

(No Model.)

2 Sheets—Sheet 1.

L. BRIGHAM.
SOFT GROUND HORSESHOE.

No. 600,960.

Patented Mar. 22, 1898.

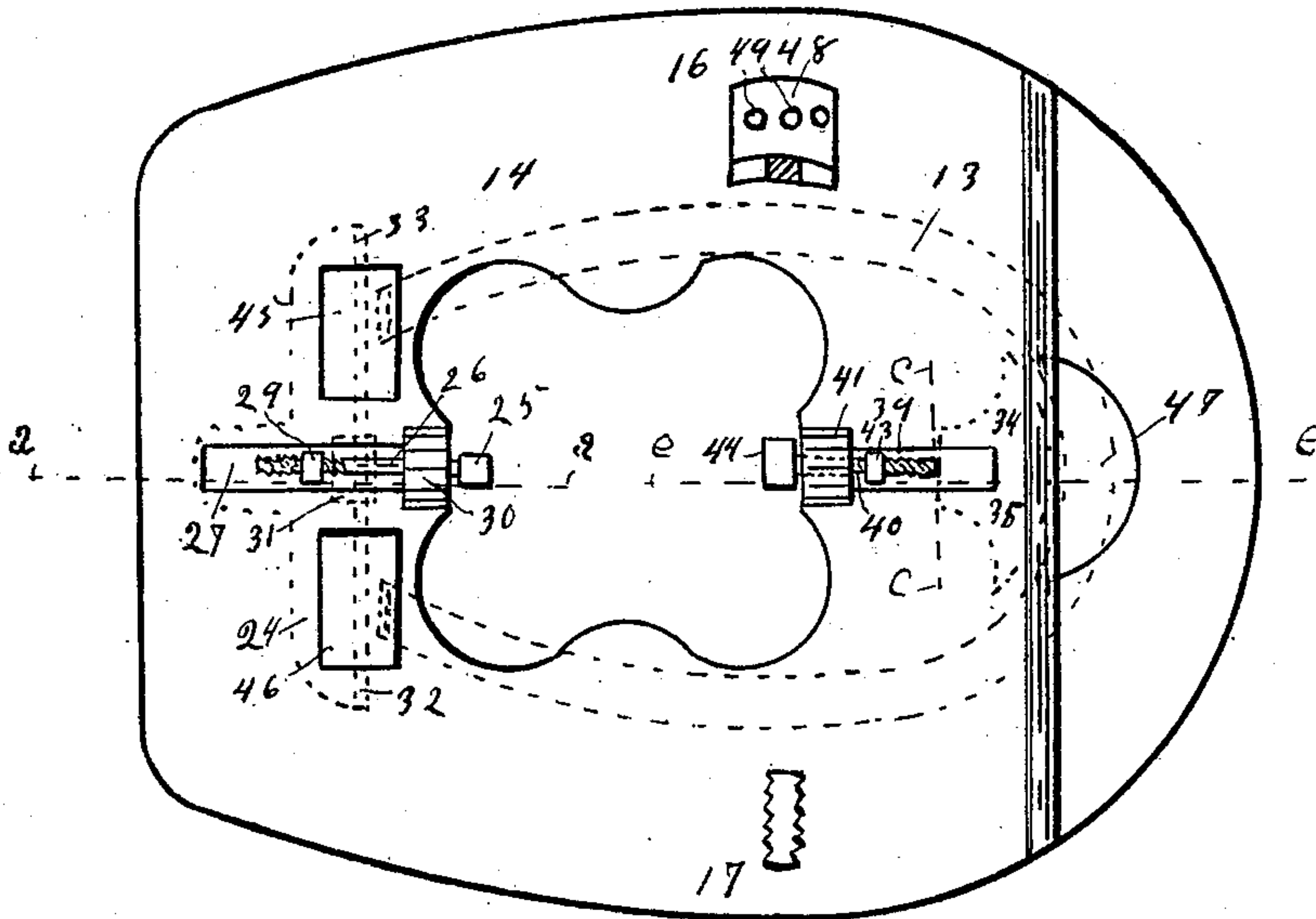
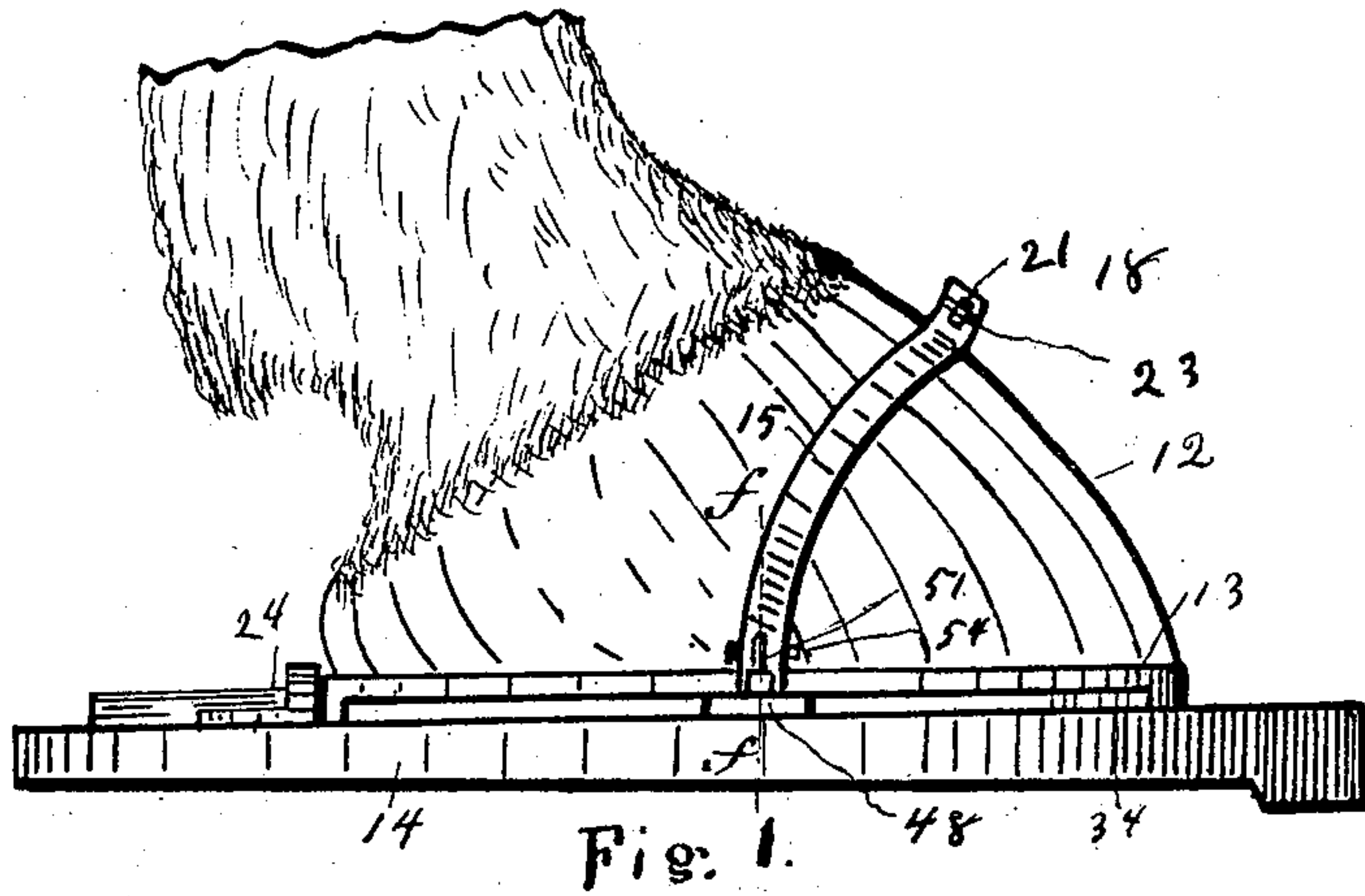


Fig. 2.

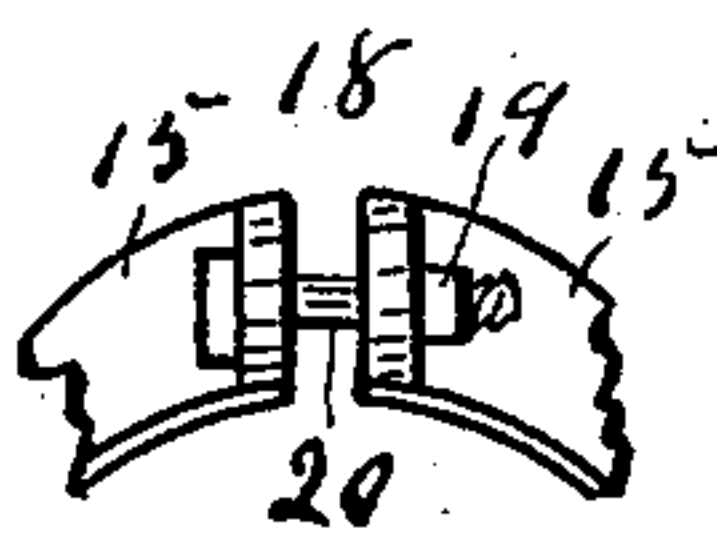


Fig. 3.

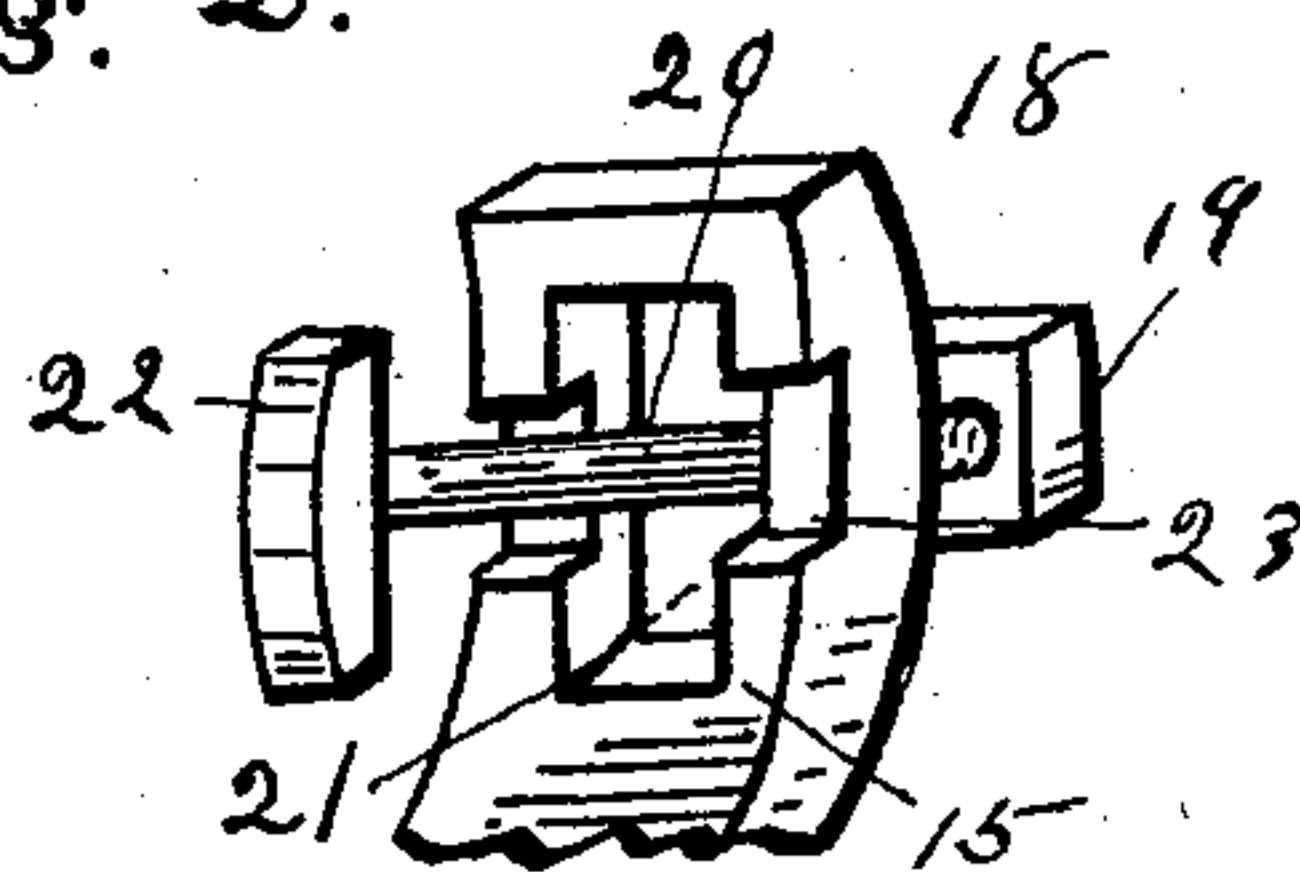


Fig. 4.

Witnesses
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Inventor
Lysean Brigham
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2 Sheets—Sheet 2.

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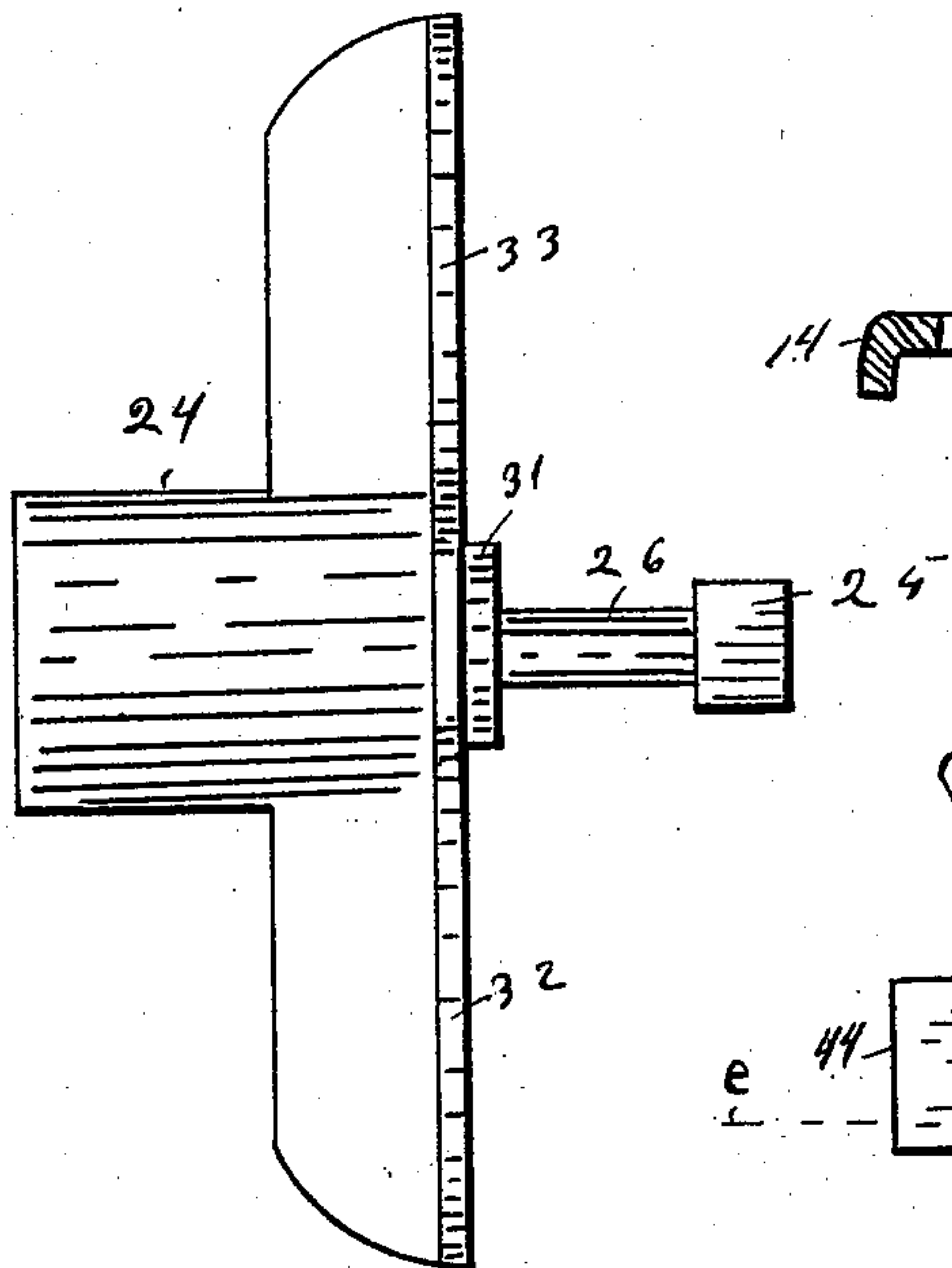


Fig. 6.

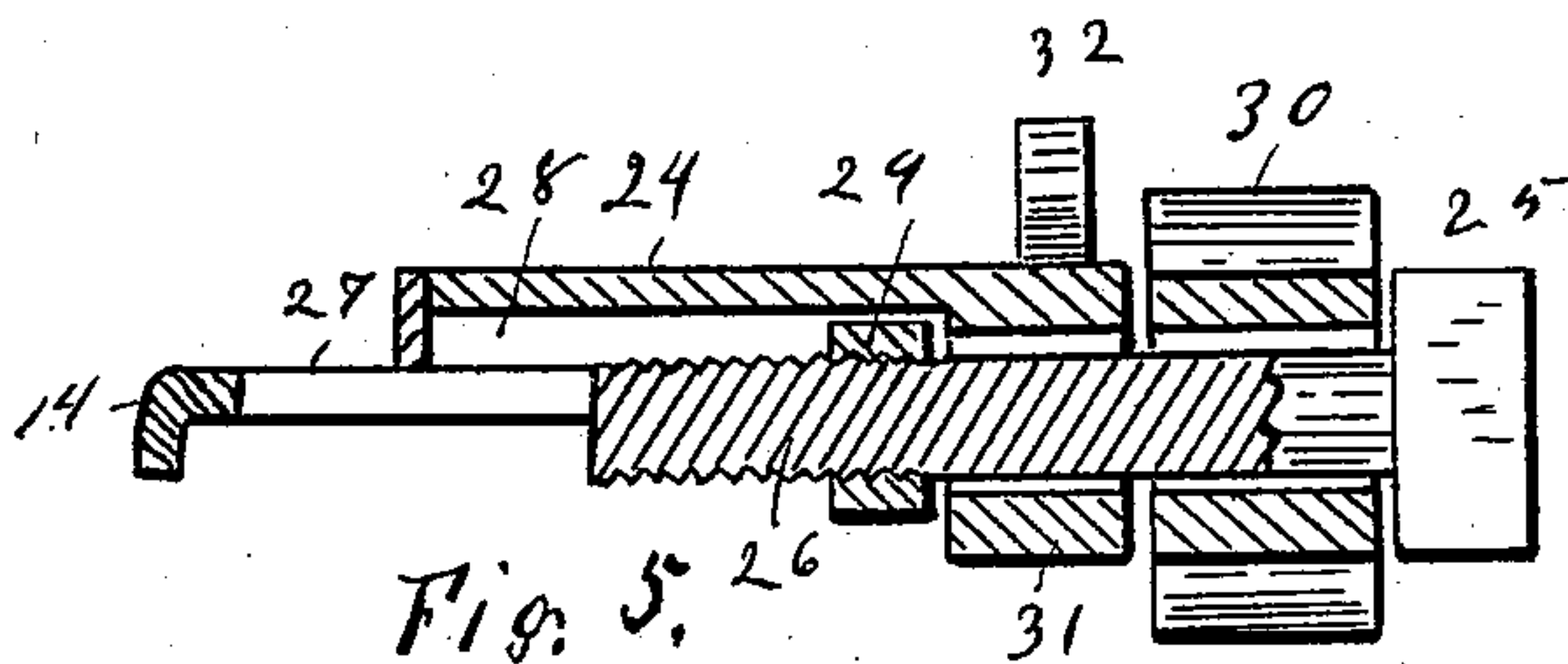


Fig. 5.

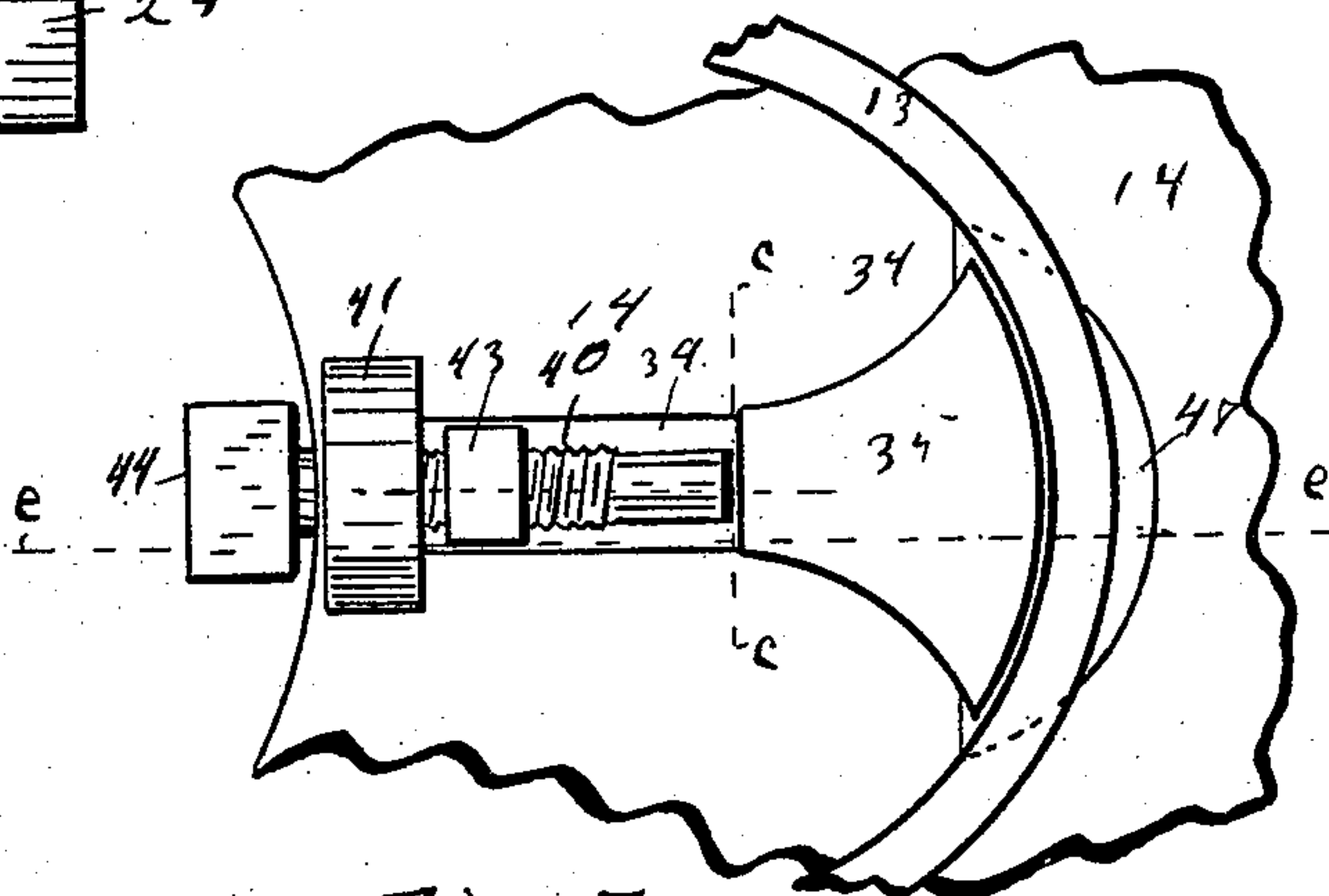


Fig. 7.

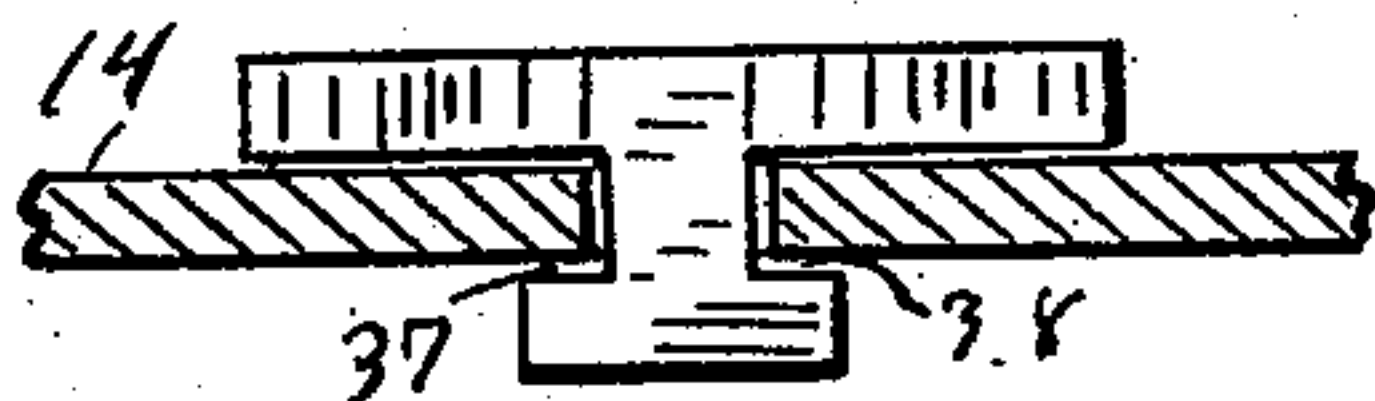


Fig. 8.

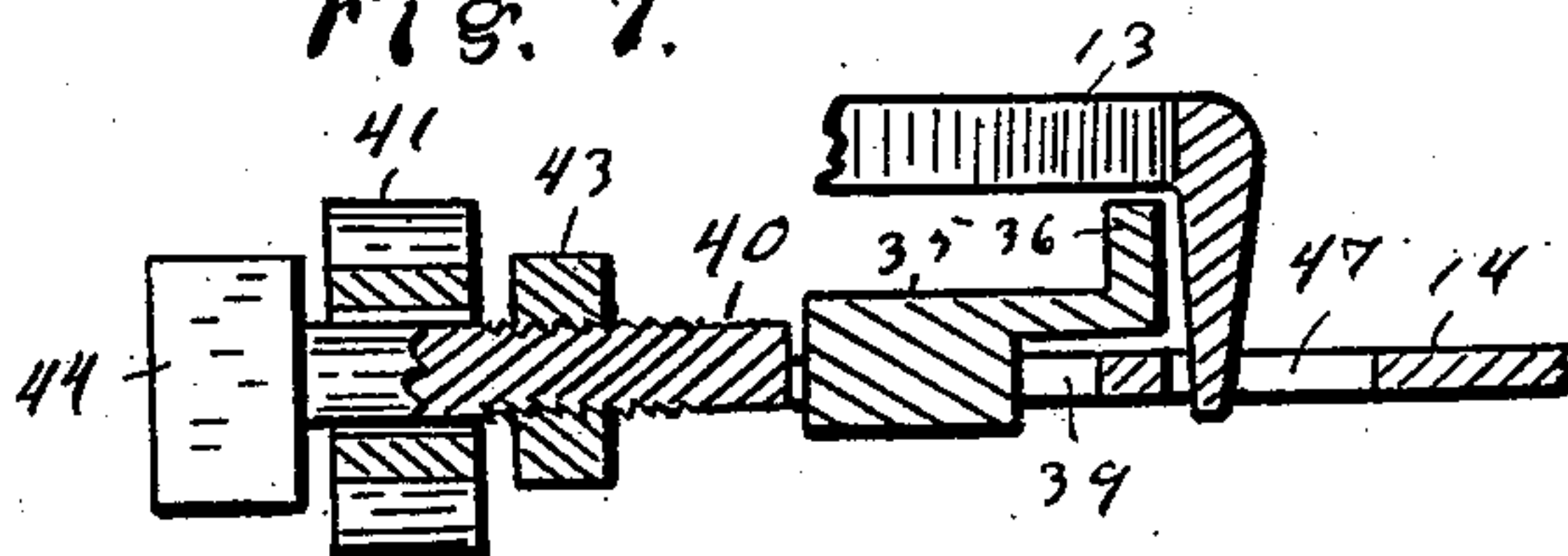


Fig. 9.

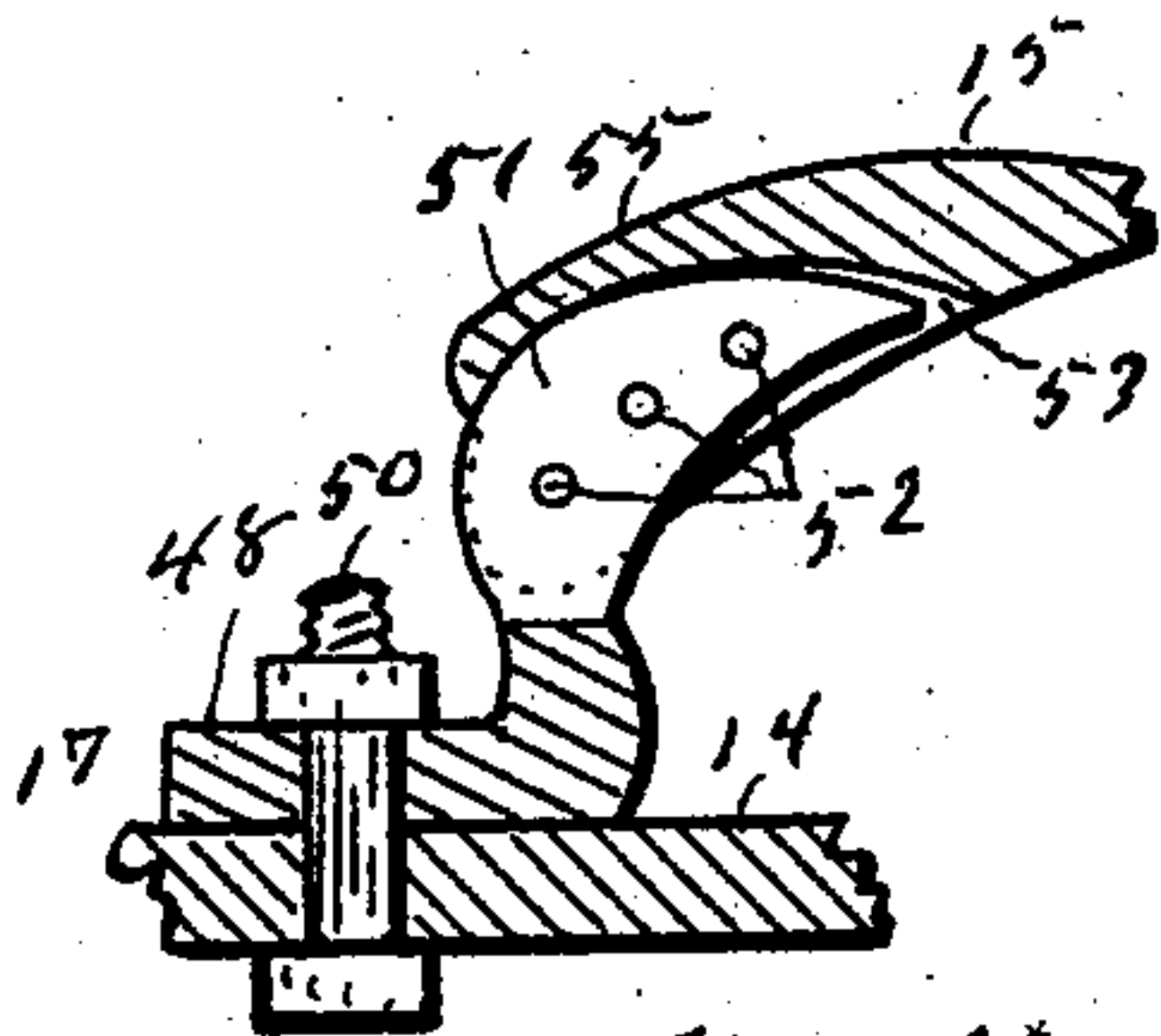


Fig. 10.

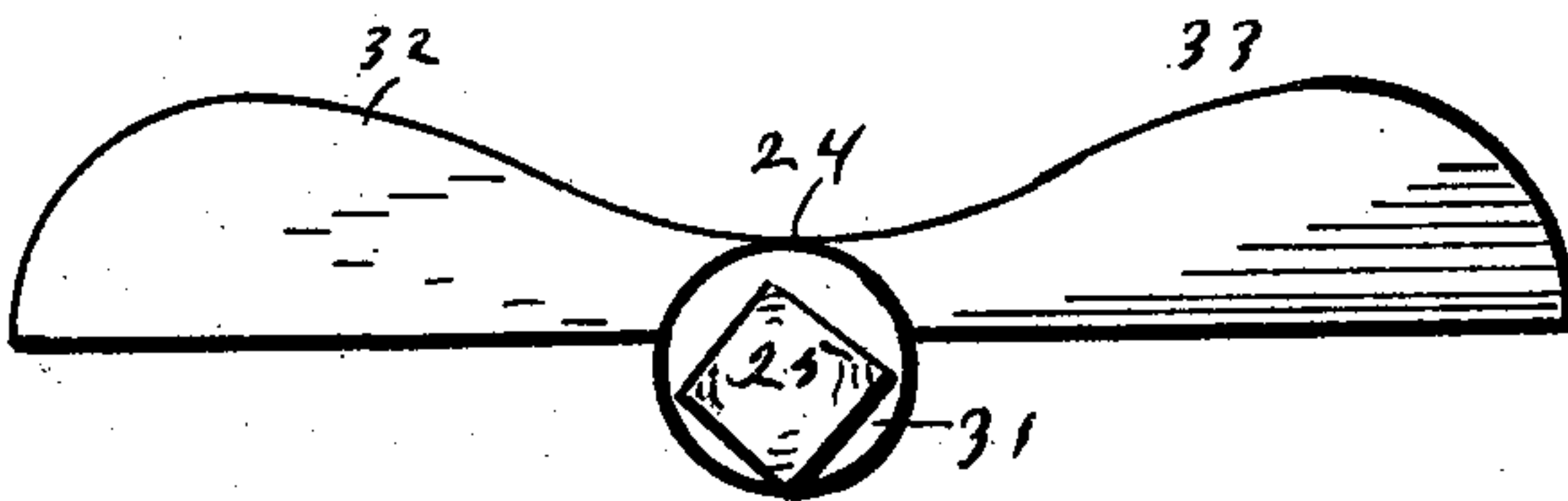


Fig. 11.

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UNITED STATES PATENT OFFICE.

LYSCOM BRIGHAM, OF DECATUR, MICHIGAN.

SOFT-GROUND HORSESHOE.

SPECIFICATION forming part of Letters Patent No. 600,960, dated March 22, 1898.

Application filed September 3, 1897. Serial No. 650,554. (No model.)

To all whom it may concern:

Be it known that I, LYSCOM BRIGHAM, a citizen of the United States, residing at Decatur, in the county of Van Buren, State of Michigan, have invented a new and useful Soft-Ground Horseshoe, of which the following is a specification.

This invention relates to soft-ground horseshoes heretofore patented to me, and more particularly to the one patented September 25, 1883, No. 285,562.

The object of the invention consists in improved means for attaching and adjusting the soft-ground horseshoe, all as more particularly set forth and claimed below.

In the drawings forming a part of this specification, Figure 1 is a side elevation of a horse's foot with my soft-ground shoe attached; Fig. 2, a plan view of the soft-ground shoe with the horse's foot removed and the regular iron shoe dotted in; Fig. 3, a broken upper portion of the bail for attaching the soft-ground shoe to the foot, looking from a point at right of Fig. 1; Fig. 4, an enlarged perspective view of same, looking from a point at left of Figs. 1 and 3; Fig. 5, an enlarged section near line *a a* in Fig. 2, looking from a point below; Fig. 6, an enlarged plan view of the adjustable stop which fits against the rear calks of the regular iron shoe, as in Figs. 1 and 2; Fig. 7, an enlarged broken portion of the front of the shoe in Fig. 2; Fig. 8, a section on line *c c* in Fig. 7, looking from a point at the left. This would also be on same line *c c* in Fig. 2. Fig. 9 is a section near line *e e* in Figs. 2 and 7, looking from a point below, Fig. 2 of course being on a smaller scale than Fig. 9; Fig. 10, a section on line *f f* in Fig. 1, looking from a point at the right, showing the plan of attaching the bail to the soft-ground shoe; and Fig. 11 is an elevation of Fig. 6, looking from a point at the right.

Referring to the parts of the drawings pointed out by numbers, 12 is the horse's foot, 13 the regular iron shoe with which the horse is supposed to be already shod, and 14 is my soft-ground shoe similar to those already in use; but I have effected improved ways of attaching and adjusting, as will be particularly set forth below.

Of course the object of the soft-ground shoes is well understood to enable the farmer

to cultivate soft marsh ground with the use of a team and prevent the feet of the horse from settling unduly into the soil. The soft-ground shoe 14 is attached to the foot by a bail 15, made in two parts, attached to the sides of the shoe at 16 and 17 and attached over the hoof at 18, Figs. 1 and 2. The ends of the bail 15, where it is attached over the foot at 18, should be so made that they can be loosened and detached without being obliged to entirely remove the nut 19 from the bolt 20, for the reason that it rusts and takes a long time to remove it, and then it is liable to become lost. Each member of the bail 15 is provided with a hole or slot to receive the bolt 20 therethrough. The hole in one of these members is elongated, as at 21 in Figs. 1 and 4, and through this elongated hole or slot the elongated head 22 of the bolt 20 is passed in coupling and uncoupling by turning it in position, as in Fig. 4. This portion of the bail also is provided with a mortise 23 in its outer face transversely to the slot 21 or elongated hole, as in Fig. 4 and also in Fig. 1. When the bolt 20 is passed through the elongated hole 21 head foremost, it is given a quarter-turn, the nut 19 tightened, and this action brings the elongated head 22 into the mortise 23. The bolt is thus held from turning when desiring to loosen the nut 19 to detach the bail. When the nut is loosened a little, the bolt 20 is turned to the position, as in Fig. 4, when the parts of the bail can be separated by passing the elongated head 22 out through the hole 21 without, as stated, having to remove the nut 19 or the bolt 20 entirely from the bail, which is a great convenience.

Since the foot of the horse is constantly growing, by the growth of the hoof it becomes necessary to arrange the shoe and its attachments to conveniently meet these changes by adjustment. As the hoof grows long the foot is carried back from the bail 15. It then becomes necessary to either reset the iron shoe 13 or to fill up under the bail 15 with leather or other material to take up the space, or, what is better yet and what my invention provides for, to have an adjustable stop or rest 24 at the rear of the foot, so that by adjusting it forward the space under the bail is taken up and the soft-ground shoe is firmly attached again, without removing the shoe

and with no great inconvenience, by simply using a wrench on the head 25 of the adjusting-bolt 26. The rear of the shoe 14 has an elongated slot through it at 27. Over this slot is placed the rest or stop 24, as shown by dotted lines in Fig. 2, the rearwardly-extending portion of this rest being hollow on the under side at 28 to adjustably receive a nut 29, as in Fig. 5, said nut also being in the slot 27. A bolt 26 passes loosely through a lug 30 of the shoe 14 and through a lug 31 of the rest 24 in like manner, as shown in Figs. 2 and 5, and said bolt 26 has a threaded portion passing through the nut 29. The rest or stop 24 has upwardly-turned portions 32 and 33 to fit against the rear calks of the shoe 13, as in Fig. 1. Thus without removing the muddy shoe with bolts and nuts, perhaps rusted, all the operator has to do to adjust the rest or stop 24 is to raise the foot of the horse and turn the head of the bolt 26, which causes the nut 29 to move forward, and this in turn moves the rest or stop forward, and the reverse, of course, if the adjustment is desired in the other direction when first adjusting for a given size foot, except, of course, in this latter instance, the rest or stop 24 is carried back by hand after the bolt 26 is loosened.

An additional rest may be employed back of the toe of the ordinary shoe, as at 34. This rest consists of a block 35, having an upwardly-extending flange 36 for resting against the inner point of the ordinary shoe 13. This block is provided with side grooves 37 and 38, and being in the slot 39 of the shoe these grooves loosely slide during the adjustment of the rest on the edges of the slot, as in Fig. 8. A bolt 40 loosely passes through a lug 41 of the soft-ground shoe 14 and has a threaded portion which adjustably passes through a nut 43, which nut is in the slot 39 and is thus prevented from turning. The forward end of this bolt 40 comes against the end of the rest or block 35 when it is adjusted forward by using a wrench on the head 44 of the bolt, and this action moves the block 35 forward against the inside of the toe of the ordinary shoe, as in Fig. 9. This has the same effect as adjusting the rest 24, but in some instances it is better to employ both and in others only one need to be employed. It should have been stated that the soft-ground shoe 14 is provided with holes 45 and 46 for the rear calks of the ordinary shoe 13 to fit in and with a hole 47 for the toe-calk. These holes are made large enough to provide for feet of varying sizes.

In Figs. 1 and 11 is shown my new plan of attaching the bail 15 to the soft-ground shoe 14. 48 is a plate provided with a series of holes 49. A bolt 50 attaches this plate to the shoe by passing through one of the holes 49, as shown in Fig. 10. By means of these holes 49 the bale which is attached to these plates, may be adjusted toward the rear or front of the soft-ground shoe, according to the size

and shape of the foot of the horse. Of course there is a like plate in use on both sides of the shoes and two parts to the bail, as stated. These plates have upwardly and inwardly projecting necks 51, provided with a series of holes 52. The lower end of the bales 15 are provided with a recess in under side, as at 53, to receive the necks 51, as in Fig. 10. This recessed portion of the bail has a bolt-hole adapted to register with any one desired of the series 52, and a bolt 54, Fig. 1, is employed to pivotally attach the bail and neck. When thus constructed, the bails can be adjusted as to length according to the size of the foot when first adjusting, and owing to the roofing-over portion 55 of the recess the bails cannot drop down when the shoe is removed from the foot.

The bolt-and-slot arrangement for attaching the upper ends of the bail really form a buttoning device as well as bolting. Thus by loosening the nut 19 the bail can be unbuttoned in a very convenient manner. By means of this shoe only a few parts are necessary and all attached to each other in a manner for use without detaching, thus less liable to become lost and always handy for use. Besides, only one size shoe is necessary for all horses, as it can be quickly adjusted for any size, as stated.

Having thus described my invention, what I claim as new, and desire to secure by Letters Patent of the United States, is—

1. The soft-ground shoe having the rear calk-holes, and the elongated slot between with the perforated lug at the end of it, combined with the rest or stop having the central perforated lug, a bolt passed loosely through the lugs, and a nut in the elongated slot through which nut the bolt is adapted to move, substantially as set forth.

2. A soft-ground shoe having a front calk-hole, and an elongated slot in its rear with a perforated lug at the end of said slot, in combination with a rest grooved to adjustably slide on the edges of the elongated slot, a nut in said slot, and a bolt passed through the lug and nut and adapted to be screwed against the rest to force it against the inside of the toe of the ordinary shoe of the horse, substantially as set forth.

3. The combination of the soft-ground shoe, the bail-plates having the series of adjusting-holes and provided with the upwardly-projecting necks having the series of adjusting-holes, the bail having the roofed-over recess to receive the neck, and the adjustable attaching-bolts, substantially as set forth.

In testimony of the foregoing I have hereunto set my hand in the presence of two witnesses.

LYSCOM BRIGHAM.

Witnesses:

LEVI F. COX,
WARREN S. MOREY.