J. R. BAUMANN.

BUILDING BLOCK.

APPLICATION FILED FEB. 6, 1919.

1,356,590.

Patented Oct. 26, 1920.

3 SHEETS—SHEET 1.

FIG. 1.

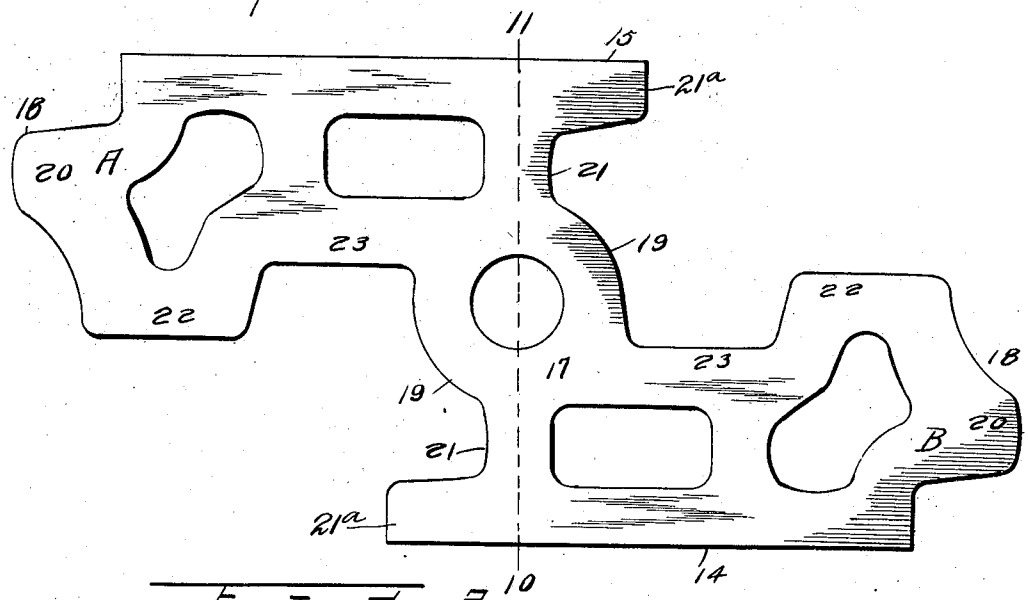
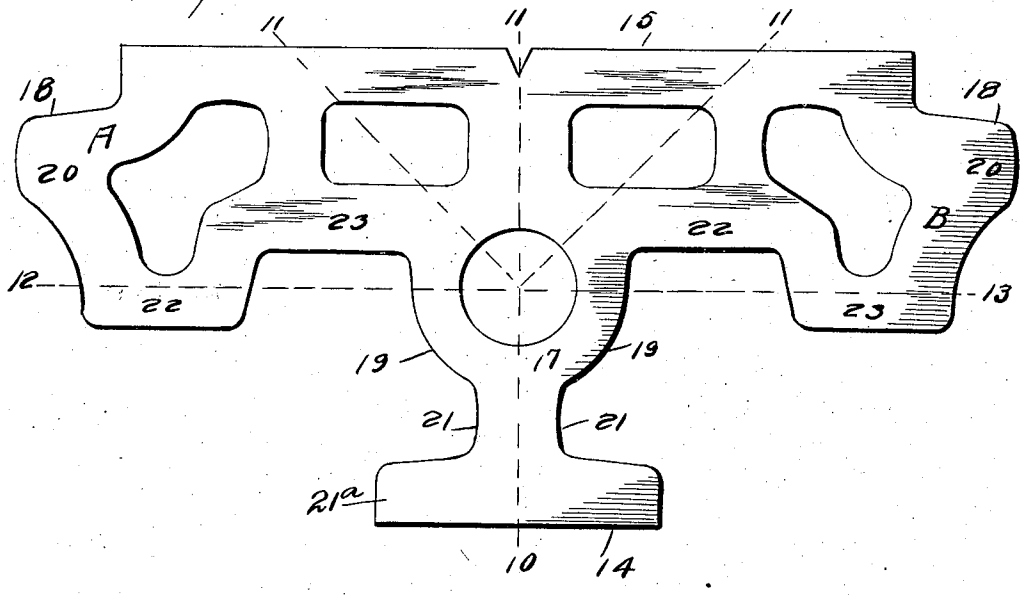


FIG. 2.



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3 SHEETS—SHEET 2.

FIG. 3.

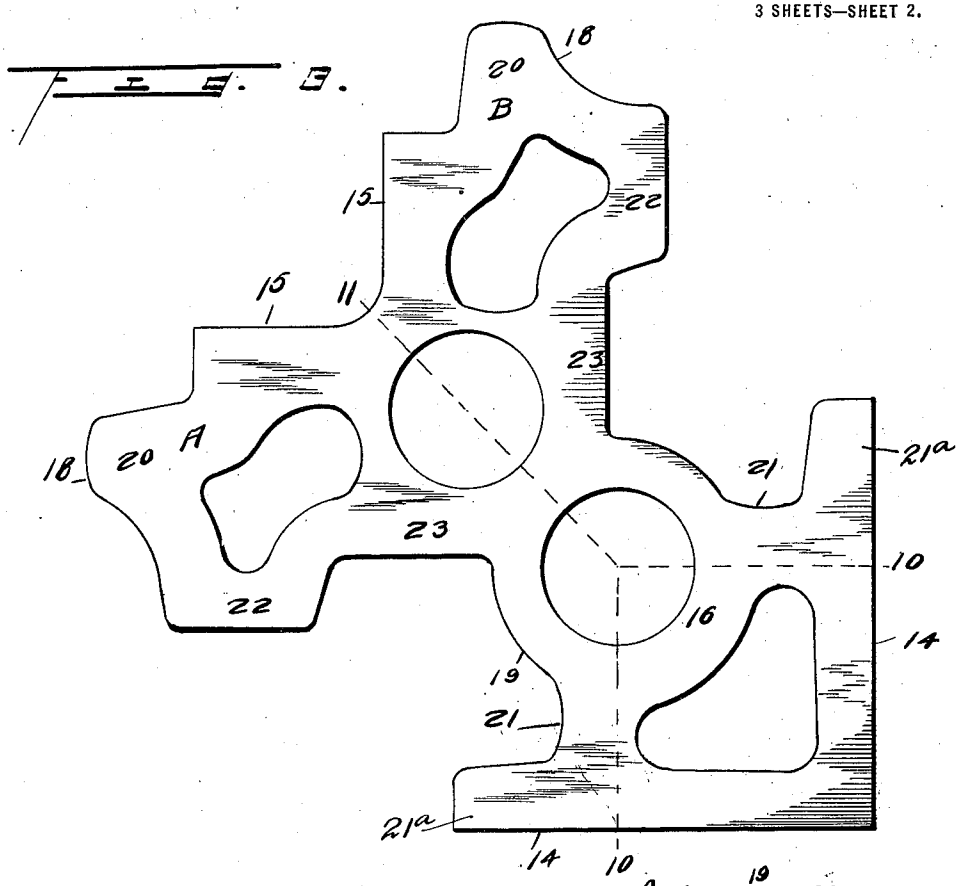
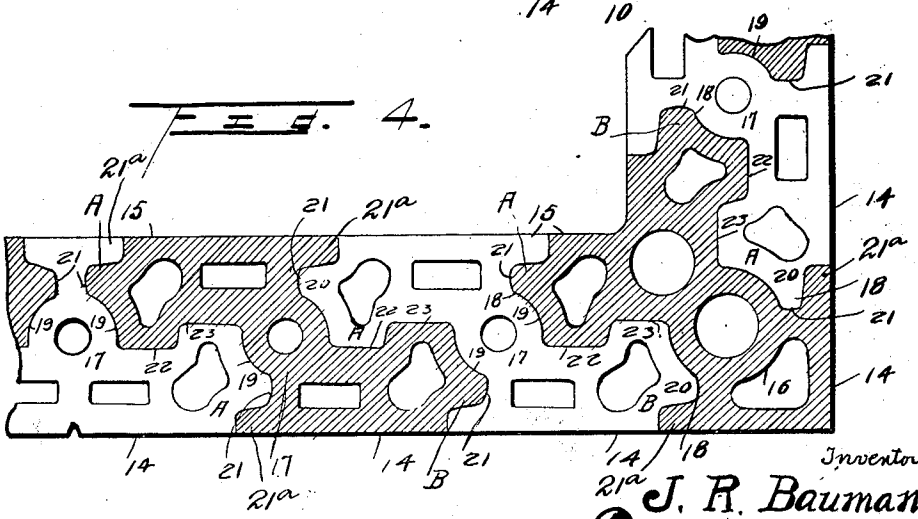


FIG. 4.



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3 SHEETS—SHEET 3.

Fig. 5.

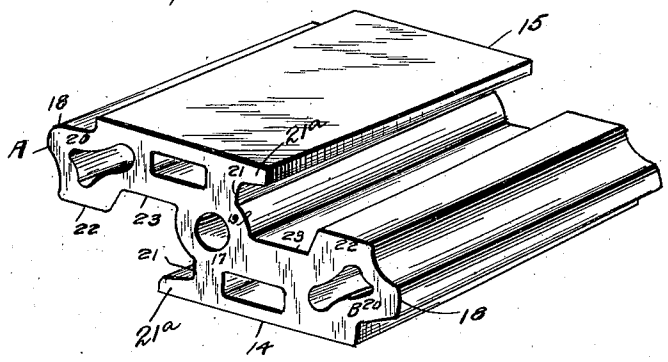


Fig. 6.

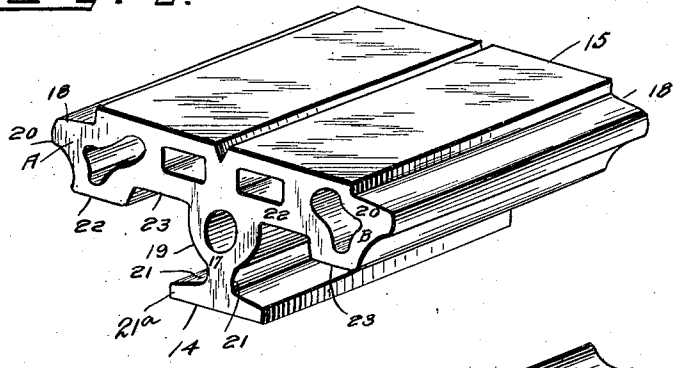
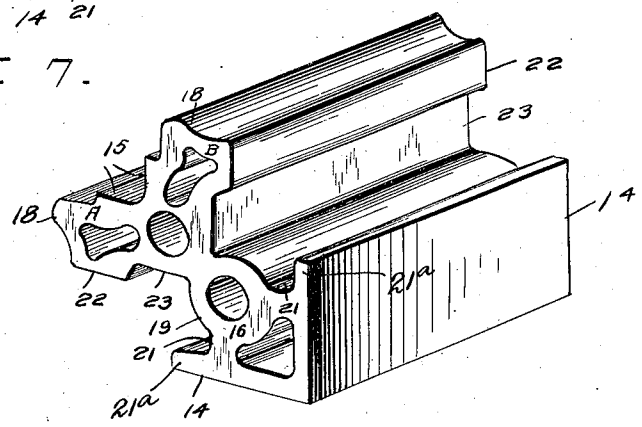


Fig. 7.



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UNITED STATES PATENT OFFICE.

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BUILDING-BLOCK.

1,356,590. Specification of Letters Patent. Patented Oct. 26, 1920.

Application filed February 6, 1919. Serial No. 275,349.

To all whom it may concern:

Be it known that I, JOHN R. BAUMANN, a citizen of the United States, residing at Red Wing, in the county of Goodhue and State of Minnesota, have invented certain new and useful Improvements in Building-Blocks; 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.

The object of the invention is to provide a building block which, as to the joint between adjacent units or elements in the same course shall correspond substantially in construction, and essentially as to operation and advantages, with that shown in my co-pending application, No. 227,093, filed April 6, 1918, and which also shall have such a construction relative to its members as to adapt them to be arranged in longitudinal alinement, or substantially longitudinal alinement, or at right angles or any preferred angle to each other, or in reversed substantially alined position, so as to facilitate, in the manufacture, and particularly with regard to the construction of the mold, the formation of either wall blocks, reversing or key blocks, or corner blocks, whether the corners of the structure are right angular or related to an octagonal or similar formation, and in this connection, as set forth in my said co-pending application, to provide a block which may be employed in the construction of buildings, silos, elevator shafts, drains, sewers, water mains, culverts, and the like.

With these and related objects in view the invention consists in a construction, combination and relation of parts hereinafter specifically set forth, it being understood however that changes in form, proportion and details may be resorted to, within the scope of the appended claims, without departing from the principles involved.

In the drawings:

Figures 1, 2 and 3 are respectively plan views of a line or wall block, a T or key block, and a corner block.

Fig. 4 is a horizontal sectional view of a section of wall including a combination of the three forms or types of blocks showing the relation therebetween and the form of the lock joint which they are adapted to produce in the construction of an inclosing wall.

Fig. 5 is a perspective view of the line or wall block.

Fig. 6 is a perspective view of the T or key block.

Fig. 7 is a perspective view of the corner block.

Each block comprises two identically constructed members A and B which are united, preferably integrally, on a line 10—11, represented by a dotted line in the drawings, Figs. 1, 2 and 3, and which lies in and corresponds with the transverse medial line of the blocks. At the intersection of this transverse medial line with the longitudinal medial line represented as at 12—13 is the geometrical center of the block whether in the forms shown in Figs. 1, 2 or 3, said center point remaining constant in all forms of the block and constituting the center about which the members may be disposed relatively, to produce the several forms either by reversal as from the form shown in Fig. 1 to that form shown in Fig. 2, or by angular movement as from the form shown in Fig. 2 to that shown in Fig. 3.

Equidistant from and at opposite sides of the longitudinal medial line each block member is provided with a wall face portion 14—15, designed to form a portion of the opposite faces of a wall to be constructed of blocks of this type, and adapted either to be exposed or to be provided with a surfacing finish as may be preferred. Also while as above indicated the members of each block are of similar construction, the arrangement of the members in the angular relation indicated in the corner block shown in Fig. 3 necessitates the introduction of an additional filler element shown at 16 and the removal from the opposite side of the block of a portion of corresponding area represented at 17 in Fig. 2. Thus, while the present invention relates particularly to the blocks, it will be noted that there is distinctly in view the provision of means whereby, in the formation of the several types of blocks, that is either line, reverse or corner, a mold may be readily adapted to produce either or all at the option of the operator, to thereby minimize cost of manufacture and at the same time

insure a proper interlocking relation between the several units or elements of a wall structure.

As a matter of convenience those portions of the end surfaces of each block member which are respectively remote from and adjacent to the transverse medial line may be designated as outer and inner end surfaces 18 and 19, and as shown they are provided respectively with male and female interlocking elements 20 and 21 for engagement respectively with the corresponding portions of the adjacent blocks in the same course of masonry. Also while the longitudinal exterior surfaces or outer side surfaces of each block member constitute wall face surfaces, as hereinbefore described, the inner longitudinal surface of each block member is provided with male and female interlocking elements 22 and 23 which extend respectively upon opposite sides of and to equal distances from the longitudinal medial line 12—13. Moreover, it will be observed that these relations are maintained in all relative positions of the block members whether in longitudinal alinement, or substantial longitudinal alinement, direct or reversed as indicated in Figs. 1 and 2, or in angular relation as shown in Fig. 3, with the result that when combined in a wall structure as shown in Fig. 4 the same interlock between the adjacent units of a wall structure is maintained throughout, regardless of the order or sequence in which the units appear or occur in said structure.

In order that there may be a clear line of differentiation discernible between the subject matter of the invention particularly set forth and claimed in this case as distinguished from that disclosed and claimed in my aforesaid copending application, it should be noted that in the construction as defined herein, the building block comprises similar reversely disposed body members each of which has an exterior surface, and designed to be disposed in coincidence with an exterior surface of the wall to be constructed thereby to form an exterior wall face surface, and a key member extending from the opposite or inner longitudinal surface of each body member and in the same plane with the body member and having the general form of a T-head, constituting a reduced or neck portion and an overhanging or longitudinally extended head portion which in turn is provided with an exterior surface constituting a wall face surface which is opposite to the wall face surface provided by the related body member of the block. For example in the form of the block which is illustrated in Fig. 2 the reversely disposed body members are arranged in longitudinal alinement, meeting at a common transverse medial plane while the key members carried respectively thereby, also meeting on a prolongation of the same transverse medial plane (10—11) constitute a reduced neck portion 19, 21 overhung by a longitudinally extended head portion 21^a, the transverse terminal portions of the body members, and the opposite sides of the neck portion having complemental interlocking members or elements as hereinabove described. In the form of the block which is shown in Fig. 3, the reversely disposed body members are arranged at an angle to each other but at the same time longitudinally with reference to the block structure, so that the wall face surfaces with which they are provided are arranged in angular relation as shown at 15—15, and the key-member projecting from the inner side of the combined body members like-wise constitute a T-head having a reduced neck portion and a longitudinally extended head, carrying wall face surfaces which however are angularly disposed with reference to each other, but are respectively disposed in parallelism with the opposite wall face surfaces of the respective body member, the T-head being arranged as above described in overhanging relation with the reduced or neck portion and the remote transverse terminal portions of the body member and the side surfaces of the neck or reduced portion having complemental interlocking elements as hereinabove described.

In the form of the block which is shown in Fig. 1 the reversely disposed body members are provided each with an outer wall face surface, but these wall face surfaces, instead of being in a common plane or in plane at an angle with each other (as shown in Fig. 3) are disposed in parallelism or in substantial parallelism, but in this as in the previously mentioned forms of the block there is provided a key member having a reduced or neck portion and an overhanging head portion (respectively 19 and 21^a), meeting at a common transverse medial plane of the block as a unit, but performing respectively the identical functions described with reference to the forms of the block shown in Figs. 2 and 3, in that the key-member which in this instance is split, with the elements thereof carried respectively by the oppositely disposed body members, has its elements provided respectively with surfaces constituting wall face surfaces disposed in parallelism with and opposite to the wall face surfaces of the respective body members with which they are related.

Having described the invention I claim:

1. A building block having elongated body members for arrangement in parallelism with the wall structure in which the block is incorporated and each provided at one longitudinal side with a wall face surface, and a key-member projecting from

the opposite longitudinal side of and in a common plane with each body member, the transversely disposed terminals of the body members and the side surfaces of the key members respectively having complemental male and female interlocking elements.

2. A building block having elongated body members for arrangement in parallelism with the wall structure in which the block is incorporated and each provided at one longitudinal side with a wall face surface, and a T-head member having elements projecting from the opposite long side of and in a common plane with each body member and provided with a wall face surface in parallelism with the corresponding body member, the transversely disposed terminals of the body members and the neck or reduced portion of the key-member respectively having complemental male and female interlocking elements.

3. A building block having elongated body members for arrangement in parallelism with the wall structure in which the block is incorporated and provided at one long side with a wall face surface and a terminally enlarged key member projecting from the opposite long side of and in a common plane with each body member at an intermediate point of the length of the block and provided with a wall face surface disposed opposite to and in parallelism with the wall face surface of the corresponding body member, the transversely disposed terminals of the body members and the reduced or neck portion of the key members respectively having complemental male and female interlocking elements.

4. A building block having elongated body members for arrangement in parallelism with the wall structure in which the block is incorporated and provided at one long side with a wall face surface, and a T-head key member projecting from the opposite long side of and in a common plane with said body members at the center of the combined lengths of said body members and provided with a wall face surface disposed in parallelism with the wall face surfaces of said body members, the transversely disposed terminals of the body members and the reduced or neck portion of the key-member respectively having complemental male and female interlocking elements.

5. A building block having an elongated body for arrangement in parallelism with the wall structure in which the block is incorporated and provided at one long side with a wall face surface, and a key-member disposed on a transverse medial line of the body of the block and provided with an enlarged longitudinally extending head forming an opposite wall face surface paralleling the first named wall face surface, the transversely disposed terminals of the body and the opposite surfaces of the key member respectively having complemental male and female interlocking elements.

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

JOHN R. BAUMANN.

Witnesses:
ARTHUR E. ARNTSON,
CHARLES A. M. JOHNSON.