May 16, 1933. L. E. HENDEE 1,908,758

MOUNTING DEVICE

Filed Aug. 26, 1929

Fig 1

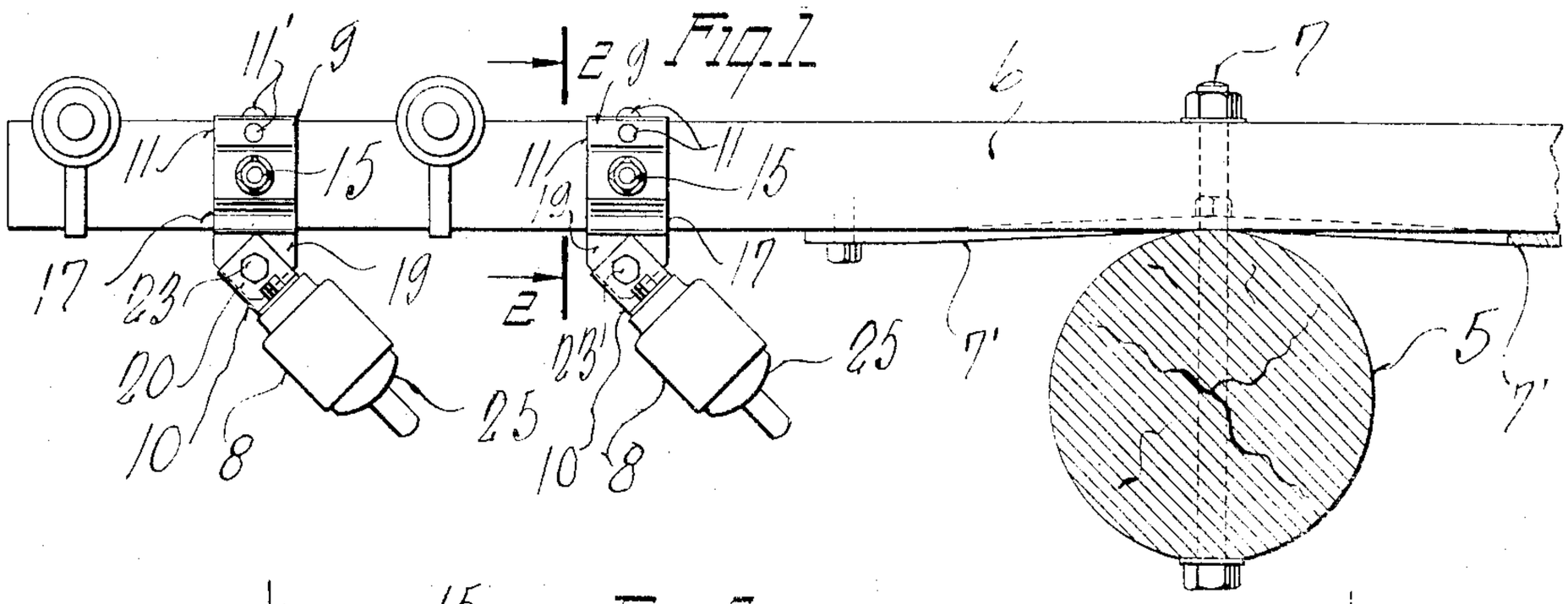


Fig 2

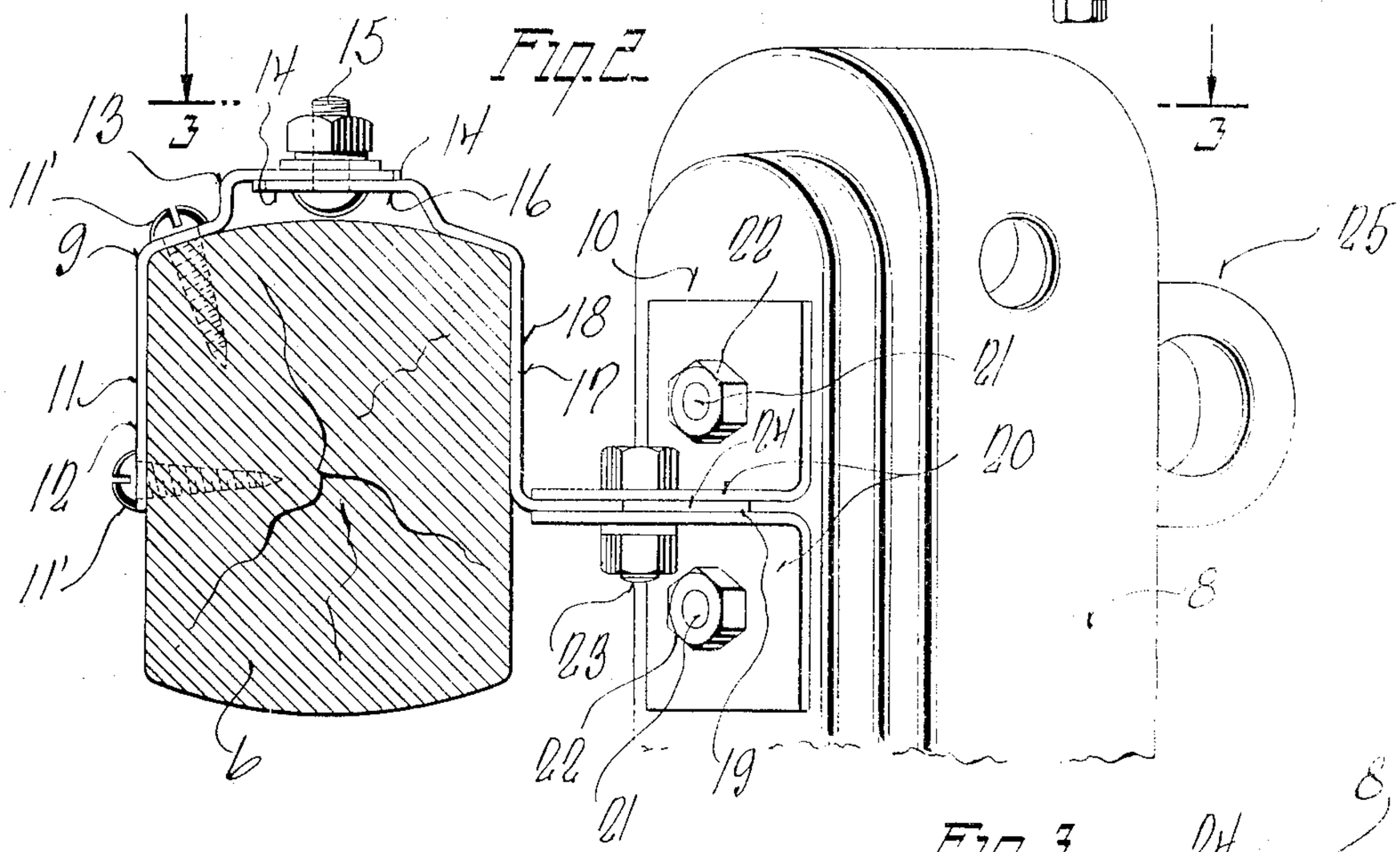


Fig 3

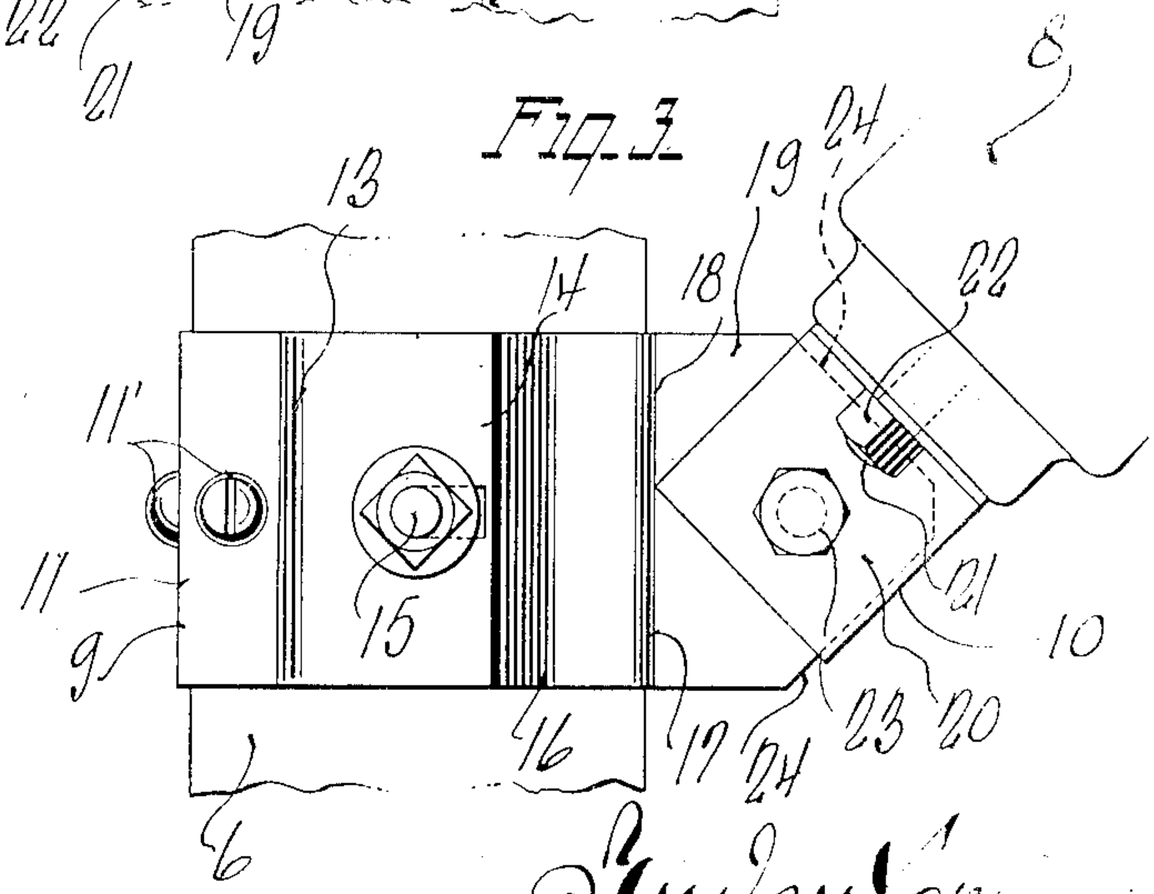
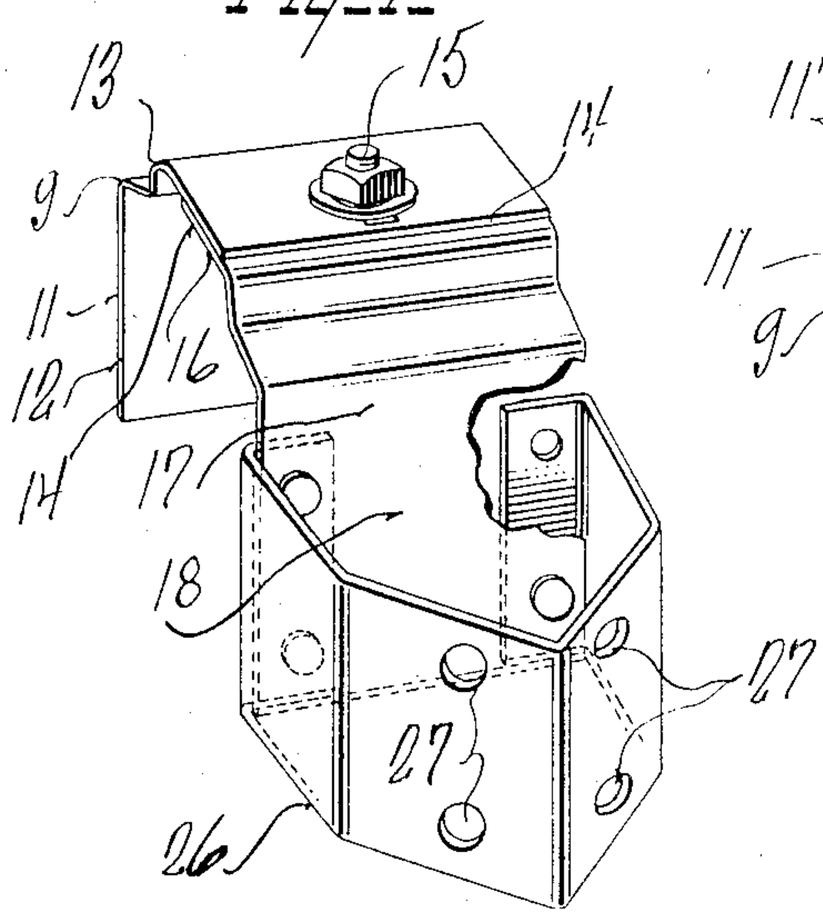


Fig 4



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UNITED STATES PATENT OFFICE

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MOUNTING DEVICE

Application filed August 26, 1929. Serial No. 388,544.

This invention relates to certain new and useful improvements in devices especially adapted for mounting fuse boxes and the like from pole carried cross arms or other like supports.

It is customary to hang, or suitably support, fuse boxes and similar equipment from cross arms, and heretofore all devices available for this purpose so positioned the boxes on the cross arm that it was necessary for a line man to lean out a considerable distance from the pole in order to reach and open the door of the box to permit inspection or removal of the fuse. This practice was objectionable, not only because of the danger connected with it, but also when in this position, he was apt to place a side thrust on the open door of the box which very often effected the alignment of the switch contacts and otherwise proved undesirable.

It is, therefore, an object of the present invention to overcome this objectionable feature by mounting the fuse box in a position with its front directed substantially toward the pole to reduce the distance a lineman is required to lean out from the pole to open and close the fuse box door and bring the lines of force during opening and closing of the cover more in line with the direction of the thrust.

It is also an object of this invention to provide a novel adjustable mounting for fuse boxes and the like which is so arranged that it may be used on either side of the pole and permits the fuse box to be swung to position its front either toward the left or right, depending upon which side of the pole it is mounted.

And a further object of this invention resides in the provision of a novel mounting for fuse boxes and the like which is readily adjustable to permit the angle at which the box is positioned to be adjusted to suit any particular installation.

With the above and other objects in view which will appear as the description proceeds, my invention resides in the novel construction, combination and arrangement of parts substantially as hereinafter described and more particularly defined by the appended claims, it being understood that such changes in the precise embodiment of the hereindisclosed invention may be made as come within the scope of the claims.

In the accompanying drawing, I have illustrated two complete examples of the physical embodiment of my invention constructed according to the best modes I have so far devised for the practical application of the principles thereof, and in which:

Figure 1 is a sectional view taken through a pole directly above one of its cross arms and illustrates the manner of supporting fuse boxes and the like from the cross arm in accordance with my invention;

Figure 2 is an enlarged cross sectional view taken through Figure 1 on the plane of the line 2—2;

Figure 3 is a fragmentary, top plan view on the plane of the line 3—3 of Figure 2; and

Figure 4 is a perspective view of a modified form of mounting means.

Referring now more particularly to the accompanying drawing in which like numerals designate like parts throughout the several views, 5 designates a pole or other suitable support to which a cross arm 6 is secured by a bolt 7 extending through the cross arm and the pole, and being held against movement about the bolt by diagonal braces 7'. Mounted on the cross arm outwardly of the pole is a pair of fuse boxes 8 of conventional construction, supported by an improved mounting device comprising a cross arm engaging section 9 and a section 10 carried by the fuse box.

The section 9 consists of two substantially right angle members 11 and 17, connected by a bolt 15 to form an inverted U-shaped section adapted to be engaged over the cross arm. The ends 13 and 16 of the horizontal legs of the members 11 and 17, respectively, are preferably raised, as at 14, to accommodate the head of the bolt 15, and the apertures therein through which the bolt passes are elongated to permit the distance between their respective vertical legs 12 and 18 to be adjusted to the width of the cross arm.

Screws 11′ passed through holes in both legs of the member 11 are threaded into the cross arm to secure the section 9 thereto, and the lower portion of the vertical arm 18 of the member 17 is directed laterally, as at 19, to be connected with the fuse box carried section 10.

The fuse box carried section of the mounting device comprises two similar right angles members 20 secured to the back of the box with their horizontal legs spaced to receive the end portion 19 of the section 9 therebetween, by bolts 21 embedded in the back of the box and passed through openings in the vertical legs of the members 20, the outer ends of which have nuts 22 threaded thereon to clamp the angle members 20 to the rear wall of the box.

With the laterally directed end portion 19 between the horizontal legs of the angle members 20, a bolt 23 is passed through aligned apertures therein to adjustably connect the sections 9 and 10 in any desired position of angular adjustment within a radius of approximately ninety degrees, defined by the diagonally cut sides 24 of the portion 19 abutting the back of the box.

With this device, the fuse box may be readily adjusted to position its door 25 toward the pole, so that a line-man standing upon the pole need not lean out dangerously far and also by positioning the boxes with their doors faced toward the pole side-thrust will be practically eliminated.

In the modified structure disclosed in Figure 4, a more rigid support is obtained, but only two positions of angular adjustment are afforded. In this construction, the laterally directed end 19 of the member 17 is replaced by a substantially U shaped member 26 having its ends riveted or otherwise fixed to the vertical leg 18 of the member 17. The closed outer end of the member 26 is substantially V shaped with the sides of the V at substantially ninety degrees to each other and apertured, as at 27, to receive the mounting bolts 21 carried by the fuse box.

From the foregoing description, taken in connection with the accompanying drawing, it will be readily apparent to those skilled in the art to which an invention of the character described appertains, that I provide a novel means for mounting fuse boxes and housings of other kindred electrical appliances from cross arms and the like which greatly minimizes the danger arising from line-men leaning out from the pole to reach the device, and which practically eliminates the imposing of objectionable side-thrust onto the doors and other parts of the device.

What I claim as my invention is:

1. In a device of the class described, clamping members, one of said members having a plurality of angular faces, means for spacing said faces from a cross arm and means associated with the faces for fastening a switch box or the like thereto.

2. In a device of the class described, clamping means adapted to clamp to a cross arm, an extension associated therewith, a switch box, means providing selectively engageable pairs of co-operating faces between the box and the extension, whereby the box may be set into any one of a number of positions with respect to the cross arm.

3. Means to mount an electrical device from a cross arm, comprising a bracket member adapted to be fixed to the cross arm and having a plurality of angularly disposed faces, and holding means associated with said plurality of faces on the bracket member to support the electrical device in any of a plurality of positions between limits defined by the angularly disposed faces, whereby the device may be positioned in any one of a number of predetermined positions with respect to the cross arm.

4. In a device of the class described, clamping means adapted to clamp to a cross arm, an extension associated therewith, a switch box, means providing selectively engageable pairs of cooperating faces operatively located between the box and the cross arm, whereby the box may be positively set into any one of a number of positions with respect to the cross arm.

5. In a device of the class described, clamping means adapted to clamp to a cross arm, an extension associated therewith, a switch box, means providing selectively engageable pairs of cooperating faces operatively located between the box and the cross arm, whereby the box may be set into any one of a number of positions with respect to the cross arm and means for definitely spacing the box from the said cross arm to insure a safe leakage path.

6. In combination with an upright pole having a transverse cross arm, of a fuse device for an electric circuit, said device having a member manually movable in a definite plane, and means for mounting said device upon the cross arm on one side of the pole or on the other but in either position with the plane of movement of the manually movable member extending diagonally with respect to the cross arm and substantially coinciding with the plane of the arm of a lineman supported alongside the pole in the position in which he would stand on spurs or on pole steps for the purpose of operating the manually movable member.

In testimony whereof I have hereunto affixed my signature.

LEM E. HENDEE.