Oct. 25, 1960 G. D. WENDL ET AL 2,957,670

SCAFFOLD

Filed Nov. 19, 1957

Fig.1

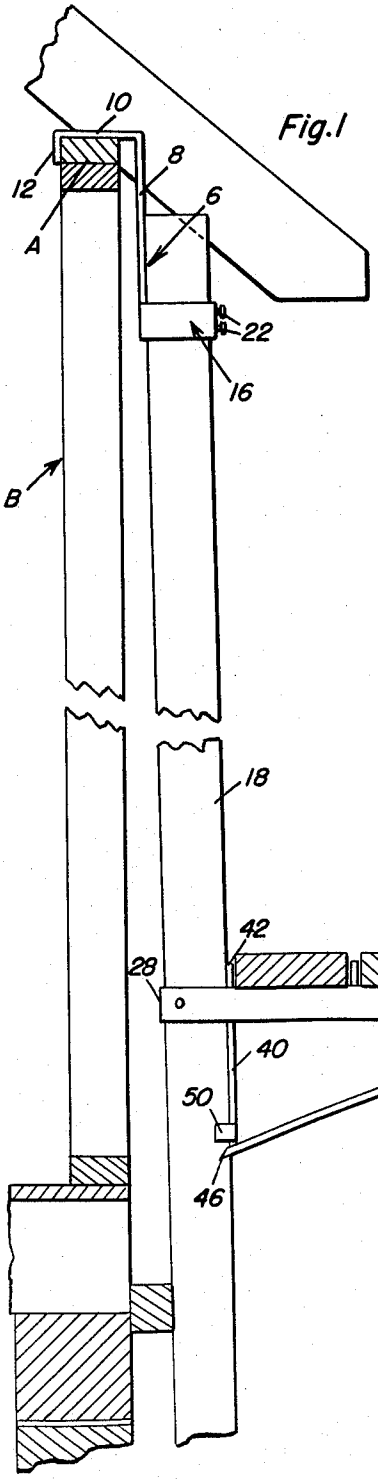


Fig.2

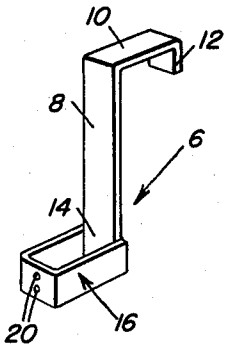
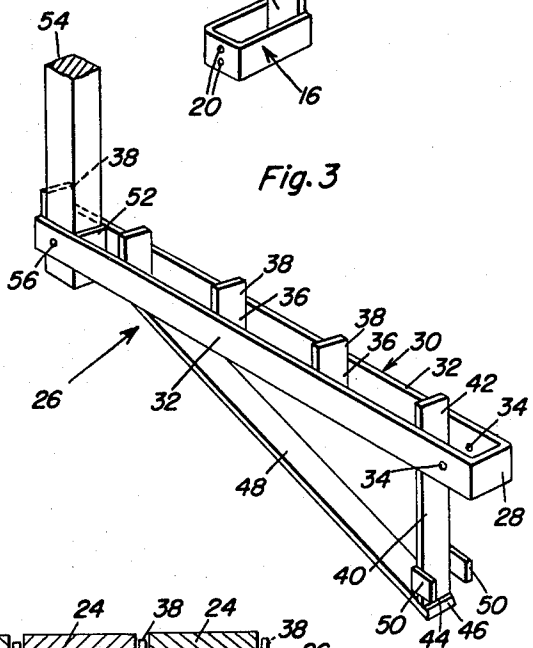


Fig.3



George D. Wendl
Steve Siracki
INVENTORS

BY Clarence A. O'Brien and Harvey B. Jacobson
Attorneys

United States Patent Office 2,957,670 Patented Oct. 25, 1960

2,957,670

SCAFFOLD

George D. Wendl, Hemlock Point Road, R.D. 2, Chagrin Falls, Ohio, and Steve Siracki, Box 205, Hiram, Ohio

Filed Nov. 19, 1957, Ser. No. 697,434

1 Claim. (Cl. 248—216)

The present invention relates to certain new and useful improvements in a pair of specially designed and constructed brackets which are such in construction that they may be satisfactorily used to build a satisfactory scaffold, using two-by-fours as verticals or support members, and readily available planks to provide a safe and reliable platform.

It is not uncommon to erect staging for workmen and knock-down scaffolds wherein available lumber on the job is employed for support members and horizontal platforms. Therefore, since numerous and varying patents have been issued in this line of endeavor, it seems significant to point out, at the beginning, that novelty is predicated not on the available lumber (such as two-by-fours and planks) but rather on the brackets or devices which enable such lumber to be successfully and reliably used in erecting a strong and satisfactory scaffold.

In carrying out the principles of the present invention novelty is predicated on the one hand on finger brackets which have hooks whereby they may be connected with the most advantageous parts of the frame structure, for example the customary roof plates.

Further novelty is predicated on the novel bracket means employed not only for supporting the planks in making up the platform but for attachment to the support timbers or two-by-fours, said means being particularly significant in that it is characterized by a diagonal brace arm the lower end of which is pointed and extended so that it embeds itself in the fibers of the wood, thus insuring reliable anchorage and cooperation with the support timber.

Then, too, novelty is predicated on the stated means characterized by a substantially U-shaped metal strap forming the body part of the bracket and providing spaced arms between which simple metal cleats are arranged to function not only as spacers but as plank retaining lugs.

Other objects, features and advantages will become more readily apparent from the following description and the accompanying drawing.

In the drawing, wherein like numerals are employed to designate like parts throughout the same:

Fig. 1 is a view in section and elevation showing parts of a building framework and illustrating the single vertical timber and planks and how they are arranged and cooperate with the novel brackets, the latter constructed in accordance with the principles of the present invention.

Fig. 2 is a perspective view of the upper hook-equipped bracket or hanger.

Fig. 3 is a perspective view of the plank and platform erecting bracket or bracket means.

Referring now to Fig. 2 the hook-equipped hanger or so-called upper bracket is denoted generally by the numeral **6** and it is preferably of one-piece construction and has a depending leg **8** with a hook on its upper end the hook embodying the component portions **10** and **12**. The lower end portion of the arm, as at **14** fits between the spaced portions of a U-shaped clip **16** and the two

parts together provide a collar which embraces the upper end portion of the two-by-four or equivalent support-timber **18**. The collar is provided with nail holes **20** to accommodate nails **22** thus making it possible to attach the timber and bracket together as seen in Fig. 1. It will be noticed here that the collar is pushed down from the upper end of the timber so that part of the arm **8** rests against the timber and distributes the stress and strain and makes for a rigid cooperation of parts.

The aforementioned boards or planks are also intended to be on-the-job material and they are denoted by the numeral **24** and when assembled or put together as seen in Fig. 1 they provide the desired platform. The bracket means here is novel and is denoted generally by the numeral **26** and as seen in Fig. 3 it comprises a metal strap which is bent upon itself at **28** to form an elongated U-shaped member **30** the opposed parallel limbs of which are denoted at **32**. Adjacent the bight portion we provide nail holes **34** for use in the manner seen in Fig. 1. The aforementioned metal cleats **36** have their lower half portions fitted between the limbs **32** and secured in place and have their upper end portions **38** projecting to provide spacing and retaining lugs. Thus the cleats not only reinforce the over-all construction but they satisfactorily arrange the planks in the manner seen in Fig. 1. Adjacent the bight portion **28** there is a specially elongated cleat which is perhaps better referred to as a leg **40** and the median portion of this passes between the limbs **32** functioning not only as a brace but also it extends above the limbs to serve also as a spacer at **42**. The lower end thereof **44** is welded inwardly of the adjacent end portion **46** of a diagonal brace **48**. The brace is joined at its outer end to the U-shaped member and has its projecting end slightly beveled or sharpened to provide a knife-like construction as seen in Fig. 1. The retaining fingers **50** embrace the timber **18** in the manner illustrated. This is indeed a novel construction in that the bight portion and limbs **32** cooperating with the leg **40** provide timber-embracing means also having the function of a stabilizer for the over-all bracket means **26**. In other words all of the components here contribute their individual shares in providing a novel over-all plank accommodating and platform building bracket, the expression "bracket" being used in a rather broad and comprehensive manner.

As before mentioned the invention relates in an over-all sense to a knockdown or easy-to-erect scaffold construction with the parts considered singly and collectively, that is the brackets **6** and **26** together and by themselves and also in combination with the timber **18** and the planks **24**.

The details of construction are so obviously clear from the illustration of the same in the drawing that the manner of use is almost self-evident. Briefly, the hanger brackets—two or more in use—are hung over the roof plates A of the building framework B as illustrated in Fig. 1. The upper end portion of the timber or two-by-four is passed through the collar and braced against the arm **8** and the collar is nailed in place. The embracing components of the bracket means **26** surround the lower end portion of the two-by-four and cooperate therewith to provide an outstanding arm and it is on this arm that the planks are arranged to provide a novel and ready-to-use platform.

With further reference to Figure 3 it will be noticed that the numeral **52** denotes a block which is suitably fastened between the limbs **32** just inwardly of the outermost cleat **36** thus providing a socket for reception and retention of the lower end portion of a post **54**. In this connection it is to be explained that a hand rail (not shown) may have to be used at times and one end of the same would be supported atop the post or upright **54**,

Also, a simple method of securing the lower end of the post is to pass a bolt or pin **56** through holes which are provided therefor in the manner shown.

The foregoing is considered as illustrative only of the principles of the invention. Further, since numerous modifications and changes will readily occur to those skilled in the art, it is not desired to limit the invention to the exact construction and operation shown and described, and accordingly all suitable modifications and equivalents may be resorted to, falling within the scope of the invention as claimed.

What is claimed as new is as follows:

For use in readily erecting and dismantling the platform portion of a scaffold and which lends itself to use in cooperative association with lumber and timber used in and around a building under construction, an arm on which portions of a plurality of coplanar planks may be allowed to rest for support, said arm being elongated and comprising a U-shaped member, said U-shaped member having a pair of spaced parallel limbs joined at like ends by a connecting bight portion, said bight portion and adjacent portions of the limbs being adapted to embrace a timber and having nail holes by way of which the limbs may be fastened to the timber with the timber resting between the limbs and an edge portion thereof being bridged by the bight portion, a leg disposed at right angles to the lengthwise axes of said limbs, said leg being spaced from said bight portion and having an upper part thereof disposed between the limbs with the end extending to a position above the plane of the upper edges of the limbs, the major portion of said leg depending below the lower edges of said limbs, said leg being adapted to bear firmly against a cooperating edge of the aforementioned timber and having means at a lower end thereof to embrace the timber, and a diagonal brace connected at one end to a median portion of said U-shaped member, the other end cooperating with and projecting beyond the lower end of said leg and terminating in a knife-like edge adapted to be embedded in the timber, and a plurality of longitudinally spaced upstanding timber spacing members providing lugs, said lugs being mounted between the limbs and extending above the limbs to assist in holding the timbers in a temporarily assembled and usable position.

References Cited in the file of this patent

UNITED STATES PATENTS

313,465	Worsley	Mar. 3, 1885
751,359	Stronach et al.	Feb. 2, 1904
1,251,703	Spencer	Jan. 1, 1918
1,662,667	Goldsboro	Mar. 13, 1928
1,926,207	MacAlpine	Sept. 12, 1933
2,122,190	Wendt	June 28, 1938
2,125,830	Vecker	Aug. 2, 1938
2,485,838	Nicol	Oct. 25, 1949
2,605,074	Bucsko et al.	July 29, 1952