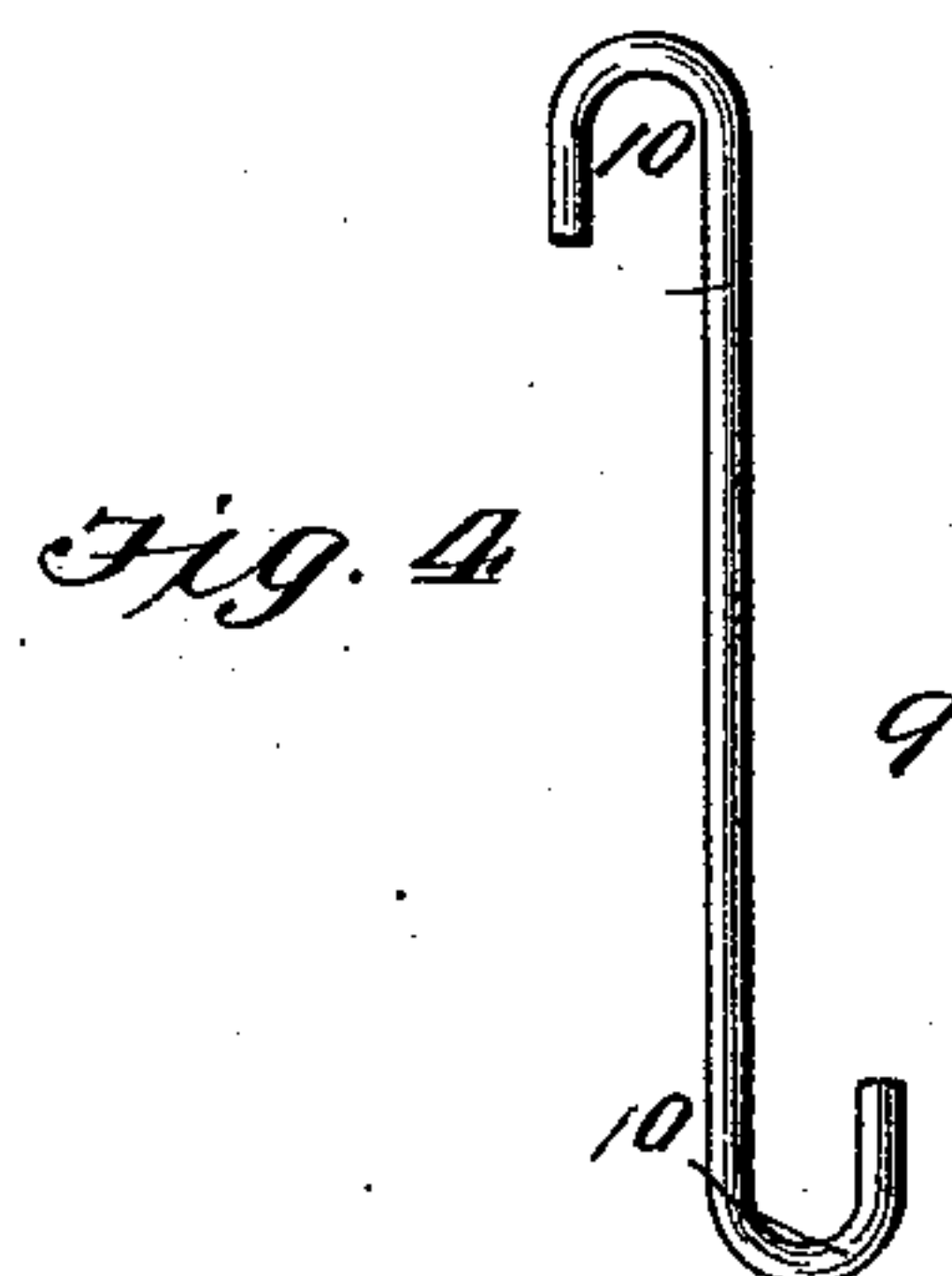
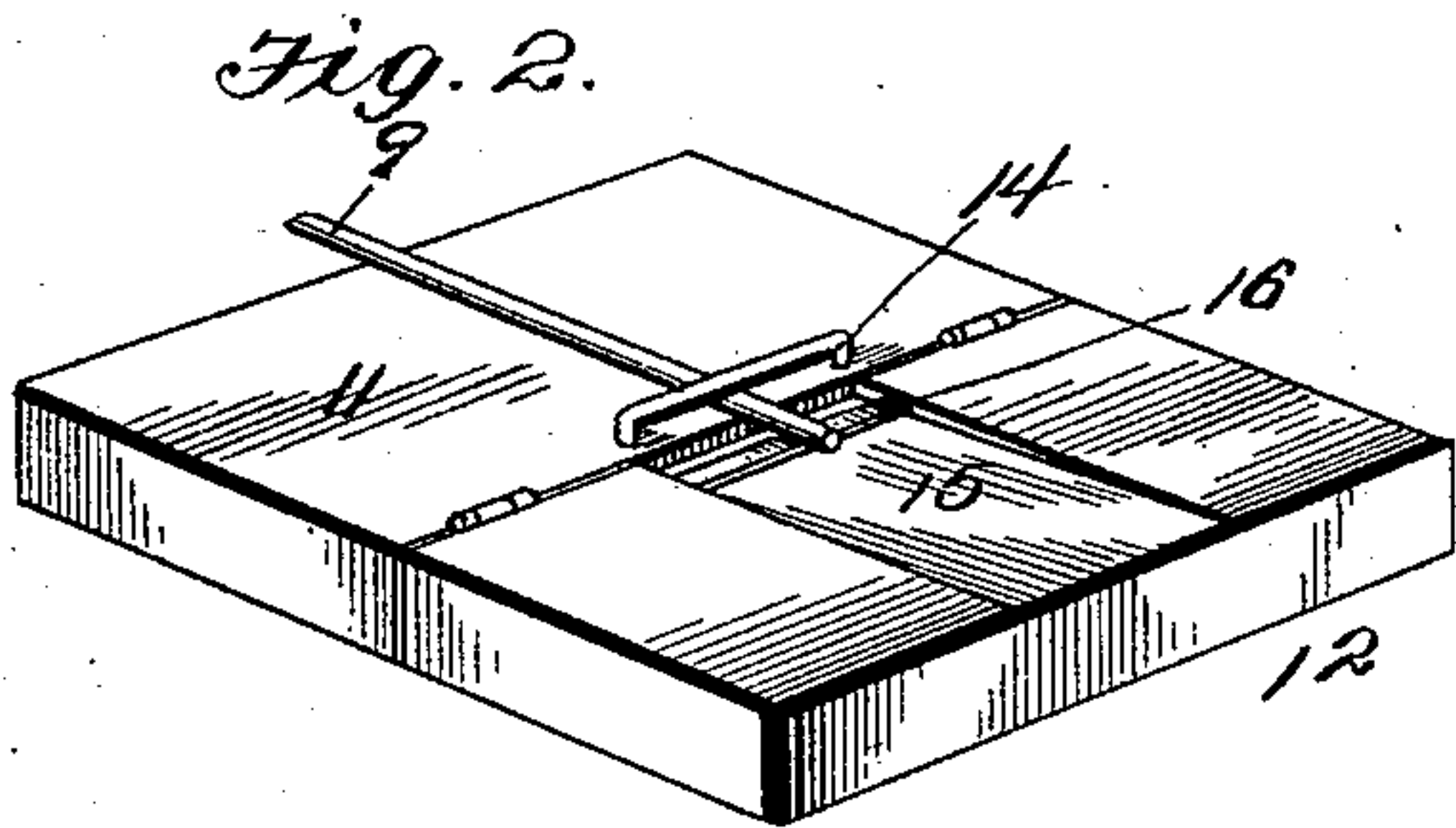
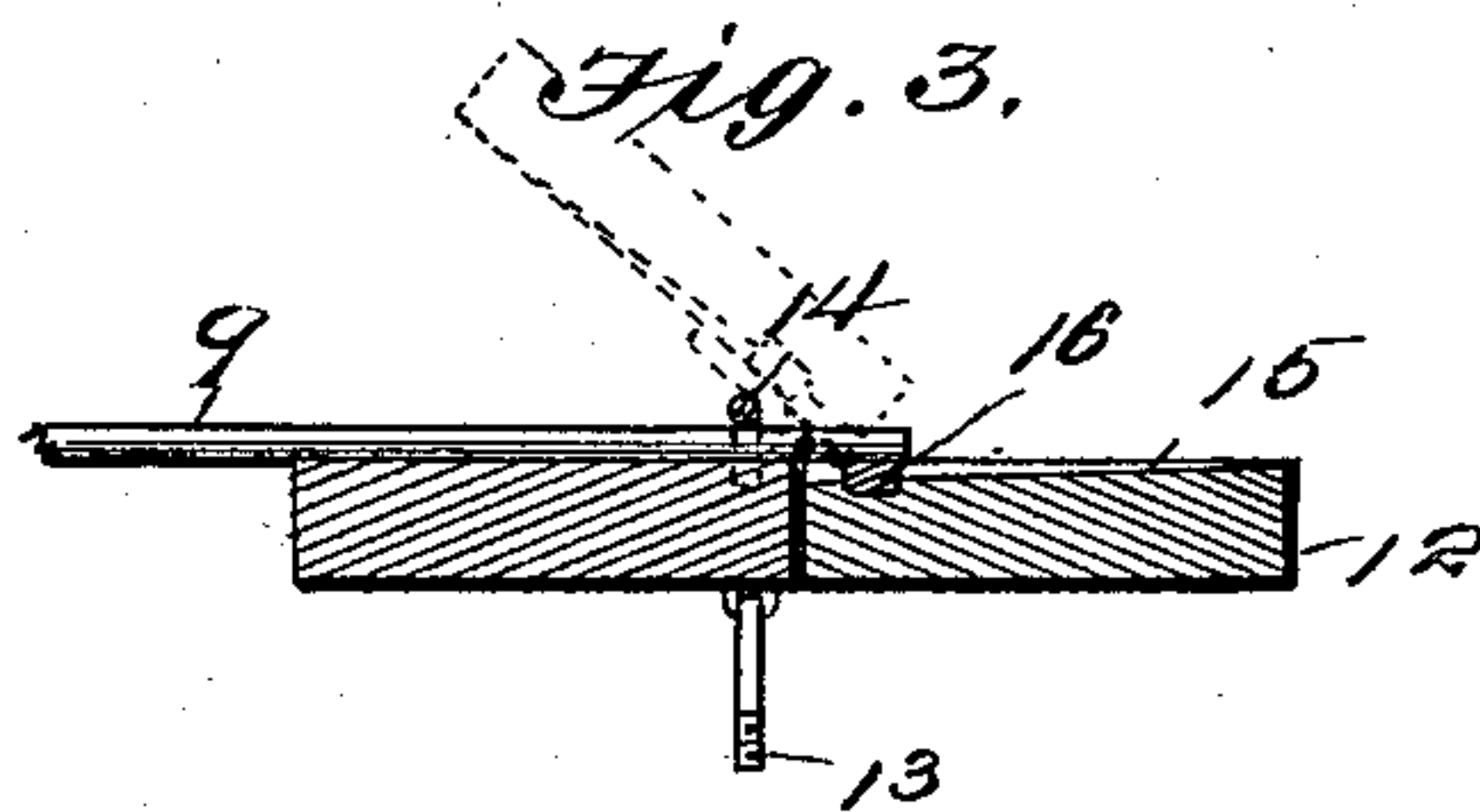
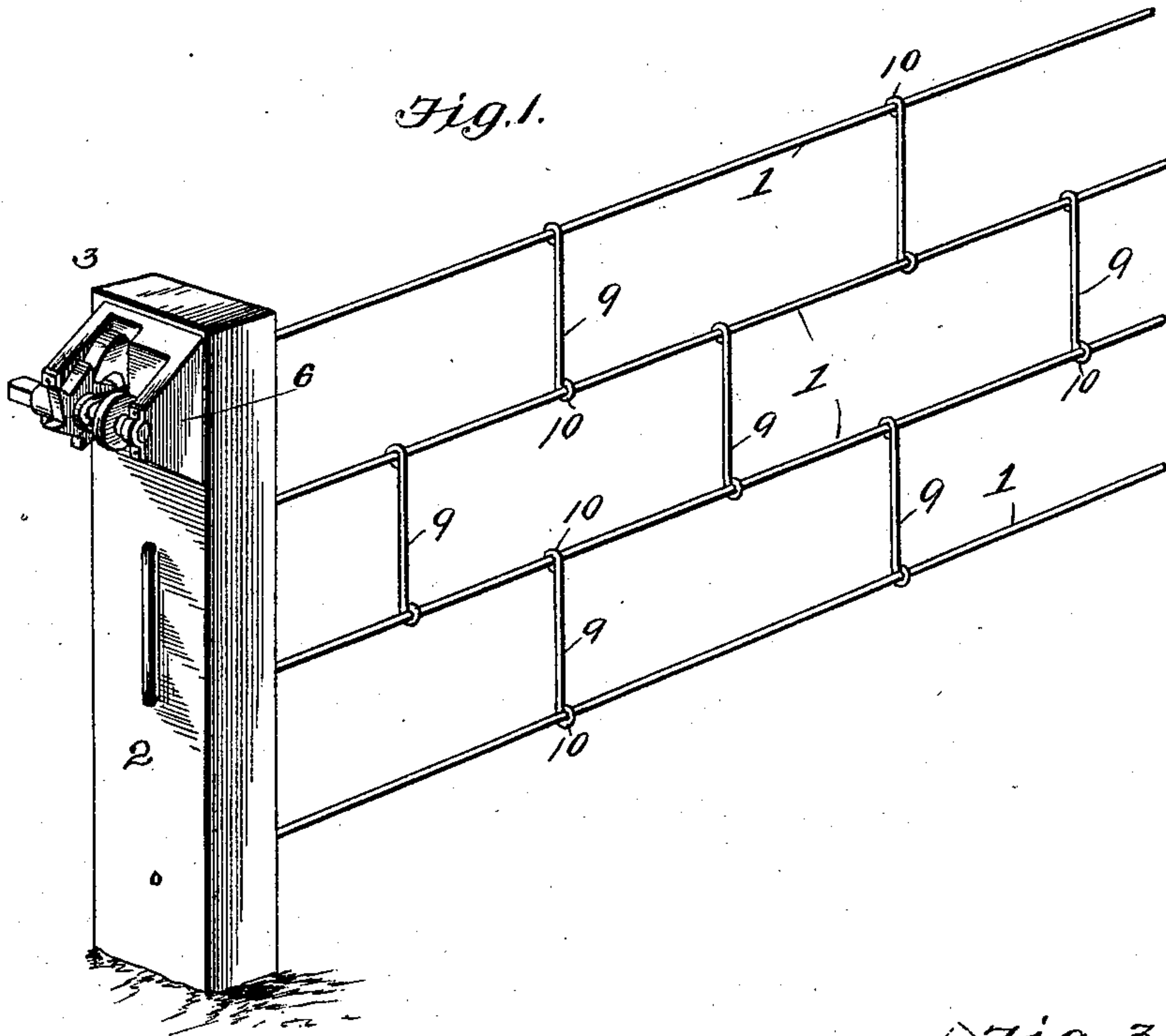


(No Model.)

H. GROVER.  
WIRE FENCE STAY BENDING DEVICE.

No. 540,615.

Patented June 4, 1895.



Inventor

Harry Grover

Witnesses

Jos. C. Stack.  
*[Signature]*

By his Attorneys.

*Chas. H. Grover*



# UNITED STATES PATENT OFFICE.

HARRY GROVER, OF OLLIE, IOWA, ASSIGNOR OF ONE-HALF TO GEORGE  
McKINNIS, OF SAME PLACE.

## WIRE-FENCE-STAY-BENDING DEVICE.

SPECIFICATION forming part of Letters Patent No. 540,615, dated June 4, 1895.

Application filed July 25, 1894. Serial No. 518,583. (No model.)

*To all whom it may concern:*

Be it known that I, HARRY GROVER, a citizen of the United States, residing at Ollie, in the county of Keokuk and State of Iowa, have  
5 invented a new and useful Wire-Fence-Stay-Bending Device, of which the following is a specification.

My invention relates to wire stays for fences, and particularly to means for bending the  
10 stays for the same; the object in view being to provide a simple, inexpensive, and efficient apparatus for bending the extremities of vertical stays preparatory to applying them to the fence to connect adjacent runners.

15 In the drawings, Figure 1 is a perspective view of a fence provided with stays constructed by means of my improved bending device to show the manner of using the same. Fig. 2 is a perspective view of a bending ap-  
20 paratus embodying my invention. Fig. 3 is a sectional view of the same, showing the manner of arranging the end of a stay therein for bending. Fig. 4 is a detail view of a stay as seen before application to a fence-runner.

25 Similar numerals of reference indicate corresponding parts in all the figures of the drawings.

Referring to Fig. 1 of the drawings—the numeral 1 indicates the horizontal runners of  
30 a fence, which are extended through suitable seats in the posts 2, and 3 represents a tightener secured to one of the posts to regulate the tension of the runner attached thereto. These runners are connected at intervals by  
35 the vertical stays 9, each consisting of a short length of wire of any desired gage, the ends of which are provided with open loops or eyes 10 to engage adjacent runners. After engaging the open loops or eyes of the stays with  
40 the runners of a fence, the extremities of said eyes or loops are bent inward toward the body portions of the stays to prevent disengagement. In order to provide for the manufacture of these connecting stays by the con-  
45 sumer or fence builder, I employ an apparatus which I have termed a bending device. Shown in Figs. 2 and 3. This bending device consists of a stationary leaf 11, to one edge of  
50 which is hinged a swinging leaf 12, said stationary leaf being secured to a bench, table, or other suitable object by means of anchor-pins

13, and being provided at its upper side adjacent to the edge to which the swinging leaf is hinged with an elongated loop 14, under  
55 which the extremity of the stay to be bent is engaged. The inner surface of the swinging leaf is provided with a seat 15 adapted to receive the extremity of the stay, and extending across this seat adjacent to the hinged edge of said leaf is an anvil or bar 16 which  
60 has its upper face flush with the upper faces of the leaves.

In operation the swinging leaf of the bending apparatus is arranged horizontally or in the plane of the stationary leaf, and the end  
65 of the stay is inserted between the loop or keeper 14 and the upper surface of said stationary leaf, said extremity of the stay projecting over the surface of the swinging leaf sufficiently to bear upon the anvil or bar 16.  
70 The free edge of the swinging leaf is then elevated and is swung over the stationary leaf, thus bending the end of the stay and forming an open sided loop or eye 10, such as that which is shown in detail in Fig. 4. After this  
75 open loop or eye of the stay has been engaged with a runner, pliers or another similar tool may be employed to close the loop or eye to prevent accidental detachment of the stay. The leaves 11 and 12 are rectangular. The  
80 anvil 16 is arranged in the recess or seat 15, and is located a short distance from the hinged edge of the swinging leaf 12, and when the device is not in use, the leaves may be folded  
85 on each other, the space between the anvil 16 and the adjacent edge of the leaf being adapted to receive the transverse loop 14, whereby the latter is prevented from being bent and injured by such folding. This construction and arrangement forms a compact  
90 device, and enables the parts to be readily folded and conveniently carried.

From the above description it will be seen that the construction of the improved device for bending stays for application to wire fences  
95 is simple, and therefore the stays required in the building of a fence may be made by the builder to suit the intervals between the runners.

Various changes in the form, proportion,  
100 and minor details of construction may be resorted to without departing from the spirit of

the invention or sacrificing any of the advantages thereof.

Having described my invention, what I claim is—

5 A folding portable device for bending fence stays, comprising two similar rectangular leaves 11 and 12 hinged together at their adjacent edges, the leaf 12 being provided with a recess or seat, an anvil 16 arranged in the  
10 recess or seat and located a short distance from the hinged edge of the leaf 12 to provide a space, and having its upper face flush with the upper faces of the leaves, and a transverse

loop 14 mounted on the upper face of the leaf 11 and arranged adjacent to the anvil and 15 adapted to be received in the said space when the leaves are folded, and means for attaching the stationary leaf to a suitable object, substantially as described.

In testimony that I claim the foregoing as 20 my own I have hereto affixed my signature in the presence of two witnesses.

HARRY GROVER.

Witnesses:

JOHN HALFERTY,  
J. T. CABLE.