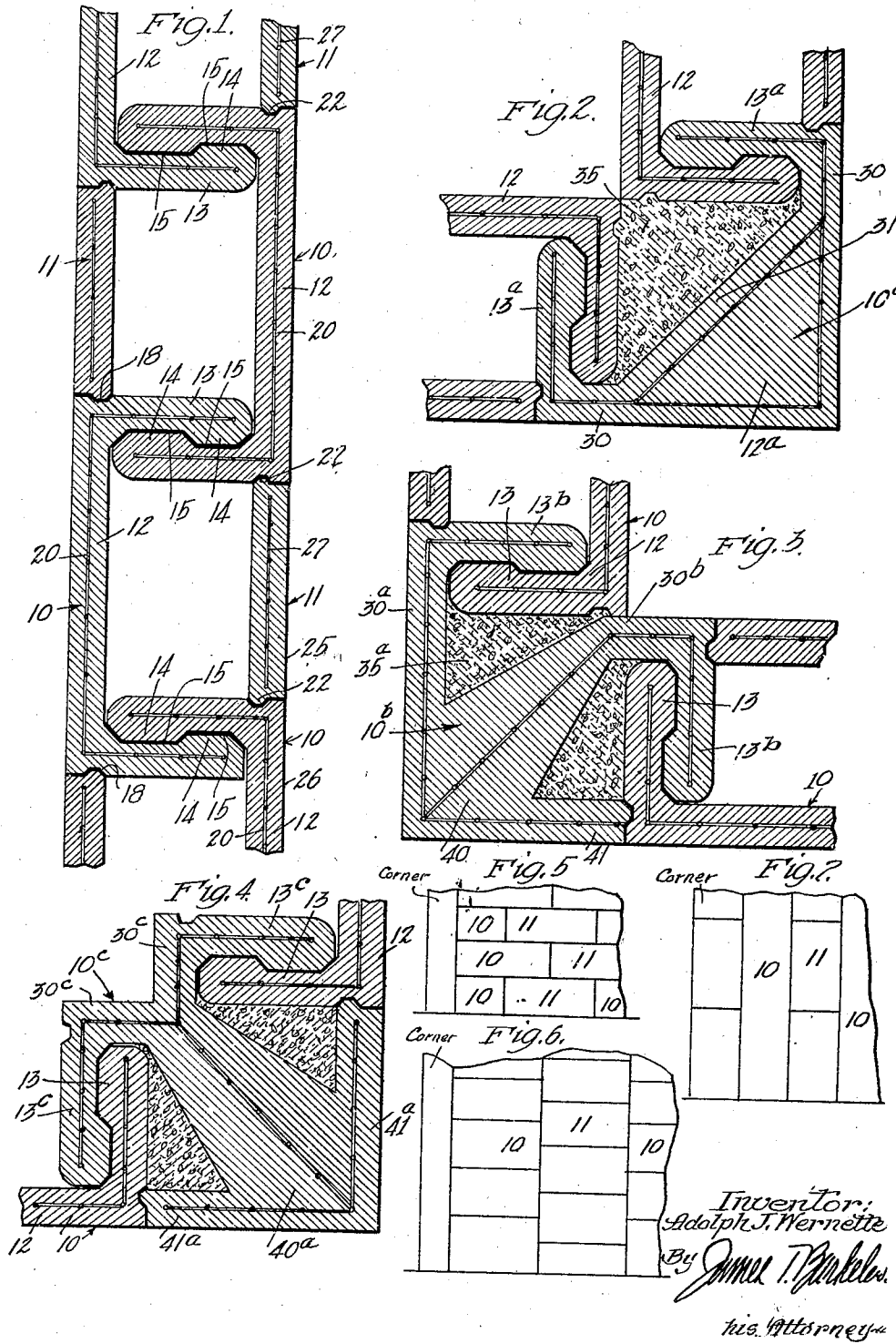


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A. J. WERNETTE.
BUILDING CONSTRUCTION.
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UNITED STATES PATENT OFFICE.

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BUILDING CONSTRUCTION.

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To all whom it may concern:

Be it known that I, ADOLPH J. WERNETTE, a citizen of the United States, residing at La Crescenta, Glendale, in the county of Los Angeles, State of California, have invented new and useful Improvements in Building Constructions, of which the following is a specification.

This invention has to do with a building construction and it is an object of the invention to provide a construction which is simple, strong, neat and inexpensive.

A feature of the invention is the provision of a construction which can be applied to, or embodied in, blocks for forming straight walls, corners, etc., and which interlock and form a strong, neat structure.

Another feature of the invention is the extreme simplicity of the blocks provided by the invention. In accordance with the invention two forms of blocks are employed in forming a straight wall, one form of block being a simple rectangular slab, the other being a similar slab with flanges at its ends. At corners, the invention may be carried out in various manners as will be hereinafter pointed out. All the blocks necessary in carrying out the invention are simple in shape and easy to handle and therefore are practical and desirable for use.

The various objects and features of the invention will be best and more fully understood from the following detailed description of a typical preferred form of the invention throughout which reference is had to the accompanying drawings in which:—

Fig. 1 is a horizontal section of a portion of a straight wall embodying the present invention; Fig. 2 is a horizontal section of one kind of corner construction embodying the invention; Fig. 3 is a view similar to Fig. 2 showing another kind of corner construction embodying the invention; Fig. 4 is a view similar to Figs. 2 and 3 showing still another kind of corner construction embodying the invention; Fig. 5 is a side elevation of a portion of a wall showing one manner in which the blocks provided by the present invention may be laid; Fig. 6 is a view similar to Fig. 5 showing another manner in which the blocks provided by the present invention may be laid; and Fig. 7 is a view similar to Fig. 5 showing another manner in which the blocks provided by the present invention may be laid.

For forming a straight, or substantially

straight, wall or the like, the present invention provides a plurality of blocks 10 and spacers 11. Each block 10 has a body part 12 and flanges 13 extending from the ends of the body 10 preferably in the same direction from, or from the same side of, the body 12 as I have illustrated in Fig. 1. For ordinary construction it is preferred that the body 12 be rectangular in shape and that the flanges 13 be at the extreme ends of the body and arranged or disposed transversely of the plane of the body. In a vertical wall structure the body 12 of each block is vertically disposed and is arranged to extend longitudinally of the wall. The flanges 13 are vertically disposed and, being transverse to the plane of the body 10, extend transversely of the wall. When I call the members 10 blocks it does not mean specifically that they are of any particular size or projection, for, as far as the present invention is concerned, the members 10 may be short truly block-like members or they may be long and more in the form of slabs.

In accordance with the present invention each flange 13 has a vertically disposed enlargement or projection 14 at the outer part of its inner side and has a vertically disposed socket or recess 15 at the inner part of its inner side. A vertical groove or recess 18 is provided in the outer side of each flange 15 at its inner end, that is, at the end where the flange joins the body 12. In practice the blocks 10 may be cast or formed of concrete, or the like, so that they are solid continuous members and may, if so desired, be provided with reinforcing 20. It will be obvious, of course, that the blocks 10 can be designed and proportioned so that they are strong and so that they can be easily and cheaply cast or otherwise suitably formed. For instance, the proportions of the parts may be varied through a wide range without departing from the structure or formation necessary in carrying out the present invention and the various corners may be beveled or finished in a manner such as I have illustrated in the drawings.

In a wall the blocks 10 are arranged in a line or end to end with adjacent blocks facing in opposite directions, that is with the body parts 12 of adjacent blocks at opposite sides of the wall, and with the flanges 13 at adjacent ends of adjacent blocks, interlocked or together so that their inner sides are together and so that the projection 14

of each extends into the recess 15 of the other as clearly illustrated in Fig. 1. In practice the projections and recesses are designed or proportioned so that they fit each other more or less closely and thus cooperate to effectively lock the blocks against relative transverse movement. The interlocking of the flanges at adjacent ends of adjacent blocks so that their inner faces are together, that is, so that the flange of each block extends inwardly between the flanges of the other, positively holds the blocks against moving apart or separating longitudinally of the wall.

Each spreader 11 is preferably in the form of a rectangular slab or block just sufficiently long to fit between adjacent flanges of alternate blocks 10, that is adjacent blocks having their bodies at the same side of the wall, as clearly illustrated in Fig. 1. In other words, each spreader 11 fits between the outer sides of the two flanges arranged in interlocking relation with the two flanges of a block, to keep them spaced apart and thereby positively prevent them from moving away from the flanges of the block to become released therefrom. Projections 22 are provided on the ends of the spreaders 11 to extend into the recesses 18 in the flanges of the blocks so that the spreaders are held in place with their outer faces 25 flush with the outer faces 26 of the body parts 12 of the blocks. The spreaders 11, like the blocks 10, may be solidly cast or formed of concrete, or the like, and may be provided with reinforcement 27.

In Fig. 2 I illustrate one kind of corner block provided by the invention. This corner block 10^a has a body 12^a and two flanges 13^a. The body 12^a instead of being a straight rectangular member, as in the case of the body hereinabove described, is specially shaped to form a corner and has two ends parts 30 which are vertically disposed but which extend in different planes or directions. In the particular case illustrated in the drawings the end parts 30 are at right angles to each other and therefore form a square corner. A comparatively large fillet 31 may be formed in the corner between the end parts 30 to make the block 10^a solid and strong. The corner block 10^a is a corner block adapted to receive and cooperate with straight wall blocks 10 arranged so that their bodies 12 are at the inner side of the wall. The block 10^a has its flanges 13^a extending inwardly from the ends of its end parts 13. The flanges 13^a of the block 10^a are the same in construction and formation as the flanges of the blocks 10 and therefore receive and cooperate with the flanges of the blocks 10 in the manner clearly illustrated in the drawings. In practice the block 10^a may be formed so that there is a space between the flanges 13, which cooper-

ate with the flanges 13^a of the block 10^a, and the fillet 31 which can be filled with a suitably shaped block or which can be filled with a concrete 35, or the like, as I have illustrated in the drawing.

In Fig. 3 I illustrate a corner block 10^b adapted to receive and cooperate with one block 10 arranged with its body part at the inner part of the wall and one block 10 with its body part arranged at the outer part of the wall. The body of this corner block has one end part 30^a at the outer side of the wall, a corner part 40, an end part 30^b at the inner side of the wall, and flanges 13^b at the ends of the end parts 30^a and 30^b. The flange 13^b at the end of the end part 30^a at the outer part of the wall extends toward the inside of the wall and receives and cooperates with the flange 13 of the block 10 having its body part 12 at the inner side of the wall. The flange 13^b at the end of the end part 30^b extends toward the outside of the wall and receives and cooperates with the flange 13 of the block 10 having its body at the outside of the wall. A spreader part 41 extends from the corner part 40 to engage and cooperate with the flange 13 cooperating with the flange 13^b which extends from the end parts 30^b, in the same manner that the spreaders cooperate with the flanges throughout the construction. The block 10^b is preferably designed so that there are spaces left when the flanges 13 of the blocks 10 are in place in connection with the flanges 13^a which can be filled with concrete 35^a, or the like.

The corner block 10^c shown in Fig. 4 of the drawings is adapted to cooperate with or receive flanges 13 of blocks 10 having their bodies 12 at the outer sides of the wall. The body of the block 10^c comprises a corner part 40^c and two end parts 30^c. Flanges 13^c extend outwardly from the ends of the end parts 30^c. In this particular corner block the end parts 30^c are both at the inner side of the wall and both flanges 13^c extend outwardly from the end parts. Spreader parts 41^c extend from the corner 40^c to cooperate with the flanges arranged in connection with the flanges 13^c. From the drawings it will be obvious how the flanges 13^c and spreader parts 41^c receive and cooperate with the flanges 13 of the blocks 10. Although I have referred to the parts illustrated in Figs. 2, 3 and 4 as corner blocks, I do not mean that they are necessarily specifically blocks, as they may be post-like members illustrated in Figs. 5 and 6.

In Fig. 5 of the drawings I illustrate one manner in which the blocks and spreaders provided by the present invention may be laid. In this particular case the blocks and spreaders are short and are the same height and adjacent tiers of blocks and spreaders are staggered or overlapped so that the

blocks and spreaders do not register or come in line vertically. In Fig. 6 of the drawings I show another manner or arrangement of laying the blocks and spreaders provided by the invention. In this arrangement also the blocks and spreaders are the same height. The blocks 10 are arranged so that they are in line vertically but the blocks and spreaders are not in line longitudinally of the wall. By this last mentioned manner of laying the blocks and spreaders adjacent tiers are interlocked so that they cannot shift or move relative to each other.

In Fig. 7 I illustrate the preferred proportioning and arrangement of blocks. The corner parts and the spreaders are comparatively short while the blocks 10 are long so that they are continuous from the top to the bottom of the wall.

In practice the various members of the structure may be cemented or otherwise suitably tied together so that all cracks are sealed. For instance the inner and also the joining parts of the members may be coated with asphalt, tar or the like, so that the wall is made waterproof and the joints between the members are tight.

From the foregoing description it will be obvious how the present invention provides a simple, effective, slightly construction, how the various blocks can be easily and inexpensively made, how they can be easily and quickly laid or arranged together, and how they securely interlock to form a strong durable structure. Further it will be obvious how the parts or members may be formed of any suitable material, say, for instance concrete, clay, metal, etc., and how they can be suitably reinforced if necessary or desirable.

Having described only a preferred form of my invention I do not wish to limit myself to the particular details hereinabove set forth but wish to reserve to myself any changes or variations that may appear to those skilled in the art or that may fall within the scope of the following claims.

Having described a preferred form of my invention, I claim:

1. A structure including, a plurality of blocks each having a body and flanges extending transversely from the ends of the body, and a plurality of spacers, the blocks being arranged end to end with the bodies of adjacent blocks at opposite sides of the

structure and the flanges at adjacent ends of adjacent blocks with their inner sides together, the spacers being arranged between the flanges to hold the flanges at adjacent ends of adjacent blocks together.

2. A structure including, a plurality of blocks each having a body and flanges extending transversely from the ends of the body, the flanges having projections at their inner sides and recesses at their inner sides inward of the projections, the blocks being arranged end to end with the bodies of adjacent blocks at opposite sides of the structure and the flanges at adjacent ends of adjacent blocks with their inner sides together, so that the projections and recesses cooperate to hold the blocks against relative transverse movement, and spacers arranged between adjacent flanges of adjacent blocks having their bodies at the same side of the structure.

3. A structure including, a plurality of blocks each having a body and flanges extending transversely from the ends of the body, the flanges having projections at their inner sides, recesses at their inner sides inward of the projections, and recesses at their outer sides, the blocks being arranged end to end with the bodies of adjacent blocks at opposite sides of the structure and the flanges at adjacent ends of adjacent blocks with their inner sides together so that the projections and recesses cooperate to hold the blocks against relative transverse movement, and spacers arranged between adjacent flanges of adjacent blocks having their bodies at the same side of the structure, the spacers having projections extending into the recesses at the outer sides of the flanges.

4. A structure including, a plurality of blocks each having a body and flanges extending transversely from the ends of the body, and a plurality of spacers, the blocks being arranged end to end with the bodies of adjacent blocks at opposite sides of the structure and the flanges at adjacent ends of adjacent blocks with their inner sides together, the spacers being arranged to bear against the flanges to hold the flanges at adjacent ends of adjacent blocks together.

In witness that I claim the foregoing I have hereunto subscribed my name this 29th day of November, 1922.

ADOLPH J. WERNETTE.