R. M. SEBREE. SCAFFOLDING. APPLICATION FILED MAR. 12, 1907.

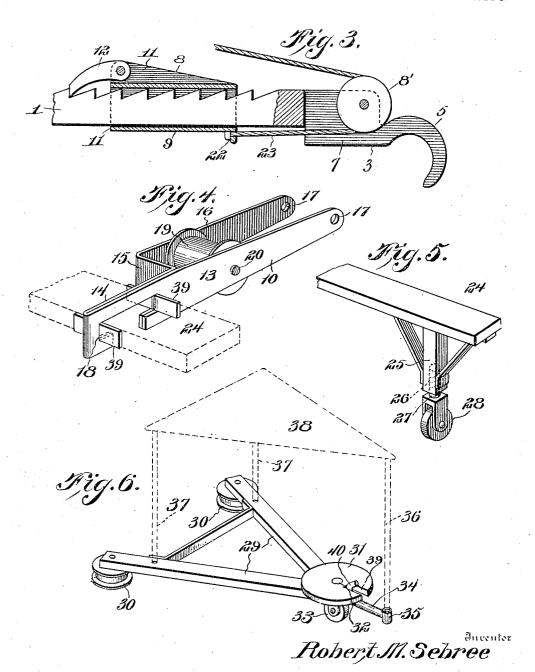
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Louis R. Keinnichs D.W. Gould.

Robert M.Sebree

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2 SHEETS-SHEET 2.



Witnesses

Louis R. Heinrichs D.W. Gould Sin Victor J. Evans

UNITED STATES PATENT OFFICE.

ROBERT M. SEBREE, OF KANSAS CITY, KANSAS.

SCAFFOLDING.

No. 852,141.

Specification of Letters Patent.

Patented April 30, 1907.

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To all whom it may concern:

Be it known that I, ROBERT M. SEBREE, a citizen of the United States, residing at Kansas City, in the county of Wyandotte and 5 State of Kansas, have invented new and useful Improvements in Scaffoldings, of which the following is a specification.

The invention relates to an improvement in scaffolding designed primarily for use on roofs and similar inclined surfaces and adapted to safely support the workmen to permit working on any portion of the surface.

The main object of the present invention is the provision of a scaffolding including hanger beams adapted for removable connection with the apex of the roof or other inclined surface, and carriages adapted for travel on the beams and for locking in adjusted position thereon, the carriages supporting the floor plate of the scaffold, and the latter guiding and supporting a seat frame for the workmen.

The invention will be described in the following specification, reference being had particularly to the accompanying drawings, in

which:—

Figure 1 is a view in side elevation of my improved scaffold, Fig. 2 is a plan of the same, Fig. 3 an enlarged elevation partly in section of one end of one of the hanger beams, Fig. 4 is a perspective view of the scaffold plate supporting arm forming part of the carriage, Fig. 5 is a perspective of one end of the scaffold plate, illustrating particularly the surface engaging means carried thereby, Fig. 6 is a perspective of the scat frame, a canopy therefor being shown in dotted outline, Fig. 7 is an elevation of a portion of the seat frame, the seat being shown in section and in reversed position, illustrating the use of the structure in painting the sides of buildings or the like.

In the construction of the scaffold of the present invention it will be noted that I make use of two hanger beams on each of which is slidably supported a member to be hereinafter termed the carriage, and that said beams and carriages are of respectively identical construction. A detail description of but one of each of these parts will be given therefor, it being understood that such de-

scription is applicable to both.

Each hanger beam 1 comprises a metallic bar of any desired length or sectional area, 55 and cut away on the lower edge as at 2, to provide end blocks 3, thereby to space the

lower edge of the bar for the greater portion of its length from the surface on which the heads 3 rest. On the relatively upper edge the bar is formed with a series of teeth 4, for 60 a purpose which will presently appear. The upper or supporting end of the beam is formed or provided with a hook member 5, designed to co-operate with the apex of the roof or other holding edge, and preferably 65 comprising duplicate shaped plates 6 projecting in spaced parallel relation from the end of the beam, the extreme forward end of the beam being recessed longitudinally to register with the space between the plates 6, 70 as at 7. A grooved pulley 8 is revolubly mounted within the recess 7 by a transversely disposed pin connecting the walls of the recess.

A carriage 8 is slidably supported on the 75 beam, said carriage comprising a slide 9 and a scaffold plate supporting arm 10. The slide 9 comprises a rectangular box 11 designed to loosely embrace the beam on all sides, the side walls of the box being extended above the top thereof to provide flanges 11, between which at the relatively rear or lower ends is pivotally supported a pawl 12 designed to co-operate with the teeth 4 of the beam and secure the carriage in adjusted 85 position longitudinally of the beam.

position longitudinally of the beam.

The scaffold plate supporting arm 10 is preferably constructed of a single length of sheet metal bent intermediate its ends to form plates 13, said plates being projected in 90 contact for a particular distance from the lower end of the arm, as at 14, one of said plates being continued directly forward, as shown, while the other is bent laterally, as at 15, and then projected forwardly to provide 95 a strip 16, which is thus arranged in spaced parallel relation to the opposing strip or plate 13. The arm 10 is pivotally connected to the slide 9, the pivot pin of the pawl 12 being for this purpose extended beyond the flanges 100 11 and the forward ends of the strips 13 and 16 formed with openings 17 to engage the The section 14 of the arm 10 is formed with a T-shaped opening 18 extending entirely through the section with the reduced 105 portion thereof opening through the lower edge of the section.

A drum 19 is pivotally supported between the strips 13 and 16, the axle 20 of the drum being projected beyond one of said strips in 110 the form of a crank handle 21 whereby the drum may be revolved. The slide 9 is

formed at its relatively upper or forward end with a depending ear 22 to which is connected one end of a flexible cord 23, which from its connection with the ear is passed forward 5 and around the groove pulley 8, and rearward therefrom to the drum to which it is connected, whereby upon proper operation of the handle 21 the carriage may be moved

longitudinally of the beam.

In connection with the carriages described I contemplate the use of a scaffold plate 24 comprising a metal plate of any desired length and of transverse sectional dimensions to fit within the openings 18 in the respective 15 arms 10. The plate 24 is provided near each end with a depending post 25, the lower end of which is formed with a centrally arranged longitudinally extending threaded opening 26 in which is mounted the threaded stem 27 20 of a caster wheel 28, designed to bear upon the inclined surface with which the scaffold co-operates.

A seat frame is arranged for use with the scaffold plate comprising an A-shaped frame 25 29 provided at the leg terminals with double flange rollers 30, the distance between the flanges of the rollers being such as to snugly receive one edge of the scaffold plate 24. The apex of the frame is provided with a seat 30 31 loosely mounted upon a stud 32, the lower end of which stud carries a depending caster The seat 31 is revolubly and wheel 23. loosely supported on the stud 32 to permit free turning of the seat and also its adjust-35 ment to maintain the same in a horizontal position by the weight of the body of the workmen.

If desired the seat frame may be provided with a rod extension 34 projecting from the 40 apex of the frame and formed with a socket end 35 to receive a pole 36, similar poles 37 being mounted in openings formed adjacent the ends of the respective legs of the frame. These poles are adapted to support a canopy 45 38 to protect the workmen from the elements.

In assembling the parts the respective hanger beams are arranged on the inclined surface, as a roof, with the hooks 5 engaging the apex thereof, and said beams separated 50 to the desired extent. The scaffold plate 24 is inserted in the openings 18 in the arms 10, bracing strips 39 being forced between the side edges of the plate and the proximate walls of the opening if desired. In this po-55 sition the wheels 28 of the scaffold plate rest

directly upon the inclined surface, the adjustment of the stem 27 serving to maintain the scaffold plate in an approximately horizontal position in use. The pivotal connec-

6c tion between the arms 10 and the slide readily accommodates the adjustment of the scaffold plate to the desired horizontal posi-The seat frame is then applied by engaging the wheels 30 with the relatively up-

said frame resting upon the inclined surface. As thus arranged the operator may adjust the scaffold plate in any desired position longitudinally of the beams and in any such position the seat frame may be readily moved 70 longitudinally of the scaffold plate in an obvious manner to afford the workmen access

to any portion of the surface.

The structure as a whole is readily adapted for use as a scaffold in supporting a painter 75 operating upon an approximately vertical surface, in which use the hooks 5 engage an appropriate support at the upper end of the surface, with the carriage and co-operating parts arranged in the same relative positions 80 as in the previously described use. In the use of the structure as a painting scaffold, however, it will be obvious that the seat 31 will not be properly positioned to support the workmen, and to provide for reversal of the 85 seat I form the same with a radially arranged slot 39 opening through the periphery of the seat terminating adjacent the central point thereof. The seat frame at the juncture of the bars 29 is provided with an approxi- 90 mately right angled pivot pin 40, of a size to engage the central opening in the seat. When the structure is in use as a painting scaffold the seat is removed from the stud 32 and mounted upon the projecting end of the 95 pin 40, the recess 39 embracing the rod extension 34 of the canopy frame. The seat is thereby supported in position approximately at right angles to the surface being operated upon, and is also fixed against rotation 100 through engagement with the rod 34, all as clearly shown in Fig. 7. The pin 40 is removably connected with the seat frame to permit its disengagement when not desired for use, or if preferred it may be so connected 105 to the frame as to be supported below the lower surface of the seat when the latter is mounted in the stud 32.

The parts described are thus adapted for convenient assembling or separation, and 110 when separated may be readily assembled in

compact form for transportation.

While preferring the details of structure shown and described, it is to be understood that various changes and modifications may 115 be resorted to without materially changing the function of the structure, and, therefore, I consider as within the spirit of the present invention such changes and variations as may fall within the scope of the appended 120 claims.

Having thus described the invention what

is claimed as new, is:-

1. A scaffolding comprising hanger beams, carriages movable on said beams, a scaffold 125 plate supported by the carriages, and a seat frame connected to the scaffold plate.

2. A scaffolding comprising hanger beams, carriages movable on said beams, a scaffold 65 per edge of the scaffold plate, the wheel 33 of | plate supported by the carriages, and a seat 130

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frame movable longitudinally of the scaffold

plate.

3. A scaffolding comprising hanger beams, carriages movable on said beams, a scaffold 5 plate movably connected to the carriages, and a seat frame movable longitudinally of the plate.

4. A scaffolding comprising hanger beams, each formed with a series of teeth, a carriage 10 movable on each beam and comprising a slide encircling the beam and an arm pivotally connected to the slide, a pawl carried by the slide and arranged to engage the teeth, and a scaffold plate arranged for removable 15 engagement with the arms of the carriages.

5. A scaffolding comprising hanger beams, each formed with a series of teeth, a carriage movable on each beam and comprising a slide encircling the beam and an arm pivot-20 ally connected to the slide, a pawl carried by the slide and arranged to engage the teeth, a scaffold plate arranged for removable engagement with the arms of the carriages, and means for independently supporting the 25 scaffold plate.

6. A scaffolding comprising hanger beams, each formed with a series of teeth, a carriage movable on each beam and comprising a slide encircling the beams and an arm pivot-30 ally connected to the slide, a pawl carried by the slide and arranged to engage the teeth, a scaffold plate arranged for removable engagement with the arms of the carriages, and a seat frame supported by and movable lon-35 gitudinally of the scaffold plate.

7. A scaffolding comprising hanger beams,

each formed with a series of teeth, a carriage movable on each beam and comprising a slide encircling the beam and an arm pivotally connected to the slide, means for adjust- 40 ing the carriage longitudinally of the beam, means for locking the carriage in adjusted position with relation to the beam, said means being supported on the slide and cooperating with the teeth on the beam, and a 45 scaffold plate supported in openings formed in the arms.

8. A scaffolding comprising hanger beams, carriages movable on said beams, a scaffold plate supported by the carriages, a seat 50 frame movably connected to the scaffold plate, a seat normally supported in parallel relation to the plane of said frame, and means for supporting the seat at approxi-

mately right angles to the frame. 9. A scaffolding comprising hanger beams, carriages movable on said beams, a scaffold plate supported by the carriages, a seat frame movably connected to the scaffold plate, a seat normally supported in parallel 60 relation to the plane of said frame, means for supporting the seat at approximately right angles to the frame, and means to engage the seat and prevent its rotation when in the latter position.

In testimony whereof, I affix my signature

in presence of two witnesses.

ROBERT M. SEBREE.

Witnesses:

James McFarland, R. H. Weber.