

No. 686,052.

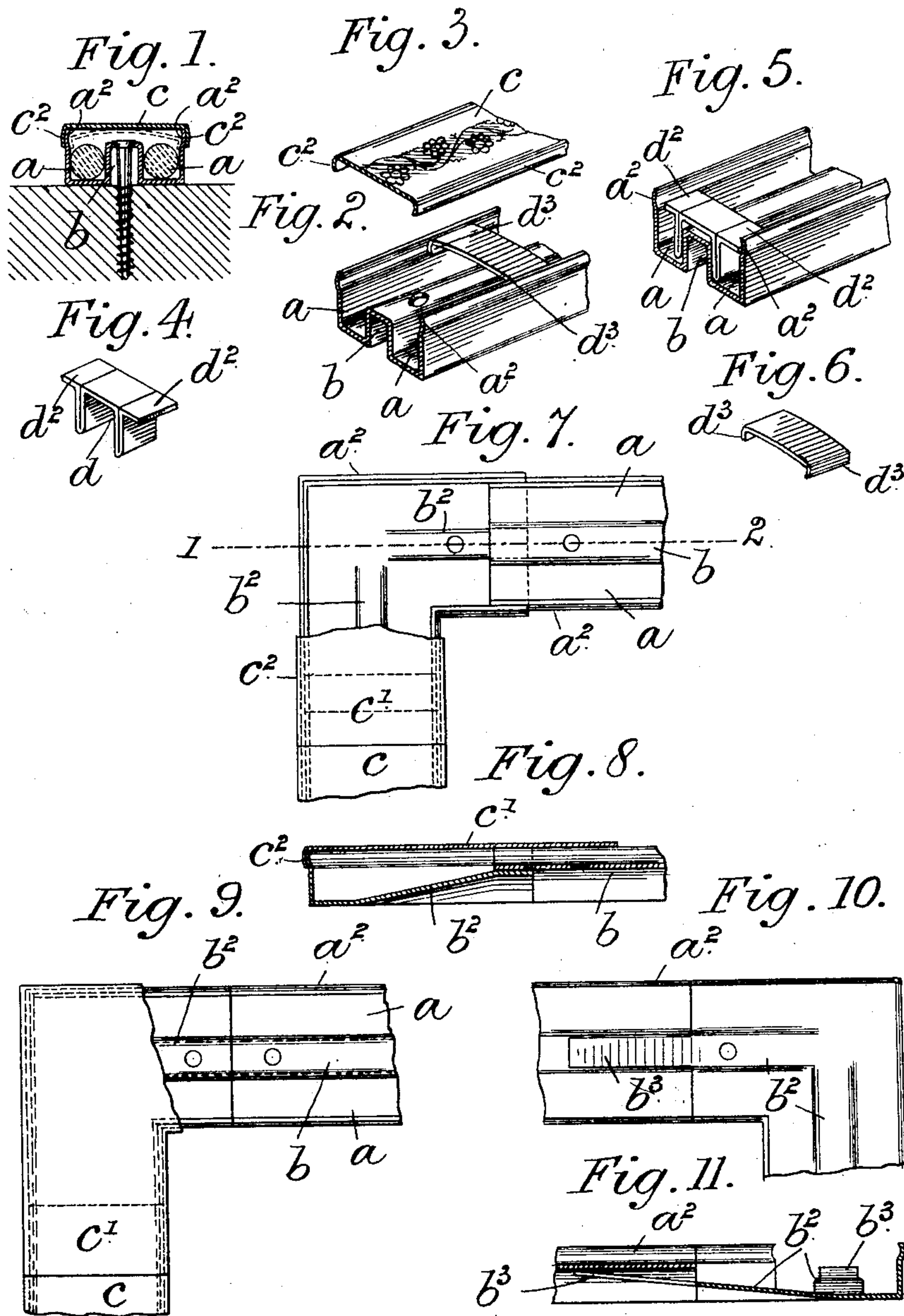
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CASING OR COVERING FOR CONDUCTORS IN BUILDINGS.

(Application filed Aug. 9, 1901.)

(No Model.)



WITNESSES:

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CASING OR COVERING FOR CONDUCTORS IN BUILDINGS.

SPECIFICATION forming part of Letters Patent No. 686,052, dated November 5, 1901.

Application filed August 9, 1901. Serial No. 71,507. (No model.)

To all whom it may concern:

Be it known that I, JOSEPH HENRY GOLDING, electrician, a subject of the King of Great Britain and Ireland, residing at 16 Church Row, Stoke Newington, in the county of London, England, have invented certain new and useful Improvements in and Connected with Casings or Coverings for Electric Conductors in Buildings; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

This invention relates to metal casings or coverings for electric conductors in buildings for application in cases where it is not possible or is inconvenient to inclose the conductors within the walls or other structural parts of a building, the said casings or coverings giving good contact between the lengths for earthing and protection against fire due to sparking and also presenting a better appearance than do casings or coverings as hitherto used outside walls, ceilings, and the like; and the object of this invention is to so construct and arrange such casings or coverings and the lids or covers by which they are closed that they are very durable and can be closed and opened with great facility and with a minimum of injury to the walls or ceilings or the like to which they are applied. Means are also provided whereby the conductors are retained in place when the lids or covers are removed or before they are put in place. The body part of the casings or coverings are made of sheet metal formed with a longitudinal recess or recesses for the reception of the conductor or conductors and capable of being secured to the walls, ceilings, or other places to which they are to be affixed. The said body part may, for instance, be made with two longitudinal recesses, with the raised part between provided with holes for the passage of fixing-screws; but one, two, or more such recesses may be used, as desired.

I will describe this invention with reference to the accompanying drawings.

Figure 1 represents in transverse section a casing or covering with a lid or cover applied in accordance with this invention. Fig. 2 shows a portion of the body part, and Fig. 3 a corresponding portion of the lid or cover.

Fig. 4 shows a device for holding the conductors in place. Fig. 5 shows a portion of the body part with the said holding device in position. Fig. 6 shows a modified form of the holding device. Fig. 7 shows two portions at right angles to each other joined by a junction-piece; and Fig. 8 is a section thereof on the line 1 2, Fig. 7. Fig. 9 shows a modification in the junction, and Figs. 10 and 11 are a plan and section showing a further modification.

The body part consists of a strip of sheet metal bent into the shape shown clearly in the separate perspective view of a portion in Fig. 2, so as to make recesses *a a* for the reception of the conductors, with a raised part *b* between for separating them, and with rounded portions *a²* along the exterior of the bent-up outer parts. After the conductors have been put in place in the recesses *a a* the front of the body part of the casing or covering and of the recess or recesses therein is covered by a metal plate *c*, which is formed with rounded edges *c²*, as shown in Fig. 3, so formed that they can by simple pressure be sprung upon the rounded edges *a²* of the said body part, the metal yielding laterally sufficiently to allow of this and returning to position again to hold the parts together by a springing action. The lids or covers can be thus readily put in place and removed, thus avoiding the trouble and distortion which arises if it be attempted to slide the lids or covers in from the end and enabling comparatively stout metal to be used. The said body part is preferably made of thin sheet-steel, and the covering-strip may also be made of somewhat thicker sheet-steel, (so as to withstand pressure which might otherwise press it into the cables,) or it may be made of brass or other suitable metal and be stamped, embossed, or otherwise ornamented. The covering-strip *c* may be made in portions of any convenient length or as a continuous strip, and the casings or coverings at angles or bends can be connected by correspondingly-formed junction-pieces. As shown in Fig. 1, it is only necessary to pass screws through the raised part *b*, thus avoiding external straps or screw-holes, except at the back of the device, where they are concealed.

In order to retain the conductors in place

before the covering-strip *c* is put in place or when it is removed, retaining devices, consisting of clips, such as are shown in Fig. 4, are provided, the said clips having a part *d*,
 5 which grips the raised part *b* of the casing, as shown in Fig. 5, and being provided with a projection or projections, as at *d*², to extend over the recess or recesses. Fig. 6 shows a modification formed with curved edges *d*³ to
 10 spring into the curved edges of the body part, as shown in Fig. 2. These clips can be employed at intervals and left in place, or they can be used only temporarily to support the
 15 conductors in the recesses before the covering-strip *c* is put on—for example, when the casings or coverings are employed on ceilings or in other situations where the recesses are presented downward.

The junction-piece (shown in Figs. 7 and
 20 8) for connecting together at angles or bends the straight lengths of casing, hereinbefore described, has sectional dimensions, such as to admit of the ends of the straight lengths being inserted therein, and the raised parts
 25 *b*² of the said junction-piece are preferably inclined from where they meet the said straight pieces down to the bottom of the interior of the junction-piece at or near the vertex of the angle thereof, so as not to injure or in-
 30 terfere with the conductors passing around the bend or angle. The upper edges of this junction-piece and the angular lid or cover portion *c'* thereof are formed with rounded edges to spring over each other, as described
 35 with regard to the straight lengths. Instead of inserting the ends of the straight length into the junction-piece, as in Figs. 7 and 8, the said junction-piece may have the same sectional dimensions as the straight length
 40 and the said straight length be butt-jointed thereto, as shown in Fig. 9, the angular lid or cover at the junction being made with both portions longer than the body portion of the junction-piece, so that its rounded edges
 45 engage with the rounded edges of the body part of the junction-piece and with a sufficient portion of the rounded edges *a*² of the body portions of the straight lengths. The raised parts *b*² are inclined in a similar man-
 50 ner to that shown in Fig. 7. The junction-piece shown in Figs. 10 and 11 is similar to that shown in Fig. 7; but it has on the raised parts *b*² spring-tongues *b*³, which enter the recesses formed by the raised parts *b* in the
 55 straight lengths. These junction-pieces are provided with lids or covers *c'*, as described with regard to Fig. 9.

By the arrangements described external straps to hold the lids or covers in position

are not required and all the fastening-screws 60 are screwed in holes concealed by being beneath the body part and no screws require to be removed to enable access to be had to the conductors. The lids or covers and the body
 65 parts can be made of sufficiently stout metal to withstand wear or corrosion for a long time, and the lids or covers can be removed and replaced without distortion of or injury to any of the parts, thus overcoming objec-
 70 tions to metal cases or coverings as hitherto proposed, and as the lids or covers overlap all beneath the exposure of unsightly edges is avoided. The good contact between the
 75 body parts and lids or covers also enables a good earth connection of the whole casing to be made.

I claim as my invention—

1. Casings or coverings for electrical conductors of sheet metal and consisting of a body part having projections along the top 80 of the outside edge and a cover part with corresponding projections along its edge, whereby the cover may be secured to the body, substantially as described.

2. Casings for electrical conductors of sheet 85 metal consisting of a body part having grooves for the conductors, the outside walls of the grooves having at their top edges rounded projections and a cover having corresponding projections adapted to fit over the body part 90 projections and thereby be held in place, substantially as described.

3. A covering for electrical conductors, comprising a body part and a removable cover therefor, in combination with clips adapted 95 to be sprung into place between the walls of the body portion to retain the conductors in place, when the cover is not in place, substantially as described.

4. An angle junction-piece for electrical 100 conductor-coverings comprising a body part having an inclined raised part, said raised part of least height toward the vertex of the angle, as and for the purpose described.

5. An angle junction-piece for electrical 105 conductor-coverings, comprising a body part having an inclined central raised part, said part of least height toward the vertex of the angle, in combination with spring-tongues on the raised part adapted to extend into simi- 110 lar portions of a straight covering, substantially as described.

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

JOSEPH HENRY GOLDING.

Witnesses:

W. GERALD REYNOLDS,
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