(No Model.)

O. KLEINBERGER.

BUILDING BRICK.

No. 556,271. Patented Mar. 10, 1896.

Fig. 1

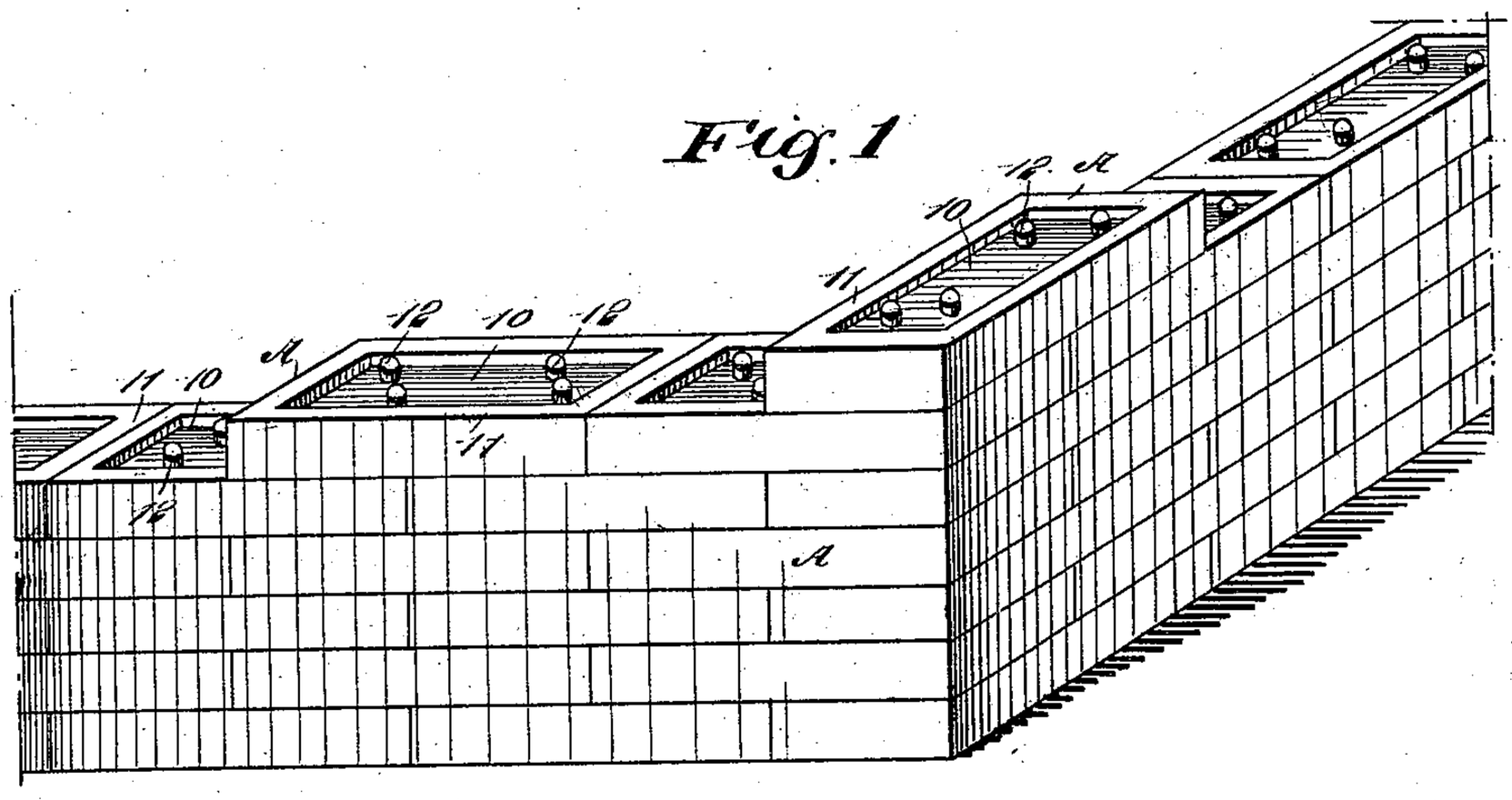


Fig. 2

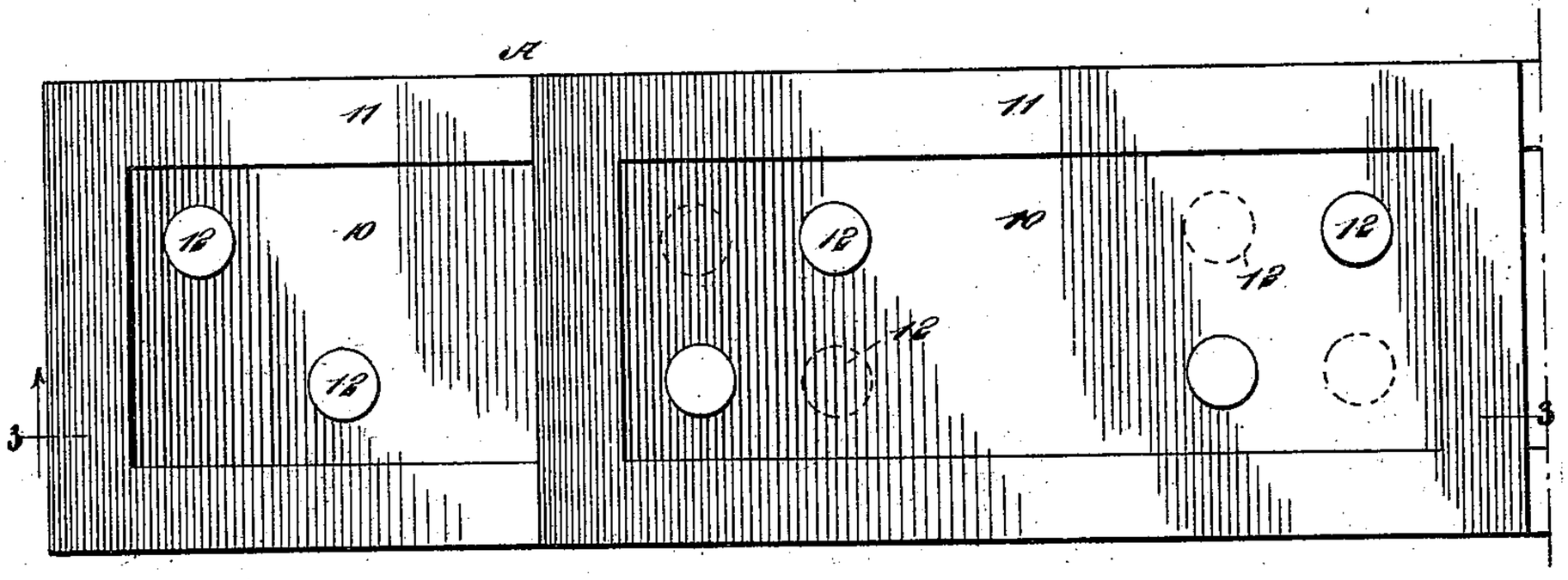
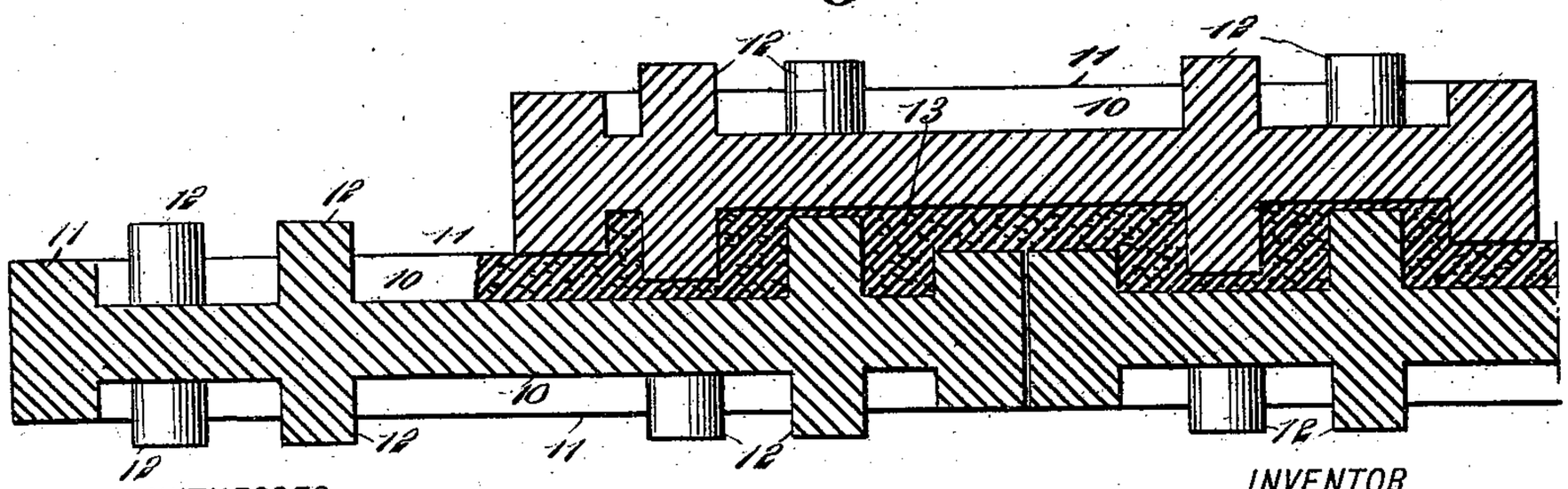


Fig. 3



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OSCAR KLEINBERGER, OF ST. LOUIS, MISSOURI.

BUILDING-BRICK.

SPECIFICATION forming part of Letters Patent No. 556,271, dated March 10, 1896.

Application filed January 8, 1895. Serial No. 534,230. (No model.)

To all whom it may concern:

Be it known that I, OSCAR KLEINBERGER, of the city of St. Louis, in the State of Missouri, have invented a new and useful Improvement in Building-Bricks, of which the following is a full, clear, and exact description.

My invention relates to an improvement in building-bricks; and it has for its object to construct the brick in such a manner that when laid in a wall, whether it be an outside wall or an inside partition, the bricks will tie themselves together in such a way that the wall cannot be sprung outward nor cracked under ordinary circumstances, and whereby, furthermore, the wall will stand even in the presence of intense heat.

Another object of the invention is to so construct the brick that a greater or a less amount of bedding, such as mortar or cement, may be used in laying the brick, and whereby, further, even when the bricks are brought face to face at their margins there will be room for sufficient cement or mortar to firmly hold the bricks in position, and whereby the improved tie forming a portion of the brick will act as well under such circumstances as when only pencilings or a bed of mortar is made to intervene the bricks.

The invention consists in the novel construction and combination of the several parts, as will be hereinafter fully set forth and pointed out in the claims.

Reference is to be had to the accompanying drawings, forming a part of this specification, in which similar figures of reference indicate corresponding parts in all the views.

Figure 1 is a perspective view of a portion of a corner of a building constructed with the improved bricks. Fig. 2 is a plan view of a series of bricks laid to break joints, and Fig. 3 is a longitudinal section taken substantially on the line 3 3 of Fig. 2.

In carrying out the invention the brick may be made of a material from which it is customary to manufacture bricks, or it may be constructed of any material found most desirable in practice.

The brick A is of the usual form of a building-brick and is preferably of the same dimensions throughout, although it may be larger or smaller, if specially desired. The brick is provided with a depression 10 in both its upper and its lower faces, the depressions being preferably of like contour as the brick itself, whereby the brick is provided at both its top and its bottom surfaces with a raised margin 11, the margin being flat and rectangular in cross-section when the brick is of this form.

Upon both the upper and the lower faces of the brick, in the depression 10, one or more (preferably two) nipples 12 are formed integral with or attached to the body of the brick at each end. These nipples are arranged diagonally with respect to a line drawn transversely through the brick, but the nipples upon the same side are also preferably in alignment or parallel to a line drawn longitudinally through the brick, and the corresponding nipples upon both faces are in vertical alignment, one being immediately beneath the other. These nipples are ordinarily made to extend a slight distance above the plane of the margin 11 of the brick, but they may be made flush with said margin, or even be below the plane thereof, if occasion may demand.

Under such an arrangement it is evident that when the bricks are placed together in a manner to break joints the nipples upon one end of the under face of the upper brick will be located between the nipples on the corresponding end of the upper face of the lower brick, and that there will be sufficient space between the nipples to permit the bricks to be moved endwise or sidewise, as may be required; and it is likewise evident that the cement or mortar bed 13 in which the bricks are laid may be made as deep as desired or as shallow as may be required, since even when the margins of the brick are brought in contact there will be a sufficient quantity of cementing material between them, as is clearly shown in Fig. 3, while the nipples will effectually prevent a sliding movement.

It will be seen especially by reference to Fig. 3 that the bricks practically interlock, whereby an exceedingly strong bond is obtained.

Since the nipples extend beyond the flat surfaces of the bricks, when one brick is placed upon another the nipples will bury themselves in the cement or mortar within the re-

cesses of the bricks and form a wall or arch so solid and strong that a brick cannot be removed without breaking it to pieces.

The improved construction of the bricks affords such a strong bond that iron bands or ties, such as are usually employed in the construction of buildings, are dispensable. Furthermore, as the marginal portions rest directly upon each other without any mortar intervening between them the mortar cannot be washed out or otherwise injured by rain, &c.

Walls constructed with the improved nipple-brick will therefore be much stronger than ordinary brick walls, and the slipping of one brick on the other is practically impossible. These advantages will be especially valuable in the construction of chimneys and arches. Furthermore, the outer surface of the walls will be continuous and perfectly smooth, instead of being broken by strips of mortar, as in ordinary brick walls.

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

1. A brick having its upper and lower surfaces provided with recesses, and projections or nipples extending outwardly from the bottoms of the recesses, substantially as described.

2. A brick having its upper and lower surfaces recessed within marginal lines and projections or nipples extending outwardly from the bottoms of the recesses beyond the plane of the marginal portion of the brick, substantially as described.

3. A brick having its upper and lower surfaces provided with recesses and projections or nipples extending outwardly from the bottoms of the said recesses, the nipples being in parallel diagonal or oblique lines whereby two bricks may be so placed together that the nipples of one brick will be arranged in lines oppositely inclined to those of the other brick, and in longitudinal alignment with the nipples of said other brick so that the bricks will interlock, substantially as described.

OSCAR KLEINBERGER.

Witnesses:
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