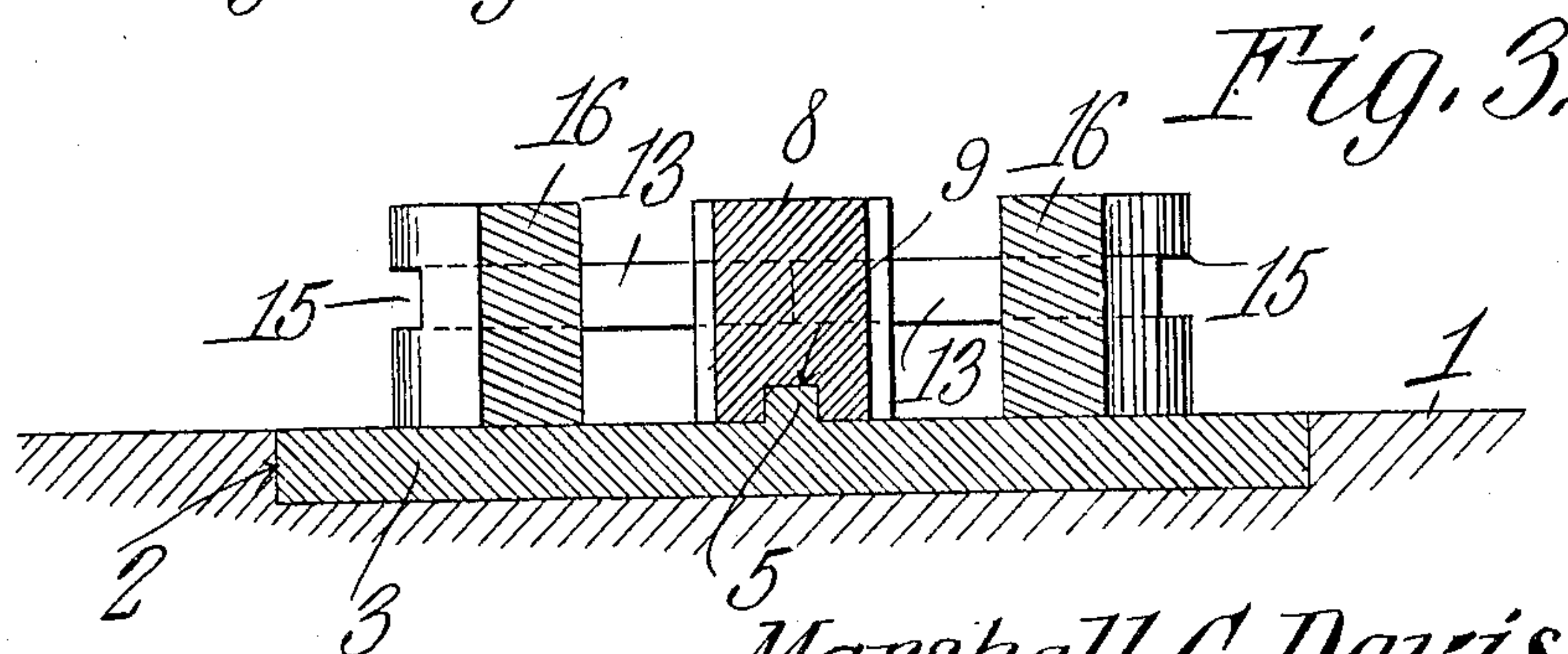
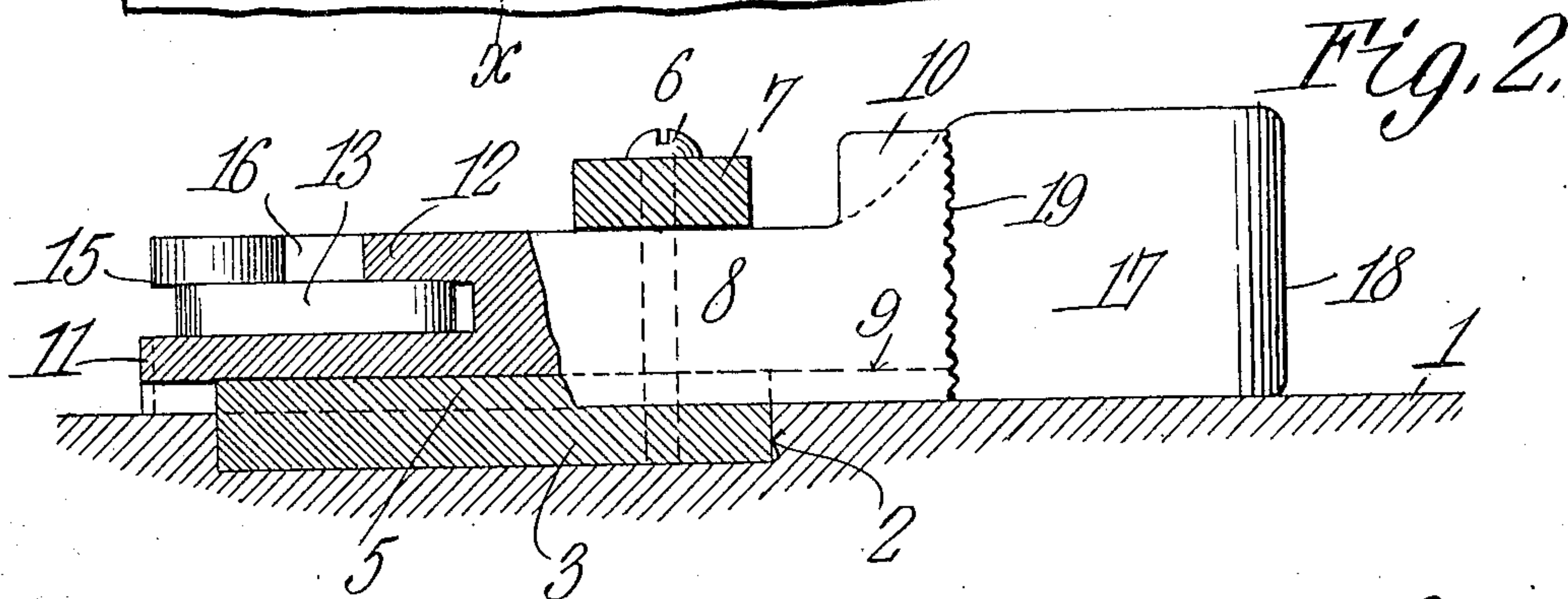
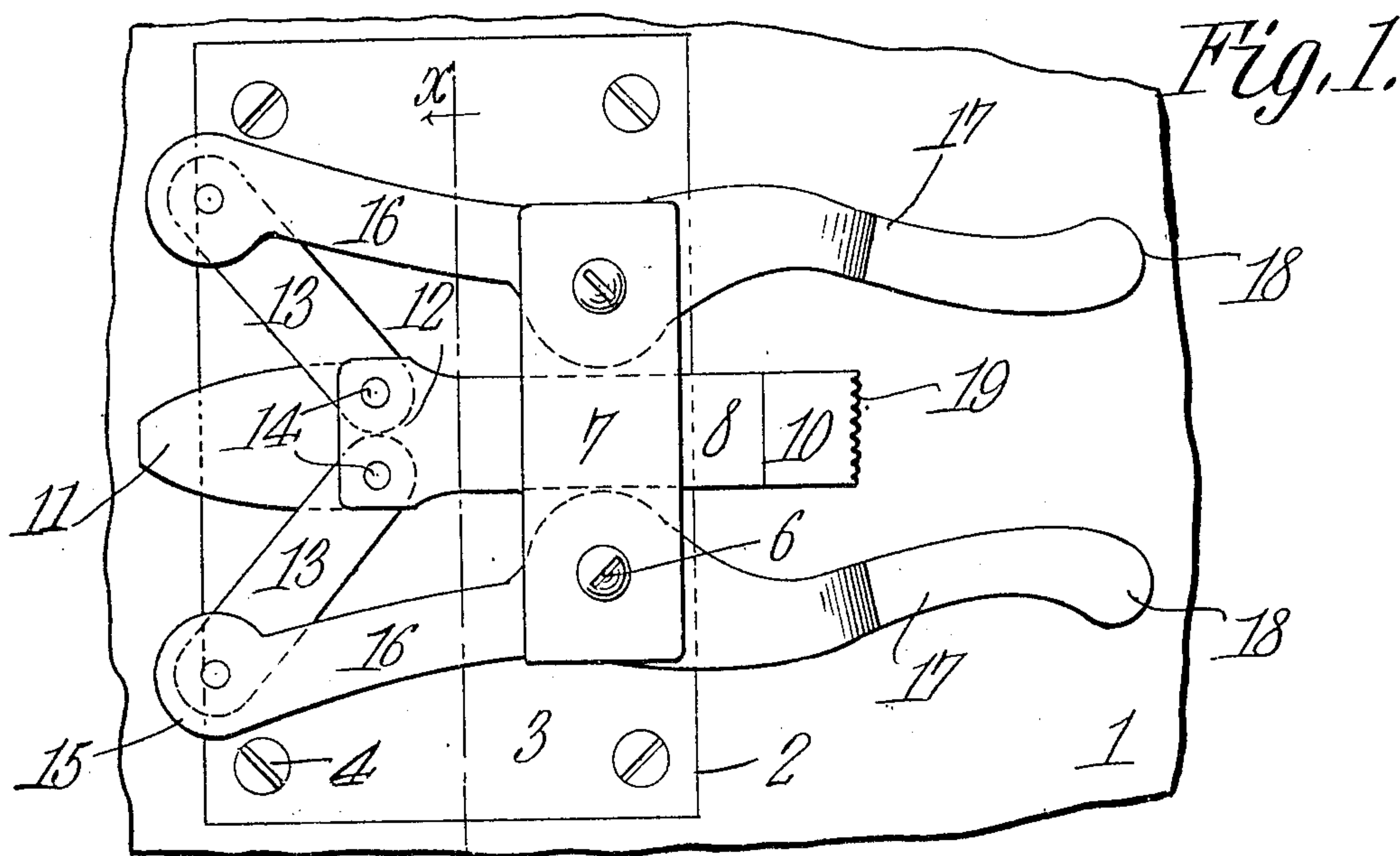


No. 875,786.

PATENTED JAN. 7, 1908.

M. C. DAVIS.  
BENCH DOG.

APPLICATION FILED MAR. 28, 1907.



*Marshall C. Davis,*  
INVENTOR.

WITNESSES:

C. D. Stewart  
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ATTORNEYS



# UNITED STATES PATENT OFFICE.

MARSHALL CORWIN DAVIS, OF WALLOWA, OREGON.

## BENCH-DOG.

No. 875,786.

Specification of Letters Patent.

Patented Jan. 7, 1908.

Application filed March 28, 1907. Serial No. 365,088.

*To all whom it may concern:*

Be it known that I, MARSHALL CORWIN DAVIS, a citizen of the United States, residing at Wallowa, in the county of Wallowa and State of Oregon, have invented a new and useful Bench-Dog, of which the following is a specification.

This invention relates to bench dogs and is particularly designed for use upon work benches by carpenters, joiners, cabinet makers and others for the purpose of securely holding wood stock in position upon the bench while the same is being dressed or shaped.

The object of the invention is to provide a simple form of bench dog which will automatically grip upon the stock, the pressure of the gripping members upon the stock being proportioned with the longitudinal pressure exerted against the stock by the mechanic while shaping or dressing the same.

A still further object is to provide a device of this character which will not mar the stock while the same is held thereby and which will promptly release the stock when the same is pulled away therefrom without necessitating any manual adjustment of any part or parts of the bench dog.

A still further object is to provide a bench dog which is self-adjusting or, in other words, is capable of automatically gripping upon stock of different proportions which may be inserted between the gripping members.

With these and other objects in view the invention consists of certain novel features of construction and combinations of parts which will be hereinafter more fully described and pointed out in the claims.

In the accompanying drawings is shown the preferred form of the invention.

In said drawings: Figure 1 is a plan view of the device; Fig. 2 is a longitudinal section therethrough, a portion of the plunger being shown in elevation; and Fig. 3 is a section on line  $x-x$ , Fig. 1.

Referring to the figures by characters of reference, 1 is the top of a work bench the same being formed with a recess 2 in which is seated the base plate 3 of the vise. This base plate may be secured to the vise in any preferred manner as by means of screws 4 and has a longitudinally extending guide rib 5 extending upward through the center thereof. Pivots 6 preferably in the form of screws extend upward from the base plate at opposite sides of the rib 5 and are connected at their

upper ends by a cross strip 7. Slidably mounted between the base plate 3 and the cross strip 7 is a stop or plunger 8 having a longitudinal groove 9 in its bottom face into which the guide rib 5 projects. The front end of this plunger is enlarged to form a head 10 and the rear end thereof has a tongue 11 extending therefrom which is overhung by an ear 12. Links 13 are pivoted upon pins 14 mounted upon the tongue 11 and ear 12 and the outer ends of these links are pivotally mounted within the forked ends 15 of arms 16 extending from the jaws 17 constituting the clamping members. Each arm is formed integral with its jaw and is pivotally mounted on one of the screws 6, that portion of the arm adjacent the pivot being enlarged so as to extend close to one side of the plunger 8 and assist the rib 5 in holding the plunger against lateral movement. The jaws 17 are curved so as to normally converge and the outer ends thereof are flared and rounded as shown at 18. It is of course understood that the strip 7 holds the plunger 8 against displacement from the guide rib 5. The working face of the head 10 is preferably roughened, as shown at 19 so as to bite into the end of the stock forced thereagainst.

In using the device herein described the same is first secured upon a bench and the stock to be dressed or shaped is slid against the flared and rounded ends 18 of the jaws 17. The jaws will therefore be pressed apart and will exert an inward pressure upon the links 13 and cause plunger 8 to slide forward. The stock can then be forced against the head 10 of the plunger and by pushing said plunger longitudinally it will cause the links 13 to swing arms 16 apart and force the jaws 17 against the opposite face of the stock. It is apparent that the gripping action of these jaws upon the stock will be increased in proportion to the pressure of the stock against the plunger 8. The stock will thus be rigidly held in place without being marred or otherwise injured by the device and whenever it is desired to move the stock it is merely necessary to pull it away from the plunger. The pressure of the jaws 17 will be promptly taken away and therefore the stock can be withdrawn without the necessity of manual adjusting or manipulating any of the parts. It will be seen that this device can be used with stock of different thicknesses and by supporting it beyond the edge of a bench boards of considerable widths can be held



thereby merely by placing them against the front of the bench and with their upper portions between the jaws. It will be seen that the vise is very simple, durable and efficient, 5 can be constructed at slight cost and possesses advantages over devices of this character heretofore constructed inasmuch as no manual adjustment of the parts is necessary to secure an efficient clamping action or to 10 release the stock.

What is claimed is:

A bench dog comprising a base, oppositely disposed non-overlapping similar pivoted members upon the base, each member comprising a jaw and an arm extending in opposite directions from the pivot thereof, said 15 members having rounded enlargements adjacent their pivots to constitute guides, a cross strip connecting the pivots of the mem-

bers, a plunger interposed between and held 20 against lateral movement by the guide portions of said members, there being a head at one end of the plunger, said strip and base constituting means to prevent vertical movement of the plunger, means slidably engaged 25 by the plunger to prevent lateral oscillation thereof, and links connecting the plunger and the arms, said links being disposed back of the cross strip and at a point removed from the head of the plunger. 30

In testimony that I claim the foregoing as my own, I have hereto affixed my signature in the presence of two witnesses.

MARSHALL CORWIN DAVIS.

Witnesses:

EDGAR MANUS,  
CLYDE MANUT.