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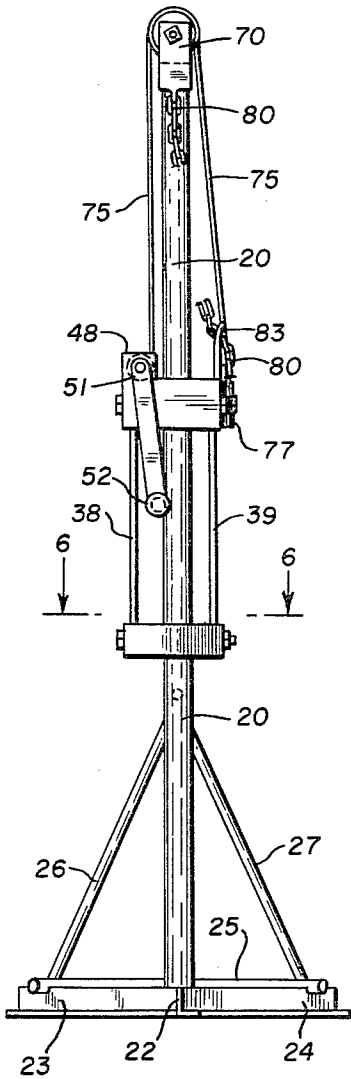


Fig. 5

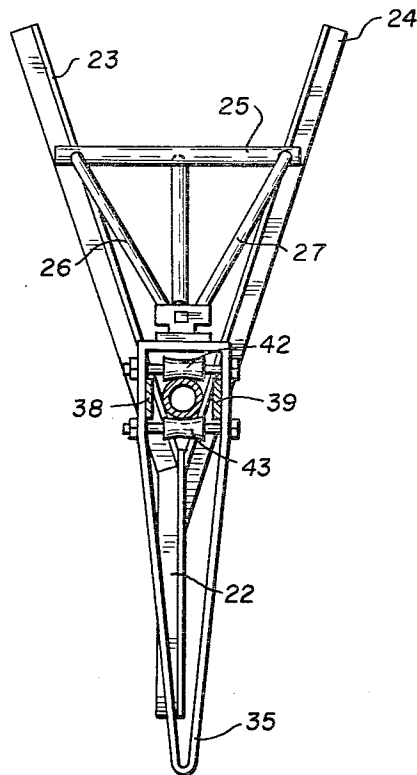


Fig. 6

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1

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This invention relates to scaffolding and more particularly to a bricklayer's scaffolding which provides a portable platform, which may be raised and lowered by the bricklayer while supported on such scaffolding.

Scaffoldings for various types of construction work are well known throughout the construction industry, but for special purposes such as bricklaying the normal single plank scaffolding is not satisfactory for the most efficient utilization of manpower. Commonly used scaffolding, particularly for the smaller contractor, utilizes a pair of spaced-apart sawhorses with a plank or two bridged between them. For lower work, lower sawhorses are used, and as the height of the wall increases taller sawhorses are utilized. The extraneous movements of the bricklayer leaning down to pick up bricks for laying, and the changing of the height of the sawhorses to change the height of scaffolding, decrease the efficiency of the bricklayer and increase the amount of work necessary for laying a brick wall. Specialized scaffolding has been proposed using bi-level platforms, but these have been unwieldy and too cumbersome for a lone operator to handle.

According to the present invention, I have provided a two-level scaffolding, one level arranged to support a bricklayer and a higher level arranged to support the bricks in ready position for use by the bricklayer. The device is arranged with raising means on each of two simple standards so that one person may change the scaffolding level while standing on the scaffolding. The device is sturdy, easily dismantled, and is readily portable, yet is strong enough to support a bricklayer and a substantial quantity of bricks. The device also provides means for joining several scaffolding planks by means of three or more standards, thereby increasing the effectiveness of the scaffolding.

Included among the objects and advantages of the present invention is a simplified two-level scaffolding for masonry work which includes at least a pair of upright tubular standards each provided with a lifting mechanism, operable by a worker mounted on the scaffolding, to raise and lower the same as required. The device is provided with safety features to prevent accidents during use thereof and to provide increased strength while retaining portability of the scaffolding members. Simple construction for ready assembly and disassembly provides a highly portable and quickly assembled scaffolding. The invention provides a two-level scaffolding in which the lower level is arranged for holding the mason and the upper layer is arranged to hold a supply of bricks for use of the mason during a bricklaying operation.

These and other objects and advantages of the invention may be readily ascertained by referring to the following description and appended illustrations in which:

FIG. 1 is a perspective view of a two-level scaffolding, according to the invention, indicating attachment to other sections of scaffold planking;

FIG. 2 is a side elevation of a scaffolding standard according to the invention, illustrating in detail the mechanism thereof;

FIG. 3 is a top plan view of a portion of the scaffolding taken along section line 3-3;

FIG. 4 is an enlarged detail of a brace according to the invention;

FIG. 5 is a rear elevation of the scaffolding of FIG. 2; and

FIG. 6 is a top plan view of the scaffolding portion taken along section lines 6-6.

2

In the embodiment of the invention selected for illustration, a pair of scaffolding supports are arranged to be placed apart supporting upper and lower planks therebetween. As shown in FIG. 1, a pair of upright scaffolding support members, shown in general by numeral 10, support a lower plank 11 and an upper plank 12. The scaffolding members may be placed in series of three or more, with the ends of planks 13 and 14 placed over the planks 11 and 12 on the horizontal supports on the upright 10 and support on another upright similar to those shown. Standards are generally arranged in line along the wall under construction; however, the standards may be placed at an angle to one another so that the planks are actually at an angle. The planks are shown as merely resting on the supports; however, it is apparent that the planks may be secured in any convenient manner to the supports as by means of clamps, bolts, or the like.

Each standard comprises, shown in FIGS. 2 through 6, a central tubular member 20 which is supported on a base 21. The base is removable, and it includes a lateral channel member 22 on one side thereof and a lateral A frame on the opposite side. The A frame as shown in FIG. 6 includes channel members 23 and 24 secured to the member 22 by welding or other suitable means and a removable cross brace 25 resting in notches on braces 23 and 24. The cross brace is connected to an upper A frame member by members 26 and 27 which are connected to a lock mechanism 28 which includes a hook 29 for fastening into a hole in the tubular member 20. The handle 30 of the lock mechanism 28 provides means for rigidly securing the base to the tubular member 20. Internally of the tubular member is removably mounted a post 31 which is welded or otherwise secured to the base member 21. The base member 21 is thus readily removable for transportation of the scaffolding member, and when assembled with the tubing 20 is arranged to support the same in an essentially upright position. The brace supports the upright essentially perpendicular to the base member 21.

Mounted on the tubular member 20 is a reciprocable carriage which includes a lower support 35 for a plank and an upper support 36 for another plank on the opposite side of the carriage. Interconnecting the lower support 35 and the upper support 36 are a pair of connector bars 38 and 39 which are secured by conventional means to the support members. On either side of the member 20 at upper and lower portions of the carriage, are rollers for free movement of the carriage along the member and these include upper rollers 40 and 41, which are journaled between the sides of upper portion of the carriage. Lower rollers 42 and 43 are secured on shafts mounted in the lower portion of the carriage.

The upper portion of the carriage includes a box frame 45 (FIG. 3) and extending upwardly from ends 46 and 47 are a pair of plates 48 and 49. A cable spool 50 is journaled in the plates 48 and 49 and a crank arm 51 extends from the spool 50. A handle 52 is mounted in the crank arm 51 and is arranged to slide through the opening from side to side of the crank arm. In one position, shown in FIG. 2, the handle is pushed through the crank arm 51 so as to rest against the upright bar 38 and form a brake for the spool, since the pull of the cable (from the weight of the carriage) tends to force the crank arm in counterclockwise position. The lower support 35 is a V-shaped piece of strap metal secured in position on the member 20 by means of the rollers.

The upper support 36 is held on to the upper carriage member by means of a hook 60 over box frame 45 and an upright support bar 61 which is secured at its base to the lower support 35. An angle brace 62 supports the member 36 which holds the brick plank. The hook 60 mounts over the top frame and the bottom of the upright

3

61 rests in a recess in the lower member of the carriage for easy removal.

A cap 70 is mounted on the top of the upright 20 and it includes a pair of pulleys 71 and 72 for reeving a cable 75 thereover. The cable is connected at one end to the extension 49 by means of a tie 76, and the cable 75 passes up over the pulley 71 down alongside the upright 20 under pulley 77 back up over the pulley 72 and then wound onto the spool 50. This reeving provides a high leverage for moving the carriage up and down the tubular member 20.

As a safety, a chain 80, provided with a key 81 at one end thereof, is attached to the cap. The chain passes through an opening in a boss 83 mounted on the upper part of the carriage. This opening has a circular portion and a notch portion connecting therewith for temporarily locking one of the links of a chain against the boss 83, as is common in chain type locks. For added security, the key 81 may be placed through the link in the slot or notch and securely hold the same in the boss. This safety feature is an addition to the use of the handle 52 which may be pushed through the crank arm 51 to rest against the upright 20 and prevent rotation of the spool.

In starting to use the scaffolding, the brace members 25 through 30 are not normally used since the carriage is in lowermost position, obscuring or covering the hole through which the hook 29 is placed. As soon as the scaffolding is raised above the point, the brace is placed in position so that the hook will pass into the hole in the upright 20 and brace 25 rests in notches in 23 and 24, and the lever arm 23 is moved down by means of the handle 30 to rest against the cross bar 25 and securely hold the upright perpendicular to the base.

As the carriage is moved higher along the upright 20, an additional brace may be necessary to particularly support the weight of the bricks on the plank held on the support 36. For this purpose, a movable support 85 is provided with a bifurcated end 86 and a foot 87 at the opposite end. The bifurcated end may be placed in the recess adjacent the upright 60 of the support 36 and the support then braced against any available support to prevent tipping of the scaffolding due to the weight of the bricks or the like carried on the plank on support 36. Different lengths of braces may be used as the height of the carriage changes.

With the base 21 and upper support 36 removed and the carriage removed, the device is easily transported. The carriage may be slid from the upright 20 if the cap 70 is removed. Various heights of tubular members 20 may be provided and in one case heavy walled aluminum tubing is used for the upright to provide a simple standard for the carriage.

While the invention has been illustrated by reference to a particular device, there is no intent to limit the spirit and scope of the invention to the precise details set forth except as defined in the following claims.

I claim:

1. A portable scaffolding support arranged to be used in pairs for supporting upper and lower bridging planks on opposite sides of upright supports comprising a tubular upright member, a base removably secured to the bottom of said upright supporting it in an upright position, a

4

movable carrier reciprocally mounted on said upright member, said carrier including an upper outwardly extending plank support projecting laterally from one side of said carrier and a lower plank support extending outwardly from said carrier in the direction opposite said upper plank support, an upper pair of rollers journaled in said carrier bearing against opposite sides of said upright and one of said upper rollers being mounted on the side opposite said upper plank support, a lower pair of rollers journaled in said carrier below said upper rollers and bearing against said upright, and one of said lower rollers being mounted on the side opposite said lower plank support whereby said carrier rides on said rollers on said upright, first pulley means mounted adjacent the top of said upright, second pulley means mounted on said carrier, rope means reeved around said pulleys, rope retrieve means mounted on said carrier including a movable crank handle, one end of said rope means being secured to said retrieve means and the other end connected to said carrier for raising and lowering said carrier along said upright, said handle being movable from an outside position for turning said rope retrieve means to an inside position against said carrier for preventing unwinding of the rope therefrom, a chain secured to the top of said upright, a bracket including an eye and slot mounted on said carrier for reception of said chain and provide temporary lock means to prevent downward movement of said carrier, and means for locking said chain in said slot and eye.

2. A portable scaffolding support arranged to be used in pairs for supporting opposed bridging planking comprising a tubular upright member, a base member having a normal depending upright cylindrical member removably telescoped in one end of said tubular member, a releasable brace temporarily securing said base and tubular upright at a right angle to each other, a removable carrier reciprocally mounted on said upright member, said carrier including an upper outwardly extending plank support projecting laterally from one side of said carrier and a lower plank support extending outwardly from said carrier in the direction opposite said upper plank support, there being upper and lower guide rollers journaled in said carrier bearing against said upright member to provide roller means for movement of said carrier up and down said upright member, first pulley means mounted adjacent the top of said upright, second pulley means mounted on said carrier, rope means reeved around said pulleys and arranged for moving said carrier up and down said upright, rope retrieve means mounted on said carrier including a movable crank handle and secured to an end of said rope means, said handle being movable from an outside position for operating said rope retrieve means to an inside position temporarily locking against said carrier, and chain lock means cooperative between said first pulley means and said carrier for temporarily securing said carrier at predetermined heights on said upright.

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