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Nadeau

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[54] **DOOR DOLLY**

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[51] **Int. Cl.** **B62b 1/12**

[58] **Field of Search** 280/79.1, 47.13

[56] **References Cited**

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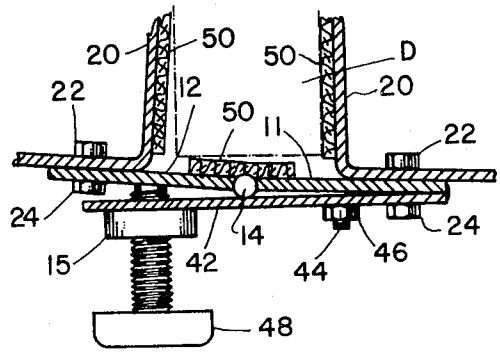
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[57] **ABSTRACT**

A dolly is provided by attaching upright angle brackets to the leaves of a butt type hinge. Two wheels are mounted to the lower flanges of the angle brackets and the weight of the door causes the upright flanges of the angle brackets to be urged toward one another by pivoting about the hinge pivot axis. A clamp on the underside of the hinge also holds the door to be transported on the dolly.

3 Claims, 3 Drawing Figures



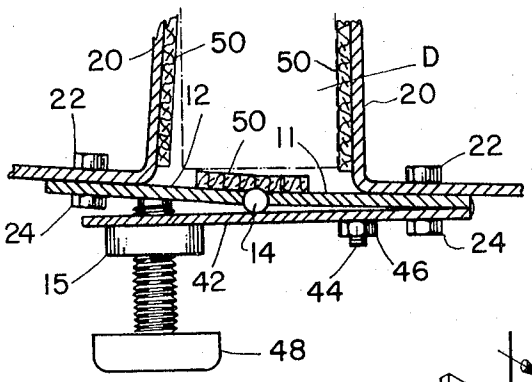


FIG. 3

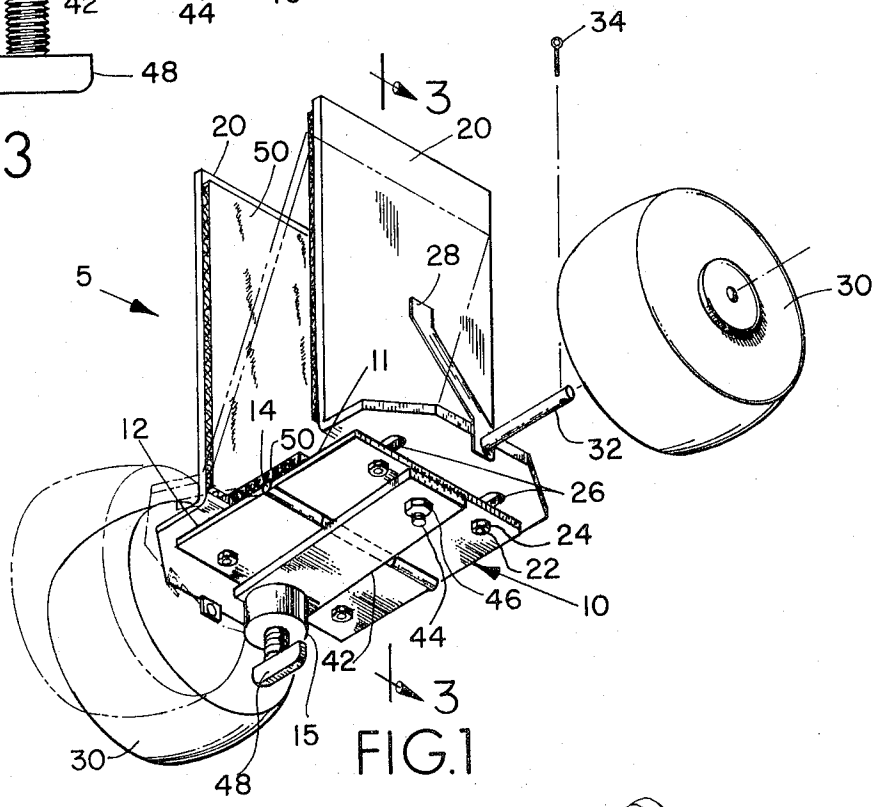


FIG. 1

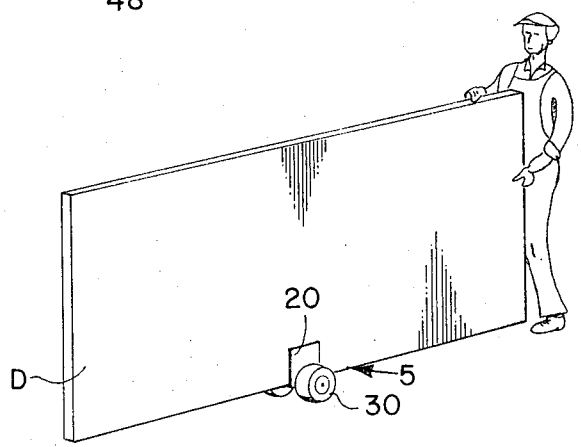


FIG. 2

DOOR DOLLY

BACKGROUND OF THE INVENTION

This invention relates to dollies for transporting large flat objects, such as doors or large panels of the type used in the building and construction trades. It is often necessary to move such hard to handle objects as wall panels, doors, sheets of plaster board, and the like from one location to another at a construction site. Generally, two workmen are required for this job since the size of the objects make them cumbersome, if not impossible, for one person to handle. Use of a dolly would permit one workman to perform the task alone.

Other dollies which have been used for similar purposes have had various drawbacks. One type has no means for clamping the dolly to the object to be transported. This makes it inconvenient for lifting the dolly over small obstructions. The second type requires shims to be used for the dolly to accommodate objects of various widths. Another type has clamping means which tend to damage a relatively soft surface such as wood or plaster board. Yet another prior art type of dolly has its wheels arranged longitudinally, making the dolly unstable in the lateral direction. The dolly of this invention avoids all of these shortcomings.

BRIEF SUMMARY OF THE INVENTION

The invention resides in a dolly which rolls on two wheels laterally disposed to the direction of motion and having two clamping members for gripping a flat object to be transported thereon. The dolly comprises two clamping members on a longitudinal center line, and wheels are so positioned that the weight of the load causes the clamping members to pivot toward one another. These members can be clamped to resist outward movement, thereby gripping the lead to prevent it from sliding. Mechanical means for so clamping these members permits the load to be firmly held irrespective of its weight and allows the dolly to be lifted by the object being transported thereon to clear small obstructions or the like. The clamping members have flat object gripping surfaces which may be covered with a soft cushioning material, as may be the floor of the dolly, so that easily marred surfaces will not be damaged. Also, the distance between the clamping members is adjustable to accommodate objects of various widths without the need for shims.

BRIEF DESCRIPTION OF THE DRAWINGS

FIG. **1** is a perspective view of the dolly with an exploded view of one of the wheel mountings and with one of the clamping members in an alternate position, as indicated by the phanthom lines.

FIG. **2** is a perspective view of the dolly being used to transport an object.

FIG. **3** is a vertical sectional view taken on the line **3-3** of FIG. **1.**

DESCRIPTION OF THE PREFERRED EMBODIMENT

Turning now to the drawings in greater detail, FIG. **1** shows a dolly of this invention as generally indicated at **5.** The floor of the dolly is a butt hinge **10** comprising two leaves **11, 12** the adjacent edges of which define as opening for receiving a pintle **14.** Two generally L-shaped angle brackets **20, 20** are secured to the hinge leaves, **11** and **12** respectively, by means of nuts **22, 22**

and bolts **24, 24.** Support struts **28, 28** are preferably welded, or otherwise suitably secured diagonally across the legs or flanges of said brackets **20, 20** for extra strength and to define a boss for the stub shaft **32.** Elongated mounting holes **26, 26** in the base leg of at least one of the brackets allow the lateral space between the two brackets to be adjusted for accommodating objects of various widths.

Two wheels **30, 30** are provided, each of which is mounted on a stub shaft **32** carried by the base leg of each of said brackets **20, 20.** These shafts are suitably secured to said bracket legs or flanges and protrude laterally therefrom. The wheels may be held on said shafts by means of cotter pins **34, 34** or other suitable means.

It is evident that the weight of an object on the floor of the dolly will cause the two upstanding flanges to pivot toward each other along the hinge line toward the position indicated by the phanthom lines of FIG. **2,** thereby clamping the supported object therebetween. This clamping force will generally be sufficient to prevent the supported object from sliding on the dolly. To more securely clamp the dolly to the object to be transported, and to provide a clamping force irrespective of object weight, clamping means **40** is provided.

More particularly, said clamping means comprises a cross arm **42** secured to leaf **11** of hinge **10** by means of a bolt **44** and a nut **46.** It will be apparent that other suitable means might also be used, as for example, a welded joint. The cross arm **42** extends laterally below the hinge across the hinge pintle **14.** A thumb screw **48** is threaded through the cross arm, or through a nut **15** welded to the cross arm, and pushes against the bottom of leaf **12.** When the thumb screw **48** is tightened, the clamping brackets **20, 20** are forced to pivot toward one another on the hinge line defined by pintle **14,** thereby exerting the required clamping force.

The inside walls of the clamping brackets **20, 20,** as well as the top portion of hinge **10** which forms the floor of the dolly, may be lined with a soft material such as rubber or cork to prevent damage to the surface of the object being transported.

I claim:

1. A dolly for transporting large flat objects comprising;

a. a butt hinge having two horizontally extending leaves pivotally connected to one another by a hinge pin,

b. two L-shaped brackets, each of which has a base leg attached to the upper face of one of said hinge leaves, and said bracket having upstanding legs for receiving an object edgewise therebetween,

c. a clamping cross arm one end of which is attached to the lower face of one of said hinge leaves, and the other end of which defines a threaded opening oriented normally to the lower face of the other of said hinge leaves,

d. a clamping screw threadably received in said cross arm opening for engaging said other hinge leaf to urge said upstanding legs toward one another, and

e. stub shafts extending horizontally outwardly from said base legs, and said shafts rotatably supporting wheels thereon.

2. The device as set forth in claim **1** wherein said base leg of at least one of said L-shaped brackets is adjustably attached to its associated hinge leaf to accommodate objects of varying widths.

3. The device as set forth in claim **2** wherein said upstanding legs of both L-shaped brackets are padded to prevent damage to an object clamped in the device.

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