I. POMERANTZ.

KEY INTERLOCKING HOLLOW TILE CONSTRUCTION OF SILOS.

APPLICATION FILED FEB. 19, 1918.

1,332,409. Patented Mar. 2, 1920.

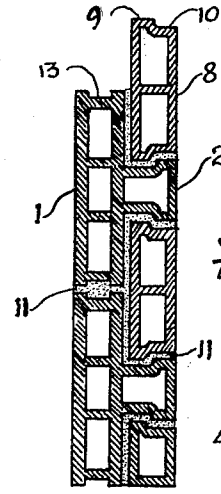


FIGURE 1

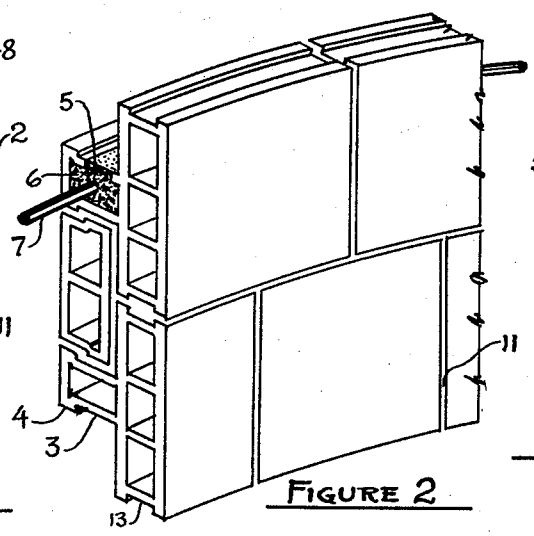


FIGURE 2

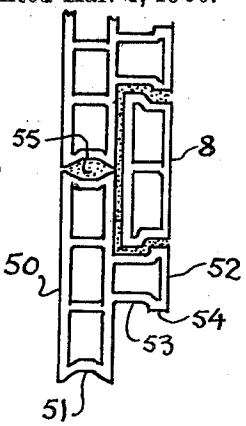


FIGURE 8

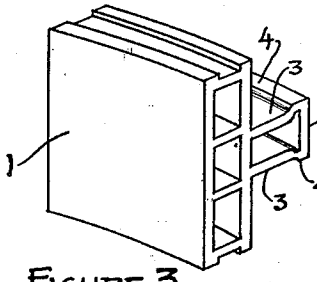


FIGURE 3

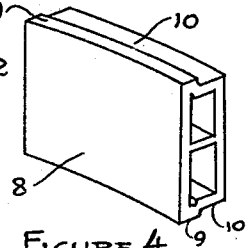


FIGURE 4

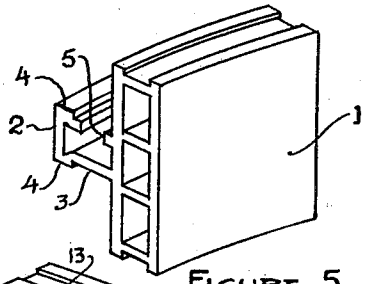


FIGURE 5

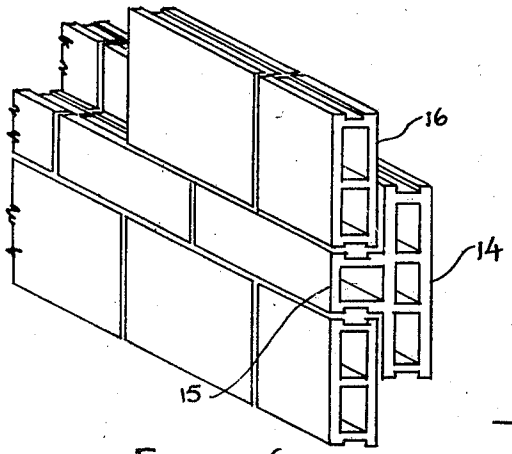


FIGURE 6

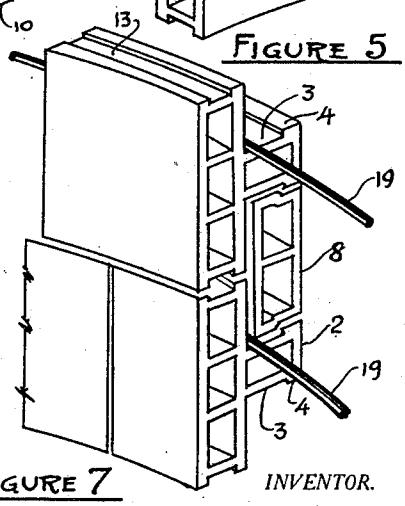


FIGURE 7

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KEY-INTERLOCKING HOLLOW-TILE CONSTRUCTION OF SILOS.

1,332,409. Specification of Letters Patent. Patented Mar. 2, 1920.

Application filed February 19, 1918. Serial No. 218,081.

To all whom it may concern:

Be it known that I, ISADORE POMERANTZ, a citizen of the United States, residing at Kansas City, in the county of Jackson and State of Missouri, have invented certain new and useful Improvements in Key-Interlocking Hollow-Tile Construction of Silos; and he does 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, reference being had to the accompanying drawings, and to the letters and figures of reference marked thereon, which form a part of this specification.

This invention relates to interlocking tile construction adapted for use in building walls and the like. The invention contemplates the use of tiles particularly adapted for the construction of silos, the main object of which is to provide an air-tight silo which will be storm-proof, acid-proof, gas-proof, moisture-proof, and vermin-proof at comparatively small cost. A still further object is to provide a wall which will insulate the contents of the silo from heat and cold.

In the drawings:

Figure 1 is a fragmental, sectional view through a wall constructed in accordance with my invention.

Fig. 2 is a perspective view of a plurality of courses of blocks showing one of the reinforcing rods applied.

Fig. 3 is a detail perspective view of one of the key blocks.

Fig. 4 is a similar view of one of the locking blocks.

Fig. 5 is a perspective view of a slightly modified form of key block.

Fig. 6 is a detail perspective view of a modified form of key blocks and lock blocks.

Fig. 7 is a further modification.

Fig. 8 is an additional modification.

Referring now to the drawings by numerals of reference and particularly to Figs. 1, 3 and 4:

1 designates the key blocks which are substantially rectangular and projecting laterally therefrom and approximately mid-way between the longitudinal edges of the block is a key projection or head 2 connected to the block by webs 3 slightly offset with respect to the edge lips 4 to provide recesses between the head and the block. The upper and lower edges of the block proper are also provided with grooves or recesses 13. If desired, one of the webs 3 may be broken away (see Fig. 2) to provide a recess 5 for the reception of a concrete filler 6 in which may be placed a reinforcing rod 7 having a spread end 49 whereby it will be anchored. 8 designates the locking block which is substantially rectangular and provided with lips 9 and shoulders 10, the lips 9 being adapted to be received within the recess between the head and the block 1. It is to be understood, of course, that the blocks are preferably hollow and that in practice the key blocks are laid in courses or layers, one upon the other with their outstanding locking projections extending in one direction, the joints of the key blocks lapping those of the other blocks. The key blocks are held together against lateral displacement by the locking blocks whose tongues 9 are receivable within the recess between the heads 2 and the block 1. When it is desired to reinforce the wall, one of the webs 3 will be broken so as to provide a recess 5 into which the reinforcing rod may be placed, the recess or channel 5 then being filled with some suitable bedding material such as concrete or the like 6, the blocks being further held together by the mortar joints 11.

In Fig. 6, I have shown a slightly modified form of key block 14 and locking block 16, the grooves for these being under-cut to key in the mortar which is used to tie them together, the key projection 15 in other respects being similar to the key projection 2. In this figure, the modified form of locking blocks 16 is provided with edge grooves rather than a shoulder and tongue. In Fig. 7, I have shown a slightly modified form in which the reinforcing rods 19 rest upon the webs and may be secured thereto by the mortar joints.

The key blocks shown in Fig. 8 are slightly different in form from those shown in Figs. 1 and 2. In Fig. 8 the key blocks 50 are provided with semi-oval edge grooves 51, the adjacent edges, when laid in courses, providing spaces, oval in cross section, to receive cement 55. The blocks 50 are also provided with key projections 53 having heads 52 with ribs 54, the key projections being adapted to receive the locking blocks 8 in a manner substantially similar to that shown in Fig. 1.

Having thus described my invention, what

I claim as new therein, and desire to secure by Letters Patent, is:

1. A key block for walls comprising a body portion having grooves in its upper and lower edges, a key head and webs connecting the key head and body, one of said webs being fragile whereby said web may be broken to form reinforcing rod recesses.

2. In a wall construction, key blocks, each key block comprising a substantially rectangular body portion, a laterally projecting key member extending from the body portion mid-way between its upper and lower edges, a head on the free end of the key member, and said key member being provided with a groove, said key members having webs connecting the head and the said body portion, one of the webs being fragile whereby said web may be broken to form reinforcing rod recesses, and a reinforcing rod and an embedding material in the recess.

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

ISADORE POMERANTZ.

Witnesses:

E. A. ERNST,

C. E. MCLAUGHLIN.