UNITED STATES PATENT OFFICE.

VERNON J. MILLER, OF EAST ORANGE, NEW JERSEY.

MATERIAL BUILDING UNIT.

Application filed April 5, 1921. Serial No. 458,661.

To all whom it may concern:

Be it known that I, VERNON J. MILLER, a citizen of the United States, residing at East Orange, in the county of Essex and State of New Jersey, have invented certain new and useful Improvements in Material Building Units; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

This invention relates to building materials, and has for an object to provide an article of the general shape and form of a board for various and general uses, and comprising an impervious face of comparatively thin material backed up and reinforced by a backing of comparatively cheap material.

A further object of the invention is to provide an article for general uses and purposes, having a face plate of ornamental or attractive design, comparatively thin, backed up by a reinforced backing of cheaper but stress-resisting material.

With these and other objects in view, the invention comprises certain novel features, elements, units, parts, combinations and arrangements, as will be hereinafter more fully described and claimed.

In the drawings, at Figures 1 and 2 the face plate 10 is shown as provided with grooves 11 of dovetailed formation. The face plate is made comparatively thin and backed up by a comparatively cheaper backing.

At Figures 3 and 4 the face plate 12 is shown as substantially plain at the back. At Figure 5 a face plate 13 is shown with a plurality of grooves 14 inclined to the longitudinal axis of the article. When grooves are employed the relation of the grooves to the article is immaterial, and showing them in inclined position as at Figure 5 is intended as no limitation upon the invention.

When grooves are employed the relation of the grooves to the article is immaterial, and showing them in inclined position as at Figure 5 is intended as no limitation upon the invention.

The face plate 15 shown at Figure 6 is provided with a plurality of holes or recesses 16, and the showing thereof in staggered relation is not in any way a limitation of the arrangement of such perforations or indentations as may be employed.

At Figure 7 the face plate has similarly been numbered 15 and the indentations 16.
indicated, but this is also and fully as much a section of the face plate 13 shown at Figure 5 and the recesses shown at 16 in Figure 7 are the equivalent of grooves 14 shown at Figure 5.

In any of the forms, a backing is provided which is preferably made up of cementitious material 17 as indicated at Figures 1 to 7 inclusive, and also preferably a reinforcing is imbedded in, or employed in conjunction with this cementitious backing.

As shown at 18, this reinforcing indicates woven fabric, but as hereinbefore stated, the reinforcing by means of such fabric is no limitation upon the present invention and the showing of the reinforcing as such is intended only as illustrative and not in any way as a limitation.

When the device is used with one of the members formed as a longitudinal continuation of another, an arrangement such as shown at Figure 8 is desirable, wherein the face plate 20 overlaps the backing 21 at one end, while the backing 21 overlaps the face plate 20 at opposite end, so that the next one employed may fit into this joint in the well-known means of halving joints.

When the device is to be used with the units engaging laterally, as for instance in clapboard construction, the face plate 22 as shown at 9 will overlap the backing 23 at one longitudinal edge, while the backing will overlap the face plate at the opposite longitudinal edge, the provision of halved joints being the same as described in regard to Figure 8, except that this halving is available at longitudinal edges instead of at the end. It is also obvious that both of these may be combined so that the joints may be halved both at the ends and at the sides, and Figures 8 and 9 are intended to convey this combination of joints.

The structure as an entirety will resemble a board or plank, and will be used in many cases where boards or planks are ordinarily employed, and by reason of the impervious face plate made thin and therefore cheaply with the reinforcing, may be economically employed, and will present a weather-proof or water-proof surface wherever so employed.

The term “cementitious” as used in the foregoing specification is intended to broadly cover any material which may be used as the backing for the face plate applied thereto in a semi-liquid or plastic condition to harden in adhesion in any manner, as by drying, crystallizing or being fired.

I claim:

A material building unit, including an impervious face-plate having a reinforced rigidified plastic backing secured thereto and having indentations therein filled with the plastic material of said backing plate, being substantially parallel to those of the facing plate, the walls of said backing plate being substantially parallel to those of the face-plate, the members interlocking along their longitudinal edges and ends by means of offset-portions which project along one side and edge and inset from the opposite side and edge.

In testimony whereof, I affix my signature.

VERNON J. MILLER.

Witnesses:

MARY L. MOORE,

C. O’DONOGHUE.