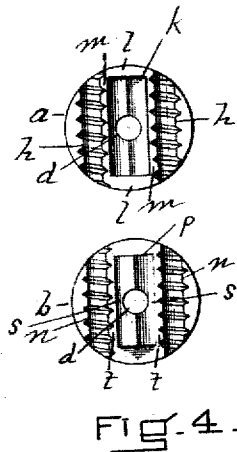
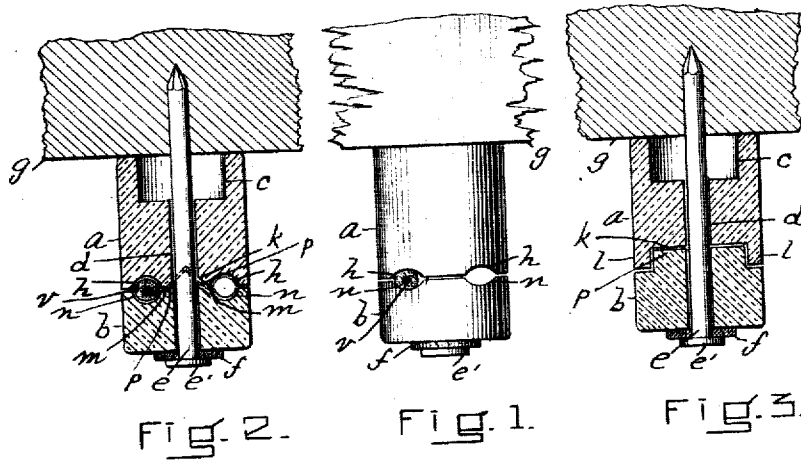


No. 864,947.

E. W. BUFFINTON.
CLAMP FOR ELECTRIC WIRES.
PATENTED SEPT. 3, 1907.
APPLICATION FILED MAY 1, 1907.



WITNESSES.

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CLAMP FOR ELECTRIC WIRES.

No. 864,947.

Specification of Letters Patent.

Patented Sept. 3, 1907.

Application filed May 1, 1907. Serial No. 371,227.

To all whom it may concern:

Be it known that I, ELISHA W. BUFFINTON, a citizen of the United States, residing in Fall River, in the county of Bristol and State of Massachusetts, have invented certain new and useful Improvements in Clamps for Electric Wires, of which the following is a specification.

This improvement relates to clamps or knobs, usually made of porcelain, for holding electric wires, such wires being commonly insulated.

This clamp is intended particularly for holding a single insulated electric wire, although it is provided with two sets of grooves for the purpose below described. The present improvement has for its particular object to enable the wire to be quickly and easily applied by the workman, and when thus applied to either of the two grooves, to be prevented by pairs of abutting walls from jumping to the nail or screw by means of which the clamp is secured and hence grounding the current.

The nature of my invention is fully described below, and illustrated in the accompanying drawings, in which:—

Figure 1 is an elevation showing my improved clamp or knob in position secured to a wall or ceiling, the insulated wire being shown in position and in section. Fig. 2 is a central vertical section of the same, the nail being shown in elevation. Fig. 3 is a central vertical section taken at right angles to the section shown in Fig. 2. Fig. 4 is a view of the adjacent surfaces of the two parts of the clamp separated.

Similar letters of reference indicate corresponding parts.

a represents the base and *b* the cap of a clamp or knob for holding an electric wire. The base is preferably chambered out at *c*, and both the base and cap are provided with coincident central holes *d* through which a nail *e* is driven in order to secure the knob in position. This nail is preferably round and has a flat head *e'* between which and the outer surface of the cap *b* a washer *f* is placed.

g represents a portion of the wall or ceiling.

The outer surface of the base *a*, that is, the surface which faces the inner surface of the cap, is provided near its opposite edges with parallel grooves *h* each of which is formed with practically transverse serrations, as illustrated in Fig. 4. Between these grooves and parallel with them is a central and somewhat deeper groove *k*, angle-shaped in cross section, said groove not extending to the opposite edges of the base but to opposite walls *l* which extend out from said edges. The nail-hole *d* is centrally located in this groove, and the opposite sides *m* of the groove constitute walls which separate the groove *k* from the grooves *h*.

The inner surface of the cap *b* is provided with opposite transversely serrated grooves *n* which when the parts are in position register with the grooves *m*, and with a V-shaped tongue *p* of length and shape to fit into the groove or recess *k*. This tongue does not therefore extend to the edges of the cap, and the nail-hole *d* extends centrally through it. The nail-hole is of less diameter than the width of the tongue, and hence there are walls *s* produced on the opposite sides of said hole next the narrow surfaces *t* which are located between the tongue and the grooves *n*.

When the parts are in the position indicated in Figs. 1, 2 and 3, the two surfaces *t* register with and nearly or quite abut against the two walls *m* on the base *a*, and the two walls *s* on the opposite sides of the nail-hole in the cap interlap with the inner surfaces of the walls *m*, such interlapping being possible because the nail-hole in the base is of less diameter than the angle-shaped groove *k*. Thus the parts *m* and the sides of the groove *k* on opposite sides of the nail-hole combine with the parts *t* and walls *s* to produce protecting partitions or walls between the nail and a wire in either of the two pairs of grooves, effectually preventing jumping of the current from a wire in a groove to the nail.

Although this device shows two sets of grooves for electric wires, it is not intended that but one shall be used at a time, as but one wire *w* is intended usually to extend through the clamp. When the workman applies the clamp to a wire, he allows the wire to lie in either of the grooves *h*, and quickly applies the cap to the base without stepping to fit their adjacent surfaces against each other, as the act of applying said surfaces to each other is practically instantaneous inasmuch as the tongue *p* slips naturally into the angle-shaped groove *k*, and is prevented from lateral movement by the side walls of the groove, and from longitudinal movement by the walls *l*. It will be seen therefore that in whichever groove *h* the wire is placed, the act of applying the cap to the base is exceedingly quick, and hence the time of the workmen is economized. As soon as the parts are placed together in the manner above mentioned the nail is applied and the clamp thus secured in position.

Having thus fully described my invention, what I claim, and desire to secure by Letters Patent, is:—

1. The herein described improved clamp or knob for electric wires, consisting of a base provided on its face with two side grooves each adapted to receive a wire and with a long and narrow central groove located between the side grooves and substantially parallel therewith and extending nearly to the opposite sides or edges of said base, walls at the opposite ends of the central groove, and thin walls between the opposite sides of the central groove and the side grooves; and a cap provided on its face with a tongue of size and shape to fit into the central groove of the base and with side grooves registering with the side

grooves in said base, the base and cap being provided with central coincident holes in said tongue and central groove for a nail or screw, the holes being of less diameter than the width of the tongue, whereby the cap portion can be quickly and accurately applied to the base, and interlapping walls are produced on the cap and base on opposite sides of the nail-holes.

2. The herein described improved clamp or knob for electric wires, consisting of a base provided on its face with two side grooves each adapted to receive a wire and with a long and narrow V-shaped central groove located between the side grooves and substantially parallel therewith and extending nearly to the opposite sides or edges of said base, walls at the opposite ends of the central groove, and thin walls between the opposite sides of the

central groove and the side grooves; and a cap provided on its face with a tongue of size and shape to fit into the central groove of the base and with side grooves registering with the side grooves in said base, the base and cap being provided with central coincident holes in said tongue and central groove for a nail or screw, whereby the cap portion can be quickly and accurately applied to the base and the tongue prevented from either longitudinal or transverse movement in the central groove.

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

Witnesses:

MORTON E. SETCHELL,
M. A. ATWOOD.

ELISHA W. BUEFINTON.