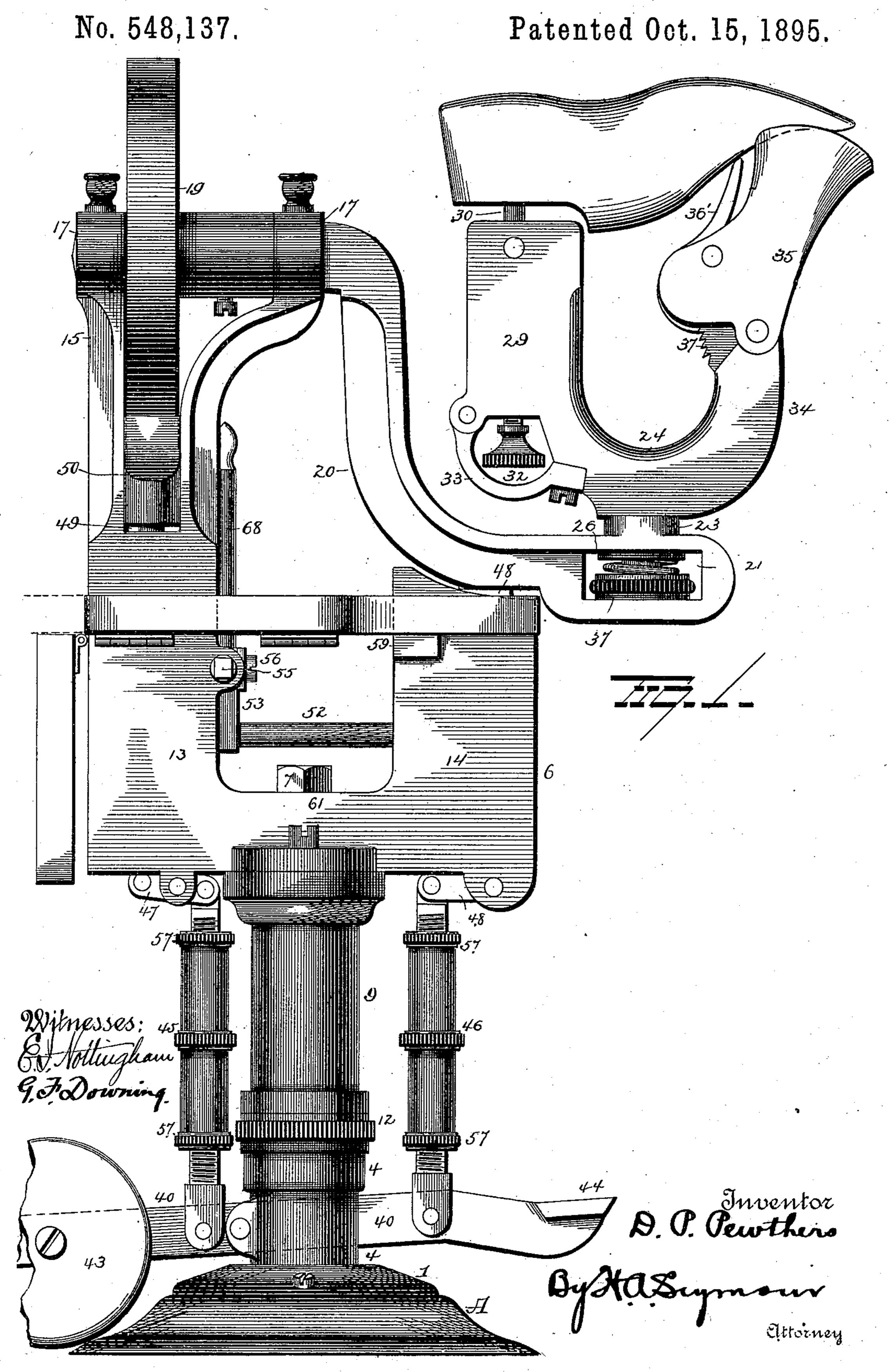
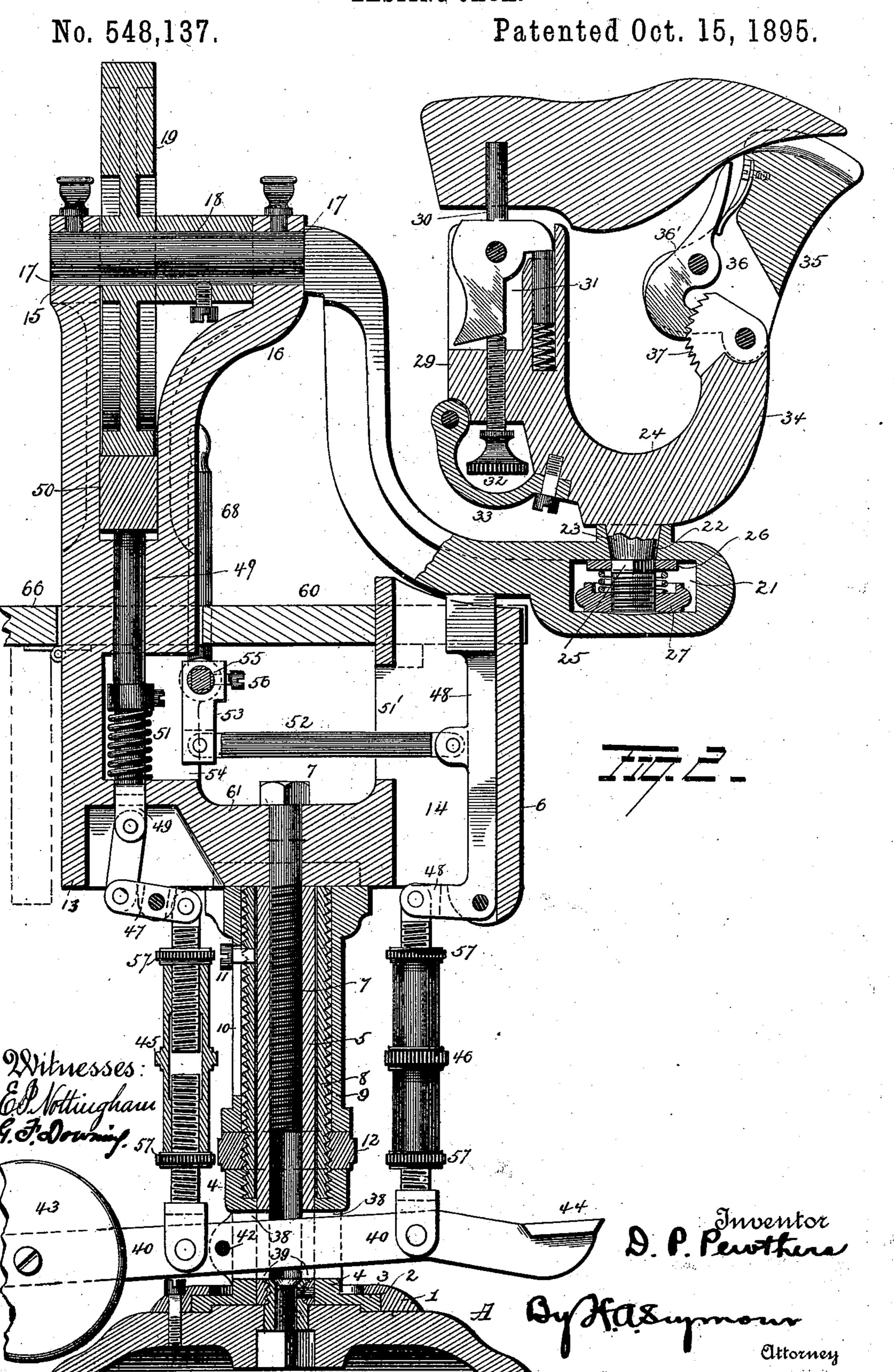
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LASTING JACK.



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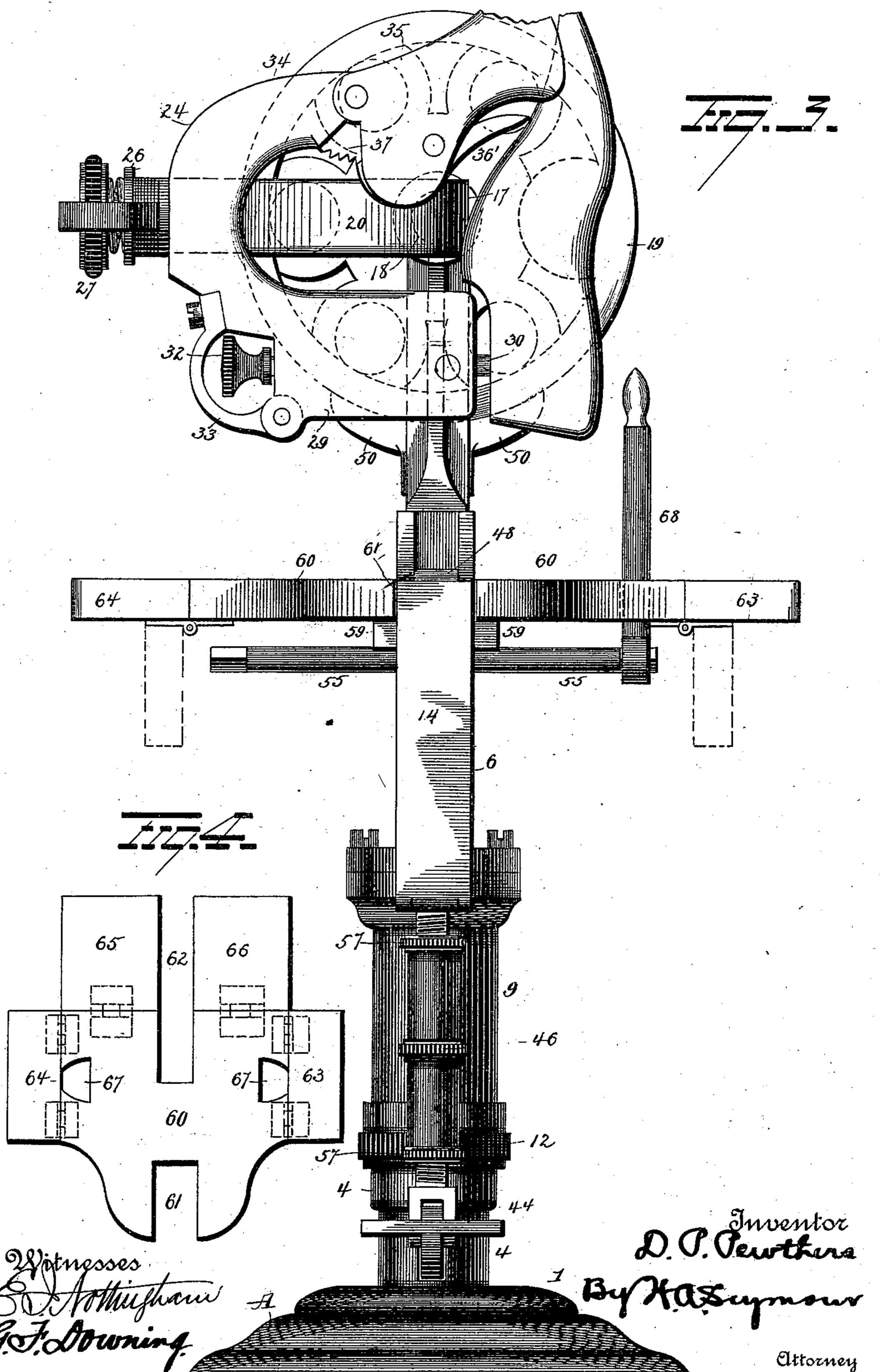
LASTING JACK.



D. P. PEWTHERS. LASTING JACK.

No. 548,137.

Patented Oct. 15, 1895.



United States Patent Office.

DANIEL P. PEWTHERS, OF PORTSMOUTH, OHIO.

LASTING-JACK.

SPECIFICATION forming part of Letters Patent No. 548,137, dated October 15, 1895.

Application filed May 24, 1895. Serial No. 550,560. (No model.)

To all whom it may concern:

Be it known that I, DANIEL P. PEWTHERS of Portsmouth, in the county of Scioto and State of Ohio, have invented certain new and useful Improvements in Lasting-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.

My invention relates to an improvement in lasting-jacks, the object being to provide simple and efficient means for holding lasts of various sizes in any desired position while

lasting by hand.

With this end in view my invention consists in certain novel features of construction and combinations of parts, as will be hereinafter more fully described, and pointed out in the claims.

In the accompanying drawings, Figure 1 is a view of my improvement. Fig. 2 is a view in vertical section of same. Fig. 3 is a view in elevation, taken at right angles to Fig. 1; and Fig. 4 is a plan view of the table.

A represents a suitable base or support, to which is secured a ring 1, the inner face of which is provided with an annular recess 2, within which is revolubly secured the flanged end 3 of sleeve 4. Sleeve 4 is internally screw-30 threaded and encircles the internally-screwthreaded standard or upright 5, the lower end of which is revolubly secured or swiveled to base or support A, while its upper end is secured to the cross-piece of the frame 6 by 35 meanso a screw-threaded bolt 7, which latter extends some distance into said upright 5, so as to form a rigid connection between said frame and upright. Encircling upright 5 is an externally-screw-threaded ferrule 8, the 40 lower end of which is screwed into the upper end of sleeve 4. Surrounding ferrule 8 is a casing 9, which latter is provided with a vertical recess 10, into which projects a lug or pin 11, carried by said ferrule, whereby sidewise movement of the casing is prevented, and to the upper end of this casing the frame 6 is secured by screws or equivalent means. Interposed between sleeve 4 and casing 9 is a nut 12, by means of which the height of the ma-

The frame 6 is composed of two hollow arms | 13 14, which are connected together by the

50 chine is regulated.

cross-piece 6'. Projecting upwardly from arm 13 are the brackets 15 16, each of which is provided with a journal-box 17, within which 55 is journaled the axle 18 of balance-wheel 19. Integral with axle 18 is downwardly-projecting L-shaped arm 20, one end of which is provided with a recess 21, into which communicates hole 22, said hole being adapted to re- 60 ceive the downwardly-projecting stem 23 of U-shaped yoke 24. This stem 23 is provided with a square portion 25, on which is seated a washer 26, while the remaining portion of said stem is screw-threaded, so as to receive 65 the nut 27. Interposed between washer 26 and nut 27 is a coiled spring 28, which latter, when contracted by turning nut 27, prevents movement of the U-shaped yoke 24 after the latter has been adjusted in any desired posi- 70 tion.

Arm 29 of U-shaped yoke 24 is constructed partly hollow and is provided within said hollow portion with a spring-actuated heel-post 30, the lower or enlarged portion 75 thereof being provided with a shank 31, in contact with which works the end of thumbscrew 32, by means of which post 30 may be moved either backward or forward, so as to be in a position to enter holes bored at dif- 80 ferent angles in the last. The head of thumbscrew 32 is located in a recess formed by the bottom of arm 29 and the pivotally-connected guard 33, which latter is locked against accidental displacement by any suitable means. 85 By thus inclosing the head of thumb-screw 32. the accidental displacement of said thumbscrew is prevented. Arm 34 of yoke 24 is provided with a pivotally-connected toe-support 35, the inner face of which is bifurcated, 90 as at 36, within which is pivotally connected a spring-actuated dog 36', which latter is adapted to engage the toothed segment 37, carried by the upper inner end of said arm 34. By means of dog 36 the pivotal toe-sup- 95 port 35 is adjusted as desired. By thus making both the heel and toe supports adjustable it will be seen that lasts of various sizes can be accommodated.

Sleeve 4 is provided with oppositely-located accordings 38, which latter are adapted to register with like openings 39, located in upright 5. Passing through and projecting on the outside of said openings is the lever 40, ful-

crumed to sleeve 4 at the point 42, one end of said lever being provided with a weight 43 and the opposite end thereof with a treadle 44, by means of which the mechanism to be 5 hereinafter described is operated. Pivotally connected to lever 40 on either side of sleeve 4 are the adjustable connecting-rods 45 46, the upper end of the former being pivotally connected to one end of the pivotally-supro ported lever 47, while the latter is pivotally connected to the short arm of bell-crank lever or support 48, which latter is pivoted to frame 6. To the opposite end of lever 47 is secured the lower end of brake-rod 49, the 15 upper end of which latter is connected to the brake-shoe 50, which is held normally in engagement with the rim of balance-wheel 19 by means of the coiled spring 51, which encircles brake-rod 49. When the bottom face 20 of L-shaped arm 20 is in contact with the upper end of bell-crank lever or support 48, the latter is adapted to act as a rest to receive any strain that might be imparted to said arm during the process of lasting.

25 From the foregoing it will be apparent that as L-shaped arm 20 is integral with axle 18 it can be moved to any desired point within the arc of a circle and maintained in such position by the action of brake 50 on the rim of 30 balance-wheel 19. The position of arm 20 may be changed at pleasure by removing the pressure of brake 50 from off of wheel 19, which operation is accomplished by applying

pressure to treadle 44.

In order to accommodate operators who are unable to stand while at work, I have provided the following additional mechanism for operating bell-crank lever or support 48 and brake 50: Arm 14 of the frame is provided 40 with a recess 51', which latter is in communication with the recess within which moves the upright portion of bell-crank lever or support 48. To this upright portion of said lever is pivotally connected one end of rod 52, the 45 other end of said rod being pivotally connected to the lower end of crank 53, which latter is pivotally connected within recess 54, formed in arm 13, by means of shaft 55, said shaft being removably secured to said crank 50 by means of a set-screw 56, carried by the upper outer face of said crank. By turning shaft 55 in the desired direction the upper end of lever or support 48 can be moved out of contact with the bottom face of L-shaped

55 arm 20. This movement also releases brake 50 from out of engagement with the rim of balance-wheel 19. As before stated, arm or support 48 can be swung on its axis to any desired position within the arc of a circle and 60 be locked therein against accidental movement by the action of brake-shoe 50, and, fur-

ther, U-shaped yoke 24 can also be turned on its pivot to any desired position within the arc of a circle and be locked in such position by 65 the nut 27 and spring 28, and hence it will be

seen that the work to be operated upon can be

adjusted to a position most convenient to the

operator.

By turning nut 12 and the adjusting-rod 45 46 in the desired direction the framework sup- 70 porting arm 48 and U-shaped yoke may be raised or lowered, as necessity demands. After the machine has been adjusted to the proper height, rods 45 and 46 are locked against movement by means of the screw-threaded nuts 57, 75 two of which are carried by each of said adjusting-rods. It will also be seen that by revolubly mounting sleeve 4 and upright 5 in base or support A the position of the entire machine may be changed at pleasure, so that the change 80 of position on the part of the operator is unnecessary.

Supported on shoulders 59, which latter are formed integral with arms 13 and 14, is a table 60, which is provided with recesses 61 62 for 85 the reception of said arms 13 and 14. This table is provided with hinge-connected leaves 63, 64, 65, and 66. The table is also provided with two openings 67, each of which is located directly over the ends of shaft 55 for the pas- 90 sage upward of the operating lever or levers 68, by means of which the anvil face of the bell-crank lever or support 48 is operated and

the brake-shoe 50 controlled.

It is evident that changes in the construction 95 tion and relative arrangement of the several parts might be made without avoiding my invention, and hence I would have it understood that I do not restrict myself to the particular construction and arrangement of the toparts shown and described; but,

Having fully described my invention, what I claim as new, and desire to secure by Letters

Patent, is—

1. In a lasting jack, the combination with a 105 movable support and a frame pivoted thereto and adapted to carry a last and having a friction wheel thereon, of a frictional device carried by the movable support and adapted to engage the wheel on the movable frame for 110 holding the latter in any desired position, substantially as set forth.

2. In a lasting jack, the combination with a support, a movable frame pivoted thereto, a wheel on the movable frame, and a brake ar- 115 ranged to engage the periphery of the wheel for holding the frame in any desired position relative to the support, of last carrying devices movably supported on the movable

frame, substantially as set forth.

3. In a lasting jack, the combination with a frame, of an arm pivotally connected thereto and having last carrying devices connected thereto, a balance wheel on said arm and a brake operating on the rim of said balance 125 wheel for locking the arm in any desired position, substantially as set forth.

4. In a lasting jack, the combination with a frame and an arm pivotally supported thereon and having last carrying devices connected 130 therewith, of a support and locking mechanism operating in connection with the arm and

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means for simultaneously operating said anvil and locking mechanism, substantially as set forth.

5. In a lasting jack, the combination with a frame and an arm pivotally supported thereon and having last carrying devices connected therewith, of a support and a brake, means connecting them whereby they are operated simultaneously and a lever for operating said

10 parts, substantially as set forth.

6. In a lasting jack, the combination with a frame and an arm pivotally supported thereon and having last carrying devices connected therewith, of a support and a brake, levers connected to each of said parts and an operating lever and rods extending from said operating lever and connecting it with the levers which are connected to the support and brake, respectively, substantially as set forth.

7. In a lasting jack, the combination with a frame and an arm pivotally supported thereon and having last carrying devices connected therewith, of a bell-crank lever pivoted to the frame and a support on said lever adapted to support the arm in one of its positions and an operating lever connected with said bell crank

lever, substantially as set forth.

8. In a lasting jack, the combination with a frame, an arm pivotally supported thereon and having last carrying devices connected therewith, and a balance wheel connected to said arm, of a spring actuated brake adapted to operate upon said wheel to lock the arm in any of its positions, and an operating lever for removing said brake from the wheel, sub-

stantially as set forth.

9. In a lasting jack, the combination with a frame and an arm pivotally supported thereon, said arm having a balance wheel and last car40 rying devices connected therewith, of a spring actuating sliding brake, a lever connected therewith, and operating lever and a rod connecting said levers, substantially as set forth.

10. In a lasting jack, the combination with a frame, an arm pivotally connected therewith 45 and a yoke supported on said arm, of a heel post pivoted to said yoke, a screw for adjusting the post and a guard for preventing accidental displacement of the set screw, substantially as set forth

stantially as set forth.

548,137

11. In a lasting jack, the combination with a base, and a frame, of a screw threaded ferrule pivotally connected with the base, a casing on said ferrule to which the frame is secured said casing having an elongated recess, 55 a projection extending from the ferrule into said recess and a nut adapted to turn on the ferrule and support the casing whereby to raise or lower said casing when it is turned, substantially as set forth.

12. In a lasting jack, the combination with a base and frame, of a standard, means for raising and lowering the frame, a support, a brake, an operating lever and extensible rods extending from the operating lever to the sup- 65 port and brake respectively, substantially as

set forth.

13. In a lasting jack, the combination with a frame having two rigid arms thereon, and an arm pivotally connected with one of said rigid 70 arms, said pivoted arm adapted to swing into proximity to one of the rigid arms when in one of its positions, of a removable table having recesses adapted to receive the rigid arms, said table held from being removed from the 75 frame by the pivoted arm when in its position in proximity to the rigid arm, substantially as set forth.

In testimony whereof I have signed this specification in the presence of two subscrib- 80

ing witnesses.

DANIEL P. PEWTHERS.

Witnesses:

S. G. NOTTINGHAM, W. A. CONNOLLEY.