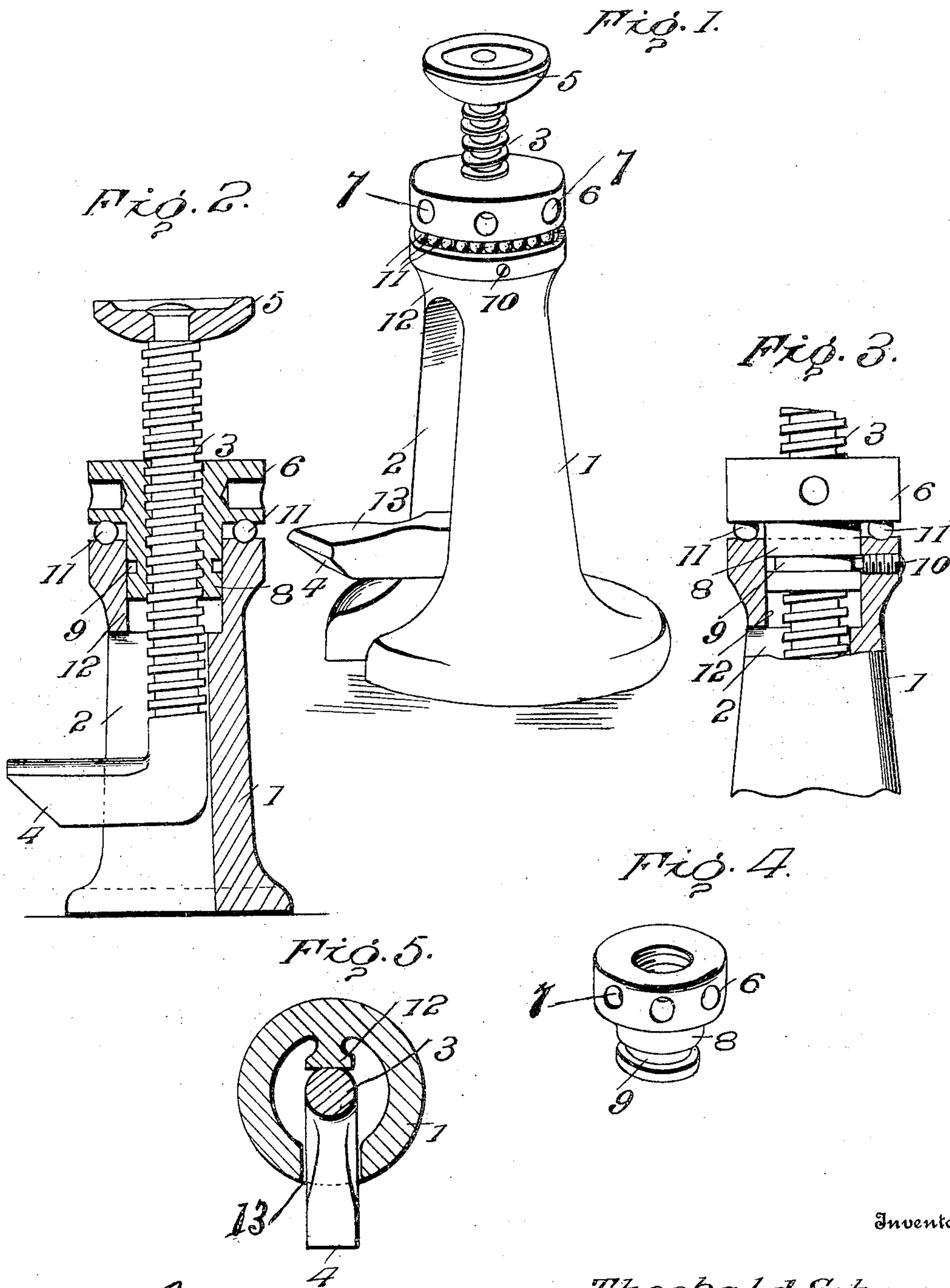


No. 822,157.

PATENTED MAY 29, 1906.

T. SCHRAMM.
LIFTING JACK.

APPLICATION FILED JUNE 27, 1905.



Inventor

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THEOBALD SCHRAMM, OF COLUMBUS, OHIO.

LIFTING-JACK.

No. 822,157.

Specification of Letters Patent.

Patented May 29, 1906.

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To all whom it may concern:

Be it known that I, THEOBALD SCHRAMM, a citizen of the United States, residing at Columbus, in the county of Franklin and State of Ohio, have invented certain new and useful Improvements in Lifting-Jacks, of which the following is a specification.

This invention embodies improvements in that type of lifting-jacks comprising a suitable base or stop in which is mounted a vertically-movable screw, said screw carrying a foot and a head for lifting purposes and being operable by means of a turning-nut.

The invention resides mainly in the peculiar construction of the parts of the jack, producing a maximum degree of substantiality and conducive to simplicity and cheapness.

For a full description of the invention and the merits thereof and also to acquire a knowledge of the details of construction of the means for effecting the result reference is to be had to the following description and accompanying drawings, in which—

Figure 1 is a perspective view of a jack embodying the invention. Fig. 2 is a vertical sectional view. Fig. 3 is a partial vertical sectional view showing the means for securing the turning-nut to the base of the jack. Fig. 4 is a detail perspective view of the turning-nut. Fig. 5 is a horizontal sectional view embodying a modification of the invention.

Corresponding and like parts are referred to in the following description and indicated in all the views of the drawings by the same reference characters.

Specifically describing the invention, the base or stock of the jack is indicated at 1, the same being provided with a vertical opening in the upper portion, which merges into a recess 2 in one side of the base. The lifting-screw 3 operates in the vertical opening in the stock and is provided at its lower end with an integral laterally-projecting foot 4. The foot 4 extends some distance from a side of the base 1 and is adapted to receive an object thereon which is to be elevated in the practical operation of the device, at the same time constituting a member for preventing turning of the screw. A swiveled head 5 is carried by the upper end of the screw 3, and this head may directly receive a load to be raised in the vertical movement of the screw aforesaid. The turning-nut 6 is mounted at the upper portion of the base 1 and is pro-

vided, preferably, with a plurality of openings 7 in its sides to receive the end of a suitable lever by which said nut may be turned in order to raise the load by imparting vertical movement to the screw 3. The turning-nut 6 is of a peculiar form, having an integral tubular extension 8 projecting from its under side, said extension being of round form exteriorly and received in the upper portion of the base 1, as shown clearly in Fig. 2. This tubular extension 8 is provided with an annular groove 9 upon its outer sides, said groove receiving the inner extremity of a screw 10, threaded into a transverse opening in the upper end of the head of the base 1. The screw 10 permits free turning movement of the nut 6, but prevents vertical displacement thereof in a manner readily apparent. The turning-nut 6 is provided upon its under side with a raceway, and the base 1 is likewise provided at its upper end with a corresponding raceway, ball-bearings 11 being arranged in the raceways of the parts 6 and 1, as above described, the turning-nut 6 having a bearing thereon reducing friction and facilitating ease of operation of the jack. The rear portion of the foot 4 of the screw 3 has a bearing against the inner side of the recess 2 when said foot receives a load to be elevated, and the above increases the substantiality of the foot and the jack generally, as well as ease of working thereof. The integrality of the foot 4 with regard to the screw 3 also promotes the rigidity and strength of this member for obvious reasons, and the mounting of the turning-nut 6 will be seen to subserve the compactness of the structure of the jack.

In the modification in Fig. 5 of the drawings the base 1 is cored or made of hollow form, this being the structure in all larger jacks, and the hollow portion of the base is formed with an integral rib 12 at the side opposite the slot 13, which extends vertically of the base and in which the foot 4 operates. The rib 12 affords a bearing for the foot and screw when the weight of the load is supported upon the foot in its vertical movement.

Having thus described the invention, what is claimed as new is—

In a lifting-jack, the combination of a base of hollow form, a screw mounted for vertical movement in the hollow portion of the base, said base being provided with a slot vertically of the side and communicating with the hollow portion thereof, a member projected lat-

erally from the lower extremity of the screw
through the slot aforesaid to prevent turning
of the screw, a head swiveled on the upper
extremity of the screw, and a turning-nut at
5 the upper end of the base having a bearing
thereon and arranged to actuate the screw,
the hollow portion of the base being provided
with an interior vertical rib opposite the slot

in the base and forming a bearing for the
screw when a load is being elevated. 10

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

THEOBALD SCHRAMM. [L. s.]

Witnesses:

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