

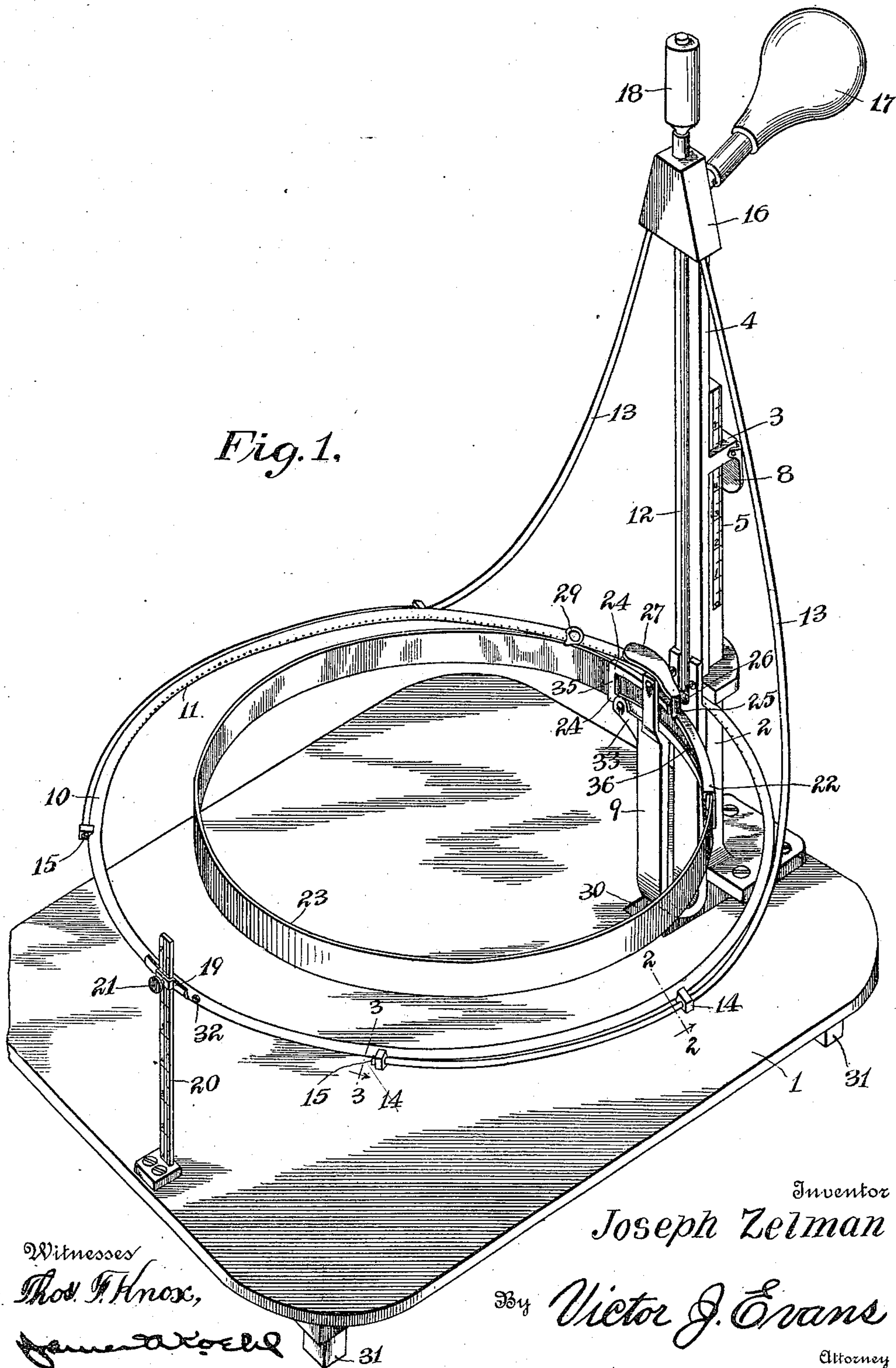
989,470.

J. ZELMAN.
SKIRT MARKER.

APPLICATION FILED MAY 21, 1910.

Patented Apr. 11, 1911.

2 SHEETS—SHEET 1.

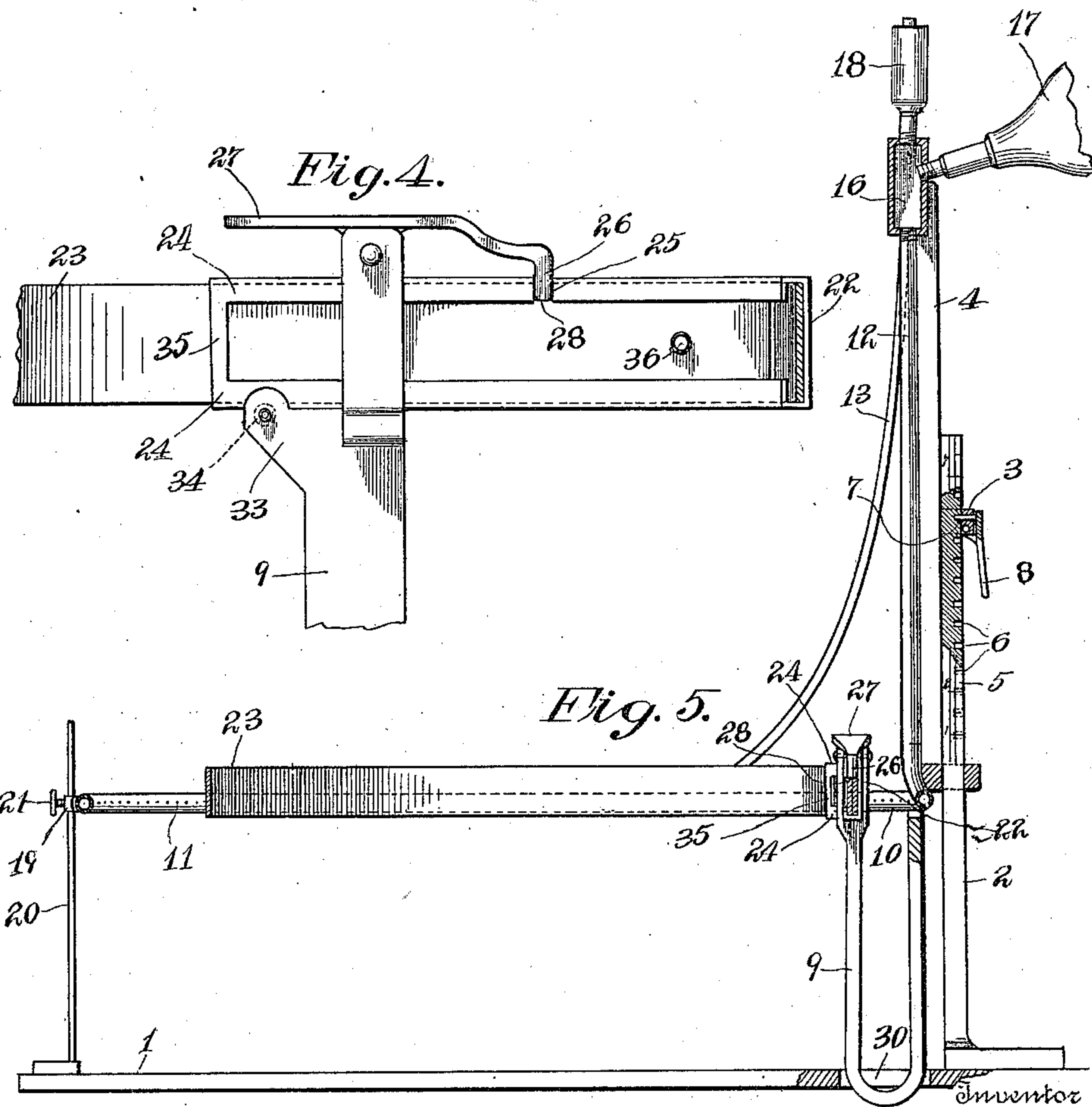
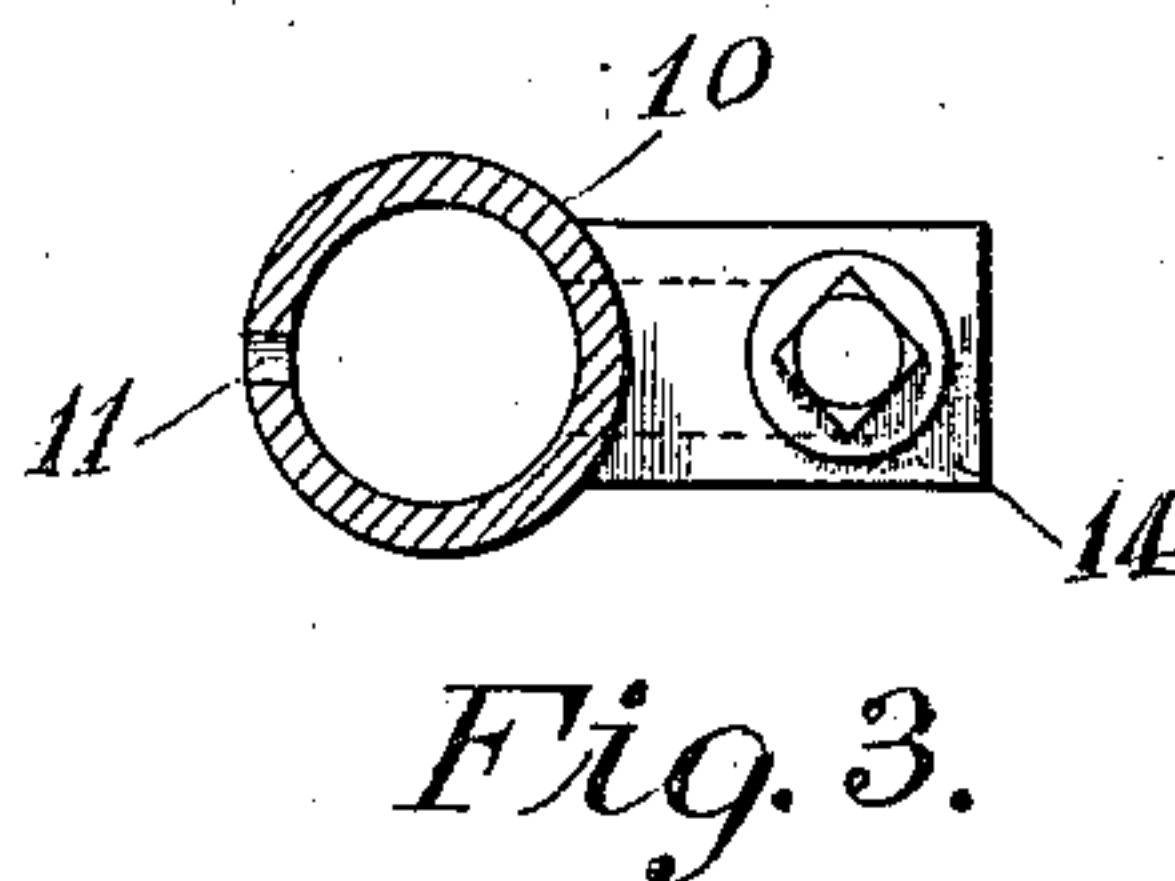
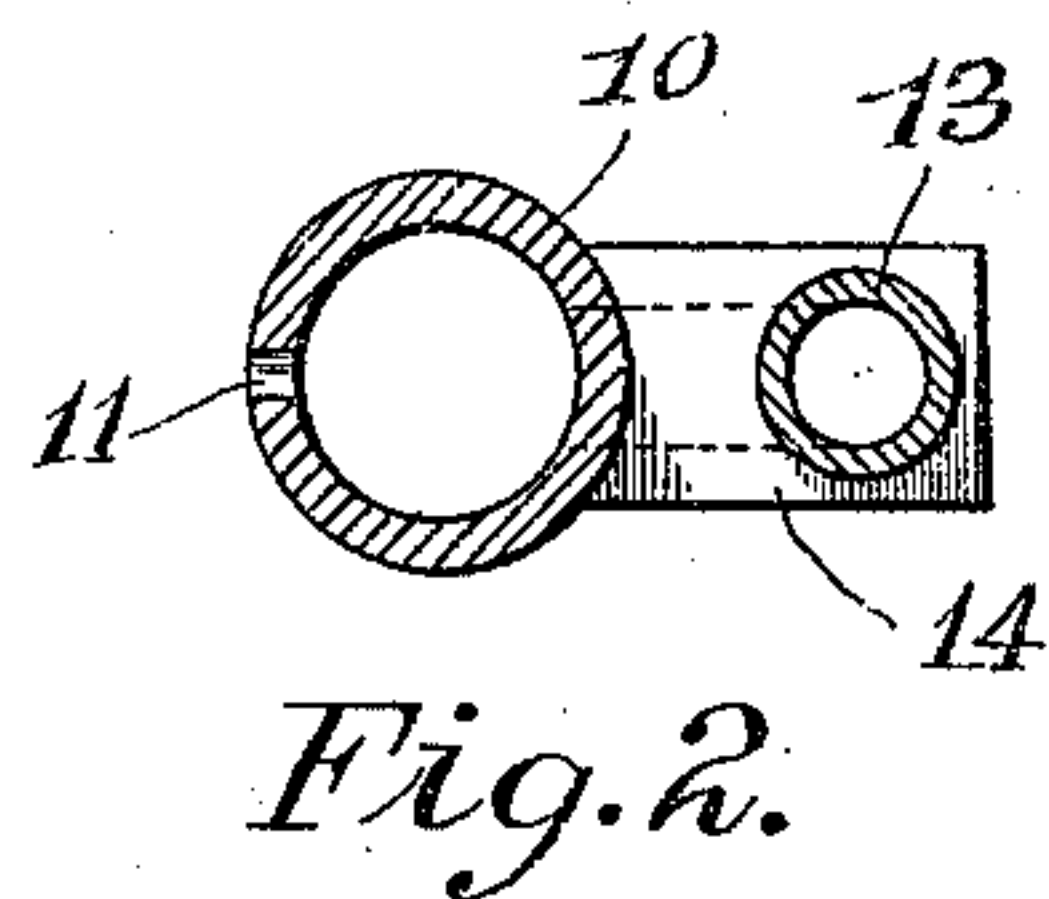


989,470.

J. ZELMAN.
SKIRT MARKER.
APPLICATION FILED MAY 21, 1910.

Patented Apr. 11, 1911.

2 SHEETS—SHEET 2.



Witnesses

Thos. H. Knox,

James H. Knox

Joseph Zelman
By *Victor J. Evans*

Attorney

UNITED STATES PATENT OFFICE.

JOSEPH ZELMAN, OF EL PASO, TEXAS.

SKIRT-MARKER.

989,470.

Specification of Letters Patent.

Patented Apr. 11, 1911.

Application filed May 21, 1910. Serial No. 562,719.

To all whom it may concern:

Be it known that I, JOSEPH ZELMAN, a citizen of the United States of America, residing at El Paso, in the county of El Paso and State of Texas, have invented new and useful Improvements in Skirt-Markers, of which the following is a specification.

This invention relates to skirt markers, and the object is to provide a conveying tube through which a quantity of marking powder can be ejected, a clamping band being employed and formed to engage the skirt to hold it so positioned against the conveying tube as to be subjected to the full action of the powder.

In the drawings, forming a portion of this specification and in which like numerals of reference indicate similar parts in the several views:—Figure 1 is a perspective view of my improved skirt marker. Fig. 2 is a detail section taken on the line 2—2 of Fig. 1. Fig. 3 is a similar view taken on the line 3—3 of Fig. 1. Fig. 4 is a detail elevation of a portion of a clamping band and the locking member for engagement with the free terminal of the band. Fig. 5 is a detail vertical section through the marker, parts being shown in full line.

The marker consists of a suitable table or support 1 which may be of any well known design best adapted for the purpose intended. At one end the table supports a bracket 2 which receives the guide 3 of a carrier 4, the said carrier being adjustable on the guide vertically thereof and formed to cooperate with the designating characters or degree marks 5, a suitable number of passages 6 according to the arrangement of the degree marks being employed and designed for receiving the finger 7 of a pivoted retaining dog 8 on the guide 3. A bracket 9 of U-form is located directly in front of the bracket 2 and as illustrated, such bracket supports a circular conveying tube 10 having an annular series of perforations 11 on its inner side. This conveying tube is connected with a central feed pipe 12 and with side branch pipes 13. The pipes 13 at their lower extremities are disposed outside of the conveying tube 10, and as illustrated, they open into such tube through connections 14. The connections 14 are arranged at the desired intervals on the conveying tube and those at the terminals of the pipes 13 are provided with suitable removable plugs 15 to facilitate cleaning such pipes when de-

sired. The upper ends of the pipes 12 and 13 open into a blast receptacle 16 with which is connected a bulb 17 or the equivalent thereof. The top of the receptacle 16 supports a container 18 for the marking powder. This powder may be talcum powder, chalk or other substance which may be blown through the pipes 12 and 13 and into the conveying tube.

At the front the conveying tube is provided with a guide 19 through which a bracket 20 on the table 1 extends. The bracket is graduated in a manner identical to that described for the bracket 2. The guide carries a set screw 21 which is designed to engage the standard 20 to hold it relatively fixed to the tube. By providing the front and rear standards for supporting the tube it will be seen that a very accurate adjustment of the latter can be obtained and the tube will be braced to prevent damage thereto should it be stepped upon accidentally.

The front arm of the bracket 9 is forked for the reception of a bracket 22. This bracket has secured thereto one terminal of a circular leaf spring 23, the opposite terminal being slidably associated with the guides 24 of the bracket. The upper guide 24 of the bracket is notched, as shown at 25, to receive the nose 26 of a locking dog 27. This dog is pivoted to the front arm of the bracket 9 and is designed to be engaged in the notch 28 in the free end of the leaf spring 23. In this manner the spring may be held contracted or under tension and it may be spaced suitably from the conveying tube. The spring 23 adjacent to the free end thereof is provided with a suitable finger-hold 29 which may be manipulated when it is desired to move the spring 23 under tension or to close the same. The bracket 9 is slidable in a passage 30 in the table 1, and as shown, the said table is provided with supports or legs 31 to hold the table spaced from the floor in use of the marker. The construction of the marker herein described and shown is such that when the spring 23 is in a closed position it is spaced sufficiently from the conveying tube 10 to provide an annular face for the reception of the lower portion of the skirt.

In operation of the marker, the one on whom the skirt is to be marked stands centrally of the table 1 with the lower edge of the skirt between the spring 23 and the tube

10. These parts are then adjusted to the desired extent and on releasing the dog 27 the spring 23 under expansion will bear against the skirt to hold it yieldingly against the perforated side of the conveying tube 10. When pressure is exerted on the bulb 17 the desired quantity of marking powder will be blown into the pipes 12 and 13 and thence into the conveying tube where it will be discharged by way of the perforations directly onto that portion of the skirt to be marked. The conveying tube is provided with a removable plug 32 which is of a construction identical with the plugs 15 and 15 when desired the operator may remove these plugs and by the insertion of a wire or the like into the tube and into the feed pipes they may be cleaned. The bracket 9 is provided with an extension 33 in which a roller 20 34 is mounted. This roller is positioned to engage the free terminal of the spring 23 affording free movement of such terminal on release of the dog 27 therefrom. The guide 24 is formed to provide a stop 25 35 against which the lug 36 on the free end of the band may be engaged to limit the movement of the free end of the spring under expansion.

I claim:—

30 1. A skirt marker comprising a support, an adjustable perforated conveying tube thereon, an expansible confining element carried by the support for holding the skirt against the perforated side of the tube, a 35 container for a marking substance, and feed means for feeding the substance from the container to the said perforated tube.

40 2. A skirt marker comprising a perforated tube, a spring clamp conforming substantially in configuration with the tube

and constructed for clamping engagement with the skirt to hold it against the perforated side of the tube, the clamp having a fixed end and a free end, and means on the fixed end of the clamp engaging the said 45 free end to hold the clamp out of engagement with the said perforated tube.

3. A skirt marker comprising a vertically adjustable perforated tube of ring form, a spring clamping member for engaging the 50 skirt to hold the same against the perforated side of the tube, a container for a marking substance, discharge connections between the container and the perforated tube, a substantially U-shaped member connecting the clamp with the tube, supporting 55 means for the adjustable tube, and means for holding the tube in its adjusted position on the supporting means.

4. A skirt marker comprising a support, a 60 vertically adjustable tube thereon, means adjustably supporting said tube upon said support, means for securing said tube in its adjusted position, a vertically adjustable 65 clamp carried by the supporting means and spaced from the inner side of the tube and designed to engage the skirt to hold it against the tube, a powder receptacle, connections between the powder receptacle and the said tube, the said tube having dis- 70 charge perforations therein opening directly upon the clamp, and force feed means operatively connected with the powder receptacle to convey the powder to the tube.

In testimony whereof I affix my signature 75 in presence of two witnesses.

JOSEPH ZELMAN.

Witnesses:

JAMES F. LEONARD,
L. ROVO.