

2 Sheets—Sheet 1.

PIANO TRUCK.

Patented Sept. 18, 1888.



Phil. C. Dietrich
C. Sedgewick

INVENTOR:

BY *L. Miller*
T. A. Wheeler
Munn & Co.
ATTORNEYS.

(No Model.)

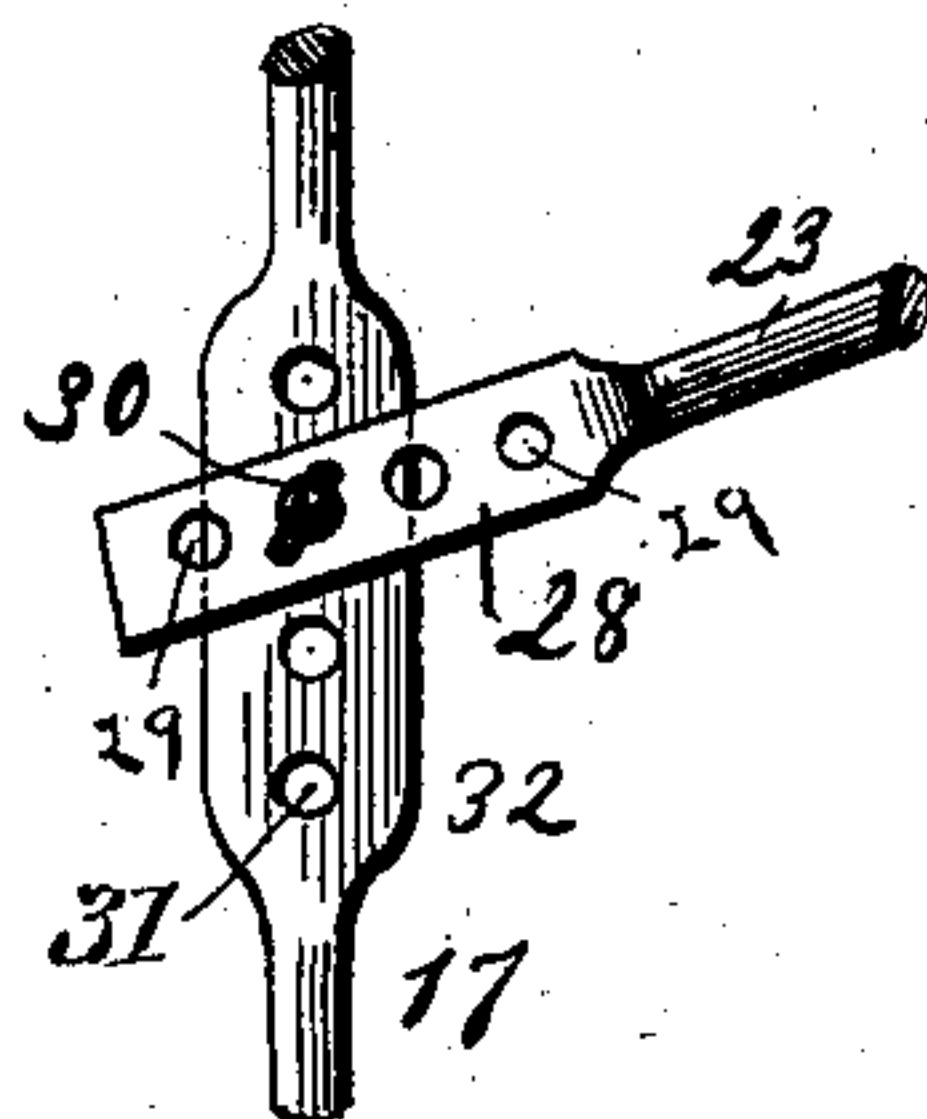
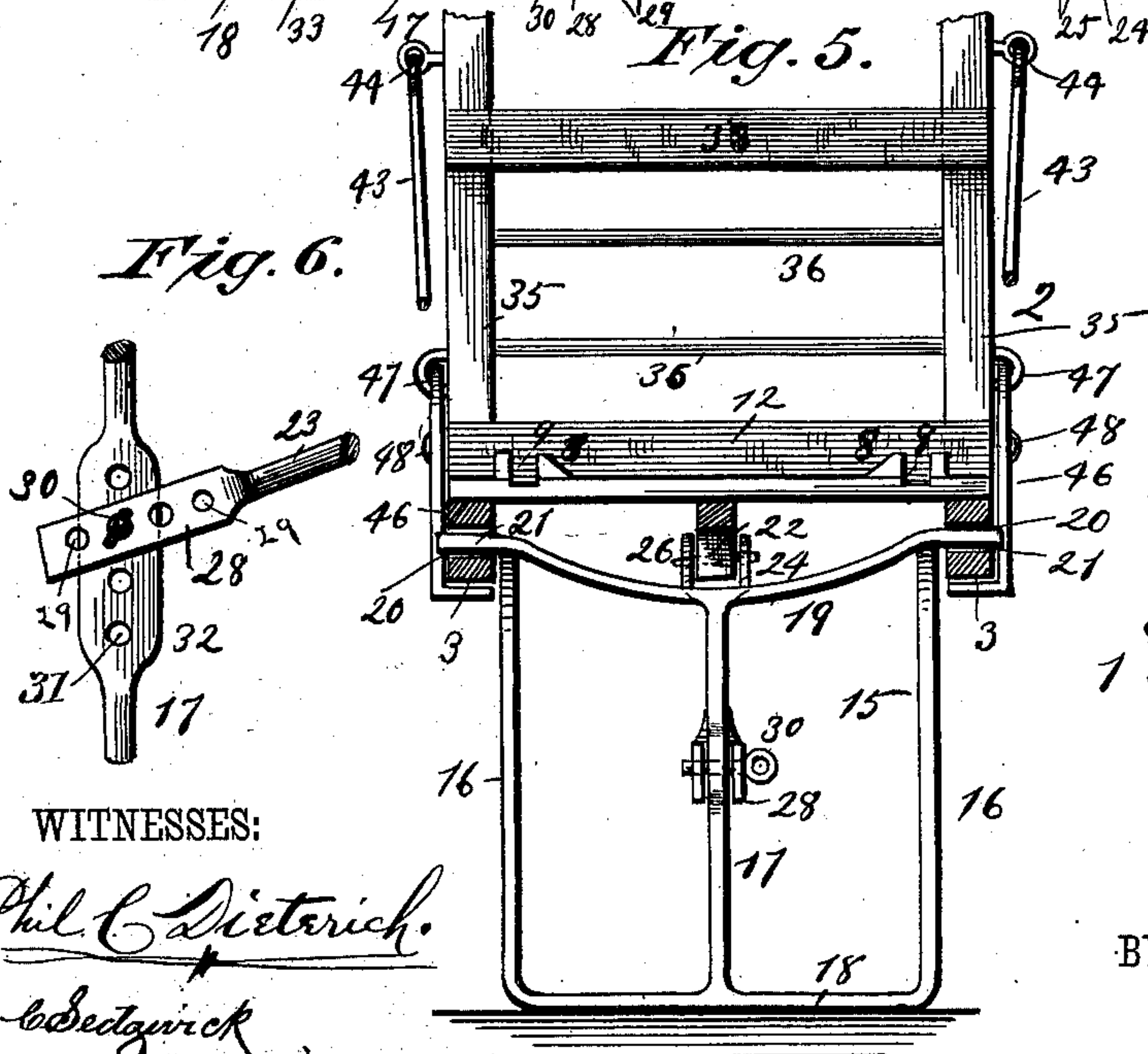
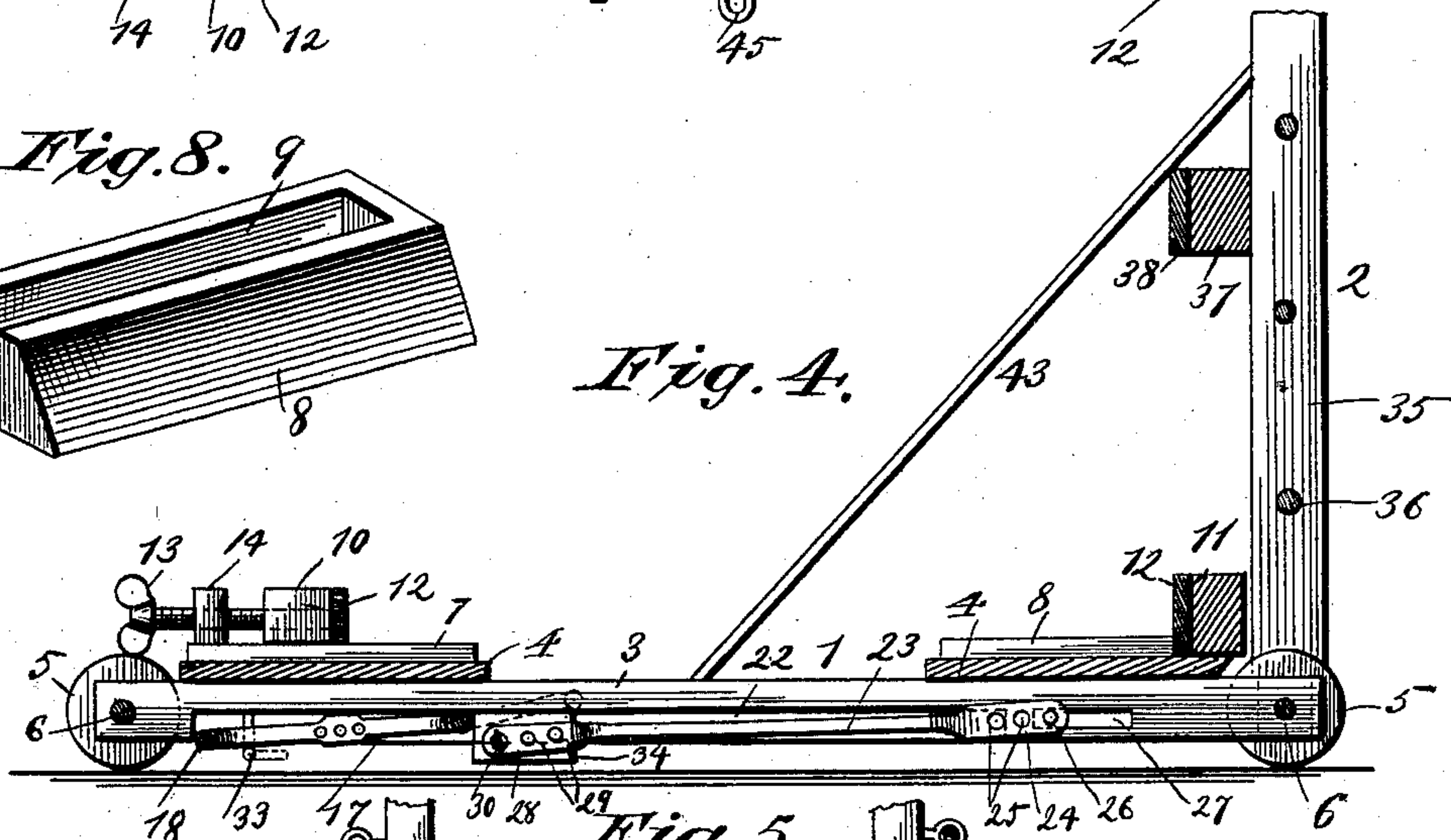
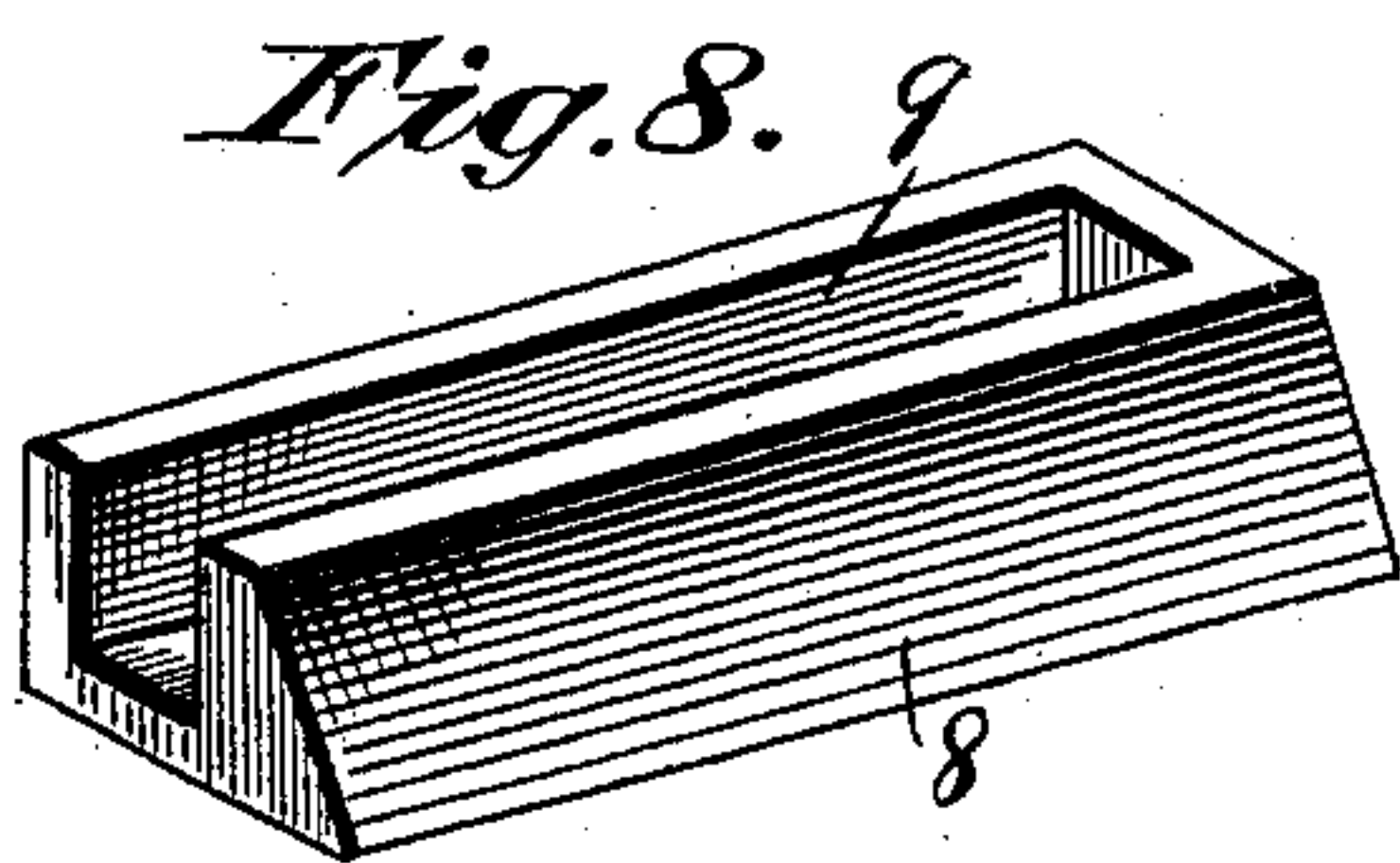
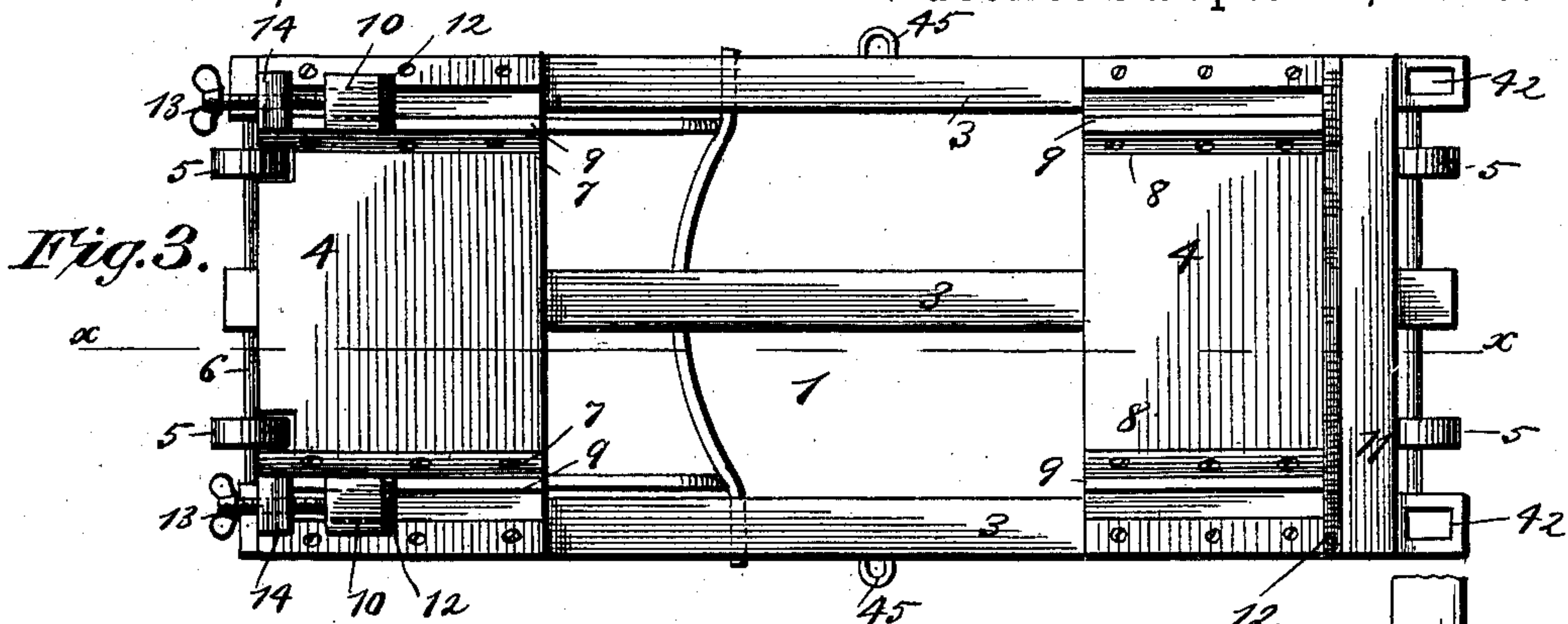
2 Sheets—Sheet 2.

L. MILLER & T. A. WHEELER.

PIANO TRUCK.

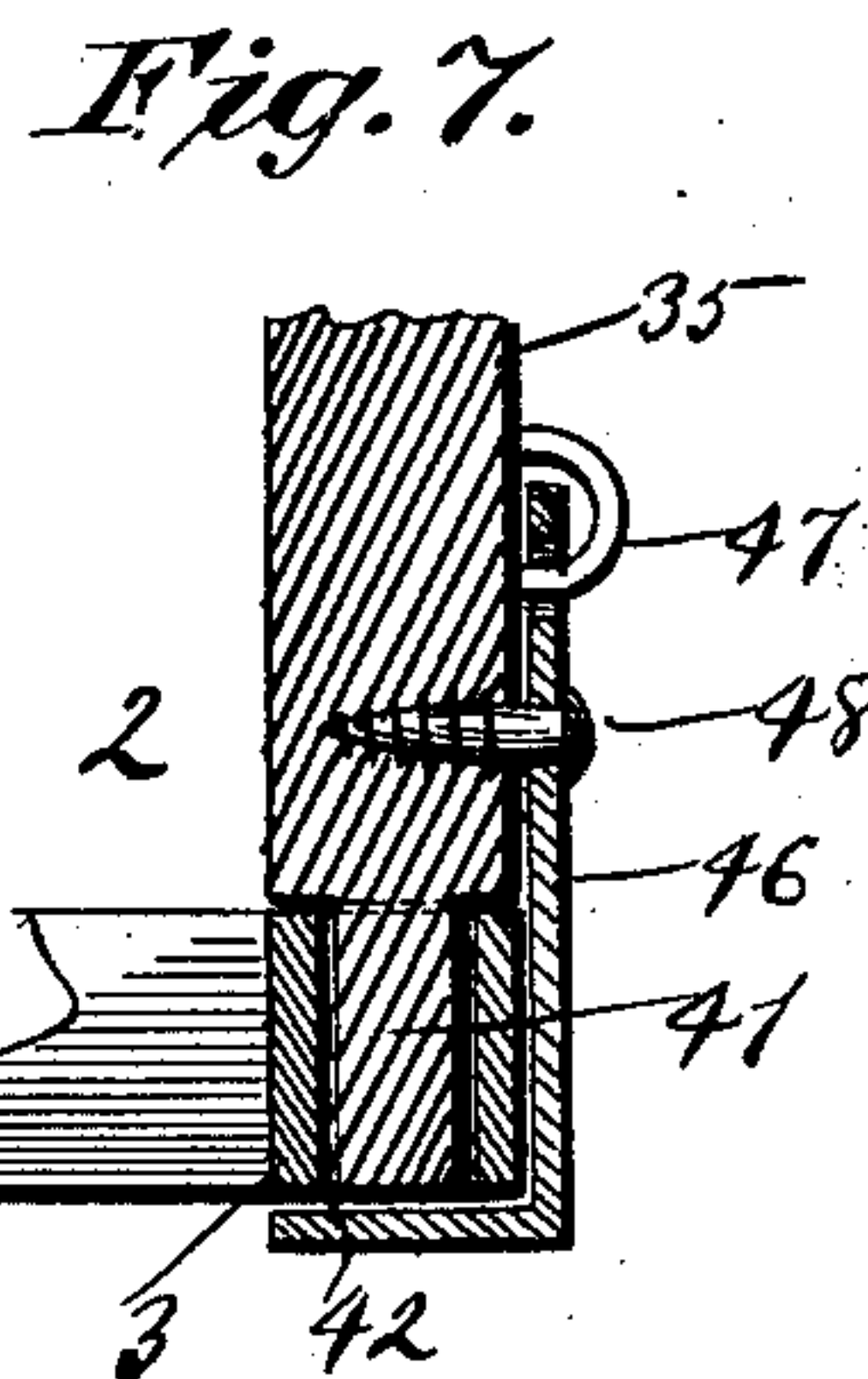
No. 389,711.

Patented Sept. 18, 1888.



WITNESSES:

Phil. C. Dietrich.
W. Sedgwick



INVENTOR:

L. Miller
T. A. Wheeler
BY *Munn & Co.*
ATTORNEYS.

UNITED STATES PATENT OFFICE.

LOUIS MILLER AND THOMAS ALBERT WHEELER, OF GREENVILLE, OHIO.

PIANO-TRUCK.

SPECIFICATION forming part of Letters Patent No. 389,711, dated September 18, 1888.

Application filed January 20, 1888. Serial No. 261,366. (No model.)

To all whom it may concern:

Be it known that we, LOUIS MILLER and THOMAS ALBERT WHEELER, both of Greenville, in the county of Darke and State of Ohio, have invented a new and Improved Upright-Piano Truck, of which the following is a full, clear, and exact description.

This invention relates to a truck or movable scaffold for supporting and moving upright pianos, and has for its object to facilitate the moving of an upright piano on and off of a wagon and over steps or a flight of stairs.

The invention consists in a movable structure for this purpose, constructed and arranged as hereinafter described and claimed.

Reference is to be had to the accompanying drawings, forming a part of this specification, in which similar figures of reference indicate corresponding parts in all the views.

Figure 1 is a side view of the invention, illustrating its position when in use. Fig. 2 is a front view of a part of the device detached. Fig. 3 is a plan view of another part of the device detached. Fig. 4 is a section taken on the line $x x$ in Fig. 3 of the truck partly broken away and with parts folded up. Fig. 5 is an end view with the horizontal part of the truck in section on line $y y$, Fig. 1, and the vertical part broken away; and Figs. 6, 7, and 8 are respectively side, vertical sectional, and perspective views of details of the device.

Owing to the peculiar shape of upright pianos and the preponderance of weight in the back, they are very difficult to be moved onto a dray or up a flight of stairs. To facilitate handling this unwieldy kind of pianos, the truck herein described has been devised.

The truck or movable scaffold consists of a frame-work formed in two parts, 1 and 2, the former serving as the base-support for the piano and the latter as the support for the end. The part 1 is constructed with horizontal bars 3, connected together by base-pieces 4, secured thereto, and is provided with metallic rollers 5, having their axle-rod 6 mounted in said bars 3. The base-pieces 4 have secured thereto blocks 7 and 8, having slots 9 open at one end to receive and permit the casters of a piano to rest therein. The blocks 7 and 8 are provided with blocks 10 and cross-bar 11, padded, as at 12, which serve to hold the base of the piano in

position, the padding bearing against the abutting polished parts of the piano. The cross-bar 11 is fixed to blocks 8, and the blocks 10 are adjustable on the blocks 7 by means of thumb screws 13, mounted in projections 14 on the blocks 7. By this means the lower end or base of the piano is clamped and held in position on part 1 of the truck. The base-support 1 is further provided with a supporting-stand-ard and brace-rod, as follows:

A standard, 15, preferably formed of an open frame-work for lightness, consists of vertical rods 16 and 17, horizontal base-rod 18, and cross-rod 19 at top, curved to allow room when the frame or standard 15 is folded up, and having extensions 20, resting in perforations 21 in the outside bars, 3, and serving as pivots for the frame 15. The central bar, 3, is cut away at 22, as shown in Figs. 4 and 5, to permit the standard 15 and a brace-rod, 23, to be folded up snugly beneath the frame 1.

The rod 23 is formed with a forked end, 24, which straddles the central cross-bar, 3, and has a number of holes, 25, to receive an adjustable pin, 26, which passes through the forked end 24, and is adapted to slide in a slot, 27, in central bar, 3, to allow for the movement of the rod 23. The other end of rod 23 is formed with a fork, 28, having a number of holes, 29, to receive an adjustable pin, 30, and is secured to the vertical rod 17 by the pin 30, passing through one of the holes 29 and one of a series of holes 31 in the flattened portion 32 of the rod 17. It will be seen by the foregoing description that the rod 23 is adapted to serve as a brace to standard 15, and that brace 23 and standard 15 may be folded up beneath frame 1 when not in use.

The standard and brace-rod may be retained in folded position by any suitable means. As shown, the standard is held by a hook or catch, 33, pivoted to frame 1, and the brace-rod by its securing-pin 30, engaging a perforation or hole in a block, 34, on frame 1.

Part 2 or the piano end support consists of a frame formed of bars 35, connected by rods 36, similar to ladder-rounds. The frame 2 is also provided with cross-bars 37, padded, as at 38; against which the end of the piano is adapted to rest, and with metallic wheels 39, mounted on an axle-rod, 40, resting in bars 35.

The frame 2 may be detachably secured to frame 1 in any suitable way, and, as here shown, is fastened thereto by tenons 41, fitting in sockets 42 in bars 3. The frame 2 is held in place on frame 1 by means of hooked rods 43, attached to bars 35 by screw-eyes 44 and engaging screw-eyes 45 on bars 3, and by angular metallic clamps 46, attached to screw-eyes 47 on bars 35, overlapping outside bars 3, and fastened by screws 48. By this means the upright frame 2 is firmly secured to base-frame 1, and is adapted to support the end of a piano.

The use of the truck is as follows: The standard 15 and brace 23 being folded up, the piano is placed upon the frame 1, its casters resting in grooves 9. The blocks 10 are then clamped against the base of the piano by thumb-screws 13 to hold the piano steady. The frame 2 is then secured to frame 1. The truck holding the piano is then moved on its rollers 5 until it is necessary to lift it. In the case of a flight of stairs the forward end of the base-frame 1 is raised and the truck moved forward until the front rollers, 5, rest on a step. The rear end of the frame 1 is then elevated and the standard 15 and brace 23 unfolded and secured together. The truck supporting the piano will then be in an inclined position. By tilting the truck backward on the standard 15 similarly to the position shown in Fig. 1 and moving it forward, the front rollers, 5, are brought to another step and rest thereon, and the rear of frame 1 is at the same time lifted and the frame moved forward until the standard 15 is brought to and rests upon a higher step. This operation is repeated until the truck with its load is brought to the top of the stairs, when standard 15 and brace 23 are folded up and the truck is moved forward on the rollers 5.

By means of the adjustment of brace-rod 23 the standard 15 can be adapted to steps in one staircase of different height from those in another. The rods 36 in frame 2 serve as a means to take hold of and lift the forward part of the truck. In case a hallway is reached where it is too narrow to turn the truck the truck may be tipped forward, so that the piano rests upon the frame 2, and the latter is moved forward on the rollers 39 and 5.

From the foregoing the manner of using the

truck in lifting a piano onto a dray will be apparent. In a wareroom or hall the frame 1 may be used without frame 2 to move a piano more readily than on its casters. By means of this device time and labor are saved, and pianos can be moved very easily and with little danger of accident.

Having thus described our invention, what we claim as new, and desire to secure by Letters Patent, is—

1. A piano-truck consisting of a base-frame mounted on rollers and having a detachable vertical frame at one end thereof, with rollers at its upper end and brace-rods connecting with base-frame, and sliding adjustable clamping-blocks at its other end, with means, substantially as described, for holding the clamping-blocks in adjusted position, and an adjustable supporting standard and brace pivoted in the bottom of the base-frame and adapted to fold up within the same, substantially as described.

2. A piano-truck consisting of frames 1 and 2, the base-frame 1 having rollers 5, grooved blocks 8, and padded bar 11, grooved blocks 7, adjustable padded blocks 10, thumb-screws 13, folding standard 15, catch 33, folding adjustable brace-rod 23, and perforated block 34, and vertical end frame, 2, having tenons 41, engaging mortises 42 in frame 1, and provided with rollers 39, hooked brace-rods 43, engaging screw-eyes 45 on frame 1, and bent clamps 46, with holding-screws 48, substantially as described.

3. In a piano-truck as herein described, a base-frame, 1, consisting of bars 3, having base-pieces 4, blocks 7 and 8, with grooves 9, bar 11, with padding 12, blocks 10, with padding 12, projections 14, with thumb-screws 13, and rollers 5, the central bar, 3, notched, as at 22, and slotted, as at 27, and having folding standard 15, with perforations 32, brace-rod 23, with forked ends 24 and 28, having perforations and retaining-pins 26 and 30, pivoted catch 33, and perforated block 34, the said bars 3 having screw-eyes 45 and mortises 42, substantially as described.

LOUIS MILLER.

THOMAS ALBERT WHEELER.

Witnesses:

C. R. LEFTNICH,

W. A. HARPER.