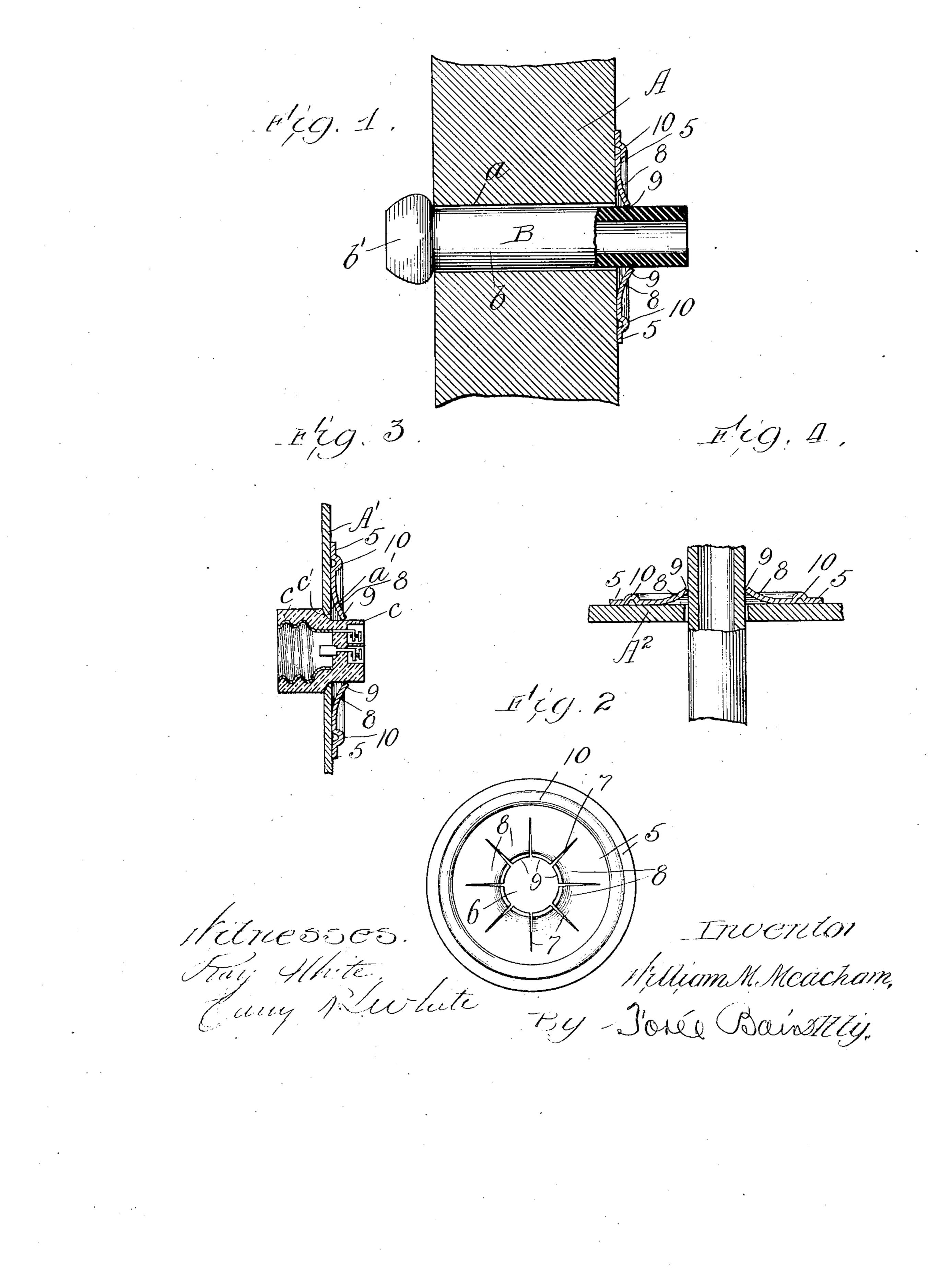
## W. M. MEACHAM.

## CLAMP FOR ELECTRICAL AND OTHER FIXTURES. APPLICATION FILED JAN. 28, 1905.

913,024.

Patented Feb. 23, 1909.



## UNITED STATES PATENT OFFICE.

WILLIAM M. MEACHAM, OF OAK PARK, ILLINOIS.

## CLAMP FOR ELECTRICAL AND OTHER FIXTURES.

No. 913,024.

Specification of Letters Patent.

Patented Feb. 23, 1909.

Application filed January 28, 1905. Serial No. 243,024.

To all whom it may concern:

Beit known that I, WILLIAM M. MEACHAM, of Oak Park, in the county of Cook and State of Illinois, have invented certain new 5 and useful Improvements in Clamps for Electrical and Other Fixtures; and I hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings, 10 which form part of this specification.

The object of my invention is to provide a clamp for electrical fixtures and other articles, which will be simple in construction, easy of manufacture and efficient in

15 operation.

In the drawings, wherein I have indicated an operative embodiment of my invention in use in various situations; Figure 1 is a central vertical section of my device as ap-20 plied to an electrical fixture. Fig. 2 is a face view of a clamp embodying my invention. Fig. 3 is a vertical section showing the application of my clamp to a lamp socket. Fig. 4 is a similar view showing the 25 application of my clamp to a pipe.

Throughout the drawings like numerals of reference refer always to like parts.

In general the article of manufacture which constitutes the salient feature of my 30 invention consists of a plate, preferably of metal, having an aperture therein adapted to receive a suitable article and having teeth, preferably integral spring parts of the plate, forming a suitable part of the edge of the 35 aperture, and arranged to yield to enlarge the aperture when a suitable article is passed therethrough in one direction and to grip the article for movement therewith tending to diminish the aperture when the article is sought to be withdrawn through the aperture in the other direction, so that the insertion of the article is made easy and its withdrawal difficult.

In the drawing 5 indicates a plate, prefer-45 ably of relatively thin resilient metal, and preferably of generally circular shape, having formed at its center an aperture 6 bounded entirely or throughout a suitable substantial part of its perimeter by teeth, 50 preferably having sharp cutting edges, inclined or inclinable at an angle to the axis of the aperture perpendicular to the plane of the plate such that when an article of suitable size and contour is inserted through 55 the aperture in one direction said teeth yield outwardly to permit the ready passage of l

the article, but such that when the article is sought to be withdrawn said teeth bite or clutch sharply upon the surface of the article to prevent axial movement of the article 60 relative to the teeth. Therefore, since the retraction of the article gripped as aforesaid would draw the spring teeth in to present an aperture of less diameter than that of the article such axial withdrawal of the 65 article is positively prevented.

In the specific construction shown the teeth are provided by cutting slots 7 into the body of the metal radiating from the aperture at suitable distances apart, to form 70 between the slots springs 8, having sharp edges at 9 to form teeth. Preferably the spring teeth 8 are permanently bent adjacent their free ends to present toward an axial line through the aperture 6 perpendicular 75 to the general plane of the plate, the sharp tooth edges 9, making the total size of the aperture 6 in the completed article slightly larger than the area of the metal removed to make the aperture 6, but slightly less than 80 the diameter of the article to be clamped. It is, however, not necessary that such permanent shape be given the spring members 8, as the insertion of the article may be depended upon to bend the spring-members 85 8 to substantially the configuration shown in Fig. 1, the spring members, when the clamp is not in use lying in the same general plane as the body of the plate. For purposes of strength I prefer that a beading or rib 10, 90 preferably of circular configuration be provided upon the plate surrounding the radially outward ends of the slots 7.

The details of construction of the article described I believe to be new and patentable 95 and may claim, but I desire it to be understood and have endeavored to impress that my invention has a broader phase susceptible of embodiment in various forms other than that herein specifically shown, and I do not 10 desire, therefore, to be understood as limiting the broader conception of my invention to the specific device herein illustratively shown, advantageous though I consider its

construction to be.

It will be apparent to those skilled in the art that the possible applications of a clamp embodying my invention are very numerous, and for purposes of illustrating a few of its possible uses, I have shown it differently 11 applied in several views.

In Fig. 1 A indicates any suitable support

having therein an aperture a. B indicates an insulating bushing or tube comprising a stem b taking through the aperture a and protruding from one side thereof, and a protruding from one side thereof, and a head b' at the opposite end abutting against the edges of aperture a. My clamp is slipped upon the protruding end of stem b until its body abuts against the support A, so that the tube B may not be withdrawn directly.

10 A screwing motion is usually necessary to

In Fig. 3 A' indicates a support, apertured as at a' to receive the stem c of a lamp socket C, the body whereof forms a shoulder 15 c' at the end of the stem. A clamp plate applied as above described to the portion of the socket protruding through the support

retains the socket in place.

In Fig. 4 A<sup>2</sup> indicates a horizontal sup-20 port through an aperture a<sup>2</sup> wherein a pipe or other article passes. A clamp applied to the pipe and resting on the support serves to suspend the pipe and act as a canopy to

conceal the aperture  $a^2$ .

Other and further uses and applications of my invention will readily occur, and I do not intend to intimate that the uses to which I have shown the clamp applied are the only employments of which devices embodying

my invention are capable, but said several 30 showings are made merely for the sake of clearness and to illustrate wide applicability of the device.

Having thus described my invention, what I claim and desire to secure by Letters Pat- 35

ent, of the United States, is:-

1. As an article of manufacture, a clamp plate for electrical insulating bushings and the like, having an aperture therein adapted to receive the bushing, integral spring teeth 40 having sharp edges forming part of the edge of the aperture, and a rib surrounding the teeth.

2. In combination with a support having an aperture therein, an electrical fixture 45 having a stem passing therethrough, and a clamp for retaining the stem against withdrawal, comprising the disk 5, having an aperture 6 to receive the stem, teeth 8 forming the edge of said aperture and a rib 10 50 surrounding the teeth 8.

In testimony that I claim the foregoing as my own, I affix my signature in presence

of two witnesses.

WILLIAM M. MEACHAM.

In presence of— Geo. T. May, Jr., Mary F. Allen.