

F. O. ANDERSSON.
HOLLOW BRICK.
APPLICATION FILED SEPT. 9, 1911.

1,041,401.

Patented Oct. 15, 1912.

Fig. 1.

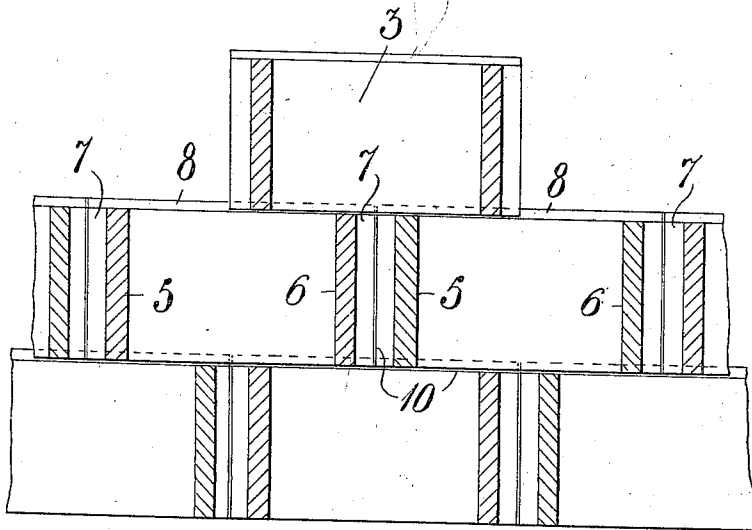


Fig. 2.

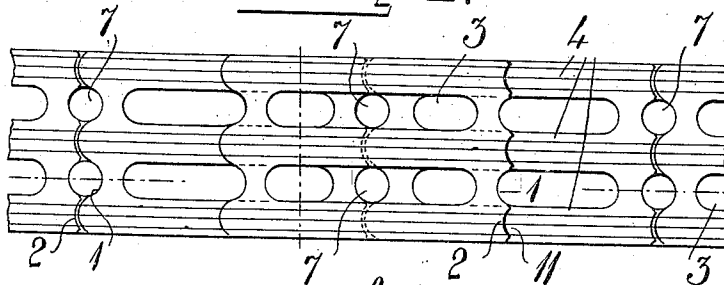
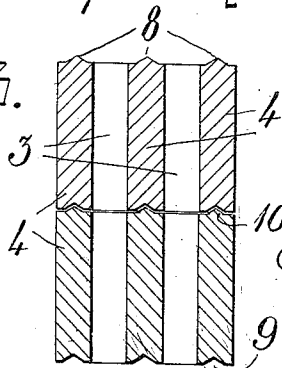


Fig. 3.



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UNITED STATES PATENT OFFICE.

FRANS OSKAR ANDERSSON, OF STOCKHOLM, SWEDEN.

HOLLOW BRICK.

1,041,401.

Specification of Letters Patent.

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To all whom it may concern:

Be it known that I, FRANS OSKAR ANDERSSON, a subject of the King of Sweden, and residing at Stockholm, Sweden, have invented certain new and useful Improvements in Hollow Bricks, of which the following is a specification.

In order to prevent the cold air, coming from the outside of a wall, from blending too rapidly with the warm air, coming from the inside, whereby damp or moisture is caused, double air-chambers are necessary in the wall, so as to create two layers of air, completely separated from each other. In order to effect this, hollow bricks are used, which consist of three walls, united with each other at their ends by means of webs in such a manner that every brick is provided with two holes or cavities. In this way complete isolation can, however, not be effected, as the joints are not isolated thereby.

The present invention refers to a brick or bricks through which complete isolation may be effected in a wall, and one form of construction is illustrated in the accompanying drawing.

Figure 1 is a vertical lengthwise section of a wall, constructed with bricks according to the present invention, and Fig. 2 is a level of the same. Fig. 3 is a cross-section of two bricks placed one on top of the other.

Each brick in the form of construction shown consists of three approximately parallel walls 4, arranged at a distance from each other, and these walls are connected with each other by means of webs 5 and 6 respectively in such a manner that every brick is provided with two holes or cavities 3. The webs 5 and 6 are formed concavo-concave in cross section and disposed in such a manner that in front of each hole or cavity 3, the bricks are provided with a notch or recess 1, and one margin of each wall 4 with a convex projection 11. The opposite margin of the walls 4 from the convex formation 11 are formed concavely as at 2 which complement or receive the formation 11 of an adjacent brick when the bricks are being laid for building a wall. When laying the bricks, there are therefore formed between two bricks channels 7, of which those nearest the outer wall together with holes 3 nearest to them form an outer chamber, while the inner chamber 7 and the inner holes 3 form another chamber, completely

separated from the former, if the bricks are bonded.

In order to facilitate the bricklaying work, the bricks are on their upper and lower surfaces provided with ridges 8, running along the walls 4, as well as with grooves 9 on the corresponding opposite surface.

When a wall is to be erected with these bricks, which may be done by persons quite unaccustomed to bricklaying work, the bricks are dipped in soft mortar on three sides, after which they are laid in place, which is apparent in Fig. 1. After a layer has been put down in this manner, the next layer is bonded with the previous one in such a manner that the channels 7 between two bricks are connected with the holes 3 in the layers lying underneath, whereby, as will be seen from Fig. 1, a chamber is obtained in which the air can circulate, and which is only interrupted by the webs 5 and 6 respectively. This indicates the mortar between the bricks. In this way complete isolation of the air is effected, as even the bonds are isolated in such a manner that every part of a wall is surrounded by air on all sides. Bricks in conformity with the present invention may also be used for the erection of pillars and reinforcing heels in walls, in which case the bricks are bonded two and two, after which the holes or cavities are filled up with concrete or similar material and reinforced with iron, if such should be necessary, through which method of procedure an extremely cheap and perfectly safe structure is obtained. In this way the tedious and expensive molding is obviated.

The bricks may be made of concrete, sand or any other suitable material. Finally, it ought to be noted that bricks may, of course, also be manufactured with more than two holes or cavities, in which case the webs have to be provided with a corresponding number of notches or frames, so as to get as large a number of layers of air as there are holes or cavities in the bricks.

Having now particularly described the nature of my said invention and in what manner the same is to be performed I declare that what I claim is:

A wall structure comprising in combination, a plurality of bonded elements each comprising in combination, a plurality of parallel walls (4), each wall having opposite vertical margins formed convexly and con-

cavely (11 and 2) respectively, and a plurality of webs (5) concavo-concave in cross section separating said walls and disposed adjacent the said concave and convex margins, parallel thereto and in spaced apart relation to each other, to provide an elongated cavity (3) between the walls, said bonded elements being disposed in staggered superposed relation to each other with the said elongated cavities (3) intercommunicating with each other, and alined cylindrical

cavities (7) at each alternate row of elements formed by the margins of said concavo-concave webs, substantially as and for the purpose set forth. 15

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

FRANS OSKAR ANDERSSON.

Witnesses:

JOHAN MARKMAN,
HILDEB TEMLING.