April 19, 1932. E. M. WYATT 1,854,439

BRICK WALL CONSTRUCTION

Filed Feb. 20, 1929

Fig. 1.

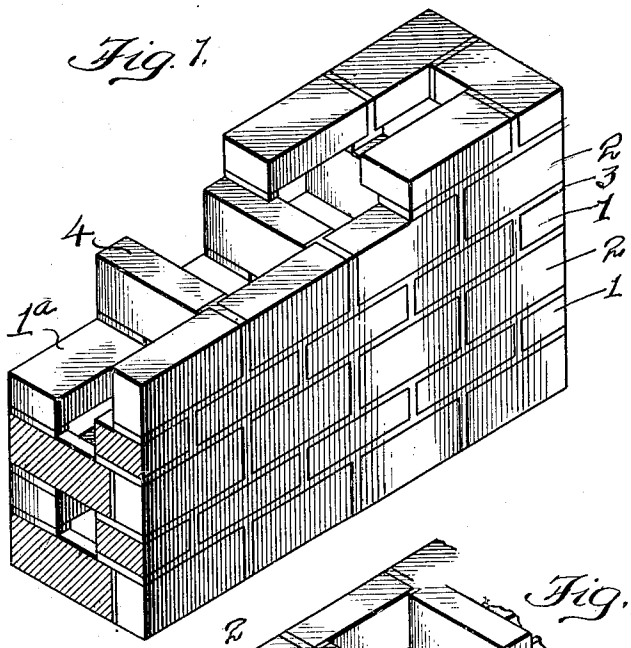
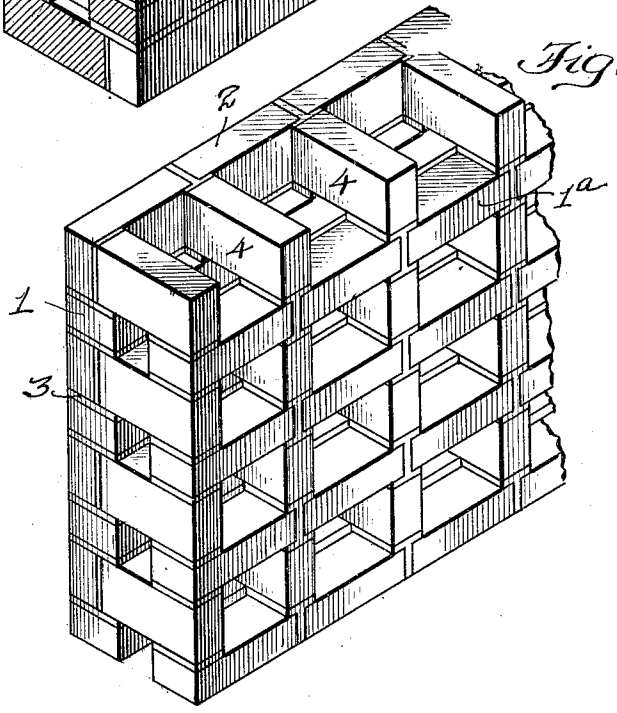


Fig. 2.



Inventor

Edwin M. Wyatt

By Samuel H. Benning Atty.

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UNITED STATES PATENT OFFICE

EDWIN M. WYATT, OF MADISON, WISCONSIN, ASSIGNOR, BY MESNE ASSIGNMENTS, TO AMERICAN FACE BRICK RESEARCH CORPORATION, A CORPORATION OF ILLINOIS

BRICK WALL CONSTRUCTION

Application filed February 20, 1929. Serial No. 341,350.

This invention relates to improvements in brick wall construction.

The object of this invention is to cheapen the expense of a brick wall by so designing it that while retaining the appearance of a solid brick wall it can be built with considerable saving of brick and brick laying labor, which in the form of construction shown amounts to a saving of nearly one-half.

Another object of the invention is to make it possible to increase the thickness without adding to its cost, thereby making practical the deep reveals about windows and doors generally considered as attractive and highly desirable architectural features.

In general, the invention consists of exterior tiers of brick work, made up of courses of bricks laid alternately as stretcher courses and bull stretcher courses, and connected across the intervening space by rowlock ties or withes.

In explanation of the terminology employed, it is proper to state that stretcher courses are laid flatwise in the ordinary manner so as to expose the side edges of the bricks, while bull stretcher courses are laid on edge to expose the broad sides of the bricks.

Rowlock brick ties are intermediate tie bricks standing on edge, which unite the front wall face with the brick work behind.

The drawings illustrating the invention serve as an exemplification of the underlying idea, which is that of alternating the stretcher courses and the bull stretcher courses in such a way as to afford inwardly projecting ledges, upon which the rowlock brick ties are supported in such a way as to unite the solid face of the wall with the open brick work behind.

In the drawings:

Figure 1 is an isometric drawing showing the front face of the wall; and

Fig. 2 is a similar view of the rear structure of the wall.

In more detailed explanation of the drawings, it will be observed that the front of the wall as illustrated is made up of tiers of bricks laid in such a way as to provide courses of stretchers 1, laid flat as in the more customary brick construction, alternating with courses 2 of bricks laid on edge and known as bull stretchers. The intervening mortar joints are designated as 3. Corresponding stretcher courses 1^a are laid in the rear of and in spaced relation to the stretchers 1, and corresponding stretchers in the front and rear tiers of the wall occupy the same level, but with the individual bricks in staggered relation in the two courses.

In view of the fact that the stretcher courses are laid flatwise, it will be noted that the front stretchers project inwardly beyond the inner faces of the bull stretcher courses in the front wall structure in such a way as to afford opposed ledges upon which the tie bricks 4 are laid on edge as rowlocks. These tie bricks being of uniform length serve to tie together or integrate the wall structure.

It is preferred to locate the brick ties so that their ends will overlie the vertical joints between the bull stretcher bricks in the front wall face, and they also cover the joints of the stretchers of the rear wall structure, which are laid in staggered relation to the corresponding stretchers on the same level in the front face of the wall.

Bull stretcher courses are omitted on the rear face of the wall, and the courses of stretchers 1^a have been so spaced from the front stretcher courses that the tie bricks completely span the rear stretchers with which they are bonded, bringing their rear edge faces flush with the rear edges of the rear courses and correspondingly increasing the width of the mortar joints between them. This provides a wall structure which is solid on the front face and of open work formation on the rear face, which results in a saving of bricks, but makes it necessary that furring and lath be used to support any plaster to be applied to the inside face of the wall.

From the above description, it will be apparent that the wall of the present invention is one in which the inner and outer sections are thoroughly knit and integrated together by the provision of the tie bricks which are firmly and adequately anchored into the tiers. By alternating the stretcher and bull stretcher courses in the manner indicated, an attractive variation in design is afforded to the front

wall face, and at the same time adequate provision is made for the formation of the ledges which serve to support and anchor the tie bricks, which combine with the rear stretcher courses to furnish a rear reinforcement of open formation.

Although, in the example shown, I have regularly alternated the stretcher courses and the bull stretcher courses, it is obvious that a similar result might be attained in cases in which two or more stretcher courses were alternated with two or more bull stretcher courses, or with variations in the alternation, without departing from the spirit of the invention, although the arrangement shown and described displays a regularity in structure which is preferable, or at any rate desirable, unless special reasons exist for an alternation in the regularity of the arrangement.

I claim:

1. A brick wall composed of equal sized bricks of standard dimensions, having a front face solid tier made up of alternating courses of bull stretchers and stretchers, the latter lying flatwise and extending rearwardly to form ledges, and the wall having its rear structure built to include stretcher courses standing in parallel, spaced and opposed relation to the stretcher courses of the front face tier, and tie bricks standing edgewise and abutting against the bull stretcher courses of the front tier, and having their front ends lying intermediate the ledges formed by the inward projection of the front stretcher courses and bonded therewith, and bridging the spaces between the edges of the front and rear stretcher courses and extending completely across the rear stretchers and bonded therewith to furnish a wall having a solid front face and an openwork rear structure with the rearwardly exposed faces of the bricks lying in flush relation to one another.

2. A brick wall composed of equal sized bricks of standard dimensions, having its front face tier made up of alternating courses of bull stretchers and stretchers, the latter lying flatwise and extending rearwardly to form ledges, and the wall having its rear structure built to include stretcher courses standing in parallel, spaced and opposed relation to the stretcher courses of the front face tier, and tie bricks standing edgewise and abutting against the bull stretcher courses of the front tier, and having their front ends lying intermediate the ledges formed by the inward projection of the front stretcher courses and bonded therewith, the forward ends of the tie bricks standing in overlapping relation to the joints in the bull stretcher courses in the front face tiers, and bridging the spaces between the edges of the front and rear stretcher courses, and extending completely across the rear stretchers and bonded therewith to furnish a wall having a solid front face and an openwork rear structure, with the rearwardly exposed faces of the bricks lying in flush relation to one another.

In witness that I claim the foregoing I have hereunto subscribed my name this 11th day of February, 1929.

EDWIN M. WYATT.