

S. A. WELLMAN.
COLLAPSIBLE CORE.
APPLICATION FILED MAR. 6, 1909.

955,235.

Patented Apr. 19, 1910.

Fig. 3.

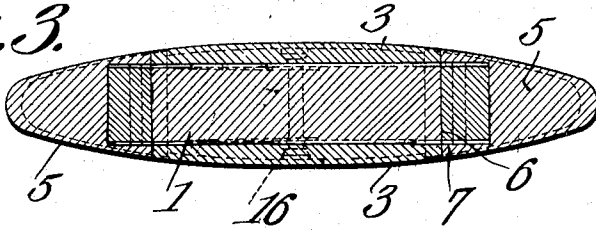


Fig. 2.

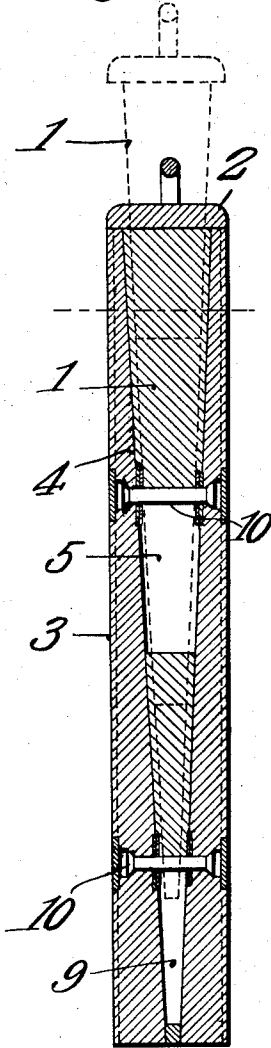
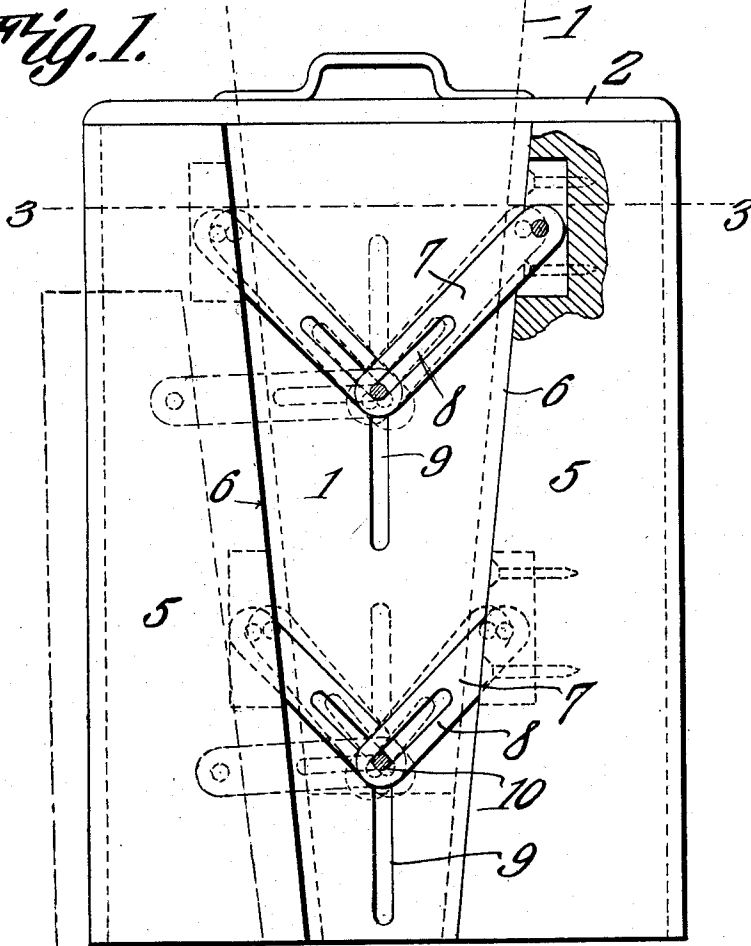


Fig. 1.



Witnesses

E. H. Stewart
C. D. Davis

Seth A. Wellman. ^{Inventor}

C. A. Snow & Co. ^{Attorneys}

UNITED STATES PATENT OFFICE.

SETH A. WELLMAN, OF SWALEDALE, IOWA.

COLLAPSIBLE CORE.

955,235.

Specification of Letters Patent. Patented Apr. 19, 1910.

Application filed March 6, 1909. Serial No. 481,669.

To all whom it may concern:

Be it known that I, SETH A. WELLMAN, a citizen of the United States, residing at Swaledale, in the county of Cerro Gordo and State of Iowa, have invented a new and useful Collapsible Core, of which the following is a specification.

This invention has relation to collapsible cores, and it consists in the novel construction and arrangement of its parts, as hereinafter shown and described.

The object of the invention is to provide a core especially adapted to be used in the manufacture of hollow concrete cement blocks, and the parts of the core are so arranged that when an attempt is made to withdraw the core from the interior of the block the side and end portions of the core collapse as a result of the withdrawal, or partial withdrawal, of the center of the core, thereby affording sufficient space between the surface of the core and the hollow in the block in which it is located to permit of ready withdrawal of the core without requiring the use of levers or other implements.

With the above object in view the core comprises a pyramidal center block having an overhanging cap portion, side blocks having inclined inner faces adapted to fit against opposite sides of the said center block, and end or edge blocks having inclined edges adapted to fit against opposite sides of the said center block. Links are pivotally connected at their outer ends with the said edge blocks and have pin and slot connection at their inner end portions with the said center block and side blocks, whereby the said center block may have relative longitudinal movement, but limited, with relation to the other parts of the core.

In the accompanying drawings:—Figure 1 is a side elevation of the core. Fig. 2 is a vertical, sectional view of the same. Fig. 3 is a transverse sectional view of the same, cut on the line 3—3 of Fig. 1.

The core consists of the pyramidal center block 1, which is provided at its larger end with the overhanging cap portion 2. Side blocks 3 are provided with inner inclined surfaces 4, which are adapted to bear against opposite sides of the center block 1, and which, when in position, have their outer surfaces in parallel relation to each other. Edge blocks 5 are also provided, and the said edge blocks are provided with

the beveled inner edges or surfaces 6, which are adapted to bear against opposite edges of the center block 1, and which, when so positioned, maintain the outer edges of the said blocks 5 in parallel relation. Links 7 are pivotally connected at their outer ends with the edge blocks 5, and are provided at their inner ends with elongated slots 8. The center block 1 is also provided with elongated slots 9. Securing devices 10 pass transversely through the slots 9 of the center block 1 and also through the slots 8 of the overlapping inner ends of the links 7. The end portions of the devices 10 are secured in the side blocks 3.

From the above description it is obvious that when the center block 1 is inserted to the farthest extent between the side blocks 3 and the edge blocks 5, that the cap portion 2 of the center block 1 will lie over the upper ends of the said blocks 3 and 5 and close what space may occur between all of the blocks. Thus when the core is inserted into a mold and the material is poured into the mold, the said cap 2 will prevent the material from entering openings between the blocks constituting the core. It will also be seen that when the center block is positioned as above described, all of the side blocks and edge blocks will have firm foundations to bear against the material in the mold; and, consequently, when the material becomes solidified an opening remains therein about the core. When it is desired to remove the core the center block 1 is slipped longitudinally with relation to the other blocks, and as the reduced transverse sectional areas of the said center block 1 move toward the ends of the other blocks, sufficient space is provided for the blocks 3, 3, to move slightly toward each other, and the blocks 5, 5, to move slightly toward each other. This movement upon the part of the blocks 5, 5, is augmented through the pull which is exerted upon them through the instrumentality of the links 7. Thus, all of the outer blocks move toward the center of the center block, and sufficient space is provided about the outer surfaces of the outer blocks and the inner wall of the solidified object to afford room for ready removal of the core.

Having described my invention, what I claim as new, and desire to secure, by Letters Patent, is:—

1. A collapsible core comprising side and

edge blocks, links pivotally connected at their outer ends with the edge blocks and being slotted at their opposite end portions, a slotted center block for insertion between
5 the side and edge blocks, and securing devices secured at their ends in the side blocks, and passing through the slot of the overlapping inner ends of the links, and through the slots in the center block.

10 2. A collapsible core comprising side blocks and edge blocks, having inclined inner surfaces, a pyramidoidal center block having elongated slots, links pivotally connected at their outer ends with the edge

blocks, and having overlapping inner slotted 15 ends, and securing devices secured at their ends to the side blocks and passing through the overlapping slots at the inner ends of the links, and through the slots in the center block. 20

In testimony that I claim the foregoing as my own, I have hereto affixed my signature in the presence of two witnesses.

SETH A. WELLMAN.

Witnesses:

FRANK E. HALES,
WILLIAM A. SHAFFER.