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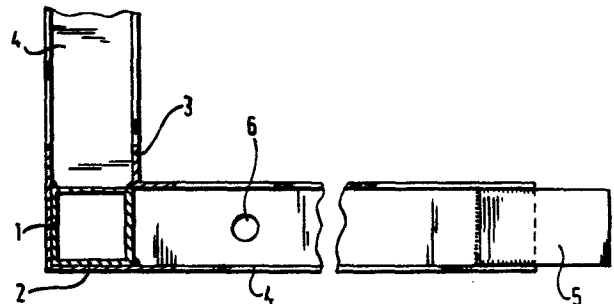
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② Designated Contracting States: **AT BE CH DE FR GB IT LU NL SE**

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⑥ **Skeleton construction for a prefabricated building.**

⑦ A skeleton construction for a prefabricated building comprising corner posts, intermediate posts and trusses composed of various profiles which are connected to one another by means of various joints wherein the corner post is formed by a box-shaped profile (1), to which over part of its length, on the outward sides an L-profile (2) is fastened and on the inwardly extending rim a further L-profile (3) is connected, said L-profiles being shorter than the box-shaped profile (1), whereas on the lower side of the box-shaped profile U-profiles (4) are fastened.



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Skeleton construction for a prefabricated building.

The invention relates to a skeleton construction for a prefabricated building comprising corner posts, intermediate posts and trusses formed by various profiles fastened to one another by means of different joints. The invention has for its object to provide a skeleton construction which can be simply and readily mounted during the erection of the building, because the various prefabricated parts fit to one another and can be fastened in and on one another. The various prefabricated parts have dimensions such that they can be transported in conventional containers so that costs are saved.

The construction is, moreover, such that the cross-sections of the channel-section profiles employed have the same dimensions so that roof and/or wall plates of the same thickness can be used.

5 According to the invention the corner post is formed by a box shaped profile to which over part of its length is fastened an L-profile on the outer sides, whilst a further L-profile is arranged on the inwardly extending rim so that the L-profiles are shorter than
10 the box-shaped profile, to the lower side of which are fastened U-profiles.

The intermediate post is formed by a box-shaped profile to which over part of its length U-profiles are fastened on two opposite sides, said U-profiles being
15 shorter than the box-shaped profile, whereas the lower side of the box-shaped profile has fastened to it U-profiles.

The trusses are composed by two halves to be slipped one into the other and to be secured to one
20 another and are equipped with means for placing and fixing on the corner and/or intermediate posts.

The invention will be described more fully with reference to the drawing.

Figure 1 is a front view of a corner post and
25 Figure 2 is a sectional view taken on the line II-II in figure 1,

Figure 3 is a front view of an intermediate post and

Figure 4 is a sectional view taken on the line
30 IV-IV in figure 3.

Figure 5 illustrates on a reduced scale the structure of the truss.

Figure 6 finally shows part of the truss construction with the fastening area of the truss on an

intermediate post.

Figure 7 shows in elevation a building according to the invention.

The corner post (Figures 1 and 2) comprises the
5 box-shaped profile 1, to which over part of its length,
on the outer sides, an L-profile 2 is fastened, whereas
the L-profile 3 is mounted on the inwardly extending
rim. The two L-profiles 2 and 3 are shorter than the
box-shaped profile 1. The free portion of the box-shaped
10 profile 1 has fastened to it on the lower side the
U-profiles 4. These profiles are provided, if necessary,
at their free ends with strips 5, which can be slipped
into and fixed in joining U-profiles of other posts so
that a stable connection and a correct alignment are
15 ensured.

The holes 6 serve to pass bolts to be inserted into the foundation.

The intermediate post (figures 3 and 4) is formed
by the box-shaped profile 7, to which over part of its
20 length on two opposite sides are fastened the two
U-profiles 8. In the same manner as with the corner post
the U-profiles 9 are secured to the lower side of the
box profile 7. Also these U-profiles are provided with
strips 5 and holes 6.

25 The truss (figure 5) comprises two halves each
having a top beam consisting of two U-profiles 10 and
11, whose webs located in a vertical plane are secured
to one another and a box-shaped profile 12 fastened to
the top beam. In the box-shaped profile 12 a smaller
30 box-shaped profile 13 is fastened in one half of the
truss to serve as an insertable connecting piece for the
box-shaped profile 12 of the other half of the truss. To
the bottom side of the top beam are secured two strips

14 having holes 15 for fixing rods (not shown in the drawing) interconnecting several trusses. For each truss half four rods are provided and hence eight rods for the whole truss.

5 To the lower side of the box-shaped profile 12 is fastened at right angles thereto a U-profile 19, in which a box-shaped profile 20 is fastened at the level of the truss. The two truss halves and the assembled truss are mounted on the corner posts and/or intermediate
10 posts as shown in figure 6. The two halves are fastened to one another by sliding the said box-shaped profile 13 of one half into the box-shaped profile 12 of the other half, whilst at the same time a small portion of the box-shaped profile 17 is slipped onto a curved round
15 iron 18. The box shaped profile 17 as well as the curved round iron 18 are rigidly secured to the top rods. Then the trusses are placed on the posts. The box-shaped profile 20 then fits into the box-shaped profile 7 and the U-profile 19 fits along two sides around the
20 box-shaped profile 7. The truss is then drawn tight to the post by means of the tapped rod 22, which engages on one side the hole 23 of the box-shaped profile 12 and on the other side the T-profile 21 rigidly secured to the box 7.

25 The space between the two truss halves on the top side may be filled out with a profiled lath 24.

Together with the eight tie rods between the trusses an immovable construction is obtained between the trusses and the various vertical girders. The
30 trusses have the conventional water drain gutters 25. All U-profiles of both the trusses and the posts have the same cross-sections and serve to receive and fasten roof and/or wall plates of the same thickness.

The connection between the various parts may usually be
35 established by welding.

CLAIMS

1. A skeleton construction for a prefabricated building comprising corner posts, intermediate posts and trusses composed of various profiles which are connected to one another by means of various joints
5 characterized in that the corner post is formed by a box-shaped profile, to which over part of its length, on the outward sides, an L-profile is fastened and on the inwardly extending rim a further L-profile is connected, said L-profiles being shorter than the box-shaped
10 profile, whereas on the lower side of the box-shaped profile U-profiles are fastened.

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2. A skeleton construction as claimed in Claim 1 characterized in that the intermediate post is formed by a box-shaped profile, to which over part of its length
5 on two opposite sides U-profiles are fastened, which are shorter than the box-shaped profile, whereas on the lower side of the box-shaped profile U-profiles are fastened.

3. A skeleton construction as claimed in Claim 1
10 characterized in that the trusses are composed of two relatively insertable halves to be fastened to one another, said trusses being equipped with parts for slipping one into the other and for placing on the corner and/or intermediate posts.

15 4. A skeleton construction as claimed in Claims 1 and 2 characterized in that the U-profiles fastened to the lower side of the box-shaped profile are provided at their free ends with connecting strips (5).

20 5. A skeleton construction as claimed in Claims 1 and 3 characterized in that the trusses are provided with strips (14) and holes (15) for fastening rods interconnecting a plurality of trusses.

25 6. A skeleton construction as claimed in Claims 1 to 3 characterized in that the trusses are provided with box-shaped profiles (20) fitting in the box-shaped profiles (7) and U-profiles (19) fitting around the box-shaped profiles (7).

30 7. A skeleton construction as claimed in Claims 1 and 3 characterized in that the insertible parts of a truss are formed by a box-shaped profile (17) and a curved round iron (18) and a box-shaped profile (13).

FIG.7

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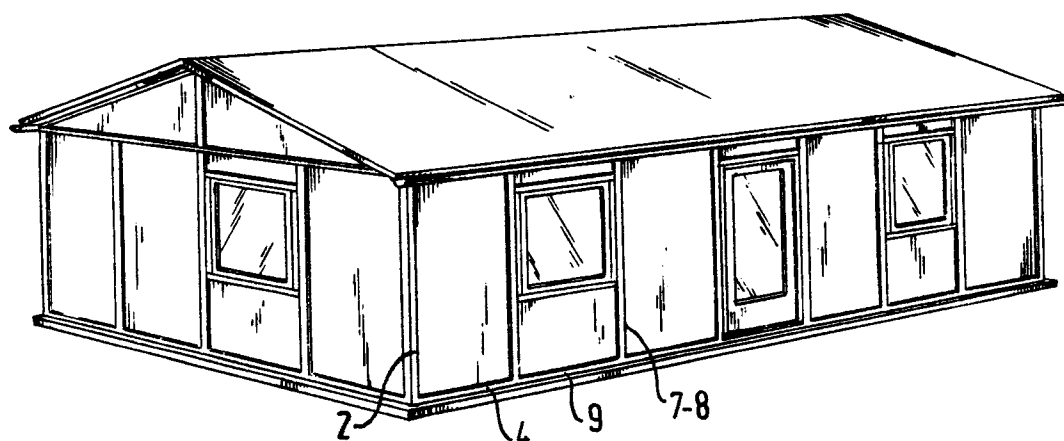


FIG.2

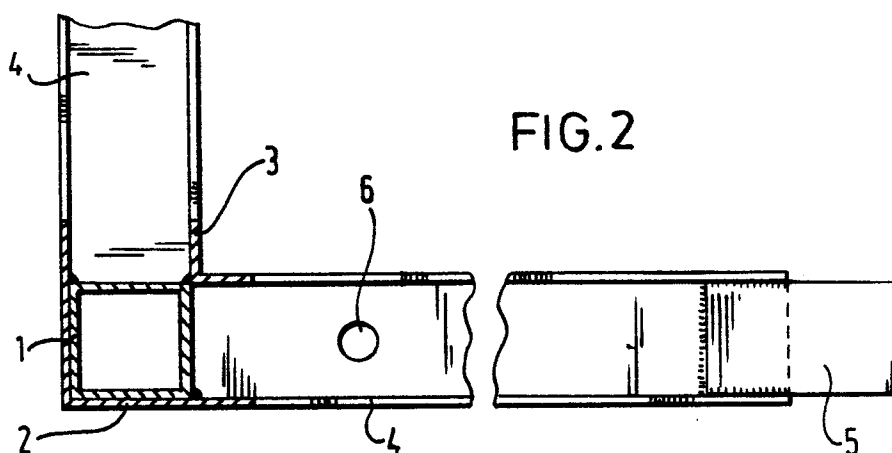
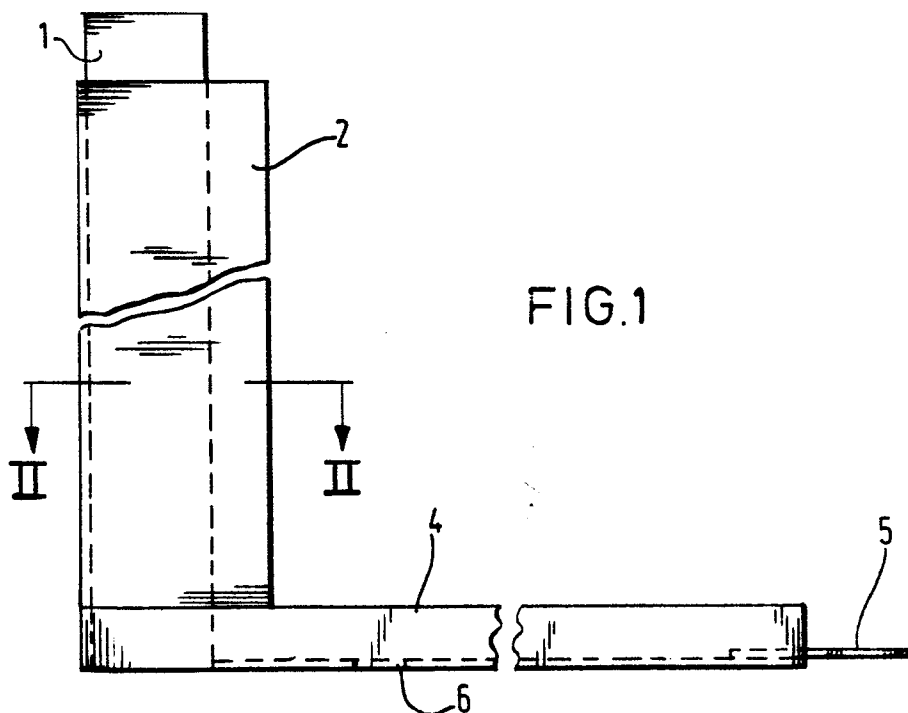


FIG.1



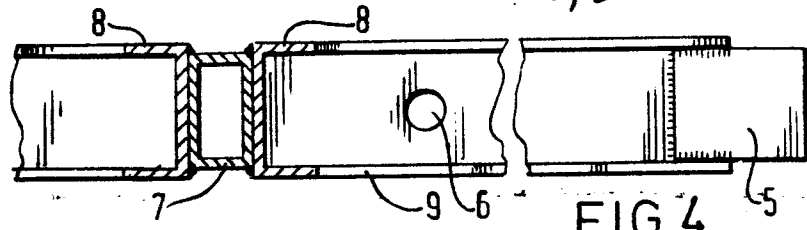


FIG. 4

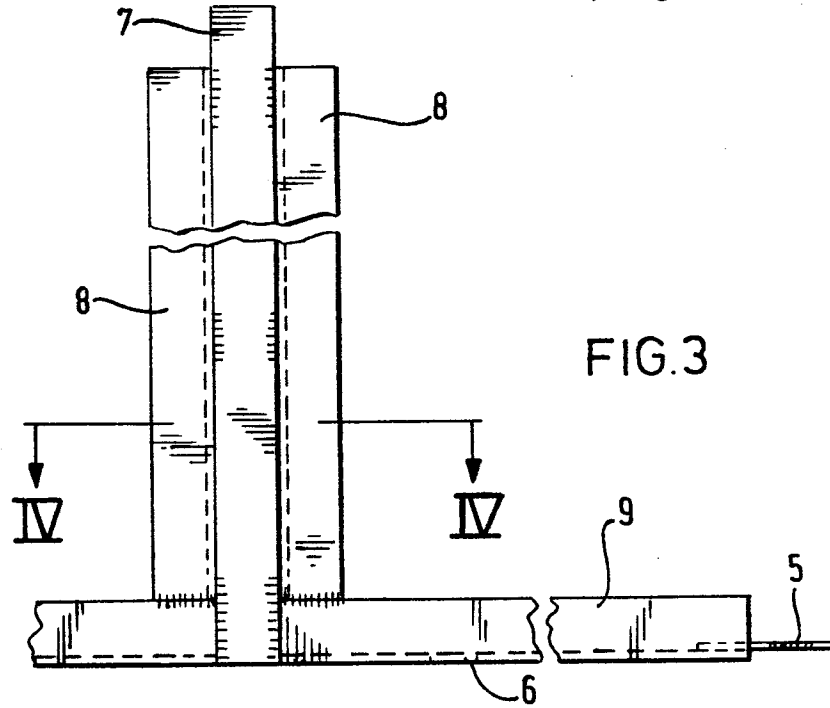


FIG. 3

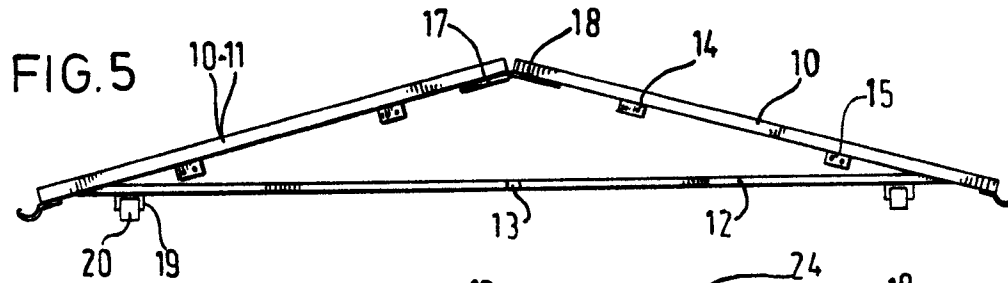


FIG. 5

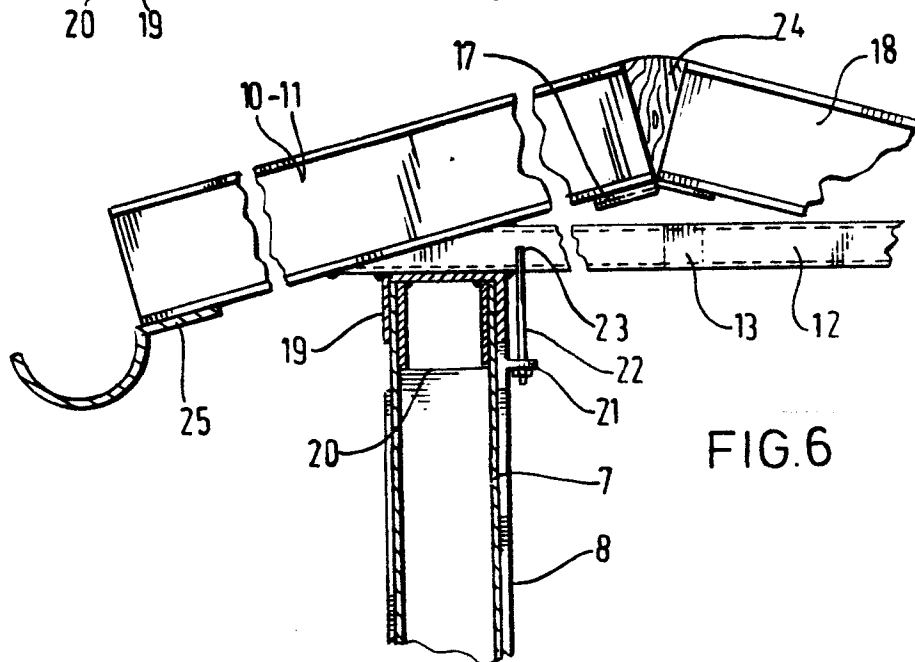


FIG. 6



DOCUMENTS CONSIDERED TO BE RELEVANT			CLASSIFICATION OF THE APPLICATION (Int. Cl.)
Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	
	<u>FR - A - 2 076 367</u> (CUPIF) * Page 3, lines 27-37; figures 9,14 * --	1	E 04 B 1/24
	<u>US - A - 2 255 194</u> (STOUT) * Page 2, column 1, lines 54-69; column 2, lines 22-32; page 3, lines 9-18; figures 7,8,9,11 * --	1,2	
	<u>CH - A - 592 789</u> (RAUC) * Column 1, line 68; column 2, lines 1-7; figure 14 * --	2	TECHNICAL FIELDS SEARCHED (Int.Cl.)
	<u>US - A - 2 034 265</u> (McLAUGHLIN) * Page 3, lines 5-19; figure 4 * --	1	E 04 B
	<u>US - A - 3 623 287</u> (FORCE) * Column 2, lines 22-64; figures 1,2,3,4 * --	1	
	<u>US - A - 3 845 601</u> (KOSTECKY) * Column 2, lines 5-13; figure 1 * ----	4	CATEGORY OF CITED DOCUMENTS
			X: particularly relevant A: technological background O: non-written disclosure P: intermediate document T: theory or principle underlying the invention E: conflicting application D: document cited in the application L: citation for other reasons
			&: member of the same patent family, corresponding document
The present search report has been drawn up for all claims			
Place of search	Date of completion of the search	Examiner	
The Hague	24-09-1979	SCHOLS	