No. 669,041.

H. B. COPELAND. PORTABLE WALL. (Application filed May 11, 1900.)

(No Model.)



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UNITED STATES PATENT OFFICE.

HUGH B. COPELAND, OF DENVER, COLORADO.

PORTABLE WALL.

SPECIFICATION forming part of Letters Patent No. 669,041, dated February 26, 1901.

Application filed May 11, 1900. Serial No. 16,382. (No model.)

To all whom it may concern:

Be it known that I, HUGH B. COPELAND, a citizen of the United States of America, residing at Denver, in the county of Arapahoe 5 and State of Colorado, have invented certain new and useful Improvements in Portable Walls; and I do declare the following to be a

- full, clear, and exact description of the invention, such as will enable others skilled in 10 the art to which it appertains to make and
- use the same, reference being had to the accompanying drawings, and to the figures of reference marked thereon, which form a part of this specification.
- 15 My invention relates to improvements in portable walls provided with a glass, tile, or other similar or ornamental facing.

The invention will now be described in detail, reference being made to the accompa-20 nying drawings, in which is illustrated an em-

bodiment thereof. In the drawings, Figure 1 is a face view of a wall constructed in accordance with my in-

a wall constructed in accordance with my invention. Fig. 2 is a cross-section, and Fig. 3 a vertical section, of the same. The section

- 25 a vertical section, of the same. The section in Fig. 3 is taken through Fig. 1 on a zigzag line. Fig. 4 illustrates the body portion of the wall located in the rear of or behind the facing. Fig. 5 is a detail view illustrating
- 30 several forms of metal bars which may be employed in the construction of my improved wall. Fig. 6 is a detail view illustrating the washer. Fig. 7 is a fragmentary section shown on a larger scale.
- 35 Similar reference characters indicating corresponding parts in these views, let the numeral 5 designate the wall-facing, which, as shown in the drawings, is composed of diamond-shaped sections of opalescent glass and
- 40 circular parts composed of the same material and located at the angles of the diamond sections. The shape of the sections, however, as well as the ornamental design of the facing, is immaterial, since it is evident that an in-
- 45 finite variety of designs, both as regards the form of the sections as well as their arrangement in the wall, may be employed. The other elements of the wall, as shown in the drawings, consist of metal bars 6, a wire 50 screen 7, and a stratum of cement 8.

The rear surface of the facing-sections is

preferably roughened by grinding or in any other suitable manner preparatory to use. They are then placed face down on a flat surface. The screen 7 is soldered or otherwise 55 fastened to the bars 6. This structure, composed of the parts 6 and 7, is then placed upon the roughened surface of the facing-sections with the screen down or in contact with the said sections. The cement is then poured 60 upon the screen and passes through its meshes to contact with the roughened surface of the face-sections. The cement fills the spaces between the bars 6 and is preferably used in sufficient quantities to cover the 65 bars. (See Fig. 2.) These bars are preferably provided with elongated openings 6ª, through which fastening devices, as screws 9, may be passed for the purpose of securing the wall in place. The elongated openings are 70 advantageous where the wall is to occupy a vertical position, since if the floor settles the wall may be moved downward therewith, the elongation of the openings being in a vertical direction. For use on ceilings or horizon-75 tal surfaces the elongated opening has no special advantage, and the bars may be provided with a circular opening 6°, as shown at the extreme left in Fig. 5. The manner of forming the openings in the bars is immate- 80 rial so far as this specification is concerned, and therefore need not be described in detail. The several forms illustrated will be readily understood. After the cement hardens the wall is ready for use. This wall may be se- 85 cured directly to the studding or upright posts 10 of the partition by the screws or other fastening devices. (See Fig. 2.) In line with the openings in the reinforcing-bars 6 the facing-sections should be left out dur- 90 ing the formation of the wall, and the said openings should be filled with wooden plugs 15, which are removed after the cement hardens. After the screws are inserted these sections may be secured in place by the use of 95 cement, thus entirely concealing the screws.

The edges of the wall may be covered by a molding composed of glass strips or other suitable material, as shown at 12 and 13. (See Figs. 1 and 3.)

A washer $15^{\acute{a}}$ is preferably used in connection with each screw 10. (See Figs. 6 and 7.)

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As the cement 8 is poured upon the screen 7 a limited portion of it will pass through the screen to engagement with the facing 5. In Figs. 2 and 3 the scale is so small that no at-

5 tempt has been made to illustrate this thin layer of cement between the screen and the facing. In Fig. 7, however, this feature is illustrated, the said thin layer being designated by the reference character 8^a, in which

10 the washer 15 is embedded. As shown in the drawings, the screw-head is countersunk in the washer, making a smooth surface for the facing.

Having thus described my invention, what I claim is—

1. A portable wall composed of a sectional facing, an open-mesh backing applied to the reverse side of said facing, cement applied to the screen of the facing, and fastening de-

20 vices passed through the mesh backing and the cement into the support for the wall, the said fastening devices being concealed in front by the facing.

2. A portable wall composed of a sectional 25 facing, an open-mesh backing, apertured bars located in the rear of the backing, cement applied to the backing and bars, and fastening devices passed through the openings in the bars and extending rearwardly into the sta-

tionary support for the wall, the fastening de- 30 vices being concealed by the facing.

3. A portable wall composed of a sectional facing, an open-mesh backing, apertured bars located in the rear of the backing and provided with vertically-elongated openings, cement applied to the backing and bars, and fastening devices passed through the elongated openings in the bars and extending into the support for the wall.

4. A portable wall composed of a facing, an 40 open-mesh backing, apertured bars located in the rear of the backing, cement applied to the backing and bars, and fastening devices passed through the openings in the bars and extending rearwardly into the stationary sup- 45 port for the wall.

5. A portable wall composed of a facing, an open-mesh backing, bars located in the rear of the facing, cement applied to the backing and bars, and fastening devices passed 50 through the backing and extending into the stationary support for the wall.

In testimony whereof I affix my signature in presence of two witnesses.

HUGH B. COPELAND.

Witnesses: A. J. O'Brien, Grace Mytinger.