No. 685,223. Patented Oct. 22, 1901.

W. SCHLEUNING.

HOLLOW BRICK.

(Application filed Aug. 30, 1901.)

(No Model.)

Fig. 1.

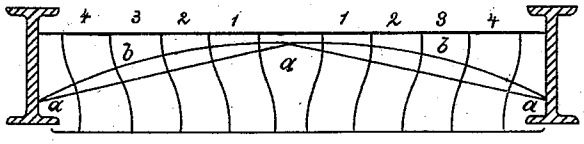


Fig. 2.

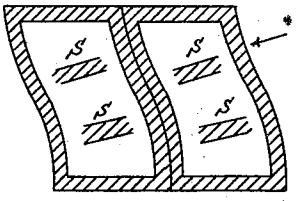


Fig. 3.

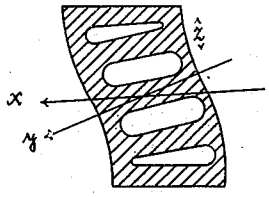


Fig. 4.

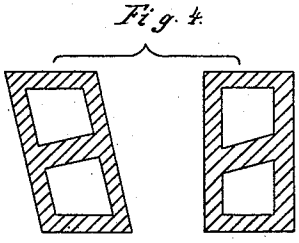
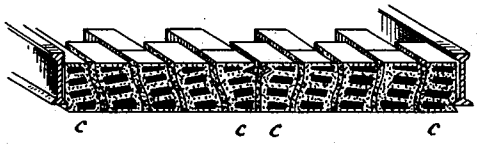


Fig. 5.



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THE NORRIS PETERS CO., PHOTO-LITHO., WASHINGTON, D. C.

UNITED STATES PATENT OFFICE.

WILHELM SCHLEUNING, OF MUNICH, GERMANY.

HOLLOW BRICK.

SPECIFICATION forming part of Letters Patent No. 685,223, dated October 22, 1901.

Application filed August 30, 1901. Serial No. 73,853. (No model.)

To all whom it may concern:

Be it known that I, WILHELM SCHLEUNING, architect, a citizen of Baden, residing at Munich, Bavaria, Germany, have invented certain new and useful Improvements in Hollow Bricks; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

The present invention relates to hollow bricks, and more essentially to that class of hollow bricks which is employed in forming flat roofs or floorings.

In order to render the present specification easily intelligible, reference is had to the accompanying drawings, in which similar letters of reference denote similar parts throughout the several views.

Figure 1 is a diagram showing the lines of pressure in an ordinary flat floor. Fig. 2 is a cross-section showing the formation of the bricks. Fig. 3 is a cross-section of a modified form of brick. Fig. 4 represents two cross-sections of bricks slightly modified in form. Fig. 5 is a cross-section of a complete roof or floor.

In the case of flat roofs or floors formed of hollow bricks it is essential that the ribs in the bricks shall be so formed as to receive the pressure between the keystones and the impost. Many attempts have been made to meet this requirement; but in almost every case several patterns of bricks have been necessary for each side of the arch, and this renders the production of the bricks expensive and the storing and sale of the same correspondingly difficult and liable to mistakes.

The object of the present invention is to produce a brick which shall meet the requirements and be of a uniform shape, with the exception of the keystone and impost, so that the said bricks may be produced in the manner hitherto known in brick-making machines.

The construction of the brick according to the present invention must also be approximately statically correct.

Referring to Fig. 1, the line *a a a* represents the line of pressure of the roof or floor construction when the load is approximately at the center of the surface to be supported, and the line *a b a b a* shows the line of pressure when the load is equally divided over the whole surface to be carried. In view of these pressure-lines the bricks must be so constructed that the ribs of the same will receive the pressure in a line parallel to one or other of the said lines of pressure or parallel to a mean between the two lines. The number of ribs employed is immaterial to a certain extent and depends on the size of the bricks. According to Fig. 2 the top and bottom of each brick are parallel and flat and the side walls are in the form of a slightly **S**-shaped curve, the opposite walls being substantially parallel one with the other, as at *f f*, and being symmetrically formed, so that the brick may be used either way up. The ribs *s s* are slanted downward from one curved wall to the other and are also advantageously parallel with each other, being slanted, as previously mentioned, to receive the pressure in the direction of the lines of pressure or their mean. In the brick shown in Fig. 3 the ribs are arranged so as to receive the pressure of a central load, as represented by the line *x*, or that of an evenly-distributed load, as indicated by the line *y*. In the modifications shown at Fig. 4 one rib only is employed, having a different slant to correspond with the central or equally-distributed load, as may be required. As will be readily understood from the foregoing explanation, the bricks may be turned about and one and the same pattern may be used for each side of the impost, as indicated at *c c* and *c c* in Fig. 5.

I claim as my invention—

A building-brick for use in filling the spaces between joists in the construction of roofs or floors, said brick being hollow and skew-shaped, and having its sides slightly **S**-shaped and arranged to form, with the adjacent bricks, joints parallel to the joists, said brick having its interior provided with ribs slanted in a direction substantially parallel to the lines of pressure of the load on the floor or roof surface.

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

WILHELM SCHLEUNING.

Witnesses:
ELLUND NILSON,
THEKLA NENNER.