Nov. 16, 1937. W. J. BINKLEY 2,099,098

BRACKET FOR ELECTRICAL WIRES

Filed Nov. 29, 1935

Fig. 1

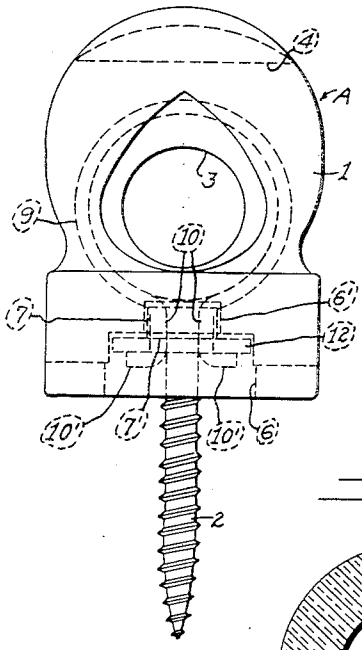


Fig. 2

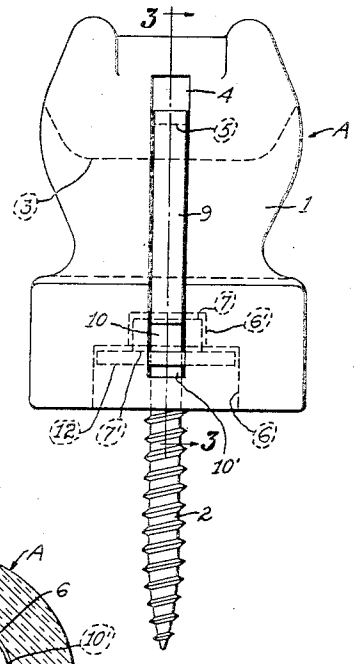


Fig. 5

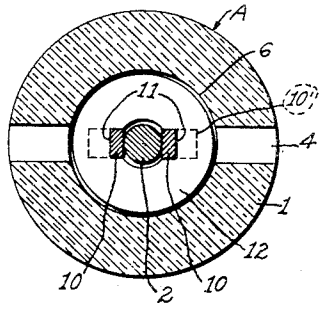


Fig. 3

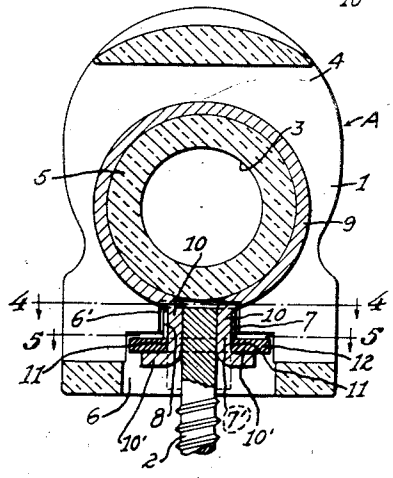
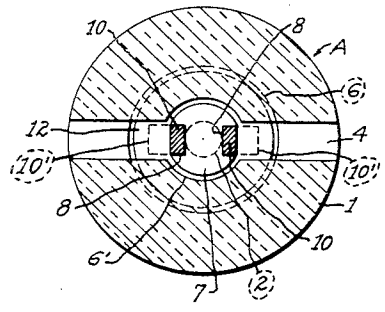


Fig. 4



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Patented Nov. 16, 1937

2,099,098

UNITED STATES PATENT OFFICE

2,099,098

BRACKET FOR ELECTRICAL WIRES

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Application November 29, 1935, Serial No. 52,137

5 Claims. (Cl. 248—71)

This invention relates generally to brackets, and more specifically to brackets of the type known as house brackets, which are employed for holding and supporting electrical wires, the predominant object of the invention being to provide a house bracket which includes an insulating body portion or knob, and a wood screw for securing the bracket to a support and wherein improved means for attaching the wood screw to the insulating body portion is provided.

Fig. 1 is an elevation of the improved bracket.

Fig. 2 is an elevation of the bracket illustrated in Fig. 1, but viewing same from a different angle.

Fig. 3 is a vertical, sectional view of the improved bracket taken on line 3—3 of Fig. 2, and with the lower portion of the wood screw broken away.

Fig. 4 is a cross-section on line 4—4 of Fig. 3.

Fig. 5 is a cross-section on line 5—5 of Fig. 3.

In the drawing, wherein is shown for the purpose of illustration, merely, one embodiment of the invention, A designates the improved bracket generally. The bracket A includes a body portion or knob 1, which is formed of poreclain or other suitable insulating material, and a wood screw 2 is attached to said body portion or knob in an improved manner to be hereinafter described. The body portion 1 has formed transversely therethrough an opening 3, through which an electrical conductor (not shown) held or supported by the bracket is extended, and formed through said body portion 1 at an approximate right angle to the axis of the opening 3 is a slot 4. The slot 4 is open at opposite sides of the body portion 1, as shown to the best advantage in Figs. 3, 4, and 5, and as shown in Figs. 2 and 3 the slot at its upper and lower ends terminates short of the top and bottom of the body portion. It is to be noted that the body portion 1 includes an integral cylindrical portion 5, which surrounds the opening 3 and extends transversely of the slot 4. Also, the lower part of the body portion 1 is provided with a circular cavity 6, which is open at the bottom face of the body portion and is provided with an inner portion 6' of reduced diameter.

The wood screw 2 of the improved bracket is provided with an enlarged head portion 7, which has formed therein at oppositely located points thereof a pair of notches 8 (Figs. 3 and 4). At the inner end of the head portion 7 of the wood screw 2 a shoulder 7' is provided which serves a purpose to be hereinafter set forth.

The improved bracket includes a ring 9 formed of metal or other suitable material, which embraces the integral, cylindrical portion 5 of the body portion 1, as shown to the best advantage in Fig. 3. This ring is provided with substantially parallel end portions 10 which, when the bracket is in its assembled condition, are disposed in and extend longitudinally of the notches 8 formed in the head portion 7 of the wood screw 2. The end portions 10 of the ring 9 are extended through notches 11 formed in a washer 12, which embraces the shank portion of the wood screw 2 and contacts with the shoulder 7'. The extreme outer parts 10' of the end portions 10 are bent outwardly, as shown in Figs. 1 and 3, against the lower face of the washer 12, whereby said washer is tightly gripped between said bent-over, outer parts 10' of the end portions 10 of the ring 9 and the sholuder 7' at the inner end of the head portion of the wood screw 2, so as to securely fix the wood screw to the ring.

In assembling the body portion 1 and the wood screw 2 of the improved bracket A, the end portions 10 of the ring 9 are spread apart and said ring is passed into the slot 4 at one side of the body portion 1 in such manner that the spread apart end portions 10 of the ring straddle the integral, cylindrical portion 5 of the body portion 1, and the ring is caused to embrace the cylindrical portion 5 of the body portion. The ring 9 is moved about the cylindrical portion 5 of the body portion to such position that the end portions of said ring are disposed within the cavity 6 of the body portion and extend outwardly with respect thereto. The wood screw 2 is assembled with the end portions 10 of the ring 9 so that said end portions of the ring are located within and extend longitudinally of the opposed notches 8 formed in the head portion of the wood screw 2, and with the head portion of the wood screw located within the reduced portion 6' of the cavity 6. The washer 12 is then arranged in embracing relation with the shank portion of the wood screw and is moved longitudinally thereof until the washer contacts with the shoulder 7' at the inner end of the head portion of said wood screw, the end portions 10 of the ring at this time being extended through the opposed notches 11 formed in said washer at the wall of the central opening thereof. The extreme outer parts 10' of the end portions 10 of the ring 9 are then bent outwardly from the positions in which they are shown by dotted lines in Fig. 3 to the full line positions of said extreme outer parts 10', as illustrated in said view, said extreme outer parts 10' of said end portions of the ring in their bent over positions contacting with the washer 12 so as to

cause said washer to be tightly gripped between the bent over parts 10' of the end portions 10 of the ring 9 and the shoulder 7' of the head portion of the wood screw.

When the improved bracket is assembled in the manner described, an electrical wire to be supported by the bracket may be passed through the opening 3 of the body portion thereof and the wood screw introduced into a wall or other support, so as to secure the bracket to the support. An important feature of the invention is that if the porcelain body portion is broken while in use the assembled ring 9, wood screw 2, and washer 12 will continue to support the electrical wire and prevent same from falling to the ground.

If it should be desired to provide flexibility between the wood screw and the body portion of the bracket so as to permit the inner face of the body portion to be drawn into flat contact with a wall or other support, even though the wood screw may be screwed into the support at an angle to its true course, looseness may be provided between the connected parts of said ring, wood screw, and washer. Thus the opposed notches formed in the head portion of the wood screw and in the washer may be made wider and the end parts 10' of the end portion of the ring may be bent into less close contact with the washer 12. In this manner considerable relative movement between the body portion 1 and the wood screw will be provided for, and the desired flexibility between said parts will be obtained.

I claim:

1. A bracket comprising a body portion having an opening formed therein and having a portion surrounding said opening, an element for securing said body portion to a support, said element being provided with a shoulder, and means for attaching said securing element to said body portion, said means comprising an annular member provided with substantially parallel end portions movable from each other to spread the annular member, said annular member being arranged in embracing relation with respect to the portion of said body portion that surrounds the opening therein, and means for connecting said end portions of said annular member to said securing element, said means comprising a member arranged in contact with the shoulder of said securing element through which member portions of said annular member extend and with respect to which the end portions of said annular member are bent, said member being disposed within said body portion.

2. A bracket comprising a body portion having an opening formed therein and having a portion surrounding said opening, an element for securing said body portion to a support, said element being provided with a shoulder, and means for attaching said securing element to said body portion, said means comprising an annular member provided with substantially parallel end portions movable from each other to spread the annular member, said annular member being arranged in embracing relation with respect to the portion of said body portion that surrounds the opening therein, and means for connecting said end portions of said annular member to said securing element, said means comprising a washer arranged in contact with the shoulder of said securing element through which washer portions of said annular member extend and with respect to which the end portions of said annular member are bent, said washer being disposed within said body portion.

3. A bracket comprising a body portion having an opening formed therein through which an electrical conductor may be extended and having a portion surrounding said opening, an element for securing said body portion to a support, said element being provided with a shoulder, and means for attaching said securing element to said body portion, said means comprising an annular member provided with substantially parallel end portions movable from each other to spread the annular member, said annular member being arranged in embracing relation with respect to the portion of said body portion that surrounds the opening therein, and means for connecting said end portions of said annular member to said securing element, said means comprising a washer arranged in contact with the shoulder of said securing element, said washer being provided with notches through which said end portions of said annular member extend and said end portions of said annular member being bent with respect to said washer, said washer being disposed within said body portion.

4. A bracket comprising a body portion having an opening formed therein through which an electrical conductor may be extended and having a portion surrounding said opening, an element for securing said body portion to a support, said element being provided with a shoulder and having notches formed therein, and means for attaching said securing element to said body portion, said means comprising an annular member provided with substantially parallel end portions movable from each other to spread the annular member, said annular member being arranged in bracing relation with respect to the portion of said body portion that surrounds the opening therein and the end portions of said annular member being disposed in the notches formed in said securing element, and means for connecting said end portions of said annular member to said securing element, said means comprising a washer arranged in contact with the shoulder of said securing element, said washer being provided with notches through which said end portions of said annular member extend, and said end portions of said annular member being bent with respect to said washer.

5. A bracket comprising a body portion having an opening formed therein through which an electrical conductor may be extended and having a portion surrounding said opening, an element for securing said body portion to a support, said element being provided with a shoulder and having opposed notches formed therein, and means for attaching said securing element to said body portion, said means comprising an annular member provided with substantially parallel end portions movable from each other to spread the annular member, said annular member being arranged in embracing relation with respect to the portion of said body portion that surrounds the opening therein and the end portions of said annular member being disposed in the notches formed in said securing element, and means for connecting said end portions of said annular member to said securing element, said means comprising a washer arranged in contact with the shoulder of said securing element, said washer being provided with notches through which said end portions of said annular member extend, and said end portions of said annular member being bent with respect to said washer.

WILLIAM J. BINKLEY.