July 23, 1963 E. C. HINER 3,098,540

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Fig. 1

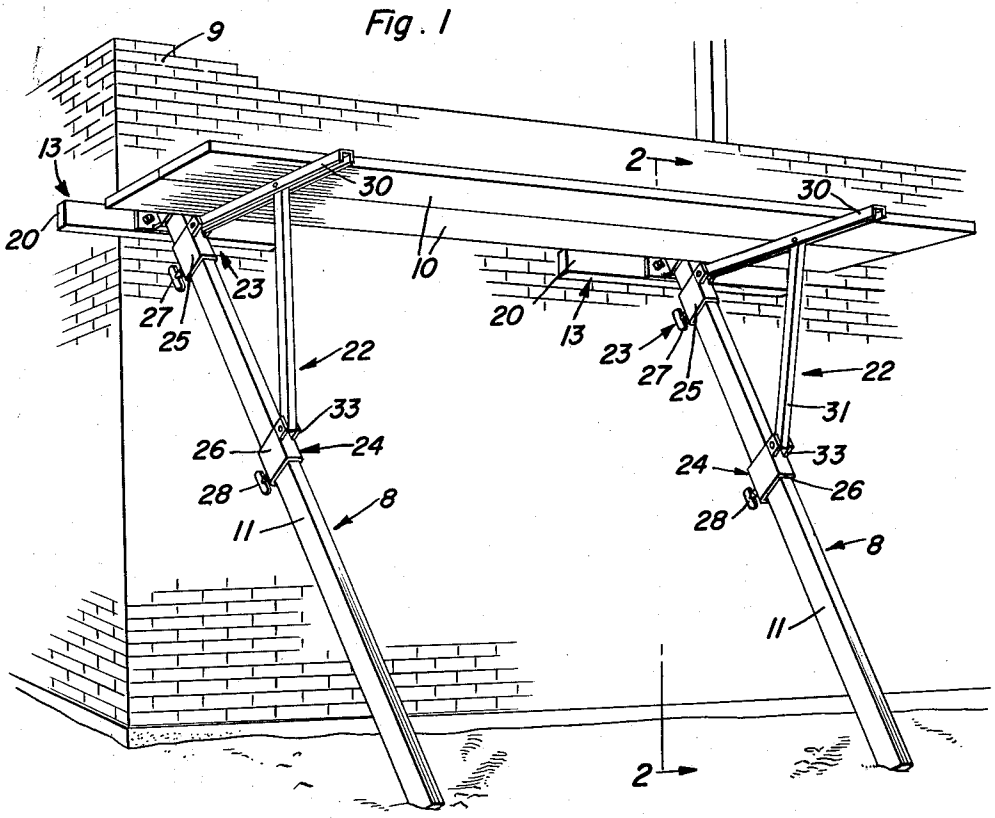


Fig. 5

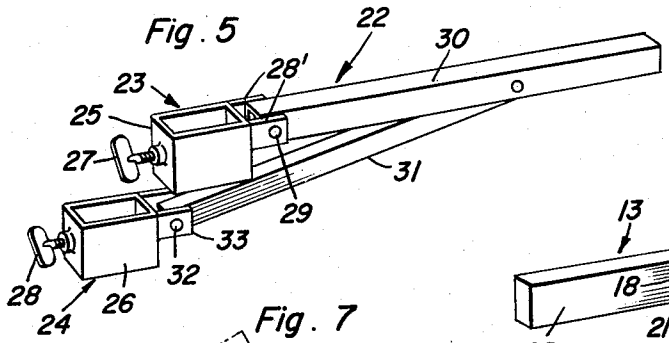


Fig. 6

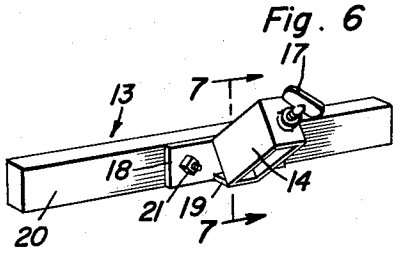
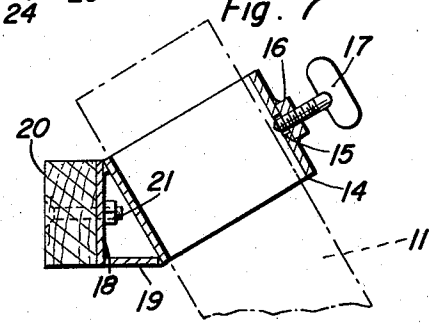


Fig. 7



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Fig. 2

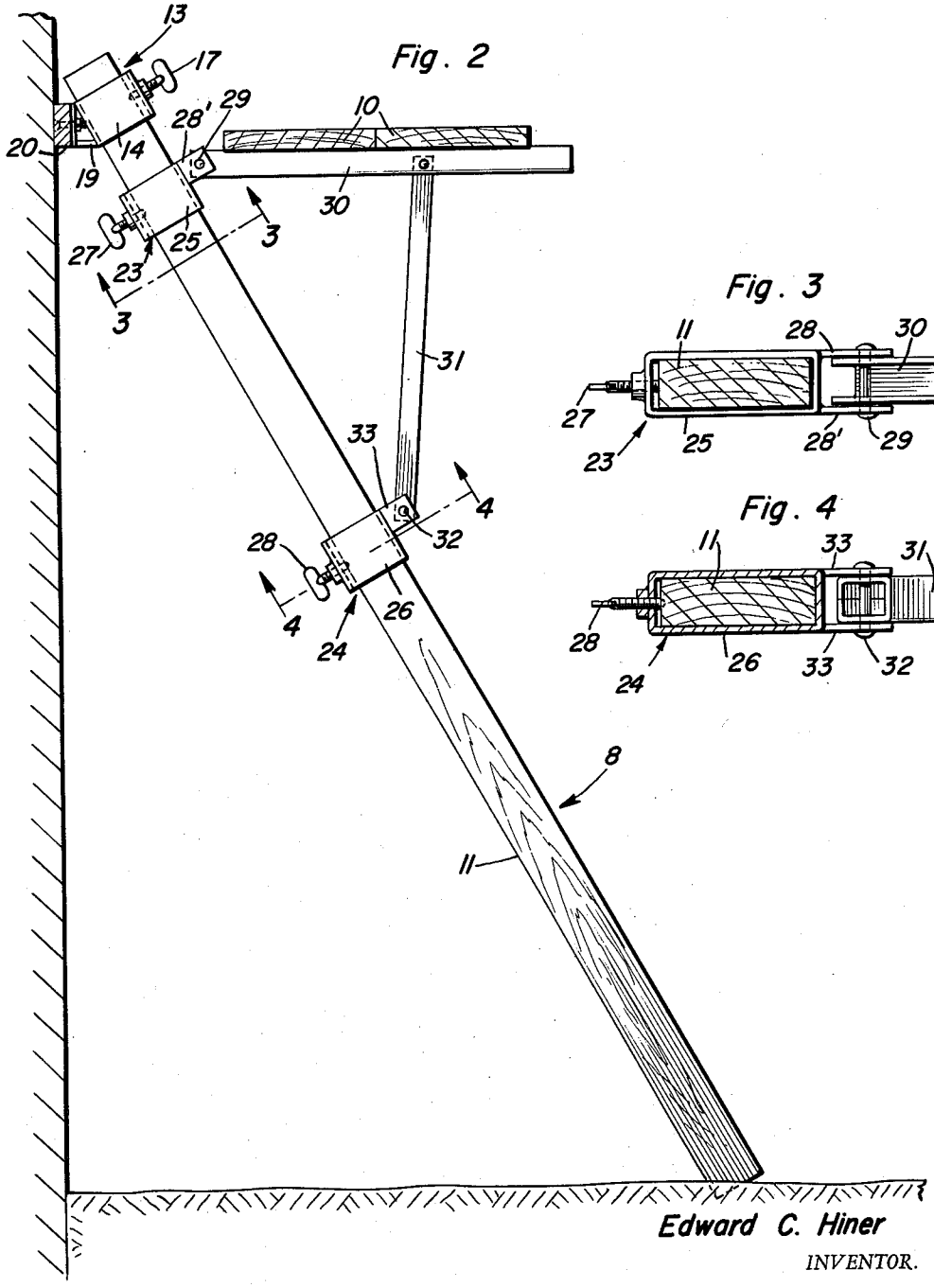


Fig. 3

Fig. 4

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4 Claims. (Cl. 182—152)

This invention relates to new and useful improvements in scaffolds of the prop type particularly but not necessarily, for use in the house building and repairing industries and has for one of its important objects to provide, in a manner as hereinafter set forth, a scaffold of this character which is adapted to utilize as one of its major component parts readily available stock timbers which may usually be had on the job, thus greatly reducing bulk and weight when transporting the scaffold.

Another highly important object of the present invention is to provide an easily transported scaffold of the aforementioned character which is readily adjustable to meet various conditions.

Other objects of this invention are to provide an improved scaffold of the character described which is comparatively simple in construction, strong, durable, safe, compact, of light weight and which may be manufactured at low cost.

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 perspective view, showing a scaffold constructed in accordance with the present invention erected for use;

FIGURE 2 is a sectional view, taken on the line 2—2 of FIGURE 1;

FIGURE 3 is a sectional view on an enlarged scale, taken substantially on the line 3—3 of FIGURE 2;

FIGURE 4 is a sectional view on an enlarged scale, taken substantially on the line 4—4 of FIGURE 2;

FIGURE 5 is a perspective view of one of the brackets, showing the same folded;

FIGURE 6 is a perspective view of the crosshead; and

FIGURE 7 is a sectional view on enlarged scale, taken substantially on the line 7—7 of FIGURE 6.

Referring now to the drawing in detail, it will be seen that reference numeral 8 designates generally a pair of plank supporting units constructed in accordance with the present invention. The units 8 are adapted to lean by gravity against a building wall or other structure as indicated at 9 for supporting adjacent thereto the usual planks 10. Two or more of the units 8 are used for each installation, according to the length of the scaffold.

In the embodiment of the invention which has been illustrated, each unit 8 includes a prop 11 which may be and preferably is a length of stock 2 by 6 timber or lumber such as is usually available on a construction site.

The prop 11 is adapted to be leaned at the desired inclination against the wall structure 9. Toward this end, the prop 11 has adjustably and removably mounted on its upper end portion a crosshead 13 which prevents said prop from turning or twisting. The crosshead 13 includes a clamp comprising a rectangular metallic sleeve 14 which slidably receives the prop 11. The outer or front end of the sleeve 14 has formed therein an opening 15 (see FIGURE 7) which is aligned with a nut 16 affixed to said sleeve. A setscrew 17 is threadedly mounted in the nut 16 and engageable with the prop 11 through the opening 15 for releasably securing the sleeve 14 in adjusted position on said prop.

The crosshead 13 further includes a transversely elongated vertical plate 18 on the inner end of the sleeve 14.

The lower portion of the plate 18 is spaced from the sleeve 14 by a member or plate 19. Mounted longitudinally on the plate 18 is a bar 20 of wood or other suitable material which is adapted to bear on the wall structure 9. Nutted bolts 21 secure the bearing bar 20 on the plate 18. The construction and arrangement, it will be observed, is such as to compensate for the angle of the inclined prop 11 relative to the wall 9.

Removably and adjustably mounted on the prop 11 is a foldable bracket 22 of suitable metal. The bracket 22 comprises duplicate upper and lower clamps 23 and 24, respectively, of suitable metal. Clamps 23 and 24 include rectangular metallic sleeves 25 and 26, respectively, which are slidably adjustable on the prop 11. The sleeves 25 and 26 are substantially similar to sleeve 14 in that they comprise setscrews 27 and 28, respectively, which are engageable with the prop 11 for securing said sleeves in adjusted position thereon. Apertured ears 28′ project from the sleeve 25. Pivotally mounted at 29 for vertical swinging movement between the ears 28′ is an arm 30 in the form of an inverted channel bar. The arm 30 is adapted to receive and support the planks 10. A metallic brace 31 operatively connects the lower clamp 24 to the arm 30 for supporting said arm in adjusted position. The lower end portion of the brace 31 is pivotally secured at 32 between a pair of apertured ears 33 which project from the sleeve 26.

It is thought that the use of the invention will be readily apparent from a consideration of the foregoing. Briefly, as hereinbefore stated, two or more of the units 8 are used, said units being spaced as desired and leaned against the wall structure 9. Of course, the brackets 22 and the crossheads 13 are mounted on the props 8 before said props are erected. The bars 20 bear on the wall 9 and prevent the props 11 from twisting or turning in an obvious manner. If desired, the bars 20 may be of sufficient length to bridge windows and other openings. The clamps 23 are then adjusted to the desired elevation on the props 11 and secured. The clamps 24 are then adjusted to level the arms 20 and secured, after which the planks 10 may be placed on said arms. The construction and arrangement, it will be observed, is such that the platform provided by the planks 10 may be quickly leveled regardless of the inclination of the props 11. It also will be noted that the planks 10 may be readily raised and lowered to the desired elevation. Of course, to disassemble the scaffold the foregoing procedure is substantially reversed. The crossheads 13 and the brackets 22 may then be removed from the props 11. When thus removed the bracket 22 may be compactly folded as shown in FIGURE 5 of the drawing. The props 11 may then be discarded. Also, the bars 20 may be removed and discarded if desired. Also, if desired, the units 8 may be left intact and ready to be used again.

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 scaffold comprising, in combination, a pair of spaced, parallel duplicate props, stabilizing crossheads on the upper end portions of the props engageable horizontally with a wall for supporting said props at an inclination thereagainst, said crossheads being of a material length for spanning window openings, in the wall, brackets mounted on the props, and planks mounted on said brackets, said crossheads including sleeves mounted for sliding adjustment on the upper end portions of the

props, vertical plates having their upper portions affixed to the upper portions of the sleeves, spacing members extending between the lower portions of the plates and the corresponding portions of the sleeves, and elongated horizontal bars removably secured on the plates and adapted to bear on the wall.

2. The combination of claim 1, said brackets comprising vertically spaced sleeves mounted for sliding adjustment on the props, generally horizontal arms mounted for vertical swinging adjustment on the uppermost of the second-named sleeves, said arms receiving the planks thereon, braces extending between the lowermost of the second-named sleeves and the arms for adjusting and supporting said arms, said props and all of the sleeves being of rectangular cross-section for retaining said props and said sleeves against relative rotation, and means for securing the sleeves in adjusted position on the props.

3. The combination of claim 2, said second-named sleeves including pairs of spaced, apertured ears receiving one end portion of the arms and braces therebetween and pivotally connected thereto.

4. The combination of claim 3, said sleeves having openings in one end portion, said means comprising nuts affixed to the sleeves in alignment with the openings, and setscrews threaded through the nuts into the sleeves and engaged with the props.

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