(No Model.)

J. J. GREEN & G. C. BROWN.

CLAMP FOR ELECTRIC WIRES.

No. 464,770. Patented Dec. 8, 1891.

Fig. 1.

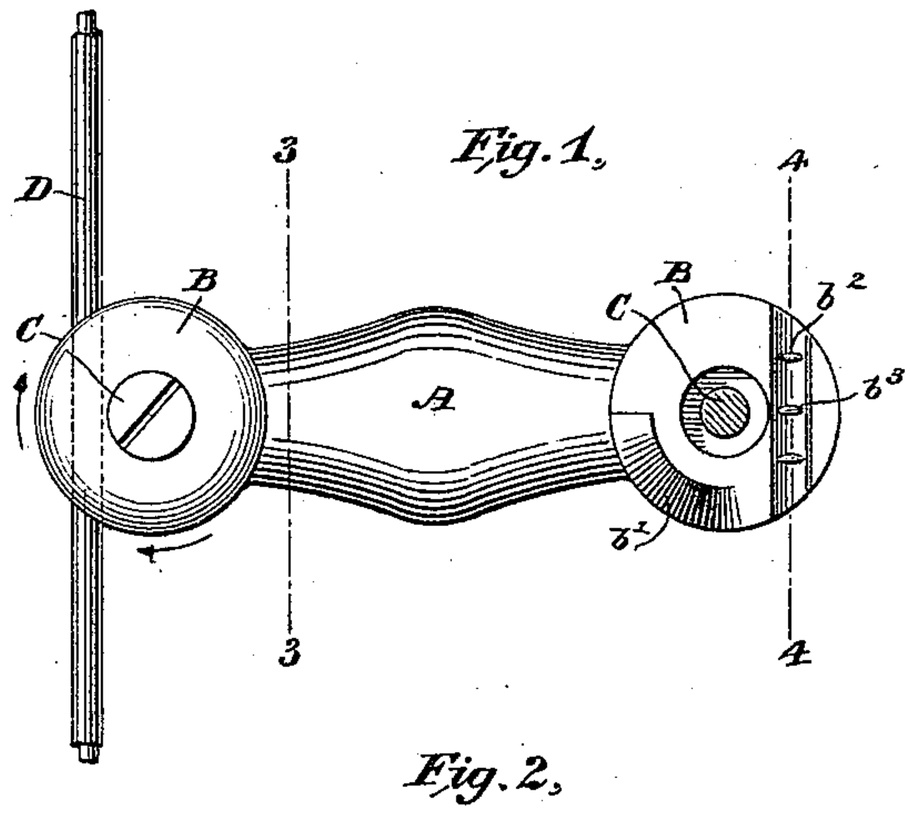


Fig. 2.

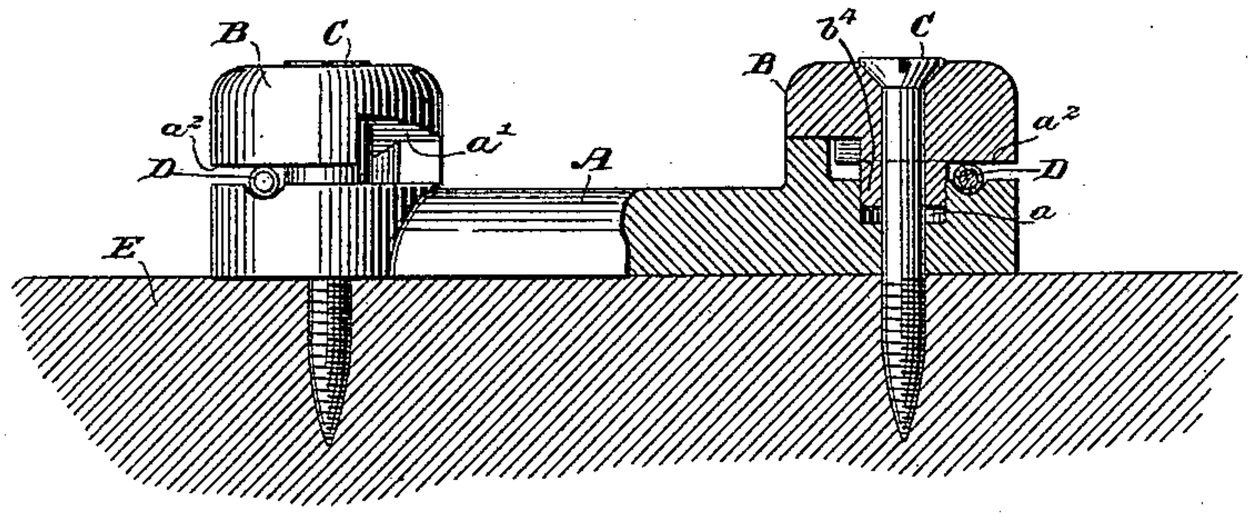


Fig. 3.

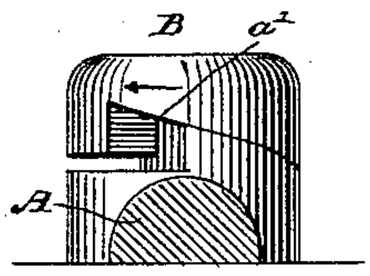


Fig. 4.

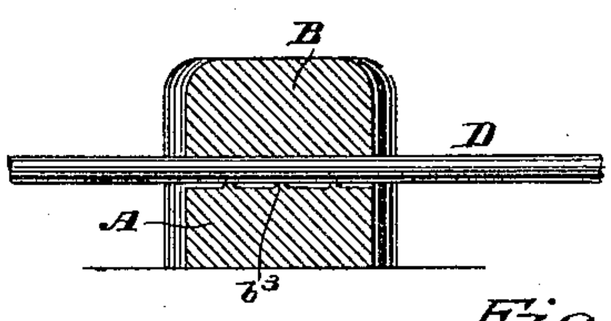


Fig. 6.

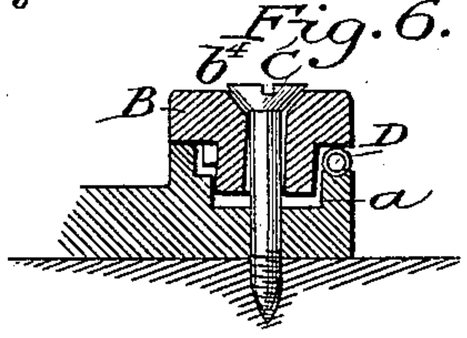
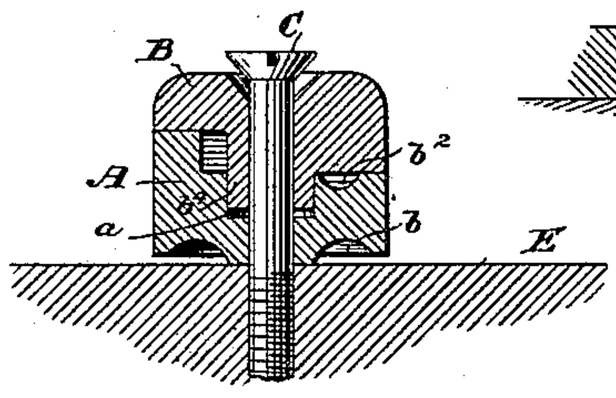


Fig. 5.



Witnesses
Geo. W. Breck.
Edward Thorpe.

Inventors
John Jay Green
Geo. C. Brown
By their Attorney
Franklin L. Pope.

UNITED STATES PATENT OFFICE.

JOHN JAY GREEN, OF BOONTON, AND GEORGE C. BROWN, OF ELIZABETH, NEW JERSEY.

CLAMP FOR ELECTRIC WIRES.

SPECIFICATION forming part of Letters Patent No. 464,770, dated December 8, 1891.

Application filed October 30, 1890. Serial No. 369,774. (No model.)

To all whom it may concern:

Be it known that we, JOHN JAY GREEN, of Boonton, in the county of Morris, and GEORGE C. BROWN, of Elizabeth, in the county of Union, State of New Jersey, citizens of the United States, have invented certain new and useful Improvements in Clamps for Electric Wires, of which the following is a specification.

The object of our invention is to furnish a device for supporting, clamping, and holding electric conductors, particularly such conductors as are provided with an outer sheath or covering of fibrous, textile, or compressible material.

In the accompanying drawings Figure 1 is a plan view, partly in horizontal transverse section, of one form of clamping device embodying our invention. Fig. 2 is an elevation of the same, partly in vertical transverse section. Fig. 3 is a cross-section taken in the plane of the line 3 3 in Fig. 1. Fig. 4 is a cross-section taken in the plane of the line 4 4 in Fig. 1. Fig. 5 is a cross-section showing the device when adjusted in readiness for the insertion of the wire or line to be clamped, and Fig. 6 illustrates the operation of clamping the wire.

The invention is applicable either to insulating-supports, in which case it is preferably made of glass, porcelain, or other like non-conducting material, or to conducting-supports, such as the clamping terminals of electric switches and the like, in which case it may be constructed of brass or other equivalent conducting metal.

Referring to the separate figures of the drawings, A is the base or stationary portion of the device, which in the present instance is provided with two wire supports, as shown, each of which has an inclined bearing-surface b', forming, as it were, a portion of a screw-thread, and a shallow semicircular groove b^2, adapted to receive the wire and prevent it from becoming laterally displaced. Above the base is a rotatable cap B, which is likewise formed with an inclined bearing-surface a' opposite to and corresponding with that at b' upon the base, hereinbefore referred to. The cap B is also provided with a horizontal bearing-surface a^2, which is adapted to press upon opposite sides of the wire or line B, as the latter lies in the groove b^2 in the manner hereinafter described.

C is a central pivot, which may be a common wood-screw, preferably with a tapering slotted head, which passes through a central opening formed in the base A and somewhat loosely through a similar opening in the cap B, as best seen in Figs. 2, 5, and 6. The cap B (see Figs. 2, 5, and 6) is formed with a sleeve b^4, which enters a socket a. Transverse corrugations b^3 are formed in the bottom of the groove b^2, which receives the wire D. The central pivot-screw C is adjustable in the direction of its length in the support E, upon which the base A is designed to be secured, and should be adjusted, as in Fig. 5, in the first instance, so as to permit the cap B to be raised to a height barely sufficient to permit the wire D to be placed in the groove b^2 of the base. The cap B is rotated upon the pivot C in the direction indicated by the arrows, the result of which is to slightly raise that edge of the cap B which is directly above the inclined surface b' of the base A, and thus by making use of the central screw C as a fulcrum to bring the opposite horizontal bearing-surface a^2 of the cap forcibly in contact with the wire D, pressing the slightly-yielding surface of the same against the corrugations b^3, after which the pivot or screw C may, if necessary, be driven home or longitudinally adjusted, thereby causing the wire D to be firmly held and prevented from moving either in a longitudinal or a lateral direction. When a thick wire is to be clamped, it is especially important that the cap B should not fit too closely around the pin C, as the operation of the device is more effective when sufficient play is permitted. By rotating the cap B in the reverse direction, and, if necessary, by loosening the screw C, the wire may be removed at will. When the base-piece A is of insulating material, a shallow annular groove b is formed in its under side, which tends to prevent the space between the base-piece A and its support from becoming filled with water.

We claim as our invention—

1. In a wire-clamp, the combination of a base having an inclined bearing-surface, a ro-

tatable cap having a similar and opposed inclined surface and loosely encircling a central pin capable of longitudinal adjustment, and a groove for receiving the wire, substantially as set forth.

2. In a wire-clamp, the combination, with a common base, of two inclined bearing-surfaces and two caps, each capable of independent vertical and rotatable adjustment upon loosely-fitting central pins for grasping two parallel wires, as set forth.

3. In a wire-clamp, the combination of the base having an inclined bearing-surface, the rotatable cap having a similar and oppositely-inclined surface and loosely encircling a longitudinally-adjustable central pin, and a sleeve formed upon one of said parts, surrounding said pin and turning within a socket formed in the other part, substantially as set forth.

In testimony whereof we have hereunto subscribed our names this 25th day of October, A. D. 1890.

JOHN JAY GREEN.
GEORGE C. BROWN.

Witnesses as to John J. Green:
JAMES H. DEPOE,
FRANKLIN L. POPE.
Witnesses as to George C. Brown:
P. J. RYAN,
FRANKLIN L. POPE.