

The present invention relates to a form for the end joint of a panel of a moulded wall, and more particularly such a form comprising a board and a hollow section mounted on the said board.

5 It is well known that moulded-wall panels can be made in the ground by digging a trench, arranging a form at its end, filling it with concrete and then removing the form.

10 In these methods, the trench is generally dug with the aid of bentonite mud. Once the trench has been dug, a form is immersed in the mud and placed at the end of the trench.

15 Concrete is then poured in to replace the mud, the concrete then coming into contact with the form. When the concrete has set, a new trench is dug adjacent to the first one on the other side of the form, generally using the latter to guide the drilling machine. Lastly, the form is extracted.

20 Difficulties occur, however, when making very deep walls. This is because the length of the end forms must equal this depth, and the forms consequently become very difficult to handle. In particular, they require the use of cranes which are at least as high as the depth of the wall. Furthermore, the forms require a large area
25 for their horizontal storage on the ground.

 The document CH-A-665,241 discloses a form of the abovementioned type, made in a plurality of parts arranged in order to be connected lengthwise end-to-end.

30 The object of the present invention is to improve this arrangement.

 To this end, the subject of the invention is a form for the end joint of a panel of a moulded wall, comprising a board and a hollow section mounted on the said board, and the cross-section of which has a longitudinal slot for the insertion of the joint, the form
35 being produced in at least two parts arranged in order to be connected lengthwise end-to-end by way of joining members (see CH-A-665,241), characterised in that the end

of the hollow section of each of the parts is set back in relation to the corresponding end of the board, and in that the joining members consist of a joining piece having substantially the same cross-section as the said
5 hollow section and being connectable to the respective boards of each of the said parts, by being inserted into the zone of discontinuance of the hollow sections so as to overlap the end zones of the boards.

When making moulded walls, form sections are
10 therefore handled rather than whole forms. Furthermore, the system for interconnecting the two parts of the form allows excellent alignment and good rigidity of the assembly. In addition, this connection system does not make the form any wider, which could make it more
15 difficult to extract.

In a particular embodiment, the joining piece has at least two holes situated opposite holes formed in the ends of the boards for joining pins to traverse them.

This arrangement enables the vertical forces
20 between the various parts of the form to be transmitted perfectly when it is extracted vertically.

The joining piece can, for example, be mounted fixed on the end of one of the boards from which it projects, and can comprise means for joining to the end
25 of the other board.

The hollow section can be produced in the form of two half-hollow sections separated by a longitudinal slot which permits, in particular, the insertion of a sealing joint, the joining piece being formed from two corresponding half-pieces.
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In order to facilitate the extraction of the form, the hollow section of its lower part can, furthermore, have a transverse dimension which decreases towards its free end over at least part of its height.

35 A particular embodiment of the invention will now be described by way of non-limiting example with reference to the attached drawings, in which:

- Figure 1 is a front view of the upper part of a form produced in two parts,

- Figure 2 is a front view of its lower part,

- Figure 3 is a view in section along the line
5 III-III in Figure 1 or the line III-III in Figure 2,

- Figure 4 is a view in section along the line
IV-IV in Figure 2,

- Figure 5 is a view in section along the line
V-V in Figure 1,

10 - Figure 6 is a view in section along the line
VI-VI in Figure 7, and

- Figure 7 is a partial front view of the two assembled ends of the form parts in Figures 1 and 2.

The upper part of the form illustrated in
15 Figure 1 is formed from a board 1 onto which are welded
two half-hollow sections 2 separated by a longitudinal
groove 3.

The half-hollow sections 2 are discontinued in
the upper end zone 4 and lower end zone 5 of the board 1.

20 In the lower zone 5 of discontinuance of the
hollow sections, the board forms two holes 6, the axes of
which are in the same horizontal plane, whereas in its
upper part 4 of discontinuance of the hollow sections, it
forms two holes 7 which have substantially the same
25 diameter as the holes 6 and the axes of which are also in
the same horizontal plane, and four holes 8 of a smaller
diameter which are respectively situated above and below
each of the holes 7.

Two half-joining pieces 9 of the same cross-
30 section as the hollow sections 2 are fixed within the
lower part 5 of discontinuance of the hollow sections, on
the one hand by welds 10 which position them, and on the
other hand each with the aid of a pin 11 engaged in both
a hole 6 and in a corresponding hole 12 of the half-
35 joining piece.

Each half-joining piece protrudes from the lower
edge of the board 1 and comprises in this zone a second
large-diameter hole 13 in which is fixed a joining pin

14, and two holes 15 of a smaller diameter respectively above and below the hole 13.

Similarly, the lower part of the form illustrated in Figure 2 comprises a board 1' to which are fixed two half-hollow sections 2' which form between them a longitudinal groove 3'. The hollow sections 2' are discontinued in the upper zone 4' of the board 1', this upper zone comprising holes 7' and 8' similar to the holes 7 and 8 of the board 1.

As illustrated in Figures 3 and 4, each half-hollow section has a transverse dimension which decreases gradually in the lower part of the form, these two half-hollow sections having bevelled ends with inclined planes 20.

The upper and lower parts of the form are interconnected by engaging the joining pins 15 fixed to the joining pieces 9 in the holes 7' of the board 1', and then by screwing bolts 21 into the facing holes 15 and 8'.

The bolts 21 essentially serve for the transverse assembly of the two parts of the form, whereas the vertical extracting forces are transmitted by the pins 11 and 14.

It will be noted that the upper elements in Figure 1 can in fact be added end-to-end, it then being possible for their holes 7 and 8 to be used either to join them to another section or to fasten them to a lifting machine.

Moreover, because the cross-section of the forms 2' [sic] decreases, the form can be extracted more easily after the concrete has set.

Various alternative embodiments and modifications can, of course, be made within the scope of the invention as defined by the attached claims.



CLAIMS

1. Form for the end joint of a panel of a moulded wall, comprising a board (1) and a hollow section (2) mounted on the said board, and the cross-section of which
5 has a longitudinal slot (3) for the insertion of the joint, the form being produced in at least two parts arranged in order to be connected lengthwise end-to-end by way of joining members, characterised in that the end of the hollow section (2, 2') of each of the parts is set
10 back in relation to the corresponding end (1, 1') of the board, and in that the joining members consist of a joining piece (9) having substantially the same cross-section as the said hollow section and being connectable to the respective boards of each of the said parts, by
15 being inserted into the zone of discontinuance of the hollow sections so as to overlap the end zones of the boards.
2. Form according to Claim 1, characterised in that the said joining piece has at least two holes (12, 13)
20 situated opposite corresponding holes (6, 7') formed in the ends of the boards for joining pins (11, 14) to traverse them.
3. Form according to either of Claims 1 and 2, characterised in that the said joining piece is mounted
25 fixed on the end of one of the boards (1) from which it projects, and in that it comprises means (13, 15) for joining to the end of the other board (1').
4. Form according to any one of Claims 1 to 3, characterised in that the said hollow section is formed
30 from two half-hollow sections separated by a longitudinal slot (3, 3'), the said joining piece being formed from two corresponding half-pieces.
5. Form according to any one of Claims 1 to 4, characterised in that the hollow section of the lower
35 part has a transverse dimension which decreases towards its free end over at least part of its height.