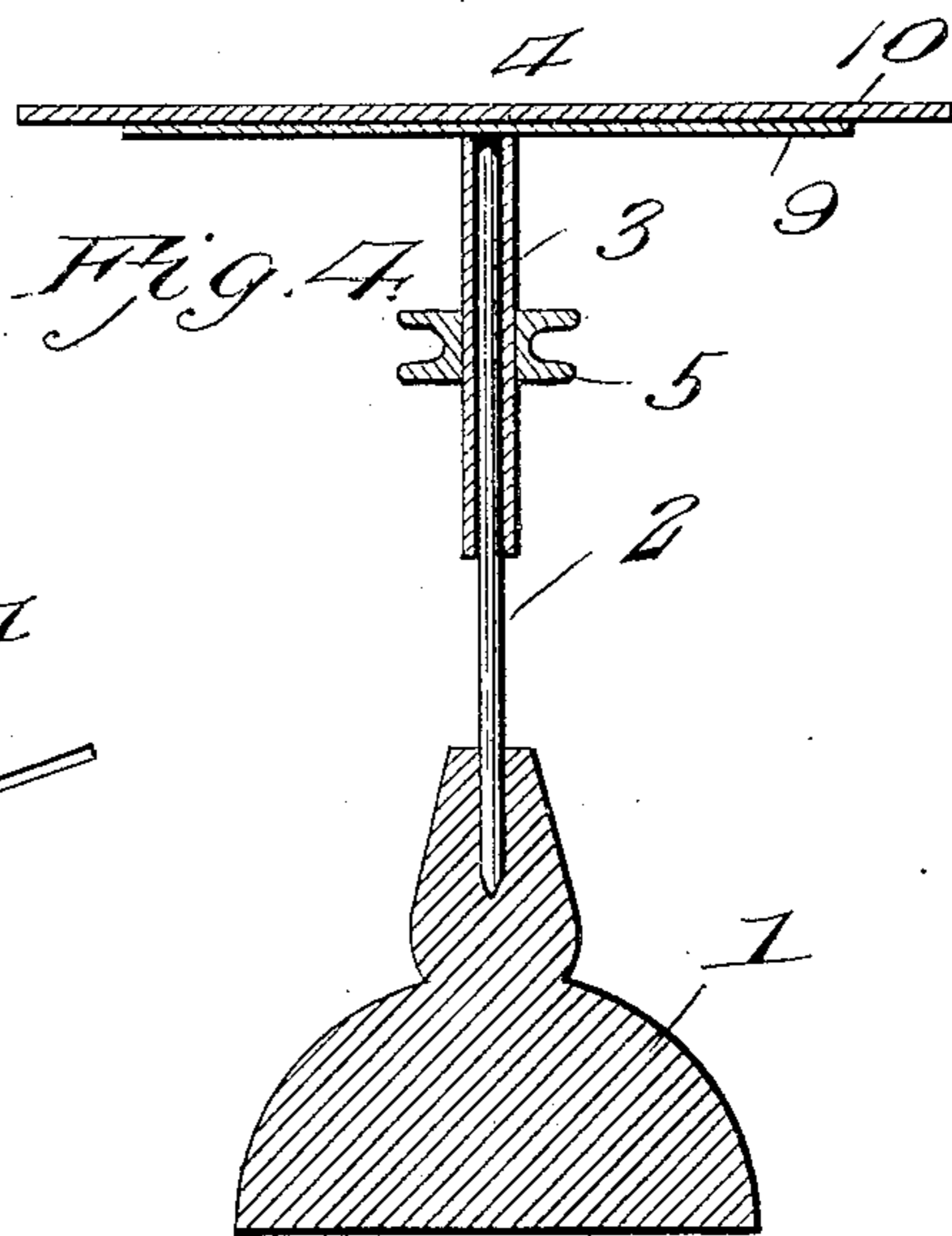
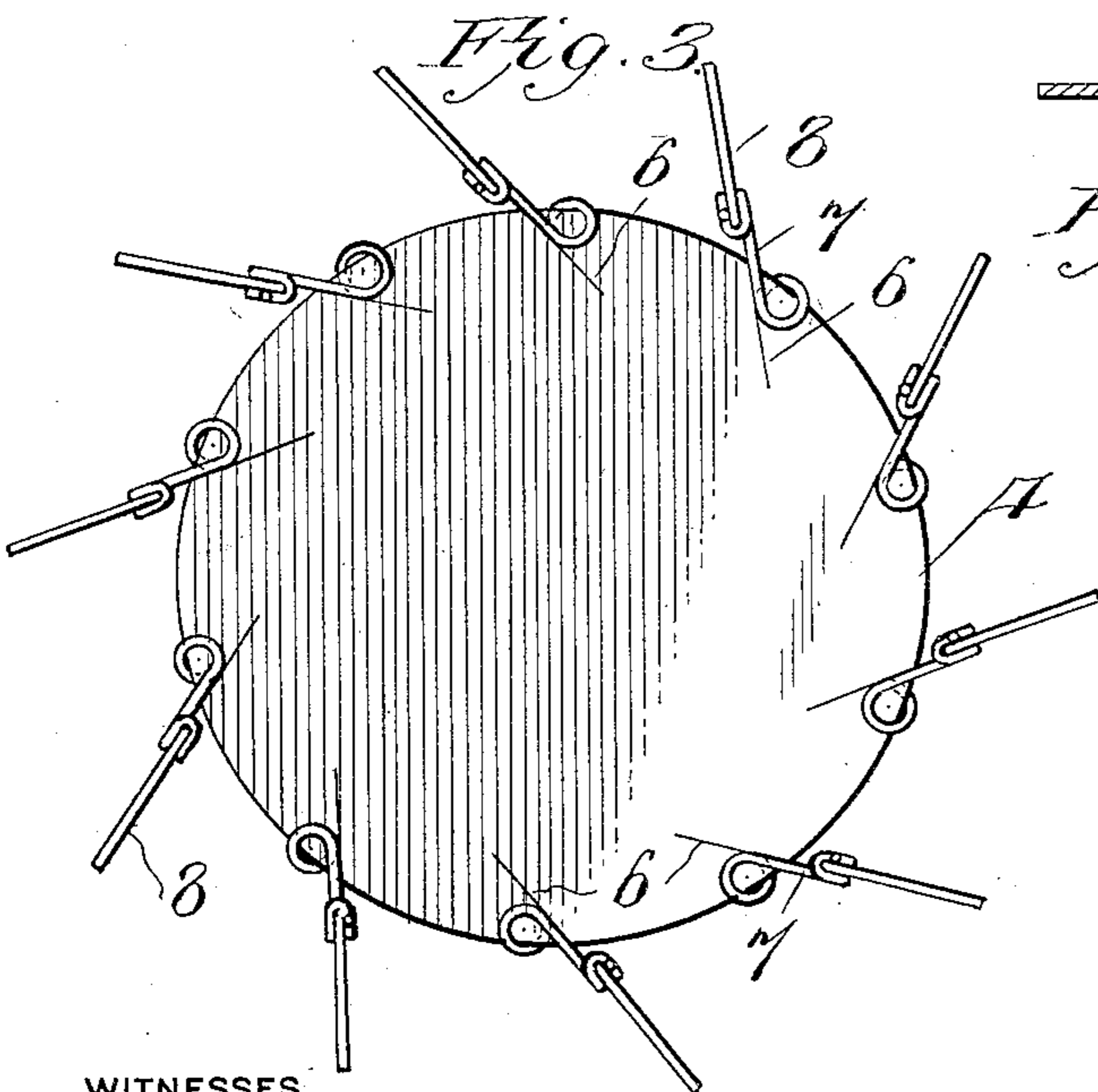
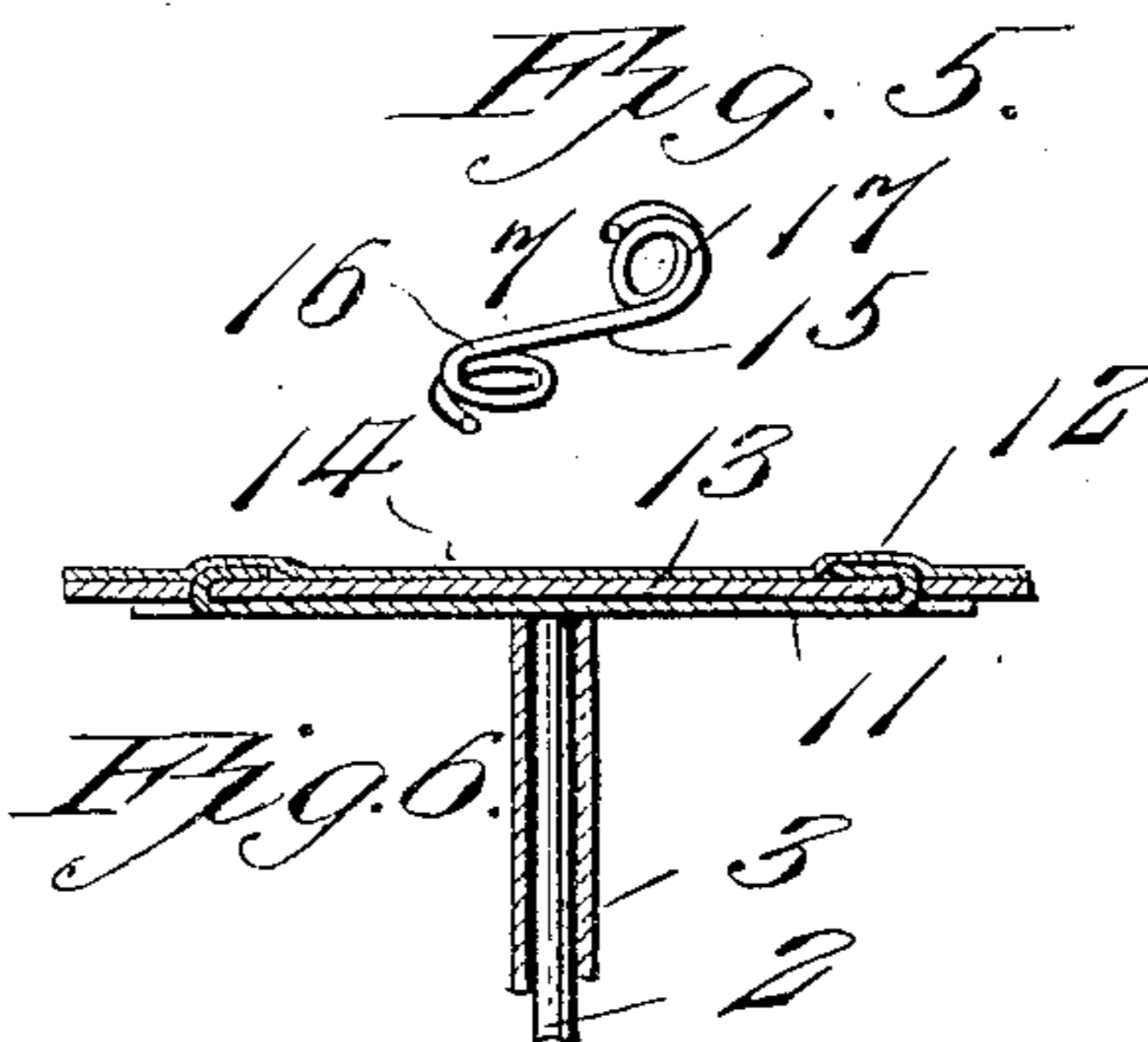
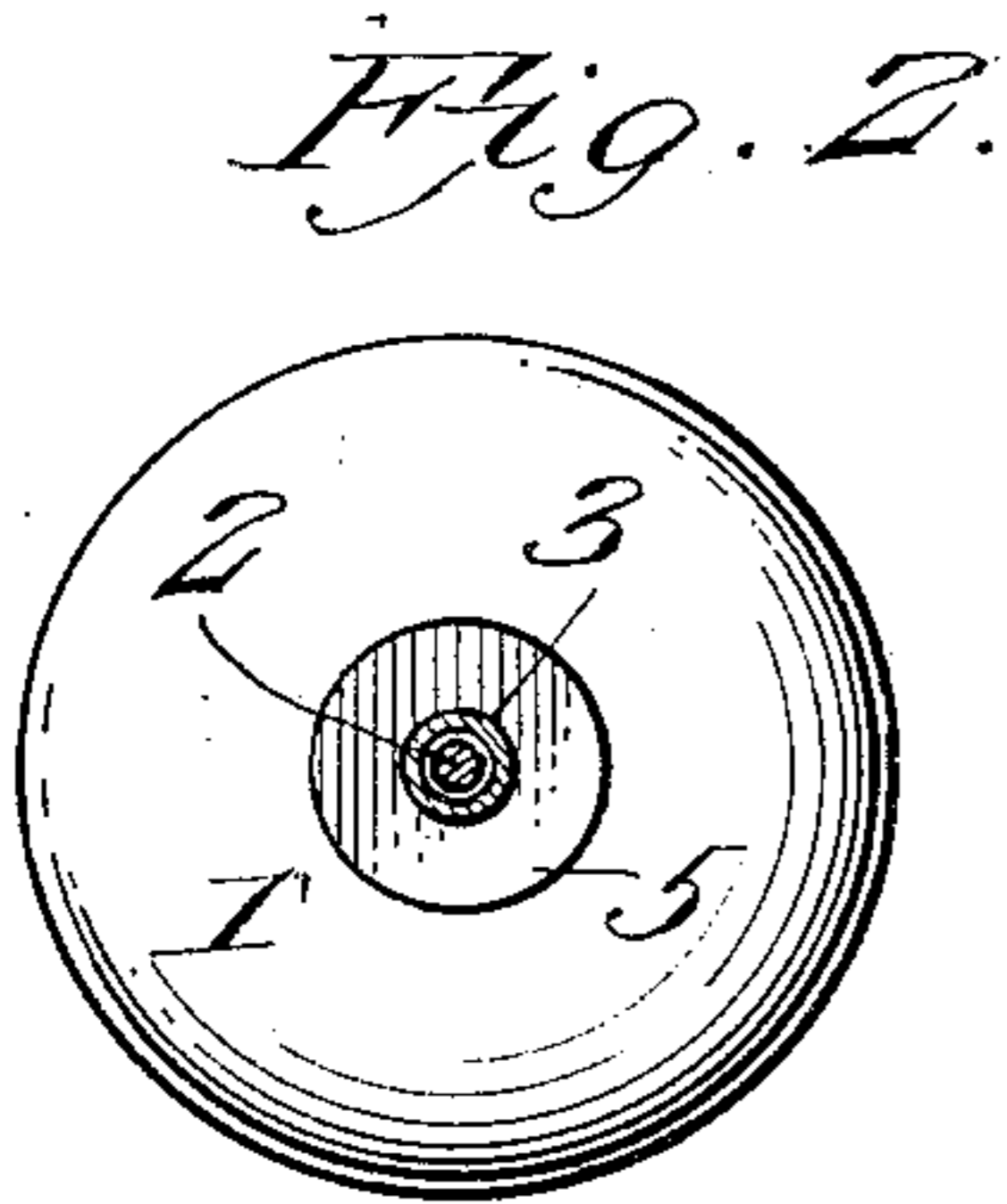
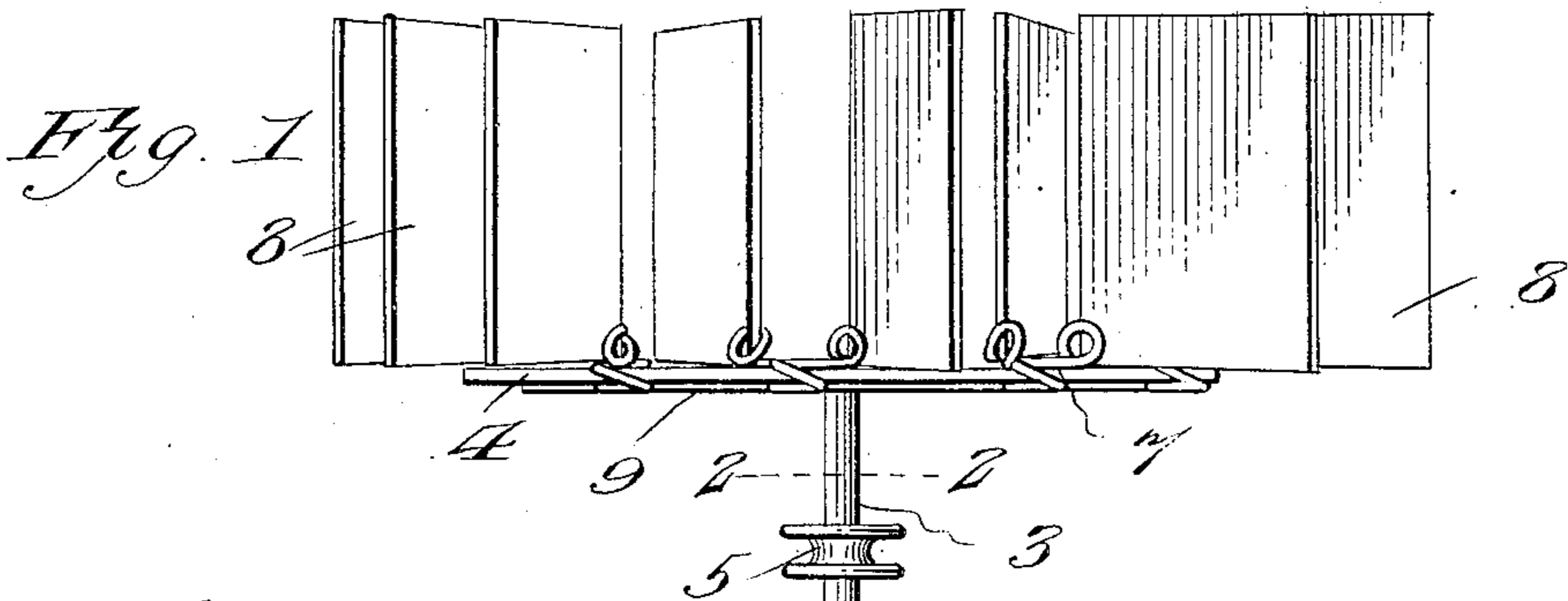


H. O. COSTELLO.

MUTOSCOPE.

APPLICATION FILED JULY 1, 1903.

NO MODEL.



WITNESSES

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UNITED STATES PATENT OFFICE.

HENRY O. COSTELLO, OF PROVIDENCE, RHODE ISLAND.

MUTOSCOPE.

SPECIFICATION forming part of Letters Patent No. 747,684, dated December 22, 1903.

Application filed July 1, 1903. Serial No. 163,920. (No model.)

To all whom it may concern:

Be it known that I, HENRY O. COSTELLO, a citizen of the United States, residing at Providence, in the county of Providence and State of Rhode Island, have invented new and useful Improvements in Mutoscopes, of which the following is a specification.

This invention relates to mutoscopes; and the object of the same is to produce a simple and effective apparatus for presenting a series of pictures in rapid succession to the eye of an observer and to embody in the construction means whereby the pictures may be readily applied or detached to a rotary member included in a mutoscope organization.

The invention consists in the construction and arrangement of the several parts, subject to a wide range in modification as to form, size, and general proportions, which will be more fully hereinafter described and claimed.

In the drawings, Figure 1 is an elevation of a mutoscope embodying the features of the invention. Fig. 2 is a horizontal section on the line 2-2, Fig. 1. Fig. 3 is a top plan view of the mutoscope. Fig. 4 is a transverse vertical section of a mutoscope with the picture-cards detached. Fig. 5 is a detail perspective view of the preferred form of picture-holder. Fig. 6 is a transverse vertical section of a part of the mutoscope, showing a modification in the construction.

Similar numerals of reference are employed to indicate corresponding parts in the several views.

The numeral 1 designates a base rest or support, which may be of any suitable material or shape and having sufficient weight to hold the mutoscope in steady upright position. Secured in the upper end of the support is a spindle 2, over which is loosely and removably fitted a sleeve 3, depending from the center of the under side of a rotary member 4, the latter being of disk-like form. The sleeve 3 and member 4 are rotatable on the spindle 2, and for conveniently operating said parts the sleeve 3 at an intermediate point has a finger-engaging pulley 5 fixed thereon. The rotary member 4 on its upper surface has a series of lines 6 defined thereon and disposed at an oblique angle to the perimeter of said member as a guide means

for applying holders 7 to the rotary member. These holders may be varied in form and are freely removable from the rotary member, so that one set of picture-cards may be readily removed and replaced by another set. The outer terminals of the holders are formed with grasping or clamping means for engagement by picture-cards 8. The indicating-lines 6 assist the operator in disposing the holders and picture-cards carried thereby at a proper angle relatively to the eyes of an observer.

From the foregoing it will be seen that the invention contemplates in its broadest sense a rotary member having picture-holders removably applied to the perimeter thereof.

The rotary member 4 in its simplest construction comprises a metallic disk 9, on which is secured by adhesive material a paper or other analogous disk 10 of a diameter greater than that of the disk 9, and from the center of the metallic disk 9 the sleeve 3 depends. By making the rotary member as set forth it is rendered lighter and sufficiently strong to resist wear, and by having the disk 10 of greater diameter than the disk 9 interference with the application of the holders is obviated. The form of the rotary member shown by Fig. 6 comprises an under metallic disk 11, from which the sleeve 3 depends, having clips 12 cut therefrom at regular intervals and turned up through and over a paper or analogous disk 13, the ends of the clips being closely bent down against the top surface of the disk 13, and a covering 14, of thinner paper or other suitable material, is then applied from the top surface of the said disk 13 to hide the clips.

The preferred form of the holder 7 is shown by Fig. 5 and consists of a piece of resilient wire having an intermediate straight body 15, an inner horizontally-disposed coil 16, and an outer vertically-disposed coil 17, the coil 16 being removably applied over the edge of the disk 10 or 13 and the outer coil receiving the picture-card 8. Several sets of the holders 7 will be supplied with each mutoscope, and the cards representing different bodily movements or postures of individuals will be first secured in the coils 17 and the holders afterward applied to the rotary member, as shown by Fig. 3. The holders carrying a set

of cards relating to one subject may be readily replaced by holders carrying other cards, and when the mutoscope is not in use all the cards will be detached from the rotary member 5 and the latter withdrawn from the spindle 2 to permit the entire mutoscope to be compactly stored within a small space. It will be understood that after the cards are applied to the rotary member the latter is rapidly turned 10 through the medium of the finger-pulley 5 on the sleeve 3.

The materials employed in the structure of the mutoscope may be varied at will and the parts plated or otherwise ornamented to pre- 15 sent a pleasing appearance.

One material advantage of the improved mutoscope herein disclosed is that within a comparatively small space with a less number of picture-cards the same result can be 20 attained as in the use of a number of cards now commonly employed in analogous devices.

Having thus fully described the invention, what is claimed as new is—

25 1. A mutoscope, having a rotary member with a series of lines defined thereon at an angle to the perimeter thereof, holders removably applied to the perimeter of the member adjacent to the lines, and picture-cards 30 carried by the holders.

2. A mutoscope, having a rotary member, and a series of picture-cards supported outwardly from the perimeter of said member and freely detachable, the said cards being held at an angle of inclination to the perim- 35 eter of the member and disposed in upright position.

3. A mutoscope having a rotary member with a series of indicating-lines thereon at an angle to the perimeter thereof, and picture- 40 card holders removably applied to the rotary member and coinciding with the said lines whereby the cards carried by the holders will be disposed at a proper angle relatively to the eyes of the observer. 45

4. A mutoscope having a rotary member consisting of a lower metallic plate with a central depending sleeve, a paper disk se- 50 cured on the said plate and of greater diameter than the latter, picture-card holders for removable engagement with the perimeter of said paper disk, and means for engaging the sleeve.

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

HENRY O. COSTELLO.

Witnesses:

WILLIAM F. COSTELLO,
MICHAEL J. DYER.