May 12, 1931. W. S. PATTISON 1,804,804

REENFORCED SURFACE FLOOR

Filed Aug. 22, 1929

Fig 1

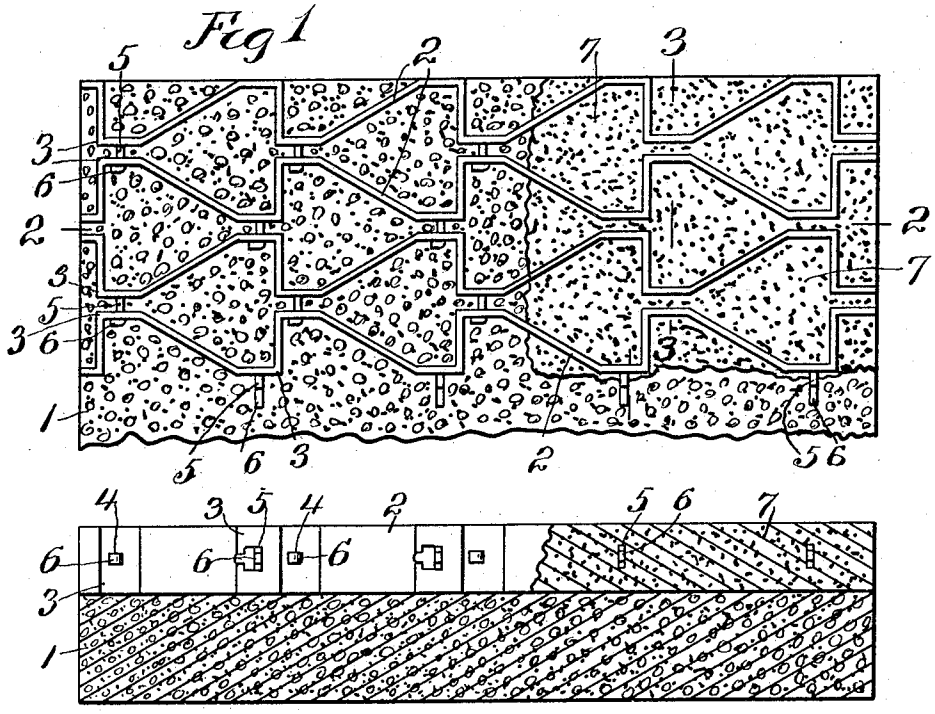


Fig 2

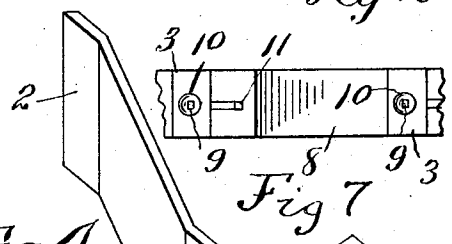


Fig 7

Fig 3

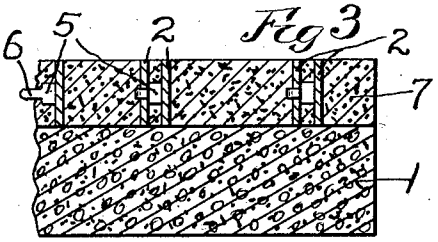


Fig 4

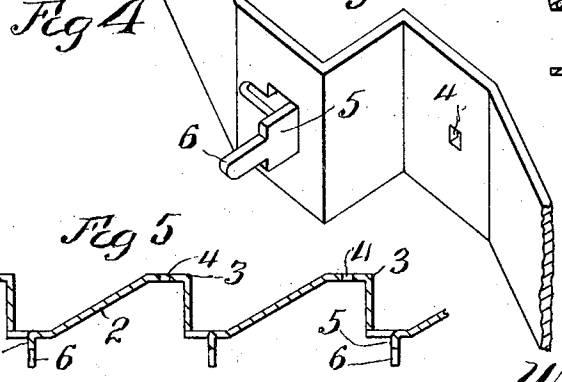


Fig 5

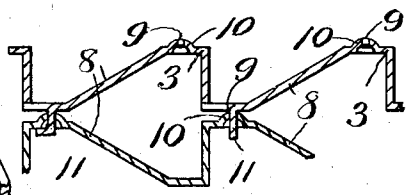


Fig 6

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1,804,804

UNITED STATES PATENT OFFICE

WILLIAM S. PATTISON, OF KANSAS CITY, KANSAS

REENFORCED SURFACE FLOOR

Application filed August 22, 1929. Serial No. 387,659.

My invention relates to improvements in reenforced surface floors. It is particularly well adapted for use in connection with cementitious floors, such as concrete floors.

One of the objects of my invention is to provide a reenforced surface floor of novel construction, which is simple, cheap, durable, strong and which will provide great resistance to surface wear.

A further object of my invention is to provide novel reenforcing for floor surfaces which is simple, cheap, strong, efficient, and which can be easily and quickly laid with the portions completed as the laying progresses.

The novel features of my invention are hereinafter fully described and claimed.

In the accompanying drawings, which illustrates my invention,

Fig. 1 is a top view, partly broken away, showing a floor portion embodying my improvement.

Fig. 2 is a section on the line 2—2 of Fig. 1.

Fig. 3 is a section on the line 3—3 of Fig. 1.

Fig. 4 is an enlarged perspective view of a portion of one of the reenforcing bars shown in Figs. 1 to 3.

Fig. 5 is a longitudinal sectional view of one of the reenforcing bars, partly broken away, which is shown in Figs. 1 to 3.

Fig. 6 is a longitudinal sectional view of portions of two reenforcing bars embodying a modification of the spacing and locking means.

Fig. 7 is a side elevation of part of what is shown in Fig. 6.

Similar reference characters designate similar parts in the different views.

1 designates an ordinary base of a concrete floor. 2 designates reenforcing bars disposed side by side edge up on the base 1, said bars being transversely corrugated, the ridges 3 of the corrugations of adjacent bars registering with each other, alternate bars being reversely disposed as shown in Fig. 1.

Alternate ridges 3 of each bar 2 are provided respectively with holes 4 and projections 5. Each projection 5 has a shoulder, Fig. 4, and an extension comprising a tongue 6 extending from said shoulder, said tongues being extended respectively from said shoulders through the holes 4 of the next bar from one side thereof, and being bent laterally so as to bear against the opposite side thereof, so as to firmly lock the bars together. The shoulders of said projections 5 of one bar bear against the adjacent side of the next bar, and so hold the bars separated, Fig. 1.

The bars may be laid from one side or end of the floor in a progressive manner, the portions laid being completed as the work progresses.

After the bars are laid on the base 1 and locked together, as described, filling material 7 is placed on the base 1 filling the spaces between the bars to the upper edges thereof, or on the upper edges thereof, if desired. Said filling material may be of any suitable wearing character, such as cement, concrete or asphalt. It will be noted, Figs. 2 and 4 that the projections 5 have less depth than the depth of the bars and are above the bottom edges of the bars, so that passages are provided between the bars past said projections 5, through which passages the filling material may pass during the operation of filling between the bars and before the material has hardened. This enables the filling operation to be quickly effected and the material evenly distributed. It also affords means for tying together the material, so that it is not liable to be displaced or accidentally removed from the spaces between the bars, and the projections 5, being embedded hold the material down.

In the form shown in Figs. 6 and 7, the bars designated by 8 are each provided with holes 9 extending through bosses 10 at one side of the bar at alternate ridges 3 of the corrugations. The other ridges of the bar are provided with tongues 11 extending laterally from the other side of the bar.

As in the form shown in Figs. 1 to 3, the bars are alternately reversed, as laid, so that the ridges of one bar are adjacent to and register with the adjacent ridges of the next bar. When so laid, the tongues 11 are respectively extended through the holes 9 in the next bar and are then turned or bent laterally so as to engage the side of the next bar

opposite to that having the bosses 10. The latter serve to space the bars 8 apart, and the tongues 11 lock the bars together.

I do not limit my invention to the structure shown and described, as modifications, within the scope of the appended claims, may be made without departing from the spirit of my invention.

What I claim is:—

1. In a re-enforced surface floor, re-enforcing bars disposed side by side with their lower edges adapted to rest upon a suitable base, adjacent bars having spacing means of less depth than the depth of said bars, separating the latter and having locking means for holding said bars spaced apart, and filling material between said bars, passages being provided between the bars past said spacing and locking means adapted to receive said material.

2. In a re-enforced surface floor, a base, re-enforcing bars disposed side by side on their lower edges thereon, one of adjacent bars having holes therethrough, and the other of the adjacent bars having spacing projections of less depth than the depth of the bars, said spacing projections bearing against the bar having said holes and provided respectively with locking tongues which extend through said holes and bear against the distant side of the bar having said holes, and filling material between said bars and resting on said base and extending past said projections.

3. In a re-enforcing for floor surfaces, two bars disposed side by side having lateral corrugations registering with each other, the ridges of the corrugations of one bar having holes therethrough, and the ridges of the corrugations of the other bar having shoulders which bear against the adjacent side of the bar having the holes, said projections having tongues extending respectively through said holes and bearing against the distant side of the bar having the holes, said projections having less depth than the depth of the bars.

In testimony whereof I have signed my name to this specification.

WILLIAM S. PATTISON.