(No Model.) 3 Sheets—Sheet 1.

E. A. ADAMS.

DRY WALL BRICK.

No. 372,007. Patented Oct. 25, 1887.

Fig. 1.

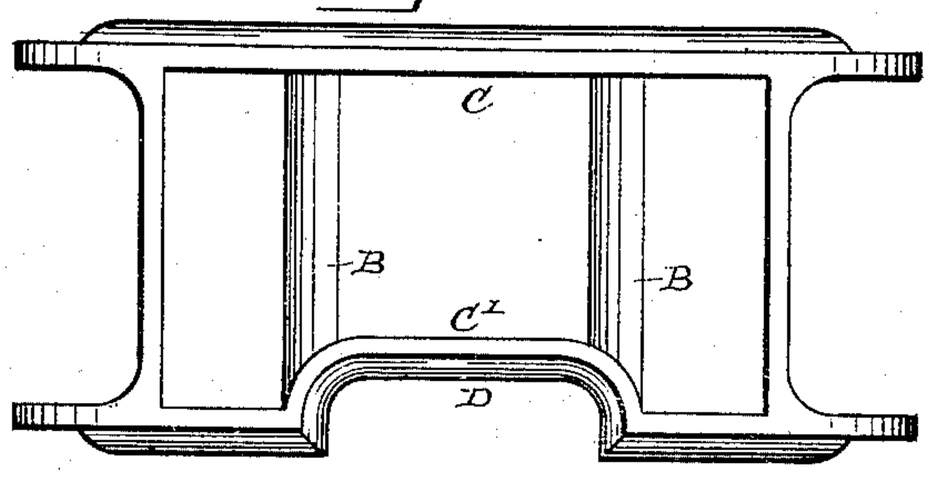


Fig. 2.

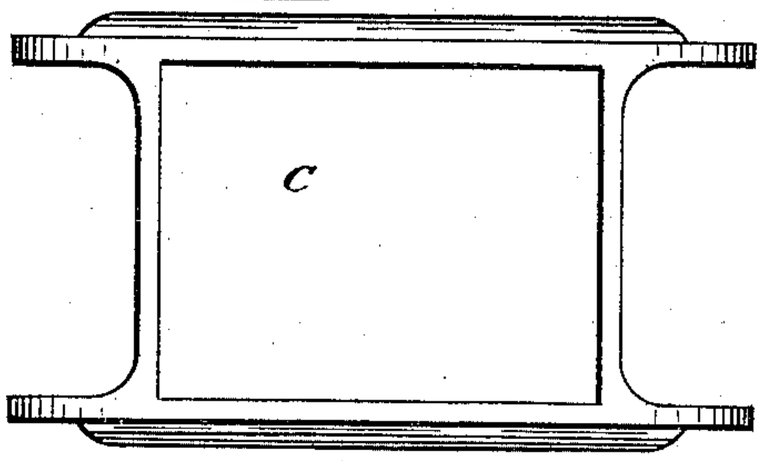


Fig. 3.

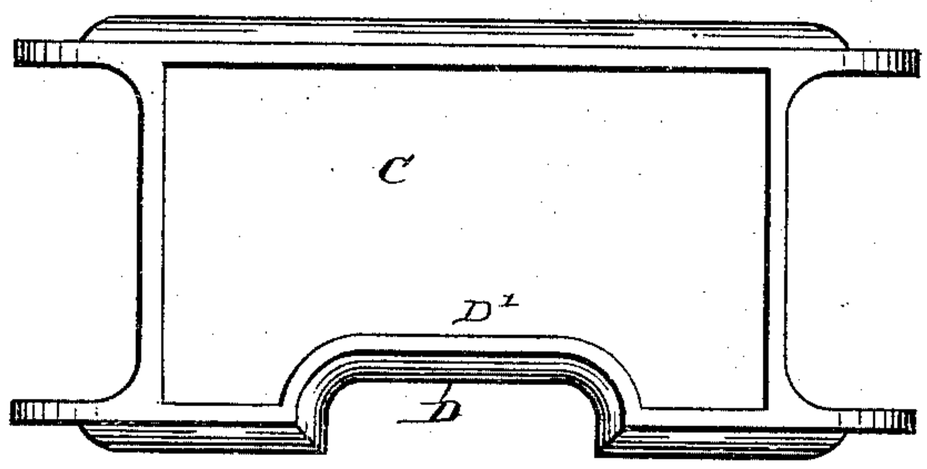


Fig. 4.

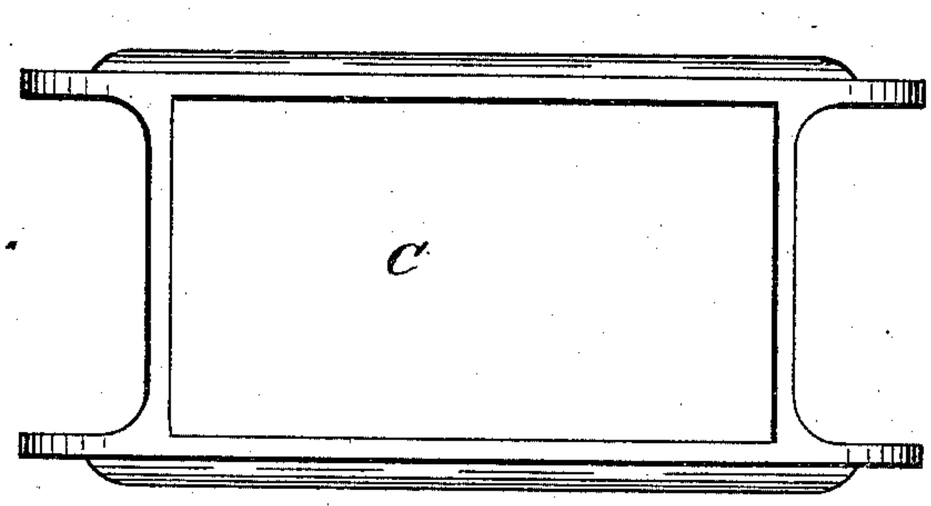


Fig. 5.

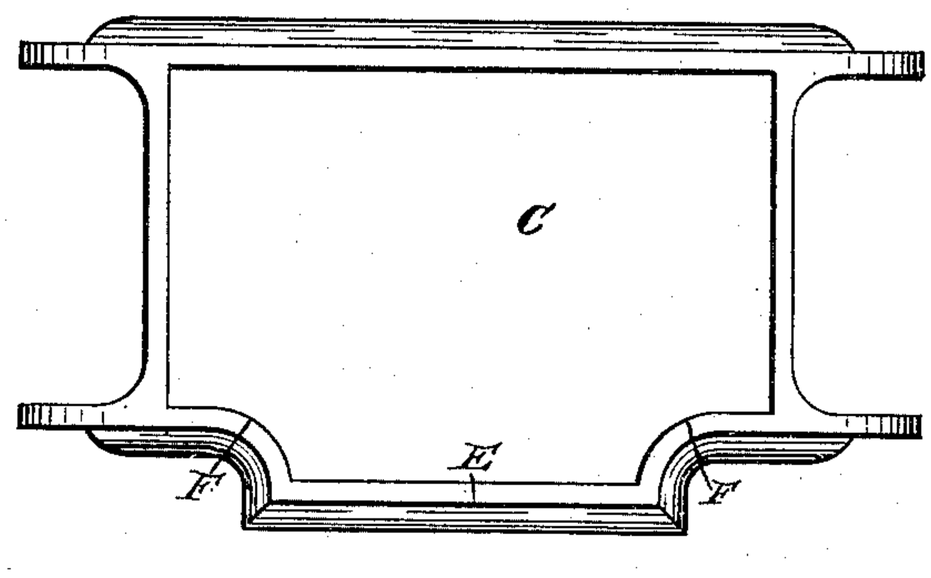
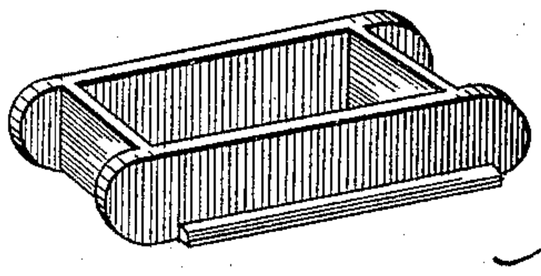


Fig. 6.



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(No Model.) 3 Sheets—Sheet 2.

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Fig. 7.

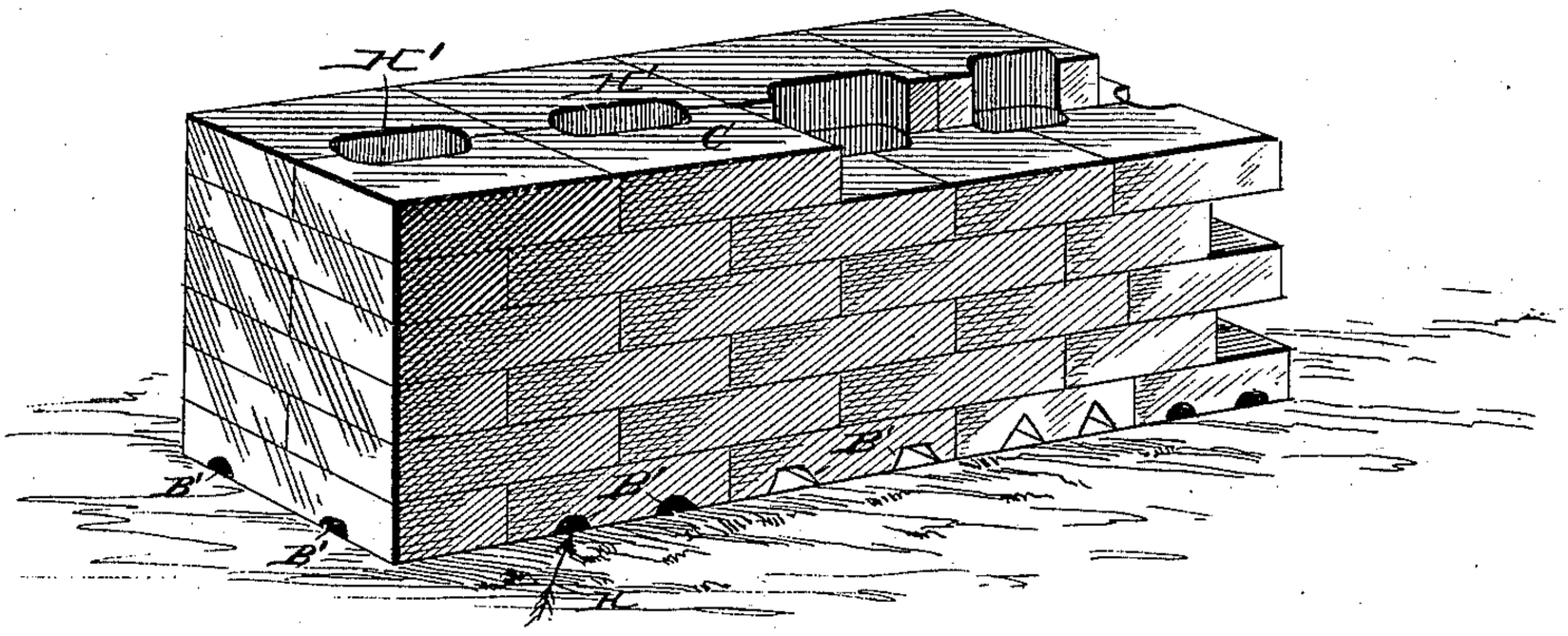


Fig. 8.

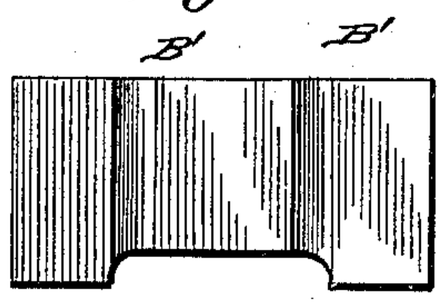


Fig. 9.

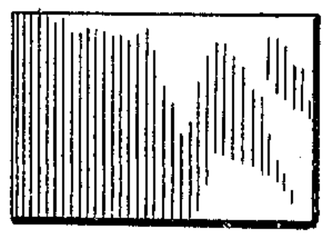


Fig. 10.

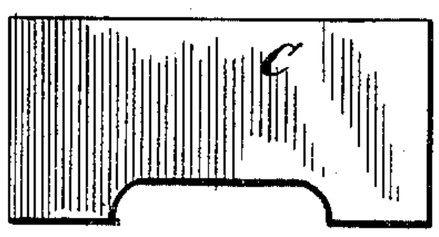


Fig. 11.

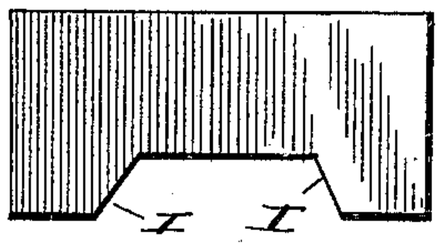
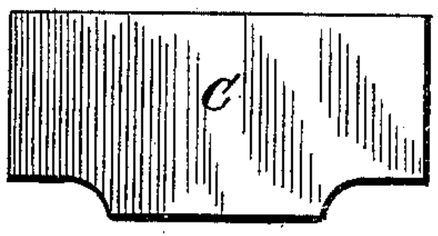


Fig. 12.



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(No Model.) 3 Sheets—Sheet 3.

E. A. ADAMS.

DRY WALL BRICK.

No. 372,007. Patented Oct. 25, 1887.

Fig. 13.

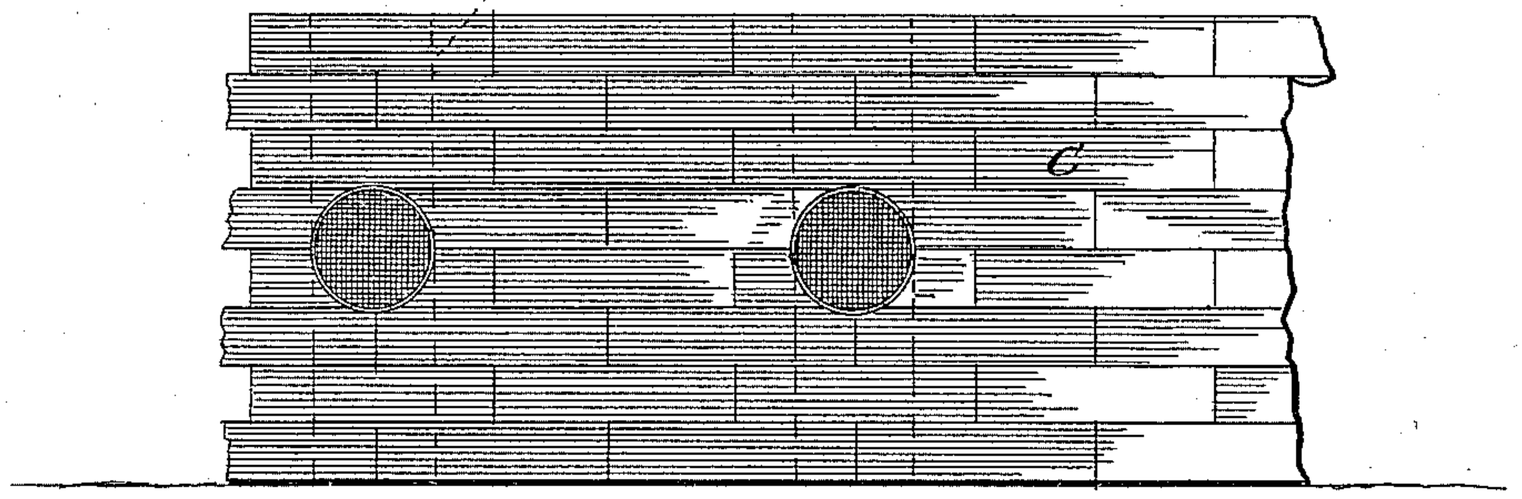


Fig. 14.

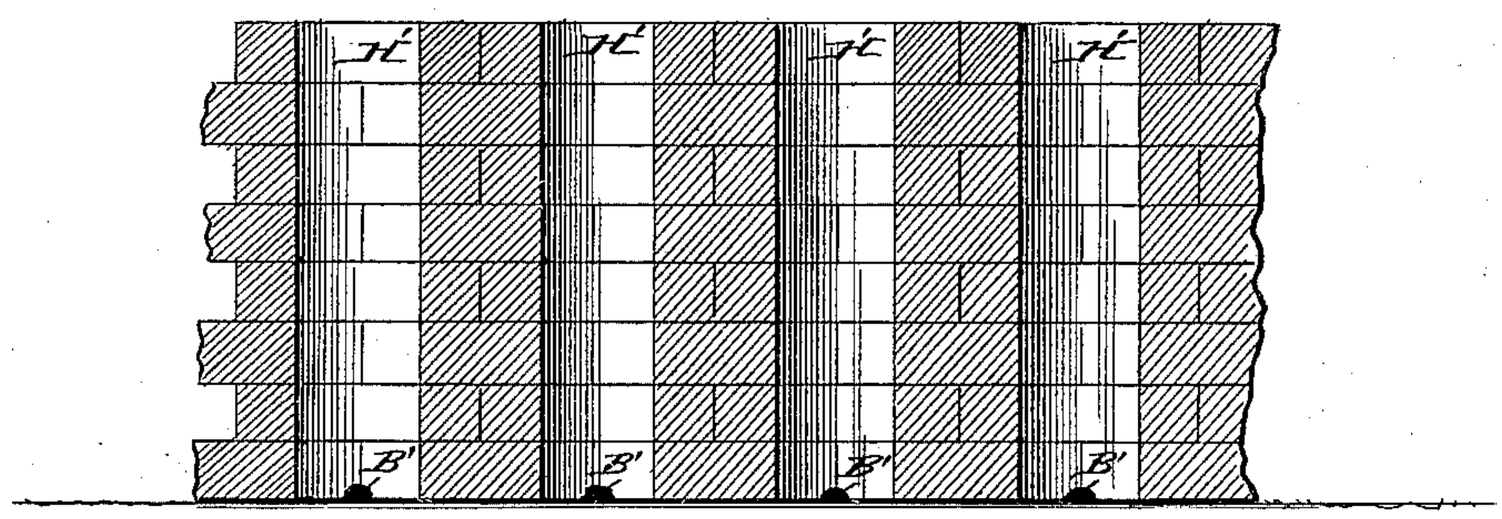
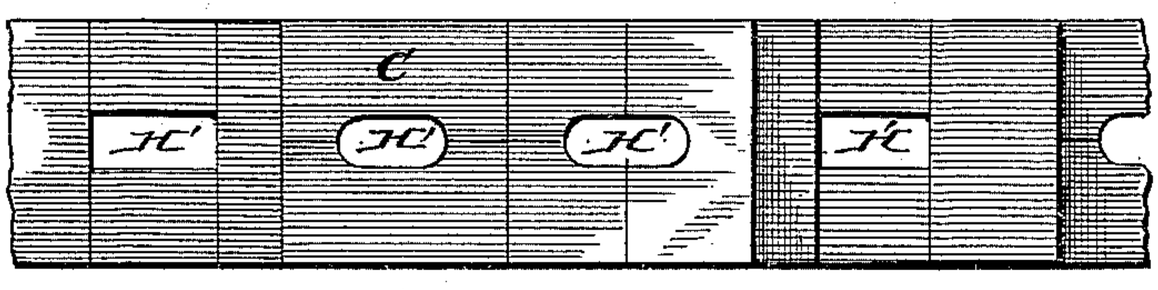


Fig. 15.



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UNITED STATES PATENT OFFICE.

ELMON A. ADAMS, OF WASHINGTON, DISTRICT OF COLUMBIA, ASSIGNOR OF ONE-HALF TO FRED W. EVANS, OF SAME PLACE.

DRY-WALL BRICK.

SPECIFICATION forming part of Letters Patent No. 372,007, dated October 25, 1887.

Application filed October 11, 1886. Serial No. 215,889. (No model.)

To all whom it may concern:

Be it known that I, ELMON A. ADAMS, a citizen of the United States, residing at Washington, in the District of Columbia, have invented a new Improvement in Dry Walls and Bricks for the Construction thereof, of which the following is so full, clear, and exact a description as will enable others skilled in the art to which my invention appertains to make and use the same, reference being had to the accompanying drawings, in which—

Figure 1 is a top plan view of a mold which may be used in casting one of the bricks to be used in my improved dry wall. Figs. 2, 3, 4, and 5 are similar top plan views of various other molds to be used in making my bricks. Fig. 6 is a perspective of one of the same. Fig. 7 is a perspective of a part of a wall constructed with my improved bricks. Fig. 8 is a bottom plan view of one of the bricks. Fig. 9 is a similar view of a half of one of my bricks. Fig. 10 is a side elevation of one of my improved bricks. Fig. 11 is a similar view of one of my bricks, showing the concavity formed in straight lines instead of curved, as shown in Fig. 10. Fig. 12 is a top plan view of a brick, showing the concavities at the ends of one side of the brick. Fig. 13 is a view of an opening in a wall, which opening is covered by a screen of metallic wire, held in place by a metallic tube made to fit the air-chamber. Fig. 14 is a longitudinal section of a wall, showing air spaces or flues extending up through the wall. Fig. 15 is an end view of the wall racked down to show two sets of heads.

The object of this invention is to provide a dry wall which will not retain moisture on its outside and carry it through to the inside.

In the ordinary construction of walls great difficulty has been experienced because of the pervious condition of the wall, which causes moisture to work through from the exterior to the interior, causing mildew, sweating off of the paper, malaria, and many other serious disadvantages, the consequences of which are the loosening of the plaster, making the room damp and unhealthy, and often destroying the paper, paint, frescoing, &c., all of which will be clearly understood by those skilled in the art.

This invention is designed especially to obviate these disadvantages and to facilitate the ventilation of the walls and cellars, vaults, closets, urinals, bath-rooms, and any other place where impure air is likely to accumulate. Aside from these advantages these openings in the wall form excellent accommodations for electric conductors of all sorts and for all of the usual purposes of lighting and signaling, telephone, telegraph, &c. Pneumatic speaking-tubes may also be used to advantage through these openings in the wall, and where it is not desired to construct an entire wall of these bricks this hollow brick may be placed in any other position in the wall or building where it is designed to put electric conductors and speaking-tubes, and where ventilation of any sort may be required.

By reference to Fig. 1 it will be observed that the mold is provided with two transverse bars, B B, which are semicircular or octagonal in shape, and which are designed to form the depressions B′ B′, as is clearly shown in Fig. 7.

In Fig. 3 I have shown a mold which is provided with simply an inwardly-projecting flange, D′. The brick C is to be formed within the frame or mold in all of the figures.

In Fig. 1 the inwardly-projecting lug C′ unites with the transverse bars B B, thus forming an opening which communicates with the depressions formed by the transverse bars B B.

D in Figs. 1 and 3 simply designates the recess in the outside of the mold.

In Fig. 5 it will be observed that there are two inwardly-projecting shoulders, F F, which are at the ends of the outwardly-projecting lug or shoulder E, thus forming the brick shown in Fig. 12.

By reference to Fig. 7 it will be observed that the wall is constructed with the bricks having the depressions B′ B′ next to the floor or underpinning of the wall, and by glancing at Fig. 8 it will be readily seen that the air passing in, as shown by the arrow H, will pass directly through into the opening H′ in the top of the wall, (shown in Fig. 7,) thus forming direct communication between the top and bottom of the wall, which will be valuable for ventilating purposes, to be used in rooms or to be used in the cellar, or anywhere where it is desired to ventilate the building and the wall which surrounds it.

The joints at the ends of the wall are formed

in the usual manner by breaking the bricks in two in the middle. It will be readily observed that the joints may be broken by using the bricks shown in Fig. 12 and by arranging them alternately along in the wall, as shown in Fig. 7. The depressions B′ B′ may be semicircular, or they may have angular sides, as may be found most desirable in the manufacture of the bricks. The brick shown in Fig. 11 shows the inclined sides I I of the depression in the brick as being on a straight line and extending in opposite directions. I wish to be understood as not limiting myself to this construction; but I find that in working the bricks the plastic material will slip out more readily from the molds and make a cleaner neater job by having the sides of the depression straight instead of curved, and in some instances I prefer to construct them in this way. It is obvious that this style of brick may be used for street-conductors for electric wires and to run from canals to dwellings. It is also apparent that the brick may be used for draining purposes on a small scale.

Having explained some of the objects, uses, and advantages of this invention, and having set forth a preferred form of carrying out the same, I wish to be distinctly understood as not limiting myself to the exact construction shown and described, as any other equivalent construction may be substituted therefor without departing from the general spirit of my invention.

The lower bottom course of my wall shows a brick provided with two depressions on its flat side. These depressions are made on each side of the large depression in the edge of the brick and extend across the brick near its thickest and heaviest portions. This forms a better brick to use for lateral ventilation, as the brick provided with the groove across its center on its flat side and also having a vertical recess in its edge is very weak in its central portion and has only a slender neck, which is quite liable to become accidentally broken.

It will be observed that the bricks used by myself and made in accordance with my specifications and drawings are of the same size throughout, and are provided with depressions in their centers in one instance and depressions at their ends in another instance, in such a manner that the depressions in the ends form a single opening to correspond with the single opening in the center of one of the other bricks when the two bricks which are recessed at their ends are placed together in a manner to break the joints, as is both necessary and desirable in the construction of brick walls. The solid plain old-fashioned bricks are of the same size as my bricks having depressions. It therefore follows that in the construction of a wall the old-fashioned plain bricks may be used to tie the wall together where a double wall is used, and the joints may be broken in the courses without the necessity of breaking any of the bricks, as will be readily understood and appreciated by those skilled in the art.

What I desire to secure by Letters Patent of the United States, and what I therefore claim, is—

1. In a dry wall of the character described, the combination of bricks made of uniform size throughout, a part of said bricks having a central recess in one of their edges, with the remainder of said bricks having corresponding recesses or depressions at their ends, all constructed and combined to operate substantially as described, whereby a continuous vertical opening may be provided through a wall by simply arranging the bricks alternately, without the necessity of breaking any of the bricks to break joint, substantially as and for the purposes specified.

2. In a dry wall of the character described, a brick having an opening in its side which communicates directly with a second opening in its adjacent side, forming a vertical and lateral flue, substantially as and for the purposes specified.

3. A dry-wall brick of the character described provided with a recess on one side and having two recesses communicating with the first recess on its adjacent side, extending across the brick, and formed by grooving the bricks in their thick and heavy portions near the ends of the bricks, to prevent accidental breaking of the bricks and to form air-ducts, substantially as and for the purposes specified.

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

ELMON A. ADAMS.

Witnesses:
EMMA R. ADAMS,
E. B. BURY.