March 31, 1936. G. A. KNAPP 2,036,054

WIRE CARRYING BASE SCREED

Original Filed May 15, 1931

Fig. 1

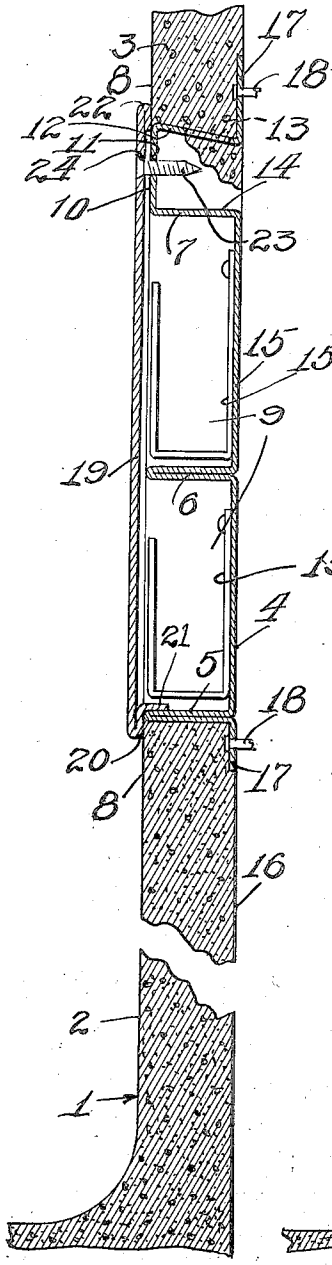


Fig. 2

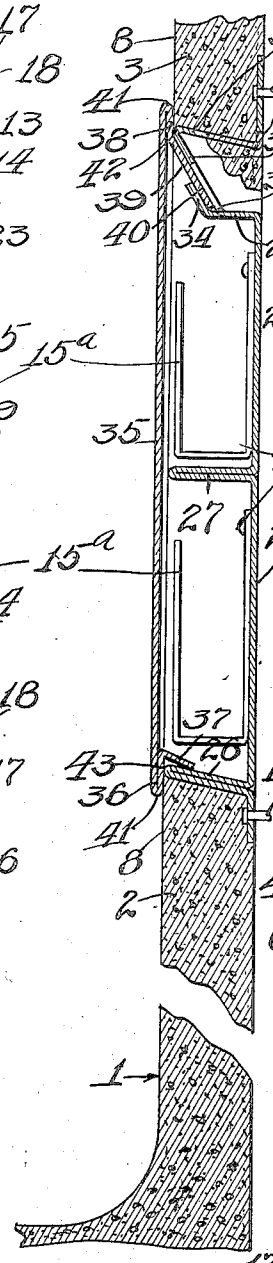


Fig. 4

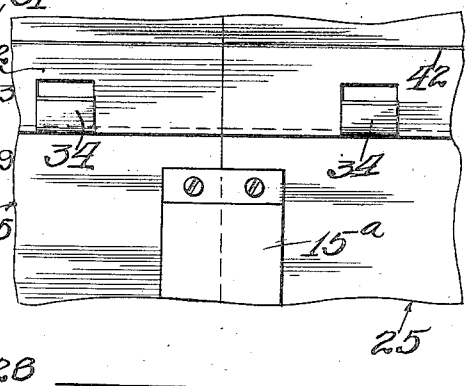
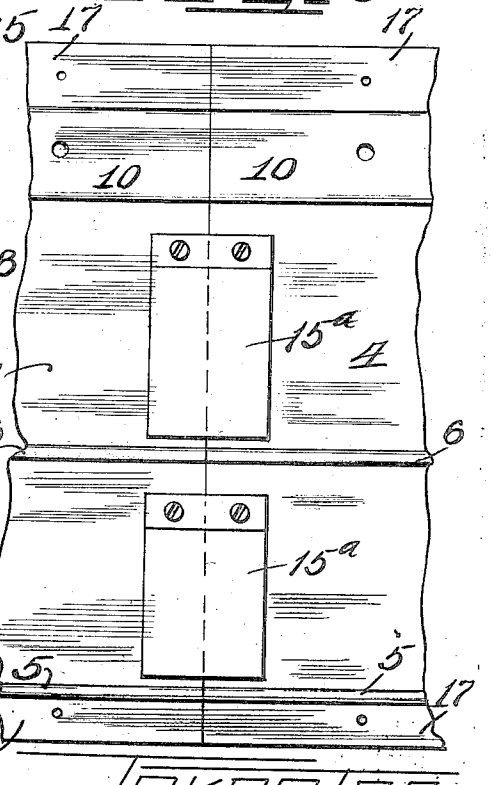


Fig. 3



Inventor

George A. Knapp.

By Charles Orsfield Attys.

Patented Mar. 31, 1936 2,036,054

UNITED STATES PATENT OFFICE

2,036,054

WIRE CARRYING BASE SCREED

George A. Knapp, Chicago, Ill., assignor to Knapp Brothers Manufacturing Company, Chicago, Ill., a corporation of Illinois

Application May 15, 1931, Serial No. 537,532
Renewed December 12, 1934

4 Claims. (Cl. 247—3)

This invention has to do with devices of the character employed in wall constructions for conducting high and/or low tension wiring, in connection with flexible circuit distribution for buildings.

An object of the invention is to provide a metallic or like wire carrying base member of a flexible system of this character which will also serve as a screed or ground for the plaster or like material forming the wall surface proper.

Another object resides in the provision of a wire carrying base screed which does not require securing means in addition to itself for its attachment to a wall.

A further object is to provide a wire carrying member which forms an intermediate part of a plaster or like wall, and which constitutes its own form.

Another object resides in the provision of a cover for the wire carrying member, which cover is readily applied and removed, requires no securing elements, and serves at the same time as molding for the wall.

It is one of the principal objects of this invention to provide a wire carrying base screed having compartments or raceways for low and high tension wires and forming a continuation of a plaster, stone or cement wall, and a cover having means cooperating with the raceways for facilitating application and removal of the cover. These means are such as to firmly hold the cover plate in place without rattling, yet to easily release the cover plate when it is desired to remove the same.

A further object of the invention is to provide a wire carrying base screed adapted to form a continuation of, and co-extensive in thickness with, a wall or wall coating, and provided with a cover adapted to serve simultaneously as a base board or chair rail or like molding for the wall.

In carrying out the invention into practice, a base screed is provided with compartments or raceways for carrying high and/or low tension wires and having upper and lower plaster ground portions. A cover plate for the screed is provided with means cooperating with the screed in such a manner as to be readily attachable to and removable from the screed. When it is desired to remove the cover plate it is necessary to engage the bottom thereof and lift the same, whereupon the cover plate may be lifted out to thereby provide access to the wiring carried by the raceways.

Another form of the invention embodies the provision of a cover plate having a lower end adapted to engage over the outer portion of the bottom of the screed, the upper portion being adapted to be secured to the screed by a screw. When it is desired to remove the cover plate, it is necessary merely to remove the screw, whereupon the plate will swing out or may be grasped and withdrawn.

Further objects and advantages will appear as the description proceeds.

On the drawing:

Figure 1 is a transverse sectional view, certain parts being shown in elevation, of one form of the invention.

Figure 2 is a view similar to Figure 1, but showing another form of the invention.

Figure 3 is an elevational view of one form of base screed looking toward the right in Figure 1.

Figure 4 is a fragmentary elevational view of the upper portion of the base screed shown in Figure 2, looking toward the right.

Referring now more particularly to the drawing, wherein the same parts are indicated by the same reference characters, a wall coating, which may be of plaster or other building material, is indicated at 1. The wall coating 1 is vertically divided to form the base portion 2 and the upper portion 3, said portions being spaced apart by a wire carrying base screed 4 constructed in accordance with the present invention. The screed 4 is provided with a plurality of return bends 5, 6, and 7 whose foremost extremities are alined substantially flush with the wall face 8, said bends being spaced apart to provide a plurality of wire carrying compartments or raceways 9.

While the lower two bends 5 and 6 are substantially of the same formation, the upper bend 7 is provided with a substantial bight portion 10 whose outer surface is substantially flush with the wall face or plaster line 8 and which has a tapped opening 11. The upper arm 12 of the bend 7 is inclined downwardly away from the wall face 8 to provide a knee which serves as a ground for the plaster or the like of which the wall 1 is constructed. The arm 12 is preferably provided with a plurality of openings 13 providing access of the soft plaster to the interior of the bend 7 to insure proper binding between the plaster and the screed 4. It will be noted that the lower arm 14 of the bend 7 is imperforate so that the compartments 9 are entirely free from plaster. The rear wall 15 of the screed 4 has its surface substantially flush with the rear face 16 of the plaster coating, and the margins 17 of the screed are

likewise flush with the face 16. Suitable projecting pins 18 or the like have their heads embedded in the plaster or the like, and extend rearwardly beyond the face 16 to provide anchors by which the screed 4 is secured to the intermediate lath or other wall construction (not shown) before the application of the plaster wall coating.

Wires or the like may be held in place by stamped holding clips 15a suitably spaced and attached to the rear wall 15. Said clips 15a are also spaced to over-lap each joint to form a joint plate and also a ground connection at the joint.

The cover plate to be employed in connection with the screed 4 is designated at 19 and has its lower end 20 rounded and return bent and then offset laterally at 21 to conform with the meeting portions of the face 8 and the bend 5. The upper end 22 of the cover plate 19 is likewise return bent and lies entirely between the main body portion of the plate and the face 8 of the wall coating. A screw 23 has its head fitting in a counter bore 24 in the plate 19 and is in threaded engagement with the tapped opening 11 of the base screed 4. It is thus apparent that the cover plate 19 presents a smooth appearance and at the same time effectively covers the raceways or compartments 9. In order to remove a plate 19, it is necessary merely to back off the screw or screws 23 from engagement with the bight portion 10 of the screed 4, whereupon the plate 19 is free to be drawn away from the screed.

In the second form of the invention, a base screed 25 has a bottom bend 26 which is inclined downwardly away from the face 8 of the plaster coating 1. An intermediate bend 27 serves as a partition between the compartments or raceways 28. The upper bend 29, as in the construction shown in Figure 1, has an upper arm 30 constituting in effect a knee which serves as a plaster ground for the upper portion 3 of the wall and is provided with openings 31 for the entry of the soft plaster to insure proper binding. The bight 32 of the bend 29 inclines downwardly away from the face 8 of the wall coating 1, a portion 34 being struck forwardly from the lower portion 33 of the bight 32 to provide with the latter a tongue receiving recess 40.

A cover plate 35 has its lower marginal flange turned back upon itself at 36 and offset downwardly and rearwardly at 37. The portion 37 may be resilient and engages the upper surface of the bend 26 at a point spaced from the wall face 8. The upper margin of the cover 35 is return bent at 38 and then offset downwardly and rearwardly at 39. The portion 39 is inclined at substantially the same angle as the portions 32 and 34 of the base screed 25 and fits in the recess 40 therebetween. The visible edges 41 of the cover 35 are rounded and it will be seen that the offset portion 34 and the bend 26 will cooperate to prevent direct lateral removal of the plate 35. When it is desired to move the plate 35, it is necessary to apply pressure at the lower edge 41 thereof to shift the cover bodily upward and forward in a direction parallel to its offset marginal portion 39.

The offset portion 37 serves not only to resist direct lateral removal of the plate 35 but functions additionally to prevent rattling between the cover plate 35 and the base screed 25. It will be appreciated from the foregoing that the base screed provided in accordance with this invention is secured directly to the plaster or the like wall, thereby obviating the need for screws and the like for the attachment of the screed. Moreover, the cover plate is so constructed in connection with the base screed as to be capable of expeditious application and removal.

The cover plate may therefore serve as a chair rail or any other desired molding for the room, and the construction as a whole is extremely simple, since it involves merely a single wire carrying screed and one or more cover plate sheet metal sections which may be easily attached and removed, and wherein the base screed serves as its own form and provides a ground for both the upper and the lower portions of the plaster or the like wall coating, thereby obviating additional attaching means.

In constructing a wall in accordance with this invention, the wire carrying base screed is first secured by bolts or the like 18 to the lath, not shown. Referring by way of example to the construction shown in Figure 2, the arm 30 constitutes a plaster ground to gage the thickness of the plaster, and the plaster is placed over the arm 30, the rear face 44 of the upper part 3 of the wall coating 1 being in abutment with the corresponding face of the lath, the forward face 8 of the plaster portion 3 being formed flush with the foremost extremity 42 of the plaster ground 30.

The lower portion 2 of the plaster wall coating 1 is then applied against the corresponding portion of the lath and its forward face 8 is formed flush with the foremost extremity 43 of the bend 26, which in effect constitutes a plaster ground. Of course, the wiring may be placed in the low tension compartment 28 while the plaster is hardening, or at any time after the screed 25 has been secured by the elements 18 to the lath.

It will be seen that by the present construction, the member 25 serves not only as a conduit for the wires, but additionally as a part of the wall.

It will be further understood that while I have described as illustrative means affording a passage for wiring, pipes or similar conduits may also be carried in said passage and the terms "wire", "wires" and "wiring" are intended to be considered as including pipes or conduits for any purpose.

I am aware that many changes may be made, and numerous details of construction may be varied through a wide range without departing from the principles of this invention, and I, therefore, do not purpose limiting the patent granted hereon, otherwise than necessitated by the prior art.

I claim as my invention:

1. Wall construction comprising a screed for engaging spaced portions of a wall, said screed being of substantially channel shape and constituting a conduit for carrying wiring, a readily attachable and detachable cover for said screed, and including a return bent inwardly extending flange seated upon the upper surface of the lower part of the screed at a point spaced rearwardly of the plane of the wall surface, and fastening means for securing the cover to the upper part of the screed.

2. Wall construction comprising a screed for engaging spaced portions of a wall, said screed being of substantially channel shape and constituting a conduit for carrying wiring, a readily attachable and detachable cover for said screed, and including a return bent inwardly extending flange seated upon the upper surface of the lower part of the screed at a point spaced rearwardly

of the plane of the wall surface, and fastening means for securing the cover to the upper part of the screed, said cover entirely concealing said screed.

3. A wall construction comprising an upper portion, a base portion, a conduit embedded in said wall and including upper and lower plaster grounds, the lower ground comprising a longitudinal corrugation with an upper and lower fold, a cover for said conduit, said cover including a bearing portion for resting on the lower ground by engagement upon the upper fold of the lower ground at a point rearwardly spaced from the plane of the wall surface, and means rigidly connecting the upper part of the cover to the conduit whereby said cover is detachably held in place, said cover having an overall height in excess of the overall height of the exposed portion of the conduit, whereby when said cover is in place, said conduit is completely concealed from view.

4. A wall construction comprising an upper portion, a base portion, a conduit embedded in said wall and including upper and lower plaster grounds, the lower ground comprising a longitudinal corrugation with an upper and lower fold, a cover for said conduit, said cover including a bearing portion for resting on the lower ground by engagement upon the upper fold of the lower ground at a point rearwardly spaced from the plane of the wall surface, said bearing portion being an integral extension of the lower edge of the cover, return bent and with the edge extending rearwardly, and means rigidly connecting the upper part of the cover to the conduit, whereby said cover is detachably held in place, said cover having an overall height in excess of the overall height of the exposed portion of the conduit, whereby when said cover is in place, said conduit is completely concealed from view.

GEORGE A. KNAPP.