

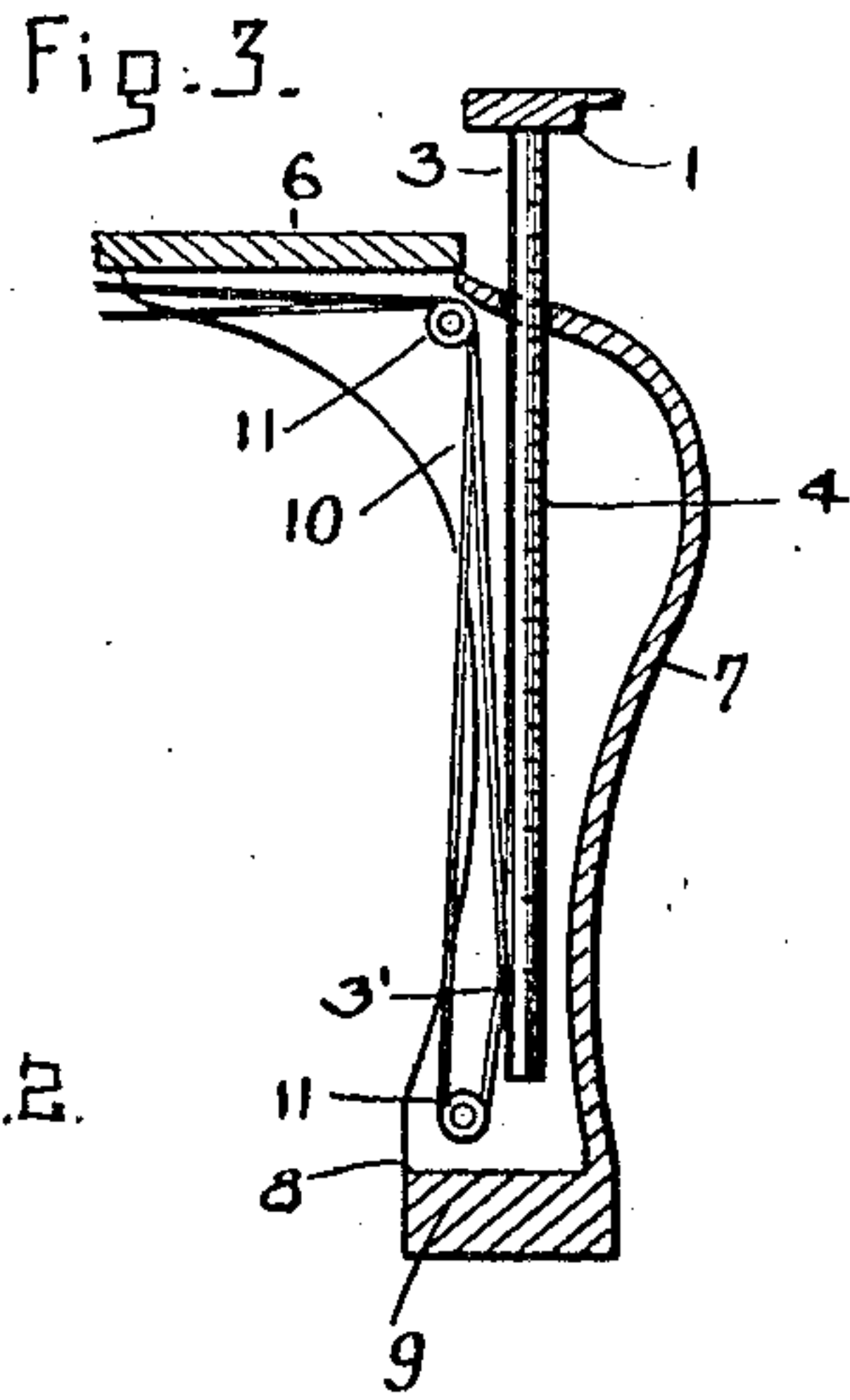
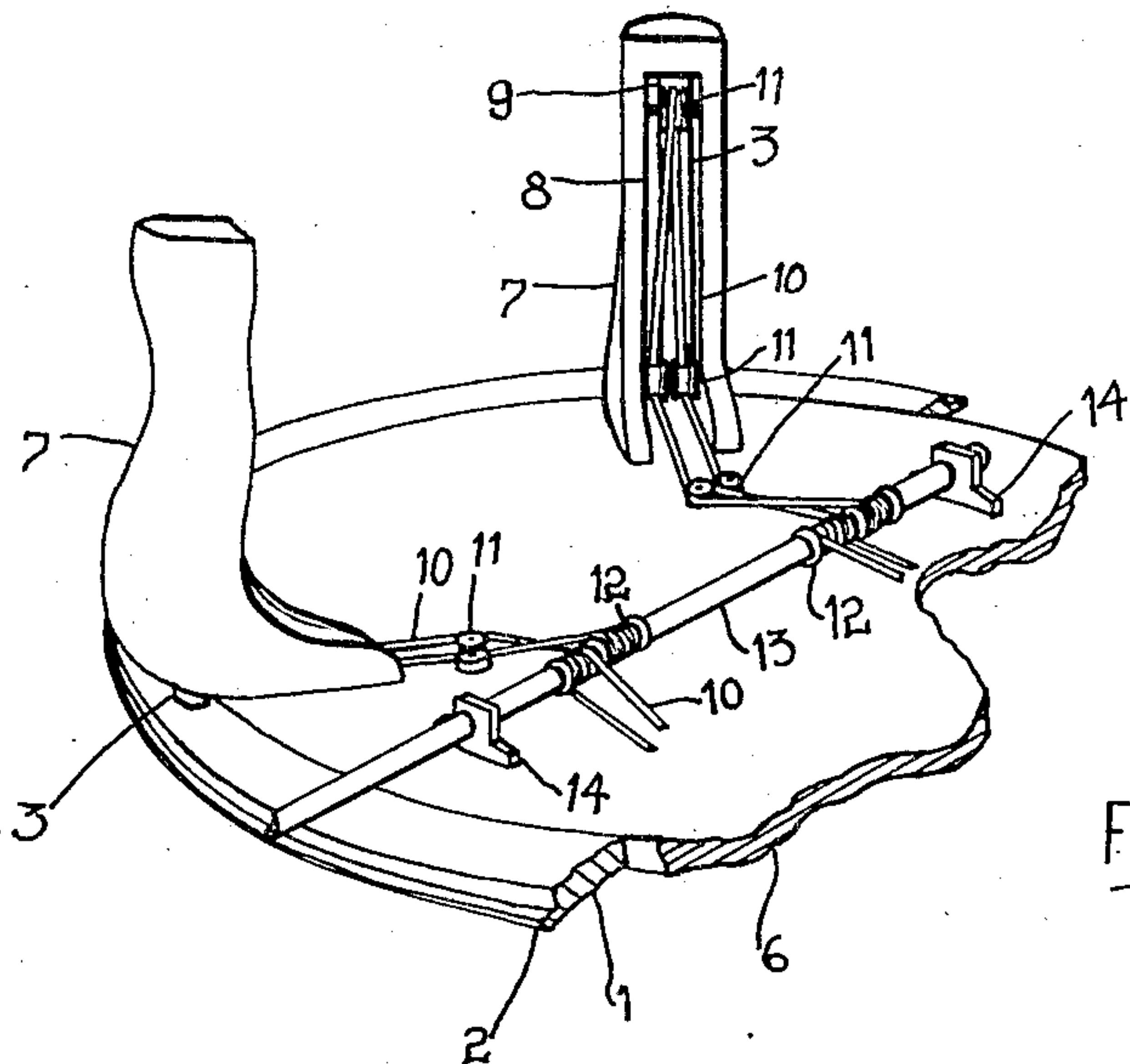
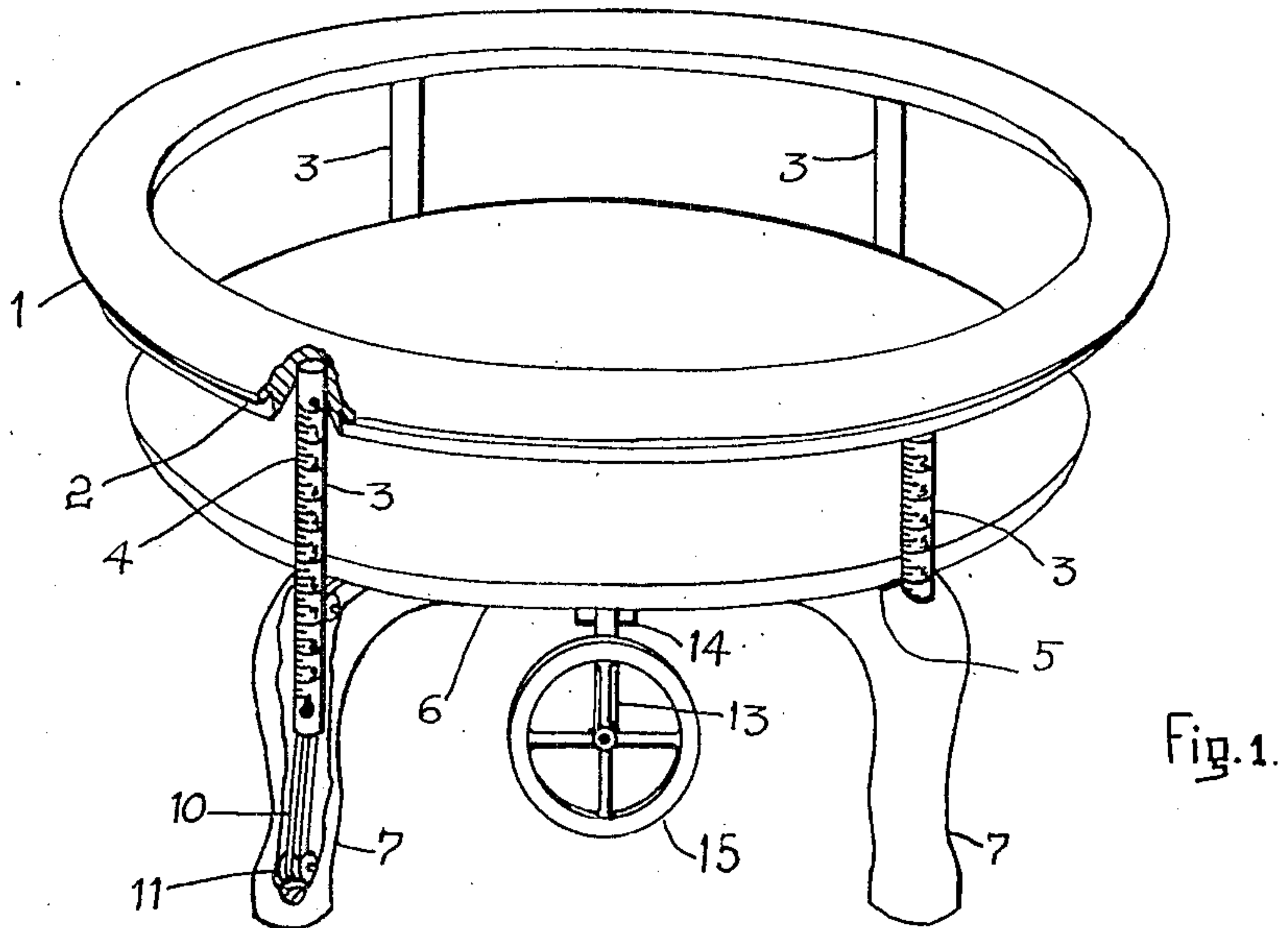
No. 849,636.

PATENTED APR. 9, 1907.

G. F. OLDHAM.

HEM FINDER.

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WITNESSES
Hazel Kirk
E. Kirk

INVENTOR
George F. Oldham
By
Geo. E. Kirk
ATTORNEY

UNITED STATES PATENT OFFICE.

GEORGE F. OLDHAM, OF TOLEDO, OHIO, ASSIGNOR OF ONE-HALF TO HIMSELF AND ONE-HALF TO THOMAS H. YOUNG, OF TOLEDO, OHIO.

HEM-FINDER.

No. 849,636.

Specification of Letters Patent.

Patented April 9, 1907.

Application filed October 15, 1906. Serial No. 339,054.

To all whom it may concern:

Be it known that I, GEORGE F. OLDHAM, a citizen of the United States, residing at Toledo, in the county of Lucas and State of Ohio, have invented a new and useful Hem-Finder, of which the following is a specification.

This invention relates to construction of an endless element, accurate adjustment thereof relative to a second element, and the connections and devices whereby these results are effected.

This invention has utility when adapted to the measuring of skirts on people or models, permitting of rapid work with a maximum of accuracy.

Referring to the drawings, Figure 1 is a perspective view looking down on an embodiment of the invention in a hem-finder, parts being broken away. Fig. 2 is a fragmentary perspective view of the bottom side of the hem-finder shown in Fig. 1; and Fig. 3 is a vertical section through one of the legs, showing the connections for guiding and actuating the extensions.

The endless element 1 has a thin outer portion 2, which in the embodiment of the invention shown herewith serves as a garment-contacting portion, against which the skirt may be marked, creased, or folded over readily and pinned or fastened up for hemming. Rigid extensions or guides 3 are secured to element 1. These guides 3 may bear scales 4, as shown, the reading of which scales may be determined by index-point 5, carried by the element 6. The central element 6 and the surrounding rigid element 1 are relatively movable, and the scale secured to a member or formed on a member secured to one of the elements is movable relative to an index-point carried by the other element, thereby providing an accurate and convenient device for determining the relation between the elements. The element 6 has a plurality of legs 7, which are recessed on the inner sides. These recesses 8 of the legs serve to prevent wobbling of the guides 3, with which they telescope. Near the base or foot of each leg is an abutment 9, upon which the extensions 3 rest when the endless element 1 is in its lowest position. In such position the element 1 is accordingly supported through extensions 3 on the abutments 9 in the legs 7.

Near the end of each guide 3 remote from its connection to endless rigid element 1 is

connected flexible cables, one reach of which extends around a guide or pulley 11 near the foot of the leg, while a second reach of the flexible connection 10 extends toward the opposite end of the leg, where both reaches go around separate guide-pulleys 11, thence over still other guide-pulleys 11 on element 6, from whence the two reaches of connection 10 are oppositely wound on drums 12, carried by rotatable shaft 13, mounted transversely of element 6 in bearings 14. The shaft may be controlled by wheel 15. These connections are effective to positively and uniformly actuate element 1 through control of the rigid means extending as guides. The connection of the flexible means 10 to the guides 3 at 3' is shown in Fig. 3. From this connection the reaches of means 10 extend oppositely and are conducted to oppositely wind about the same actuating-shaft 13. Therefore the reaches on each side of the connection 3' uniformly travel, each reach is held taut, and the guide is positively and uniformly actuated up and down.

Operation: A model or person wearing the skirt upon which the hem is to be found is stood upon element 6 within the surrounding element 1. Presuming a short skirt is desired—say six inches from the ground or floor—the wheel 15 is rotated to operate through the connections to move element 1 from its zero position in the plane of the top of element 6, as shown in Fig. 2, to the position shown in Fig. 1, where six inches on the scale is opposite index-point 5. The garment may be marked where it contacts with thin portion 2 or it may be creased or folded thereover, as desired.

The connections are such that rotation of shaft 13 in one direction uniformly pays out the reaches of connections 10, which extend over guides 11 in the feet of the legs 7, while at the same time the remaining reaches connected to the guides 3 are as uniformly wound upon drums 12 to move the endless element 1 relatively to element 6. This operation lifts the endless element 1. Reversing the rotation of shaft 13 causes opposite movement of element 1.

The idea of the invention herein disclosed is not to be limited by the drawings and description to any greater extent than the ordinary meaning of the terms of the claims demand. In other words, the elements set

forth in the claims are to be interpreted broadly, giving me the advantage of equivalents in the protection of my idea.

What is claimed, and it is desired to secure
5 by Letters Patent, is—

1. A hem-finder comprising an endless element having guides, a central element, a rotatable shaft carried by the central element, a plurality of uniformly-operable flexible
10 means separately connecting the shaft and the guides to move the endless element and guides for the flexible means.

2. An endless rigid element, extensions

therefrom, a second element having guides for the extensions, a rotatable shaft and
15 guide-pulleys mounted on the second element, and a plurality of flexible connections guided by the pulleys for uniformly actuating the extensions to move the endless element.
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In testimony whereof I affix my signature in the presence of two witnesses.

GEORGE F. OLDHAM.

Witnesses:

THOMAS H. YOUNG,
GEO. E. KIRK.