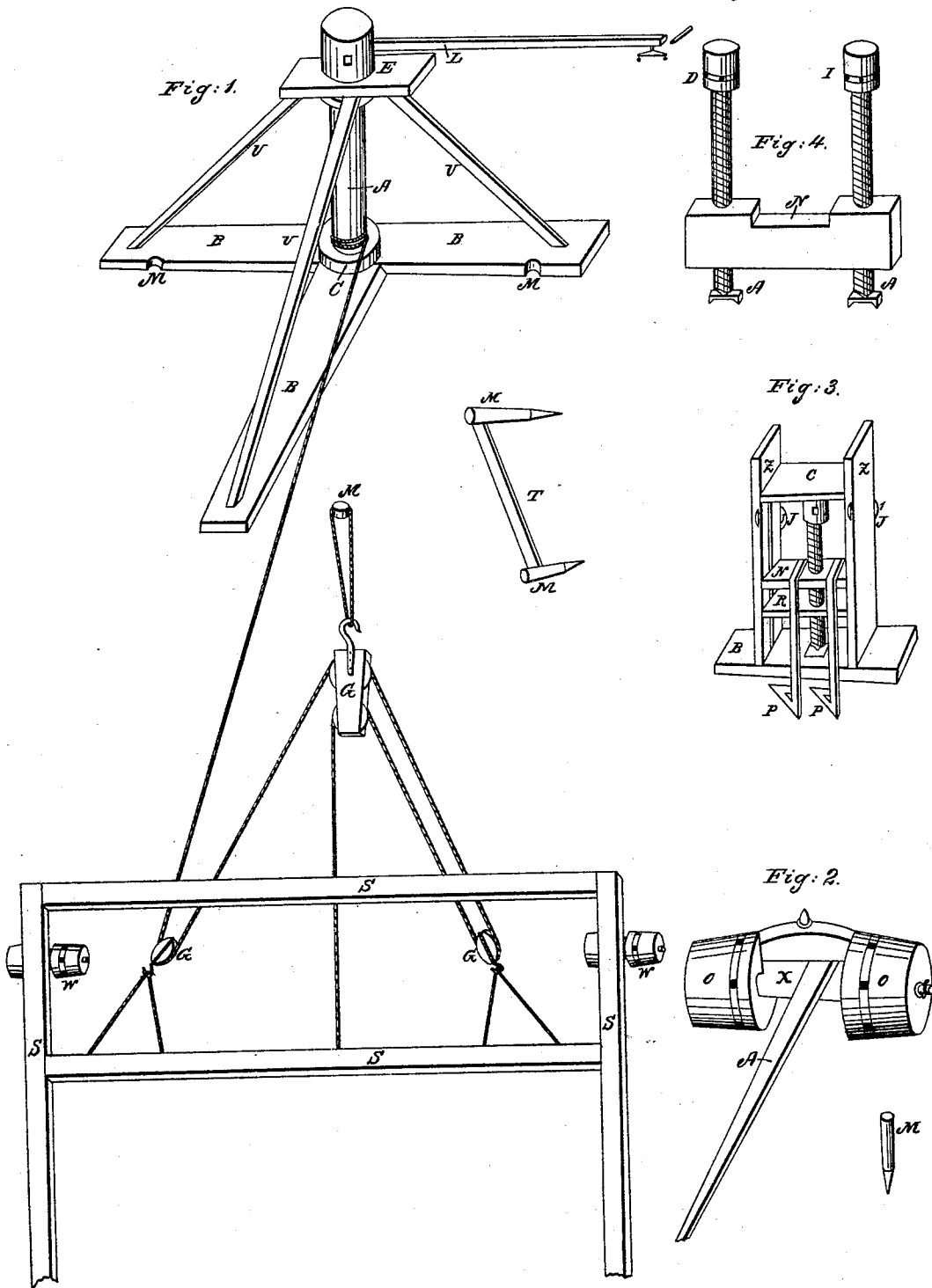


L. PULLMAN.
Removing Buildings.

No. 2,225.

Patented Aug. 21, 1841.



UNITED STATES PATENT OFFICE.

LEWIS PULLMAN, OF PORTLAND, NEW YORK.

MACHINE FOR REMOVING BUILDINGS, &c.

Specification of Letters Patent No. 2,225, dated August 21, 1841.

To all whom it may concern:

Be it known that I, LEWIS PULLMAN, of Portland, in the county of Chautauqua and State of New York, have invented a new, useful and Improved Machine for the Purpose of Raising and Moving Buildings and other Weights, and that the nature of my invention or improvement consists in applying the power of the screw and lever, so as to raise buildings and other heavy weights with expedition and safety and then by placing underneath, carriages so constructed with truck wheels axles, bolsters, pivots and poles, that they are strong and durable, and not liable to turn or rock sideways, and can be moved in any direction required, thereby turning the building or other weight so placed on the carriages in the direction required and by the application of the power of the pulley attached to a capstan, so constructed, that by applying power on a lever attached to the shaft of the capstan any degree of power required may be applied, and the building or other weight can be moved with safety and expedition. The capstan can be easily fastened and when removed the rope will readily unwind therefrom.

The following is a full and exact description of the construction and operation of the same reference being had to the annexed drawing making a part of this specification, in which—

Figure 1 is a view of that part of the machine used in moving buildings and other weights Fig. 2 is a view of one pair of the truck wheels with the axle bolster pivot washer and pole attached thereto four pairs of which I usually put under a building. Fig. 3 is a view of a machine to set by the side of a building and raise it Fig. 4 is a view of a block and screws used to raise buildings where there is nothing to prevent using it.

I construct the wheels not less than 8 in number marked O in Fig. 2, 12 inches long and 18 inches in diameter at the end next to the bolster and 16 inches in diameter at the end next to the linch pin, but the size is not as important as the proportion on account of readily turning them under the sill when required in order to turn the building. I also make mortises in the wheels as represented by the drawing, for the purpose of inserting and using a lever when necessary. On the axle marked X, I fasten a bolster

which projects two inches above the wheels on the top of which I fasten an iron pivot with a washer around it, on which the sills of the building rest without any further fastening, and thereby the wheels or carriages can be readily turned in any direction required.

Y represents the shaft or pole attached to the bolster and axle, on the rear end of which, I fasten a small block, of the same height as the top of the bolster, to prevent the axle's tipping.

Fig. 1 S, S, S, represents part of the sills of a building placed on two carriages or trucks consisting of two pairs of wheels marked, W W, with the axles bolsters, pivots washers and poles as described in Fig. 2.

G, represents a pulley block with two sheaves fastened at M, by a stake marked M, to which a bar marked T is attached which is connected with another stake also marked M, both of which stakes being driven into the ground firmly secure the said large pulley block.

G, G, represent two small pulley blocks with one sheave each, through which the rope passes, as represented in the drawing, from the building to the upright shaft in the capstan marked A, which I construct 3 feet long, 8 inches in diameter below the head of the braces, and 10 inches above the brace head marked E.

B, B, B, represents the bed pieces or sills of the capstan, the longest of which I construct 7 feet long and 11 inches wide at the center, tapering to 5 inches wide at each end. The short sill or bed piece, I place at right angles with the other extending 4 feet in the rear and 1 foot in front halved on to the center of the other bed piece.

U, U, U, represent the braces made fast to the brace head marked E, and to the bed pieces or sills. C represents a ledge near the lower end of the shaft, 6 inches wide to prevent the rope from throwing the shaft out from the sills.

M M, represents two places in the bed pieces or sills to fasten by stakes. I also fasten by other stakes, when necessary, and I usually fasten in front of the short sill or bed piece by a rope 7 feet long made fast to the brace head and to a stake in front.

L, represents a lever inserted in the head of the capstan shaft, and on which I apply the necessary power.

The length and dimensions herein stated are calculated for ordinary business, but may be increased or diminished as may also the number of pulleys, according to the weight to be moved and the power to be applied.

Fig. 3, Z Z, represents two side posts $2\frac{1}{2}$ feet long $2\frac{1}{2}$ inches thick and 4 inches wide, fastened into a sill or bed piece marked B, and connected at the top by a cap marked C 12 inches long. N a nut extending from one post to the other with a projection on each end which is closely fitted in each post so that the nut can be raised and lowered, true and steady from the bottom to the top of the posts.

Q, represents a screw made of iron fastened into the cap marked C, but in such a manner that the head of the screw can be turned around therein, E F represents two iron bars fastened to the nut N, and extending down 14 inches with two hooks projecting out 6 inches in the rear for the purpose of hooking under the sills of buildings.

K represents a guard block below the nut N and extending from one post to the other, to prevent the bars F F from binding inward. J J represents wheels to prevent the frame from injuring the building when it

raises. The length and size of the above materials can be varied to suit buildings.

Fig. 4 D D represents two screws made of wood passing through the block or nut marked N which I construct 4 feet long and 9 inches square. A A an iron stop on which the screws stand and turn. Two feet of the center of the block or nut N I make thinner than the ends for the purpose of keeping its place under the sill.

What I claim as my invention and desire to secure by Letters Patent, is—

1. The combination of the pivot and bolts herein referred to, with the truck employed for removing buildings and other weights, consisting of an axle and wheels having hortises on their periphery, to which levers are adapted for moving them.

2. Also in combination with said truck the screw, Fig. 3, having a movable nut, with hooks attached to it for raising buildings all as herein described.

In witness whereof, I have hereunto subscribed my name this 2nd day of August 1841.

LEWIS PULLMAN.

Witnesses:

TIMOTHY PULLMAN,
RANSOM S. MORRISON.