May 6, 1958 C. MACKINTOSH 2,833,607

SECTIONAL PLATFORM WITH NESTING SECTIONS

Filed March 28, 1955

FIG. 1.

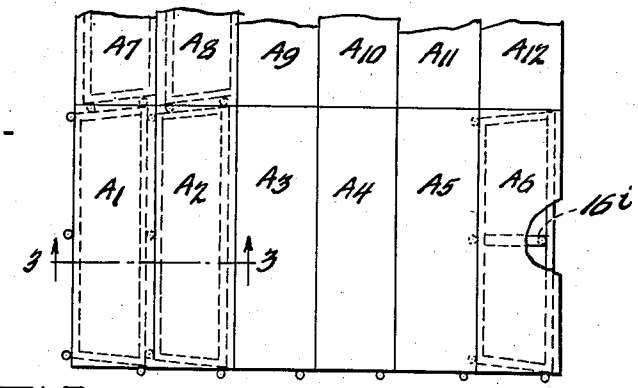


FIG. 2.

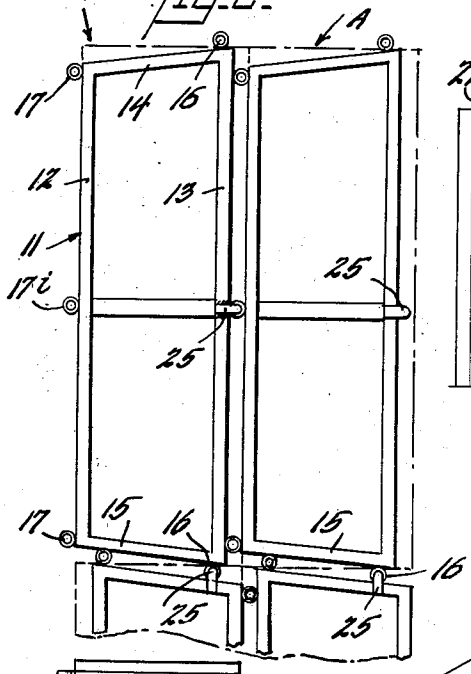


FIG. 3.

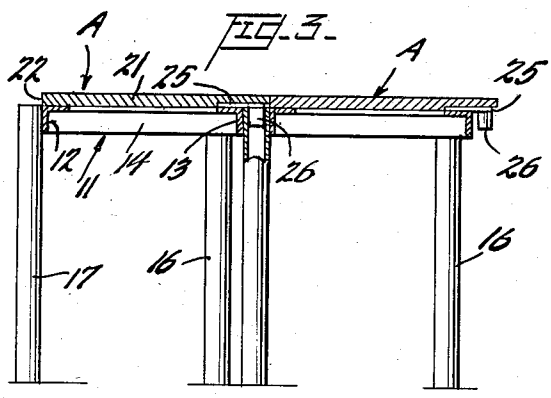


FIG. 5.

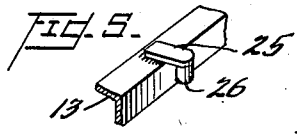
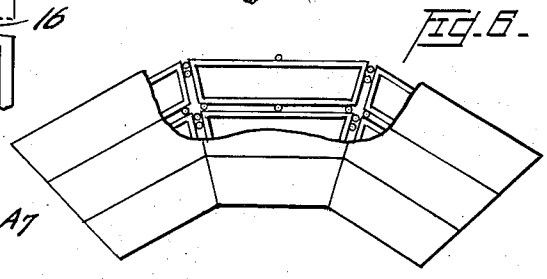


FIG. 6.



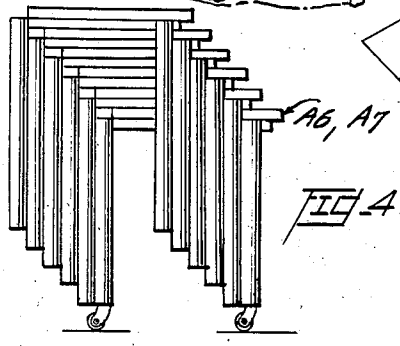


FIG. 4.

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SECTIONAL PLATFORM WITH NESTING SECTIONS

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4 Claims. (Cl. 311—4)

This invention relates to a sectional platform or stage and more particularly to a sectional platform wherein the individual sections are adapted to nest together.

An object of the invention is to provide a sectional platform made up of a plurality of individual sections, each comprising a top panel, a panel supporting frame, and a plurality of legs on the frame, wherein the configuration of the frame and the disposition of the legs thereon are such as to enable the sections to be stacked one on top of another.

A further object is to provide a sectional platform as just described wherein the individual sections when arranged into a platform are adapted to be interconnected by a novel latching device.

Another object of the invention is to provide a table-like assembly which may be associated, either longitudinally, laterally or both, with a number of similar units into a platform, the units, on disassociation, being adapted to nest together in a compact array.

Other objects and advantages will be apparent from the following detailed description when read in conjunction with the accompanying drawings in which:

Figure 1 is a plan view of a stage or platform formed of a plurality of table-like assemblies constructed in accordance with the present invention;

Figure 2 is an enlarged plan view of several juxtaposed units, with the panels shown in dotted lines;

Figure 3 is a transverse section taken substantially along line 3—3 of Figure 1, but with the panels in solid lines;

Figure 4 is a side elevation of a plurality of the units nested together;

Figure 5 is a fragmentary detailed view of a novel latching device adapted to maintain the units together; and

Figure 6 is a plan view of a stage or platform of different configuration assembled from a plurality of slightly modified units, the panels being partially cut away to reveal the construction of the units.

It is evident from the drawings, Figures 2 and 3 in particular, that the basic or elemental unit of the invention is a table-like assembly, generally designated A, which may be arranged in various relationships with other units to form platforms, stages, tables and the like of different sizes and configurations. The assembly A includes an open frame **11** constructed of angle or channel iron and having front and rear members **12** and **13**, respectively, and left and right side members **14** and **15**, respectively, the members being welded or otherwise secured together at the corners to constitute a unitary structure. To permit the nesting of the assemblies, either front member **12** or rear member **13** (the former, as illustrated) is foreshorted at its ends, as compared to the other member, so that the side members **13** and **14** extend slightly obliquely inwardly between the ends of the front and rear members. Where the front and rear members are straight, which would constitute

the simplest and least expensive arrangement, the frame **11** takes the form of a trapezoid.

Dependent from frame **11** and secured thereto by welding or other conventional means are two sets or groups of legs, a back set **16** and a front set **17**. One of these sets (**17** as illustrated) is mounted on the exterior face or edge of the foreshortened member and includes a leg disposed adjacent each end of the member and a further leg located intermediate such ends, which further leg is given in the drawings the special designation **17***i*. A leg of the other group is mounted on the exterior edge or face of each of side members **14** and **15** adjacent the end thereof remote from the member which carries the first group of legs. All of the legs of both groups are of equal length and, for reasons that will hereafter appear, are preferably generally tubular in form.

Supported by frame **11** is a top panel member **21** formed of plywood or other substantially rigid sheet material which may be detachably secured to the frame in any of the usual ways, for example, with screws (not shown). The edge of the panel which corresponds to the frame member carrying the first group (**17**) of legs, for example edge **22**, so extends as to leave at least a portion of each of the legs of that group exposed to access from above, and where that edge is straight, it may be generally flush with the outer edge of the frame member. On the other hand, the opposite edge **23** of the panel, at least in regions diametrically opposite to legs carried by the foreshortened member, projects beyond the exterior limits of the legless frame member to an extent comparable with the exposed portion of the legs on the other side of the frame. The purpose of this arrangement is that when two assemblies are placed front to back, the projecting portion of the panel of one assembly will overlap and cover the exposed portion of the legs of the front or rear group, as the case may be, of the other assembly, the entire panel of the first assembly constituting with the entire panel of the other assembly a substantially continuous surface.

With respect to the side portions of the panel: In the region of the corners of the frame defined by a side member and the non-foreshortened member, the panel terminates short of the legs carried by the side frame members so that at least a portion of each of these legs is left exposed to access from above; and at least in the regions diametrically opposite to the legs carried by the side frame members the panel projects beyond the outer edge of the side frame member to an extent comparable with the portion of the leg left exposed. The object accomplished by this arrangement here is that when two assemblies are arranged side-to-side but in reversed relationship, a projecting panel portion of each of the assemblies will overlap and cover an exposed leg portion of the other assembly, the two panels together constituting a virtually continuous surface.

The exact shape which the front, back, and side edges of the panel of each assembly will take is a matter of individual choice provided that all of the legs of each assembly are left at least partially exposed when that assembly is standing alone but will be substantially covered by projecting panel portions of other adjacent panels when the assembly is arranged with other assemblies into a platform and that when so arranged the panel edges will mate with the edges of the other adjacent panels to form a flat, substantially unbroken surface. A rectangular panel will, for many purposes, be advantageous due to its low cost and simplicity.

From the standpoint of safety, latching means operative to positively maintain a plurality of assemblies in juxtaposition is a practical necessity and any one of a number of known means of this type may be employed in

association with the assemblies just described. In addition, there is disclosed a novel latching device which has been especially designed for the invention. In accordance with this feature, one or more of the frame members of each assembly is provided with an outwardly projecting tongue **25** which carries at its free end a downwardly directed finger **26** adapted to fit in and engage the exposed portion of the bore of one of the tubular legs of an adjacently arranged assembly. Preferably, the end of the tongue remote from the finger is secured, e. g., by welding, to the upper surface of the frame member and in this case the corresponding portion of the under surface of the panel is relieved or recessed to accommodate the tongue. However, other arrangements are possible. Thus, the tongue may be mounted with its upper surface flush with the upper surface of the frame member and the wall of the leg notched to receive the tongue. As is readily inferrable from the drawings, the latching device may be applied to the legless frame member, one side member, two side members, or all three, dependent upon the ultimate size and configuration of the platform and the fashion in which the assemblies are arranged together. When applied to the legless frame member, it is preferably so located as to engage with the intermediate leg, e. g., leg **17***i*. If the leg is fully exposed, the finger may take the form of a peg or dowel mating with the bore of the leg.

Referring now to Figure 1, there is shown a platform composed of two oppositely or reversely facing groups of assemblies, A_1—A_6 and A_7—A_{12}, wherein the assemblies in each group are arranged front to back with the projecting panel portion of all except the "terminal" assemblies (A_6 and A_7) overlapping with and supported by the exposed legs of the next adjacent assembly, and one assembly from each group is juxtaposed with one assembly from the other group with a projecting side panel portion of each overlapping and supported by a side leg of the other. In order that the support of the platform may be complete and uniform throughout, it is desirable that the "terminal" assemblies in any platform, corresponding to assemblies A_6 and A_7 in Figure 1, have an intermediate leg (**16***i*) on the otherwise legless frame member.

To facilitate transportation of a nested array of the assemblies, as shown in Figure 4, one of a number of assemblies, which may conveniently be a "terminal" assembly, is provided with wheels **29** at the termination of all legs, the wheeled assembly serving as a carrier for other assemblies. The weight of the assemblies and the point at which the center of gravity of the entire array falls outside the confines of the wheels governs the number which may be readily stacked together.

A platform having the configuration seen in Figure 6 necessitates a slight change in the disposition of the legs on one side of each assembly to permit the close juxtaposition of assemblies which are all facing in the same direction, as well as a change in the shape of the panels and a progressive increase in the size of the assemblies in the direction of front to rear.

In the event a stepped platform is desired, the legs of the front row of assemblies may be reduced in length and the legs of the back row increased in length compared to that of the legs of the intermediate row. The modification of the latching arrangement necessary for a stepped platform will be apparent to one skilled in the art.

It will be understood that the invention is not limited to the particular embodiments illustrated as some variations and modifications have been suggested in the specification and others will occur to one conversant in the field of the invention.

Having thus described the invention, what is claimed as new and desired to be secured by Letters Patent is:

1. A sectional platform comprising a plurality of individual table-like assemblies, each of which includes a four-sided frame having one side shortened at each end as compared to the opposite side, a group of legs mounted on the exterior of said shortened side, a second group of legs including a leg mounted on the exterior of each of the two remaining opposite sides of said frame at a point adjacent the side opposite said shortened side, and a rectangular panel overlying said frame, said panel having one edge approximately coterminous with the exterior of said shortened side and a portion opposite said edge projecting outwardly of the exterior of the side opposite said shortened side and being of a length approximately equal to the length of the side opposite said shortened side, whereby portions of said panel also project outwardly of the exterior of said two remaining opposite sides adjacent said shortened side, said assemblies being arranged together with the outwardly projecting portions of the panel of one assembly overlapping with and being supported by at least one leg of an adjacent assembly, said panels fitting together and constituting a substantially continuous surface when viewed in plan, and said assemblies being nestable together when disarranged.

2. The platform of claim 1 wherein said legs are tubular in form and each of said assemblies is provided with at least one latching unit comprising a tongue projecting from the side of said frame opposite said shortened side and a finger dependent from the free end of said tongue, said finger fitting into the bore of a leg of an adjacent assembly and maintaining said assemblies closely together.

3. The platform of claim 1 wherein each of the "terminal" assemblies includes in the rear group of legs an additional leg carried by the side opposite said shortened side and intermediate its ends.

4. The platform of claim 1 wherein the first group of legs in each assembly includes an additional leg intermediate the ends of said shortened frame side.

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