

No. 616,972.

Patented Jan. 3, 1899.

P. W. RAYNOR.
PIANO TRUCK.

(Application filed Feb. 11, 1898.)

(No Model.)

Fig. 1.

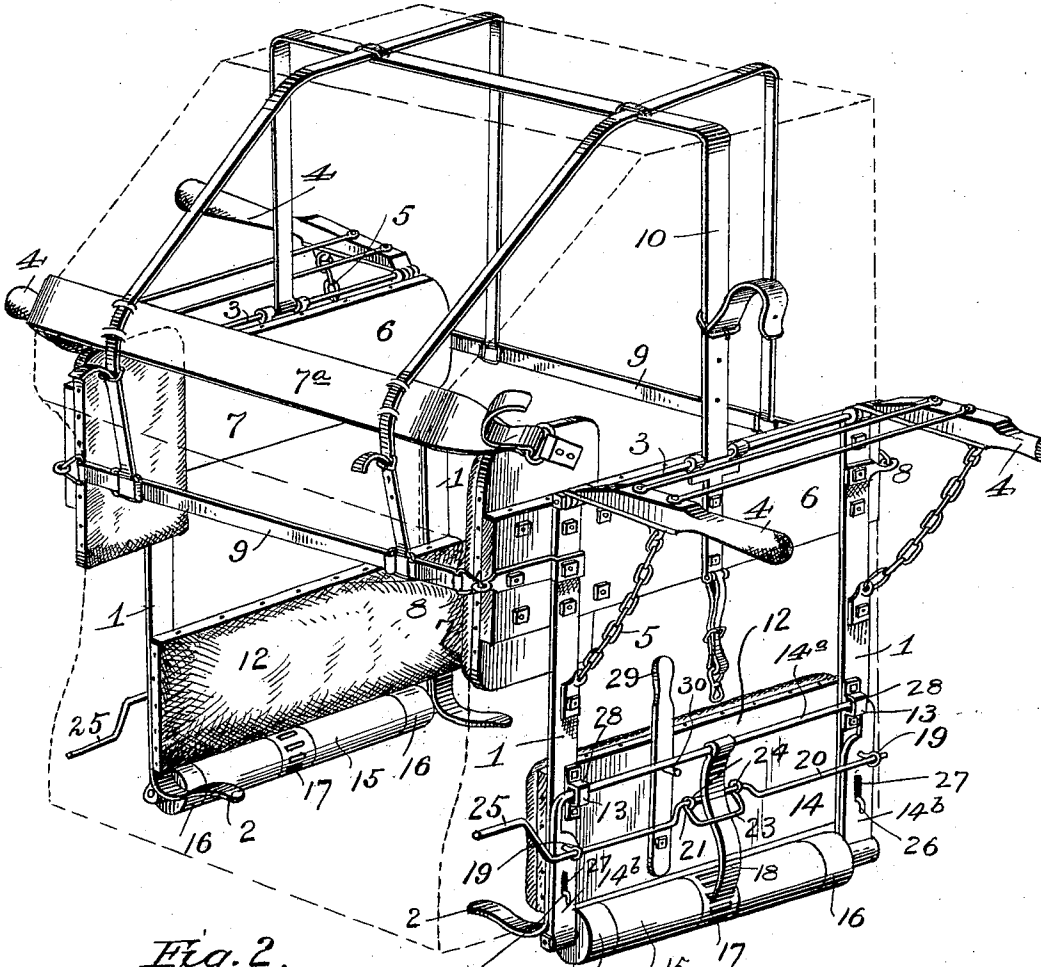
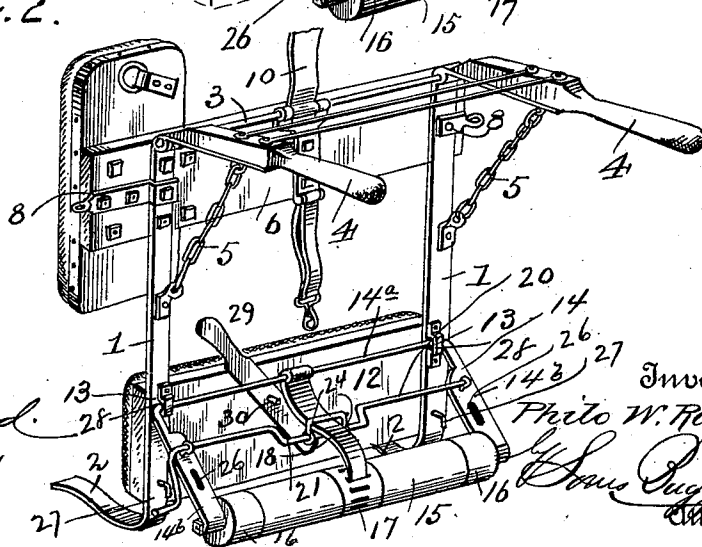


Fig. 2.



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UNITED STATES PATENT OFFICE.

PHILO W. RAYNOR, OF FINDLAY, OHIO.

PIANO-TRUCK.

SPECIFICATION forming part of Letters Patent No. 616,972, dated January 3, 1899.

Application filed February 11, 1898. Serial No. 669,961. (No model.)

To all whom it may concern:

Be it known that I, PHILO W. RAYNOR, a citizen of the United States, and a resident of Findlay, in the county of Hancock and State of Ohio, have invented certain new and useful Improvements in Trucks for Moving Pianos; and I do hereby declare that the following is a full, clear, and exact description of the invention, which will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, which form a part of this specification.

My invention relates to trucks or apparatus for moving pianos; and its object is to provide an improved construction of the same which shall be easily connected with a piano and be loaded in a wagon for transportation or the piano be moved from place to place by hand and when not in use can be readily carried by a person.

The invention consists in the novel construction and combination of parts herein-after fully described and claimed.

In the accompanying drawings, Figure 1 is a perspective view of an apparatus for moving pianos constructed in accordance with my invention, the piano being shown in dotted lines. Fig. 2 is a perspective view of one of the trucks.

Before proceeding to describe the invention in detail I would state that there are two trucks employed, one at each end of the piano, and as these trucks are duplicates of each other a description of one will suffice for both.

Referring now to the said drawings, the reference-numeral 1 designates two metal bars, the lower ends of which are bent at an angle, forming lugs 2, adapted to engage with the bottom of a piano. To the upper ends of these bars is secured a horizontal rod 3, to which are hinged two handles 4, adapted when not in use to be folded against said bars, but when in use to be extended at right angles to said bars, being held in said position by chains 5, secured thereto and to said bars. Secured to said bars at the upper ends is a board 6, adapted to rest against the end of a piano and provided with a cushion 7 at one end to prevent injury to the piano. Connected with the cushions 7 is a strap 7^a, which is lined with one or more sheets of duck or

other suitable material. This strap passes over the front of the piano just above the keyboard and serves to prevent injury to the piano while being carried through doorways. The numeral 8 designates lugs secured to said bars, with which are connected straps 9, extending around the front and back of the piano. There is also a strap 10 connected with rod 3, which extends over the top of the piano. The object of this strap is to securely hold the piano to the trucks. Secured to the lower ends of said bars 1 is a board 12, the inner side of which, as well as the board 6, is provided with a lining or covering of some soft material, such as cloth or felt, for preventing marring or injuring the piano. Hinged to said bars by hinges 13 is a movable U or angular shaped frame 14, comprising the horizontal rod 14^a and the arms 14^b at right angles thereto, to the ends of which arms is journaled a roller 15, having metal bands 16 at the ends and the center provided with a ratchet-wheel 17. Engaging with the ratchet-wheel is one end of a tongue or pawl 18, the other end of which is journaled to the horizontal portion of the frame 14.

Secured to each of the arms 14^b is a screw-eye 19, in which eye is journaled a horizontal rod 20, formed at the center with a crank or eccentric 21, which is located behind the pawl. In front of said pawl is a loop 23, provided with eyes 24 at the ends, which engage with the said crank or eccentric. One end of rod 20 is formed with a crank 25, by which to rotate the same. The arms 14^b of the said frame are formed with slots 26, with which engage hooked lugs 27, secured to the bars 1. It will be noted that the hinges or bearings 13 of the frame 14 consist of plates or offsets 28, so that the arm 14^a of the frame can move up and down therein. The object of this construction is that when the hooked lugs are passed through the slots 26 the frame can be raised slightly, so as to allow the ends of the lugs to engage over the lower ends of the slots and hold the frame securely to the bars 1. For the purpose of holding the said frame in such elevated position I provide a lever 29, pivoted to the said board, having a pin 30, which engages with the arm 14^a of the frame. When this lever is turned to a perpendicular position, said pin will lock or hold it in place.

As before stated, there is one of the trucks or devices described at each end of the piano, and in use the bent lower ends of the bar 1 are engaged under the ends of the piano, the lugs 25 being disengaged from the slot 26 and the frame 14 thrown outward, as seen in Fig. 2, and the piano secured to the truck by the straps. The eccentric and loop are then turned, so that the tongue or pawl 18 will be thrown into engagement with the ratchet-wheel of the roller, thus holding the latter against rotation. The ends of the piano are then slightly raised by the handles and the frame 14 pushed inward, so that the piano will be supported by the rollers, the weight of the piano causing said frame to move upward, so that the lugs 27 will engage with the lower ends of the slots in the arms 14^b, and thus hold the frame against the side bars 1. The lever 26 is then turned to a perpendicular position, so that its pin will engage under the rod 14^a and hold the frame in its elevated position. The rod 20 is then turned, so that the eccentric and loop will throw the pawl out of engagement with the ratchet-wheel to allow the roller to rotate and the trucks be moved over a floor or pavement. The piano can be lifted into and out of a wagon by the handles.

When the trucks are removed from the piano, they may be folded so as to occupy but little room in transportation.

Having thus fully described my invention, what I claim is—

1. In a truck for moving pianos, the combination with the bars connected together at the lower ends by a transverse board provided with a cushion and connected at the upper ends by a transverse board provided with a cushion at the front end and the lower ends of said bars turned inwardly at right angles, of the handles pivoted to the upper

ends of said bars and the straps, substantially as described.

2. In an apparatus for moving pianos, the combination with the bars having the lower ends bent approximately at right angles, the pivoted handles at the upper ends of said bars and the straps, of the pivoted frame at the lower ends of said bars, the roller journaled thereto, and means for locking said roller against rotation, substantially as described.

3. In an apparatus for moving pianos, the combination with the bars having their lower ends bent approximately at right angles, and the pivoted handles at the upper ends of said bars, of the pivoted vertically movable frame, the hooked lugs adapted to project through slots in the side arms of said frame, the roller journaled to the ends of said arms, and the pivoted lever provided with a pin engaging with said frame, substantially as described.

4. In an apparatus for moving pianos, the combination with the bars having their lower ends bent approximately at right angles and the pivoted or hinged handles at the upper ends of said bars, of the pivoted vertically-movable frame, the hooked lugs adapted to project through slots in the side arms of said frame, the pivoted lever having a pin engaging with the horizontal arm of the frame, the roller journaled to the frame, the ratchet-wheel, the transverse rotatable rod and the eccentric and loop, substantially as described.

In testimony that I claim the foregoing as my own I have hereunto affixed my signature in presence of two witnesses.

PHILO W. RAYNOR.

Witnesses:

JOHN T. CRITES,
JOHN E. BETTS.