E. JENSEN.

BUILDING SLAB.

APPLICATION FILED MAR. 4, 1918.

1,296,525.

Patented Mar. 4, 1919.

Fig. 1.

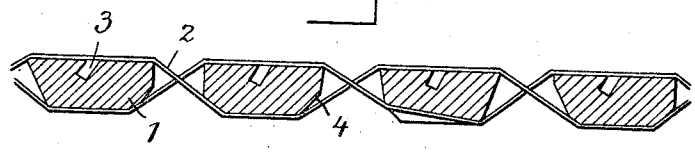


Fig. 2.

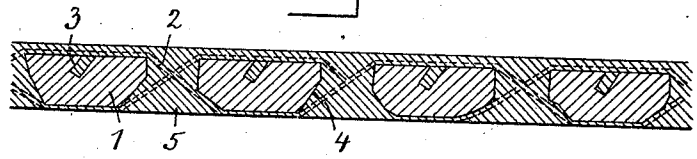
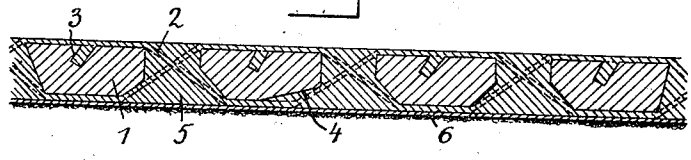


Fig. 3.



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UNITED STATES PATENT OFFICE.

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BUILDING-SLAB.

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To all whom it may concern:

Be it known that I, EMANUEL JENSEN, manufacturer, subject of the King of Denmark, residing at Frederiksberg, near Copenhagen, Denmark, have invented certain new and useful Improvements in Building-Slabs, of which the following is a specification.

The present invention relates to a building material in shape of plates or slabs, consisting of wooden laths, tied together and fitted, on one side of the slab, with a small groove or similar recess while, on the opposite side of the slab, one or both edges of the laths are chamfered. This lathing material is ordinarily used after having been filled out with a suitable hardening plastery mass.

The tying together of the laths so as to form a slab may, suitably, be performed in a machine where they are woven together by means of metal wire or twine, so that a suitable space is left between any two laths. This interstice is filled, at once or later, by a hardening mortar or a plastery mass which may either fill the interstices alone or also cover the wooden laths. In the former case, the slabs should receive a finishing coat of plaster after they have been fitted in place, in the latter case they may be finished entirely with a plaster coat in the factory. On the laths there may be cemented a layer of paper or felt-paper. For inside use it may be common paper cemented on the slab by means of a fireproof adhesive, for instance a compound of water-glass and asbestos, while for outside use it consists of paper or felt-paper impregnated with bitumen and also cemented to the laths by means of bitumen. The outer face of the felt-paper receives a coating of sand, cork chips or a similar granular material, maintained in position by means of the same kind of adhesive as used for the felt-paper and serving to retain a coat of plaster applied, eventually, on the paper.

When the slabs are used as roofing plates, the said paper or felt is used to make water-tight joints by allowing the felt to project somewhat beyond the slab on either side, and the joint is then made as indicated in Figs. 4 and 5.

In order to facilitate the comprehension of this invention, it has been illustrated in the accompanying drawing, to show, by way of example, how it may be carried into effect.

Figure 1 shows a cross-section of the building slab as it looks, before it has been filled out with mortar,

Fig. 2 shows a cross-section of the slab, after it has been filled out with mortar.

Fig. 3 shows a cross-section of the slab with a layer of paper or felt cemented thereto.

Referring to the drawing, 1 indicates the wooden laths, 2 the wires, 3 the grooves in the face of the laths, 4 the chamfering, 5 the mortar and 6 the paper coating. As shown in Fig. 3 the paper coating 6 is roughened by the addition of sand, cork-chips or the like. The mortar 5 is held to the slab partly by penetrating down in the grooves 3 and, partly, by fitting around the chamferings 4. Besides serving the purpose of keeping the mortar in place, the groove in the lath is useful in decreasing the tendency of the lath to warp.

When the slabs are delivered from the factory complete with plaster coating, they are fitted with stiffening strips glued on the rear side.

If the plaster is not applied, until the slabs have been placed in the building, then the slabs may be shipped in coiled state, which makes the transportation more easy.

The advantage of these slabs is that they are easier to produce, as they are manufactured by machine, and the material does not cost much, as any waste-wood may be used for this, even waste-pieces from slender spruce trees which may be cut into laths of the shape shown on the drawing without much work and, besides, it is not important that the chamferings of the edges on all the laths should be alike. The more the edges are chamfered on the lower side of the laths, the better will they retain the mortar coating. In fact, laths may be used having only one edge chamfered, as this will suffice to prevent the mortar and the laths separating. The mortar coating may also consist of some cheap material as, for instance, a mixture of clay and chaff, peat dust or the like, or a lean slag concrete. As plates for outside use are fitted with a covering of paper or felt impregnated with bitumen, no dampness will be able to reach the wooden laths or the mortar coat and, as the paper is covered with sand or cork dust, a coating of weather-proof mortar may easily be applied on the outside.

Owing to the mortar coating, the slabs are very fireproof, as the fire cannot reach the

wooden laths. Thus there is attained, without the use of expensive materials, a cheap, durable and fireproof slab, suitable for indoor and outdoor covering of wooden posts, for roof covering, insulation of damp walls, etc., and one which is of a shape and lightness enabling it to be shipped over long distances.

Having now particularly described the nature of my said invention, and in what manner the same is to be carried out, I claim:

A building slab or lathing material comprising a plurality of wooden laths having means binding them together in spaced relation, each of said laths having a flat surface on one of its sides extending the width thereof, and provided with a groove, and a plastic filling material covering the laths and occupying the spaces therebetween, said filling material being anchored to the laths by the binding means and said grooves, and a second covering of material overlying one side of the slab, said material presenting a roughened surface whereby a coat of finishing material may be applied thereto.

In testimony whereof the foregoing specification is signed in the presence of two witnesses.

EMANUEL JENSEN.

Witnesses:

JULIUS LEHMANN,

CARL HEMMINGSEN.