T. HENDERSON.

INSULATING BUILDING SLAB.

APPLICATION FILED NOV. 24, 1919.

1,356,764. Patented Oct. 26, 1920.

FIG. 1

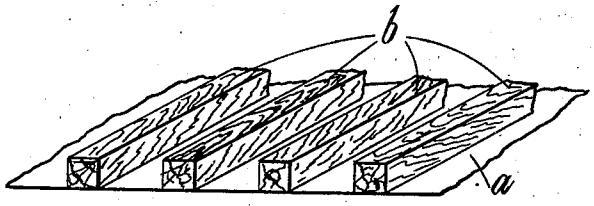


FIG 2

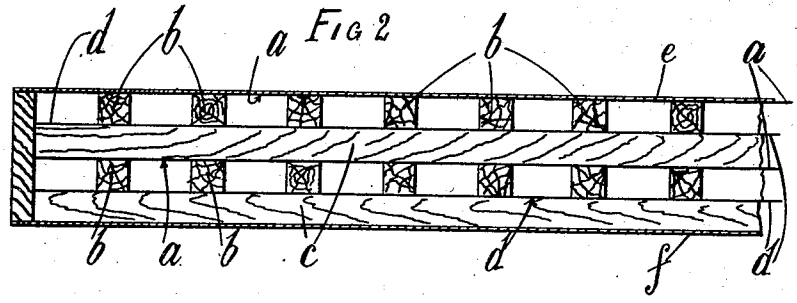
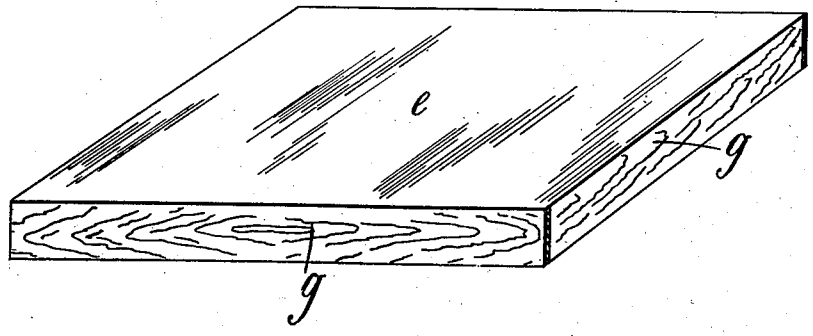


FIG. 3



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UNITED STATES PATENT OFFICE.

TURNER HENDERSON, OF ABINGDON, ENGLAND.

INSULATING BUILDING-SLAB.

1,356,764. Specification of Letters Patent. Patented Oct. 26, 1920.

Application filed November 24, 1919. Serial No. 340,195.

To all whom it may concern:

Be it known that I, TURNER HENDERSON, M. A., a citizen of the United Kingdom of Great Britain and Ireland, and resident of The Coppice, Clifton Hampden, Abingdon, in the county of Berkshire, England, have invented certain new and useful Improvements in Insulating Building-Slabs, of which the following is a specification, such as will enable others skilled in the art to which it appertains to make and use the same.

This invention relates to insulating slabs for building and the like purposes and is designed to provide slabs which may be of any suitable size, of considerable strength, and having good insulating properties against both temperature and sound.

The improved slab comprises several layers of wood strips, the members of each layer being spaced apart and the layers arranged crosswise in relation to each other with a sheet of paper or other suitable material between them, the whole being then inclosed in any suitable manner, such as by covering the two faces, that is the outside of the uppermost and the outside of the lowermost layer with thin wood, chip or other such substance and inclosing some or all of the edges of the slab within a light wood frame.

My invention is shown by way of example in the accompanying drawing, in which:—

Figure 1 is a fragmentary view showing the mode of constructing the slab.

Fig. 2 is a sectional view of one of my insulating slabs in which four layers of wood strips are used.

Fig. 3 shows on a smaller scale than Fig. 2, a perspective view of a completed slab.

Referring to Fig. 1 of the drawings *a* represents a sheet of paper or other suitable material upon which is mounted the requisite number of say 64, wood strips *b*, of say a quarter of an inch square, and 24 inches long, spacing them about one-half inch apart. These strips are then secured to the paper which is already the requisite size—say 48 inches long and 24 inches wide. The strips are secured to the paper by any suitable adhesive. Another sheet of paper of the same size is then taken upon which say 32 strips of wood of similar section as the first set and similarly spaced, are secured by the adhesive. These two layers are then stuck together with the strips of one layer crossing the strips of the other layer at right angles; other such layers being added in similar manner as may be desired. When the requisite thickness has been made up, the top and bottom sides are then preferably faced with thin sheets of suitable material, also the edges are similarly finished.

In the section shown in Fig. 2 there are four layers of wood strips *b* and *c*, each layer being arranged at right angles to the adjoining layer and having layers of paper *a* and *c* between them as indicated. *e* and *f* show respectively a thin sheet of wood secured to the top and bottom faces to form flat outer surfaces as at *e* in Fig. 3.

A sheet of paper may separate the outer sheets from the top and from the bottom layers of strips if necessary.

Wooden strips *g* close the edges of the layers thus forming a complete slab as seen in Fig. 3.

It will be evident that because of the paper sheeting or equivalent material on which the strips are mounted and because the strips are continuous and substantially parallel on each sheet the spaces between the strips on each sheet are entirely inclosed and do not communicate with any other spaces on the same or on an adjoining sheet and that thereby every space is a separate compartment or pocket of air each of which consequently has high insulating properties so that a slab formed of these layers forms an excellent thermal and sound insulator.

What I claim and desire to secure by Letters Patent is:—

A slab for building and analogous purpose comprising a plurality of layers of strips of wood, each layer being arranged substantially at right angles to the layer next thereto, the strips in each layer being spaced apart and substantially parallel to each other, sheets of material between each pair of layers, closure sheets of material on the outer surfaces of the outside layers, and closures for the edges of the slab, said closures bearing directly against the ends of the wood strips and the edges of the first named sheets.

In witness whereof I have hereunto set my hand in presence of two witnesses.

TURNER HENDERSON.

Witnesses:

HENRY FAIRBROTHER,

BARBARA BROOM.