Nov. 3, 1953 L. FAYE 2,657,448

MATERIAL FOR CONSTRUCTING CONCRETE WALLS

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Fig. 2

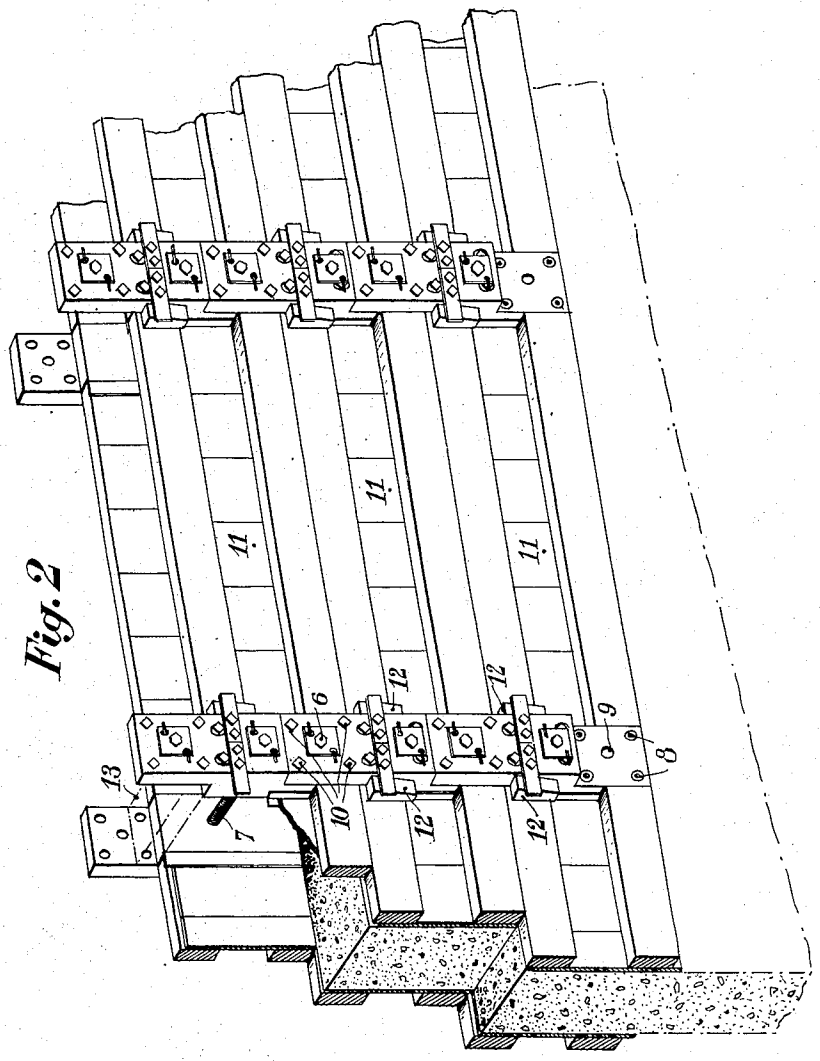
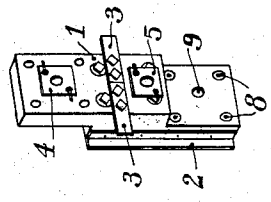



Fig. 1




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## MATERIAL FOR CONSTRUCTING CONCRETE WALLS

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3 Claims. (Cl. 25—131)

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This invention relates to a novel material for constructing concrete walls by casting successive concrete courses.

It is one object of this invention to provide a material for constructing concrete walls which is so arranged that all its component elements, after serving for constructing one course, are readily recovered for constructing the next upper course.

Another object of this invention resides in the provision of a novel material for constructing concrete walls which comprises post elements adapted to be fitted into one another to constitute the frame structure of casing panels, the concrete being subsequently cast inbetween these panels to form one course of the wall under construction.

Other features and advantages of the invention will become apparent from the following description of one form of embodiment thereof, given by way of example with reference to the attached drawing. In the drawing:

Figure 1 is a perspective view of the post element, and

Figure 2 is a complete, part-sectional view of a wall under construction comprising three series of superimposed post elements, of which the uppermost is ready to be filled with concrete for forming a new course.

The post element consists of a wooden member 1 of generally straight prismatic shape which, when seen in vertical section, has a central portion of rectangular profile and its upper and lower end portions thinned on opposite faces so that each member 1 may form the upper or lower extension of another identical member when these members are superimposed to one another as illustrated in Fig. 2. Each wooden member 1 has fixed on either side thereof an angle member extending from the top of the central portion to the bottom of the lower portion of the angle member as shown, the length of these angle members corresponding to the height of one course of the wall to be constructed. These angle members may be fastened to the side faces of the wooden member 1 by means of screws or any other fastening means. Moreover, on the front or outer face of the wooden member 1 and at a short distance below the upper end of the angle members 2 is a horizontal flat iron consisting of one or two elements 3 secured to this front face by means of screw spikes and projecting laterally from the side edges of the wooden member 1 as shown. Above and beneath the horizontal iron member 3, 3 are fixed through

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any suitably fastening means a pair of plate members 4, 5 having a central hole and adapted to receive an assembling bolt 6 and a clamping screw rod 7; in addition, on the front face of the lower portion of the wooden member 1 are fixed through screw or other suitable means four abutment plates 8 and, centrally of these plates, an internally screw-threaded socket 9 secured to the rear or inner face of the lower portion of the wooden member 1 through an integral square-shaped flange (not shown) provided with screw or other fastening means. Finally, the arrangement includes four adjustment screws 10 (Fig. 2) engaged from the front and passing through the upper thinned portion of the post element, as shown.

Figure 2 shows how this post element is utilized in the construction of a concrete wall, together with panels 11, wedge members 12 and temporary cross-stays 13. As apparent from the drawing, a pair of registering post elements kept at the required spacing by means of a temporary cross-stay 13 are interconnected through a clamping screw rod 7. The relative positions of a pair of superimposed and cooperating post elements can be adjusted by means of the aforesaid screws 10 engaging the abutment plates 8; moreover, the assembling of the post elements of a same pair occurs through a bolt 6 engaging the internally screw-threaded socket 9. A panel element 11 located against one face of the wall under construction between two successive post elements (in a horizontal plane) is held in position by hammering a pair of wedge members 12 inserted between the panel 11 and the lateral extensions 3, 3 of the transverse or horizontal iron member, so as to press the panel against those wings of the angle members 2 which are parallel to the wall. Then a course of concrete is cast over the surface of the last course cast, between the post elements and panels of the uppermost series, until the concrete is flush with the upper ends of the angle members 2 of these post elements and with the upper edges of these panels. After the concrete is poured, the post elements and panel members from the lowermost series are fitted on the uppermost series of post elements and panels, and a new course of concrete is cast between these last-fitted elements.

As a result, each course and, therefore, the complete wall, can be constructed by utilizing only two series of superimposed post and panel elements.

Advantageously, the casing or form may be constructed in view of casting three successive

courses of concrete. In this case, three superimposed series of post and panel elements will be fitted on a series of supporting elements carried by the last course of the already built wall portion, and so forth.

While the above description and the accompanying drawing refer to a preferred embodiment of the invention, it will be readily apparent to anybody conversant with the art that many modifications as to proportions of parts, materials used in their construction, and wall shapes and patterns may be resorted to without departing from the spirit and scope of the invention.

What I claim is:

1. A material for constructing concrete walls by casting successive courses thereof, comprising post elements consisting each of a wooden member the height of which is equal to that of one course to be constructed, said wooden member, having a front, a rear and two lateral faces, being formed with a lower portion thinned by a cut in said front face, and an upper extension the front face of which forms the continuation of said front face of said wooden member, of a pair of angle members fixed along said lateral faces and forming the continuation of said rear face of said wooden member on either side thereof, and of a pair of lugs secured to, and projecting on either side of said front face, above said lower end, means for fastening together a pair of post elements so that they will register with each other, means for adjusting the supporting relationship between the lower end of one post element and the upper extension of another post element, means for assembling two superimposed post elements by causing the lower end of one post element to be supported by the upper extension of the other of said post elements, panel elements having the same height as one course, and wedge members adapted to be inserted between one lug of post element and one panel element for clamping said panel element against said angle members of said post element.

2. A material for constructing concrete walls by casting successive courses, comprising post elements each consisting of a wooden member of same height as the course to be constructed, said wooden member being bounded by a front face, a plane rear face and two lateral faces, and having a notched portion thinned out at the lower end of said front face and having a central hole extending therethrough, and an upper extension of said front face also having a central hole extending therethrough, a pair of angle members secured along said lateral faces and providing lateral extensions of said rear face on either side thereof, a pair of lugs secured on said front face above the lower end so as to project on either side from said front face, and an internally screw-threaded socket member fastened in said central hole of said lower end, means for securing to each other a pair of post elements disposed in face-to-face relationship, means for adjustably positioning said lower end



of one post element on the upper extension of the other post element, assembling bolts each adapted to extend through said central hole in said upper extension of a post element and to be screwed in the internally screw-threaded socket member of another post element, thereby fastening said two post elements together so that said other post element is supported by said first post element, the lower end of said other post element bearing on the upper extension of said first post element, panel elements of same height as one course, and wedge members so disposed that each wedge member is positioned between one of said lugs of a post element and a panel element, thereby clamping said panel element against the angle members of said post element.

3. A material for constructing concrete walls by casting successive courses, comprising post elements each consisting of a wooden member of same height as the course to be constructed, said wooden member being bounded by a front face, a plane rear face and two lateral faces, and having a notched portion thinned out at the lower end of said front face, and a central hole extending therethrough, and an upper extension of said front face also having a central hole extending therethrough, a pair of angle members secured along said lateral faces and providing an extension of said plane rear face on either side thereof, a pair of lugs secured on said front face above said lower end and projecting on either side of said front face, an internally screw-threaded socket member secured in said central hole of said lower end, and a set of metal disks fixed on said lower end around said screw-threaded socket member, means for fastening two post elements in face to face relationship, a set of adjustment screws having bearing ends, each screw being adapted to be screwed through the upper extension of a post element around said central hole in said upper extension, assembling bolts each adapted to be introduced through said central hole of the upper extension of a post element and to be screwed in the internally screw-threaded socket member of another post element, thereby fastening said two post elements to each other so that said other post element is mounted on said first post element, the metal disks of said other post element engaging the bearing ends of the adjustment screws extending through the upper extension of said first post element, panel elements of same height as one course, and wedge members, each of said wedge members being adapted to be inserted between one of said lugs of a post element and a panel element, thereby clamping said panel element against said angle members of said post element.

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