

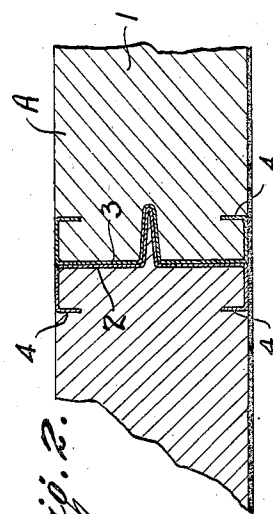
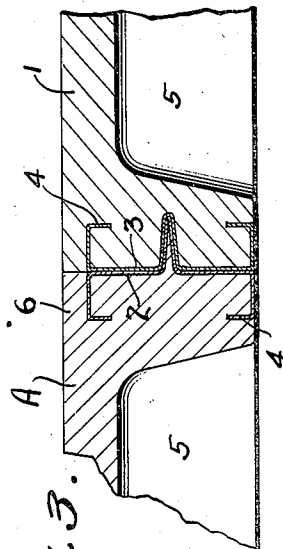
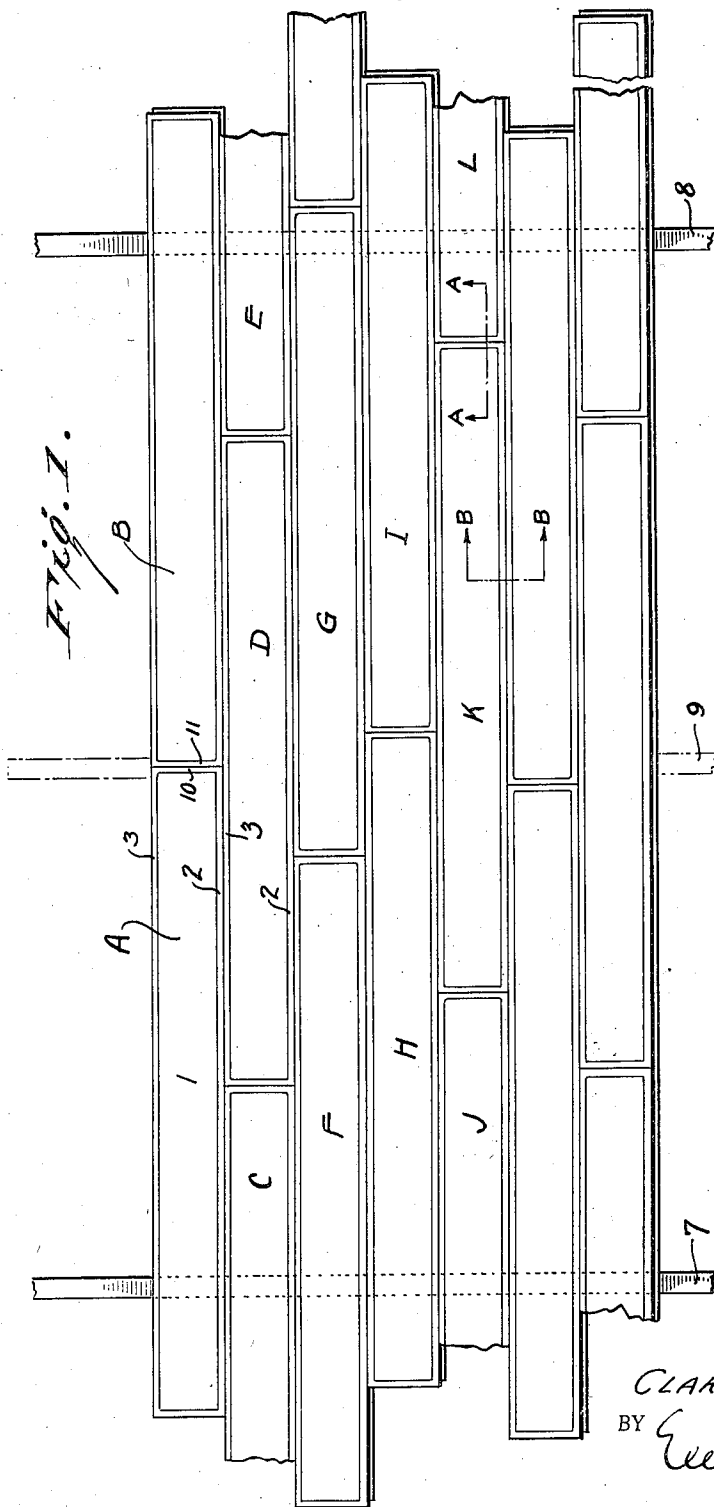
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DECKING

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2,127,661

DECKING

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Continuation of application Serial No. 655,591,
February 7, 1933, now Patent No. 2,083,987.
This application September 24, 1935, Serial No.
41,862

1 Claim. (Cl. 72-68)

The present application is a continuation of
co-pending application 655,591, now Patent No.
2,083,987.

The present invention relates to a deck such
as a floor or roof deck constructed of precast
units.

The principal object of the invention is the
provision of a deck construction as above, so
arranged that it is not necessary for all of the
elements going to make up the deck to be of a
length such as will extend between the deck sup-
ports. In other words, one or more units going
to make up the deck may completely float be-
tween supports.

The above construction is made possible by
arranging the elements with tongues and grooves
along two or more edges so that when assembled,
each unit being interlocked or tongued and
grooved to its neighbors, will be satisfactorily
supported by the neighboring units irrespective
as to whether or not that unit is directly sup-
ported by a supporting element.

To this end, the invention contemplates a deck
such as a floor or roof deck made of precast
units preferably, though not necessarily, provid-
ed with metal members on at least opposite lon-
gitudinal edges and preferably on all four edges,
where the metal members are bonded to the slab
unit on which it occurs, and where the metal
members on opposite edges are complementarily
tongued and grooved.

The invention contemplates that the length of
the sum of the units will be less than the dis-
tance between deck supports and that these units
may be so arranged in the deck that they do not
extend over any of the supports and, as a con-
sequence, are supported entirely by the inter-
locking edge engagement with the neighboring
units.

The invention further consists in the novel
arrangement, combination and construction of
parts more fully hereinafter described and shown
in the accompanying drawing.

In the drawing—

Fig. 1 illustrates diagrammatically a plan view
of a deck constructed according to this inven-
tion;

Fig. 2 is a partial sectional view along the lines
A—A and B—B of Fig. 1;

Fig. 3 is a view similar to Fig. 2 showing a
modified form of slab.

Referring now with particularity to the embod-
iment illustrated, a slab A is shown of precast
material 1 such as gypsum or the like having
metal edges 2 and 3 bonded to opposite edges

thereof. As shown, the metal edge 2 is prefer-
ably tongued and the metal member 3 comple-
mentarily grooved so as to interlock together in
a tight frictional joint when the parts are assem-
bled together as in Fig. 1. By turning down the
edge 4 of both of the parts 2 and 3, the metal
members are securely and mechanically bonded to
the slab body 1 and this prevents inadvertent
separation during handling or erection.

As shown in Figs. 2 and 3, the slab body 1
may be solid, that is, of uniform thickness
throughout as indicated in the former figure or
the slab body may be provided with a bisquetted
depression 5 as shown in Fig. 3. The latter is
preferred where deep sections are to be used as
this modification consequently permits a greater
depth I-beam formed by the tongued and grooved
metal members without at the same time corre-
spondingly increasing the weight of the slab body.
The top and bottom of the metal members 2 and
3 may be flush with the slab body 1 as shown
in Fig. 2 or they may be at either or both sides
of the slab and overlay 6 of the material of which
the slab is made as shown in Fig. 3. Preferably
the part 6 extends only over the metal member
at the top thereof so that there is a metal to
metal contact with the deck support at the bot-
tom.

In erecting slabs according to this invention,
supports 7 and 8 are provided which may be
beams, purlins or the like of any desired type,
whether for floor or roof decks. A temporary
shore 9 may be provided intermediate thereof in
order to provide a temporary support until the
slabs have been properly meshed.

As clearly shown in the drawing, slabs A and
B are laid up on the supports 7, 8, and 9 with
their short ends 10 and 11 meshed together by
means of their metal edge member in a tight
frictional tongued and grooved interlock. The
slabs C, D and E are then erected, followed by
F, G, H, I, J, K, L, etc. After the desired area
has been erected, the temporary shore 9 is then
removed. It is to be noted that the slabs D, K
and others similarly placed are without any di-
rect support by the members 7 and 8, but that
they are, on the contrary, supported by the edge
interlock on all four edges with their neigh-
boring units. The fact that the metal members 2
and 3 of slabs A and F extend beyond and past
the broken short end joints between slabs C and
D together with the fact that slabs A, C and F
cantilever over the support 7 provides adequate
support for that end of slab D. Likewise slabs

B, E, and G serve the same purpose for the other end of slab D.

The above construction, therefore, provides a system wherein the length of an individual unit is not dependent in any way upon support spacing or vice versa.

Obviously any type of floor or roof finish may be applied directly over the top of the deck thus constructed either with or without filling materials in between.

While the invention has been shown and described with particular reference to an embodiment, yet this is to be taken as illustrative only and the scope of the invention is to be restricted only by the breadth of the claim.

I claim:

A building construction comprising in combination two spaced apart permanent supports, a surface area supported thereby, said area including a series of precast slabs, each slab having on opposite edges metal members bonded to the slabs, the metal members on opposite edges being complementarily tongued and grooved, adjacent edges of adjacent slabs being wedgingly interlocked together in a tongued and grooved joint, at least one of said slabs in the surface area being of a length less than the distance between supports, said slab being supported by the slabs engaging it.

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