C. M. GOODRICH.

BUILDING UNIT.

APPLICATION FILED MAR. 19, 1919.

1,340,949. **Patented May 25, 1920.**

Fig. 1.

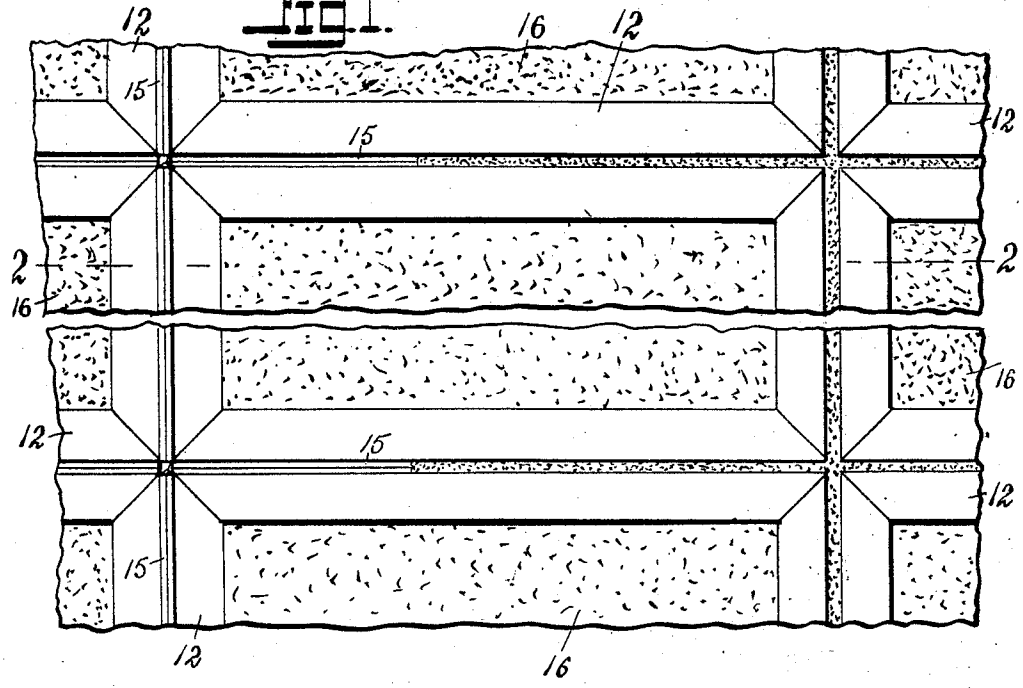


Fig. 2.

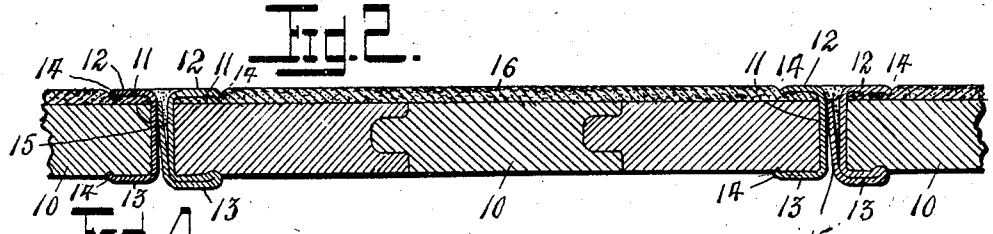


Fig. 4.

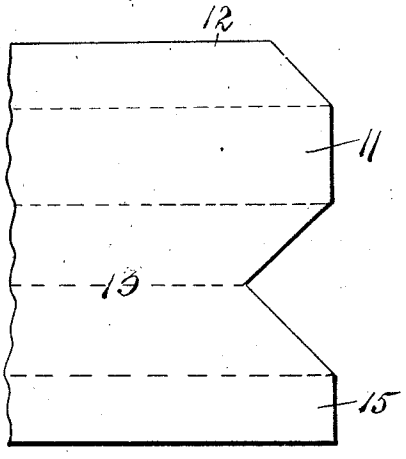
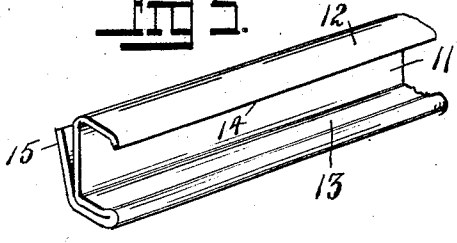


Fig. 3.



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UNITED STATES PATENT OFFICE.

CHAUNCEY M. GOODRICH, OF THE UNITED STATES ARMY.

BUILDING UNIT.

1,340,949. Specification of Letters Patent. Patented May 25, 1920.

Application filed March 19, 1919. Serial No. 283,643.

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To all whom it may concern:

Be it known that I, CHAUNCEY M. GOODRICH, major, Engineers, United States Army, a citizen of the United States, stationed at Washington, D. C., have invented an Improvement in Building Units, of which the following is a specification.

The invention described herein may be used by the Government, or any of its officers or employees, in prosecution of work for the Government, or by any other person in the United States, without payment of any royalty thereon.

This invention relates to building units, and has for one of its objects to improve the construction and increase the efficiency and utility of devices of this character.

Another object of the invention is to provide a combined binding device for each unit and a filler device between the units whereby the joints are rendered air and moisture proof, and likewise germ and vermin proof.

Another object of the invention is to provide a binding and protecting element for the sectional units which operate to protect the edges of the units and enable them to be quickly assembled when required.

With these and other objects in view the invention consists in certain new and useful improvements hereinafter described and specifically set forth in the claims, and in the drawings illustrative of the preferred embodiment of the invention.

Figure 1 is a plan view of a plurality of floor sections constructed in accordance with the invention.

Fig. 2 is a section on the line 2—2 of Fig. 1.

Fig. 3 is a detached perspective view of a portion of one of the combined binding and packing members.

Fig. 4 is a section of one of the blanks from which the packing strips are formed.

The improved unit is represented as a whole at 10 and the units are intended to be arranged side by side and end to end. Each unit is preferably constructed of tongued and grooved material connected in any suitable manner. The units may be of any required dimensions to correspond with size of the building.

Disposed over the edges of the units are combined binding and packing or germ excluding devices of sheet metal or other suitable material. The binding devices are initially bent into channel shape transversely, each including a main web 11 and spaced apart longitudinal flanges 12—13. The binder members are applied to each edge of each section with the flanges 12—13 mitered at the corners as indicated in Fig. 1. The flange 13 of each binder member of two of the edges of each section are of greater width than the other flange and bent upon itself longitudinally to form an additional web 15, and extended obliquely to the main web 11, as shown.

By this arrangement the spaces between the units are occupied by two thicknesses of the packing material, with elongated V-shaped spaces opening outwardly between the confronting edges of the units. The obliquely directed web members 15 form yieldable packing members between the units. The V-shaped cavities thus formed are preferably filled with a suitable cement or other packing material. If preferred, the filler material may be oakum or like material either alone by itself or mixed with a suitable compound to render it waterproof.

The joints between the units are thus rendered moisture and germ proof, and this feature of the invention is essential, especially when the structure is employed for hospital and like purposes.

Attached to the inner face of each unit is a layer of suitable covering material, preferably the material commonly known as "wall board," indicated at 16. Each section of the covering material is formed of superposed layers of paper and cement rolled or otherwise compressed to render them sufficiently hard to withstand the wear and friction incident to their use.

At their edges the flanges overlap the covering material 16 and after the parts are in position the free edges of the flanges 12 and the folded portions of the flanges 13 are "crimped" inwardly and pressed into the material 16, as shown at 14, thereby securing the parts in relative position and likewise forming a uniform face on the whole structure, and obviating the production of ridges at the junctures of the units.

Having thus described the invention what is desired to secure by Letters Patent is:

1. In a building structure a plurality of units adapted to be arranged end to end and edge to edge, and combined binding and

packing devices substantially in channel shape transversely and bearing by their flanges over the edges of the units, one of said flanges being of increased width and bent upon itself and extended in proximity to the binding and packing device of an adjacent unit.

2. A packing and binding device formed of a continuous sheet of material consisting of lateral flanges connected by a web, one of said flanges being extended and bent back upon itself with its projecting end lying in proximate inclined relation to the web.

3. A combined binding and packing device comprising a member channel shaped transversely and including a main web and lateral flanges in spaced relation, one of said flanges being extended to form a supplemental web directed initially oblique to the main web and extended in proximity thereto.

4. A combined binding and packing device comprising a member channel shaped transversely and including a main web and lateral flanges in spaced relation, one of said flanges being of increased width and bent upon itself and extended to form a supplemental web directed initially oblique to the main web and extended in proximity thereto.

5. The combination with a building unit of a combined binding and packing device comprising a member channel shaped transversely and including a main web and lateral flanges in spaced relation to engage over the edges of the units, one of said flanges being extended to form a supplemental web directed initially oblique to the main web and extended in proximity thereto and adapted to contact with the main web of the binding and packing device of the adjacent unit.

6. A building structure in a plurality of units adapted to be arranged end to end and edge to edge, combined binding and packing devices substantially in channel shape transversely and bearing by their flanges over the edges of the units, one of said flanges being of increased width and bent upon itself and extended obliquely to the binding and packing device of the adjacent unit to form V-shaped cavities between the units, and a filler of compressible material in said cavities.

CHAUNCEY M. GOODRICH.