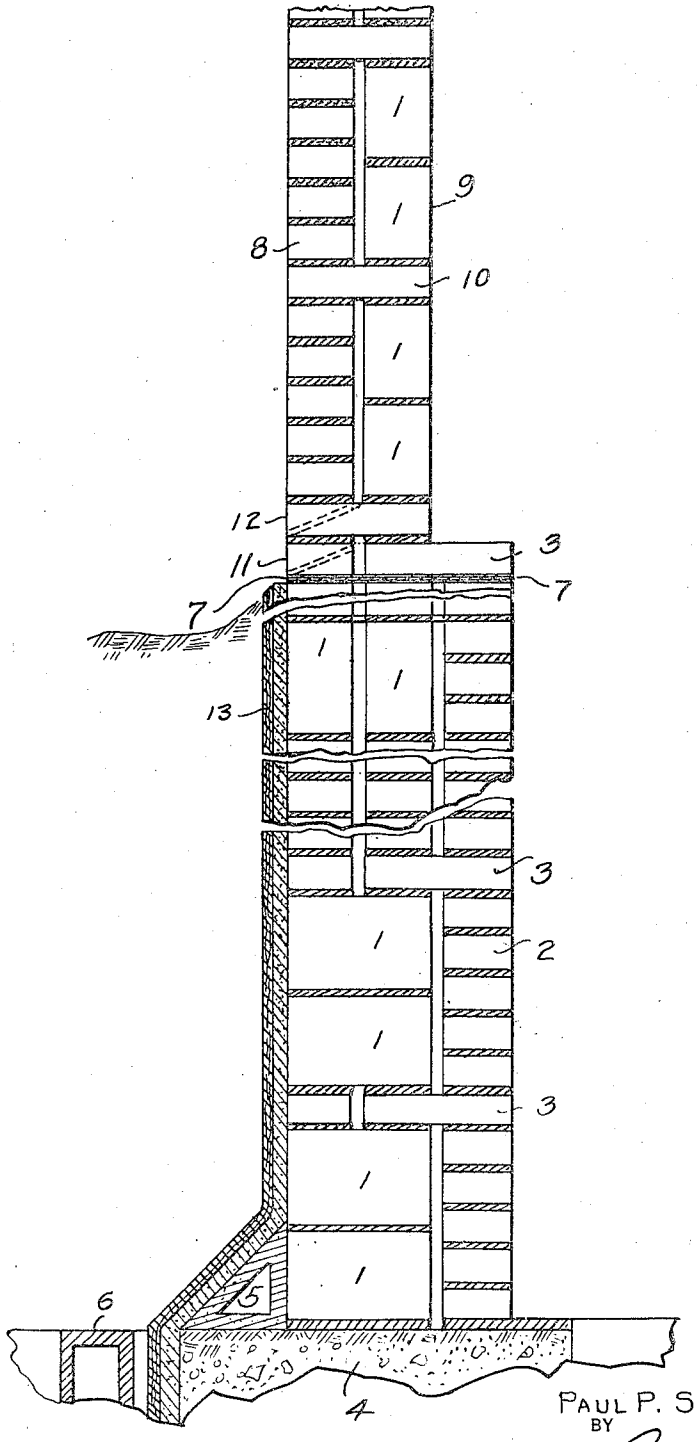
Feb. 14, 1939. P. P. STOUTENBURGH 2,146,775

BUILDING CONSTRUCTION

Filed Jan. 27, 1938



INVENTOR
PAUL P. STOUTENBURGH
BY
Robert A. Lavender
ATTORNEY

Patented Feb. 14, 1939 2,146,775

UNITED STATES PATENT OFFICE

2,146,775

BUILDING CONSTRUCTION

Paul P. Stoutenburgh, Washington, D. C.

Application January 27, 1938, Serial No. 187,215

5 Claims. (Cl. 72—127)

(Granted under the act of March 3, 1883, as amended April 30, 1928; 370 O. G. 757)

The invention described herein may be manufactured and used by or for the Government of the United States for governmental purposes without the payment to me of any royalty thereon in accordance with the provisions of the act of April 30, 1928 (ch. 460, 45 Stat. L. 467).

In building construction, especially in those portions below ground levels, dampness of the walls is frequently noted during periods of heavy precipitation. It has been the theory that this dampness has been caused by water penetrating the wall from the earth and to prevent this seepage special materials have been developed to waterproof the wall on the earth side and subsoil drains have been provided to carry off any water in the soil near the wall.

In spite of these precautions dampness still appears on the inner surface of the wall and I have found that this dampness is due to condensation of moisture within the wall caused by the infiltration of the moisture with the air through the inner surface of the wall, the condensation appearing on the inner side of the surface contacting with the soil. I have further found that this dampness is due to moisture condensing on the inside of the building walls above ground, which water slowly finds its way to the portions of the walls below ground level.

In the type of building construction of my invention, an embodiment of which is illustrated in the sectional view in the accompanying drawing, I provide a subsoil wall made up of an outer series of porous building materials such as cinder block 1 or hollow tile and spaced therefrom is the inner wall surface of brick 2 spaced from the cinder block and tied thereto by courses of tie-brick 3. I provide a footing 4 for the wall sufficiently wide to accommodate a porous tile 5 of cinder block or similar material which extends completely around the base of the wall and communicates with the open air preferably in the areaway in which the usual exterior drain trap opens. The outer surface of the wall is then pargeted and covered with tar paper 13 in the usual manner, the pargeting covering the exterior of the hollow tile 5 and extending below the usual subsoil drain indicated at 6.

At or slightly above the ground level a layer of slate 7 or metal is provided and the wall above this point is constructed with an outside layer of brick 8, interior cinder block or equivalent material 1 (with an interior facing of waterproofing 9) spaced from the brick and tied thereto with tie courses 10. Immediately above the layer of slate 7 I provide two courses of brick, one 11 a facing course and the other a tie course 12, certain or all of the brick in each course being provided with apertures extending from the exterior of the wall to the space between the face brick and the cinder block. In a wall of this construction any water collecting either by seepage or condensation has ready access to the exterior of the wall and in this manner the usual dampness appearing during periods of heavy precipitation is prevented.

It is to be understood that the foregoing description and accompanying drawing are merely illustrative of my invention and many modifications may be made therein without departing from the spirit of the claims appended hereto.

Having thus described my invention what I claim is:

1. A double wall building block construction including above-soil and subsoil portions, said upper portions comprising a relatively non-porous outer wall and a relatively porous inner wall longitudinally spaced apart to provide a passageway therebetween constituting a moisture drainage conduit the outlet of which extends exteriorly of the outer wall at substantially ground level, a moisture impervious member disposed between the above-surface and sub-surface wall portions, the inner wall of said sub-surface wall portion comprising a relatively non-porous inner wall and a relatively porous outer wall the latter being provided with a moisture-proof outer coating, said sub-surface walls being longitudinally spaced to provide a passageway constituting a moisture drainage conduit the outlet of which extends exteriorly of the outer wall but interior of the moisture-proof coating thereon, and a subsoil drain arranged exteriorly of said last named coating and extending to a level lower than the bottom of said subsurface wall.

2. A wall construction comprising parallel tiers of structural building units spaced from each other to form drainage passageways between the tiers and tied together at intervals throughout the height of the wall, the units of one of said tiers being of dense impervious material set in mortar and the units of another of said tiers being constructed of porous material set in mortar, and a drainage passageway contacting said porous tier and extending to a point exterior of said wall.

3. A wall construction comprising parallel tiers of structural building units spaced from each other to form drainage passageways between the tiers and tied together at intervals throughout the height of the wall, the units of one of said tiers being of dense impervious material set in mortar and the units of another of said tiers being

constructed of porous material set in mortar, a water-impervious coating covering the exterior face of the porous tier, and a drainage passageway formed of porous material contacting said porous tier and extending around the base of the porous tier to a point exterior of said wall.

4. A wall construction comprising parallel tiers of structural building units spaced from each other to form drainage passageways between the tiers and tied together at intervals throughout the height of the wall, the units of the outer of said tiers being of dense impervious material set in mortar and the units of the inner of said tiers being constructed of porous material set in mortar, a water-impervious coating covering the interior face of the porous tier, and a drainage passageway contacting said porous tier and extending around the base of the porous tier and through said impervious unit to a point exterior of said wall.

5. A wall construction comprising parallel tiers of structural building units spaced from each other to form drainage passageways between the tiers and tied together at intervals throughout the height of the wall, the units of the inner of said tiers being of dense impervious material set in mortar and the units of the outer of said tiers being constructed of porous material set in mortar, a water-impervious coating covering the exterior face of the porous tier, and a drainage passageway contacting said porous tier and extending to a point exterior of said wall.

PAUL P. STOUTENBURGH.