May 18, 1926. 1,584,784

R. A. LOVELACE

MOLD

Filed Nov. 1 1924 2 Sheets-Sheet 1

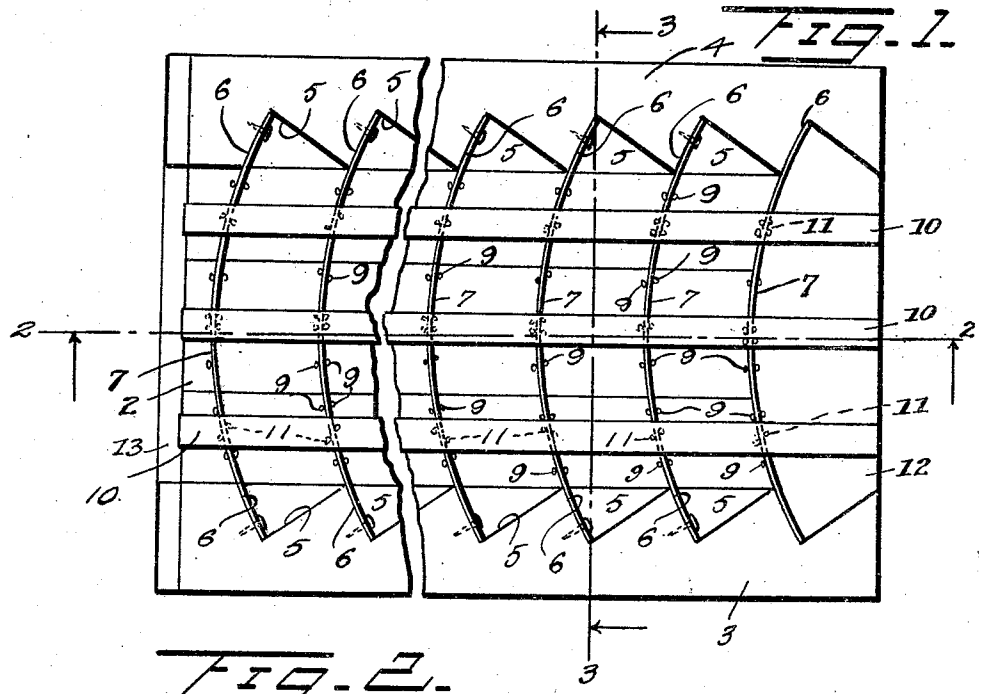


Fig. 1.

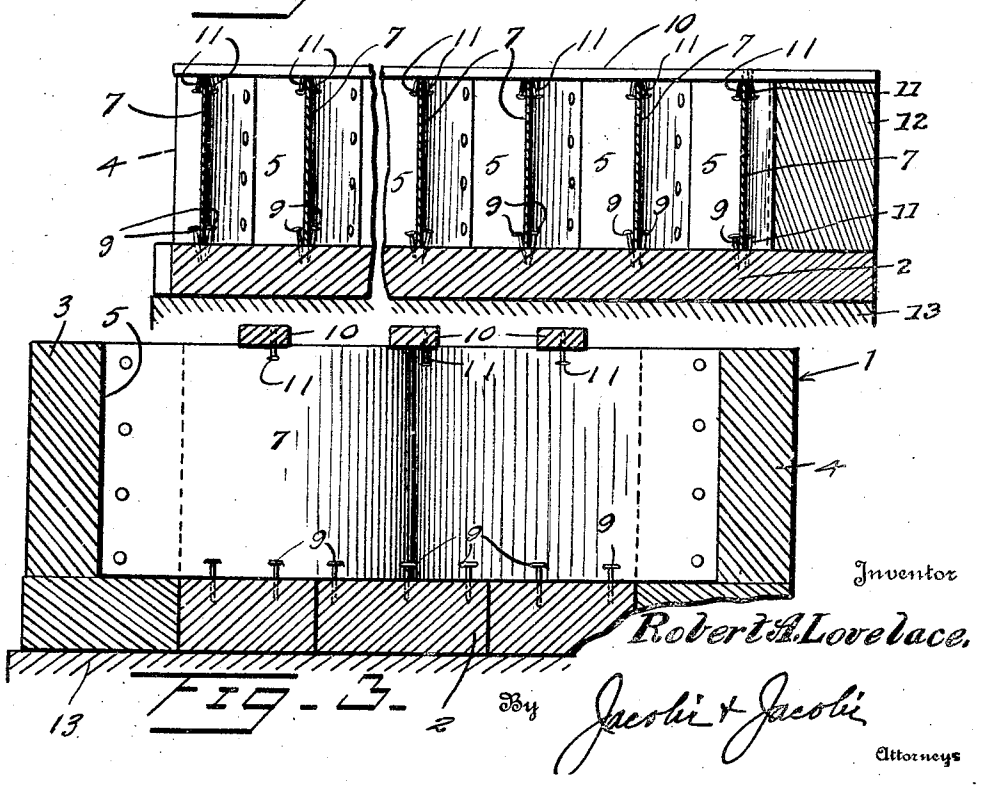


Fig. 2.

Fig. 3.

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2 Sheets-Sheet 2

Fig. 4.

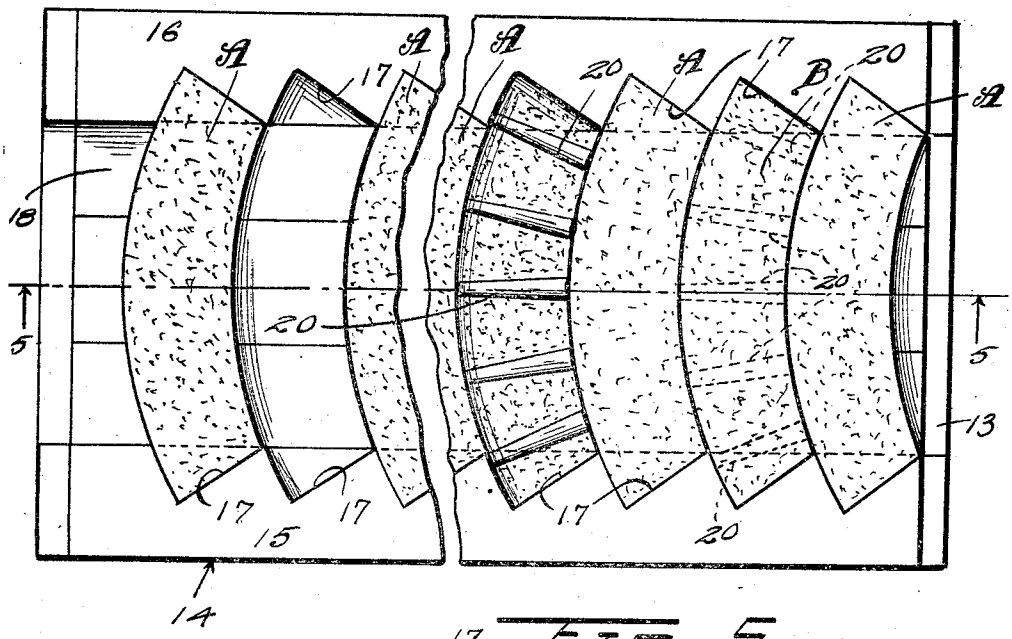


Fig. 5.

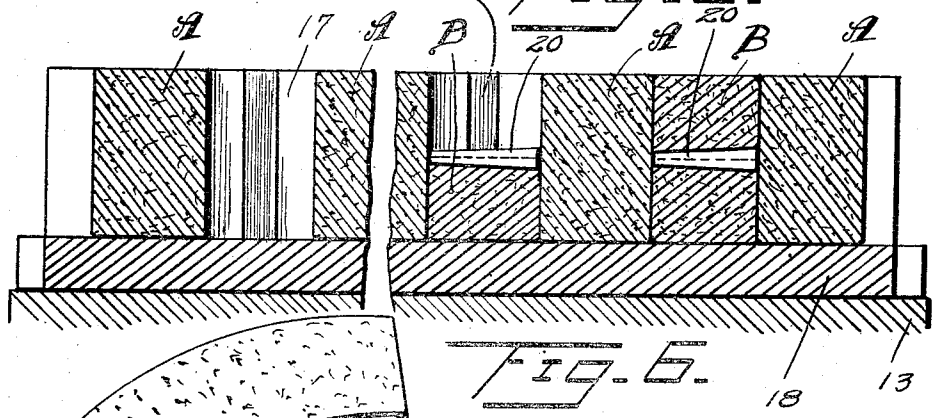
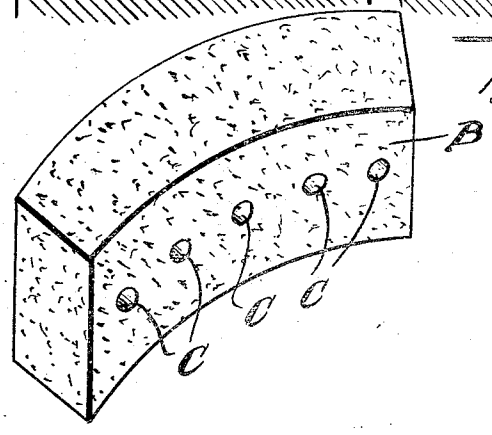


Fig. 6.



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UNITED STATES PATENT OFFICE.

ROBERT A. LOVELACE, OF MERCED FALLS, CALIFORNIA.

MOLD.

Application filed November 1, 1924. Serial No. 747,203.

This invention relates to new and useful improvements in molds, and has for its principal object to provide a device which is especially adapted for use in the formation of blocks which are principally used in the construction of a cesspool or drain.

Another important object of the invention is to provide a mold of the above mentioned character, wherein the blocks to be formed will be substantially arcuate-shaped, means being further provided for forming perforations in the blocks whereby a proper draining device is provided.

Another important object of the invention is to provide a mold which is of such a construction as to enable the same to be readily and easily set up in position whenever it is desired to use the same, and further may be readily disassembled.

A still further object is to provide a mold of the above mentioned character which is simple in construction, inexpensive, strong and durable, and further well adapted for the purposes for which it is designated.

Other objects and advantages of this invention will be come apparent during the course of the following description.

In the accompanying drawings forming a part of this specification and in which like numerals designate like parts throughout the same,—

Figure 1 is a plan view of the mold for the first set of blocks.

Figure 2 is a longitudinal section taken on line 2—2 of Fig. 1.

Figure 3 is a transverse section taken on line 3—3 of Fig. 1.

Figure 4 is a plan view of the mold used in conjunction with the formation of the final blocks.

Figure 5 is a longitudinal section taken on line 5—5 of Fig. 4, and

Figure 6 is a detail perspective view of one of the finished blocks.

In the accompanying drawings, wherein for the purpose of illustration is shown the preferred embodiment of my invention, the numeral 1 designates generally the frame of my mold and comprises the floor 2 formed of a series of longitudinally extending strips of wood, and the side members 3 and 4, respectively. Each of the side members are provided with a series of cut out portions or notches 5, the latter being preferably formed on the inner face of each of the side members and the inner wall of each notch is substantially arcuate-shaped, as shown at 6, for the purpose to be hereinafter more fully described. These notches are arranged in such a manner as to cooperate with the notches formed in the opposite side member for the purpose of supporting the outer ends of the spacing partitions 7.

The spacing partitions 7 are substantially arcuate-shaped and have their lower edges secured to the floor of the frame by means of the fastening elements shown at 9 in the drawings. The outer ends of each of the partitions fit in the opposed notches 5 of the side members 3 and 4 respectively, and cooperate with the arcuate-shaped inner walls 6 of the notches. These partitions are preferably formed of sheet metal or the like, although it is to be understood that any other suitable material may be substituted therefor as is desirable.

For the purpose of retaining the partitions in their proper spaced relation with respect to one another and to further hold the same in their arcuate arrangement, I provide the longitudinally extending strips 10 which have the nails 11 extending therefrom in such a manner as to have the shanks and heads of the nails abutting the opposite faces of the partitions in the manner as shown in Fig. 2 of the drawings. A wooden block, such as is shown at 12, is supported in the forward end of the frame and into which is driven the nails carried by the forward ends of the strips 10, whereby longitudinal movement of the strips when in position on the upper edges of the partitions 7 will be prevented. Any number of these strips may be used and the same are preferably arranged in parallel spaced relation with respect to each other as is clearly illustrated in Fig. 1 of the drawings.

With the parts arranged as shown in Figs. 1 and 2, the floor of the frame is preferably supported on the supporting members 13, whereby the frame will be off of the ground. Concrete is then poured into the compartments formed by the partitions 7 and the same is left for a considerable length of time in order that the blocks formed will be hard. After the concrete has hardened in the frame 1 and the strips and partitions are removed, the arcuate-shaped blocks formed therein will provide a means for forming the similar shaped blocks to be used in the construction of the cesspool as will be presently described.

The mold shown in Fig. 4 of the drawings

is substantially the same in construction as the mold shown in Fig. 1 with the exception that the partitions 7 which are formed of sheet metal, as heretofore described, are not used in conjunction therewith. The arcuate-shaped blocks formed from the concrete A which is poured into the mold 1 between the partitions 7 are used as the partitions in the mold 14 shown in Fig. 4 of the drawings. The side members 15 and 16, respectively, are also provided with the notches 17 in the inner faces thereof, similar to the side members 3 and 4 and the notches 5 formed therein. The floor 18 is also substantially the same as the floor 2. In the formation of the blocks to be used in the construction of a cesspool or the like, the arcuate-shaped blocks formed in the mold 1 are taken and placed at every other notch in the side members of the mold 14, thereby forming partitions between which is adapted to be formed the blocks B. It is to be understood that the blocks A will be first dipped in oil or the like before being set into the mold 14 to prevent the same from adhering to the concrete which is poured into the spaces formed by the partitioning blocks A.

With the blocks A arranged at spaced intervals in the mold 14, concrete is then poured into the spaces 19 formed therebetween for substantially halfway between the upper edges of the blocks A and the floor 18. With the concrete still in its plastic condition, and when at this height, frusto conical-shaped cores such as are shown at 20 in the drawings are placed on the plastic concrete at spaced intervals and these cores extend from the rear face of one of the spacing blocks A to the inner face of the adjacent spacing block, as is clearly illustrated in Fig. 5 of the drawings. Additional concrete is then poured over the conical-shaped cores 20 between the spacing blocks A until the concrete is at the same level with the tops of the blocks A. The concrete is then left to be hardened and after standing for a considerable length of time, the spacing blocks A are removed as are also the finished blocks B. The cores 20 being still embedded in the central portions and being conical, are adapted to be removed and conically-shaped apertures, such as are shown at C in the drawings, will be formed and will extend transversely through the blocks.

In this manner it will be readily seen that any number of blocks, such as are shown in Fig. 6 of the drawings, may be formed in a simple and efficient manner, wherein the process of forming the same is inexpensive and the parts of the molds may be readily set up when desired to use the same, or readily disassembled when not in use. The arcuate-shaped blocks B with the opening C extending therethrough will then be adapted to be used in the formation or construction of a cesspool in the well known manner, and it is not thought necessary to go into detail relative to the manner in which the cesspools are formed, as the same is well known in the art. The opening C in the blocks formed by my mold will provide a drain means which is very essential in the construction of cesspools.

The imperforate blocks may also be used in constructing drains. Heretofore the blocks used for this purpose were molded and cured singly and this necessitated the loss of considerable time and labor. The present blocks are left in the mold until properly cured and when in the mold only one face of each block is exposed to the sun, whereas in the treatment of the singly molded blocks the major portion of each block is exposed. This further obviates the continual pouring of water on the blocks as is necessary in treating the single blocks.

From the foregoing description of the construction of my improved apparatus, it will be seen that I have provided a simple, inexpensive and efficient means for carrying out the objects of the invention, and while I have particularly described the elements best adapted to perform the functions set forth, it is obvious that various changes in form, proportion and in the minor details of construction may be resorted to, without departing from the spirit or sacrificing any of the principles of the invention.

Having thus described my invention, what I claim is:—

A concrete mold structure comprising a frame having a floor and provided at the side edges of the floor with upstanding walls, said walls being provided at their inner surfaces with V-shaped notches which extend from the upper to the lower edges of the walls, arcuate partition members having their end portions received in the notches, said partitions resting upon the floor and bridging the space between the walls and securing devices fixing the partition members to the walls at the surfaces of the notches therein.

In testimony whereof I affix my signature.

ROBERT A. LOVELACE.