(No Model.)

R. MÜLLER.

MACHINE FOR LIFTING DOORS AND HOLDING SAME.

No. 604,833. Patented May 31, 1898.

Fig. 1.

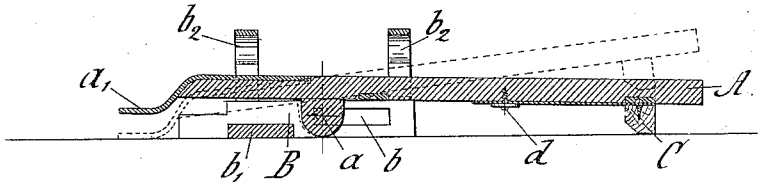


Fig. 2.

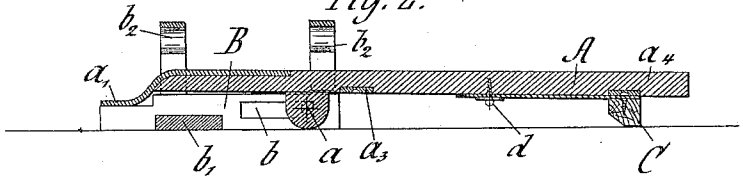


Fig. 3.

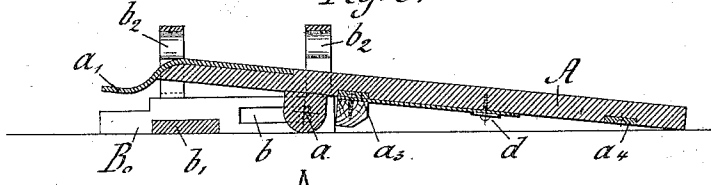


Fig. 4.

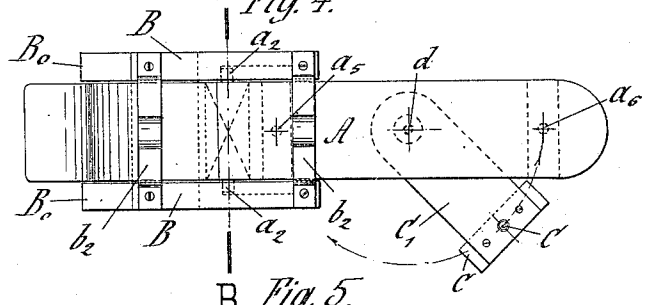
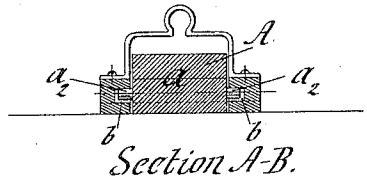


Fig. 5.



Section A-B.

Witnesses.

A. Schmitz

G. Egremont.

Inventor.

Rudolf Müller

per O. Kleiger

Attorney.

THE NORRIS PETERS CO., PHOTO-LITHO., WASHINGTON, D. C.

UNITED STATES PATENT OFFICE.

RUDOLF MÜLLER, OF LINZ, AUSTRIA-HUNGARY.

MACHINE FOR LIFTING DOORS AND HOLDING SAME.

SPECIFICATION forming part of Letters Patent No. 604,833, dated May 31, 1898.

Application filed June 7, 1897. Serial No. 639,708. (No model.)

To all whom it may concern:

Be it known that I, RUDOLF MÜLLER, overseer, of Linz, in the Empire of Austria-Hungary, have invented certain new and useful Improvements in Machines for Lifting Doors and Holding Same; 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.

By means of my combined door lifter and holder doors of all kinds can be lifted for the purpose of oiling their hinges, &c., by a single person and maintained in this position independently of the pressure of such person's foot, and for the object of cleaning can be raised exceptionally high, and their complete taking down can be effected without any additional assistance. All these requirements I attain by producing an arresting door-lifting atrivance which, easily operated by the foot, by a slight manipulation can be put into a condition to effect such a heaving up of the door as will well suit its commodious lifting off or unhinging.

Figures 1, 2, and 3 are longitudinal sections, Fig. 4 a plan, and Fig. 5 a transverse section, of my device.

To accomplish the prizing up of a door, I use a board A, which is furnished with a caster or roller like bottom block a and a metal foot or under grip a'. A support or prop C, so joined with the treadle or treadle-board A as to revolve at the point d, makes possible the normal lifting up of a door for the purpose of oiling its hinges, &c.

The prop C in the mode shown in Fig. 4 revolves around the point d as a center of rotation and can in both its extended directions be held arrested. To effect this arrestation, two plates a^3 and a^4 are screwed on the treadle-board A underneath. These plates at their centers have circular holes a^5 and a^6, in which catches the round stud c of a connecting-plate c' of the prop C, which is held by spring-pressure.

The before-mentioned lifting up of the door ensues when, as is illustrated in Figs. 1 and 2, the rotatory prop C is turned outward. In this case, by means of the connecting-plate c', which has an upward spring-pressure, the stud c holds the prop C in its end position, this stud c falling into and remaining in the circular-shaped aperture a^6. In the same manner an arrestation of the prop C in its inward-turned longitudinal position in a^5, as presented in Fig. 3, is obtained, this being a case, however, when the question is whether the door, with the aim of cleaning it, &c., shall be lifted completely out of the eyes of the hinges. Of course it is self-evident that in these circumstances also the door is not lifted wholly off, but only so high that by that time it can be easily taken down; but the foregoing implement possesses a much more important function than that just specified in that the door, after being raised, can, too, be maintained in its elevated position without further trouble, so that the person employed for the duty need concern himself with nothing but the thorough oiling of the hinges. With the treadle-board A already armed by a and a' a shore attachment B is combined in such a manner that it is altogether independent of the intrinsic action of such treadle-board A and in respect to this board can be at any moment pushed into two positions, which are important for the implement. Both these positions in relation to A are depictured in Figs. 1 and 2. When B is in the position according to Fig. 1, the implement is pushed forward, with its foot or under grip a' under the wing of a door opened at about right angles, while C is in the position shown in Figs. 1 and 2. Then follows a lifting of the door to a somewhat greater height than the shoulder B^0 on both sides of the shore B, Fig. 4. While, therefore, for that object the right foot, resting on the treadle-board A, lifts the door, the left foot pushes the shore forward just as represented in Fig. 2. From then onward the door is completely and securely supported, and the servant can proceed to do whatever oiling is needed; but so that both treadle-board and shore remain united and cannot become disconnected the one from the other, as also that the required relative shifting of both parts is feasible, the roller-like bottom block a has at each side a peg or rib a^2, which moves freely in slits or grooves b in both sides of the shore, (refer also to Fig. 5,) while the integration of the double-shouldered shore B is accomplished by a cross-piece b', as well as by means of the disposition of two stubs or struts b^2,

which above the treadle-board join the parts of the shore together, making it possible by putting the left foot between these last to simultaneously push the shore under the lifted door while the right foot still rests upon the treadle-board.

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

Improvements in a combined door lifter and holder, the treadle-board A, the roller-like bottom block a and the metal foot or under grip a' on said treadle-board, the pegs a^2 on the block a and the swinging lift-limiting prop C all in combination with the shore B having slots b adapted to receive the said pegs a^2, and the cross-piece b' and the struts b on the shore B, substantially as described.

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

RUDOLF MÜLLER.

Witnesses:
HEINR. CARIUS,
CHR. FISCHER.