United States Patent [19]

Hanson

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[54] **MOBILE BUILDING**

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[52] **U.S. Cl.** ..... **280/30,** 296/23 R

[51] **Int. Cl.** **B62d 63/06**

[58] **Field of Search** 280/30; 180/24.02; 296/23

[56] **References Cited**

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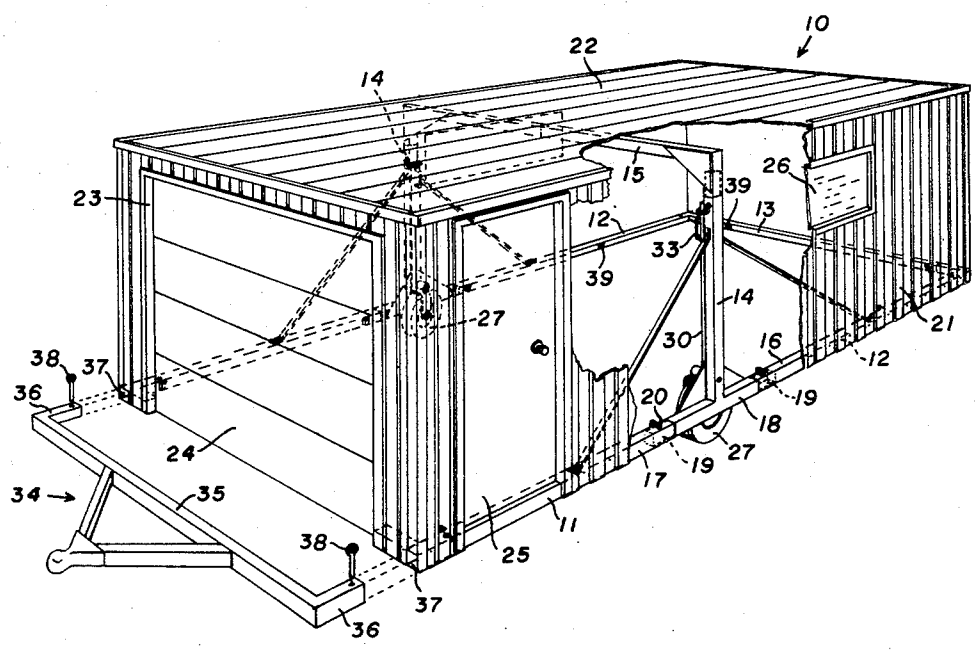
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[57] **ABSTRACT**

A mobile building adapted to provide shelter for such items as autos and boats has a U-shaped sill frame formed of steel tubing. Secured respectively to the middle of the two sides of the sill frame are two vertical supports which are connected at their tops by a cross bar. Sheet metal walls and a roof are carried by the sill frame with a door provided at the open end of the sill frame. Movement of the building is effected by a pair of wheels each of which is rotatable in a bracket which is pivotally mounted at the lower inner end portion of the respective vertical supports. The wheels may be moved into and out of operative position by means of an elongate lever which is secured to each bracket and adapted to be held by latching means along the adjacent support when the wheels are in operative position. Inclined tubular members secured to the inner sides of the sill frame are adapted to receive pins which are driven into the ground for anchoring the building. Detachably secured to an end of the building is a hitch having side arms which telescope into the exposed open ends of the sides of the sill frame.

5 Claims, 3 Drawing Figures



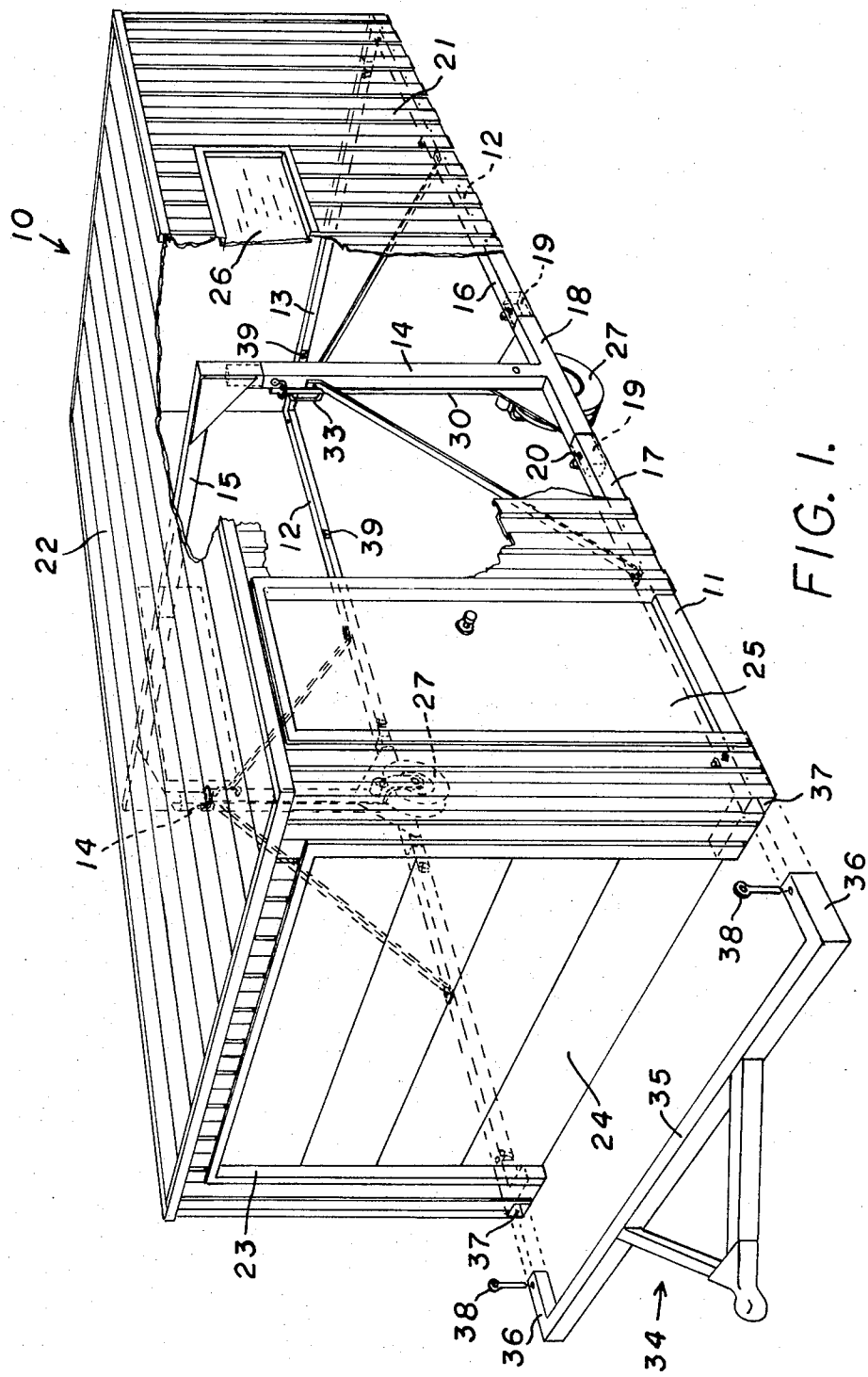

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FIG. 1.

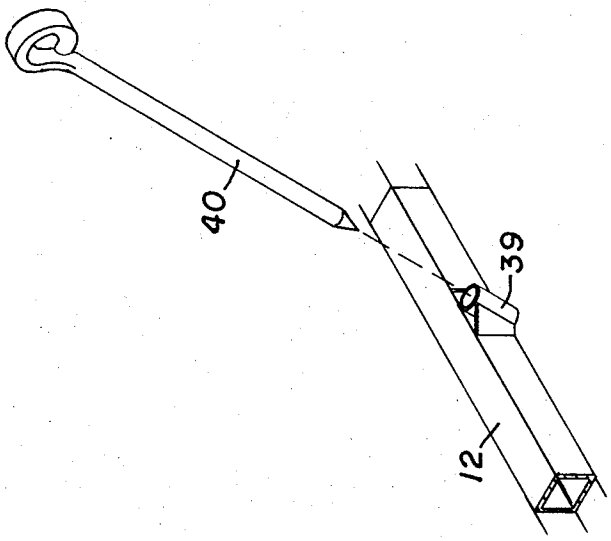


FIG. 3.

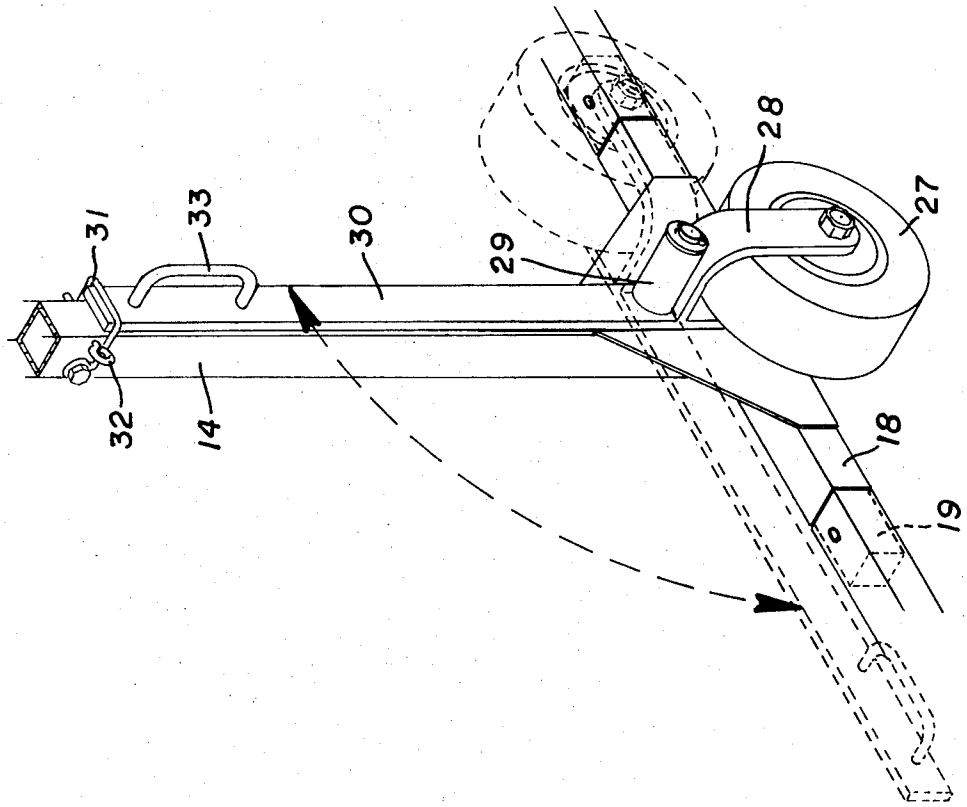


FIG. 2.

MOBILE BUILDING

BACKGROUND OF THE INVENTION

This invention relates to mobile buildings and more particularly it has reference to such types of buildings which are used to provide storage space or shelter for various items such as autos, boats and snowmobiles, for example. While parking spaces for autos are usually provided adjacent to mobile homes which are more or less permanently located in so-called trailer parks, there is generally no provision for garages to protect autos from the weather. Sportsmen and vacationers often need a mobile building to provide shelter for an auto, boat or snowmobile.

SUMMARY OF THE INVENTION

Objects of the invention are to provide a mobile building of the type described which will be simple in structure, economical to manufacture, efficient and convenient in operation and especially adapted for the uses above mentioned.

According to the invention, a mobile building has a U-shaped sill frame formed of steel tubing. A pair of vertical supports are secured, respectively, to the two sides of the sill frame opposite each other and about midway between the ends of the sides and are connected at their tops by a cross bar. Sheet metal walls and a roof are supported by the sill frame with a door opening formed in the end wall adjacent to the open end of the sill frame and with the roof resting on the cross bar. Pivoted at the lower inner end portion of each support is a bracket on which a wheel is rotatably mounted. Secured to each bracket is a long lever by means of which the brackets may be turned to bring the wheels into position so that they support the building for movement and with the levers held in position by latching means carried by each support.

The building may be moved by attaching it to a vehicle by hitching means having two side arms which are telescoped into the open exposed ends of the sides of the sill frame and detachably held by pins. When the wheels are retracted the building rests on the ground and may be anchored thereto by inclined tubular members which are secured to the inner faces of the sill frame and adapted to receive pins which are driven into the ground.

BRIEF DESCRIPTION OF THE DRAWINGS

FIG. 1 is a perspective view of the mobile building embodying the invention with parts broken away to show interior construction and with the wheels in operative position and the hitching means disassembled.

FIG. 2 is a fragmentary view in perspective showing the wheel mounting.

FIG. 3 is a perspective view of the means for anchoring the building to the ground.

DESCRIPTION OF PREFERRED EMBODIMENTS

A preferred embodiment of the invention is shown in the drawings wherein **10** indicates, generally, the mobile building comprising a U-shaped sill frame **11** having the parallel sides **12** connected by an end portion **13.** Secured to the respective sides **12,** and midway between their ends and opposite each other, are the two vertical supports **14,** which are connected at their tops by a cross bar **15.** The parts of the sill frame and the vertical supports and cross bar are preferably formed

of square steel tubing with the open ends of the sides **12** exposed for a purpose to be hereinafter described. In order to disassemble the sill frame **11** for convenience in handling and shipping, each side **12** may be formed of two separate pieces **16** and **17** which are detachably connected to the central piece **18** by telescoping them onto stubs **19** carried by **18** and securing them by locking pins **20.** The end portion **13** may be detachably connected to the sides **12** by similar structure.

Sheet metal walls **21** and a roof **22** are connected to and carried by the sill frame **11** with the roof **22** resting on the cross bar **15.** The end wall which is at the open end of the U-shaped sill frame is provided with a door opening **23** which may be closed by a conventional overhead sliding door **24.** For added convenience, a smaller door **25** and a window **26** may be provided in a side wall.

To facilitate moving of the building by towing it behind a vehicle, there are provided two wheels **27** each of which is rotatably mounted on a bracket **28** which is pivotally mounted as at **29** on the inner lower side of each vertical support **14,** as shown in FIG. **2.** Secured to each bracket and extending away therefrom in a vertical plane between the bracket and vertical support **14** is the elongate lever **30.** With the wheels **27** in building supporting position, as shown in full lines in FIG. **2,** the levers **30** extend upwardly along the inner faces of the vertical supports **14** and are held in such position by the latching means comprising a pivoted latch **31** which may be lowered over the end of the lever **30** and held securely by a pin **32** which passes through aligned apertures in support **14.** When the building is to be located on the ground, the latch **31** is raised and the lever **30** and wheel **27** are moved to the retracted position shown in broken lines in FIG. **2** so that the sill frame **11** rests on the ground. A handle **33** attached to the upper end portion of each lever **30** facilitates the operation and the length of the lever provides a mechanical advantage so that raising or lowering of the wheels **27** may be accomplished with a minimum of effort.

With the wheels **27** in building supporting position as shown in FIGS. **1** and **2,** the building may be towed by hitching it to a vehicle with hitching means indicated generally at **34** in FIG. **1.** The hitching means comprises a cross bar **35** having the two side arms **36** which may detachably secured to the building by telescoping the side arms **36** into the open exposed ends **37** of the sill frame sides **12** and locking them in place by pins **38** which pass through aligned aperatures in the sides **12** and arms **36.**

Since the building is relatively light in weight in order to facilitate its movement, it is desirable that provision be made for holding it in place when it is on location with the sill frame resting on the ground or on a low foundation. This is accomplished by anchoring means comprising a plurality of tubular members **39** which are secured; as by welding, at spaced intervals along the inner faces of the sides **12** and end portion **13** of the sill frame. The tubular members **39** have their axes inclined to the vertical and are adapted to receive the anchoring pins **40** which are driven into the ground.

From the foregoing, it will be apparent that the objects of the invention have been attained by providing a mobile building which is simple in structure, economical to manufacture and convenient and efficient in use. When the building is in use as a shelter, the hitching means **34** is, of course, removed so that vehicles such

as an auto may be driven freely into the door opening **23** without passing over an obstructing member of the sill frame. The open ends of tubular sides **12** are exposed at both ends of the building so that the hitching means may be attached to either end of the building. Various modifications may be made without departing from the spirit of the invention as pointed out in the appended claims.

I claim:

1. A mobile building comprising a sill frame having parallel sides connected by an end portion, a pair of vertical supports secured, respectively, to the two sides of the sill frame opposite each other and between the front and rear end portions of the sill frame, a cross bar connecting the upper portions of the two supports, sheet material walls extending upwardly from the sides and end portions of the sill frame, a roof of sheet material mounted above the walls and supported by the cross bar, the sill frame being adapted to rest on the ground when the building is in use, means to facilitate moving of the building comprising a bracket pivotally mounted at the lower inner side of each support, a wheel rotatably mounted on each bracket, an elongate lever fixed to and extending away from each bracket and lying in a vertical plane between the wheel and support whereby each bracket may be turned selectively to bring the wheels into supporting relation with the sides of the building with the wheels extending below the sill frame and with the levers extending upwardly along the respectively adjacent supports, latching means carried by the supports for selectively holding the levers in vertical position, and hitching means detachably secured to the lower part of the building whereby it may be towed by a vehicle.

2. The structure in claim **1** wherein the sill frame is

substantially U-shaped and a door opening is provided in the wall at the open end of the sill frame.

3. The structure recited in claim **1** wherein the parallel sides are tubular and have their ends exposed on at least one end of the building and the hitching means has two side arms which may be telescoped into the exposed ends of the tubular sides and locked in position.

4. The structure recited in claim **1** and further including means for anchoring the building to the ground when the wheels are retracted comprising tubular members secured to and spaced along the inner portions of the sill frame with the axes of the tubular openings inclined to the vertical and adapted to receive anchoring pins which are driven into the ground to effect anchoring of the building.

5. In a mobile building having a sill, a plurality of vertical supports extending upwardly from the sill for supporting the roof structure and at least two wheels carried by the sill for use in moving the building, the combination of a bracket for each wheel, each bracket being mounted to turn about a pivot carried at the lower portion of a support, each wheel being rotatably mounted on a bracket, an elongate lever attached to and extending away from each bracket and lying in a vertical plane between the wheel and the adjacent support whereby the bracket may be turned selectively to retract the wheels or bring them into supporting relation with the building with the wheels extending below the sill and the levers extending upwardly along the respectively adjacent supports and means carried by the supports for selectively holding the levers in raised position.

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