M. E. HOWE.

CHIMNEY.

APPLICATION FILED JULY 27, 1908.

909,412. Patented Jan. 12, 1909.

Fig. 3.

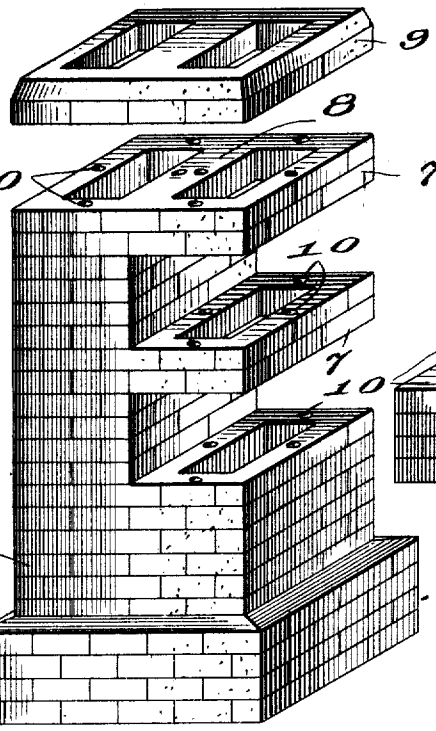


Fig. 1.

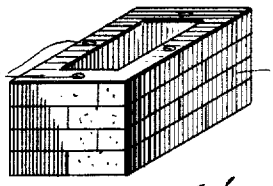
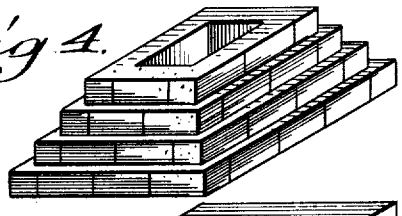


Fig 2

Fig 4.



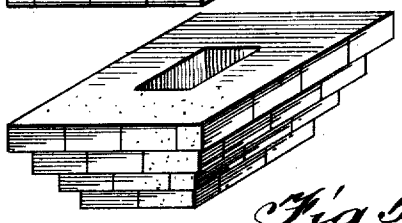
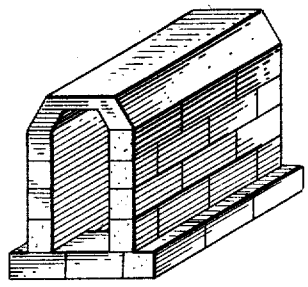


Fig 5

Fig. 6.



Witnesses

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MILO E. HOWE, OF MORRIS, ILLINOIS.

CHIMNEY.

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To all whom it may concern:

Be it known that I, MILO E. HOWE, citizen of the United States, residing at Morris, in the county of Grundy and State of Illinois, have invented certain new and useful Improvements in Chimneys, of which the following is a specification.

This invention relates to chimneys, and has for its object to provide an improved chimney constructed of concrete and made of sections which are molded in advance and which can be quickly set up to form a chimney which will be permanent and fire proof.

Brick chimneys have the defect that the mortar decays and drops out, causing loose bricks and open joints, allowing the chimney to fall, and also being unsafe because of fire. By the use of molded sections made of concrete and extending entirely around the flue, and joined together by cement, these disadvantages and dangers are avoided. The sections are molded and put together with doweled joints, and when completed form substantially one solid piece of cement of great durability. The chimney can be built by inexperienced persons, since it only requires that one block or section be put upon another until the desired height is reached. This can be done very quickly and in a small fraction of the time required to build a brick chimney. By variation of the molds and the sections, chimneys of different kinds can be made, containing one or more flues as desired.

The nature of the invention will be more fully apparent from the following description and the accompanying drawings in which—

Figure 1 is a perspective view of part of a chimney, some of the blocks being removed in order to show the interior construction; Fig. 2 is a perspective view of one of the blocks so removed; Fig. 3 is a perspective view of a cap piece; Figs. 4 and 5 are respectively perspective views of upper and lower sections of an ornamental head for the chimney; Fig. 6 is a perspective view of a hooded head.

In Fig. 1, a two-flue chimney is shown. This is made of sections which are respectively single and double. One of the single sections is shown in Fig. 2 at 6. One of the double sections is shown in Fig. 1 at 7. The former consists of a hollow rectangular block forming a single flue. This is united with or placed beside a similar block to form a double flue chimney. The double block 7 is preferably only half the height of the single section and contains two flue openings separated by a cross wall 8 at the middle. This double section extends across the entire chimney and serves to assist in binding the same together. The single sections 6 may be built up for one, two or more courses, and then one of the bonding sections 7 is placed thereon, and then additional single sections are added, with double sections at intervals, until the desired height of chimney is reached. At the top the chimney may be ended by a plain cap block or section as indicated at 9. Or, one of the other heads may be used. The two blocks shown in Figs. 4 and 5 when united form an enlarged head of ornamental appearance. The hooded head shown in Fig. 6 is useful under certain conditions. The latter may be molded in one piece by the use of a proper mold and core.

The block sections are preferably marked or scored on the outside to represent brick, as shown in the drawing, but a plain or other finish may be used instead. The sections are united by cement, and doweled joints are formed by means of holes or depressions 10 in the top and bottom of the sections. These doweled holes correspond with each other in the various sections, and when the cement is applied and the sections are built together the cement will enter the holes and form a very effective bond which will hold the chimney together without the use of other fastening devices.

For a single flue chimney the single sections only are used, being built one upon the other until the desired height is reached. It is obvious that this may be done very quickly. By making the sections a foot high it is only a few minutes work to set one upon the other to form a chimney several stories high. By making the walls of the sections extend entirely around the flue, and cementing the sections together, there is no possibility of cracks or openings forming in the chimney at the joints thereof. No special skill is required to build the chimney, care only being required to set the first section level. The chimney constructed as stated is much cheaper than a brick chimney, both with respect to material and with respect to the labor required to build it. The solid wall between the flues prevents one flue drawing from another, and the blocks are

capable of being made in standard sizes, or can be made in special molds to suit special conditions.

I claim:

A chimney built of molded cement blocks some of the blocks having a single flue opening through the same and placed in courses with a plurality of blocks in each course, and other bonding blocks having a plurality of flue openings, and each block forming a course.

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

MILO E. HOWE.

Witnesses:
WILLIAM YOUNGREN,
WILLIAM G. SANFORD.