

(No Model.)

H. S. SPENCE.  
LIFTING JACK.

No. 570,614.

Patented Nov. 3, 1896.

Fig. 2.

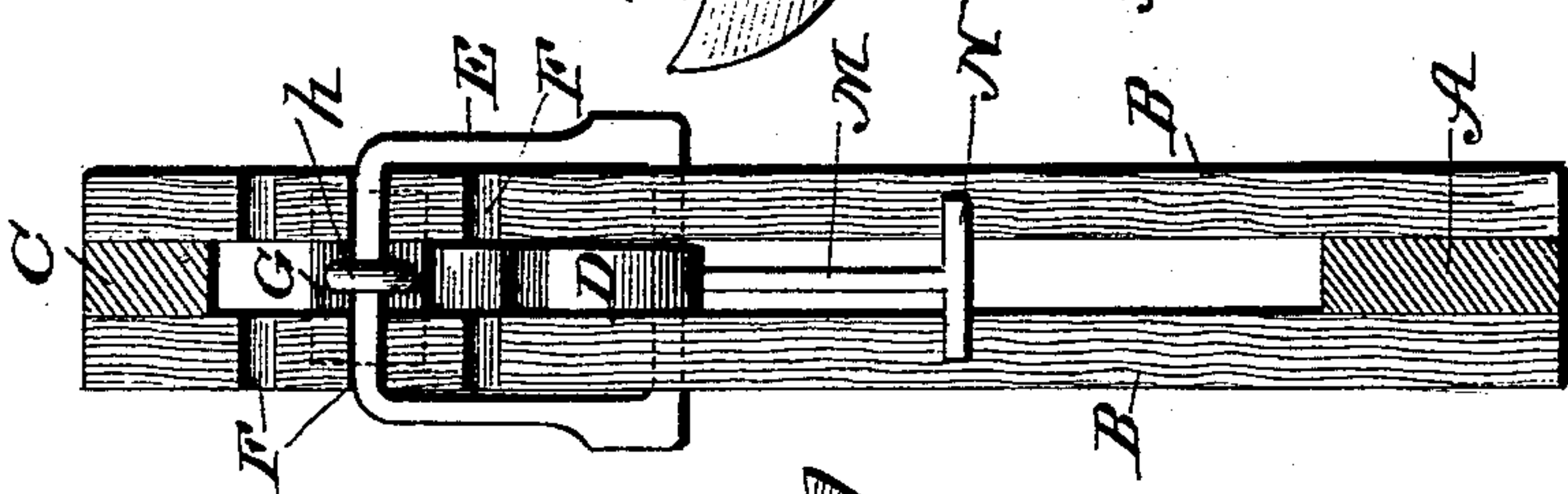


Fig. 3.

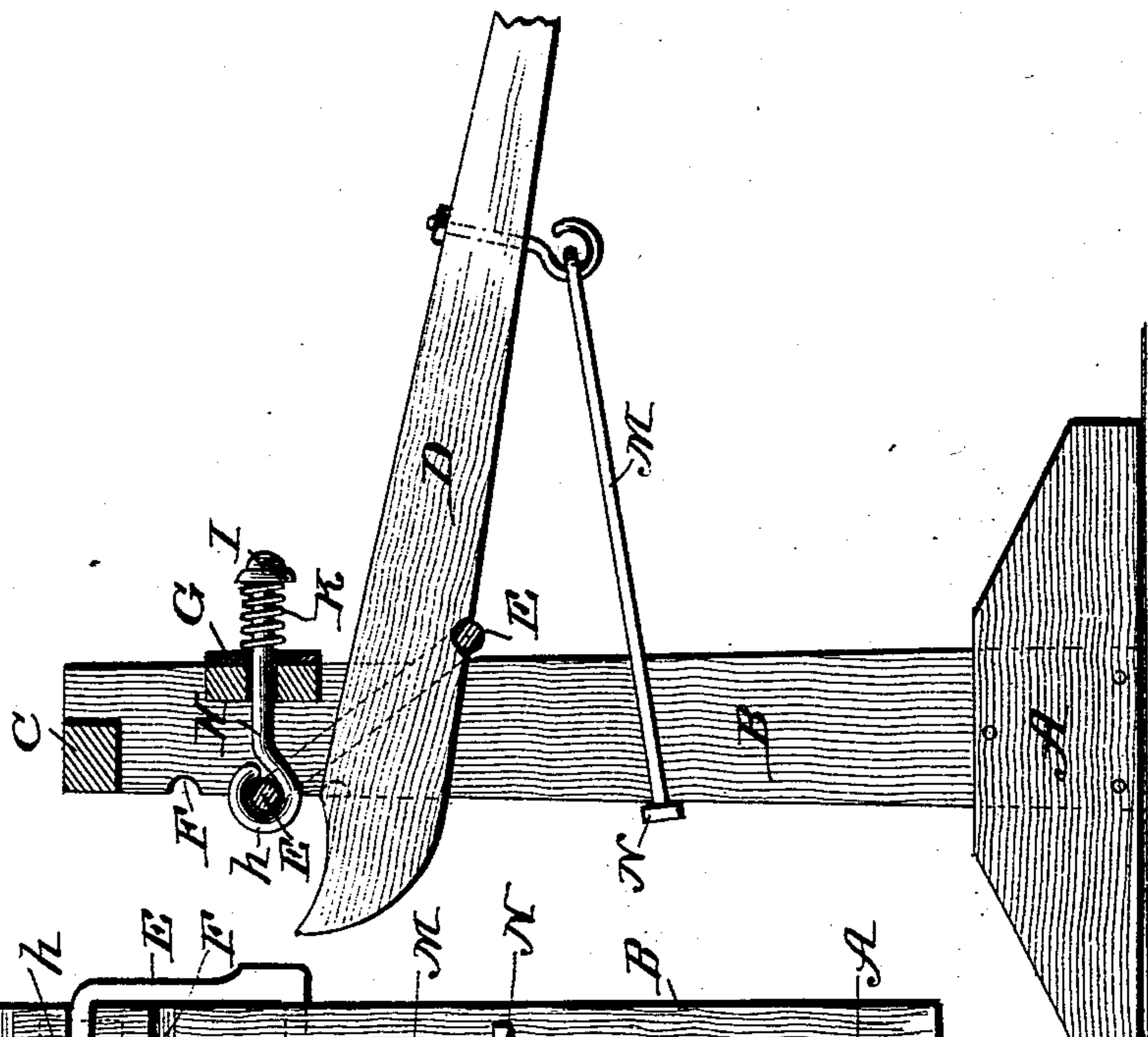
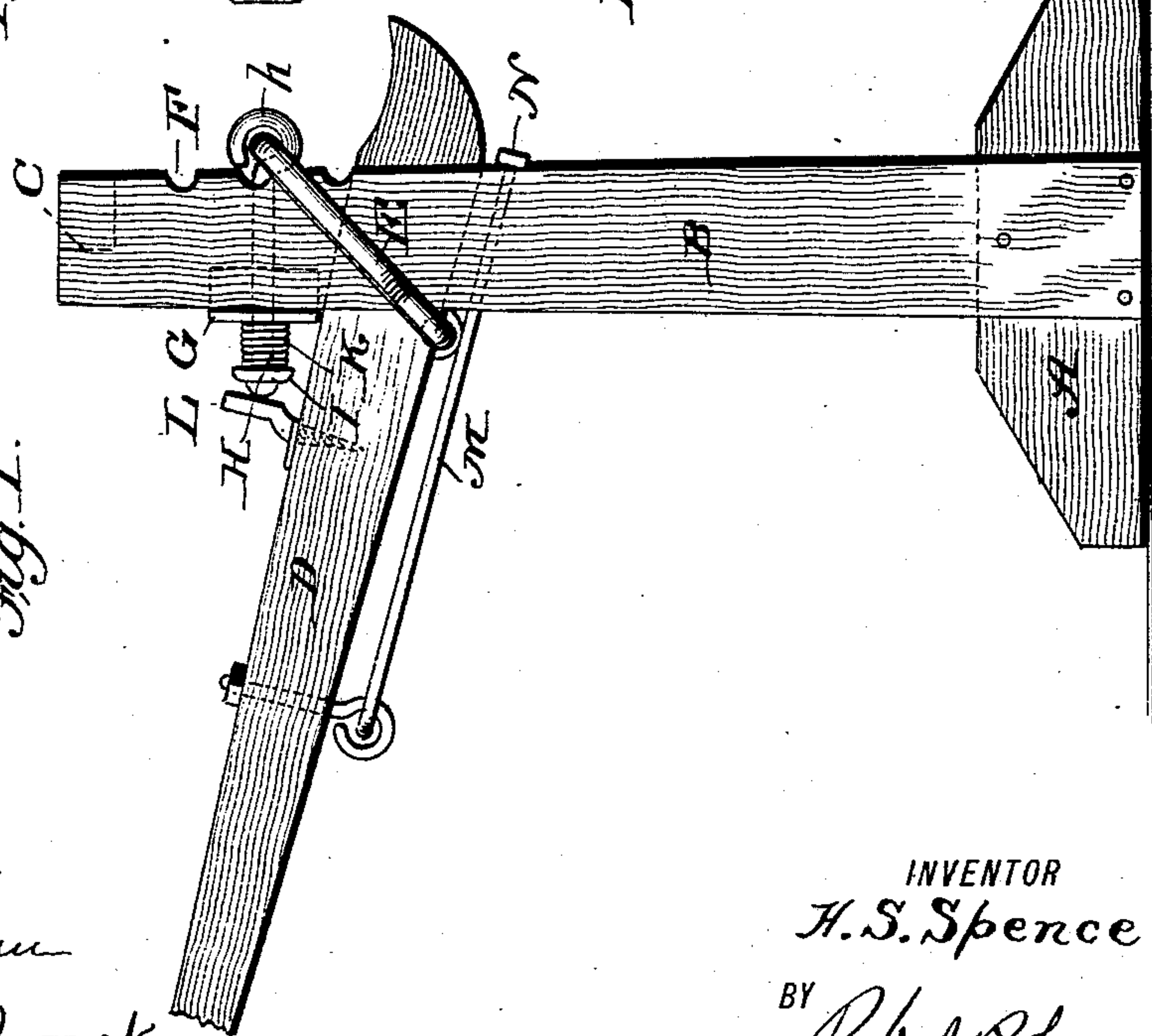


Fig. 1.



WITNESSES:

Jos. A. Ryan  
Chas. E. Brock

INVENTOR

H. S. Spence

BY

R. H. A. Lacy

ATTORNEYS.



# UNITED STATES PATENT OFFICE.

HARVEY S. SPENCE, OF JEWETT, OHIO.

## LIFTING-JACK.

SPECIFICATION forming part of Letters Patent No. 570,614, dated November 3, 1896.

Application filed January 4, 1896. Serial No. 574,335. (No model.)

*To all whom it may concern:*

Be it known that I, HARVEY S. SPENCE, of Jewett, in the county of Harrison and State of Ohio, have invented an Improved Lifting-Jack, of which the following is a specification.

This invention relates generally to lifting-jacks for raising and lowering vehicles and in removing and replacing the wheels thereof, and relates particularly to that class of lifting-jacks known as "lever" lifting-jacks.

The object of the invention is to provide an exceedingly cheap and simple device, one which can be quickly and easily operated by any one, and one in which the lever can be adjusted to suit various heights of vehicles or other objects to be lifted.

Another object is to construct a lifting-jack which shall include a locking device for holding the lever with its lock thereon in its raised position.

Another object is to provide a novel form of movable support or fulcrum for the lever which can be adjusted by the simple movement of the lever and avoids the use of pins, screws, and pawls and ratchets, so commonly employed for this purpose.

With these objects in view my invention consists in a peculiar construction of the various parts, and their novel combination and arrangement, all of which will be fully described hereinafter, and pointed out in the claim.

In the drawings forming a part of this specification, Figure 1 is a side view of my improved lifting-jack. Fig. 2 is a front view. Fig. 3 is a sectional view.

Briefly stated, my lifting-jack comprises suitable supporting-frame, a lifting-lever mounted therein, and a movable fulcrum or support arranged in the supporting-frame and adapted to hold the lifting-lever during its operation.

The supporting-frame comprises a base-piece A, the parallel upright standards B, attached at their lower ends to the opposite sides of the base-piece, and connected at their upper ends by means of a block or top piece C.

The lifting-lever D is arranged between the upright standards and is slightly curved at its upper end to readily engage the under side of an axle or other object, the handle of said lever being of any desired length which

the nature of the work for which the jack is intended requires.

The movable fulcrum or support comprises an essentially rectangular bail E, to the lower member of which the lever is pivotally connected; the upper member of said bail engaging notches F in the forward edges of the upright standards, and by means of which said bail is held in place during the operations of the lever. In addition to the bail, the movable fulcrum or support comprises a sliding guide-block G, which slides between the standards at the rear side and carries a bolt or rod H, which bolt or rod has a hook h at its forward end, which embraces the upper member of the bail at the central portion thereof. The rear end of the bolt or rod is threaded and carries a nut I, and between said nut and the guide-block is arranged a coil-spring K, the tension of which is normally exerted upon the nut for the purpose of forcing the bolt backward and holding the upper member of the bail into engagement with the notch on the forward face of the standards.

It will thus be seen that my lifting-jack comprises, as before stated, a supporting-frame, a lifting-lever, and the movable support or fulcrum for said lever, and in order to adjust the point of support or fulcrum for said lever the bolt or rod is pressed forward, which disengages the upper member of the bail from the notch, and then by moving said bail up or down a fulcrum of the lever is altered, and inasmuch as the lever is pivotally connected with said bail it is obvious that they must move in conjunction.

The bolt could be projected forward by pressure extended in any suitable manner, but in practice I prefer to arrange a knob L upon the upper edge of the operating-lever, so that by throwing the handle of the lever upward said knob will be brought into engagement with the rear end of the bolt, and force the same forward, and then by continuing the pressure, the lever with the bail can be moved up or down as desired, thus rendering the adjustment exceedingly quick and easy.

In order to lock the lever with its load thereon, I employ a locking rod or bar M, which is pivotally connected at its rear end to the under side of the lever-handle. The



forward end of said rod or bar extends between the upright standards, and carries a step or cross-piece N, which bears against the forward edges of the upright standards, binds  
5 tightly into them, and prevents the upper end of the lever being swung upward. When it is desired to raise the lever-handle for the purpose of pressing the bolt to adjust the bail, the forward end of the locking-bar is  
10 lifted up against the bottom of the lever, as shown in full lines, Fig. 1, so that the knob can strike against the rear end of the bolt.

It will thus be seen that I provide an exceedingly cheap and simple form of lever-  
15 lifting jack, and one which will accomplish all the results hereinbefore recited.

Having thus described my invention, what

I claim as new, and desire to secure by Letters Patent, is—

In a lifting-jack, the combination with the 20 supporting-frame, of a lifting-lever, carrying a knob, the rectangular fulcrum-bail, the slidable block, the bolt connected at its forward end to the upper member of the bail, a nut or cap upon the rear end of the upper member of 25 the bail and the spring surrounding said bolt between the block and cap, substantially as shown and described.

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

HARVEY S. SPENCE.

Witnesses:

JOSEPH M. AIKEN,

JAMES AIKEN.