Feb. 28, 1967

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3,306,397

SECTIONAL PLATFORM OR SUPPORT FOR USE WITH SCAFFOLDING

Filed May 24, 1965

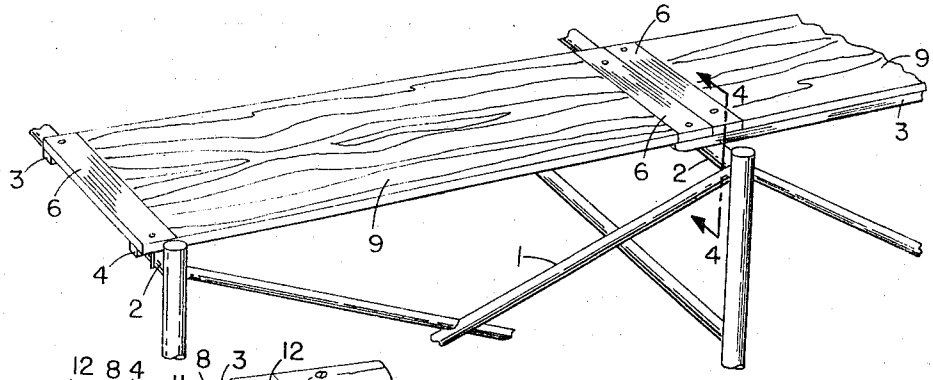


FIG. 1

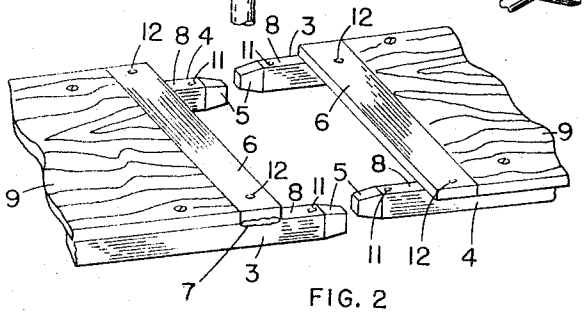


FIG. 2

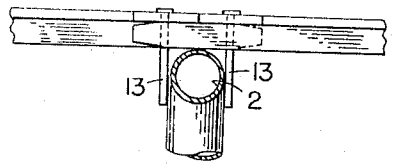


FIG. 4

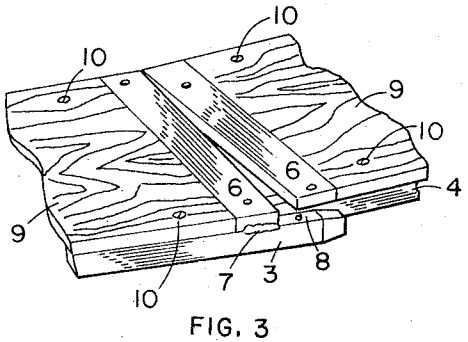


FIG. 3

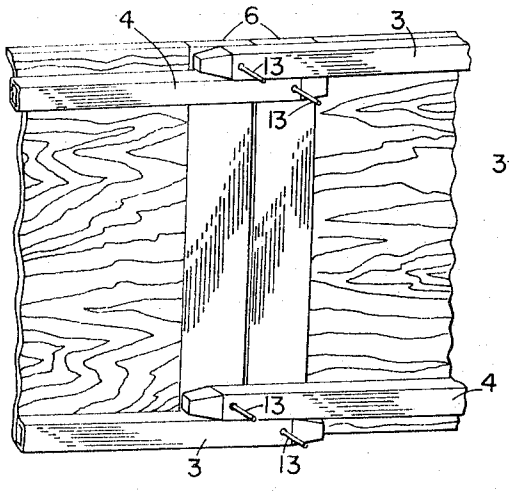


FIG. 6

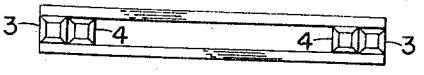


FIG. 5

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United States Patent Office 3,306,397
Patented Feb. 28, 1967

3,306,397

SECTIONAL PLATFORM OR SUPPORT FOR USE WITH SCAFFOLDING

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Filed May 24, 1965, Ser. No. 458,276
3 Claims. (Cl. 182—223)

This invention relates to scaffolding used in wall or building construction or repair and more particularly is an improvement in sectional platforms for use with scaffolding as a support for bricks, tile, block or the like and as a walkway or platform for the worker.

An object of the invention is to provide a relatively light, sturdy, durable and inexpensive sectional platform or support which can easily be assembled on location for use with conventional scaffolding, such as tubular steel scaffolding, to provide a support for materials and workment in wall construction.

Another object is a sectional platform having, when assembled, a high safety factor.

A further object is a device of the type disclosed in which the assembled sections provide a support or platform satisfactorily resistant to torsional strains and stresses and which is rigid under load.

Still another object of this invention is a platform or support of the character described which consists in a plurality of unit sections, each of which is adapted to be quickly and easily coupled and assembled together in end-to-end relation with an adjacent section.

Still another object is to provide a sectional support of the type disclosed in which the sections are provided with side rails underlying a supporting surface and in which the ends of the side rails extend beyond each end of the supporting surface and wherein one of the rails of the respective sections defines one longitudinal side edge or dimension of the supporting surface, and the other rail is offset inwardly of the opposite longitudinal side edge or dimension of the supporting surface sufficiently to receive an extended rail end of an adjacent assembled section in side-by-side overlying relation.

Other and further objects and advantages of the present invention will be apparent from the following description and claims, reference being made to the accompanying drawings in which like reference characters are employed to designate like parts throughout the same. Other embodiments of the invention employing equivalent principles may be applied by those skilled in the art, and structural changes may be made as desired without departing from the scope of the present invention.

In the drawings:

FIGURE 1 is a perspective view partly broken away illustrating a conventional tubular metal scaffolding upon which the sectional support constituting my invention is assembled in use;

FIGURE 2 shows the ends of two adjacent sections in position for assembly along a longitudinal axis;

FIGURE 3 illustrates the manner of bringing the ends of the adjacent sections into position for securing them together;

FIGURE 4 is an enlarged section taken on line 4—4 of FIGURE 1 showing the interfitting ends of adjacent sections assembled for support on the cross rail of a scaffolding section;

FIGURE 5 is an end view of two of the platform sections shown nested together for storage; and

FIGURE 6 is a bottom view in perspective of the assembled ends of adjacent sections.

In carrying out my invention, as illustrated in the embodiment shown in the drawing, I provide a sectional platform or support adapted to be used in conjunction with conventional scaffolding such as tubular steel frames

indicated generally at **1**, and having horizontally disposed supporting members **2** arranged at spaced intervals along the course of the scaffolding.

By virtue of my invention, each platform section is substantially identical and they are so constructed that they may easily be nested for stacking in storage or for transportation. Each section includes a pair of laterally spaced apart longitudinal side rails **3** and **4** substantially parallel to one another. These rails preferably are formed of tubular or hollow metal stock, such as aluminum, and terminate at their ends in tapered nose portions **5**, preferably closing the hollow tube ends to seal out moisture or foreign matter.

Cross tie plates preferably of metal are welded or otherwise permanently secured at their end portions, as at **7**, to the respective rails **3** and **4** adjacent the ends of the rails, but are positioned sufficiently inwardly of the rail ends to provide extended supporting surfaces **8** for the cross ties or lateral plates **6** of adjacent section ends as the sections are assembled, as shown in FIGURES 3, 4 and 6.

Panels **9** providing supporting means for the workman and his trade material, such as block, brick, stone or the like, are preferably made of suitable, economical, light sheet material, such as plywood, of a thickness to provide adequate load supporting strength. These panels are secured to the side rails **3** and **4** by means of screws or bolts **10**. It is to be noted that the longitudinal rails lie below and have their outer side walls substantially flush with one of the longitudinal side edges of the panels **9**, while the rails **4** lie below the opposite side edge of the panels **9** and are set back or indented from the edge approximately a distance equal to the side of the rail **3** so that when adjacent sections are assembled, as clearly shown in FIGURE 6, the end portions of the rails **3** and **4** on each side of the respective panels will overlie one another longitudinally and will afford adequate support for the cross tie plates **6** and the panels **9**, particularly in the junction area.

The extended end portions of the rails **3** and **4** are each apertured at **11**, while the cross tie plates **6** are apertured at **12** in such manner and location that the respective openings **11** and **12** will be in proper alignment to receive the removable headed pins **13** which are of sufficient length that they will be disposed downwardly through these aligned openings and on each side of the horizontal supporting members **2** of the scaffolding unit, as shown in FIGURE 4.

From this arrangement, it will be evident that the adjacent panels are locked against longitudinal movement with respect to the scaffolding and that torsional stresses and strains, due to non-uniformity of load distribution, will be resisted in use.

From the above, it will also be seen that the platform sections can easily and quickly be assembled on scaffolding of the type illustrated to provide a continuous supporting surface along assembled sections, which is safe and which will provide adequate support for the workman and his work materials. It will also be noted that the supporting surface is free of obstructions when the sections are assembled together in the manner illustrated and that these sections can also be easily disassembled, nested and stacked for storage or transportation in multiples, as indicated in FIGURE 5.

It is to be understood from the foregoing description and accompanying drawing that the sectional platform or support of the present invention is not to be regarded as limited by the above described embodiment. It will be apparent therefore to those skilled in the art that other alternative arrangements of parts, substitution of materials and other organization and assembly procedures may be

employed without departing from the scope and spirit of the invention claimed.

I claim:

1. A load supporting platform for use with scaffolding and adapted to be removably carried thereon, said scaffolding having horizontally disposed platform supporting members arranged at spaced intervals therealong, said platform comprising a plurality of sections for arrangement in end-to-end relation, said sections having a pair of substantially parallel longitudinally disposed side rails, a cross tie plate secured to and connecting each of said side rails adjacent their end portions, and a load supporting panel secured on said side rails and between the tie plates at the end of each respective section, one of the side rails of each section lying substantially flush with a longitudinal edge of said panel with at least one end extended beyond and underlying one of the tie plates and laterally overlying an end of an adjacent section when said sections are assembled in end-to-end relation, the other of said side rails of each section lying inwardly of the opposite longitudinal edge of said panel a distance sufficient to receive laterally thereof an extended adjacent end of a rail of said adjacent section, and means for securing the sections in end-to-end relation, said means comprising elongate fastener members removably engaging the respective adjacent overlying end portions of said cross ties and said side rails and disposed to engage both sides of a horizontal platform supporting member when assembled on said scaffold, thereby preventing movement and disalignment of adjacent platform sections assembled on said scaffold.

2. A load supporting platform according to claim 1 wherein relative endwise movement of adjacent platform sections is prevented in use.

3. A load supporting platform for us with scaffolding and adapted to be removably carried thereon, said scaffolding having horizontally disposed platform supporting members arranged at spaced intervals therealong, said

platform comprising a plurality of sections for arrangement in end-to-end relation, said sections having a pair of substantially parallel longitudinally disposed side rails, a cross tie plate secured to and connecting each of said side rails adjacent their end portions, and a load supporting panel secured on said side rails and between the tie plates at the end of each respective section, one of the side rails of each section lying substantially flush with a longitudinal edge of said panel with at least one end extended beyond and underlying one of the tie plates and laterally overlying an end of an adjacent section when said sections are assembled in end-to-end relation, the other of said side rails of each section lying inwardly of the opposite longitudinal edge of said panel a distance sufficient to receive laterally thereof an extended adjacent end of a rail of said adjacent section, and means for securing the sections in end-to-end relation, the end portions of said side rails and said cross tie plates having aligned openings therethrough when adjacent sections are in end-to-end assembled position, and headed elongate fastening members removably insertable in said aligned openings and adapted to engage both sides of an adjacent horizontal platform supporting member of the scaffold for maintaining alignment and preventing relative endwise movement of adjacent sections in use.

References Cited by the Examiner

UNITED STATES PATENTS

1,718,885	6/1929	Williams	182—121
2,261,831	11/1941	Farr	182—223
2,485,165	10/1949	Pollman	182—223
2,738,832	3/1956	Torkelson	182—222

FOREIGN PATENTS

593,770	3/1960	Canada.

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