M. L. BINKLEY.

BUILDING BLOCK

APPLICATION FILED SEPT. 7, 1918.

1,430,431. Patented Sept. 26, 1922.

Fig. 1.

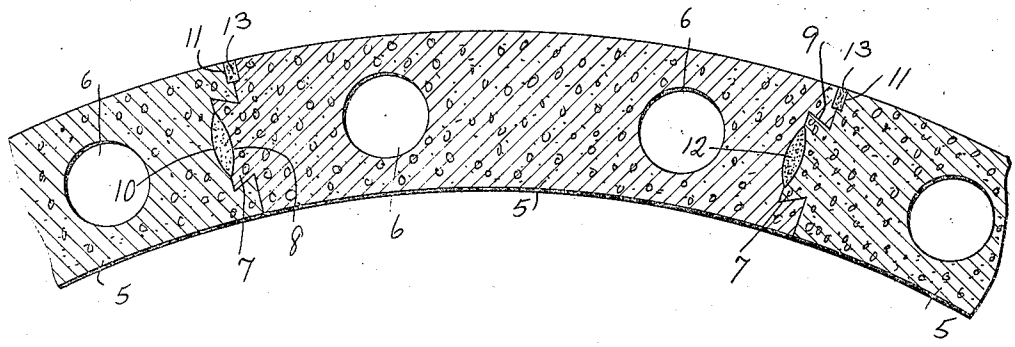
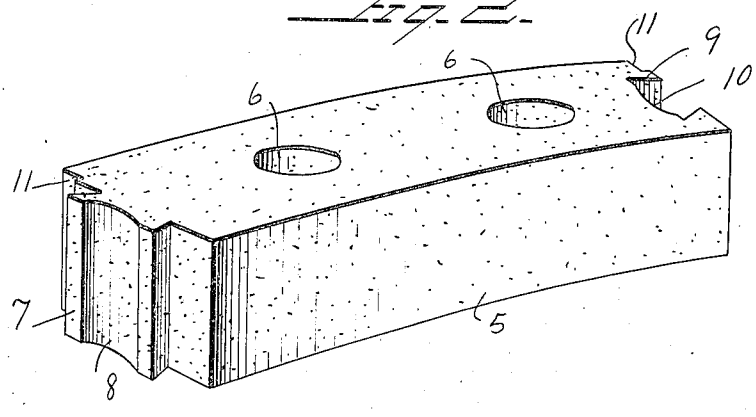


Fig. 2.



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UNITED STATES PATENT OFFICE.

MARTIN L. BINKLEY, OF LIMA, OHIO.

BUILDING BLOCK.

Application filed September 7, 1918. Serial No. 253,063.

To all whom it may concern:

Be it known that I, MARTIN L. BINKLEY, a citizen of the United States, residing at Lima, in the county of Allen and State of Ohio, have invented certain new and useful Improvements in Building Blocks, of which the following is a specification, reference being had to the accompanying drawings.

This invention relates to an improved concrete building block, and has for its primary object to provide a molded wall block or unit having improved means formed on its opposite ends for interlocking engagement with adjacent blocks of a wall.

It is another important object of the invention to provide a molded building block which is formed with a cavity or recess at each end to mate with a similar cavity in an adjacent block and receive mortar, cement, or other suitable binding agent which, in addition to the interlocking means on the ends of the blocks, serves to effectively hold said blocks against all possibility of relative movement and thereby produce a rigid and substantial wall structure.

It is also a further general object of my invention to provide a building block or unit of the above character which is exceedingly simple, highly serviceable and efficient in practical use, and which can be expeditiously produced in large quantities at relatively small cost.

With the above and other objects in view, the invention consists in the improved form, construction and relative arrangement of the several parts as will be hereinafter more fully described, subsequently claimed and illustrated in the accompanying drawing in which similar reference characters designate corresponding parts throughout the several views, and wherein:—

Figure 1 is a horizontal section through a fragment of a silo wall illustrating the preferred embodiment of my improved building blocks or units; and

Figure 2 is a perspective view of one of the blocks.

Referring in detail to the drawing, 5 designates the body of the building block or unit which, as herein shown, is of curvilinear form and primarily designed for use in the building of a silo structure. It is apparent, however, that the device is not limited in its utility to this specific use but may be produced in various other forms and employed for the building of various structures. The block is preferably formed of concrete in a suitable mold and of any desired length, width and thickness. Preferably, though not necessarily, the body of the block is provided with air passages, indicated at 6.

The block 5 is formed at one of its ends with vertically extending male interlocking means, herein illustrated in the form of a dove-tail rib 7, which is of appreciably less width than the thickness of the block and the face of which is hollowed or concaved, as at 8, to provide a shallow recess therein, the opposite vertical edges of which are disposed in spaced relation to the outer side edges of the dove-tail rib.

At the opposite end of the block 5, female interlocking means is formed, consisting of a complementary dove-tail channel 9 extending vertically of the end face of the block. The base wall of this channel is likewise hollowed out or concaved, as at 10. The block is further provided at each of its ends and in the outer side face thereof with a rabbet or groove 11.

In assembling the blocks in the wall structure, the dove-tail rib 7 on the end of one block is inserted downwardly into the dove-tail channel 9 in the end of an adjacent block until the upper surfaces of the blocks are disposed in the same plane. The hollowed or concaved faces 8 and 10 of the blocks will then be in opposed spaced relation, affording an elliptical-shaped cavity for the reception of cement, mortar, or other suitable binding agent, shown at 12, which serves as additional means to firmly bind and lock the blocks together. The rabbets 11 in the ends of the adjacent blocks are also thus brought into mating relation to receive the mortar or binding agent, indicated at 13. This groove or channel formed by the rabbets 11 is preferably about one inch in depth and the mortar or cement therein effectually prevents the seepage of moisture between the opposed end faces of the adjacent blocks.

From the foregoing description, taken in connection with the accompanying drawing, the construction, manner of use, and several advantages of my invention will be clearly and fully understood. It will be seen that I have devised a very simple and serviceable building block or unit which will be especially advantageous in the construc-

tion of silos wherein the exclusion of moisture is of primary importance. However, as above noted, the improved building block also is capable of adaptation to many other uses. The blocks may be quickly formed in large quantities by means of suitable molds, and at comparatively small cost. It will also be apparent that my improved building block is exceedingly strong and durable. While I have herein shown and described the preferred construction and arrangement of the various parts of the device, it is to be understood that the same are susceptible of considerable modification and I, accordingly, reserve the privilege of adopting all such legitimate changes as may be fairly embodied within the spirit and scope of the invention as claimed.

I claim:—

In combination, a plurality of building blocks, one end of each block being provided with a dove-tailed tongue, the opposite end of said block having a dovetailed groove corresponding to and receiving the dovetailed tongue of an adjacent block, the bottom wall of the groove and the face wall of the tongue having oppositely curved longitudinally extending concavities, which register and form a space for the reception of a binding agent, which constitutes means to spread the blocks and force the undercut walls of the dovetailed tongue and groove into binding contact, the concavities being of less width than the width of the tongue and groove, whereby the tongue and groove may tightly interengage, the adjacent corner end faces of the blocks adjacent their outer faces having correspondingly shaped vertically extending rabbets for mating relation and receiving a binding agent for additionally holding the blocks together.

In testimony whereof I hereunto affix my signature in the presence of two witnesses.

MARTIN L. BINKLEY.

Witnesses:
W. P. ANDERSON,
R. C. EASTMAN.