

June 9, 1942.

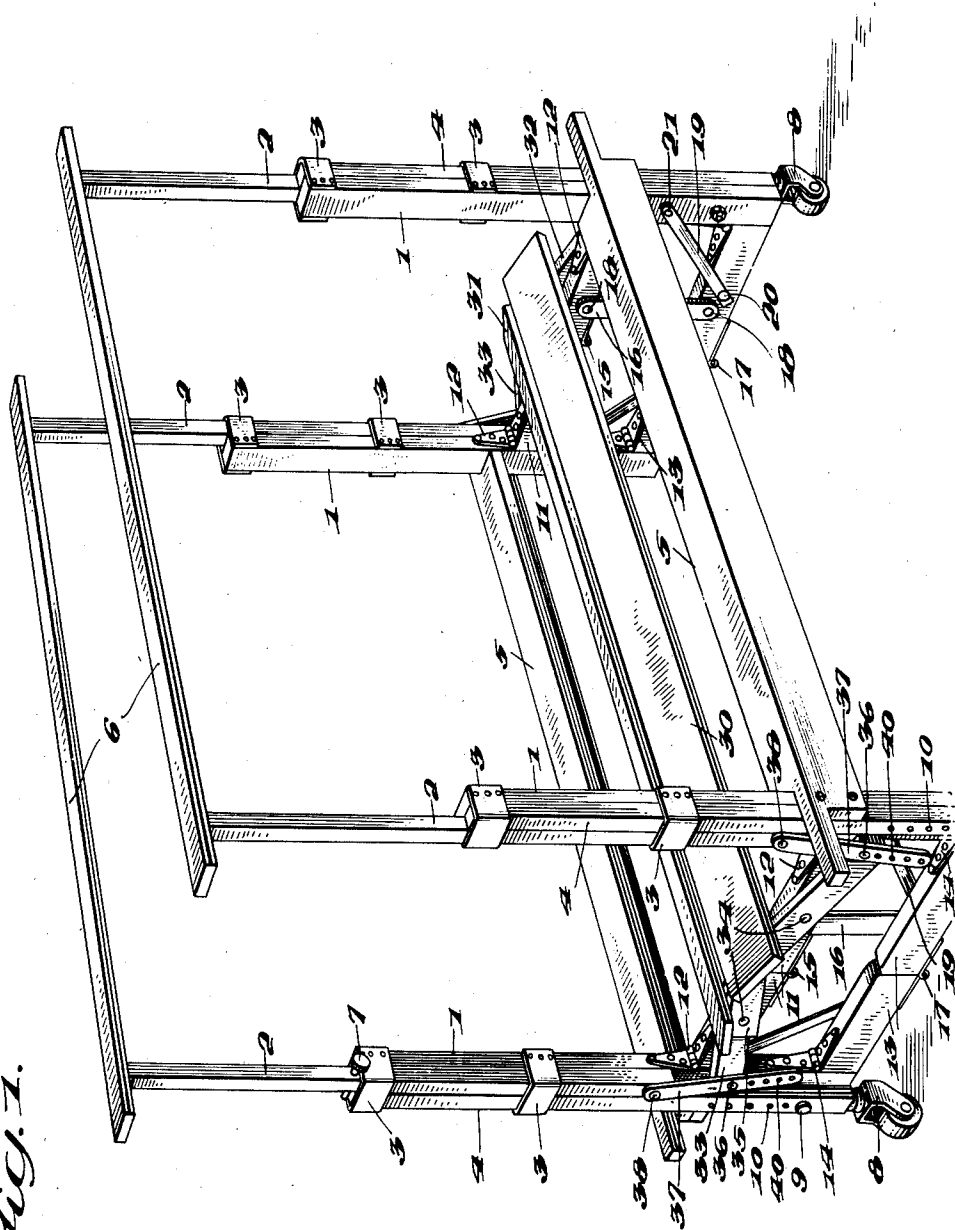
A. J. CHENOWETH

2,285,901

MATERIAL HANDLING SCAFFOLD

Filed March 30, 1942

3 Sheets-Sheet 1



Inventor

Albert J. Chenoweth,

Balcock + Balcock

354

Attorney

June 9, 1942.

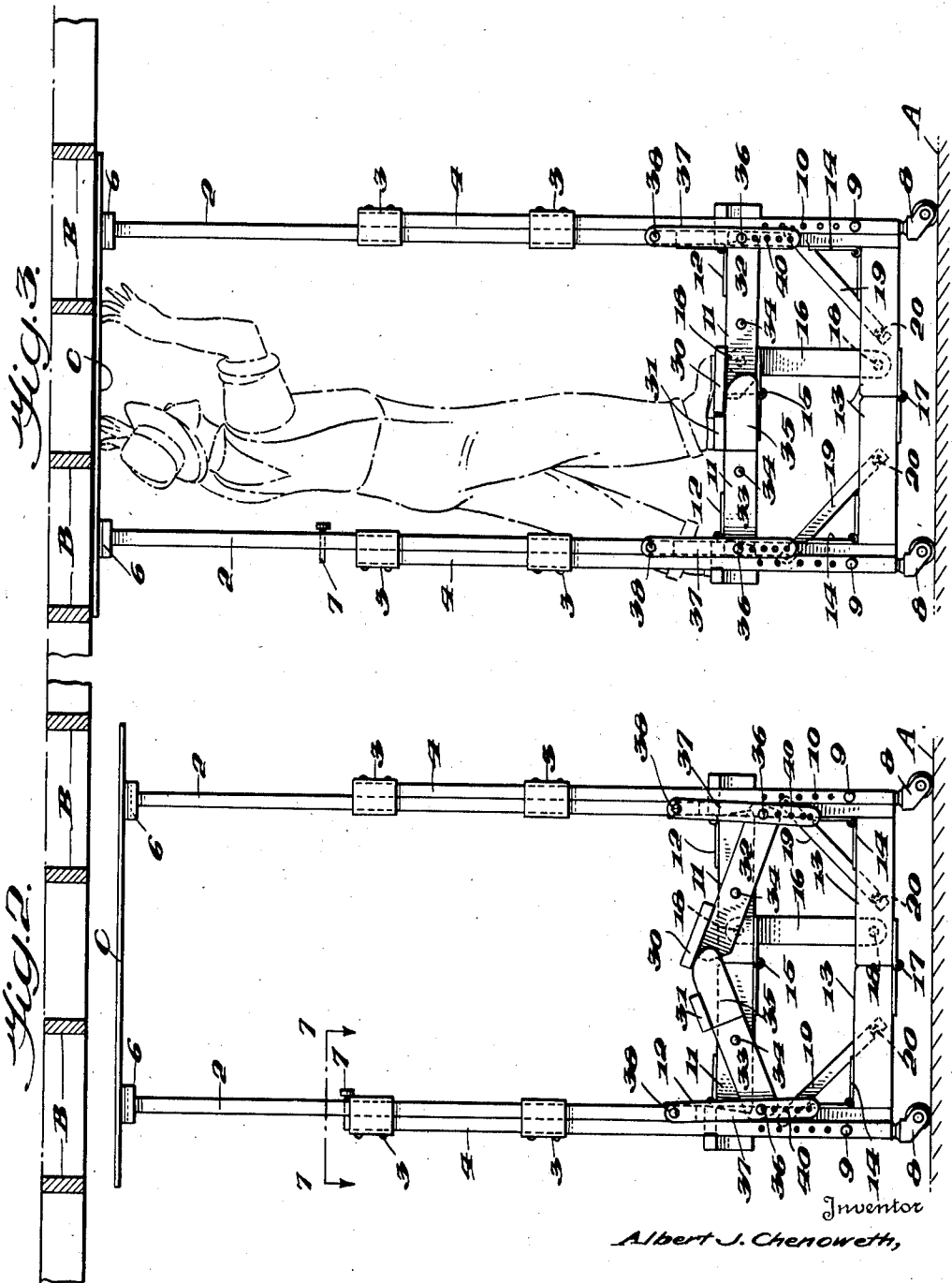
A. J. CHENOWETH

2,285,901

MATERIAL HANDLING SCAFFOLD

Filed March 30, 1942

3 Sheets-Sheet 2



344 Babcock & Babcock
Attorney

June 9, 1942.

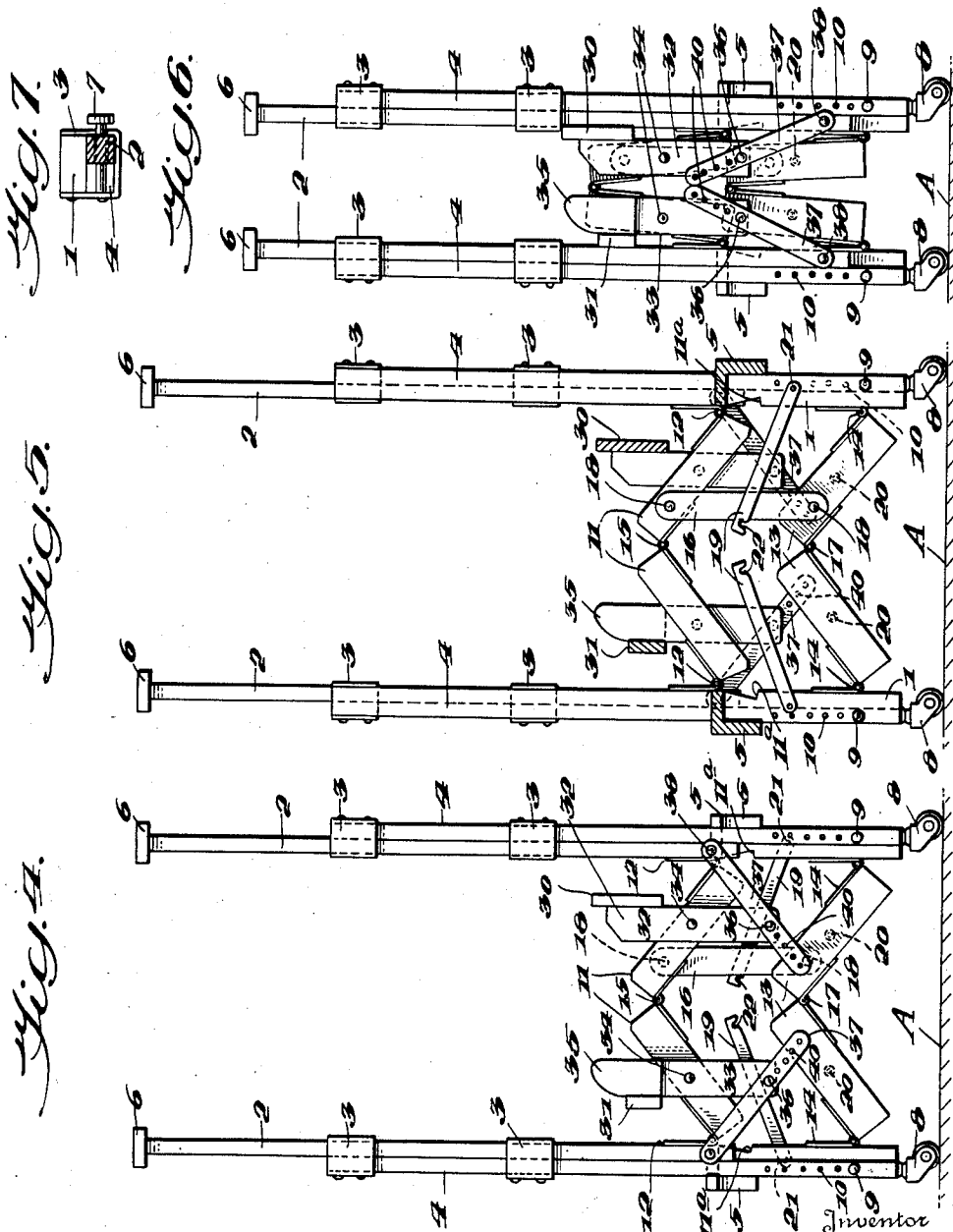
A. J. CHENOWETH

2,285,901

MATERIAL HANDLING SCAFFOLD

Filed March 30, 1942

3 Sheets-Sheet 3



Inventor

Albert J. Chenoweth,

By Balcock + Balcock

Attorney

UNITED STATES PATENT OFFICE

2,285,901

MATERIAL HANDLING SCAFFOLD

Albert J. Chenoweth, Elkins, W. Va.

Application March 30, 1942, Serial No. 436,889

9 Claims. (Cl. 304-2)

This invention relates to material handling and positioning scaffolds primarily for holding sheet material in proper position overhead for securing in place or position in or on a ceiling or canopy.

The primary objects of this invention are to provide what might be termed a "one-man scaffold" to support the workman in proper position to nail or otherwise secure the sheet material to the ceiling or ceiling beams or joists and operable by the workman to, first, support the sheet material or the major portion of the weight thereof while the workman moves it about with his hands or the tips of his fingers until he has moved it into the position desired by him and, while the sheet material is held or supported or partially supported in such desired position by the workman with his hands, to subsequently be further moved or operated by the workman to shove the sheet material vertically upward against the ceiling or ceiling beams or joists to clamp the sheet material between the same and the scaffold whereby the sheet material will be held in the desired position and the workman may remove his hands from the sheet of material and use them to nail or otherwise secure the sheet material in place; to provide in such a scaffold foot operated means or a treadle and associated parts operable by the workman by one of his feet to move the supporting means for the sheet material upward or to permit said means to descend with a controlled movement while the workman adjusts or manipulates the sheet material with his hands until he gets it into such horizontal position that when moved vertically it will fit into the position the workman desires in or on the ceiling; to provide such a scaffold with means for adjusting it for use with widely different height ceilings; to provide a normally wide very stable scaffold which is collapsible or foldable sidewise to pass through narrow openings from one room or hall to another; to provide such a scaffold with a vertically collapsible construction whereby it may be vertically collapsed and pass through low openings while being sidewise collapsed or while being in normal spread condition; and to provide such a scaffold of very simple and sturdy construction and which, while collapsible both vertically and sidewise, shall nevertheless be quite sturdy, rigid in use, dependable and easy and sure of operation by a lone workman under normal operative conditions.

In the accompanying drawings:

Figure 1 is a perspective view of a scaffold em-

bodily my invention, the supporting and clamping bars being in their lowered and stopped position;

Figure 2, an end elevation of such scaffold with said bars in such position and supporting a sheet of plaster-board or other sheet material C roughly 4 to 6 inches below the ceiling or ceiling beams or joists B;

Figure 3, an end view similar to Figure 2 with said bars raised to position to support the sheet material C, by the controlled pressure of the workman's foot on the treadle 30, to a point anywhere from an eighth to a half an inch below the beams or joists B at which height the sheet material may be manipulated by the finger-tips of the workman until it has been moved horizontally into the desired position to make a good fit or match with the adjacent portion of the ceiling sheet material and into proper relation to the individual beams or joists B, from which position the said bars will be raised sufficiently by the application of further pressure to the treadle 30 to force the sheet material C upward and firmly clamp it between the clamping bars and the beams or joists B;

Figure 4, an end elevation with the parts in an intermediate side-wise collapsed condition;

Figure 5, a sectional vertical view taken at any point between the ends of the scaffold and looking toward either end and with the parts in the position shown in Figure 4; and

Figure 6, an end elevation with the parts in collapsed condition, both sidewise and vertically; and

Figure 7, a view on the line 7-7 of Fig. 2, looking in the direction of the arrows.

Referring now in detail to the drawings, A designates the floor; B, the ceiling beams or joists; and C, a sheet of the plaster-board or other sheet material to be secured to the ceiling beams or joists B or to the ceiling.

In practice the plaster-board which is frequently nailed to the joists or studding as a substitute for the lathing and plastering of by-gone days is usually four feet wide and will vary from six to fourteen feet in length, so that one of these sheets, particularly one of the longer ones, will run to an appreciable weight, it being remembered they will run from say three-eighths of an inch to half an inch or more in thickness, the weight and the size making for awkwardness in handling and positioning.

In houses and buildings where it is proposed to use plaster-board or sheet material four feet wide the ceiling beams or joists B will preferably

be spaced at intervals of sixteen inches between centers and the supporting and clamping bars 6 of the scaffold of this invention are spaced at distances of thirty-two inches between centers and preferably will not exceed a width of four inches and may be narrower than that so that as used to apply sheet material to joists B spaced as above mentioned each bar 6 will have its longitudinal center preferably parallel or approximately parallel with, and approximately eight inches from the longitudinal centers of each of two beams or joists B between which it is disposed, thus two beams or joists B will be located between the bars 6.

Of course where the scaffold is for handling sheet material of really substantially different width from that above mentioned it may be desirable to so construct the scaffold or arrange or modify the parts thereof that the distance between the centers of the bars 6 is more or less than the thirty-two inch interval above mentioned according as the variation in the width of the material, the possible variation in the distance of spacing the beams or joists B, and the possible weight and nature of the material of the sheet material C and the ease or awkwardness of handling the same may make desirable or preferable.

The scaffold of the instant invention may be rolled about over the floor from room to room or place to place on casters 8 mounted on or in the lower ends of the adjustable stilt legs 4 respectively of the respective composite corner posts; and may be said to comprise four groups of associated elements, as follows, the corner composite posts connected longitudinally in pairs; the parallel link assemblages between each end of each of said connected pair of posts for permitting sidewise collapsing of the scaffold while providing means for holding it steady and substantially rigid in its normal spread or expanded condition; the supporting and clamping bars with their guided vertically movable and adjustable rods sliding in a guided respectively by the respective composite corner posts; and the linkage and treadle means or supporting and clamping bar manipulating mechanism; and for convenience and simplicity, I will try to follow that general arrangement or order in the following description.

Corner composite posts

There are four of these composite corner posts to each scaffold divided up into two pairs, the corner posts of each pair being connected by the side bars or rails 5 preferably having a horizontal web and a vertical web to give a wide foot support and to provide the requisite rigidity and strength, each pair of composite corner posts together with their connecting side bar or rail 5 constituting a side of the truck.

Each composite corner post comprises a wide thick pillar 1 preferably of a thickness at least equal to half its width, a leg 4, a rod 2 and at least two confining and guiding metal ferrules, bands or loops 3 which need not be endless bands but may simply be of approximately U-shape with the corners of the U formed as right angles so as to correspond in shape to the corresponding two outer faces of the corresponding legs 4 and rods 2, and where the cross-sectional shape of these varies from that shown in the accompanying drawings, then the form of the band or loops 3 will vary accordingly.

A pair of ferrules, bands or loops 3 is fitted

about the leg 4, rod 2 and pillar 1 of each composite corner post, with the bottom of the U extending across the faces of both the leg 4 and rod 2 thereof with the free end edges of the sides or arms of the U flush with the inner face of the pillar 1 of said corner post, the said ferrules, bands or loops 3 being secured in position by any suitable means, as by nails or other means passing through or connected with the respective arms of each of said bands or loops 3 and penetrating the said pillar 1 and serving to definitely anchor the respective end portions of the said bands or loops 3 to said pillar 1.

Preferably each of the rods 2 and legs 4 will be square in cross section, the length of each side of such square corresponding to the thickness, or one-half of the width, of each of the pillars 1.

The legs 4 are vertically adjustable with relation to the pillars 1 and may be slid downward or upward with respect to its corresponding pillar 1 through the loops or bands 3 until they reach their extreme upper position shown in the drawings or until they have been moved downward until they respectively reach their extreme lower points of adjustment and they may be adjusted to depend to varying degrees to adjust the scaffold for use in applying sheet material to varying or various height ceilings by removing the respective bolts 9 with their nuts, adjusting the length of the legs or depending portion of the legs 4 as may be necessary to raise or lower the platform or upper faces of the bars or rails 5 so that the same will be six feet below the lower face of the ceiling or as close thereto as the spacing of the adjustment holes 10 will permit, when the hole 10 closest to the desired adjustment is brought into registry with the hole in the pillar 1 of each of the respective corner composite posts and thereafter the respective bolts 9 are shoved through such respective registering holes and on being drawn up tight by the application of their respective nuts serve to definitely clamp and hold the respective legs 4 and pillars 1 in their thus adjusted relations and the respective bands or loops 3 intermediate the ends of the respective pillars 1 at all times extend about portions of the respective legs 4 whatever the position of vertical adjustment of the latter, thus preventing the exertion of undue leverage, such as otherwise might be injurious, between the pillars 1 and legs 4 respectively or by said pillars 1 or legs 4 respectively upon the respective bolts 9 with their cooperating nuts.

The respective rods 2 are freely slidable vertically up or down in sliding rubbing contact with the opposed faces of the respective pillars 1 and legs 4 and confined laterally by each of the band or loops 3 of the respective pairs of such bands or loops of the respective composite corner posts and in all positions of said rods 2 respectively.

Parallel link assemblages

Aligned links 11 having their adjacent ends connected together by a hinge 15 applied to their respective adjacent lower edge end portions have their distant end portions hingedly connected to the opposed side faces of the respective pillars 1 at the respective ends of the scaffold by hinges 12 respectively having one leaf secured against the adjacent side face of the respective corresponding pillar 1 and the outer end portion of the upper face of the respective corresponding link 1, and aligned links 13 having their adjacent ends similarly connected together by hinges

17 respectively correspondingly applied have their respective distant end portions correspondingly connected by hinges 14 respectively with the opposed side faces of the pillars 1 at equal distances from, and below, the points of attachment of the links 11, the length, construction and relation of the links 11 and 13 together with their hinge connections being such that in the laterally spread or normal condition of the scaffold the aligned links 11 and the aligned links 13 of the respective ends of the scaffold considered together with the intervening opposite portions of the side faces of the respective pillars 1 will define a right angular parallelogram and the distance between the respective pintles of each of the pairs of hinges 12 at each end and the corresponding hinge 15 pintle will be substantially equal and substantially the same as the distance between the pintles of each pair of hinges 14 and the pintle of the corresponding respective hinges 17 at the respective ends of the scaffold.

Preferably the opposing side faces of the respective pillars will be notched as at 11a and the outer ends of the respective links 11 will be outwardly and downwardly inclined, with the extreme tip of the lower edge outer end portion slightly beveled to facilitate proper aligning of parts, such construction providing for direct supporting engagement of the horizontal face of said notch, or the slightly inclined near horizontal face thereof, approximately corresponding in incline to the bevel of the lower outer end edge face of the respective links 11, with the lower face of said links 11 respectively, thus taking much of the weight of the workman off of the hinges 12 when he places his weight on the treadle or shoves down on the treadle 30.

To provide for rigidity one of the links 11 at each end of the scaffold will be connected with the corresponding link 13 at each end of the scaffold by a rigid inelastic fixed form, preferably metal link or bar 16 pivotally connected to the said links 11 and 13 and functioning to maintain them parallel to each other at all times throughout their range of movement, and this in turn will result in maintaining each of the other sets of adjacent links 11 and 13 parallel to each other throughout their range of movement, the pins 18 serving to pivotally connect the respective ends or end portions of the respective bars or links 16 with the respective links 11 and 13 of the respective connected sets of links 11 and 13 at the respective ends of the scaffold.

In the normal or spread condition of the scaffold bars or thrust members 19 respectively pivotally mounted on or connected to the inner faces of the pillars 1 by pivot pins 21 and formed with recesses or notches 22 to receive and fit about the respective studs or lugs 20 extending laterally from the inner faces of the respective links 13 and lengthwise of the scaffold and hold the links 13 at right angles respectively to the respective pillars 1 and with their adjacent ends in abutting relation or substantially so and these through the respective links 16 serve to pull the respective links 11 into, and hold them in, the same relation to the respective pillars 1 and to each other, all as shown in Figures 1, 2 and 3.

To collapse the scaffold sidewise it is necessary to swing the respective bars or links 19 upward about their pivot pins 21 to thus disengage their respective recesses or notches 22 from the respective studs or lugs 20 of the respective links

13, thus freeing both pairs of links 11—11 and 13—13 at each end of the scaffold to swing upward about the pintles of their respective pairs of hinges 12 and 14 and to fold or swing toward each other as to each pair about their respective hinge pintles 15 and 17, until the scaffold has been contracted sidewise to its extreme sidewise or lateral contracted condition illustrated in Figure 6.

Of course the function of the parallel link assemblages above described is primarily simply to provide a simple construction which will permit easy quick sidewise or lateral contraction so as to permit the scaffold to pass through narrow openings and which will permit the attainment of a reasonably rigid reasonably steady structure when the scaffold has been expanded sidewise or returned to normal operative condition, and while the construction, combination and arrangement of parts above described and serving this function is preferred as a very simple structure lending itself particularly to lumber construction, still the construction, combination and arrangement of parts above described and serving this function, considering my invention from many aspects, is not essential either as to such general combination or as to any details of construction and considering my invention in a quite broad aspect anyone of many different arrangements or mechanisms now known and suitable to serve the function in mind and which may be any one of a number of arrangements radically different from that illustrated may be used equally well to serve this function.

Supporting and clamping bars etc.

These are the relatively wide bars 6 which may be of any suitable length depending upon the size of the rooms or halls in which it, the scaffold, is to be used and the length of the sheet material with which the scaffold is to be used, though a length of approximately eight feet will probably be found to be the most convenient or closest approach to a single or universal size for use under practically all conditions with practically all lengths of sheet material.

Each bar 6 will be secured in any suitable manner, as by nailing, or a screw or equivalent means, to the upper ends of the respective rods 2 of each pair of composite corner posts on each side of the scaffold and so that in the normal position of the parts, illustrated in Figure 2, all parts of the upper face of the one bar 6 will lie substantially in the same plane as all parts of the upper face of the other bar 6, and the said rods 2 will be so connected and associated with their operative mechanism that they may all be raised and lowered simultaneously and in equal degree to maintain such relationship between said upper faces of said bars 6.

Operative mechanism for supporting and clamping bars

This comprises the platform treadle or board 30 secured to the free end portions of the upper edges of the levers 32 and overlying, in normal condition, the rounded noses or cam blocks 35 respectively rigidly fastened to the free ends of the levers 33, said levers 32 and 33 respectively being pivotally mounted medially of their end portions upon the links 11 respectively by pivot pins, studs or other suitable pivotal connecting means 34 respectively secured to or in passing through and extending from the medial portions of the respective links 11 and extending

through the medial portions of the respective levers 32 and 33 to pivotally mount said respective levers on said respective links.

Links 37 respectively pivotally connected by the pivot pins 38 respectively to the lower end portions of the respective rods 2 by one end portion and by the other end portion respectively pivotally connected by the respective pivot pins 36 to the outer ends or outer end portions of the respective levers 32 and 33 cause the rods to reciprocate vertically and to equal degree in accordance with the upward and downward rocking or swinging movement of the treadle 30.

Each link 37 has its normally lower end portion, which is pivotally connected to one of the levers 32 or 33 as the case may be, formed with a plurality of regularly spaced adjustment holes 40 any one of which may receive the pivot pin 36 to pivotally connect said link 37 with its cooperating lever, thereby providing means for adjusting the position of the rods 2 vertically, independently of the swinging movement of the levers 32 and 33, such adjustment say from the upper hole to the medial hole 40 in each link 37 varying the distance accordingly between the upper faces of the side platforms or bars 5 and the top of treadle 30 on the one hand and the tops of the bars 6 on the other hand.

Preferably one of the rods 2 will be transversely bored to receive a stop pin 7 at such point as shown in Figure 3 that when pressure is removed from the treadle 30 and the bars 6 together with their rods 2 are free to drop under their own weight the downward movement of that pair of rods 2 connected to the outer ends of the levers 33 will be arrested by the pin 7 engaging the top edge of the corresponding band or loop 3 while the curved nose or cam face of the blocks 35 lie beneath and in engagement with the lower face of the treadle 30, whereby at all times when the parts are in normal operative relationship pressure upon the treadle 30 will serve to depress the inner ends of all of the levers to the end that both of the bars 6 will be simultaneously shoved upwardly and with the same extent of movement.

Of course more than the one transverse bore might be made in said rod 2 so that if the mentioned relationship of the treadle 30 and the curved noses or cam faces of the blocks 35 may be maintained regardless upward or downward adjustment of the rods 2 above mentioned.

Preferably a narrow supplemental tread board or platform 31 will be secured to the upper edges of the inner end portions of the levers 33 at such distance from the extreme inner edges thereof that when the levers 32 and 33 are actuated to cause their inner ends to fall and the other ends to rise to their extreme such position the inner edges of the treadle 30 and of the tread board 31 preferably will be very slightly spaced or if they contact will only contact at the extreme of such movement, all to the end that they should not contact at such stage as would prevent completion of the movement.

Also said boards or treadle or platform 31 and 30 should either be cut away or so formed or so positioned, as shown in Figures 4 and 5 that the levers 32 and 33 respectively may swing about their pivot points or fulcrums 34 to such degree as may be necessary to permit the respective pivot pins 38 to move downward through dead center and then drop downward beyond dead center to the position shown in Figure 6, after of course the removal of the stop pin 7, to contract the

scaffold vertically to permit it to pass through low openings.

As shown in the drawings, the scaffold is adjusted to apply sheet material to ceilings at a height of eight feet, and as thus adjusted the top of the side platforms or bars 5, and of the treadle 30 and tread-bar or platform 31 when depressed to the horizontal, will be approximately two feet from floor surface and six feet from ceiling surface.

The adjustment holes 10 in each leg 4 are arranged in a regularly spaced series, say six inches apart. Thus, if sheet material is to be applied to an eight and a half foot ceiling it would simply be necessary to adjust each leg 4 downward six inches or one hole, which would raise the bars 5, treadle 30, tread-bar 31 and levers 32 and 33 to approximately two and a half feet above floor level and to a point still approximately six feet below ceiling surface.

If, however, it be desired to apply sheet material to a ceiling of a height varying from both the full or even foot measure and also from the half fraction, say eight feet three inches or four inches or nine inches or ten inches, etc., then it would be necessary to adjust the legs 4, by means of the holes 10 and cooperating bolts 9, upward or downward to get as close as practical to the six foot distance between the platform surface and ceiling surface, and thereafter it would be necessary to adjust the vertical positions of the bars 6 by means of the adjustment holes 40 and pivot pins 36 to move said bars 6 upward or downward slightly with relation to the said platform as may be necessary so that for the same given movement of the treadle 30 and levers 32 and 33 the bars 6 will shove the sheet material C against the lower faces of the ceiling beams or joists B and clamp them thereagainst firmly and tightly while at the same time not exerting injurious excessive pressure against said sheet material between the joists.

Preferably the side bars or platforms 5 will be formed with reduced size end extensions to serve as convenient handles, as shown in Figure 1, for ease in handling the scaffold in moving it from place to place.

In the embodiment illustrated lumber has been used as the material from which to construct the scaffold particularly as that material is more freely available at this time and such non-combat purposes, and of course many of the smaller details of construction shown are due to the use of such material.

The invention is of course equally capable of being made of metal and in such case will be of such different detail construction as will best suit its various elements to be constructed in the most suitable manner from metal and to cooperate to the best advantage with each other and to take advantage, where occasion offers, of the opportunity to add various minor desirable details facilitated by the use of metal and the modified construction flowing therefrom, although the general principle and mode of operation and broad structural parts will remain the same or very much the same and will function to the same end.

I claim:

1. A material handling scaffold comprising a pair of platform rails, pairs of pillars extending approximately perpendicularly to said rails, the pillars of the respective pairs being respectively substantially rigidly secured to the respective end

portions of the respective rails, a plurality of legs respectively adjustably associated with said pillars, means respectively for securing said respective legs in any selected adjusted position lengthwise of the respective pillars, a pair of supporting and clamping bars, rods respectively secured to and depending from the respective end portions of said bars, and confining means respectively secured to said respective pillars and extending about said rods and legs respectively and confining the same against lateral spreading movement while permitting their endwise movement relative to the respective pillars, in combination with foldable means, locking means serving to lock said foldable means to maintain all of said pillars in substantially parallel relation to each other in the normal spread condition of said foldable means and being releaseable to permit said foldable means to be collapsed and said pillars at each end of said rails to approach the respective corresponding pillars at the ends of the other rail, levers pivotally mounted on said foldable means, links respectively pivotally connected respectively by one end portion to the lower end portions of the respective rods and adjustably pivotally connected by their respective other end portions to one end portion of the respective levers, a treadle means associated with the other end portions of the respective levers to by variations in pressure thereon cause endwise movement of said rods, and means for connecting said respective levers and respective links at any selected point of adjustment endwise of said links.

2. A material handling scaffold comprising a pair of platform rails, pairs of pillars extending approximately perpendicularly to said rails, the pillars of the respective pairs being respectively substantially rigidly secured to the respective end portions of the respective rails, a plurality of legs respectively adjustably associated with said pillars, means respectively for securing said respective legs in any selected adjusted position lengthwise of the respective pillars, a pair of supporting and clamping bars, rods respectively secured to and depending from the respective end portions of said bars, and confining means respectively secured to said respective pillars and extending about said rods and legs respectively and confining the same against lateral spreading movement while permitting their endwise movement relative to the respective pillars, in combination with means serving to maintain all of said pillars in substantially parallel relation to each other, levers pivotally mounted on said means, links respectively pivotally connected respectively by one end portion to the lower end portions of the respective rods and adjustably pivotally connected by their respective other end portions to one end portion of the respective levers, a treadle means associated with the other end portions of the respective levers to by variations in pressure thereon cause endwise movement of said rods, and means for connecting said respective levers and respective links at any selected point of adjustment endwise of said links.

3. A material handling scaffold comprising a pair of platform rails, pairs of pillars extending approximately perpendicularly to said rails, the pillars of the respective pairs being respectively substantially rigidly secured to the respective end portions of the respective rails, a plurality of legs respectively adjustably associated with said pillars, means respectively for securing said

respective legs in any selected adjusted position lengthwise of the respective pillars, a pair of supporting and clamping bars, rods respectively secured to and depending from the respective end portions of said bars, and confining means respectively secured to said respective pillars and extending about said rods and legs respectively and confining the same against lateral spreading movement while permitting their endwise movement relative to the respective pillars, in combination with means serving to maintain all of said pillars in substantially parallel relation to each other, levers pivotally mounted on said means, links respectively pivotally connected by their respective end portions to the adjacent end portions of the respective rods and the respective levers, and a treadle means associated with the other end portions of said levers to by variations in pressure thereon cause endwise movement of said rods.

4. A material handling scaffold comprising a pair of platform rails, pairs of pillars extending approximately perpendicularly to said rails, the pillars of the respective pairs being respectively substantially rigidly secured to the respective end portions of the respective rails, a pair of supporting and clamping bars, rods respectively secured to and depending from the respective end portions of said bars, and confining means respectively secured to said respective pillars and extending about said rods and confining the same against lateral spreading movement while permitting their endwise movement relative to the respective pillars, in combination with means serving to maintain all of said pillars in substantially parallel relation to each other, levers pivotally mounted on said means, links respectively pivotally connected by their respective end portions to the adjacent portions of the respective rods and the respective levers, means permitting adjustment to vary the distance between said points of pivotal connection of the respective links, and a treadle means associated with the respective levers to by variations in pressure thereon cause endwise movement of said rods.

5. A material handling scaffold comprising a pair of platform rails, pairs of pillars extending approximately perpendicularly to said rails, the pillars of the respective pairs being respectively substantially rigidly secured to the respective end portions of the respective rails, a pair of supporting and clamping bars, rods respectively secured to and depending from the respective end portions of said bars, and confining means respectively secured to said respective pillars and extending about said rods respectively and confining the same against lateral movement while permitting their endwise movement relative to the respective pillars, in combination with means serving to maintain all of said pillars in substantially parallel relation to each other, a treadle, and means interposed between said treadle and said rods to cause upward endwise movement of said rods by pressure upon said treadle and to permit the reverse endwise movement of said rods when such pressure is removed.

6. A material handling scaffold comprising a platform, pillars extending approximately perpendicularly to said platform, a plurality of legs respectively adjustably associated with said pillars, means respectively for securing said respective legs in any selected adjustment lengthwise of the respective pillars, a pair of supporting and clamping bars, rods secured to and depending from the respective bars, and confining means

respectively secured to said respective pillars and extending about said respective rods and legs and confining the same against lateral movement while permitting their endwise movement relative to the respective pillars, in combination with levers respectively pivotally mounted on said platform, links respectively connected pivotally by their respective end portions to the adjacent portions of the respective rods and the respective levers, a treadle means associated with the other end portions of the respective levers to by variations in pressure thereon cause endwise movement of said rods.

7. A material handling scaffold comprising a platform, pillars extending approximately perpendicularly to said platform, a pair of supporting bars, rods respectively secured to and depending from the respective bars, and confining means respectively secured to the respective pillars and confining said rods against substantial lateral movement while permitting their endwise movement relative to the respective pillars, in combination with levers pivotally mounted on said platform, links respectively pivotally connected to the adjacent portions of the respective rods and the respective levers, and a treadle means associated with said levers to by variations in pressure on said treadle cause and permit endwise movement of said rods.

8. A material handling scaffold comprising a platform, pillars extending approximately perpendicularly to said platform, a pair of supporting bars, rods respectively secured to and depending from the respective bars, and confining means respectively secured to the respective pillars and confining said rods against substantial lateral movement while permitting their endwise movement relative to the respective pillars, in combination with a treadle, and means interposed between said treadle and said rods to cause upward endwise movement of said rods by pressure upon said treadle and to permit the reverse endwise movement of said rods when such pressure is removed.

9. A material handling scaffold comprising a laterally collapsible platform, means for supporting said platform at a selected distance from a supporting surface, supporting bars, and rods respectively secured to and depending from said bars, in combination with a treadle associated with said platform in such manner as to be conveniently stepped upon by a workman upon said platform, and means interposed between said treadle and said rods to cause upward endwise movement of said rods by pressure upon said treadle and to permit the reverse endwise movement of said rods when such pressure is removed.

ALBERT J. CHENOWETH.