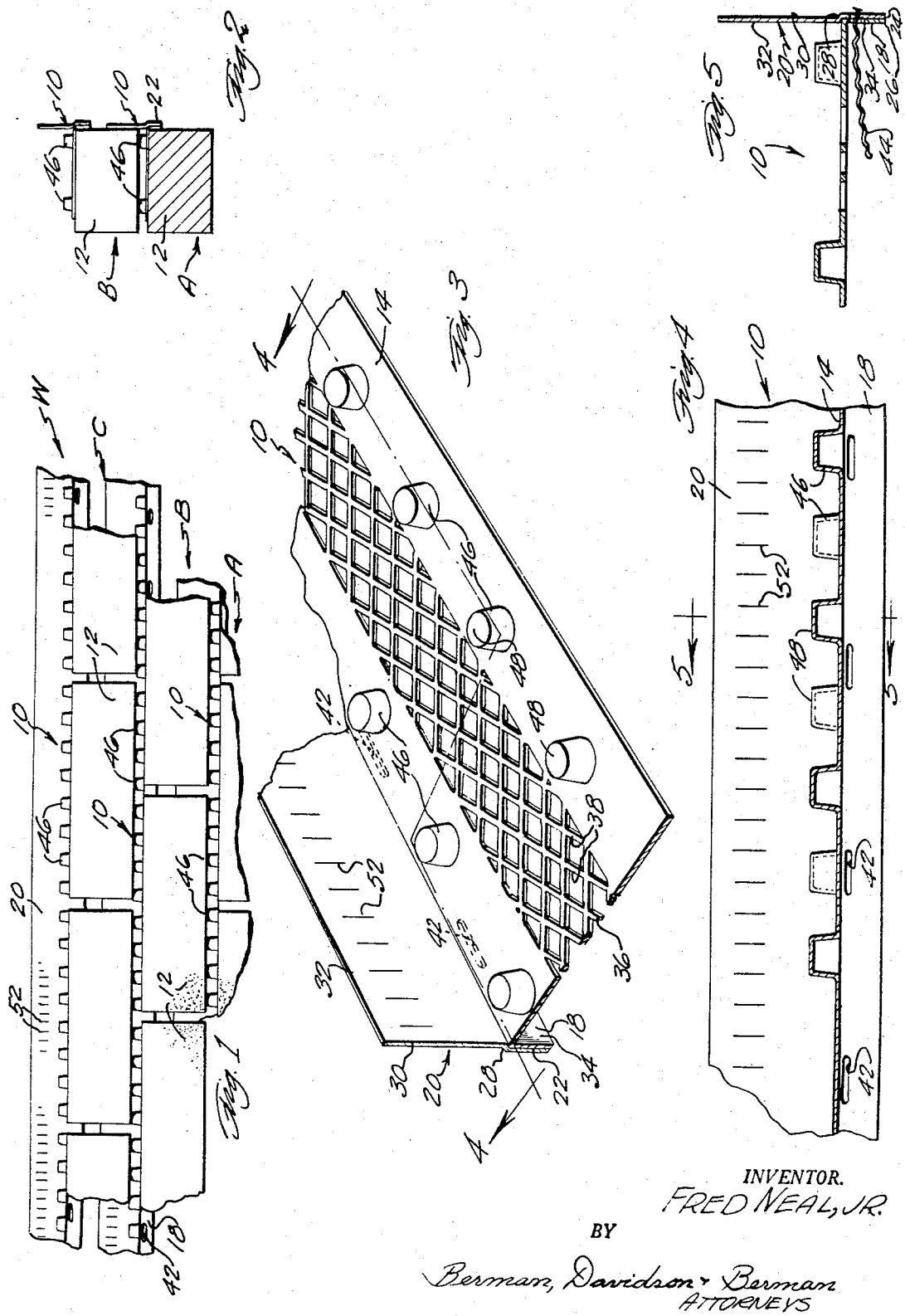
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COURSE SPACER AND MORTAR BARRIER

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COURSE SPACER AND MORTAR BARRIER

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ABSTRACT OF THE DISCLOSURE

(1) For use in erecting a masonry wall, a course guide comprising: a flat sheet of flexible material; opposed flanges normal to said sheet in opposite directions on the same side of said sheet and rows of spacing means projecting out of said sheet.

(2) A masonry wall comprising: upper and lower brick courses; a sheet of material positioned between and vertically spacing said courses, said sheet being pervious to mortar, and flanges on said sheet at the rear of said sheet and overlying adjacent courses.

This invention relates to masonry wall construction, and more particularly to a combined brick course spacer and mortar barrier device.

The primary object of the invention is the provision of a practical, inexpensive, and easily used device of the kind indicated, which facilitates and reduces the time required for construction of brick walls, to accurate predetermined heights and configurations, and which, at the same time automatically provides, at the side of the wall, remote from that from which the mortar is applied between courses, a uniform surface, to which wall components can be secured, without special preparation of that side of the wall.

Another object of the invention is the provision of a device of the character indicated above, which:

(1) Assures accurate and uniform spacing and orientation of the bricks in a course, and in overlying and in underlying courses;

(2) Enables working out, beforehand, the proper placement for brick around wall openings and corners;

(3) Enables construction of any desired number of imposed courses of brick, without interrupting the building for the application of mortar, so that the mortar can then be applied either manually, or by machine, at substantial savings of labor, and without the loss of mortar which would otherwise escape between courses, at the side of the wall remote from that which the mortar is applied;

(4) Eliminates the need to level any but the bottom course of bricks, and enables predetermining the exact height of the top course, without resorting to the common practice of varying the thickness of mortar between courses.

A further object of the invention is the provision of a device of the character described above, which is adapted to be made of kraft paper, treated to have the necessary stiffness and load-supporting characteristics, but retaining the capacity to be cut to size and dimensions with ordinary shears, the device thereby being cheaper to provide than metal construction and cheaper to handle and store. Other equivalent materials may be used.

In the drawings:

FIGURE 1 is a fragmentary side elevation showing a brick wall constructed with devices of the present invention, before application of mortar thereto;

FIGURE 2 is a diagrammatic end view, partly in section;

FIGURE 3 is an enlarged fragmentary perspective view of a device of the invention, per se;

FIGURE 4 is a vertical longitudinal section, taken on the line 4—4 of FIGURE 3; and,

FIGURE 5 is a vertical transverse section, taken on the line 5—5 of FIGURE 4.

Referring in detail to the drawings, a brick wall W is shown, which comprises upper, intermediate, and lower brick courses C, B, and A, respectively, which are vertically spaced at the same distances apart, by means of devices **10** of the present invention, the bricks **12** in each course being longitudinally spaced from each other, at uniform distances, with the spaces between the bricks in the courses staggered.

The device **10** comprises an elongated, rectangular horizontal sheet **14**, of suitably treated kraft paper. The sheet **14** is folded along a longitudinal line parallel spaced from one longitudinal edge thereof, to define a pendant, relatively narrow right-angular flange **18**. A perpendicular mortar barrier sheet **20**, narrower than the sheet **14**, and preferably narrower, as indicated in FIGURE 2, than the height or thickness of a brick **12**, has a lower portion **22** thereof secured, by any suitable means, to the outer side of the flange **18**, with the lower edge **24** of the barrier sheet on a level with the lower edge **26** of the flange **18**. The material of the barrier sheet **20** is deformed and displaced, as indicated at **28**, over the upper edge of the flange **18**, so that the main portion **30** of the barrier sheet **20**, is positioned in vertical alignment with the flange **18**. This arrangement puts the inner surface **32** of the barrier sheet flush with the inner surface **34** of the flange **18**.

The horizontal sheet **14** is wider than the main barrier sheet portion **30**, but is slightly narrower than the width of associated bricks **12**, as shown in FIGURE 2. The horizontal sheet **14** is formed, along its longitudinal centerline, with a parallel sided, relatively wide grid **36**, preferably defined by diamond-shaped openings **38**. The grid **36** is provided to procure adequate bond between mortar applied between the brick courses and the bricks thereof.

The dual thickness of material defined by the flange **18**, and the lower portion **22** of the barrier sheet **30**, is formed, at regular longitudinal intervals, with longitudinally elongated slots **42**, through which metal or other material wall ties **44** are adapted to be engaged, as indicated in FIGURE 5.

The brick course spacing function of the horizontal sheet **14**, aside from the thickness thereof, is provided by rows of equally longitudinally spaced and aligned uprising projections **46**, located spacedly at opposite sides of the grid **36**, the projections in the rows being staggered relative to each other.

The projections **46** are preferably in the form of hollow frusto-conical studs, machine-formed in the sheet **14**, and having flat load-bearing upper ends **48**, but may be otherwise formed and suitably attached to the sheet **14**.

The side of the main portion **30** of the barrier sheet **20**, facing the horizontal sheet **14**, is formed with a longitudinal row of equally longitudinally spaced perpendicular, parallel gauge marks **52**, which are visible above the bricks **12** laid upon the projections **46**, to serve as guides to the accurate and uniform longitudinal spacing of adjacent bricks **12**, relative to each other, in a course; and a guide to the laying of bricks in an overlying course.

As indicated in FIGURE 2, in use and operation, a lower brick course A having been laid and levelled, a device **10** is then placed thereon, with the gauge marks **52** thereof properly related to the ends of the bricks in the course A, for the desired arrangement of courses, and with the flange **18** engaged with the related sides of the bricks in the course A, so that the then upstanding barrier sheet **20** extends above the course A.

The next above course B is then laid upon the projections **46** of the device **10**, with the bricks of the course B,

longitudinally spaced from each other, with reference to the gauge marks **52**, and with the related sides of the bricks in the course B engaged with the barrier sheet **20**.

The laying of the next above brick course C is then proceeded with, another device **10** having first been placed upon the course B, and the laying of subsequent brick courses is proceeded with in the same manner.

Several mutual supporting brick courses having been laid, as above outlined, or an entire wall, mortar is adapted to be applied between the courses, either manually or by machine. The applied mortar is positively stopped from being forced out between the courses, and between adjacent bricks in courses, by the presence of the barrier sheets **20**.

What is claimed is:

1. A masonry wall comprising upper and lower brick courses, a device positioned between and vertically spacing said courses, said device comprising a horizontal sheet resting upon the lower course, said sheet being formed with spaced projection means upstanding thereon, the upper course supportably resting upon the projection means, wherein a perpendicular mortar barrier is secured to and extends above the horizontal sheet and extends upwardly across the gap between the brick courses and is in contact with one side of the bricks in the upper and lower courses.

2. A masonry wall according to claim **1**, wherein said barrier reaches above the upper course, the part of the barrier wall extending above the upper course being formed with equally longitudinal spaced vertical gauge marks related to the ends of adjacent bricks in the upper course and adapted to serve as guides for the placing and longitudinal spacing of brick in a brick course laid upon the upper course.

3. A masonry wall according to claim **1**, wherein said barrier comprises a pendant flange along a longitudinal edge of the horizontal sheet, and an upstanding barrier sheet having a lower portion secured to a side of the flange, the barrier sheet having an upper portion laterally displaced relative to its lower portion whereby the surface of the flange and said upper main portion facing the horizontal sheet are flush with each other and engage bricks in the upper and lower courses.

4. A masonry wall according to claim **3**, wherein said horizontal sheet, said flange, and said barrier sheet are formed of treated paper-like material and said projections are hollow and formed of material of the horizontal sheet.

5. For use in erecting a masonry wall, a course guide comprising: a flat sheet of flexible material; opposed flanges normal to said sheet in opposite directions on the same margin of said sheet; rows of course spacing means projecting from said sheet; and a mortar pervious grid extending centrally the length of said sheet.

6. A course guide as set forth in claim **5**, in which the guide is formed of kraft board.

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