W. G. CLARK.

INSULATOR CLAMP.

APPLICATION FILED NOV. 21, 1911.

1,040,620.

Patented Oct. 8, 1912.

2 SHEETS—SHEET 1.

Fig. 1

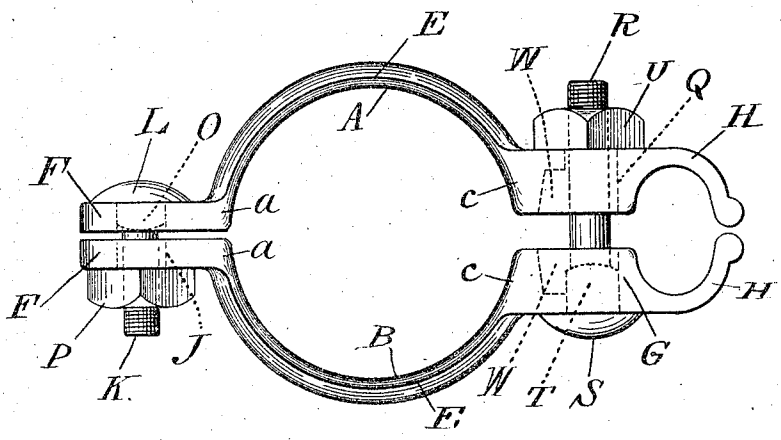


Fig. 2

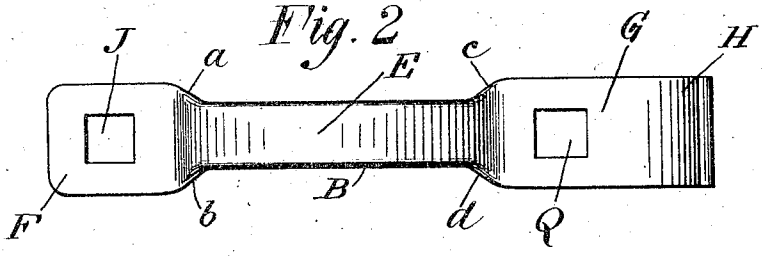
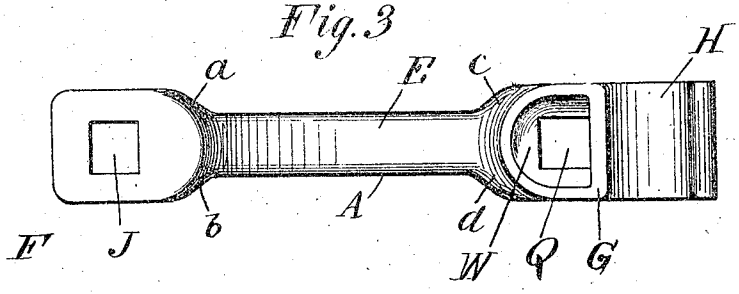


Fig. 3



WITNESSES

Ida Knigsberg

M. M. Riemann

Walter G. Clark INVENTOR

BY Herbert G. Ogden

his ATTORNEY

W. G. CLARK.

INSULATOR CLAMP.

APPLICATION FILED NOV. 21, 1911.

1,040,620.

Patented Oct. 8, 1912.

2 SHEETS—SHEET 2.

Fig. 4

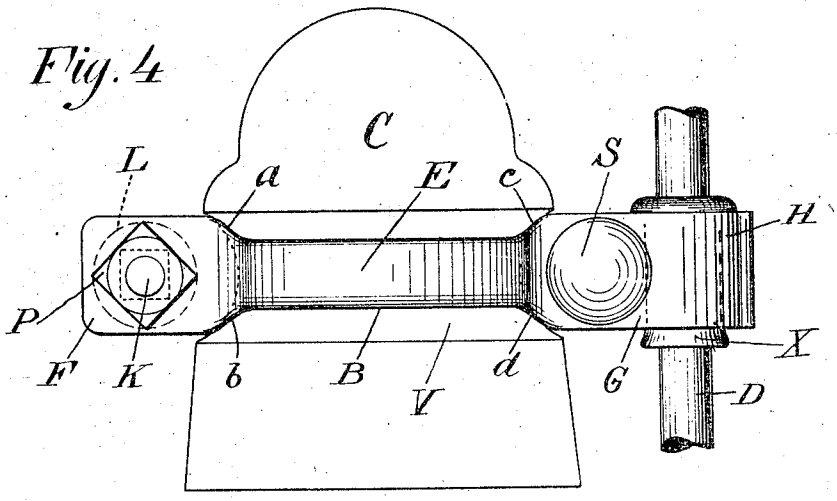
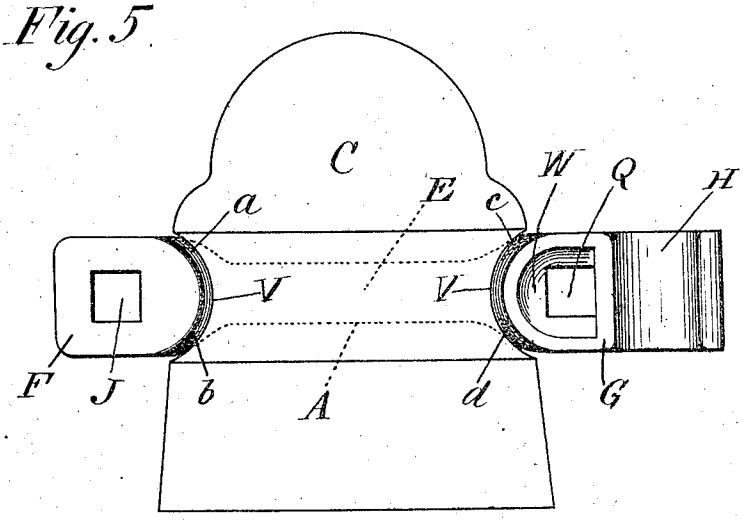


Fig. 5



WITNESSES

Walter G. Clark INVENTOR

BY Herbert E. Ogden

his ATTORNEY

UNITED STATES PATENT OFFICE.

WALTER G. CLARK, OF NEW YORK, N. Y.

INSULATOR-CLAMP.

1,040,620. Specification of Letters Patent. Patented Oct. 8, 1912.

Application filed November 21, 1911. Serial No. 661,473.

To all whom it may concern:

Be it known that I, WALTER G. CLARK, a citizen of the United States, and a resident of the borough of Manhattan, city, county, and State of New York, have invented certain new and useful Improvements in Insulator-Clamps, of which the following is a specification, accompanied by drawings.

This invention relates to insulator clamps, but more particularly to a clamp for holding in place angle or vertical conductors, as for instance, for holding street arc lamp cables to standard or other suitable pole insulators or in a power house for fastening vertical bus bars in place on a switch board, in which latter case the clamps would preferably, although not necessarily, be used behind the switch board.

Many other uses will be found for a clamp adapted to hold angle or vertical conductors, and the objects of the invention are to provide a neat, permanent and attractive clamp, simple and cheap to manufacture, yet strong and efficient, and especially designed for the purposes for which it is intended. The clamp is furthermore constructed to cooperate with a suitable insulator, as a standard insulator, and is provided with clamping members having body portions constructed and adapted to embrace the insulator and lie in the retaining groove on the insulator, so that the clamp is held firmly in position when the clamping members are tightened about the insulator.

To these ends the invention consists of a clamp embodying the features of construction substantially as hereinafter described and claimed in this specification and shown in its preferred embodiment in the accompanying drawings, in which—

Figure 1 is a top plan view of an insulator clamp embodying the invention, with the parts assembled; Fig. 2 is a detail side elevation of the outside of one member, with the bolts removed; Fig. 3 is a detail side elevation of the inside of one member with the bolts removed. Fig. 4 is a side elevation of the clamp applied to an insulator; and Fig. 5 is a side elevation of an insulator with one half of a clamp applied thereto illustrating the manner in which the clamping members coöperate with the insulator to grip the same firmly.

Referring to the drawings, the insulator clamp comprises a plurality of clamping members, preferably two members A and B, adapted to clasp an insulator, as the insulator C shown in Figs. 4 and 5, and cooperate with each other to hold a conductor D at an angle to the plane of the clamping members. In this instance the conductor D is shown clamped in substantially vertical position by way of illustration, so that the conductor is held in a plane substantially parallel to the plane of the longitudinal axis of the insulator C. Such a construction is frequently necessary or desirable in contra-distinction to those cases in which it may be required to hold the conductor horizontally, or extending across the top of the insulator.

Since the clamping members are substantially identical in construction and therefore interchangeable, which is an advantageous feature, the description of one member applies equally well to the other.

Each clamping member comprises a body member E bowed or curved as shown, and having a securing member F in the form of a lug at one end, and a jaw portion G at the other end provided with the jaw H. The securing member F is provided with an aperture J preferably angular or squared, to receive a securing bolt K having the head L, squared neck O, and nut P, so that the bolt may be inserted from either side of the securing members F when the clamping members are assembled. The jaw portion G is also provided with the preferably squared aperture Q preferably between the body member and jaw to receive the bolt R having the head S, squared throat T and nut U. The body member E is preferably formed in the process of manufacture narrower and thinner than the securing member F and jaw portion G, in order to save metal and decrease weight, without, however, sacrificing the desired strength of parts. By thus reducing the metal of the body member, the securing member and jaw portion may be constructed wider and thicker than the body member and thus afford provision for obtaining beveled shoulders *a*, *b* and *c*, *d* at each end of the body member, which are so constructed and shaped as to coöperate with the groove V of the insulator C and afford bearing portions for the clamp, thus taking the strain off the conductor D. The jaw portion is also preferably hollowed at W for lightness and strength. The relative width and thickness of the body member and end portions

of the clamping members are more incidental to the process of manufacture, than a requisite in the construction of the clamp, because obviously the coöperation between the shouldered portions *a*, *b* and *c*, *d* and the grooved portion of the insulator can be obtained if each clamping member were made of the same width and thickness throughout, because the bearing portions of the clamping members lie at the inner surfaces of the securing members F and jaw portions G indicated by the reference characters *a*, *b* and *c*, *d*. These bearing portions furthermore are adapted to fulfill their functions of taking the strain off the conductor with conductors of different diameters, because the surfaces *a*, *b* and *c*, *d* will conform to the surface of the groove under substantially all conditions, provided the jaw portions are not too widely separated by the insertion of a larger conductor than proper. Ordinarily clamps having different sized jaws will be provided for conductors of different sizes.

In clamping a conductor or cable, a lead bushing X may be used in the jaws if desired, but this may be omitted, and the jaws are adapted to receive and hold a conductor of any suitable cross-section, as oval, circular, square, etc.

The insulator clamp constructed in accordance with this invention is simple and cheap to manufacture and affords an efficient means for holding in place angle or vertical conductors.

I claim and desire to obtain by Letters Patent the following:

An insulator clamp comprising two coöperating clamping members each having a bowed body member, a securing member at one end, and a jaw portion at the other end provided with an aperture intermediate the jaw and body member, the securing member and jaw portion being wider than the connecting body member and having beveled shoulders at the junctions of the body member with said securing member and jaw portion.

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

WALTER G. CLARK.

Witnesses:
M. M. RIEMANN,
HERBERT G. OGDEN.