April 6, 1943. E. KNOWLTON 2,315,967

BUILDING CONSTRUCTION

Filed June 13, 1942

Fig. 1.

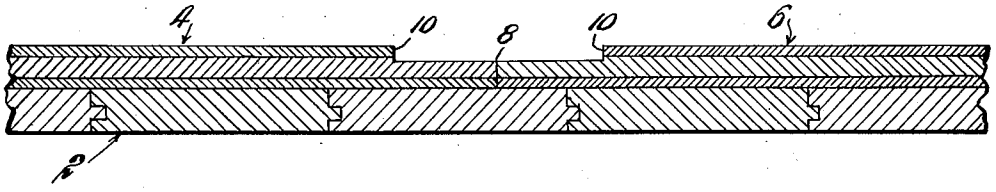


Fig. 2.

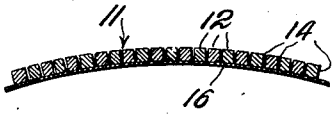


Fig. 3.

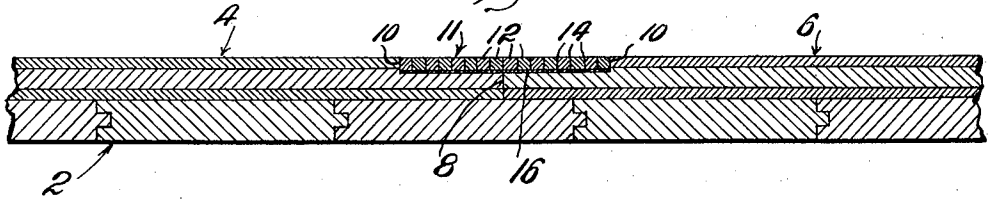
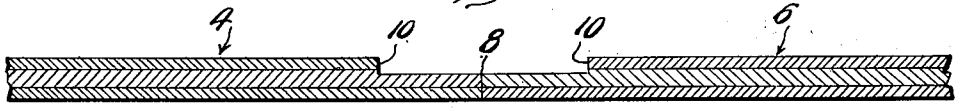


Fig. 4.



INVENTOR.
EBEN KNOWLTON
BY
Harry Lea Dodson.
ATTORNEY

Patented Apr. 6, 1943

2,315,967

UNITED STATES PATENT OFFICE

2,315,967

BUILDING CONSTRUCTION

Eben Knowlton, Cold Spring Harbor, N. Y.

Application June 13, 1942, Serial No. 446,851

5 Claims. (Cl. 20—4)

My invention relates to that class of devices known as building materials and more particularly to the construction of an improved floor, ceiling, or wall.

The principal object of my invention is to provide a construction that results in a finished floor, wall, or ceiling, either whole or panels thereon, having for its outer surface any desired fine wood or other material and having decorative inlays of the same or any other desired material and design, the latter forming a series of cover strips in unique arrangement. Thus I am able to entirely do away with a double floor with its additional expense.

A further object of my invention is to provide a covering whereby in joining the edges of these secondary floor coverings, no unevenness will result from warping of the under floor due to inequalities at the joints.

It has been frequently experienced in practice that when plywood panels are joined they must be grooved and tongued or keyed into position, my invention is to obviate this condition.

A further object of my invention is to provide means whereby a secondary floor, wall, or ceiling, may be laid over an existing floor, wall, or ceiling, with a great saving in the cost of installation and material.

It will be clear to those skilled in the art that a floor, wall, or ceiling of plywood having as many plies as are desired, with the top or outer ply of any desired material, will be considerably less expensive to lay than an entire new covering of individual strips, separately attached. In addition to this saving my invention will produce a decorative effect which in practice has been found to be constantly acceptable to the public.

The many arrangements and designs which can be obtained by the use of my invention preclude any disclosure of a top or plan view because it is clear that I do not desire to be limited to any particular arrangement.

My means of accomplishing the foregoing objects, may be more readily apprehended by having reference to the accompanying drawing which is hereunto annexed and made a part of this specification in which:

Fig. 1 is a cross-sectional view of a floor, wall, or ceiling showing my invention used as a covering for an existing surface;

Fig. 2 is a cross-sectional view of my insert;

Fig. 3 is a cross-sectional view of a floor constructed in accordance with my invention with the insert in place; and

Fig. 4 is a cross-sectional view of my invention used as a floor.

Similar reference numerals refer to similar parts throughout the entire specification.

As shown in the drawing upon the surface of an existing floor, ceiling, or wall 2, I mount plywood panels 4 and 6 of as many plies as are desired for the job. There is, of course, no need for many plies in a side panelling job, whereas for a floor a stronger construction is necessary.

The adjoining edges 8 of the plies are rabbeted. The depth may be that of the top ply, or, if this is not deemed sufficient, the rabbet may be made deeper. This leaves an edge 10 of the rabbet on the plywood panels. In the space between the edges 10—10, I place a section 11 of special material formed by strips 12 of exactly matching edges 14 and of even thickness which are mounted in an arcuate form as clearly seen in Fig. 2. These strips may be secured in any suitable manner to flexible backing 16. These strips 12 may be of wood, metal, plastic, or any other desired material and in any desired design, either strips, squares, mosaics etc., but they will be within the scope of my invention.

Then, by measuring and cutting the strips 12 carefully so that when the arc is compressed to a plane as seen in Fig. 3 they will completely fill the space between the edges 10—10, with the insert section 11, and cement or otherwise firmly embed this section in place, a finished floor will be produced, as shown in Fig. 3.

It will be apparent to those skilled in the art that if, due to subsequent shifting, the under floor 2 becomes uneven and causes the plywood flooring 4 to also spread at the joint 8, my invention, due to its flexibility, prevents any upturned edge being exposed which would have to be sanded down, a situation which has heretofore prevailed in the trade.

It has been found in practice that the strips 12, do not open objectional gaps at the edges 14, even under a relatively large separation of the plywood panels at joint 8, due to the flexibility of the construction.

When my invention is to be used, a builder can order plywood panels 4 and 6 of any desired outer surface and the insert section 11 delivered already finished to a job. The installation in accordance with the teachings of my application can then be easily made. This practice will be found to be very economical, for the flooring is completely finished as laid and presents a superior surface both as to beauty and as to wear.

Having described my invention what I regard as new and desire to secure by Letters Patent is:

1. A surface covering to cover an existing surface; consisting of a plurality of plywood panels laid on said surface, the adjoining portions of said panels having rabbets in the exposed face thereof, the rabbets defining grooves, a substantial number of elongated fibrous strips mounted on a fabric backing filling said grooves and adhesively secured therein with the exposed faces of said strips substantially coplanar with the face of said panels, means to flexibly attach adjoining edges of said strips and means to secure said strips in said rabbet.

2. A surface covering to cover an existing surface; consisting of a plurality of plywood panels laid on said surface, the adjoining portions of said panels having rabbets in the exposed face thereof, the rabbets defining grooves, a substantial number of elongated fibrous strips mounted on a fabric backing, said strips filling said grooves under compression with respect to a transverse force when substantially coplanar with the face of said panels, and means to secure said strips in said rabbet.

3. A surface covering to cover an existing surface; consisting of a plurality of veneered panels, rabbets in the exposed face thereof, said rabbets defining grooves, sections of parquetry in an arcuate form, mounted on a fabric backing, inserted in said rabbets whereby said rabbets are completely filled when the face of said section is substantially coplanar with the face of said panels.

4. A surface covering to cover an existing surface; consisting of a plurality of veneered panels, rabbets in the exposed face thereof, having rabbets defining grooves, sections of parquetry in an arcuate form, mounted on a fabric backing, inserted in said rabbets whereby said rabbets are completely filled when substantially coplanar with the face of said panels, and means to cement said parquetry in said rabbets.

5. A method of laying a surface covering comprising the following steps; placing finished sections of plywood on said surface, rabbeting the exposed face thereof, said rabbets defining grooves, flexibly securing adjoining edges on one surface of a fabric in an arcuate form of strips of suitable material then inserting in said rabbets said strips until said strips and panels are completely coplanar, and cementing said strips in said rabbets.

EBEN KNOWLTON.