N. T. CLEMENTS.

SWITCH BOX MOUNTING.

APPLICATION FILED JUNE 17, 1919.

1,362,674. Patented Dec. 21, 1920.

2 SHEETS—SHEET 1.

Fig. 1.

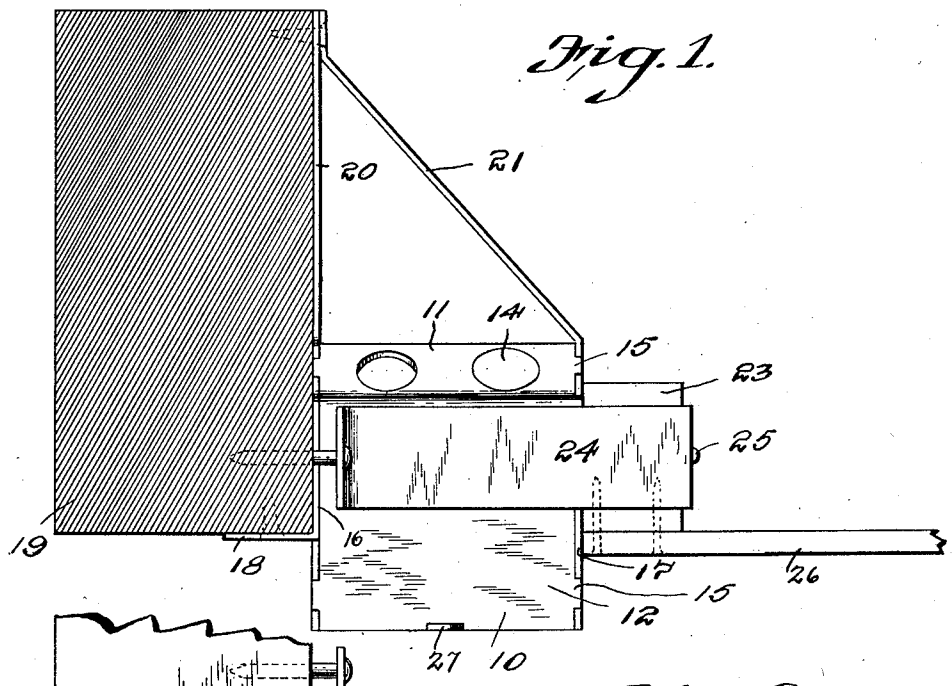
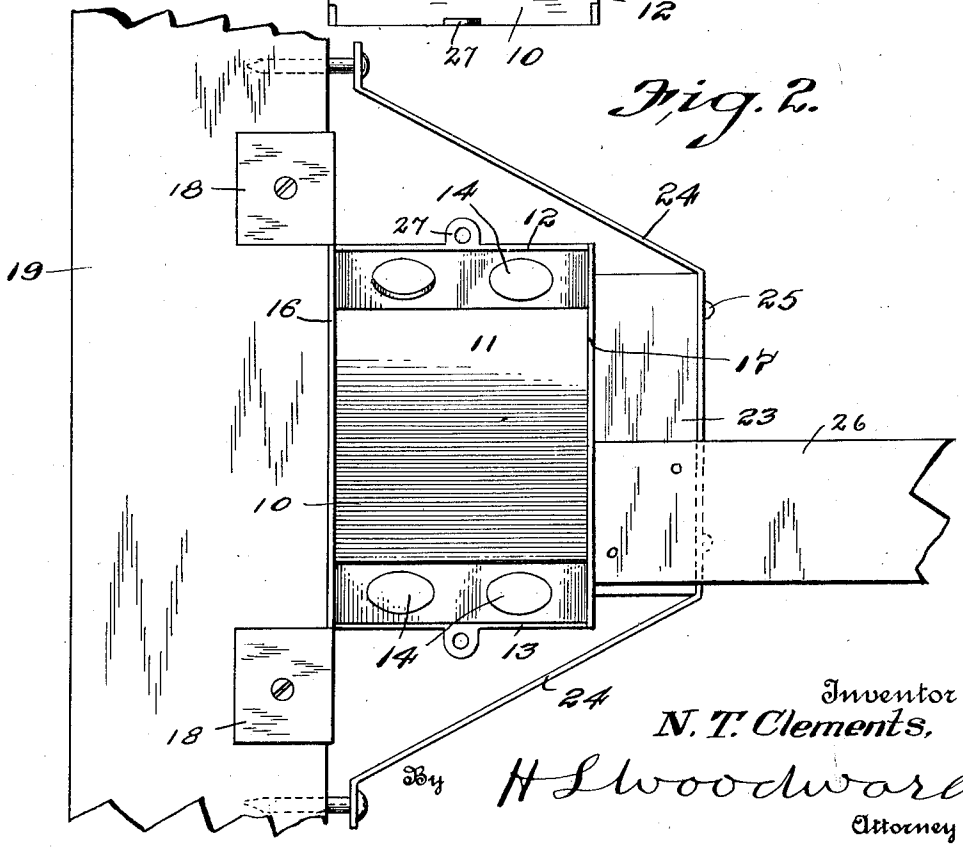


Fig. 2.



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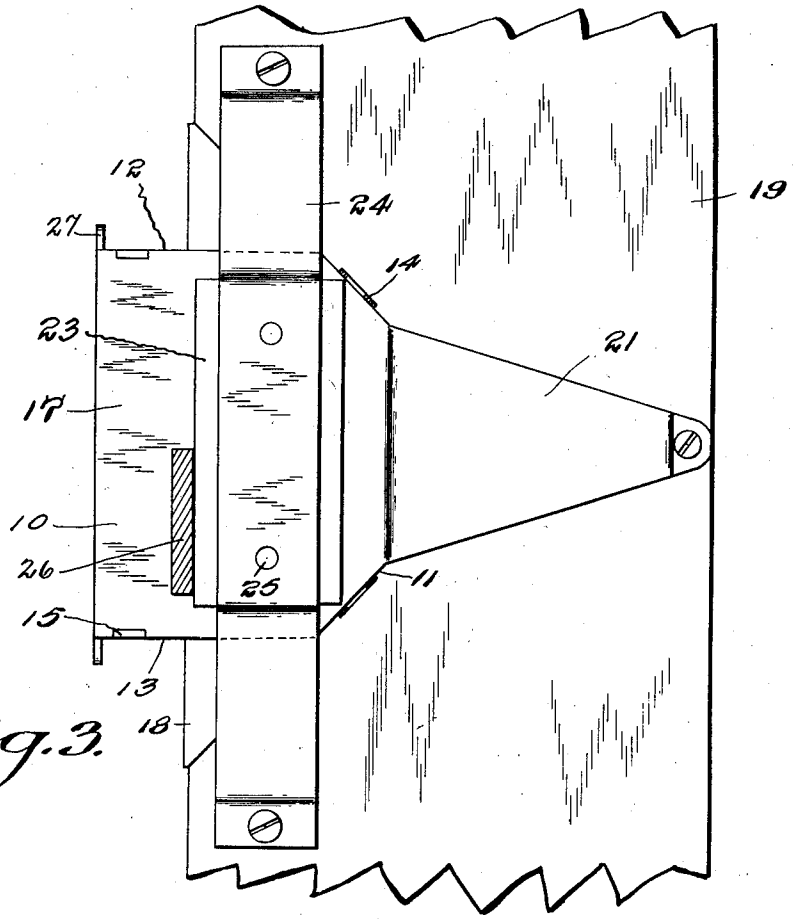


Fig. 3.

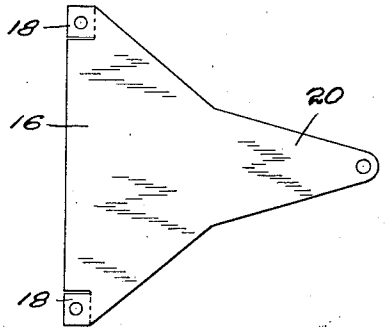


Fig. 4.

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UNITED STATES PATENT OFFICE.

NILS TAGE CLEMENTS, OF SUPERIOR, WISCONSIN.

SWITCH-BOX MOUNTING.

1,362,674. Specification of Letters Patent. Patented Dec. 21, 1920.

Application filed June 17, 1919. Serial No. 304,968.

To all whom it may concern:

Be it known that I, NILS T. CLEMENTS, a citizen of Sweden, residing at Superior, in the county of Douglas and State of Wisconsin, have invented certain new and useful Improvements in Switch-Box Mountings, of which the following is a specification.

The invention has for an object to effect improvements in outlet boxes, especially of that type in which switches are mounted in walls of buildings. It is a particular aim of the invention to enable the construction from sheet metal of an outlet box having flanges by which it may be secured upon a stud such as ordinarily employed in constructing partitions, and having also a bracing part adapted to be secured against the side of the same timber to steady the box.

Additional objects, advantages and features of invention may appear from the construction, arrangement and combination of parts hereinafter set forth and shown in the drawings, wherein,

Figure 1 is a top view of the device secured upon a timber,

Fig. 2 is a front view thereof,

Fig. 3 is a side view, (the foregoing three views are full size, as the device has been produced in practice.)

Fig. 4 is a plan view of the blank for the planiform plate reduced one-half.

There is illustrated a box 10, comprising a plate 11 which may be termed the back plate, as it is bent to form the back portion of the box, and also the top 12 and bottom 13, this plate being provided with the usual partly stamped out areas 14, which may be knocked out as required to form openings for wires or conduits to enter and leave the box. The box may be made of any desired dimensions. The plate 11 is formed with lugs 15 at intervals on its lateral edges inserted through side plates 16 and 17 now to be described, and upset to retain these side plates in place securely upon the box. The plate 16 comprises a forward body portion of a size ample to inclose the side of the box, ears 18 being formed at the upper and lower edges thereof, having their forward parts bent laterally outward on a vertical line to lie in a plane at right angles to the plate, and being suitably apertured for the reception of mounting screws by which the device may be secured upon a two by four timber 19, as shown in Fig. 1. Rearwardly from and in the plane of the body portion of the plate there is projected an extension 20, having a fairly broad base, but brought to a point at the rear and apertured closely thereadjacent to receive a screw engaged in the side of the two by four timber 19.

The plate 17 at its forward part corresponds in shape to the ordinary side plate employed in the construction of outlet boxes of this type, but is formed with a rearward extension 21 having the same breadth of base as the extension 20 before mentioned, but of greater length, so that it may be bent inward toward the extension 20 and its extremity then turned rearwardly to lie in close parallel relation with the extremity of the member 20, the extension 21 is formed with an aperture in registry with that in the extension 20. Secured upon the outer side of the body of the plate 17, there is a wooden block 23, over which a strip of light sheet metal 24 is secured, having apertured ends, and being of a length to permit laths 26 to be secured by nails thereupon as illustrated in Fig. 2, the block 23 and the strip 24 being secured upon the box by means of rivets 25 extended through the strip and block and the plate 17, upon the inner side of which the rivets are upset. The strip 24 is also suitably extended and apertured to permit its ends to be attached to the timber 19 at a distance above and below the box, as shown in Fig. 2, giving further security to the box and to the lath support.

The use of the box constructed as described and shown will be readily understood by those versed in the art, without detailed explanation other than that given.

The ears 18 of Fig. 2 are bent upon the dotted lines shown in Fig. 4, so that when the device is assembled the forward part of the box will project beyond the outer face of the timber 19 as shown in Fig. 3. This brings the forward edges of the box in a plane closely adjacent, or coincident, with the plane of the finished wall when plastering has been completed, in accordance with ordinary methods, and permits the mounting of push switches in proper position for the push buttons to project from the face of the wall, and for the fitting of cover plates over the mechanism and against the face of the wall. It also permits the mounting of other appliances. Further, it obviates the need for

adjustable flange pieces made separately from the box. Should it be desired to mount the box with a less forward projection, the flanges 18 may be bent forwardly into alinement with the body of the plate 16, and again bent laterally at such distance inwardly of the front edge of the box as may be desired. The box will have a proper relative position to the pieces 23 without other special manipulations. The box is provided with the usual ears 27 on the upper and lower front edges for attachment of switch mechanisms or other appliances.

By this construction, I am enabled to form integral mounting ears on the side portions of the box set back from the front edges thereof without leaving openings through the walls of the box, which would involve fire risks. Also, it is possible to use lighter sheet metal in the construction of this box than is ordinarily employed at present in such boxes, and still obtain ample rigidity and security. Laths may be nailed upon the timber 19 extending over the ears 18, without detriment to operations of plastering.

What is claimed:

1. A sheet metal box device comprising top and bottom portions, and vertical side plates secured against opposite edges of the first named plate to form sides of the box, each side plate having a rearward tapered extension, one side plate being planiform and the other having its extension longer and bent diagonally inward and extended against the first named plate a distance, the terminal portions of said extensions being apertured in registry, said planiform plate having upwardly extending ears thereon for engagement of fastenings on a timber to which said rearward extensions are secured.

2. A sheet metal outlet box comprising a back plate having end portions bent forwardly to form top and bottom sides, and vertical side plates secured against opposite edges of the first named plate to form sides of the box, each side plate having a rearward tapered extension, one side plate being planiform and the other having its extension bent diagonally inward and extended against the first named plate a distance, the terminal portions of said extensions being apertured in registry, said planiform plate having ears thereon to engage against the front edge of a timber to which said rearward extensions are secured, said plate having the diagonal extension being provided with a lath rest for the purpose described.

3. As an improved article of manufacture, a sheet metal side plate for outlet boxes comprising a body portion adapted to form the side of a box and having a rearward tapered extension apertured adjacent its extremity for securement against a timber, said plate having upward extensions with forward parts bent outwardly into a plane at right angles to the plane of the plate body, for the purposes described.

In testimony whereof I have affixed my signature in presence of two witnesses.

NILS TAGE CLEMENTS.

Witnesses:

NORMA E. FAIZIE,

H. G. PICKERING.