March 16, 1926. 1,577,082

C. H. SIERKS

MULTI-UNIT SILL CONSTRUCTION

Filed April 23, 1921 2 Sheets-Sheet 1

Fig. 1.

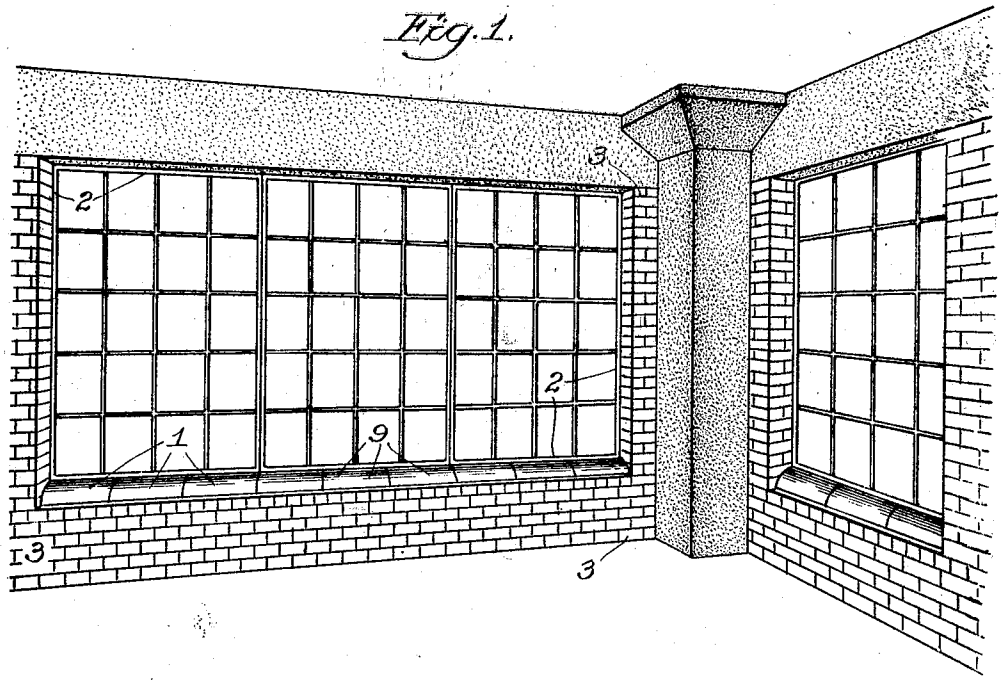
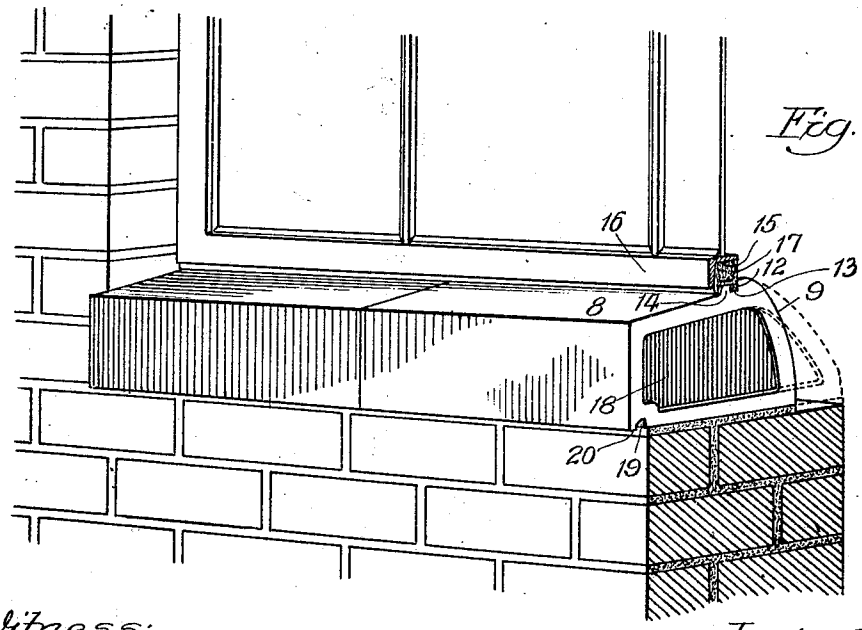


Fig. 2.



Witness:
John Enders

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Fig. 3.

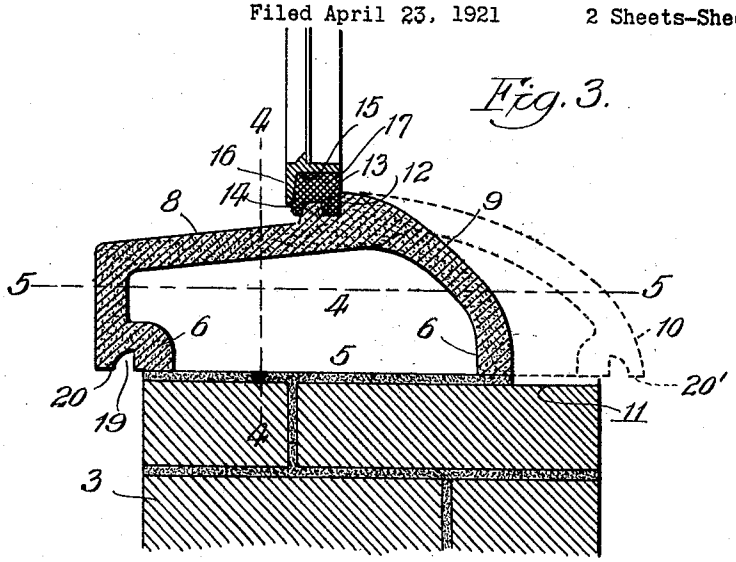


Fig. 4.

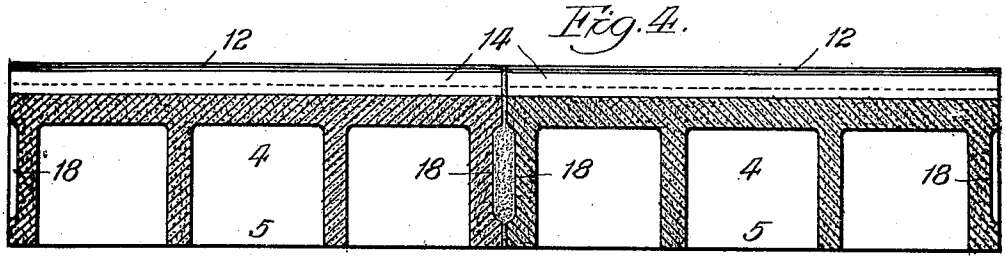
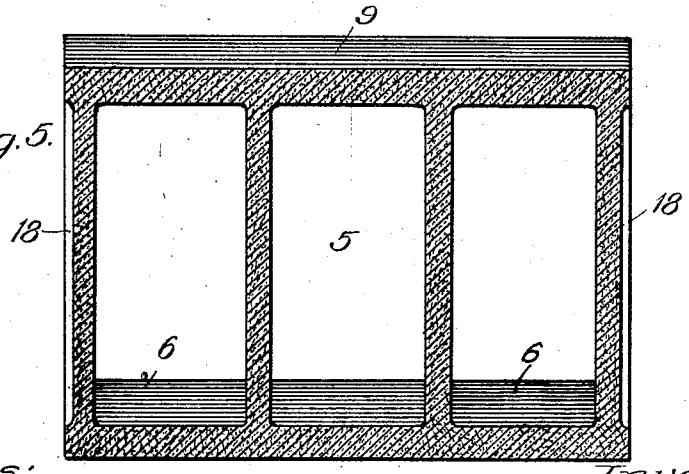


Fig. 5.



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Patented Mar. 16, 1926. 1,577,082

UNITED STATES PATENT OFFICE.

CHARLES H. SIERKS, OF CHICAGO, ILLINOIS, ASSIGNOR TO NORTHWESTERN TERRA COTTA COMPANY, OF CHICAGO, ILLINOIS, A CORPORATION OF ILLINOIS.

MULTIUNIT-SILL CONSTRUCTION.

Application filed April 23, 1921. Serial No. 463,793.

To all whom it may concern:

Be it known that I, CHARLES H. SIERKS, a citizen of the United States, residing at Chicago, in the county of Cook and State of Illinois, have invented certain new and useful Improvements in Multiunit-Sill Constructions, of which the following is a specification.

This invention relates to sill construction of the type formed of a plurality of hollow tile units or sections of such size and shape to work with and readily fit any standard size of sash frames.

In the types of hollow-tile sills heretofore known it has been necessary to either laboriously build the tile units into a specially prepared wall, or to order special tile for each different job and then in all probabilities cut one or more of such tile to a length to fill out the sill space thus consuming an undue amount of time and labor and then failing to produce a neat job.

With my invention the sill blocks are so constructed that they will form sills of any desired length by merely duplicating certain units which are worked out to fit any width of sash or size of glass and to fit any width of mullion. The sills of the present invention are made without lugs, and without raised joints to permit adjustment of the building, they can be set either before or after the sash is in place, and will fit any shape steel or other standard sash. A calking groove is provided to allow for calking of the sash to make a watertight job, and my sill units are of such shape to give a finish to the wall both inside and outside, and can readily be made in any color desired, glazed or unglazed. The units are so worked out and constructed that sills for any sash or any combination of sashes, can be furnished without delay by ordering certain sets of units. The tiles can be made to cover any width of wall, are sloped to drain out, will drip on the outside, and are raised at the back of the sill to form a calking shoulder or to function to receive a metal water-bar in a groove. The tile units are so constructed and worked out that by using various lengths, mortar joints are comparatively uniform. Also my sill being of hard burnt clay is less absorbent than material commonly used, and can be glazed outside and unglazed inside, or vice versa, or the entire sill can be made either glazed or unglazed.

Among the further objects of my invention are to provide hollow sill tiles open at the bottom and having closed rabbetted ends to hold the mortar in place in the joint and prevent water from running in the ends of the tile; further to provide a novel form of sill unit; further to provide a multi-unit sill especially adapted for use with steel sash; further to provide a more simple, economical, efficacious, and flexible fitting multi-unit sill than heretofore known; and such further objects, advantages and capabilities as will later more fully appear.

My invention further resides in the combination, construction, and arrangement of parts illustrated in the accompanying drawings and while I have shown therein a preferred embodiment I desire it to be understood that the same is susceptible of modification and change without departing from the spirit of my invention.

In the drawings:—

Fig. 1 is a perspective view of the interior of a window provided with a sill embodying my invention.

Fig. 2 is an enlarged fragmentary perspective view, partly in section, of a portion of a steel sash and two sections or units of my improved sill tile.

Fig. 3 is a vertical transverse section through one of my sill tile and portions of the adjacent wall and sash, and showing in dotted lines how the sill tile can be extended to the inner face of the wall and provided with an inner drip.

Fig. 4 is a vertical section taken in a plane passing through line 4—4 of Fig. 3.

Fig. 5 is a horizontal section of one of my sill tile taken in a plane passing through line 5—5 of Fig. 3.

Referring to the drawings my invention is shown in Figs. 1 to 3 as applied to a window opening, the sill tile or sections being designated at 1, the sash (in this case of steel) at 2, and the wall (brick or other material as desired) at 3. As will be appreciated my tiles are so constructed, proportioned, and worked out that they will nicely fit the opening of any standard sash without the necessity of cutting any of the tile, and they can be secured without delay by

simply ordering certain sets of units. This is of importance since with none of the tile heretofore known has this been possible.

As will be seen in Fig. 3 the individual tile of my improved sill is formed with the interior space 4 which extends through the bottom of the tile at 5 forming base portions 6 extending around the bottom edge of the tile to provide a firm bearing surface to contact either directly with wall portion 7 or with a layer of mortar or the like interposed therebetween. The upper face of the tile slopes outwardly and downwardly at 8 and towards its inner portion is curved inwardly at 9 to extend inside of the sash to form an interior finish as shown in solid lines in Fig. 1. This curved portion 9 may extend inwardly sufficiently far to reach the inner edge 10 of the wall ledge 11, as shown in dotted lines in Figs. 2 and 3, or it may be made to fall short thereof to any degree desired. Intermediate of surfaces 8 and 9 of the tile are formed offset 12, groove 13, and rib 14, which parts coact with the adjacent angular space 15, formed on the interior of angle member 16 constituting the marginal member of the steel sash to receive the calking material 17, therebetween. This calking material may assume the form of cement, or any other suitable material desired, its function being to form an effective seal between the sash and the tile to resist the wind, rain or other elements of the weather. Also if desired a separate weather bar may be suitably embedded in plastic material or otherwise in groove 13.

It is of importance to note that the formation of the upper surface of my tile is such as to permit insertion of the tile into place even after the sash has been set, by simply sliding the tile into place from within. As noted in Figs. 4 and 5 the ends of the tile are each rabbetted or depressed as shown at 18 to receive cement, mortar or the like therein and prevent entry of moisture into the tile at the joints, and at the same time firmly hold the tile against any lateral movement with relation to each other.

The outer edge of the tile extends beyond the outside edge of ledge 11 and a groove 19 is formed in the tile just beyond the edge of ledge 11 to form lip 20 to cause any moisture to drip away from the wall. Also if desired the inner edge of the tile may be extended slightly beyond the inner face of the wall and provided with an inner drip 20′ as shown in dotted lines in Fig. 3 to lead away any moisture that might collect on the inner face of the glass, without discoloration of or injury to the inside face of the wall, in factories or the like where work of such nature as to cause deposit of moisture on the interior of the window, is being carried on.

Having now described my invention, I claim:

1. In combination, a steel sash formed with an angular marginal portion, a plurality of sill units of selected stock sizes each having an irregular formation in its upper face opposite said marginal portion, and a calking material between the interior angle of the marginal portion and said irregular formation.

2. A sill constructed of a plurality of sill units of selected stock sizes adapted to form sills of any selected length, said units being of a width to substantially cover the entire width of the wall both outside and inside of the sash, that portion of each unit extending inside of the sash being formed to give a finished appearance to that portion of the wall inside of the room and the sill having a projection along its upper face to cooperate with a groove in an adjoining face of a sash to form a weather seal.

3. In combination with a sash frame, a plurality of sill units of selected stock sizes, the said units being tapered and having plane ends to adapt them to be inserted to their places after the sash is in place, the upper face of each tile unit being formed with a ridge opposite the lower edge of the sash and the sash being formed with a groove to receive a calking material between the sash and unit.

4. In combination with a sash frame, a plurality of hollow tile sill units, the said units being tapered and having plane ends to adapt them to be inserted to their places after the sash is in place, the upper face of each tile unit being formed with a groove opposite the lower edge of the sash to receive a calking material between the sash and the unit.

5. In combination, a steel sash formed with a hollow angular marginal portion, a plurality of sill tile units each having an irregular formation in its upper face opposite said marginal portion, and a calking material between the interior angle of the marginal portion and said irregular formation.

6. In combination with a sash, a sill unit extending both inside and outside of said sash, that portion extending inside the sash forming a decorative finish for the room just inside the sash and sloping inwardly away from said sash to drain water therefrom, one face of the portion inside the room being formed with a groove.

7. In sill construction, in combination with a sash, a sill unit extending both inside and outside of said sash, that portion extending inside the sash forming a decorative finish for the room just inside the sash, said sash having a groove in the edge thereof adjacent the sill, a projecting ridge on the sill facing the groove, and means

between the ridge of each unit and the sash groove for forming a weather seal.

8. In sill construction, in combination with a sash, a sill unit extending both inside and outside of said sash, that portion extending inside the sash forming a decorative finish for the room just inside the sash, and means overlying the sill and extending into the sash for forming a weather seal, and a drip portion formed on each of the inner and outer edge portions of the sill unit.

In witnesses whereof, I hereunto subscribe my name to this specification.

CHARLES H. SIERKS.