Feb. 11, 1964 P. E. NEELEY 3,120,878

PORTABLE KNOCKDOWN SCAFFOLD CONSTRUCTION

Filed Dec. 28, 1961

Fig. 1

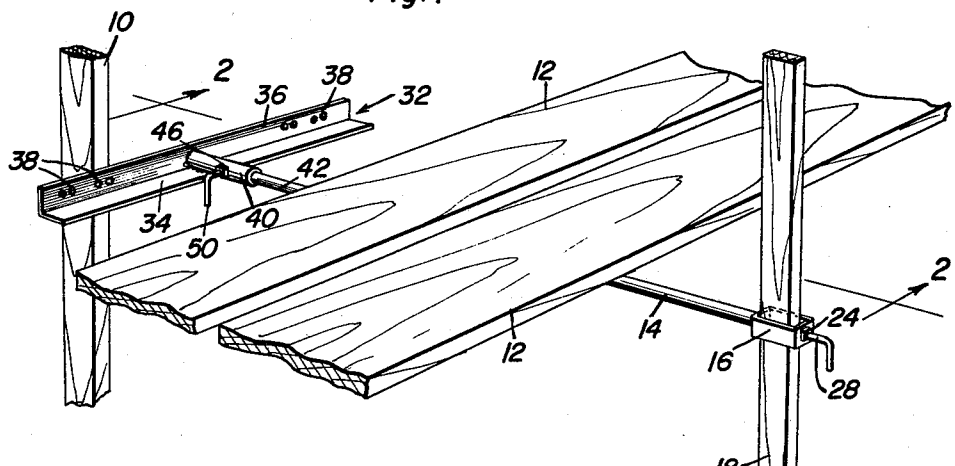


Fig. 2

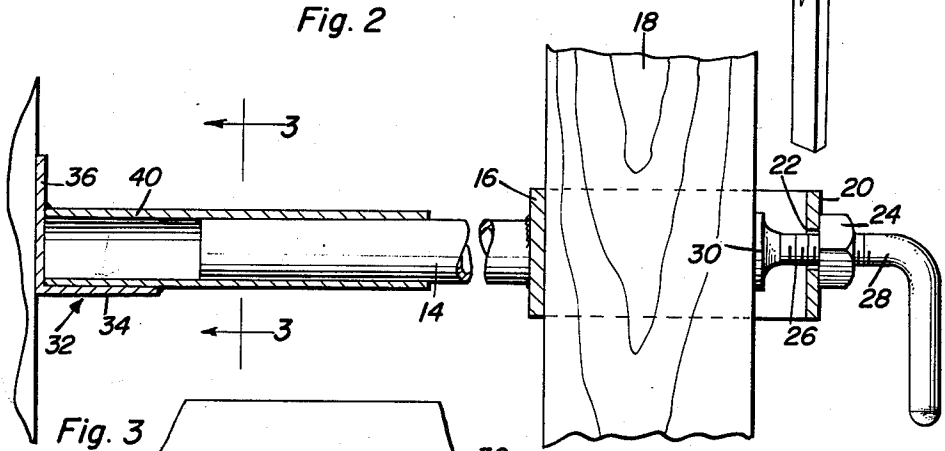
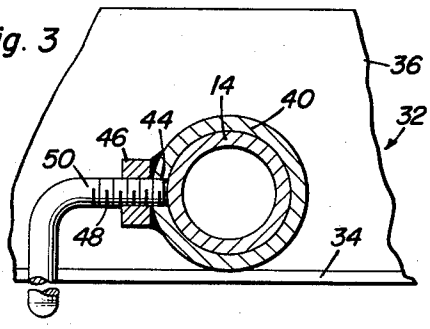


Fig. 3



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PORTABLE KNOCKDOWN SCAFFOLD CONSTRUCTION

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The present invention relates to certain new and useful improvements in a scaffold construction which employs horizontal planks and vertical timbers as principal structural members and readily applicable and removable metal component parts to effectually and reliably support the planks or timbers, as the case may be.

Briefly the invention has to do with an easy-to-erect knockdown-type scaffold construction characterized by a horizontally disposed support member, means at at least one end thereof having a horizontal socket member into which the adjacent end of the support member is telescopically removably fitted, said socket member having a fastening device securing the support member in the socket thereof, planks resting removably atop the support member, a vertical leg, and means removably embracing the leg and detachably and adjustably secured to said leg.

An object of the invention is to provide novel brackets and trestles or stands of a simple, practical and economical type and which are such in construction and durability that they may be used over and over, dismantled and readily carried from one construction job to another whereby to thus provide the compactness and convenience so essential in time and labor-saving needs for all concerned.

Another object of the invention is to permit the adoption and use of suitable rods or pipe sections and to so design and construct the companion or complemental parts that the desired results may be achieved with assurance, safety and reliability.

In carrying out one embodiment or form of the invention the plank supporting pipe or rod member is provided at one end with an elongated bracket capable of being nailed on framework studding or a building wall, the same being provided at an outer end with a simple collar having a clamping screw and making it possible to utilize timbers as vertical and adjustable supporting legs.

These together with other objects and advantages which will become subsequently apparent reside in the details of construction and operation as more fully hereinafter described and claimed, reference being had to the accompanying drawings forming a part hereof, wherein like numerals refer to like parts throughout, and in which:

FIGURE 1 is a fragmentary perspective view showing a portion of a scaffold and, for sake of simplicity, illustrating two planks on the support rod or member, showing the attaching bracket for the member at the left, and the timber accommodating collar at the right;

FIGURE 2 is an enlarged view in section and elevation taken approximately on the plane of the horizontal line 2—2 of FIGURE 1; and

FIGURE 3 is an exaggerated cross-section on the line 3—3 of FIGURE 2.

With reference to FIGURES 1 to 3, inclusive, and particularly to FIGURE 1 the numeral 10 designates a stud which may be assumed to be a fixed stud in a wooden building framework (not shown). The conventional platform planks are denoted at 12. These are shown resting and supported on the horizontal support member 14 which may be a suitable length of rod or a pipe section. This rod is provided in its outer or righthand end in FIGURE 1 with a rectangular or an equivalent collar 16 which is rigidly attached and which is adapted to embrace or receive the coacting portion of a vertical timber 18 constituting a leg. The outer end portion 20 (FIG. 2) of the collar is provided with an opening 22 and on the exterior

side with a fixed nut 24 to accommodate the screw-threaded portion 26 of a crank-type setscrew 28. The inner end of the setscrew is provided with a swiveled end thrust head 30 to engage the edge of the timber 18. As evident, this collar construction permits one to use on-the-job timbers for the leg means and allows for suitable adjustment. The lefthand end of the support member 14 is attached to and suspended by a bracket 32 which comprises an elongated angle iron having a horizontal flange 34 and a vertical flange 36. The latter flange is provided with nail holes 38 to permit the same to be nailed to the timber 10. Secured fixedly to the two flanges between the ends of the angle iron is a horizontal sleeve 40 which provides a socket member to telescopingly and removably receive the end portion 42 of the support member 14. As shown in FIG. 3 the sleeve has a hole 44 in one side with an aligned fixedly mounted nut 46 which serves to accommodate the screw-threaded portion 48 of the crank-shaped setscrew 50. In practice the bracket 32 is fastened to two or more studs 10 (one shown) or alternatively may be mounted on a somewhat more completed wall of a building (not shown). After being fixed at the proper point and elevation the bracket permits the attachment thereto of the cooperating end portions 42 of the support member 14 after which the setscrew is tightened. The collar-equipped end 16 serves to accommodate the timber 18 which provides a supporting leg and which functions in a clearly understandable manner.

It is believed that a careful consideration of the description in conjunction with the figures of the drawings will enable the reader to obtain a full and comprehensive understanding of the features and advantages, construction and use of the overall invention. Therefore, a more extended description is believed to be unnecessary.

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:

1. A portable easy-to-erect knockdown scaffold structure comprising, in combination, a stationary vertical stud constituting at least one of the studs in the framework of a building, an elongated angle iron adapted to assume a position horizontal to said stud and embodying horizontal and vertical flanges, said vertical flange having selectively usable nail holes, said vertical flange being nailed in a predetermined usable position against a cooperating vertical surface of said stud, said angle iron being of a length appreciably greater than the cross-section of the stud and having its end portions extending well beyond diametrically opposite vertical surfaces of said stud, a horizontal rigid socket member, said socket member being circular in cross-section and having one end portion seated on the horizontal flange of the angle iron and a terminal end abutting, fixed to and closed by the vertical flange of said angle iron, the transverse cross-section of the vertical flange being greater than the cross-sectional dimension of said socket member, said socket member being of a length whereby the open-ended socket portion thereof projects well beyond the longitudinal edge of the horizontal flange of said angle iron, said projecting portion being provided with a setscrew, said angle iron being of a length at least several times the length of said socket member, an elongated rigid plank-supporting member having one end which is circular in cross-section and which is fitted telescopingly, rotatively and removably in the socket portion of said socket member, the other end of said supporting member being provided with an

integrally joined rigid collar, said collar being provided with a setscrew, a vertically elongated timber having an upper portion passing through and beyond the collar and projecting above the plane of the collar as well as the plane of said support member, and planks supported on said support member between the projecting upper end of said leg and said socket member.

2. A portable knockdown plank assembling, supporting and scaffold-building device comprising an elongated angle iron constituting an anchoring bracket, said angle iron embodying integrated horizontal and vertical flanges, said vertical flange having a plurality of longitudinally spaced selectively usable nail holes to accommodate nails such as are used in nailing said angle iron flatwise on a fixed vertical framework stud or siding on abuilding wall, said angle iron being of a length that it may be caused to assume horizontal position spanning a pair of adjacent studs in the aforementioned framework, a rigid socket member having one end portion seated on the horizontal flange of the angle iron midway between the respective ends of the angle iron and having a terminal end thereof abutting and fixed to and closed by the vertical flange of said angle iron, said socket member being circular in cross-section and also being of a length appreciably greater than the cross-sectional width of said horizontal flange and having a major portion projecting well beyond the cooperating longitudinal edge of said horizontal flange, the projecting portion of said socket member being provided with a setscrew, said setscrew being spaced for freedom of access and operation from said longitudinal edge,

an elongated rigid plank assembling and supporting member having one end which is circular in cross-section and fitted telescopingly and rotatably into said socket member and removably secured therein by said setscrew, a rigid rectangular timber receiving and embracing and timber erecting collar having an inward end thereof affixed to an adjacent end of said plank supporting member and coplanar with said supporting member, said collar having an outer end provided with a setscrew and said collar and setscrew functioning to permit an end portion of a conventional building timber to be fitted through the opening in the collar in the manner and for the purposes described.

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