

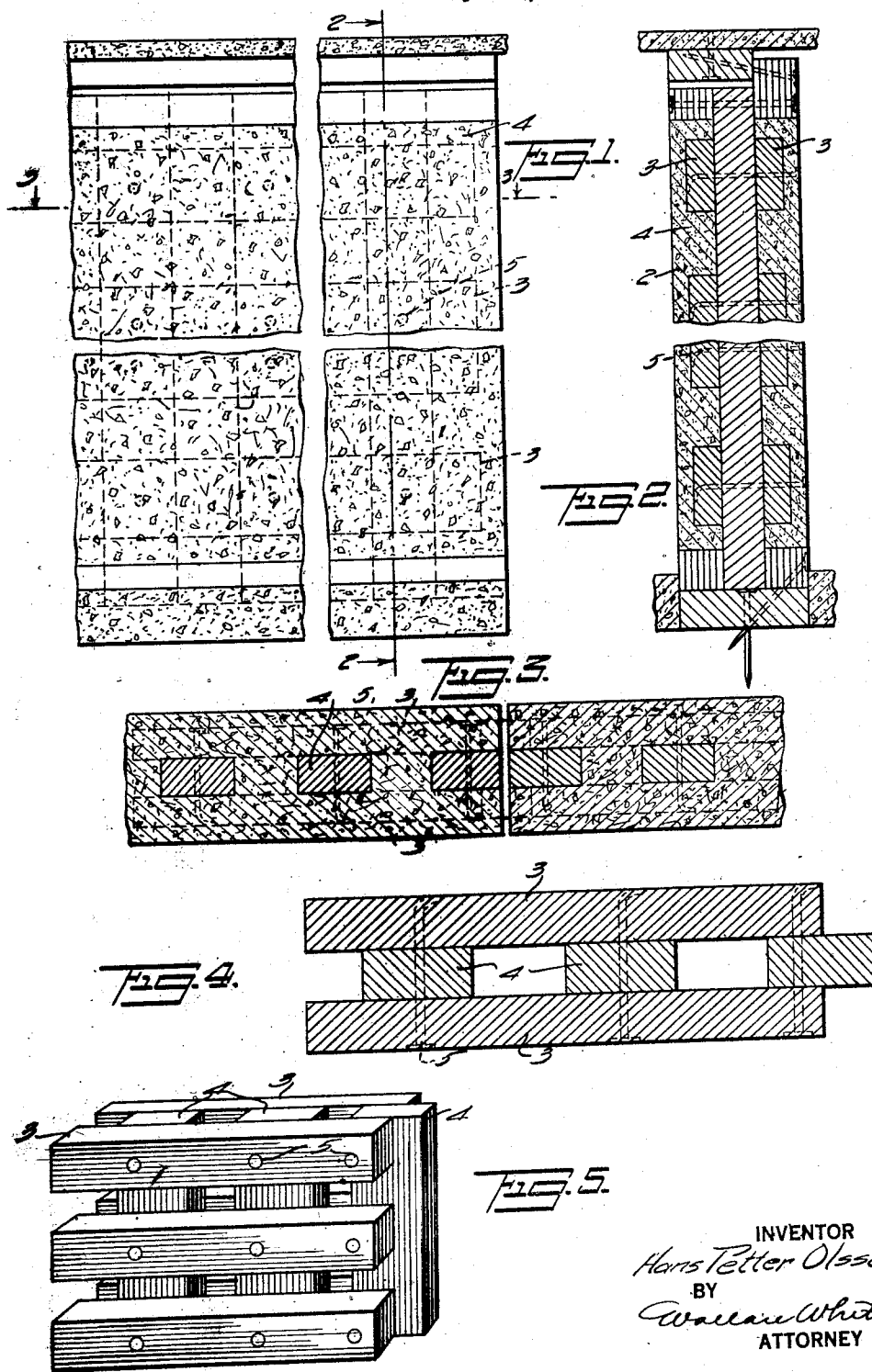
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H. P. OLSSON

SECTION FOR BUILDING UP WALLS, CEILINGS, ROOFS, AND THE LIKE

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SECTION FOR BUILDING UP WALLS, CEILINGS, ROOFS, AND THE LIKE.

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To all whom it may concern:

Be it known that I, HANS PETTER OLSSON, subject of the King of Sweden, residing at Backberg, Kungsgarden, in the county of Gestrikland, Sweden, have invented certain new and useful Improvements in Sections for Building Up Walls, Ceilings, Roofs, and the like, of which the following is a specification.

The present invention refers to a method for building up walls, ceilings, floors or the like. According to the invention such walls, ceilings, floors or the like are built up of sections, comprising a grate shaped framework of wood, the spaces of which are filled up by means of a suitable mass, cast around said framework. The said sections are simple in their construction and are easily applicable according to different requirements. Completely finished walls, ceilings or the like may be built up with the aid of such sections in a very short time.

In the accompanying drawing, Fig. 1 is a front view of a part of a wall built up according to the invention, Fig. 2 is a section on the line 2—2 of Fig. 1 on an enlarged scale, Fig. 3 is a section on line 3—3 of Fig. 1, also on an enlarged scale, Fig. 4 is a similar view to Fig. 3, but with the casting mass removed for the sake of clearness and Fig. 5 is a perspective view of a block constructed according to the present invention.

The sections consist of a framework in the form of a grate, built up from three layers of pales or bars 3, 4 of wood, placed in crossed positions and nailed together by nails 5. The framework however may also consist of two or more layers. The nails 5 penetrate the pales 3, 4 at their crossing points. A filling mass 2 of a suitable material or materials is cast around said framework so as to fill up the spaces of the grate. The distance between the pales in the framework depends upon the purpose for which the sections are to be employed, and also on the nature of the mass 2, cast around the framework. Sections thus produced, are placed edge to edge for building up a wall, a ceiling, a roof or the like. To enable this to be done, according to the present invention, one edge of the framework may be provided with a groove, and the opposite edge with a corresponding tongue. When such an arrangement is used (see Fig. 4) the ends 3^a of the pales 3 are projected at the one edge of

the framework, beyond the longitudinal edge of the outer pale 4^a as indicated at the left-hand side of Figs. 1, 3 and 4 whereas at the opposite edge of the framework, the outer longitudinal pale 4^b projects beyond the ends 3^b of the transverse pales 3, so as to form a tongue, corresponding to the depth of the groove, formed in the first named edge of the framework, as indicated at the right-hand side of Fig. 4.

For carrying out the casting operation an ordinary casting mould of wood is used, covered on the inner surface with linoleum or with glass plates. The length of the mould is equal to the length of the grate and the depth of the mould is equal to the breadth of the grate. The breadth of the mould is equal to the thickness of the building sections to be produced. In the bottom of the mould a longitudinal groove is formed, in which the edge of pale 4^b, which is to form a tongue on one edge of the framework, can seat, and so as to hold the grate in its proper position on the bottom of the mould. Between the ends 3^a of the pales 3 Fig. 4, on the opposite edge of the framework (which ends at the top of the mould during the casting operation), a list, forming a projecting tongue is placed, which is withdrawn after the casting operation, and a groove in which said tongue enters is formed by securing two bars across the mould and nailing them to the framework, which thus is caused to occupy its proper position in the upper part of the mould whereafter the casting of the mass 2 may be performed. It has been found preferable to compose the said filling mass of gypsum, lime and slag or clinker from coal furnaces, mixed with water so as to form a paste, which may be cast around the framework. Of course the invention is not limited to this composition of the mass.

When the frame work is formed only of two layers of pales, comparatively big pales, forming one layer, are provided longitudinally with a comparatively large distance between them, and the second layer is formed by transverse smaller pales placed at a less distance apart. No groove and tongue is formed in this case at the edges of the framework. The casting of the mass is performed around the framework, which is placed in a horizontal position on a horizontally placed brace of wood, lined with

linoleum, glass or the like, on which brace a frame of wood is built, the outer form of said frame being similar to the framework around which the mass is to be cast. The
5 height of this frame corresponds with the thickness of the section to be produced. The framework is secured in this mould with the smaller transverse pales placed downwards and at a suitable distance from the
10 lined wooden brace, and thereafter the mass is cast.

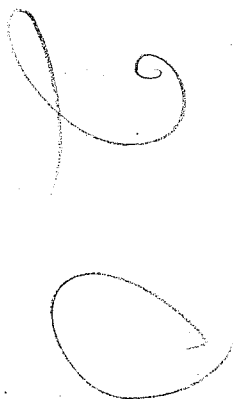
In employing the invention for building up a ceiling, a framework is established underneath the floor, above said ceiling, and
15 a brace of wood, lined with linoleum, glass or the like is secured at a distance underneath said framework. Thereafter the mass is cast on said brace and around the framework. After the mass solidifies the brace is
20 removed.

Having now described my invention, what I claim is:

A section for use in building walls, ceilings, roofs and the like comprising a framework composed of a plurality of spaced-apart longitudinal and transverse pales or
25 bars connected at their points of intersection, and a material cast about said framework adapted to become hardened or set to produce a block of the desired size and shape,
30 the transverse pales at one edge of the section being projected beyond the outer longitudinal pale at that edge to form a locking groove and that longitudinal pale at the opposite edge of the section being projected
35 beyond the transverse pales thereat to form a tongue.

In testimony whereof I have signed my name to this specification.

HANS PETTER OLSSON.

A handwritten signature, possibly 'H. P. Olsson', is written in the lower left quadrant of the page. Below the signature is a large, hand-drawn circle.