R. L. DAY.

REINFORCED CONCRETE OR PLASTIC SLAB.

APPLICATION FILED MAY 23, 1916.

1,229,904.

Patented June 12, 1917.

2 SHEETS—SHEET 1.

Fig. 1.

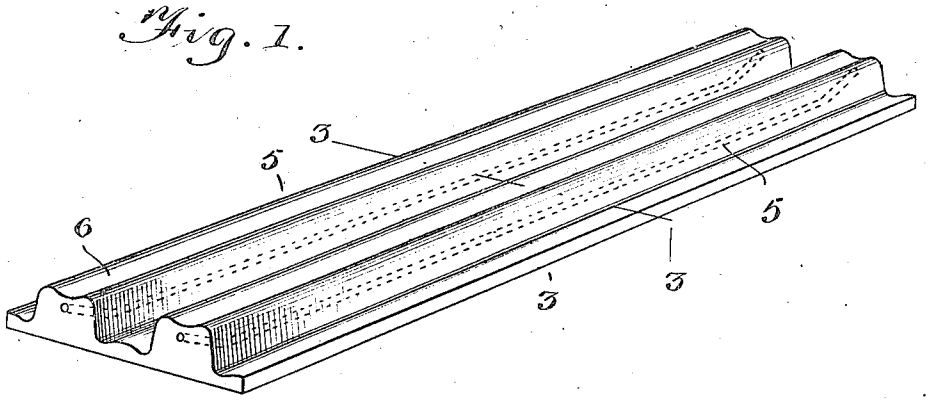


Fig. 2.

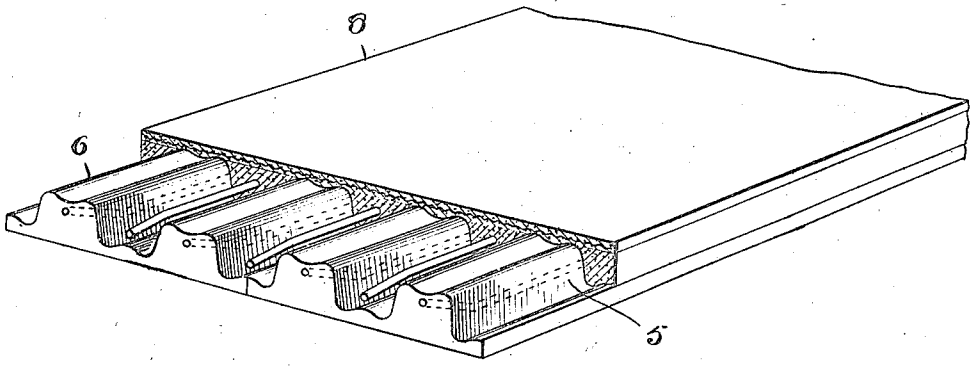
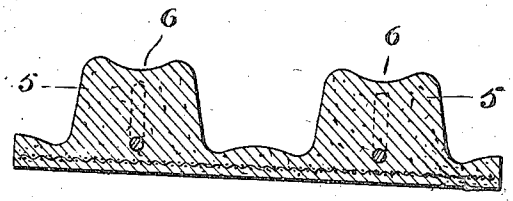


Fig. 3.



Witness

E. R. Ruppert.

Inventor

R. L. Day

By Victor J. Evans

Attorney

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2 SHEETS—SHEET 2.

Fig. 4.

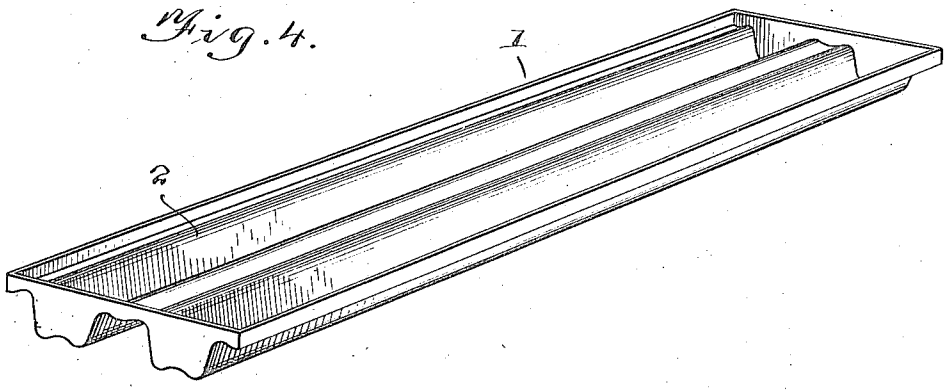


Fig. 5.

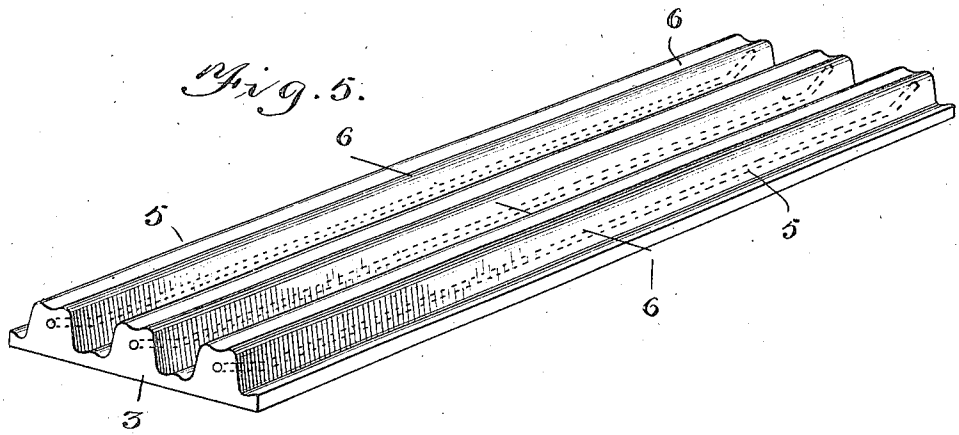
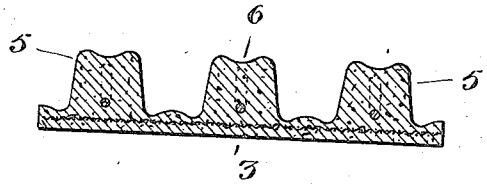


Fig. 6.



Witness

E. R. Ruppert

Inventor

R. L. Day

By Victor J. Evans

Attorney

UNITED STATES PATENT OFFICE.

ROBERT L. DAY, OF HUNTINGTON, WEST VIRGINIA.

REINFORCED CONCRETE OR PLASTIC SLAB.

1,229,904. Specification of Letters Patent. Patented June 12, 1917.

Application filed May 23, 1916. Serial No. 99,381.

To all whom it may concern:

Be it known that I, ROBERT L. DAY, a citizen of the United States, residing at Huntington, in the county of Cabell and State of West Virginia, have invented new and useful Improvements in Reinforced Concrete or Plastic Slabs, of which the following is a specification.

This invention relates to monolith reinforced concrete construction slabs for use in buildings or other construction in which reinforced concrete or plastic material is used.

In carrying out the improvement it is my purpose to construct a reinforced concrete or plastic slab which shall be simple, strong, durable, light and effective and which shall supplant the ordinary pressed steel, wood or other forms employed in the construction of floors, or other construction in which reinforced concrete is used.

It is also my purpose to provide means whereby monolith reinforced concrete or plastic slabs may be made at a factory, in a mold, and the rigidity, strength, and light weight of the slab, permit of transportation from the factory to the place where used; also the slab to be made in close proximity to the building or other construction where used, and because of the rigidity, strength, and light weight of the slab it should be used and supersede other reinforced concrete construction.

A still further object of the invention is to produce a reinforced concrete or plastic slab that shall have one of its faces formed with spaced parallel ribs whereby the grooves between the ribs provide pockets for semi-plastic finishing material such as concrete, plaster, or the like, and whereby a perfect bond will be afforded between the said finishing material and the alining slabs and also whereby the danger of breaking or flaking of the several coats of the finishing material will be effectively obviated.

Another purpose of my invention is to avoid and eliminate the expense of the centering which is usually erected and put in place to sustain reinforced concrete or plastic until it has hardened sufficiently to sustain its own and other weights. My invention serves as a centering for itself, and all plastic material which may be added to it for further strength and finish.

With the above and other objects in view the improvement resides in the construction, combination and arrangement of parts set forth in the following specification and falling within the scope of the appended claim.

In the drawings:

Figure 1 is a perspective view of a monolith reinforced concrete slab constructed in accordance with the present invention,

Fig. 2 is a similar view showing a plurality of slabs arranged in registering alinement and the plastic facing or finishing material partly applied thereon,

Fig. 3 is a greatly enlarged sectional view approximately on the line 3—3 of Fig. 1,

Fig. 4 is a view illustrating a mold in which one of the plates may be formed,

Fig. 5 is a view of a slightly different construction of the plate, and

Fig. 6 is a sectional view approximately on the line 6—6 of Fig. 5.

In carrying out my invention I provide any number of molds of the desired shape, size and material, and each of these molds 1 is formed with longitudinally extending grooves 2. Concrete or other suitable plastic material is poured in the mold and tamped therein to produce the slab 3, and the portion of the material received in the groove of the mold from the slab upon one of its faces is provided with longitudinally extending ribs or tongues 5.

By reference to the drawings it will be noted that the lower or outer walls of each of the grooved portions of the mold is centrally extended inwardly or that the same is formed with an inwardly projecting rib 5, and this rib, it will be also noted, provides the face of the ribs or tongues of the slab with a central longitudinally extending groove or channel 6. While this feature is not essential it is highly desirable, inasmuch as the finishing material, indicated by the numeral 8, will not only engage in the grooves between the ribs or tongues of the slab but also will be received in the referred to channels, so that the slabs will present additional surfaces to which the said finishing material will connect itself.

Each of the slabs preferably centrally of each of the tongues or ribs thereon has embedded therein one or a number of longitudinally extending members which are preferably constructed of metal and which materially add to the strength of the plates.

Each of the slabs across its entire surface, has embedded in the upper side of the

slab while being poured and made in the mold, reinforcement; plaited or woven steel wire principally, which materially adds to the strength of the slab after it is formed.

It is to be understood that the molds are adapted and used at factories, to make my reinforced concrete slabs, of general and stock dimensions for the market; the slab after seasoning being of sufficient strength, rigidity, and lightness of weight, to permit of transportation to an advantage. Also that the molds are adapted and used locally with respect to the building upon which the slabs are to be used and it will be further noted that the slabs in either instance may be thus produced and installed in the building or construction at a minimum cost.

The slabs, while constructed in various proportions, shapes and sizes, necessarily embody the spaced ribs or tongues, together with the reinforcing members mentioned, and the construction, while simple, is strong, durable, light and effective.

Having thus described the invention, what I claim is:

A reinforced plastic slab adapted to be produced at a factory having general stock, and various sizes and furnished to the market for use; or adapted to be constructed in close proximity to the construction upon which it is to be used, comprising a member having one of its faces formed with outwardly projecting spaced parallel ribs, a reinforcing element in its flat surface, consisting of finely meshed wire screening, a reinforcing element in each of the ribs consisting of a single length of iron rod having its ends bent upwardly and each of said ribs having a central longitudinally extending depression, and a similar raised portion in the spaces between said ribs, a superimposed filler mass adapted to be placed on said slabs and to settle on and between the said ribs, said mass also being provided with reinforcing elements that substantially correspond to those of the ribbed slabs.

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

ROBERT L. DAY.

Witnesses:
F. W. McCULLOUGH,
DANIEL DAWSON.