April 29, 1958 C. T. OTTAWAY 2,832,479

MATERIAL HANDLING SCAFFOLD

Filed Aug. 2, 1955

FIG. 1

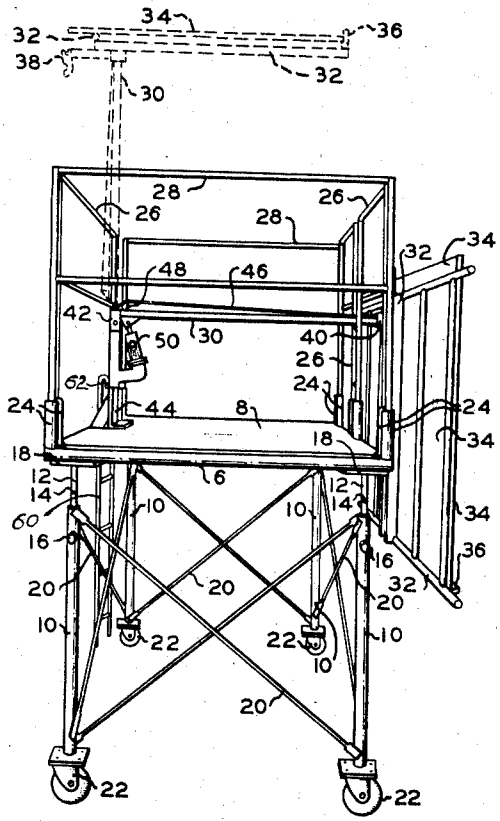


FIG. 2

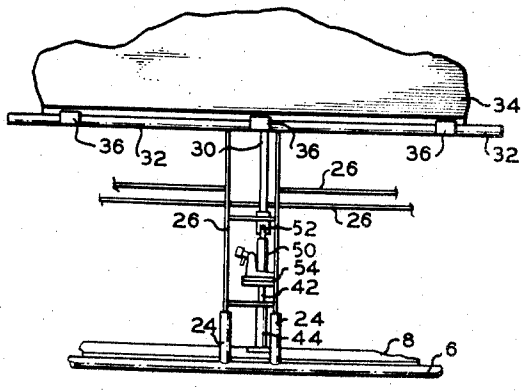


FIG. 3

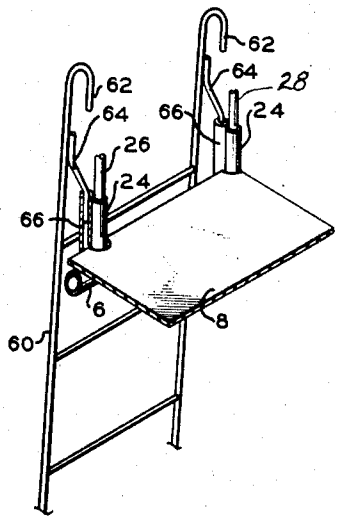
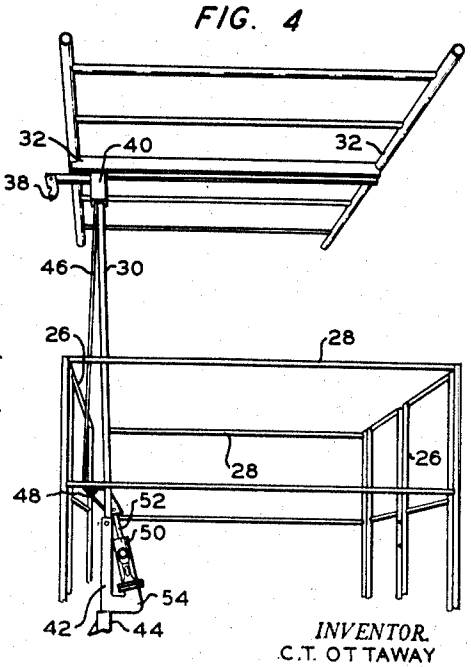


FIG. 4



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MATERIAL HANDLING SCAFFOLD

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4 Claims. (Cl. 214—1)

This invention relates to material handling. In a more specific aspect, this invention relates to handling wall and ceiling board widely used for the interior walls and ceilings of buildings. In a still more specific aspect, this invention relates to a portable and height adjustable scaffold having means therewith to raise a sheet of wall and ceiling board from a position close to the floor to the position of work near the ceiling so that workers on the scafford can easily install the board in proper place.

Material handling scaffolds and lift means are known in the art, and some of them are primarily designed for use to handle wall and ceiling board to raise same to the work position near the ceiling. The usual four foot by eight foot gypsum core wall and ceiling board section is cumbersome, relatively heavy and requires several men to install same on ceiling joists, if such is done by hand. These scaffolds and other means of the prior art are inefficient and complicated, and are far too expensive for the usual sheetrock contractor. I have invented a very simple portable scaffold structure to so handle wall and ceiling board. By unique and novel structural means I have invented a scaffold with board raising means which is extremely simple of structure, yet will efficiently handle the heavy and cumbersome gypsum core wall and ceiling board used so widely today. My new scaffold means is especially inexpensive to make and maintain.

The new scaffold for handling material of my invention has a platform. A rack is mounted on this platform by lever means, the rack being adapted to support a sheet of wall and ceiling board. The scaffold has means to operate the lever means, and the scaffold can be easily used to lift a sheet of wall and ceiling board to work position upon operating the means to operate the lever means.

It is an object of my invention to provide new material handling means.

It is another object of this invention to provide new scaffold means for handling wall and ceiling board widely used for the interior walls and ceilings of buildings.

Still a further object of this invention is to provide new, simple and inexpensive portable scaffold means having means therewith to raise a sheet of wall and ceiling board from close to the floor to the ceiling work position.

Other objects and advantages of the new material handling means of my invention will become apparent to one skilled in the art upon reading this disclosure.

Drawings accompany and are a part of this disclosure. These drawings depict preferred specific embodiments of the new materials handling scaffold of my invention, and it is to be understood that such drawings are not to unduly limit the scope of my invention.

In the drawings, Fig. 1 is a perspective view of a preferred specific embodiment of the new materials handling scaffold of my invention with the rack lowered.

Fig. 2 is an elevation view, partly cut away, of the scaffold of Fig. 1 showing the rack of the scaffold in partially raised position.

Fig. 3 is an enlarged perspective view of the ladder and mounting means of the scaffold of Fig. 1.

Fig. 4 is a perspective view of the upper portion of the scaffold of Fig. 1, showing the rack raised.

Following is a discussion and description of the new materails handling scaffold of my invention made with reference to the drawings whereon the same numerals are used to indicate the same or similar parts or structure. The discussion and description is of preferred specific embodiments of my new scaffold means to handle materials, and it is to be understood that such is not to unduly limit the scope of my invention.

The new scaffold of my invention for handling materials depicted in the drawings has a platform preferably consisting of pipe frame **6** and floor **8** which rests on frame **6**. Frame **6** can conveniently be made from pipe members joined in any suitable manner such as by welding, or it can be made from rod, bar stock, etc., if desired, and floor member **8** can be made from metal, wood, or the like, a sheet of ¾-inch plywood notched out for the scaffold members as shown having been found desirable. The platform is preferably supported on telescoping leg members which have an outer member **10** and an inner member **12** with holes **14** therethrough to receive pin **16** so that the platform is fixedly adjustable as to height. These leg members can suitably be pipe or channel iron members, or the like, attached in any suitable manner to the platform such as by plates **18** mounted on pipe member **6** as shown, the pipes **6** and leg members **12** being welded to plates **18**. It is preferred to cross brace the legs by members **20**, as shown, and such can conveniently be rods, or the like, welded to leg members **10**. The legs are mounted on wheels **22**, which are preferably caster wheels, so that the scaffold is easily movable on the job and from job to job. The scaffold has hollow railing holder pipe members **24** mounted on frame members **6** in any suitable manner, such as by welding. The lower ends of the vertical members of railing sections **26** and end railing sections **28** slip into uprights **24** to make the railing sections easily installed and removed for moving the scaffold. The side rail sections are formed with centrally located notches open at the top as shown to accommodate lever arm **30**.

The new movable scaffold of my invention has a frame rack **32** made in any suitable manner, such as from welded pipe or rod members, and the rack **32** is large enough to hold a four by eight-foot sheet of ceiling and wall board **34**. The rack **32** supports the board **34** in vertical position due to ear members **36** against which one side of the board rests and hook **38**, the bill of which fits over the opposite side edge of the board. Lever member **30** mounts rack **32** on the outer end of the lever by socket **40** attached to rack **32** in any suitable manner, such as by welding, the end of lever **30** slipping into socket **40**. I have found that no securing means need be used, but, if desired, a set screw in socket **40** can be used. The inner end of lever **30** is pivotally attached to upright member **42** which is removably mounted in braced socket member **44**, in turn mounted on frame members **6** in any suitable manner, such as by welding. I have found it desirable to brace lever **30** by rod or wire member **46** attached to the end portions thereof and spaced therefrom by bridge member **48**.

Near the pivot point of lever **30** at the side of the platform so as to be out of the way, jack means **50**, which are preferably hydraulic jack means, are mounted with the jack arm **52** pivotally attached to lever **30** and the jack base mounted on a projection **54** of upright member **42**, so that the platform indirectly furnishes the backing for the jack in non-tipping relation thereto. As one skilled in the art can see, the new unique structure provides for the lever arm in lowered position to

lie across the platform. Jack **50** when operated raises and lowers rack **32** to lift sheets of wall and ceiling board into work position. See the dotted line position on Fig. 1 and Fig. 4.

A ladder **60** is preferably provided so that workmen can mount to the platform of the scaffold to work from thereon. The ladder **60** has hook ends **62** and other hook members **64** welded thereon. These slip into socket or upright members **60** welded to frame pipes **6**. Hooks **62** and **64** provide for two height positions of the platform for installing wall and ceiling board on two heights of ceilings, Figs. 1 and 3 showing the ladded in position for the platform in its low position. The side railing **26** on the ladder **60** side has an opening formed therein as shown so that workmen can easily step onto the platform board **8** from ladder **60**.

The scaffold is used as follows to raise a sheet of gypsum core ceiling and wall board into work position close to the ceiling from a position close to the floor. The workmen place the "Sheetrock" on the rack **32** in the position of Fig. 1 with hook **38** in holding position with the bill thereof over the edge of the board. One man can easily do this. Then the jack **50** is operated to pivot lever **30** to the position of Fig. 4, raising the rack and the board. A workman on the platform can easily do this. Upon releasing hook **38** workmen on the platform board **8** can nail the board **34** in position on the ceiling joists, and because of the unique structure, the entire area of the platform is free in which to move about. To lower the rack **32** for another sheet of "Sheetrock," the pressure is released from the hydraulic jack liquid, and slowly preferably so that rack **32** slowly lowers. The new scaffold of my invention can be moved around easily, with the sheet of board in any position, so that it is in most advantageous position for nailing the board to the joists.

As will be apparent to those skilled in the art, modifications of the new materials handling scaffold of my invention can be made, or followed, in view of this discussion and disclosure without departing from the spirit or scope of the specification and claims thereof.

I claim:

1. A scaffold for handling material, comprising, in combination, a platform supported by telescoping legs which are mounted on caster wheels, said legs being fixedly adjustable as to length to vary the height of said platform and said platform being movable on said wheels, a rack having ear members projecting therefrom on one side thereof and a pivoted hook on the opposite side thereof, said rack adapted to hold and support a sheet of wall and ceiling board thereon in vertical position with one edge of said board in contact with said ears and the opposite edge of said board in the bill of said hook, a lever member rigidly attached in one end portion to said rack on said side having said hook and in the other end portion pivotally attached to said platform in the middle portion of a side thereof so that when said rack is in lowered position said lever member lies across said platform, hydraulic jack means mounted on and supported by said platform, attached to said lever in said

end portion pivotally attached to said platform and adapted to raise and lower said rack with said sheet of wall and ceiling board thereon, railing members for said platform removably mounted thereon, and said scaffold adapted to raise said sheet of wall and ceiling board on said rack into approximate ceiling mounting position from a position close to the floor upon operating said jack.

2. A scaffold for handling material, comprising, in combination, a movable platform adjustable as to height, a rack having ear members on one side and a hook on the opposite side, said rack adapted to hold and support a sheet of wall and ceiling board in vertical position with one edge of said board in contact with said ear members and the opposite edge in the bill of said hook, a lever member rigidly attached in one end portion to said rack on said side having said hook and in the other end portion pivotally attached to said platform so that when said rack is in lowered position said lever member lies across said platform, and jack means supported by said platform attached to said lever member in said end portion pivotally attached to said platform and adapted to raise and lower said rack, said scaffold adapted to raise a sheet of wall and ceiling board on said rack into approximate ceiling mounting position from a position close to the floor upon operating said rack means.

3. A scaffold for handling material, comprising, in combination, a movable platform adjustable in height, a rack having means therewith to hold and support a sheet of wall and ceiling board in vertical position, lever means rigidly attached in one end portion to said rack and pivotally attached in the other end portion to said platform so that when said rack is in lowered position said lever means lies across said platform, and jack means supported by said platform and attached to said lever means, said scaffold adapted to elevate a sheet of wall and ceiling board on said rack from a position close to the floor to a position close to the ceiling upon operating said jack means.

4. A material handling scaffold, comprising, in combination, a platform, a rack having means therewith to receive and hold a sheet of material in substantially vertical position when said rack is in lowered position, lever means pivotally attached in one end portion to said platform and said rack mountable on the other end portion of said lever means to move therewith upon pivoting said lever means, said lever means mounted on said platform to be on one side portion thereof when in elevated position and to lie across said platform when in said lowered position, and elevating means mounted on said platform and attached to said lever means, said scaffold adapted to elevate said sheet of material on said rack when same is mounted on said lever means from said lowered position to said elevated position with said sheet of material in substantially horizontal position upon operating said elevating means.

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