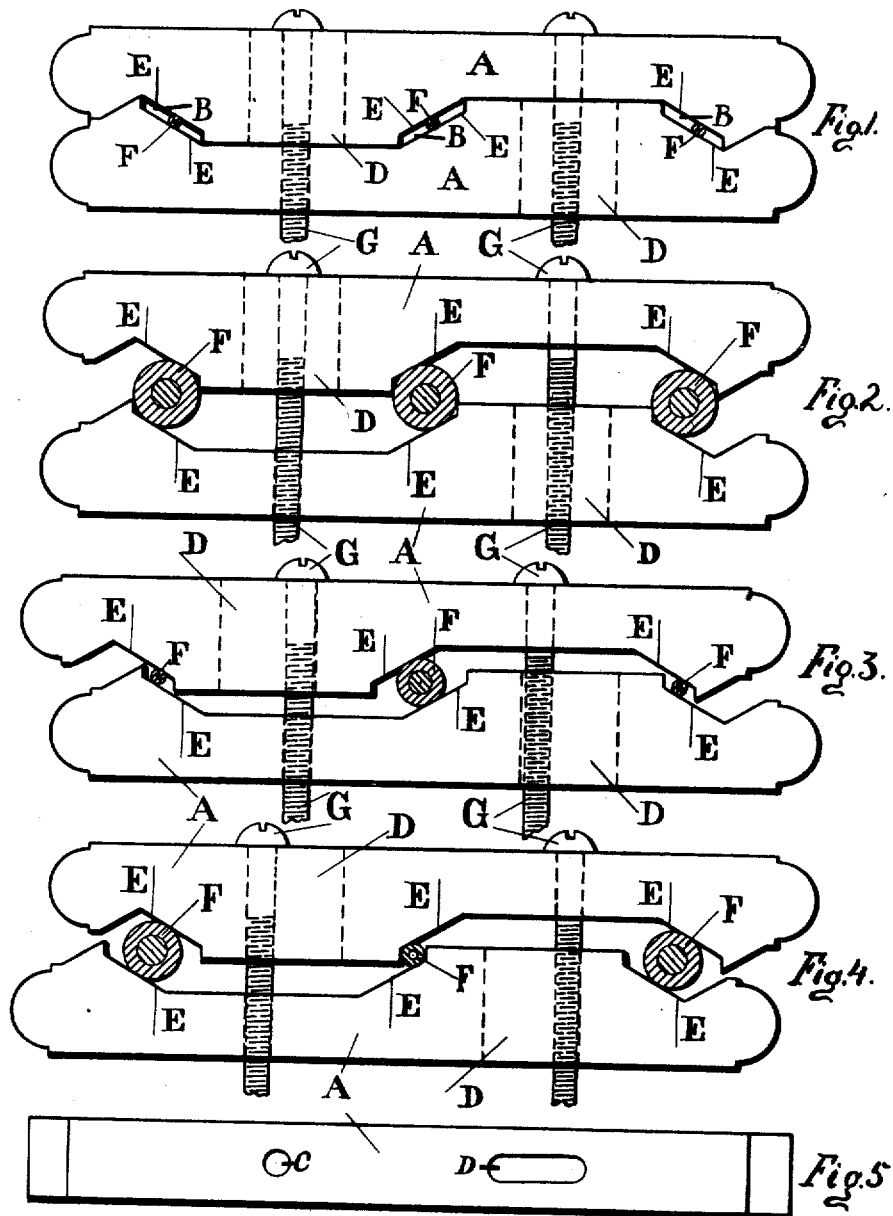


(No Model.)

H. P. BALL.
CLEAT FOR ELECTRIC WIRES.

No. 458,964.

Patented Sept. 1, 1891.



WITNESSES:
John M. White
C. E. Estabrook

INVENTOR
Henry Price Ball.

UNITED STATES PATENT OFFICE.

HENRY PRICE BALL, OF BROOKLYN, NEW YORK.

CLEAT FOR ELECTRIC WIRES.

SPECIFICATION forming part of Letters Patent No. 458,964, dated September 1, 1891.

Application filed April 17, 1891. Serial No. 389,290. (No model.)

To all whom it may concern:

Be it known that I, HENRY PRICE BALL, a citizen of the United States, residing in Brooklyn, in the State of New York, have invented a new and useful Cleat for Electric Wires, of which the following is a specification.

My invention relates to improvements in cleats for electric wires in which the wires are held from the ceiling some distance to prevent contact with the ceiling, and also in constructing a cleat in two pieces exactly alike, the cleat being able to hold any size of wire within its capacity or three different sizes of wire indiscriminately placed in the cleat. I attain these objects in the mechanism illustrated in the accompanying drawings, in which—

Figure 1 represents the cleat holding three small wires of the same diameter. Fig. 2 represents the cleat holding three large wires of the same diameter. Fig. 3 represents the cleat holding a large wire in the center and a small wire at each end. Fig. 4 represents the cleat holding a small wire in the center and a large wire at each end. Fig. 5 is the top view of the cleat.

The cleat is constructed of two sections which are interchangeable. Each section A of the cleat is constructed, as shown on the drawings, with three inclined planes E E E, which form, with the inclined planes of the other section, the openings B B B, Fig. 1, in which openings the wires are clamped when the two sections of the cleat are brought together. The angle of these inclined planes is preferably about thirty degrees to the long side of the cleat. Each cleat has in it a round hole C and an elongated hole D, through which the screws G pass to screw the cleat against the wall or ceiling or wherever it is used. It will be seen that this cleat adjusts itself to any size of wire F within the capacity of the cleat, as shown on the drawings. The variation in the size of the wire F (shown on the drawings) is greater than practice would require, the drawings being made of this capacity simply to show the capabilities of the cleat.

The principles on which the cleat works is that the wires F F F will roll or slip between

the inclined planes E E E until they find their proper bearing, at which point the rolling or slipping of the wires stops, and then any extra pressure that is brought to bear upon the screws will clamp the wires tightly between the inclined planes.

This cleat can be made of wood, or porcelain, or glass, or, in fact, of any material that has sufficient strength.

An advantage of this cleat over other cleats is the fact that the wires need not be all of the same size, which in practice is of great importance, as in the three-wire system a larger or smaller neutral wire is often run, a small neutral wire being run in cases where the three-wire system is never changed, except in great emergencies, to the two-wire system, and a larger neutral wire in cases where the three-wire system is designed to be run on the two-wire system with the same economy as on the three-wire system. Three varying sizes of wire can also be used in my cleat, an advantage which also does not necessitate any great accuracy in the thickness of the insulation in order that the cleat should clamp all the wires.

I am not aware of any three-wire cleat made in two pieces, the pieces being exactly alike and interchangeable, that will hold two or three varying sizes of wire at the same time.

Having fully described my invention, so that any one skilled in the art could manufacture the same, what I claim, and desire to secure by Letters Patent, is—

1. A three-wire cleat in two sections capable of being screwed together by means of screws passing through the hole in one section and through the hole in the other section into the place where they are to be fastened, the cleat holding the wires between the inclined planes, which present surface between which the wires are clamped.

2. A three-wire cleat made in two sections, each section having three inclined planes, two of them forming a raised projection on the side of the cleat, and one of these two inclined planes and the third forming a depression on the side of the cleat, this projection and this depression fitting into the depression and projection, respectively, on the

side of the second section, the wires being held between the inclined planes and clamped, as specified.

3. A cleat composed of two sections, each
5 section having inclined planes which are so located that the inclined planes of one section engage with the inclined planes of the

second section when the wires are clamped between the planes, as specified.

HENRY PRICE BALL.

Witnesses:

JOHN MCGHIE,
C. E. ESTABROOK.