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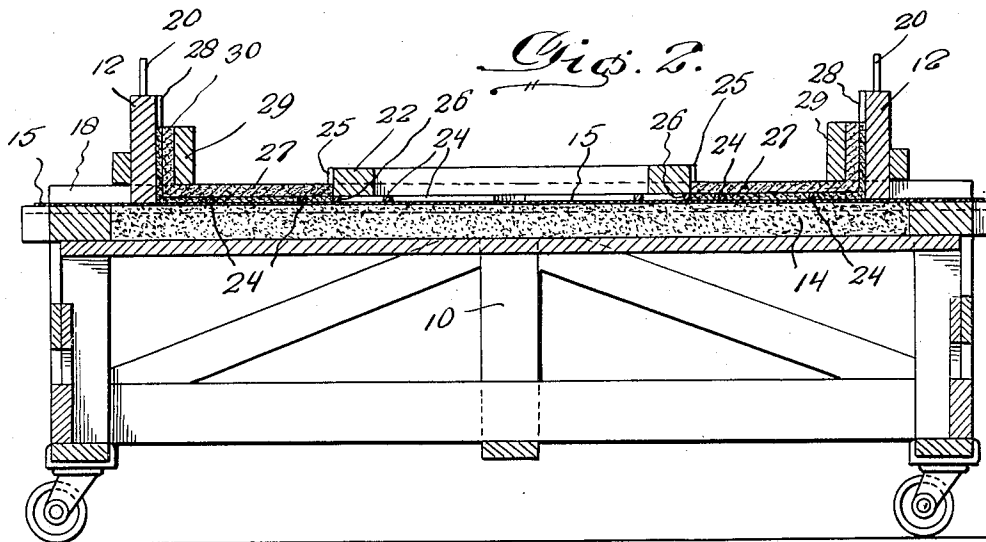
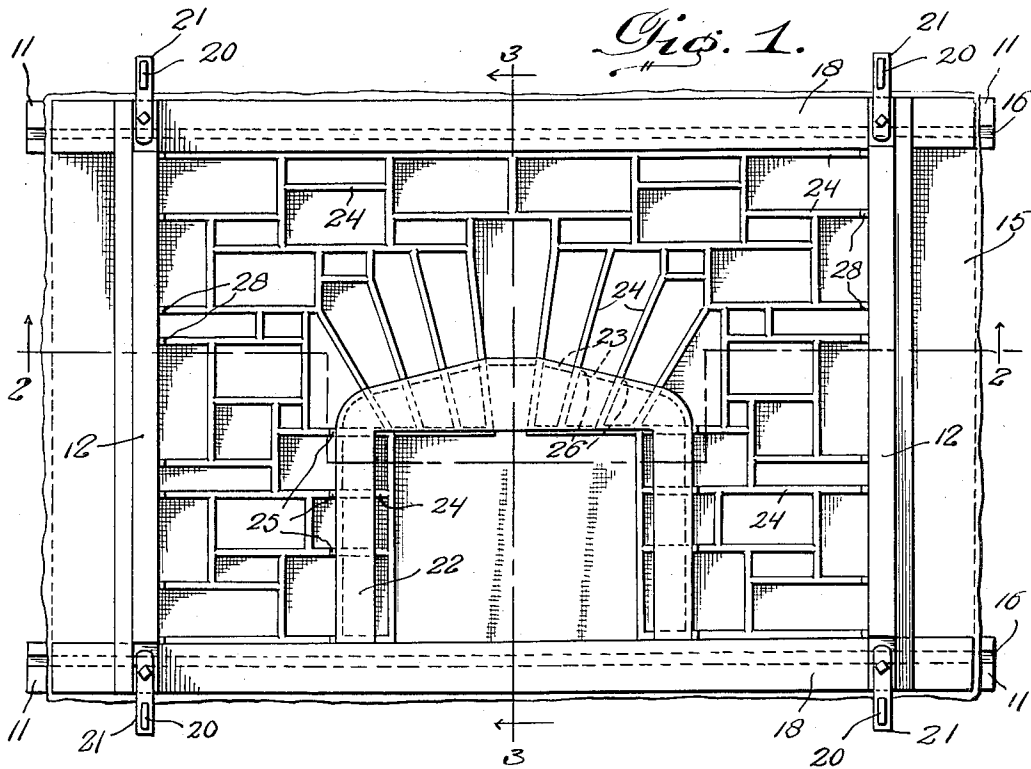
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1,937,306

APPARATUS FOR MAKING CONCRETE FIREPLACES

Filed July 1, 1931

2 Sheets-Sheet 1



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APPARATUS FOR MAKING CONCRETE FIREPLACES

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2 Sheets-Sheet 2

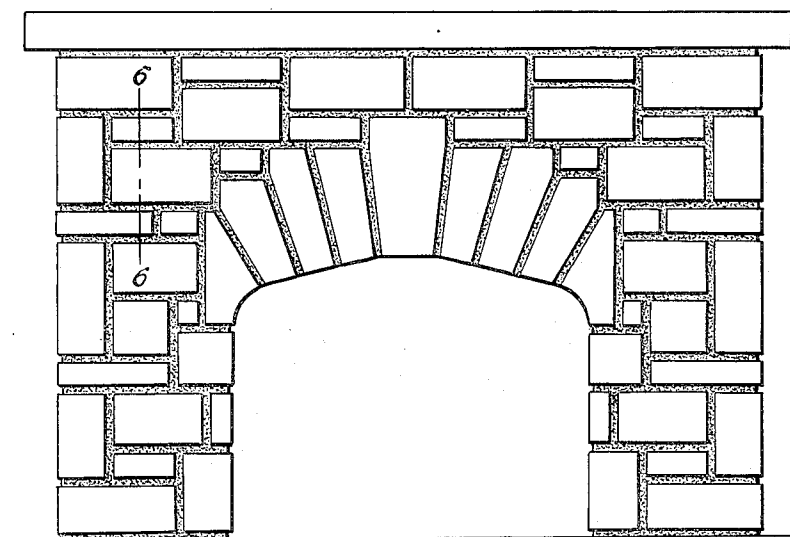
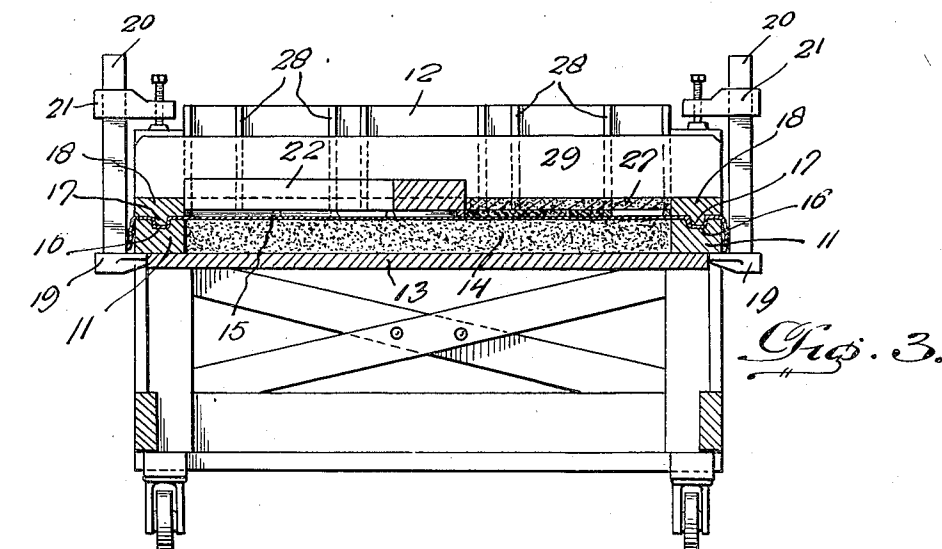
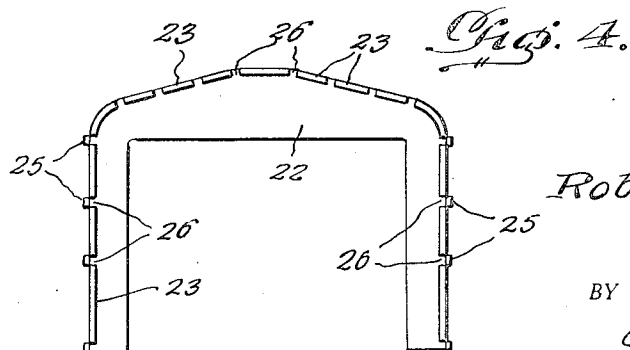
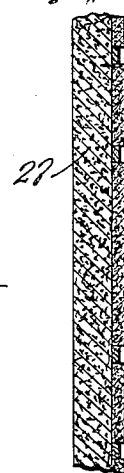


Fig. 6.



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UNITED STATES PATENT OFFICE

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APPARATUS FOR MAKING CONCRETE
FIREPLACES

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Application July 1, 1931. Serial No. 548,186

2 Claims. (Cl. 25—118)

The present invention relates generally to the art of concrete fireplaces, and more particularly to a new and improved method of making a fireplace characterized with the appearance of a smooth sandstone finish, which is obtained without the necessity of burnishing or rubbing the face of the product.

In carrying out the invention I contemplate the provision of a fireplace having a sandstone appearance, and one which is comparatively light in weight, and capable of being manufactured and marketed at a nominal cost.

Another important object of the invention resides in the method of making concrete fireplaces having a smooth even surface, free of air holes, air bubbles and the like, and one having the appearance of being made from a plurality of separate pieces suitably joined together.

The nature and advantages of the invention will be better understood from the following detail description when read in connection with the accompanying drawings, and wherein:

Figure 1 is a top plan view showing the apparatus used in the method.

Figure 2 is a sectional view on line 2—2 of Figure 1.

Figure 3 is a sectional view on line 3—3 of Figure 1.

Figure 4 is a view of one of the forms.

Figure 5 is a view in elevation of the fireplace constructed in accordance with my invention.

Figure 6 is a sectional view taken on line 6—6 of Figure 5.

The mold used in carrying out the present invention, includes any ordinary table-like support, preferably mounted on a wheeled frame-like structure 10. As herein illustrated, the table comprises spaced side and end members 11 and 12 respectively, and a bottom 13 which supports a bed of sand 14 of any desired thickness. The sand bed 14 has its surface smoothed and is maintained in a very wet condition.

Stretched over the sand bed 14 is a thin unblemished cloth 15 which is secured to the table in any suitable manner, in order to hold it taut. For this purpose, the side members 11 of the table are preferably grooved as at 16, and receive the tongues 17 formed on the clamping sills 18. The sills 18 are arranged beneath the end members 12, and as shown in Figure 3, after the cloth 15 has been arranged in position, pressure is exerted upon the end members 12 to hold the sill members in clamping relation with the side members 11. Clamps are used adjacent the corners of the apparatus, each clamp including a fixed jaw 19

engaging the side member 11, a vertical shank 20 upon which is slidably supported a movable jaw 21, the latter having a threaded adjustable member associated therewith for engagement with the end member 12.

The wall of the fireplace is molded about several forms, one of which is indicated at 22 in Figure 4. This form is arranged upon the cloth 15, and may of course be constructed from any suitable material and also vary in size without departing from the spirit of the invention. This form 22 is provided with spacing elements 23 to support the forms in spaced relation to the cloth 15 as clearly shown in Figures 2 and 3. This particular form is used to provide the wall of the fireplace with the usual arch opening as will be readily understood.

Also reposing upon the cloth 15 is a form in the nature of a skeleton frame including metallic bars 24 suitably joined together, and arranged relatively to provide any desired design for the face of the fireplace wall, as illustrated in Figure 5. This form obviously provides the face of the fireplace with intersecting grooves, thereby dividing the face of the wall into a plurality of flat smooth portions of relatively different sizes and contour, and which affords the finished product the appearance of being made up of separate pieces of relatively different dimensions, instead of a unitary construction. The cloth 15 and the form including the bars 24 are then covered with a plastic composition, of a thickness equal to the depth of the form. In other words the spaces defined by the adjacent bars of this form are filled with a plastic composition, and the latter is smoothed off level with the upper surface of the form. If desired, each of the spaces defined by the bars 24 of the form, or certain combination of said spaces can be filled with different colored cement, to provide the facing of the wall with a nicely blended color composition, with a view of enhancing its artistic and ornamental appearance. Certain of the bars 24 extend beneath the form 22, while rising from these bars are vertical extensions 25 received by notches or spaces 26 provided in the form 22. After the skeleton-like form has been filled with a cement or the like, the wall proper indicated at 27 is formed by pouring cement over the skeleton-like form as shown in Figure 2. This wall 27 is preferably a mixture of Haydite and Portland cement, which forms a sort of clay substance, and gives the fireplace a light weight construction.

After the cement wall 27 has been poured, the parallel side extensions of the fireplace are

formed. For this purpose, the end walls 12 which extend an appreciable distance above the bed of sand 14, have arranged thereagainst, vertical extension bars 28 forming part of the skeleton form.

5 The spaces between these bar extensions 28 are filled with plastic composition, similar to that used for the face of the wall. A board 29 is then arranged in spaced parallel relation to each end wall, and the space filled with cement to form
10 extension walls 30, which of course are united with the adjacent extensions of the face of the wall as will be readily understood.

After the method has been thus completed, the structure is allowed to stand for a few days,
15 and the mold is subsequently removed, together with the forms 22 and 24. The grooves formed by the removal of the skeleton form are then filled with mortar or the like of any desired color.

As hereinabove stated, one of the essential
20 characteristics of the invention, resides in providing a cement fireplace, free of air holes or bubbles, and having a sandstone finished appearance. This is accomplished by the use of a bed of sand and a cloth covering therefor, which
25 allows the sand to absorb water and moisture, and to prevent the formation of air holes and

bubbles while the article is being molded. Consequently, a product is produced having a smooth even surface, without the necessity of burnishing or rubbing said surface, and one having the appearance of a sandstone finish.

While it is believed that from the foregoing
80 description the nature and advantages of the invention will be readily apparent, I desire to have it understood that I do not limit myself to what is herein illustrated or described, and that such
85 changes may be resorted to when desired as fall within the scope of what is claimed.

What I claim as new is:

1. In a mold for making fire-places, a pallet adapted to contain a bed of sand and embodying
90 a bottom wall with upstanding side and end walls, a porous cloth, and means associated with the pallet for maintaining the cloth stretched in a taut condition over and upon the bed of sand.

2. In a mold for making fire-places, a pallet adapted to contain a bed of sand, a porous cloth,
95 and means associated with the pallet for maintaining the cloth stretched over and upon the bed of sand.

ROBERT GEORGE BARRIBALL.

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