To all whom it may concern:

Be it known that I, SYLVESTER A. MARSTELLER, a citizen of the United States, residing at Carrick, in the county of Allegheny and State of Pennsylvania, have invented a new and useful Improvement in Brick and Wall Constructions, of which improvement the following is a specification.

My invention relates to the construction of the various kinds of walls, chimneys, etc., and the form of brick or tile employed in the same.

My invention has for its principal objects, to provide a brick which will, in wall, chimney, and other constructions, greatly reduce the quantity of mortar in the construction thereof, in comparison with that of the ordinary brick, thus reducing the cost; to provide a brick that can be more readily handled by the workman in the construction of walls, etc., as well as quickly laid; that will permit of the free circulation of air in the wall, and that will be strong, durable, not liable to displacement, and be of neat appearance.

With the above objects in view, my invention consists in certain features of construction, arrangement, and in certain parts, as will be hereinafter more fully set forth in this specification, and particularly pointed out in the appended claims.

In the accompanying drawing, which forms a part of this specification, I have shown a practical embodiment of my invention, wherein:

Figure 1 is a plan of the regulation brick as employed in straight course work of a structure. Fig. 2 is an end elevation of the same. Fig. 3 is a plan of the brick as employed in the corners of the structure. Fig. 4 is an end elevation of the same. Fig. 5 is a plan of a portion of a wall constructed in accordance with my invention, and Fig. 6 is a side elevation thereof, partly in section. Fig. 7 is a perspective of a modified form of brick for straight course work.

In the embodiment shown, the brick employed for straight course work comprises a body portion having a flat underside portion which is provided near its two opposite sides with the longitudinally-disposed mortar keys or grooves 2—2. On the upper side of said body, at the two opposite sides thereof, are formed the two upwardly-extended parallel flanges 5—5, constituting in fact upper turned portions of the side walls, each of which has formed therein a longitudinally-disposed mortar groove 4, preferably, shallow, as shown, to economize in the quantity of mortar used, and at the same time produce a greater mortar thrust than is secured by the ordinary brick. Intermediate of these flanges, but of less depth, is also formed the longitudinal rib 5, having tapered side walls and presenting in cross-section the appearance of a dovetail. This rib is intended to serve the purpose of a hand grip for the workman in handling and setting the brick during the construction of the wall in which they are employed.

The brick employed in the corners of the wall or other structure, is usually made of half the size of that of the other brick. This brick comprises the body portion 6, having the flange portion 7 extending along one side and end thereof in right-angular form. This brick has also a mortar key or groove 8 formed about the flanged portion thereof and a like groove 9 in the plain underside thereof.

In forming a wall with the above described brick, the straight course brick is laid, end to end, on a suitable foundation with mortar 10 therebetween, the underside of the same being also embedded in the mortar at the key or grooves 2, thus keying the layer to the foundation. At the end of the wall is also arranged and secured by mortar the corner brick, against which, and a portion of the adjoining straight brick, abuts the first brick of the adjacent or connecting side wall at right angles thereto. The construction of the wall is then continued, the flanged portion of the bricks always being uppermost, the mortar between the flanged top of the one layer and the plain bottom portion of the next layer directly thereabove being keyed to one another, as shown in Fig. 6, and also giving a greater mortar thrust. In handling and laying the brick, the workman grasps the same by the central rib 5, the tapered sides thereof enabling him to more firmly grasp the same without danger of its slipping from his grasp. The channels formed between the flanged portion of the brick, as will be readily apparent, form an air space between the layers of brick.

In Fig. 7, where the modification is shown, the body portion 11 of the brick is provided on its upper side with the three flanges 12—12—12, the intermediate one of which 110
may either be employed as an additional support, or as a hand grasping rib, as desired. The flanges are each provided with a mortar key groove, there being similar grooves formed in the flat underside portion of the body.

Having thus shown and described a practical embodiment of my invention, what I claim is—

1. A building block, the face of which is brick size, comprising a plurality of spaced-apart, load-sustaining members, said load-sustaining members being connected by a horizontal transverse web, which, with said load-sustaining members, constitutes the base of the block, and a longitudinal member extending vertically from and connected with said horizontal transverse web and arranged between said spaced-apart, load-sustaining members, and adapted for the purpose of a hand-hold, the said load-sustaining members, the transverse web connecting them and the longitudinal hand-hold member being of uniform length.

2. A building block, comprising a plurality of spaced-apart, load-sustaining members, said load-sustaining members being united by a horizontal transverse web arranged horizontally through the centers of the load-sustaining members and constituting, with said load-sustaining members, the base of the block, and a longitudinal member integral with and extending vertically from the said horizontal transverse web, the said longitudinal integral member being disposed substantially midway between said spaced-apart, load-sustaining members and adapted for the purpose of a hand-hold, the said load-sustaining members, the transverse web connecting them and the longitudinal hand-hold member being of uniform length.

3. A channel brick including a flat body portion having parallel side members projecting from one face thereof, said members being provided at their outer edges with mortar grooves and the opposite face of the body portion being provided with corresponding mortar grooves, the members defining an intermediate air space and having substantially the size of a building brick, and a hand hold projecting into the said air space from an intermediate portion of the body portion.

4. A channel brick including a flat body portion having parallel side members projecting from one face thereof, said members being provided on their upper edges with mortar receiving surfaces, the opposite face of the body portion being provided with mortar grooves, the members defining an intermediate air space and having substantially the size of a building brick, and a longitudinally extending hand hold projecting into the air space from an intermediate portion of the body portion, said hand hold having a spaced and parallel relation to the side members.

5. A building block comprising a plurality of spaced-apart load-sustaining members having their upper and lower surfaces, respectively, lying in common planes, and a horizontal transverse web connecting the load-sustaining members arranged substantially below a plane passing horizontally through the centers of the load-sustaining members and forming with the lower portions of the load-sustaining members a base for the block, and a central longitudinal web connected to said transverse web and disposed between and spaced from said side members and adapted for the purposes of a hand hold, all parts of the block being included between the planes of the upper and lower surfaces of the load-sustaining members.

6. Hollow wall construction consisting in twin walls comprising channel brick adapted to be laid horizontally in courses, mortar being interposed between the courses and bonding the same, each brick having a plurality of spaced-apart, load-sustaining members connected by a horizontal transverse web, which, with the load-sustaining members, constitutes the base of the block and forming above said transverse web, and between said load-sustaining members, a central horizontally disposed air space and having a longitudinal vertically disposed member connected to said transverse web and arranged between said load-sustaining members, the said load-sustaining members, the transverse web connecting them and the vertical, longitudinally disposed member all being of uniform length, and the said horizontal air space interrupting the mortar joints transversely of the walls.

In testimony whereof, I have hereunto signed my name in the presence of two subscribing witnesses.

SYLVESTER A. MARSTELLER.

In the presence of—

R. S. HARRISON,

LAWRENCE G. CARLIN.