

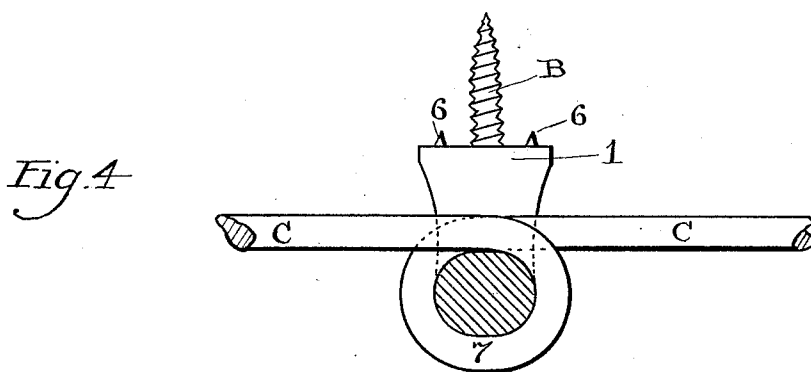
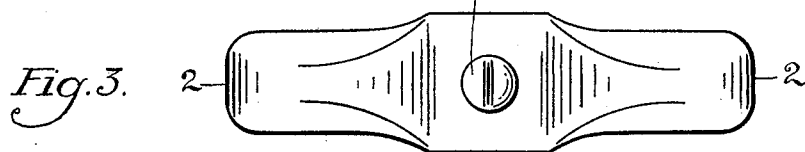
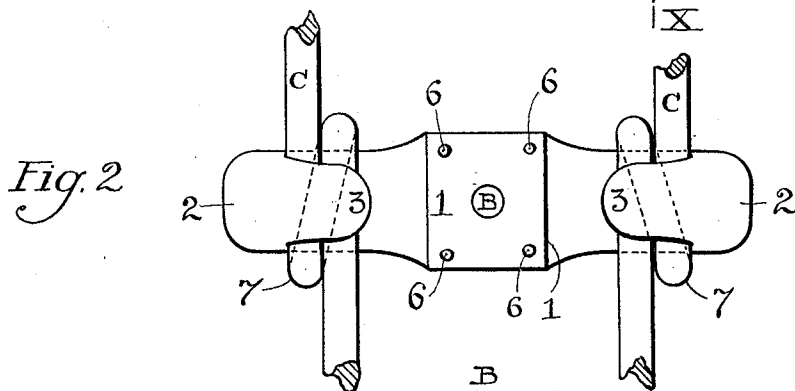
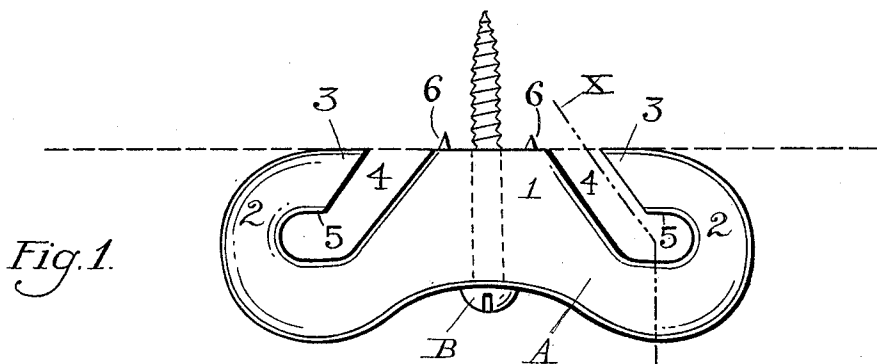
(No Model.)

H. B. WYMAN.

CLEAT FOR SUPPORTING CONDUCTING WIRES FOR ELECTRIC CIRCUITS.

No. 518,907.

Patented Apr. 24, 1894.



Witnesses;
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UNITED STATES PATENT OFFICE.

HORACE B. WYMAN, OF SLINGERLANDS, ASSIGNOR OF ONE-HALF TO ALBERT C. GOODWIN, OF ALBANY, NEW YORK.

CLEAT FOR SUPPORTING CONDUCTING-WIRES FOR ELECTRIC CIRCUITS.

SPECIFICATION forming part of Letters Patent No. 518,907, dated April 24, 1894.

Application filed December 20, 1893. Serial No. 494,191. (No model.)

To all whom it may concern:

Be it known that I, HORACE B. WYMAN, of Slingerlands, in the county of Albany and State of New York, have invented new and useful Improvements in Cleats for Supporting Conducting-Wires for Electrical Circuits, of which the following is a specification.

My invention relates to supports for wires for conducting electrical-currents through buildings, wherein said wires are, from necessity, carried in close proximity to the ceilings, partitions, and other parts of the building, that are composed, either partially or entirely, of wood or other material of a combustible nature, that is liable to be ignited by said currents; and it consists of a cleat composed of porcelain, glass, or other material that is a non-conductor of electricity, and made substantially in the form shown in the accompanying drawings and described in this specification.

In the accompanying drawings, which are herein referred to and form part of this specification, Figure 1 is a side elevation of my invention. Fig. 2 is a plan view of the same. Fig. 3 is an inverted plan view; and Fig. 4 is a transverse section at the line X X, showing the manner of hitching wires to the cleat.

As represented in the drawings, A designates my cleat or fastening for supporting conducting-wires, the same consisting of a body, 1, perforated vertically for receiving one or more screws, B, or other means for securing said cleat in a required position, the upper end of said body having a broad bearing surface for the purpose of giving stability to the cleat; at each end of the latter a hook, 2, is formed in such manner that its terminal, 3, will range in line, or approximating thereto, with the plane of the upper surface of the body 1. Between said body and each of said hooks, a slotted opening, 4, is formed to extend to the upper surface of said body; preferably said slotted openings are made to incline outwardly from said body toward the corresponding end of the cleat, and preferably said slotted openings are each extended outwardly, in a horizontal direction, to form a shoulder, 5, on each of the hooks. The shoulders 5 form obstructions in the slotted

openings 4 to prevent the wire from slipping out therefrom.

When preferred the upper surface of the body 1 can be provided with spurs, 6, or other means, which, by becoming indented in the wood, or other substance to which the cleat is secured, will prevent the latter from being swung by the strain of the wires out of its proper position.

C designates conducting-wires of the kind commonly used for carrying currents of electricity, and said wires are supported by my cleats, either by simply passing the wire through the slotted opening 4, to lay upon the hook 2, or by attaching the wire to said cleat by means of a loop, or hitch, 7, formed by turning said wire around the lower portion of said hook, as shown in the drawings; by securing the wire as last described support is afforded to retain the cleat in place against a strain of the wire which might otherwise turn the cleat from the position in which it had been arranged.

In practice the wires C need not be secured by the hitch 7 to every cleat used, but such fastening may be reserved for securing the wires at points considered necessary or desirable to obtain efficiency.

By constructing my cleat with a central body, whose upper face bears directly against a ceiling or other part of a building, a sufficient mass of insulating material—of which said cleat is composed—will be interposed between the conducting-wires, between said wires and screw B, and between said wires and wood-work to which the cleat is secured, to effect a perfect electrical-insulation of said parts from the conducting-wires, and I am thereby enabled to avoid all moisture-collecting joints between different layers of the insulating-material—as found in some cleats for a like purpose, and I also avoid providing surfaces for gathering and retaining moisture between the conducting-wires and fastenings; such moisture affording a well-known means for conducting the electric-currents from said wires to the screws and thence to the wood-work, and, consequently, such insulators frequently prove to be a prolific source of danger instead of affording the protection sought for.

What I claim as my invention, and desire to secure by Letters Patent, is—

1. An insulating-cleat for electrical-conducting-wires; the same being composed of material that is a non-conductor of electricity and consisting of a central body, 1, whose upper face is fitted to bear directly against a ceiling or wall and is perforated to receive a fastening-screw that will be surrounded by the insulating material of the cleat to its point of contact with said ceiling; said central body having—at each end—a hook, 2, which is integral therewith and has a terminal, 3, whose end ranges—either approximately or positively—with the upper face of said central body; whereby slotted openings, 4, with practically parallel sides are formed between said body and hooks in such manner that said openings will be entirely insulated from the fastening-screws and no lodgment for moisture afforded in said openings, as and for the purpose specified.

2. An insulating-cleat for electrical-conducting-wires, composed of material that is a non-conductor of electricity and consisting of a central body, 1, having its upper face fitted to bear directly against the plane to which the cleat is attached; said central body being perforated to receive a fastening-screw, B, which secures said cleat to its place and which will be surrounded by the insulating material of the cleat to the point of junction of the central body with the plane to which said cleat is attached; each end of said central body having a hook, 2, that is integral therewith and is provided with a terminal,

3, ranging—either approximately or positively—with the plane of the upper face of the central body; whereby slotted openings, 4, are formed to extend—first downwardly inclined and then horizontally—from said central body so as to form shoulders, 5, in said openings; the latter being formed with practically parallel sides and being entirely insulated from the fastening-screw, as and for the purpose specified.

3. An insulating-cleat for electrical-conducting-wires, composed of material that is a non-conductor of electricity and consisting of a central body, 1, whose upper face is fitted to bear directly a plane where to said cleat is fastened; said central body being perforated to receive a fastening-screw, B, which will be surrounded by the insulating material of said cleat to the point of junction of said central body with the plane to which the cleat is attached; said central body having at each end a hook, 2, whose terminal ranges—either approximately or positively—with the plane of the upper face of the central body; whereby slotted openings, 4, with practically parallel sides will be formed between said hooks and central body and said openings will be entirely insulated from said fastening-screw, in combination with a conducting-wire, C, secured to a hook of said cleat by means of a hitch or turn, 7, of said wire around said hook, as and for the purpose specified.

HORACE B. WYMAN.

Witnesses:

WM. H. LOW,
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