March 26, 1968 R. H. SHAVER 3,374,861

SCAFFOLDING PLATFORM

Filed March 8, 1967

Fig. 1.

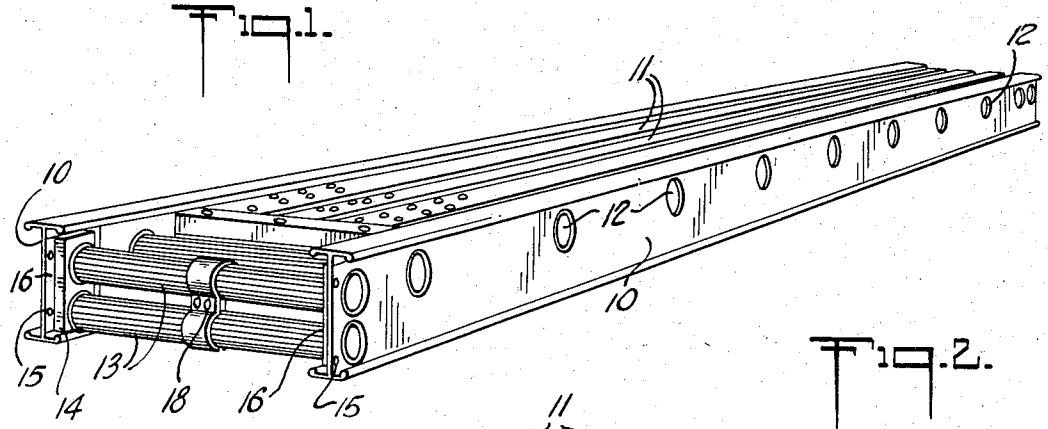


Fig. 2.

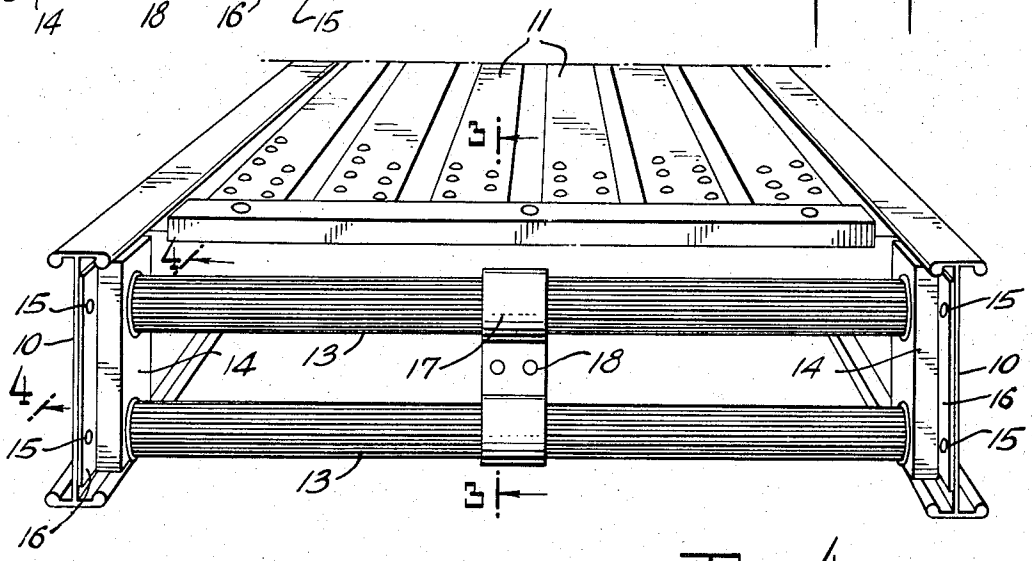


Fig. 3.

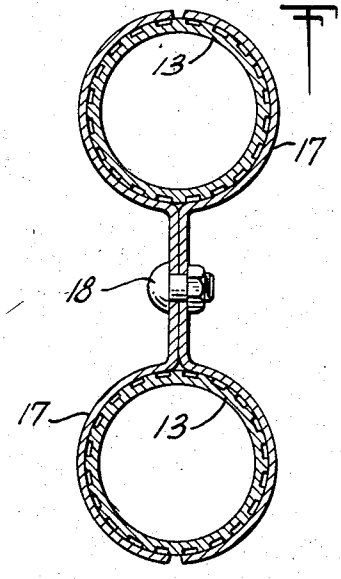
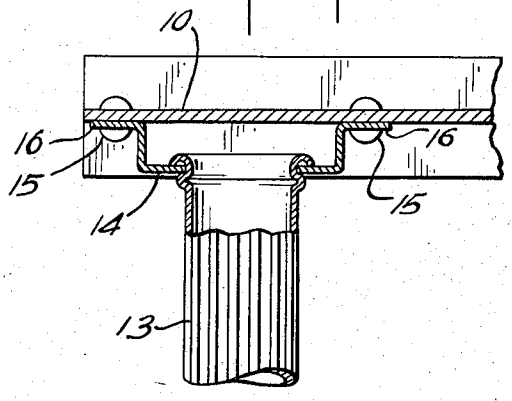


Fig. 4.



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SCAFFOLDING PLATFORM

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ABSTRACT OF THE DISCLOSURE

A scaffolding platform of light weight metal having a decking comprising longitudinally extending laterally interconnected floor slats supported on intermediate rungs or transverse bars between parallel rails. End rungs are positioned between end portions of the rails to protect the ends of said decking and to stiffen the platform structure against torsional strains. Said end rungs are mounted with their ends engaged in channels secured to the rails and are reinforced by rigid elements which securely connect their intermediate portions.

The present invention relates to platforms of a type for use in connection with or as part of scaffolding equipment or the like.

Known types of platforms employed in scaffolding include those having rails and rungs or cross pieces which support various kinds of slats or other flooring or decking between the rails. In general, such devices are unduly cumbersome and heavy and do not stand up effectively under the conditions of severe use or misuse commonly experienced in construction and maintenance operations.

An object of the invention has been to provide a platform of minimum weight, maximum load bearing capacity and optimum durability or resistance to rough handling. Such a device will also advantageously be made up of light weight metal parts as aluminum, magnesium or alloys thereof designed to be assembled at low cost.

In general, a lightweight metal platform according to my invention comprises parallel spaced I-beam rails and decking which includes slat supporting rungs arranged transversely between and with their ends supported in the web portions of said rails, longitudinally extending slats supported in parallel relation on said rungs, an angle bar mounted transversely between said rails and overlapping end portions of said slats, spaced reinforcing rungs mounted at the platform ends between rung supporting channel plates each having lateral flanges and a flat intermediate web provided with spaced holes for receiving the reinforcing rung ends. Said plates are fastened to end portions of the webs of the rails by means, as rivets, extending through said webs and said flanges; and said reinforcing rungs are advantageously supported between end portions of the rails and said decking in position to protect the latter against injury from forces applied between the rail ends. To further strengthen said reinforcing rungs, a connecting spacer and tie member of rigid metal is secured between opposed intermediate portions of said reinforcing rungs. The slats are advantageously elongated channels provided with lateral flanges and are secured to said slat supporting rungs with a flange of one slat overlapping a flange of an adjoining slat. For additional safety, the slats or platform treads of the decking are formed with roughened or irregular exposed surfaces to minimize likelihood of the user slipping when the platform is in use.

Other objects and distinctive features of my invention will appear from consideration of the following description and claims and from the accompanying drawings wherein I have shown a preferred embodiment of the invention. These disclosures are intended to illustrate the subject invention and to aid others in understanding its principles so that they can practice it in such various forms as may best be suited to different conditions of manufacture and use.

In said drawings

FIG. 1 is a three-quarter view in perspective showing more particularly one end of a platform embodying my invention;

FIG. 2, an end view on enlarged scale;

FIG. 3, a vertical section on the line 3—3 of FIG. 2; and

FIG. 4, a fragmentary view in horizontal section on the line 4—4 of FIG. 2.

A platform assembly embodying my invention and as seen in the drawings, comprises side rails in the form of lightweight metal I-beams each of which includes a web **10**. Appropriate decking is provided by lightweight metal slats **11** supported on rungs **12** having their ends mounted in said webs **10** in a known manner. And reinforcing means are provided to strengthen the assembly against torsional and other strains and stresses and to protect end portions of the decking against injury.

As seen more clearly in FIGS. 2, 3 and 4, appropriate strengthening devices include the reinforcing rungs **13**, the ends of which are secured in channel plates **14** secured to webs **10**, as by rivets **15** extending through said webs and flanges **16** of plates **14**. An advantage of this type of mounting for rungs **13** is that, in case of impairment, they may readily be removed and replaced with new rungs. This arrangement also provides secure anchoring of said rungs **13** to webs **10** in a manner which not only avoids removing excess amounts of metal from said webs but also tends to stiffen them against buckling or other deformation. Further reinforcement of the platform assembly is effected by a spacer and tying member including rigid metal clamp portions **17** conveniently secured in operative rung stiffening position by bolts **18**, or the like.

I claim:

1. A platform for use with scaffolding equipment or the like comprising spaced rails having web portions operatively connected by transverse slat supporting rungs and including longitudinally arranged slats supported on said runs, said platform being provided with stiffening means including spaced parallel reinforcing rungs mounted between rung supporting channel plates each having lateral flanges and a flat intermediate portion between said flanges which is provided with holes, the ends of said reinforcing rungs being secured in said holes and said plates being fastened in operative position on opposed end portions of said rails by securing means extending through said webs of the rails and said flanges of the plates.

2. A platform according to claim **1** and wherein a reinforcing rung spacer and tying member includes clamping portions operatively engaging intermediate portions of the respective reinforcing rungs and said tying member having a rigid spacing and tie portion between said clamping portions.

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