No. 862,380 PATENTED AUG. 6, 1907.

M. D. BARON.

ADJUSTABLE BOX FOR SWITCHES AND THE LIKE.

APPLICATION FILED FEB. 24, 1906.

Fig. 1,

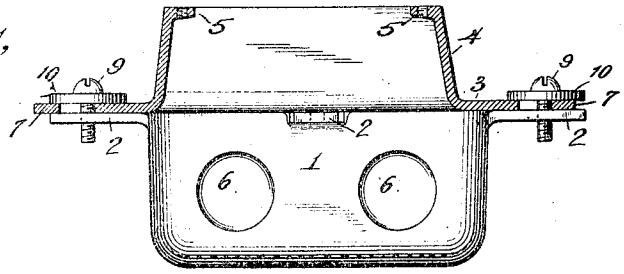


Fig. 2,

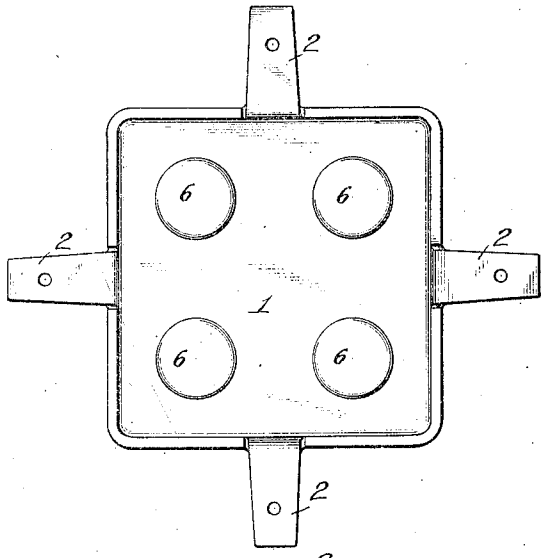
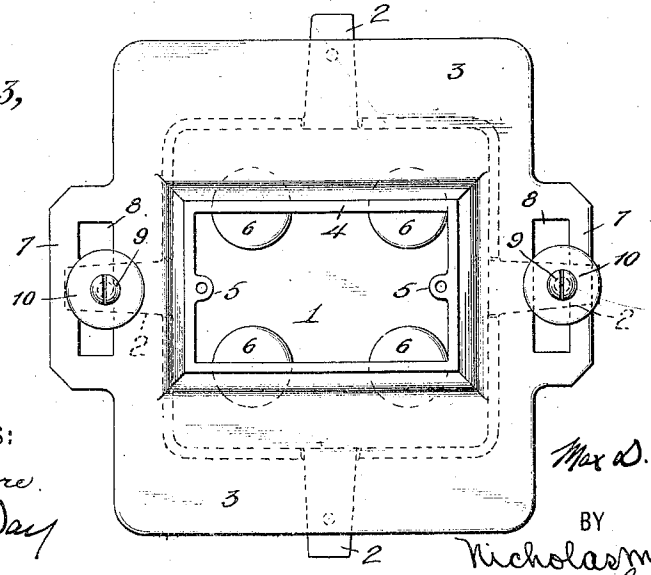


Fig. 3,



WITNESSES:

Ida Gilmore.

Leonard Day

INVENTOR

Max D. Baron

BY

Nicholas M. Goodlett Jr.

his ATTORNEY

UNITED STATES PATENT OFFICE.

MAX D. BARON, OF NEW YORK, N. Y.

ADJUSTABLE BOX FOR SWITCHES AND THE LIKE.

No. 862,380. Specification of Letters Patent. Patented Aug. 6, 1907.

Application filed February 24, 1906. Serial No. 302,679.

To all whom it may concern:

Be it known that I, MAX D. BARON, a citizen of the United States, and a resident of the borough of Manhattan, in the county and State of New York, have invented certain new and useful Improvements in Adjustable Boxes for Switches and the Like, of which the following is a specification.

This invention relates to wall boxes for use in house wiring. In this type of box it is necessary that a complete fire proof inclosure be provided for the electric connections of some instrument, such as a switch or lamp fixture, with the line wires inclosed in conduits within the walls of a building and at the same time provide a suitable support for this instrument and a suitable outlet opening into a room. In modern practice these boxes are installed during the construction of the building and necessarily before the finish or decorations can be accurately determined. In many types of boxes the outlet opening or receptacle socket of the box is fixed relatively to the body portion, or at best is capable of but slight adjustment relatively thereto. Thus, as a result, when the installation is complete and the walls finished the exposed electric instrument attached to the box is frequently offset an unsightly amount from its proper position. In this case a readjustment can only be made at great trouble and expense.

The advantage of an adjustable outlet opening has long been appreciated and many more or less unsuccessful attempts have been made to provide such a box. Their most frequent defect has been the provision of too little adjustability and even that little at considerable increase in cost.

An object of the present invention is to provide an inexpensive box which shall have a receptacle opening possessing a wide range of adjustability, preferably the maximum in all directions throughout the confines of the body portion, and which shall possess a closed interior for all adjustments of the receptacle opening.

A preferred embodiment of this invention is illustrated in the drawings forming part of this specification and in which like numerals designate corresponding parts and in which:—

Figure 1 is an elevation of the assembled box showing the cover portion in section. Fig. 2 is a plan view of the body portion of the box. Fig. 3 is a plan view of the assembled box showing the outline of the body portion in dotted lines.

Referring now more particularly to the drawings,—1 designates the body portion of the box which may be of any approved construction but which preferably has an unrestricted open face as illustrated.

2 designates outwardly extending projections such as lugs integral with the side walls of the body portion and preferably arranged in pairs at the centers of opposite sides of the body portion.

3 is a cover plate overlapping the body portion 1 and preferably formed integrally with a throat piece or receptacle socket 4 which provides the outlet opening for the box. These two members 3 and 4 together form the cover portion. The socket 4 is provided with supporting lugs 5 for a receptacle or fixture, while knock-out plugs 6 are illustrated in the walls of the body portion to provide for the entrance of conduits.

7 designates ears integral with the plate 3 and located centrally on opposite sides thereof. The ears are each provided with an enlarged slot 8. Screws 9 pass through these slots into the lugs 2 and serve to clamp the cover portion to the body portion by means of the washers 10 which always bridge the slots 8.

The size and contour of the cover plate 3 is determined by the size of the open face of the body portion and the size of the opening in the socket 4. Preferably its size should be such that when an edge of the socket 4 comes flush with one side wall of the body portion 1 the opposite edge of the plate 3 will just cover the open face of the body portion and engage the opposite side wall of the body portion. This should be true for all positions of the socket so that the exact limit for all sides of the cover plate is determined. Obviously there is thus provided a two piece box possessing the maximum adjustment of its outlet opening in all directions within the confines of the body portion.

The size and outline of the slots 8 is determined by the shanks of the screws 9 and is such as to allow the cover portion to assume the extreme positions referred to above where the socket 4 comes flush with a side wall of the body portion without the screws 9 engaging with the plate 3 until one of these extreme positions is actually reached, when further movement is retarded by the screws 9. The washers 10 are preferably just large enough to bridge the slots 8 when the shanks of the screws 9 are against the side walls of the slots. The projections 2 also extend preferably the same distance beyond the screws 9 as do the washers 10 so that a double clamping action may be provided on the ears 7.

In addition to the lateral adjustment of the socket 4, as described above, the cover portion and socket 4 possess a considerable amount of rotary adjustability due to the play of the screws 9 in the slots 8.

If the body portion 1 is square as is illustrated in the figures and which is the preferred form, the cover portion may be rotated through 90° before being clamped to the body portion. Thus it is apparent that a second pair of projections 2 as illustrated in the figures would be of service should it be found desirable to have the socket 4 in a position 90° displaced from that illustrated in Figs. 1 and 3. However, the body portion might be made with only one pair of projections 2, and still possess great advantages.

The box may be constructed by any approved process

such as by casting or stamping and may be of any suitable material such as iron. It is not essential that the body portion 1 be square as illustrated, as any suitable form is within the scope of the invention. This is also true of the receptacle socket 4 which may be of any suitable shape. Whatever the shape of the various parts may be it is an important feature of this invention that the outlet opening in the socket 4 be capable of the maximum adjustment or change in position afforded by the confines of the body portion 1, so that the said opening is always completely alined with the body interior, or, if desired, may slightly overlap the same.

Although the box as illustrated and described is deemed to be the preferred embodiment of this invention, many modifications fall within the scope thereof as particularly set forth in the following claims:—

1. A wall box comprising a body portion and a cover portion laterally adjustable in all directions, and a single pair of clamping means for said cover portion controlling the lateral adjustability of said cover portion in all directions.

2. A two piece wall box comprising a body portion with an open mouth and a cover portion, said cover portion being provided with a socket, and means for adjustably securing said cover portion to said body portion and providing lateral adjustability for said socket in every direction throughout the entire confines of said open mouth.

3. A wall box comprising a body portion and a cover portion, said cover portion being provided with a socket, means clamping said cover portion to said body portion, which, when released permits, by means of a single movement, the adjustment of said socket in any lateral direction.

4. A wall box comprising a body portion and a cover portion laterally and rotatably adjustable in all directions, and a single pair of clamping means for said cover portion controlling the lateral and rotary adjustability of said cover portion in all directions.

5. A wall box comprising a body portion with an open face, and a cover portion, said cover portion being provided with a socket, and means for adjustably securing said cover portion to said body portion and providing lateral and rotary adjustability for said socket in every direction throughout the entire confines of said open face.

6. A wall box comprising a body portion and a cover portion, said cover portion being provided with a socket, and means for providing lateral and rotary adjustability in all directions over the entire interior of said body portion for said socket.

7. A wall box comprising a body portion and a cover portion, said cover portion being provided with a socket, and means for providing for said socket, by means of a single adjustment, lateral and rotary adjustability in all directions over the entire interior of said body portion.

8. A wall box comprising an open faced body portion and an overlapping cover portion, said cover portion provided with a receptacle opening smaller than the open face of the body portion; and means securing said cover portion to said body portion and permitting rotary and lateral adjustment of the receptacle opening in all directions within the confines of the open face of the body portion, and maintaining said cover portion in closing position for all adjustments.

9. A wall box comprising an open faced body portion and an overlapping cover portion, said cover portion provided with a receptacle opening smaller than the open face of the body portion; and means securing said cover portion to said body portion and permitting rotary and lateral adjustment of the receptacle opening in all directions within the confines of the open face of the body portion and maintaining said cover portion in closing position for all adjustment; said means comprising one or more pairs of projections extending outwardly from opposite sides of said body portion, laterally projecting ears, each provided with a slot, on said cover portion, and clamping means passing through said slots and engaging projections and said ears.

10. A wall box comprising an open faced body portion and an overlapping cover portion, said cover portion provided with a throat shaped centrally located receptacle socket, smaller than the open face of the said body portion; and means securing said cover portion to said body portion and providing unlimited lateral adjustability and rotary adjustability of said receptacle socket within the confines of the open face of said body portion, said means also maintaining said cover portion in closing position for all adjustments.

11. A wall box comprising an open faced body portion and an overlapping cover portion; said cover portion being provided with a throat shaped centrally located receptacle socket, smaller than the open face of the said body portion; and means securing said cover portion to said body portion and providing unlimited lateral adjustability and rotary adjustability of said receptacle socket within the confines of the open face of said body portion while maintaining said cover portion in closing position for all adjustments; said means comprising one or more pairs of projections extending outwardly from opposite sides of said body portion, ears projecting from opposite sides of said plate and provided with slots, and clamping means passing through said slots and engaging said projection and said ears.

12. In a wall box in combination, an open faced body portion being provided at its rim with one or more pairs of oppositely located outwardly extending lugs; a cover portion comprising a flat plate of predetermined size greater than the size of the open face of said body portion; ears extending outwardly from opposite edges of said cover portion, each ear being provided with an enlarged slot; and means extending through said slots and engaging said lugs, said means being provided with members for bridging said slots and engaging the upper face of said ears with a clamping action.

13. In a wall box in combination, an open faced body portion being provided at its rim with one or more pairs of oppositely located outwardly extending lugs; a cover portion comprising a flat plate of predetermined size greater than the size of the open face of said body portion and also comprising a socket; ears extending outwardly from opposite edges of said cover portion, each ear being provided with an enlarged slot; and screws extending through said slots and engaging said lugs, said screws being provided with members for bridging said slots and engaging the upper face of said ears with a clamping action.

In testimony whereof, I have signed my name to this specification, in the presence of two subscribing witnesses.

MAX D. BARON.

Witnesses:
C. A. HELFER,
LEONARD DAY.