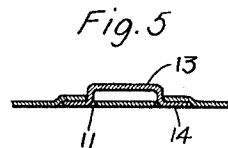
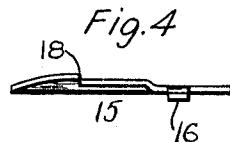
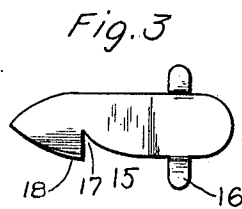
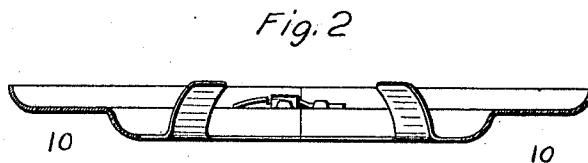
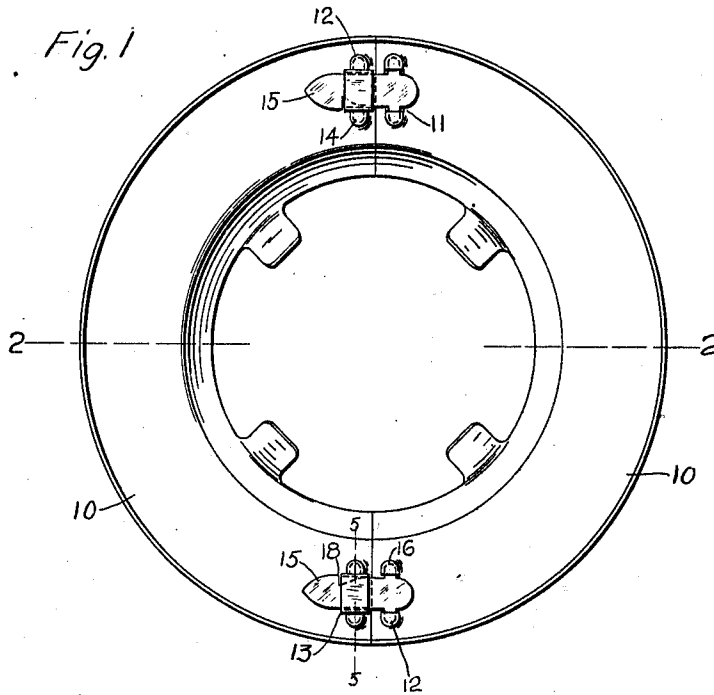


A. C. GAYNOR.
CEILING AND FLOOR PLATE.
APPLICATION FILED JULY 21, 1910.

989,140.

Patented Apr. 11, 1911.



WITNESSES:

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ARTHUR C. GAYNOR, OF BRIDGEPORT, CONNECTICUT.

CEILING AND FLOOR PLATE.

989,140.

Specification of Letters Patent.

Patented Apr. 11, 1911.

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To all whom it may concern:

Be it known that I, ARTHUR C. GAYNOR, a citizen of the United States, residing at Bridgeport, county of Fairfield, State of Connecticut, have invented an Improvement in Ceiling and Floor Plates, of which the following is a specification.

This invention has for its object to provide simple, inexpensive, easily attached and easily operated means for joining the members of ceiling and floor plates and positively but detachably securing them together.

The special advantages of my present construction are that the parts may be blanked out to shape in presses and that riveting is avoided, thus reducing the cost of construction to the minimum and producing a neat and attractive article.

With these and other objects in view I have devised the novel ceiling and floor plate which I will now describe, referring to the accompanying drawing forming a part of this specification and using reference characters to indicate the several parts.

Figure 1 is an inverted plan view of my novel plate with the members secured together; Fig. 2 a section on the line 2—2 in Fig. 1; Fig. 3 a plan view of one of the catches detached; Fig. 4 an edge view corresponding with Fig. 3, and Fig. 5 is a section on the line 5—5 in Fig. 1.

10 denotes the members or halves of a ceiling or floor plate which are blanked out from sheet metal and may be given any ordinary or preferred configuration. Each member is provided near its end with two longitudinal slots 11 and on the side of each slot farthest from the other slot with a depression 12 which forms a hood on the inner side of the member. One member, the left as seen in Figs. 1 and 2, is provided on its inner side with housings 13 formed from sheet metal and open on opposite sides. Each housing is provided at its ends with lugs 14 which are passed upward through the slots 11 and then pressed down into the depressions where they lie flush with the outer surface of the member and are wholly covered on the inner side by the hoods. The housings are thus rigidly secured to the member, riveting is avoided and the outer surface of the member is left smooth. In practice, the ends of the lugs are rounded and the depressions are made just large enough to receive them. The other member

is provided at its ends with catches 15. The shanks of the catches are provided with lugs 16 which are passed upward through the corresponding slots 11 and are then pressed downward into the depressions, making an attachment in precisely the same manner that the housings are attached to the other member, the lugs being covered on the inner side by the housings, as before, and the outer side of the member being left flush and smooth and without rivets. The forward end of each catch is made spear-pointed and comprises a notch 17 and a hook 18. The bodies of the catches are offset inward slightly to adapt them to pass under the ends of the opposite members and into and through the housings on the opposite members. The hooks are bent inward obliquely to the plane of the bodies of the catches, so that they will be sprung outward slightly in passing through the housings and will snap into engagement with the rear walls of the housings after passing through the housings and into the locking position, as clearly shown in Figs. 1 and 2, the engagement of the hooks with the rear walls of the housings serving to lock the members securely together and retain them in place in use. To detach the members from each other, the hook of one catch is sprung outward sufficiently to disengage it from the rear wall of the housing and permit it to be drawn backward through the housing. The other catch may then be readily detached by turning the members slightly out of parallel with each other and moving them away from each other. The members may be attached together again by simply passing the hooks into the housings and moving them forward until the hooks snap into engagement with the rear walls of the housings.

Having thus described my invention I claim:

1. Ceiling and floor plate members having near their ends longitudinal slots and depressions contiguous thereto, one of said members being provided with housings having lugs which are passed through the slots and bent downward into the depressions and the other member being provided with catches having lugs to engage the slots and depressions and oblique hooks which are adapted to pass through the housings and then spring into engagement with the rear walls thereof.

2. Ceiling and floor plate members hav-

ing near their ends longitudinal slots and
depressions contiguous thereto, one member
being provided with open housings and the
other member with catches comprising ob-
5 lique hooks adapted to engage the housings,
said housings and catches being provided
with lugs which are passed through the slots
in the members and pressed down into the

depressions to rigidly secure the housings
and catches in place. 10

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

ARTHUR C. GAYNOR.

Witnesses:

A. M. WOOSTER,

C. H. SHEEHAN.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents,
Washington, D. C."
