

No. 780,653.

PATENTED JAN. 24, 1905.

W. H. GRIFFITH.
PIANO TRUCK.

APPLICATION FILED JULY 23, 1903.

2 SHEETS—SHEET 1.

Fig. 1.

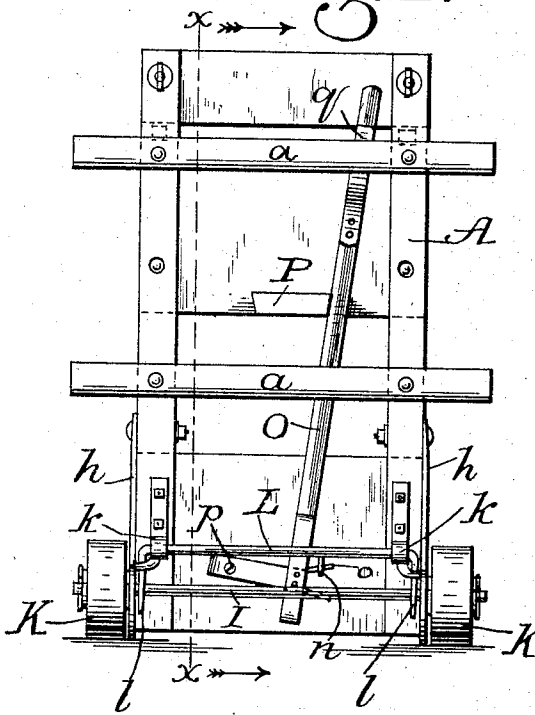


Fig. 2.

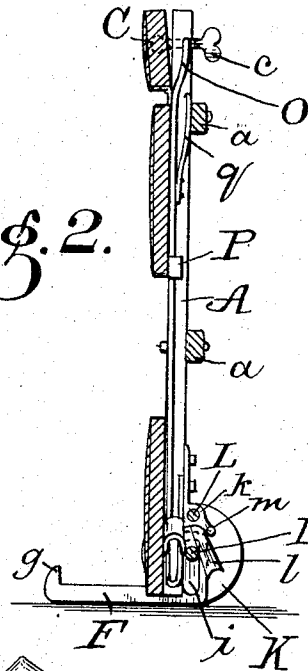
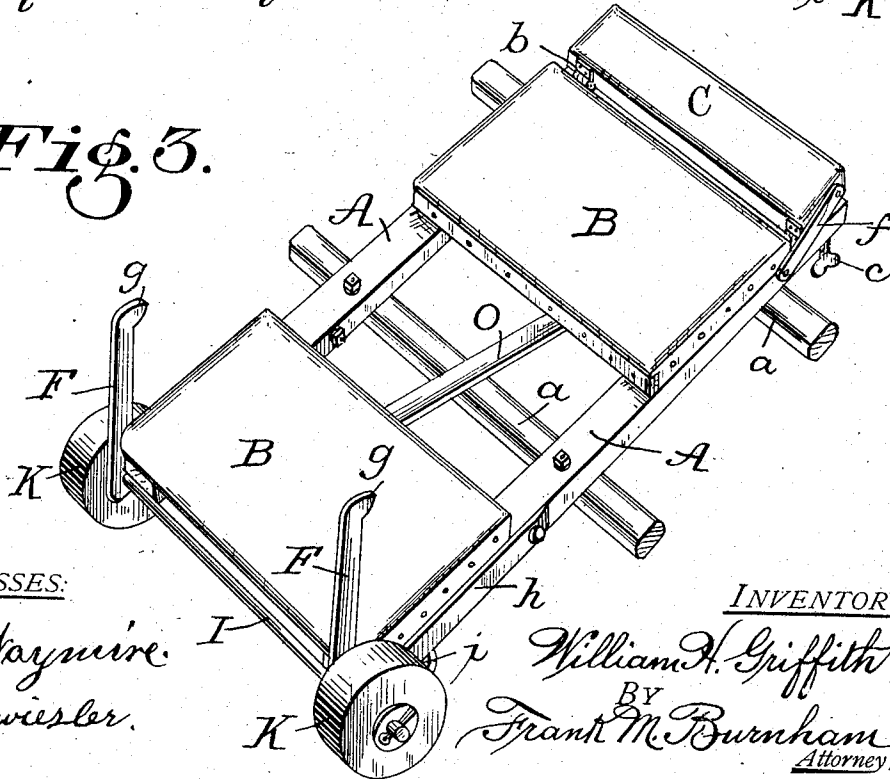


Fig. 3.



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2 SHEETS—SHEET 2.

Fig. 4.

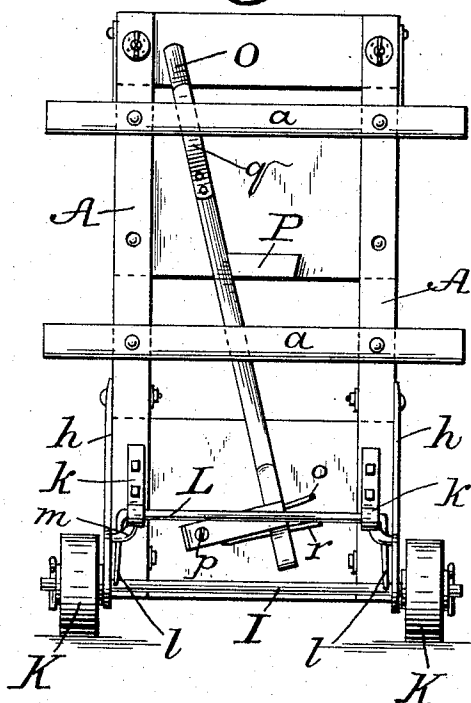


Fig. 5.

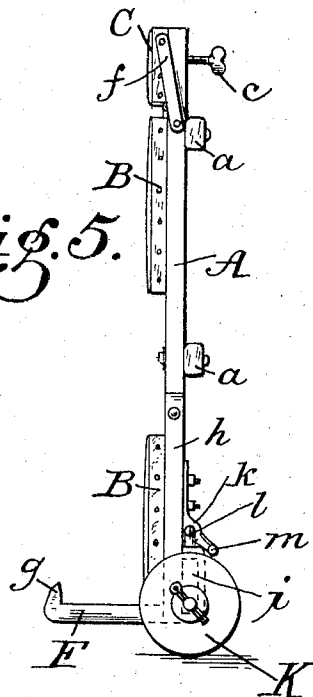


Fig. 6.

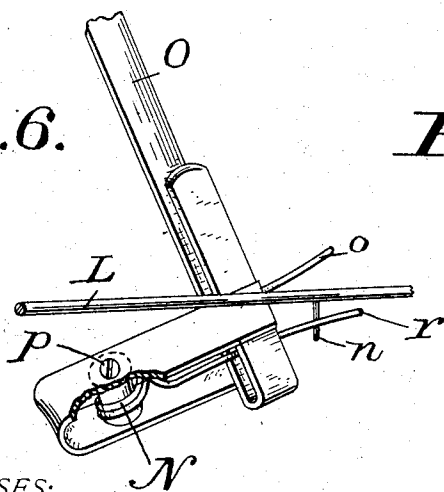
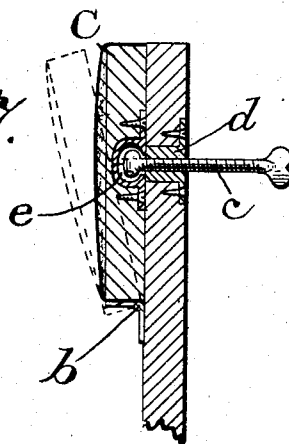


Fig. 7.



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UNITED STATES PATENT OFFICE.

WILLIAM H. GRIFFITH, OF TROY, OHIO.

PIANO-TRUCK.

SPECIFICATION forming part of Letters Patent No. 780,653, dated January 24, 1905.

Application filed July 23, 1903. Serial No. 166,689.

To all whom it may concern:

Be it known that I, WILLIAM H. GRIFFITH, a citizen of the United States, residing at Troy, in the county of Miami and State of Ohio, have invented certain new and useful Improvements in Piano-Trucks; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to the letters of reference marked thereon, which form a part of this specification.

This invention relates to improvements in piano-trucks; and some of the objects consist in constructing a truck which will facilitate the handling of pianos or cabinet organs of any size, either when in the freight-office and boxed up or while being moved into a dwelling or building when removed from the box and in an unpacked condition.

Among some of the many advantages of my improved piano-truck may be mentioned the following: It does not mar or injure the piano; the piano need not be touched or handled when upon the truck; is light in weight and simple in construction, so as to be easily and quickly handled and operated; inexpensive in cost of manufacture, and although intended and designed for service in connection with musical instruments, and particularly pianos, it can also be used in the transportation and moving of boxes and other large bodies generally.

This device, referring in general terms to its construction, consists of the body of the truck, comprising the hardwood frame, and the bearing portions, preferably padded or covered with heavy soft material, the handles, the lever for permitting of the automatic raising or lowering of the piano while being trucked, the hooked arms, the wheels upon which the truck is mounted and moves, and the peculiar and novel combination and arrangement of these parts, as will be more fully described hereinafter and set forth in the subjoined claims, in accordance with the statutes in such cases made and provided therefor.

Having reference to the annexed drawings,

which are a formal part of this specification and wherein the same letters of reference indicate like parts wherever they occur throughout the several views, Figure 1 is a bottom plan view in elevation of my piano-truck, showing the parts lowered and in the position they assume when in the act of raising a piano; and Fig. 2 is a vertical transverse sectional view taken on line *xx* of Fig. 1. Fig. 3 is a perspective view showing the parts raised or in a normal position. Fig. 4 is a plan elevation similar to Fig. 1, but showing the parts in a reverse position therefrom—*i. e.*, in their raised or normal position; and Fig. 5 is an end elevation of the device in the position as shown in Fig. 4. Fig. 6 is a perspective view, on a somewhat-enlarged scale in detail, of a portion of the lever and mechanism which operates same; and Fig. 7 is a sectional view, on a somewhat-enlarged scale in detail, of the upper movable bearing portion and the hand-screw for moving the same.

In describing my said invention and referring in detail to the different parts or mechanical elements of construction as shown throughout the various views of the drawings and indicated by means of the letters of reference as aforesaid, A represents the side strips, which, in conjunction with the handles or cross-pieces *a*, form the truck-frame. Said side strips and cross-pieces are preferably constructed of hard wood and are securely connected by bolts. The front of the truck is provided with stationary portions B, preferably cushioned with carpet or other suitable soft and strong material, so as to prevent injury to the piano or organ and form bearing-surfaces for the same while being moved. Located at the top of the truck and hinged, as at *b*, to side strips A is a movable portion C, preferably cushioned and similar to portions B, which is adapted to be thrown outward, so as to firmly bear or impinge against the piano as desired by means of hand or set screws *c*, which move or work through a screw-threaded socket *d* in the side strips. Each of said set-screws terminates at one end in a knob or knuckle which rests and has sufficient play in a suitable recess *e* in the movable portion C, so as to form a knuckle-joint for retaining said

movable portion in position or permit of the same to be projected out or drawn in with the action of said set-screw. (See Fig. 7.) Said portion C for the purpose of more securely supporting it is further provided with strap-hinges *f*.

Extending at right angles from the body of the truck are the metallic arms F, provided with hooked or pointed ends *g*, upon which the bottom of the piano rests when the piano is raised after the arms have been placed thereunder, said arms being securely connected to the said strips, as at *h*, and are formed with slots *i*, adapted to receive and retain axle I, having wheels K of sufficient size to properly support the truck and permit of its being easily propelled or moved, no matter how heavy the weight of the piano it supports may be. Bearings *k* support and permit of shaft L, which is provided with ends *l*, suitably formed, so as to fit over and rest on axle I, to turn or rotate as far as stops *m*, formed on said bearings, will allow when lug or projection *n* of shaft L is forced downward by reason of prong *o* of bifurcated spring N, pivoted at *p*, (see Fig. 6,) which is forced against said lug as lever O is moved to the right and firmly held in position by stop P, when the parts will assume the position shown in Figs. 1 and 2 and the body of the truck will have descended until hooked arms F will rest on the floor, ground, or walk, as the case may be, and on the same horizontal plane with the wheels until slightly raised by the adjustment of a strap over the top of the piano in the usual manner, which raises it sufficient for the casters of the piano to rest on the floor. Lever O is provided with a spring *q*, adapted to bear against upper cross-piece *a*, thus retaining said lever in position as to any swaying or lateral movement. (See Figs. 1, 2, and 4.)

In moving or operating the truck the handles or cross-pieces are grasped by their extended ends, and to raise the truck from the position as above referred to, to its normal position, lever O is moved from right to left as spring *q* is compressed against cross-piece *a*, when lower prong *r* of bifurcated spring N will move upward and raise lug *n* until shaft L has been turned or moved inward sufficient for its ends *l*, which are slightly concaved, as shown in Fig. 2, to move upward with the body of the truck as it is raised from the position shown in Figs. 1 and 2 until said ends have also turned so as to rest over and on axle I, (see Fig. 4,) when the body of the truck and hooked arms F will have been raised from the floor, ground, or walk, as shown in Figs. 3, 4, and 5.

It is of course obvious and well understood that while I have only described one truck it is necessary in the practical operation of my device to employ two trucks, one at each end of the piano, connected one with the other by a strap over the top of the piano in the cus-

tomary manner. It will also be readily understood that by providing wheels of a sufficient or proper height instead of the usual form of long rollers the great amount of friction caused by said rollers is removed, thereby permitting of the truck to be more readily and easily moved or propelled.

I am aware of one form of truck wherein a projecting long curved lever is employed; but in this truck the entire construction is different from and in no way similar to nor does it resemble mine, this form being very objectionable for the reason that where it is necessary to place the truck close to a wall (this being especially true in halls or narrow passage-ways or where there is a door) in raising the length of the lever will interfere with the operation of the truck, while my truck is so constructed that it can be placed close to a wall or door when necessary and yet be operated.

Having now described my improved piano-truck, what I claim is—

1. In an improved piano-truck, the combination with the body and wheels thereof; of the arms; the shaft provided with the ends which are adapted to rest free of the axle when the truck is lowered, or to rest on the axle when said truck is raised, said shaft being also provided with a projection or lug; and means for actuating said shaft so as to lower or raise the truck as desired; all substantially as and for the purposes described.

2. The combination in a piano-truck with the frame thereof; of the high wheels; the hooked arms; the shaft provided with a lug; also having the ends adapted to rest on the axle of said wheels; the lever provided with means for forcing or moving said lug of said shaft upward or downward; and suitable bearing portions; all substantially as and for the purposes described.

3. A piano-truck having in combination with the body and wheels thereof the following elements; to wit: the hooked supporting arms; a movable shaft having supporting ends, and further provided with a lug; a lever provided with means for holding it in position, also means for actuating said shaft; and a movable bearing portion having means for adjusting it backward or forward; all substantially as and for the purposes described.

4. In a piano-truck, the combination with the frame and body thereof; of the high wheels; the hooked arms; the shaft provided with the lug, and supporting ends; the lever and spring for moving said lug, means for retaining the lever in position; all substantially as and for the purposes described.

In testimony whereof I have affixed my signature in presence of two witnesses.

WILLIAM H. GRIFFITH.

Witnesses:

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JAMES O. HARTSHORN.