W. K. SAINT.

SCAFFOLD.

APPLICATION FILED OCT. 12, 1917.

1,272,120. Patented July 9, 1918.

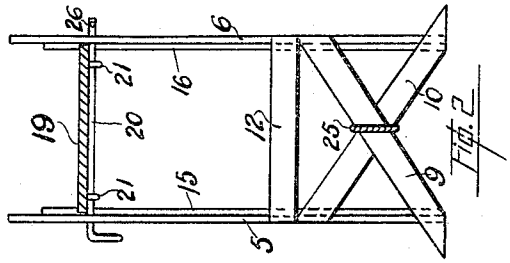


Fig. 2

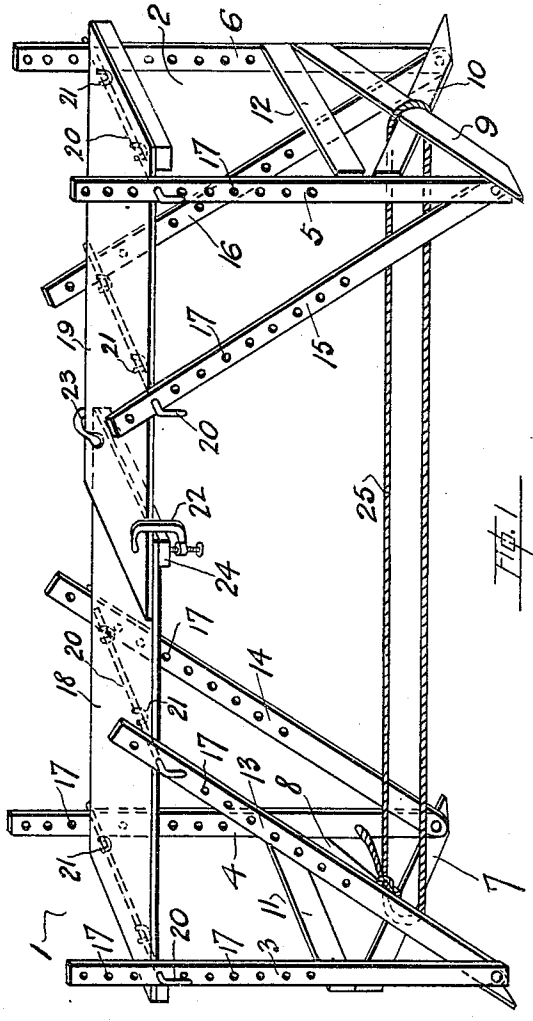


Fig. 1

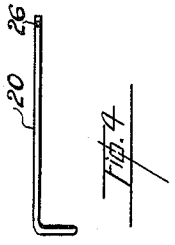


Fig. 4

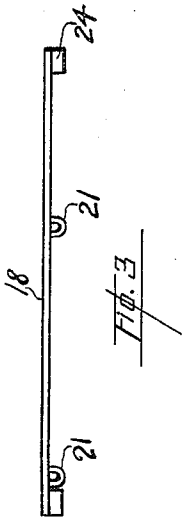


Fig. 3

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THE NORRIS PETERS CO., PHOTO-LITHO., WASHINGTON, D. C.

UNITED STATES PATENT OFFICE.

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SCAFFOLD.

1,272,120. Specification of Letters Patent. Patented July 9, 1918.

Application filed October 12, 1917. Serial No. 196,257.

To all whom it may concern:

Be it known that I, WILLIAM KELSON SAINT, a subject of the King of Great Britain, and a resident of the city of Vancouver, in the Province of British Columbia, Canada, have invented certain new and useful Improvements in Scaffolds, of which the following is a specification.

My invention relates to improvements in scaffolds, and the object of my invention is to provide a knock-down scaffold which is capable of being constructed of very light material so that it may be handled when set up with great ease and facility while at the same time possessing the necessary strength, rigidity, and safety required for the effective execution of any work in which it may be employed. A further object is to devise a scaffold of this nature which is adjustable as to height and length, which, when knocked down, may be folded up into a small compact parcel so that it may be readily carried by hand and transported in any public vehicle without causing inconvenience to the passengers therein, and which is simple in construction, enabling it to be manufactured and sold at a low cost.

I attain these objects by the construction illustrated in the accompanying drawings in which—

Figure 1 is a perspective view of my scaffold when set up ready for use.

Fig. 2 is an end view.

Fig. 3 is an edge view of one of the platform boards.

Fig. 4 is a detail view of a supporting bar.

Similar figures of reference indicate similar parts throughout the several views.

Referring to the drawings, in which Fig. 1 shows the scaffold set up ready for use, 1 and 2 indicate the vertical end supporting frames of the device, which frames consist respectively of the vertical legs 3—4 and 5—6, braced together at their lower ends by the inclined brace members 7—8 and 9—10 and the transverse braces 11 and 12. Pivotally connected to the legs 3—4 and 5—6 adjacent their lower ends are bracing members 13—14 and 15—16 capable of being swung to any desired angle and each of these members and also each of the vertical legs 3—4 and 5—6 is provided with a plurality of spaced openings 17 arranged oppositely in pairs, as shown in Fig. 1.

18 and 19 indicate removable boards forming the platform of the scaffold, which boards are supported at their outer ends and also intermediate their length by rods 20, each of which rods is preferably provided with a split pin hole 26, as shown in Fig. 4, and is passed through a pair of openings 17 in the respective legs 3—4 and 5—6, and the bracing members 13—14 and 15—16, the rods also passing through staples 21 secured into the underside of the boards, as shown in Figs. 2 and 3. The boards are overlapped at their inner ends and are detachably secured to each other by means of clamps 22 and 23, as shown in Fig. 1, the end of board 18 being reinforced by a block 24 so that a suitable bearing for the point of each clamp is provided.

25 indicates a rope permanently secured at one end in any suitable manner to the cross braces of the frame 1, its free end being passed around the cross braces of the frame 2 and, after being pulled taut, secured by a suitable knot, the tightening of which rope tends to pull the frames 1 and 2 together and stiffens the whole structure so that the weight of the operator on the platform, which is then slightly arched, is, in effect, taken up by the rope, which imparts an elasticity to the whole scaffold which would not otherwise be present and enables much lighter platform boards and general construction to be used than would be the case if the platform boards were rigidly supported.

The adjustment of the platform as to height is effected by raising or lowering the rods 20 in the openings 17, and as to length by moving the supporting frames and the boards 18 or 19 in or out to increase or decrease the lap of the boards.

To knock down the scaffold the clamps 22 and 23 are removed, the rods 20 withdrawn, and the boards 18 and 19 lifted off, the rope 25 having first of all been untied. If it is desired to pack it up to be stowed away or to be carried or shipped from one place to another, the supporting members 13—14 and 15—16 are folded on their respective frames 1 and 2 and the two frames are then laid one on the other after the two boards 18 and 19 have been laid therebetween. The rope 25 is passed around the whole in a suitable manner and pulled taut and knotted securely, thus maintaining the entire knocked down scaffold in a neat and compact parcel.

From the foregoing it will be seen that I

have devised a simple and inexpensive knock down scaffold which is possessed of great supporting strength, rigidity, and safety, while at the same time it is capable of being constructed of very light material, and which provides a great convenience not only for tradesmen such as painters, paperhangers, plasterers, and the like, but also in households, as it is capable of being used with great advantage in place of the ordinary step ladder.

What I claim as my invention is:

1. In a scaffold, a platform, vertical supporting frames therefor, braces pivoted to said frames and engaging the platform between the frames, and a flexible connection between said frames adapted to be drawn taut to pull the bottoms of said frames toward each other whereby an arching strain is exerted on the platform.

2. In a scaffold, a pair of vertical supporting frames, a platform board for each frame supported thereby at its outer end and detachably secured thereto at its outer end, the inner ends of said boards being overlapped and detachably clamped together, means for bracing said boards intermediate their length, and a flexible connection between said frames adapted to be drawn taut so as to pull said frames toward each other and to force the said supporting means upwardly against the underside of the platform boards to stiffen the platform formed thereby.

3. In a scaffold, a pair of vertical supporting frames the opposite legs of which are suitably braced together and provided with a plurality of vertically spaced openings and a rod passing through a pair of said openings, a platform board for each frame each of which is supported on the said rods at its outer end, the inner ends of said boards being clamped together, a pair of bracing frames hingedly connected at their lower ends to the respective vertical frames and having their opposite legs perforated with a plurality of spaced openings and provided with a rod passed through a pair of said openings, said hinged frames being disposed so that the rods of the same support the said platform boards approximately intermediate their length, staples on the underside of said boards and through which the said rods pass, and an adjustable connection between the lower ends of said vertical frames whereby tension can be exerted upon the platform to arch it.

Dated at Vancouver, B. C., this 26th day of September, 1917.

WILLIAM KELSON SAINT.

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