J. W. SNIDER.

SCREW JACK.

APPLICATION FILED OCT. 10, 1913.

1,106,009.

Patented Aug. 4, 1914.

Fig. 1.

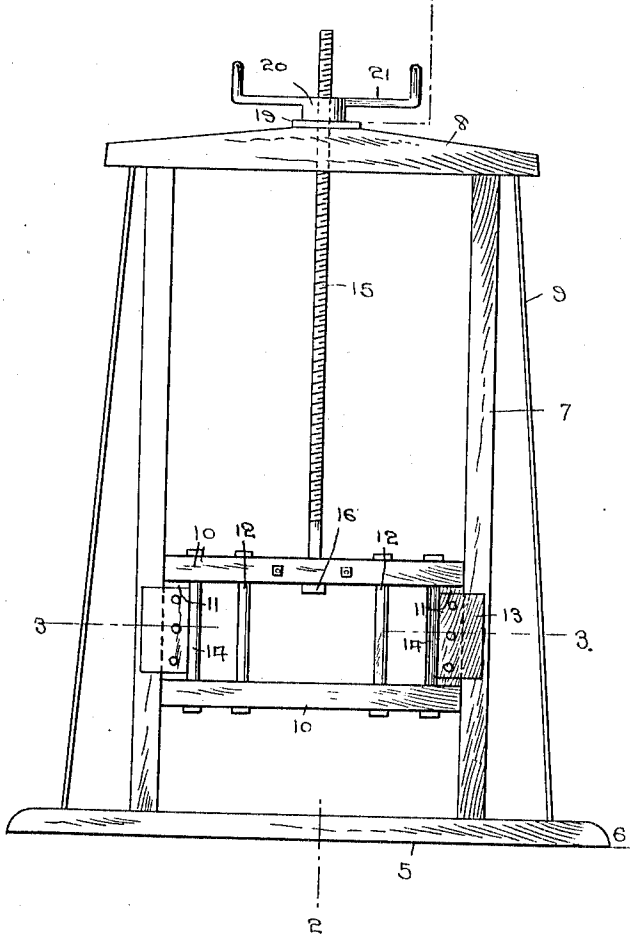


Fig. 2.

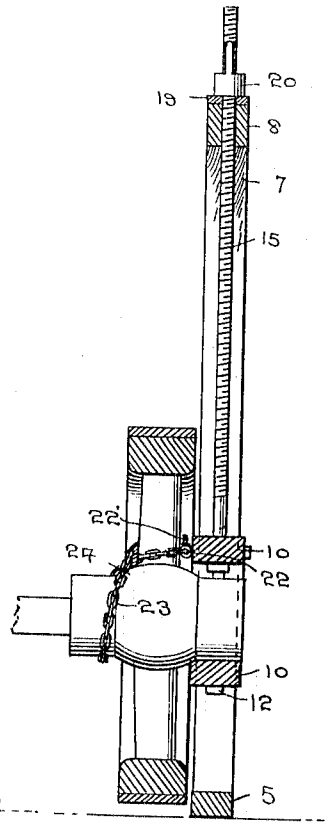
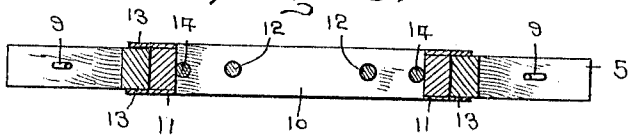


Fig. 3.



WITNESSES

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UNITED STATES PATENT OFFICE.

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SCREW-JACK.

1,106,009. Specification of Letters Patent. Patented Aug. 4, 1914.

Application filed October 10, 1913. Serial No. 794,480.

To all whom it may concern:

Be it known that I, JOHN W. SNIDER, a citizen of the United States, residing at Denton, in the county of Davidson and State of North Carolina, have invented certain new and useful Improvements in Screw-Jacks; 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.

This invention relates to lifting jacks, and more particularly to a screw jack, for lifting threshing machines and the like.

One of the principal objects of my invention is a provision of a jack which will lift a machine or vehicle to an exact pre-determined height within certain limitations, and will securely hold it in raised position.

Another object is to generally improve the construction of jacks of this type, and to provide a jack which will be simple, durable, efficient in operation, inexpensive to manufacture, and one which will have few working parts, and which will not be likely to get out of order.

With these and other objects in view, the invention consists in the construction, combination and arrangement of parts hereinafter more fully described and claimed and illustrated in the accompanying drawings, in which like reference characters indicate like parts throughout the several views, and in which,

Figure 1, represents a vertical elevational view of the jack. Fig. 2, represents a vertical sectional view on the line 2—2 of Fig. 1, showing the jack in operation. Fig. 3, represents a horizontal sectional view on the line 3—3 of Fig. 1.

In constructing a jack according to my invention, I provide a long flat substantially wide bar 5, which has its ends rounded as at 6, and which supports vertical spaced guide bars 7, the latter being connected at their upper ends by a heavy cross bar 8. Brace rods 9, are secured in the ends of cross bar 8, which extends beyond guide bars 7, and connect said cross bar with the outer ends of base 5, said brace rods diverging downwardly and substantially bracing the jack.

A lifting frame is adapted to slide up and down between guide bars 7, and said frame comprises upper and lower beams 10, connected at their ends by vertical beams 11, and intermediate their ends by vertical bolts 12, the latter being spaced from each other and from beams 11. Bolts 14, connect the beams 10, and rest against the end beams 11 for bracing the same. The outer ends of beams 10, and the outer edges of beams 11, are plane, and rest against the inner faces of guide bars 7, and the beams 11 are provided with guide plates 13 which engage on opposite sides of the guide bars, whereby the lifting frame may be guided in its movements.

A long lifting screw 15, extends centrally through the upper cross beam 10, and is secured thereto by means of a nut 16, and screw 15 extends through an opening centrally of cross bar 8, and through a bearing plate 19, secured to said cross bar, and a threaded nut 20 is provided on the upper end of screw 15, and bears against plate 19, said nut being provided with oppositely extending arms 21, whereby the nut may be rotated for raising the sash, said arms at their outer ends being bent upwardly to provide hand holds.

An eye bolt 22 and a hook 22′ are secured horizontally in beam 10 of the frame and on opposite sides of the center thereof and as illustrated in Fig. 2, said bolt and hook are adapted to co-act with a chain 23, in securing a wheel 24, of a threshing machine or the like to the lifting frame, said chains 23 being secured at one end to the bolt and being passed between the spokes of the wheel under and around the hub, and crossed on top of the hub between the spokes and secured to the hook, thus holding the hub in contiguous relation with the supporting frame, said hub resting on the lower cross beam 10, of said frame, but the chain might be otherwise secured to the hub, the nature and construction of the wheel determining the best manner in which the chain should be secured thereto.

By the use of my improved jack, the wheels of a vehicle may be raised to any exact pre-determined distance from the ground within the limitations of the path of the supporting frame, and the wheels will be held in raised position and cannot accidentally be removed or detached from the jack. The use of my jack will save much time and trouble by eliminating the necessity of blocking a vehicle or threshing machine, by reason of the fact that the base 5, affords a large bearing surface to the

ground, and it is noted that no special adjustment of set screws or levers or other paraphernalia is necessary, the only adjustment required, being made through means of the lifting screw.

Although I have described the preferred embodiment of my invention, I may desire to make such changes in the construction, combination and arrangement of parts, as do not depart from the spirit of the invention and the scope of the appended claim.

Having thus fully described my invention, what I claim as new and desire to secure by Letters-Patent is:

A lifting jack comprising a base, guide bars supported thereby, a cross bar connecting said guide bars, a lifting frame slidable between said guide bars, said frame comprising spaced cross bars, and spaced vertical bars connecting said cross bars, a lifting screw connected to said lifting frame, said screw extending through the cross bar secured to the upper ends of said guide bars, and adapted to be operated by means of a nut, a chain adapted to pass around the hub of a wheel for securing the same to the lifting frame, said hub adapted to rest against the lower cross bar of said frame, and securing means for said chain.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

JOHN W. SNIDER.

Witnesses:

WILLAM R. SNIDER,

JOHN O. GARNER.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."