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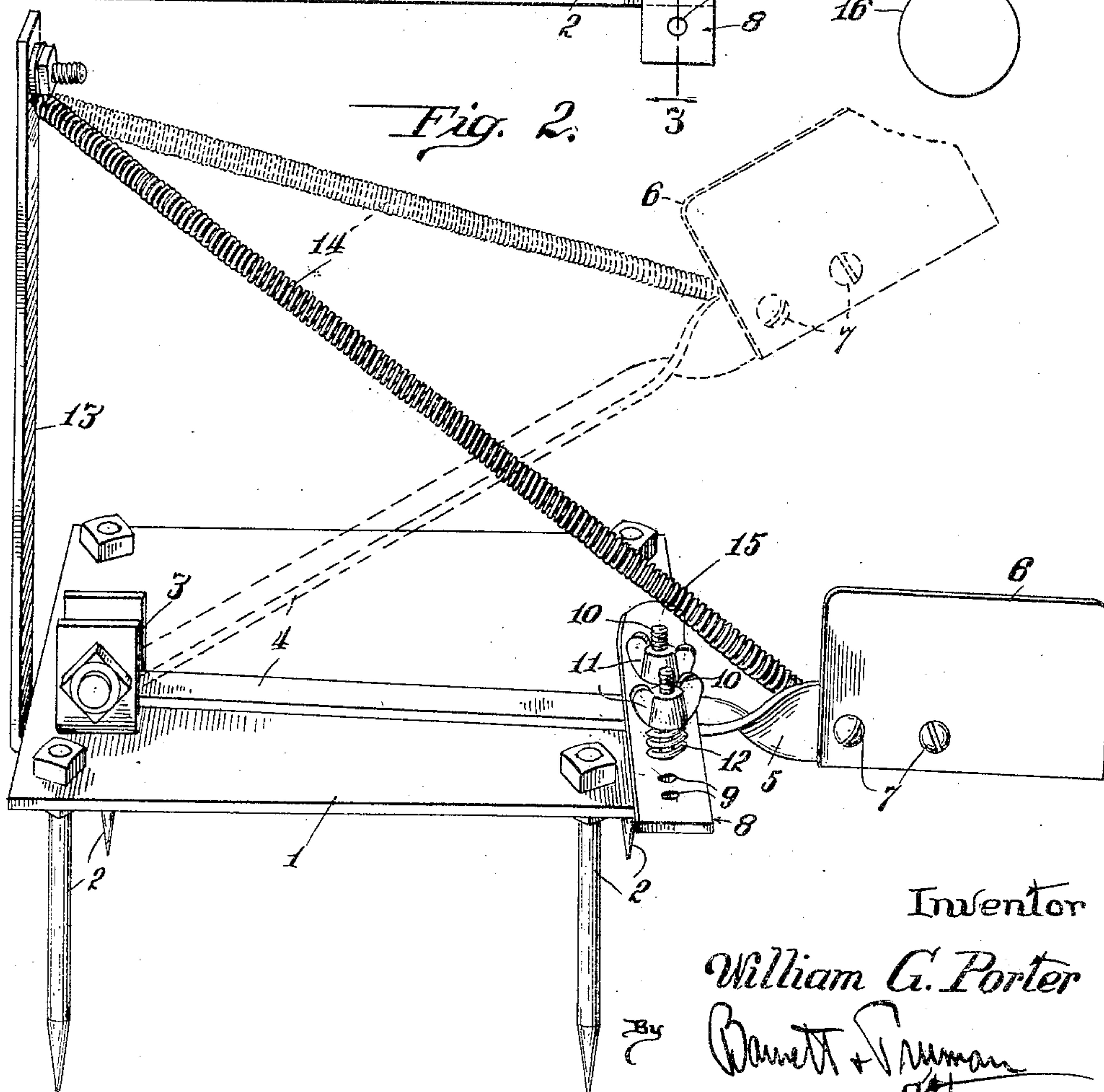
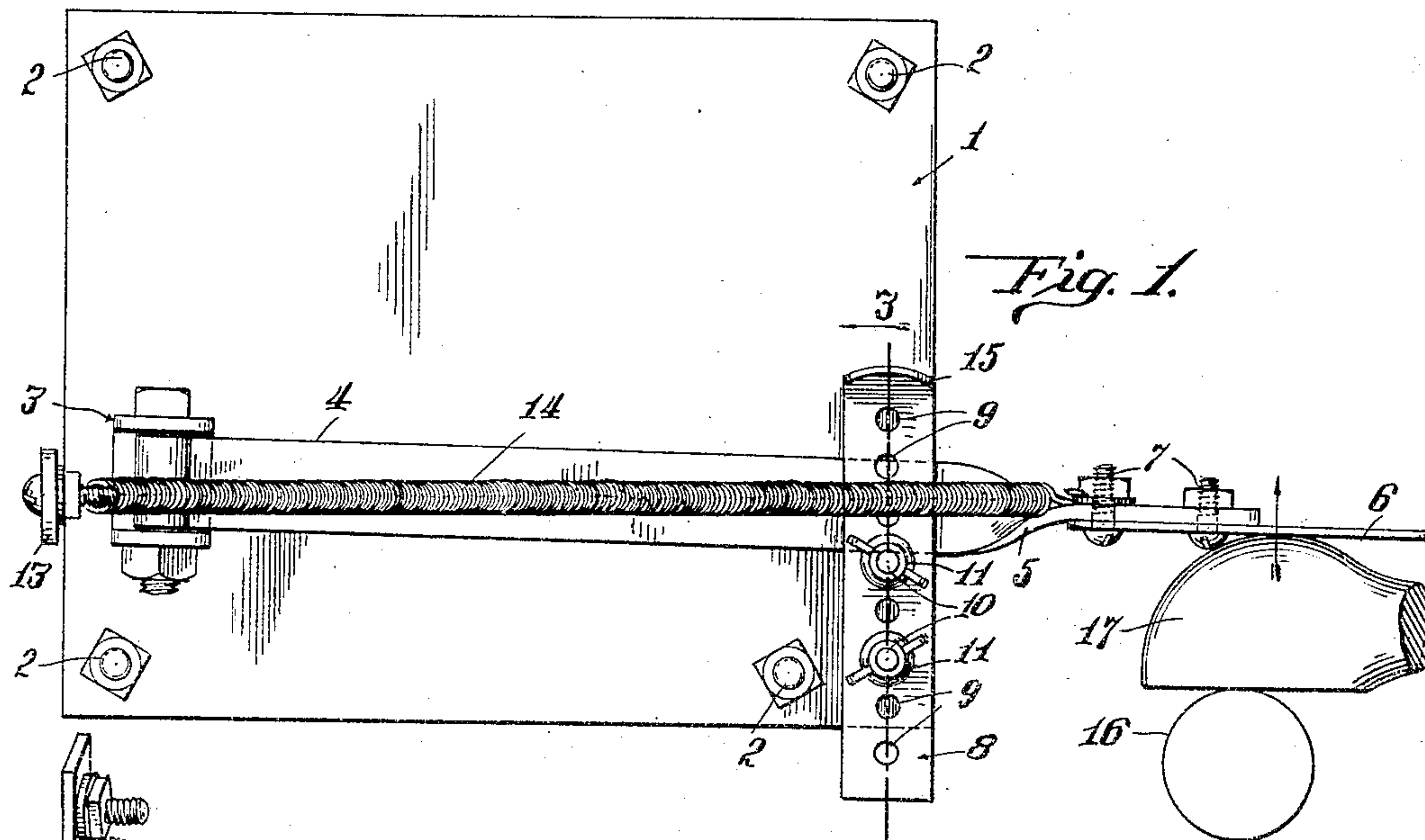
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1,897,212

AUTOMATIC GOLF INSTRUCTOR

Filed May 7, 1931

2 Sheets-Sheet 1



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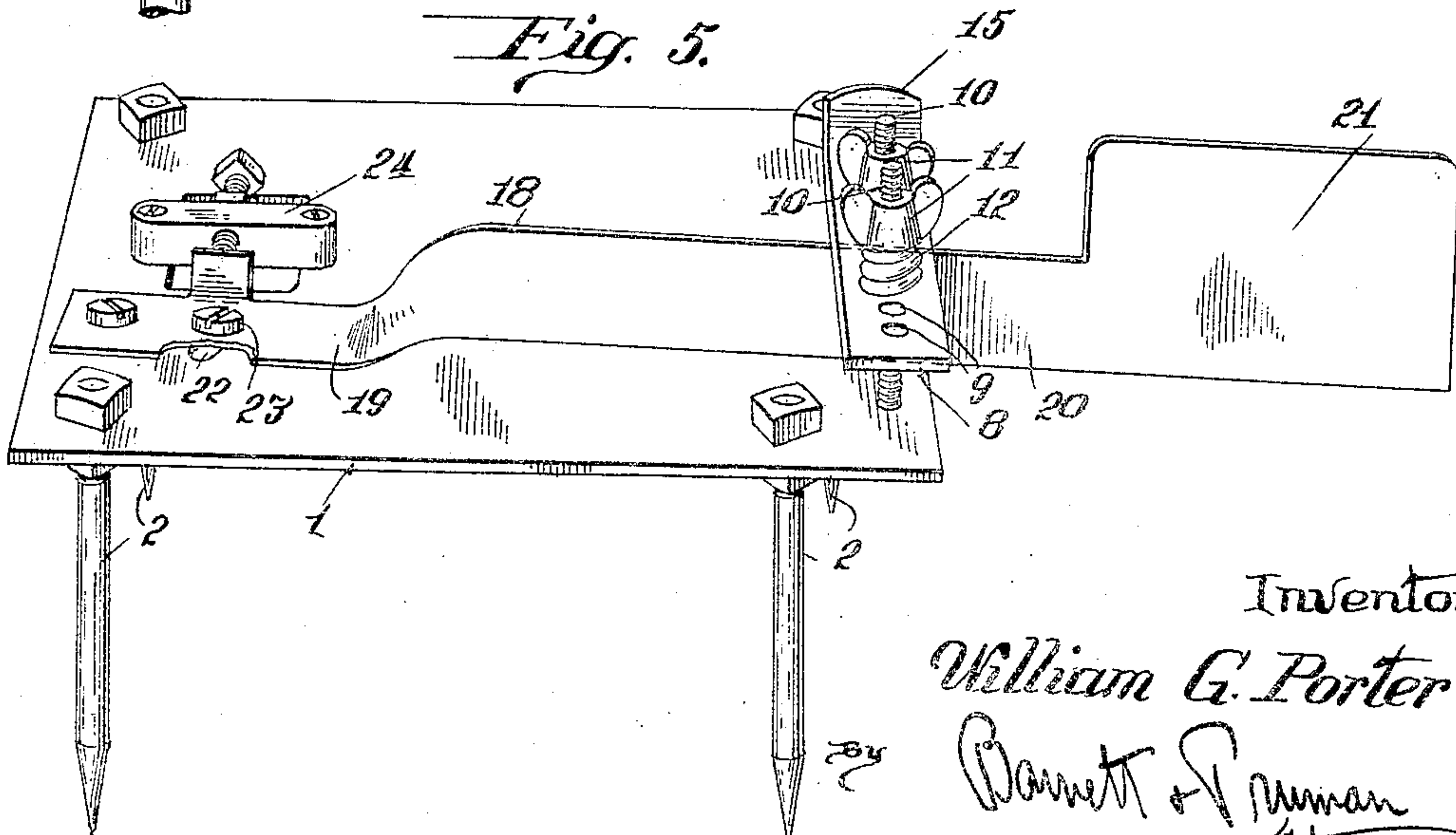
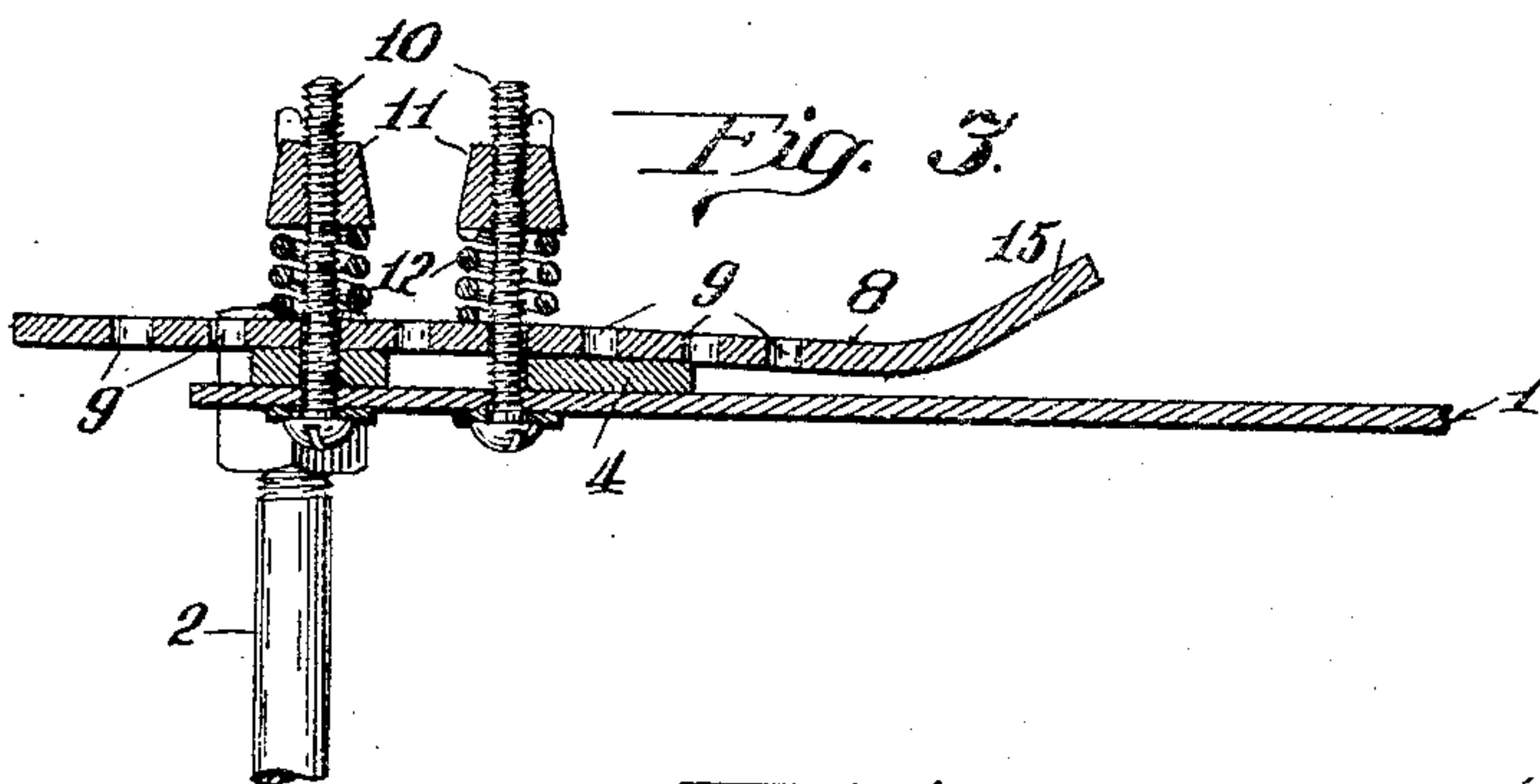
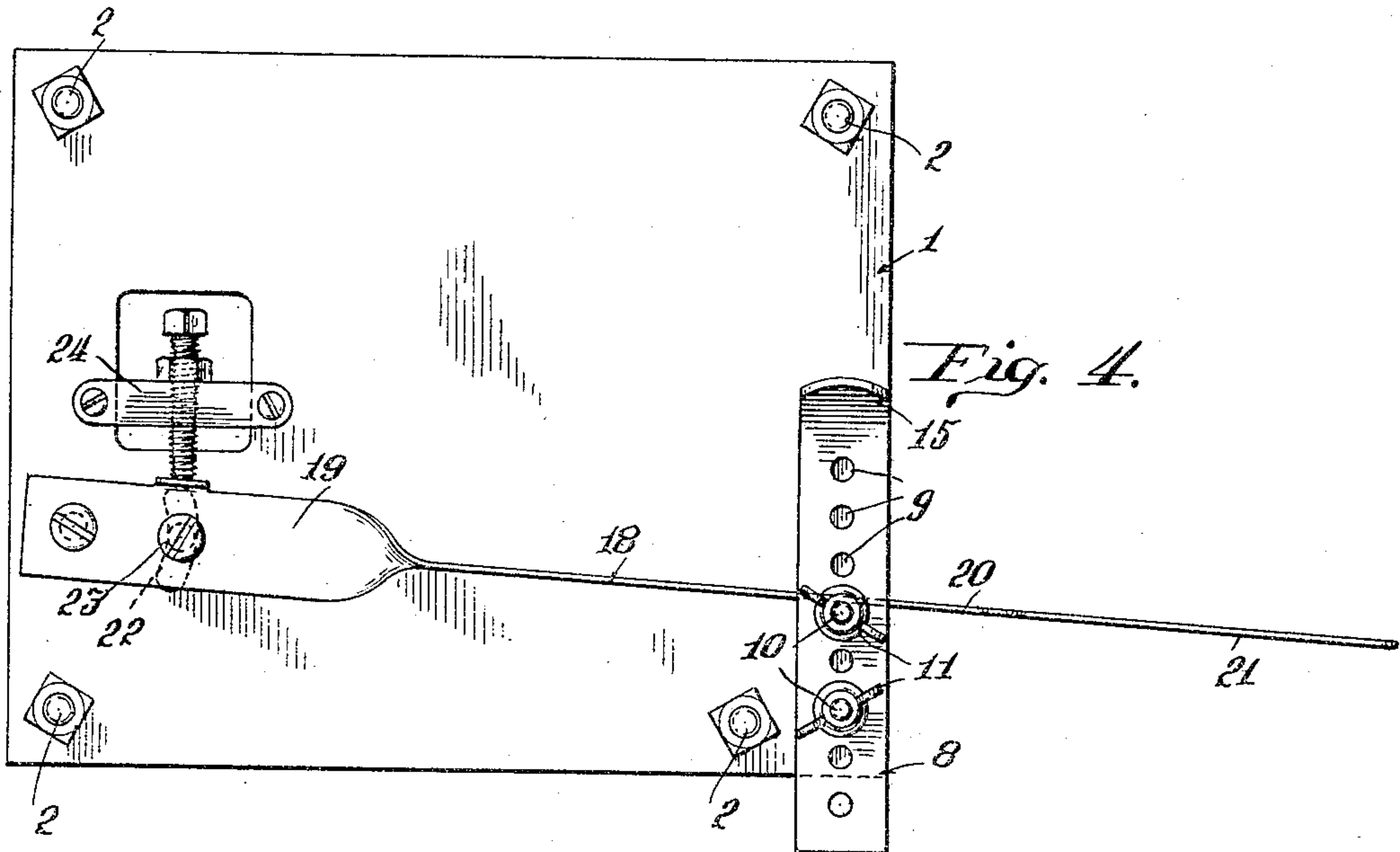
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2 Sheets-Sheet 2



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UNITED STATES PATENT OFFICE

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AUTOMATIC GOLF INSTRUCTOR

Application filed May 7, 1931. Serial No. 535,678.

My invention relates to new and useful improvements in machines for automatically instructing golfers as to the correct manner of swinging a golf club.

After years of observation and study I have come to believe that the great majority of golfers err in their manner of swinging due to a faulty back-swing. In other words if a golfer makes an improper back-swing preparatory to hitting the ball, it is almost impossible to correct the error and make a proper down-swing. However, it also follows that if a proper back-swing is made the down-swing will generally take care of itself properly resulting in a correctly hit ball.

My invention for one of its objects provides a machine which automatically causes the user to swing his golf club backwards in the proper manner. By using my improved invention the user is forced to back-swing properly and soon acquires the "feel" of such swing so that the swing is correctly executed without the machine, resulting in good golf "form", properly hit balls and lower scores.

Another object of my invention is to provide an apparatus which permits the user to actually "play" the ball while being instructed. Other devices for correcting the golf swing have been designed for practice swings only but my invention allows the ball to be hit at the same time.

Another object is to provide an apparatus that is adjustable so as to be adapted for the instruction of a correct full swing, three quarter swing, half swing, etc.

Further objects of my invention will appear from the detailed description of the embodiments shown in the accompanying drawings:

Fig. 1 is a plan view of the device in set position showing the head of a golf club and a golf ball in proper relative positions before the back-swing has been started.

Fig. 2 is a perspective view of the device in set or cocked position also showing in dotted lines its position after it has been sprung.

Fig. 3 is a section along line 3—3 of Fig. 1.

Fig. 4 is a plan view of an alternative embodiment of my invention.

Fig. 5 is a perspective of the device shown in Fig. 4.

The improved automatic golf instructor consists of a base 1 having a plurality of downwardly extending spikes 2 secured to the base 1 in any desired manner. To the base 1 is pivotally fastened a U-shaped member 3, between the arms of which is hinged, so as to allow vertical swinging movement, a flat metal arm 4. The extreme other end of said arm 4 which extends beyond the base 1 is twisted to vertical position as at 5 so as to receive the rectangular plate 6 which is secured thereto by nuts and bolts 7. A slightly bowed flat metal catch member 8 having a plurality of holes is adjustably fastened to the base 1 at a point opposite the U-shaped member 3 by means of bolts 10 and thumb nuts 11. Spiral springs 12 are interposed between the member 8 and the nuts 11.

Mounted on base 1 and extending vertically upwards from a point behind 3 is a bar 13. Connecting the upper end of 13 and the end 5 of arm 4 is an expansion spring 14 adapted to normally hold the arm 4 in the position indicated in the dotted lines in Fig. 2. One end of the bowed member 8 is upturned as at 15.

To operate, the spikes 2 are pushed into the ground until the base 1 is flush therewith. The arm 4 is then pulled down and under member 8 as shown in Fig. 3 and the thumb nuts 11 turned down until the desired tension is obtained. The slightly bowed shape of member 8 adds friction against which the arm 4 must be moved before it is released. A golf ball 16 and golf club 17 are positioned as shown in Fig. 1. From this position the player must move the club head in the direction of the arrow Fig. 1 to start his back-swing. In order to do this he must overcome the pressure of the springs 12 and the bowed portion of the member 8 which acts to hold the arm 4 in set or cocked position. As he presses backward against plate 6, to start his back-swing the arm 8 is moved to 15 which allows it to be quickly pulled by the spring 14 into the position shown in dotted lines, thus releasing the resistance against the back-swing, throwing the club head back

and up in a proper manner. From this position it is only natural for the player to return the club head in the same manner, thus hitting the ball 16 correctly. It is to be noted that by using my invention the club is involuntarily thrown backwardly and upwardly in a correct manner, and results in the player learning to so swing it voluntarily without the use of the machine.

10 In the alternative form shown in Figs. 4 and 5, the arm 4 is substituted for by a twisted flat spring metal arm 18. This arm comprises a portion 19 in a horizontal plane and a portion 20 in a vertical plane. The 15 portion 20 is widened at its end to form the club head abutting member 21. The portion 19 is pivotally secured to base 1 at 22 so as to be adjustably pivoted in a horizontal plane by means of the slot 22, the bolt 23 and the 20 set screw mechanism 24. In this structure the bar 13 is omitted due to the fact that spring 14 is unnecessary for arm 18 is formed of spring metal and is so shaped that its normal position is similar to that of arm 4 25 shown in dotted lines in Fig. 2.

To set or cock this form of my invention the arm 18 is pulled down against the spring action of portion 19 and horizontally against the spring action of portion 20 until portion 20 may be positioned beneath member 8 as shown in Figs. 4 and 5. In this construction the same adjustments are present as in the other structure with the addition of set screw adjustment 24. In this manner any 35 desired amount of resistance to the initial back-swing can be obtained.

In the form of my invention illustrated in the accompanying drawings I have shown spikes for anchoring the structure in the 40 ground. It is apparent that it may be used indoors as well as out in which case the spikes may be omitted and the base screwed or bolted to the floor.

It is apparent that my invention is not limited to the details of construction herein shown and described, as the principle of providing an adjustable resistance against a portion of the back-swing of a golf club can be embodied in many different ways, the 50 same general instructive result being obtained.

I claim:

1. An automatic golf instructor comprising a golf club head abutting member mounted 55 on a base, means for normally holding said member out of the path of the head of a golf club and means for holding said member in the path of the head of a golf club adapted to yieldingly resist movement of said member 60 horizontally a predetermined distance.

2. An automatic golf instructor comprising a member adapted to be positioned in the path of the head of a golf club and offer resistance to the movement of the club head 65 during the initial portion of the back-swing,

and means for directing said member out of the path of the club head when a predetermined portion of the back swing has been completed.

3. An automatic golf instructor comprising a support, a member mounted on the support in position to be moved by the head of a golf club during the initial portion of the back swing and means for offering yielding resistance to the movement of the member 75 during a predetermined portion of the back swing.

4. An automatic golf instructor comprising a support, a member mounted on the support in position to be moved by the head of a 80 golf club during the initial portion of the back swing and means for offering yielding resistance to the movement of the member during a predetermined portion of the back swing and means for directing said member 85 out of the path of the back swing when a predetermined portion of the back swing has been completed.

5. An automatic golf instructor for controlling the movement of the head of a golf 90 club comprising a golf club head abutting member mounted on a base, means for normally holding said member away from the path of the club head, means for holding said member out of normal position and behind 95 the club head adapted to yieldingly resist movement of said member horizontally and adapted to release said member to normal position after it has been moved horizontally a predetermined distance. 100

6. An automatic golf instructor for controlling the movement of the head of a golf club comprising a golf club head abutting member mounted on a base, means for normally holding said member away from the 105 path of the club head, means adjustable vertically for holding said member behind the club head and adapted to release said member to normal position after it has resisted the back swing of the club a predetermined distance. 110

7. An automatic golf instructor comprising a golf club head abutting member mounted on a base, means for normally holding said member out of operative position, a catch adapted 115 to hold said member in operative position, said means adapted to return said member to normal position after it has been moved horizontally a predetermined distance, and yielding means for resisting the movement of said 120 member horizontally.

8. An automatic golf instructor for controlling the movement of the head of a golf club comprising a golf club head abutting member mounted on a base, means for normally holding said member out of operative position, a catch mounted on said base adapted to hold said member in operative position behind a golf club head and release it to normal position after it has been moved horizontally 130

zontally a predetermined distance by the golf club and adjustable yielding means for resisting the movement of said member horizontally.

5 9. An automatic golf instructor comprising a golf club head abutting member mounted on a base, resilient means for normally holding said member out of operative position, a catch for holding said member in operative
10 position behind a golf club head and releasing it to normal position after it has been moved horizontally a predetermined distance, and means whereby said predetermined distance may be varied.

15 10. An automatic golf instructor comprising a golf club head abutting member mounted on a base, resilient means for normally holding said member out of operative position, a catch for holding said member in operative
20 position, said resilient means adapted to return said member to normal position after it has been moved horizontally a predetermined distance, said catch being adjustable vertically to form a yielding means for resisting the movement of said member said prede-
25 termined distance.

11. An automatic golf instructor comprising a golf club head abutting member mounted on a base, resilient means for normally
30 holding said member out of operative position, a catch for holding said member in operative position said resilient means adapted to return said member to normal position after said member has been moved horizontally a
35 predetermined distance, threaded members for adjustably mounting said catch on said base, and springs adapted to exert vertical pressure on said catch so as to yieldingly resist horizontal movement of said club head
40 abutting member.

12. An automatic golf instructor comprising a golf club head abutting member pivotally mounted on a base, a rigid arm mounted on said base, resilient means connecting said
45 member and said arm adapted to normally hold said member out of operative position, yielding means adjustably mounted on said base adapted to hold said member in operative position and resist horizontal movement, said
50 resilient means adapted to return said member to normal position after it has been moved horizontally a predetermined distance.

13. An automatic golf instructor comprising a base, an arm pivotally mounted on said
55 base, a club head abutting member mounted on the free end of said arm, an upwardly extending arm rigidly mounted on said base, resilient means connecting said arms and adapted to normally hold said club head abut-
60 ting member above said base, a catch member mounted on said base adapted to hold said club head abutting member out of normal position and adjacent said base, yielding means adapted to resist horizontal movement of said club
65 head abutting member away from said catch,

said resilient means being adapted to return said club head abutting member to normal position after it has been moved horizontally away from said catch a predetermined distance.

14. An automatic golf instructor comprising a base, an arm pivotally mounted on and extending beyond said base, a club head abutting member mounted on the free end of said
75 arm, an upwardly extending arm rigidly mounted on said base, resilient means connecting the ends of said arms and adapted to normally hold the free end of said movable arm above said base, a catch member adjust-
80 ably mounted on said base adapted to yieldingly fit over said movable arm and hold it out of normal position and adjacent said base, and yieldingly resistant means for resisting the horizontal movement of said arm away
85 from said catch member.

15. An automatic golf instructor comprising a base, an arm pivotally mounted on and extending beyond said base, a club head abutting member mounted on the free end of said arm, an upwardly extending arm
90 rigidly mounted on said base, resilient means connecting the ends of said arms and adapted to normally hold the free end of said movable arm above said base, a catch member adjust-
95 ably mounted on said base having a free end adjacent said base adapted to fit over said movable arm and hold it out of normal position but permitting horizontal movement of
100 said arm towards the free end of said catch member, adjustable yielding means for resisting such movement, said resilient means adapted to snap said pivoted arm into normal position when said arm reaches the free end
105 of said catch member.

16. An automatic golf instructor comprising a base, a spring arm mounted on said base and extending beyond it, adapted to yieldingly resist horizontal distortion and means
110 for quickly removing said arm from the path of the force causing such horizontal distortion at a predetermined time.

17. An automatic golf instructor comprising a base, a spring arm mounted on said base and extending beyond it and forming a club head abutting member adapted to yield-
115 ingly resist horizontal distortion, means for varying said resistance and means for quickly removing said arm from the path of the force causing such horizontal distortion at a
120 predetermined time.

18. An automatic golf instructor for controlling the movement of the head of a golf club comprising a member adapted to be
125 positioned in the path of the club head and offer resistance to the movement of the club head during the initial portion of the back swing, means for directing said member out of the path of the club head when a predeter-
130 mined portion of the back swing has been

completed, and means for anchoring said device.

19. An automatic golf instructor comprising a support, a member mounted on the support in position to be moved by the head of a golf club during the initial portion of the back swing, means for offering yielding resistance to the movement of the member during a predetermined portion of the back swing and means for directing said member out of the path of the back swing when a predetermined portion of the back swing has been completed, and means for anchoring said support.

20. An automatic golf instructor comprising a base, means for anchoring said base, an arm pivotally mounted on and extending beyond said base, a club head abutting member mounted on the free end of said arm, an upwardly extending arm rigidly mounted on said base, resilient means connecting the ends of said arms and adapted to normally hold the free end of said movable arm above said base, a catch member adjustably mounted on said base having a free end adjacent said base adapted to fit over said movable arm and hold it out of normal position but permitting horizontal movement of said arm toward the free end of said catch member, adjustable yielding means for resisting such movement, said resilient means adapted to snap said pivoted arm into normal position when said arm reaches the free end of said catch member.

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