

No. 656,499.

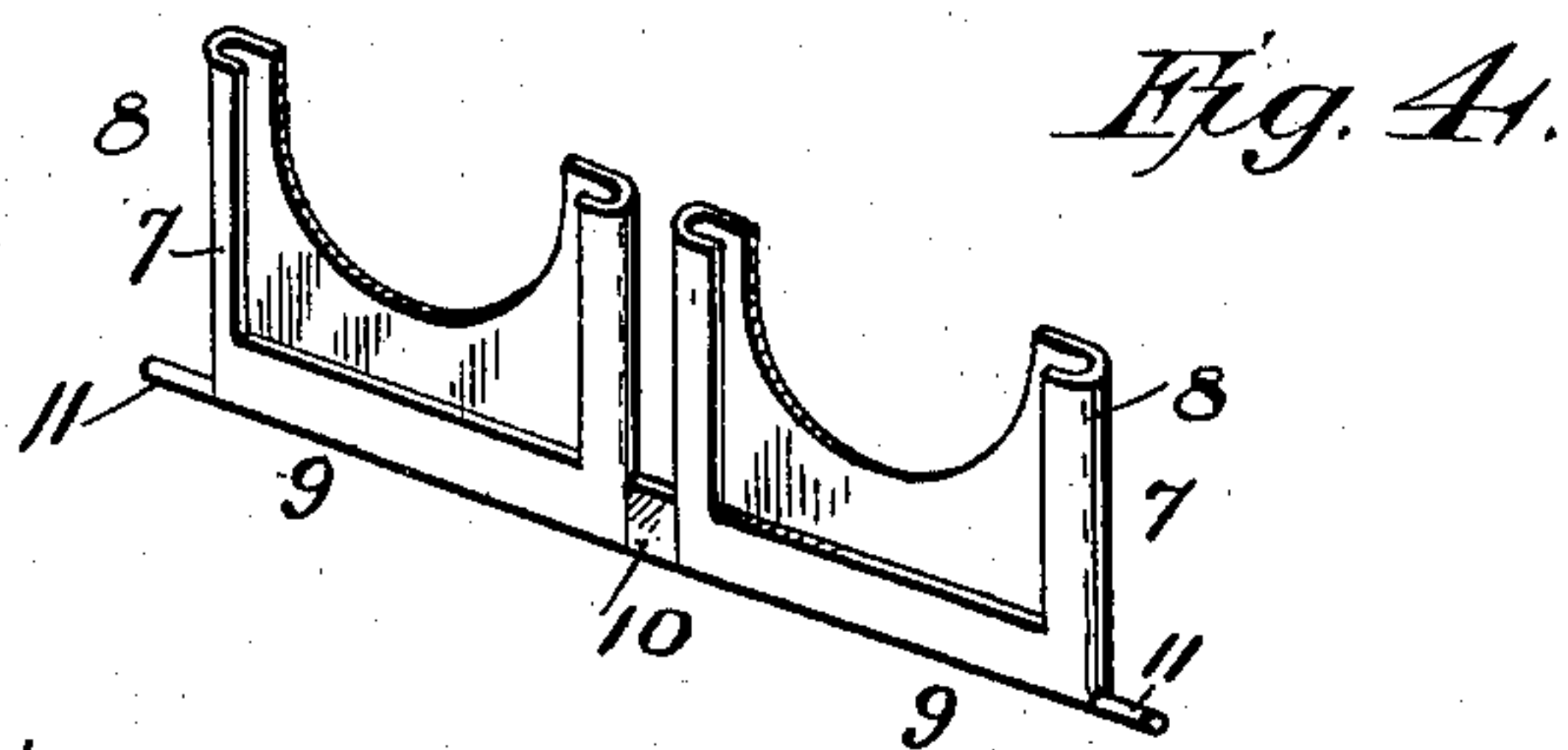
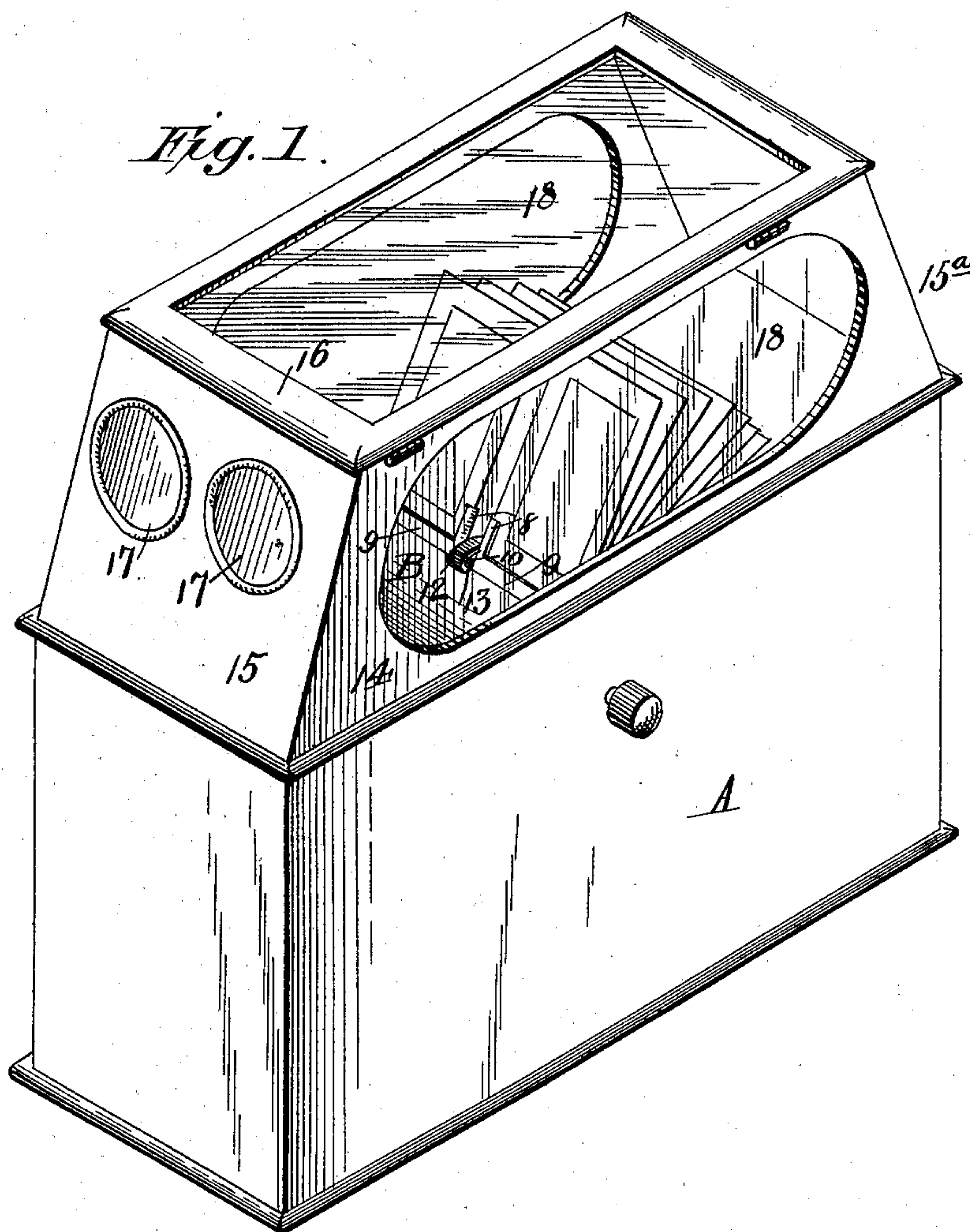
Patented Aug. 21, 1900.

J. O. BODÉN.
STEREOSCOPE.

(Application filed Apr. 20, 1900.)

(No Model.)

2 Sheets—Sheet 1.



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2 Sheets—Sheet 2.

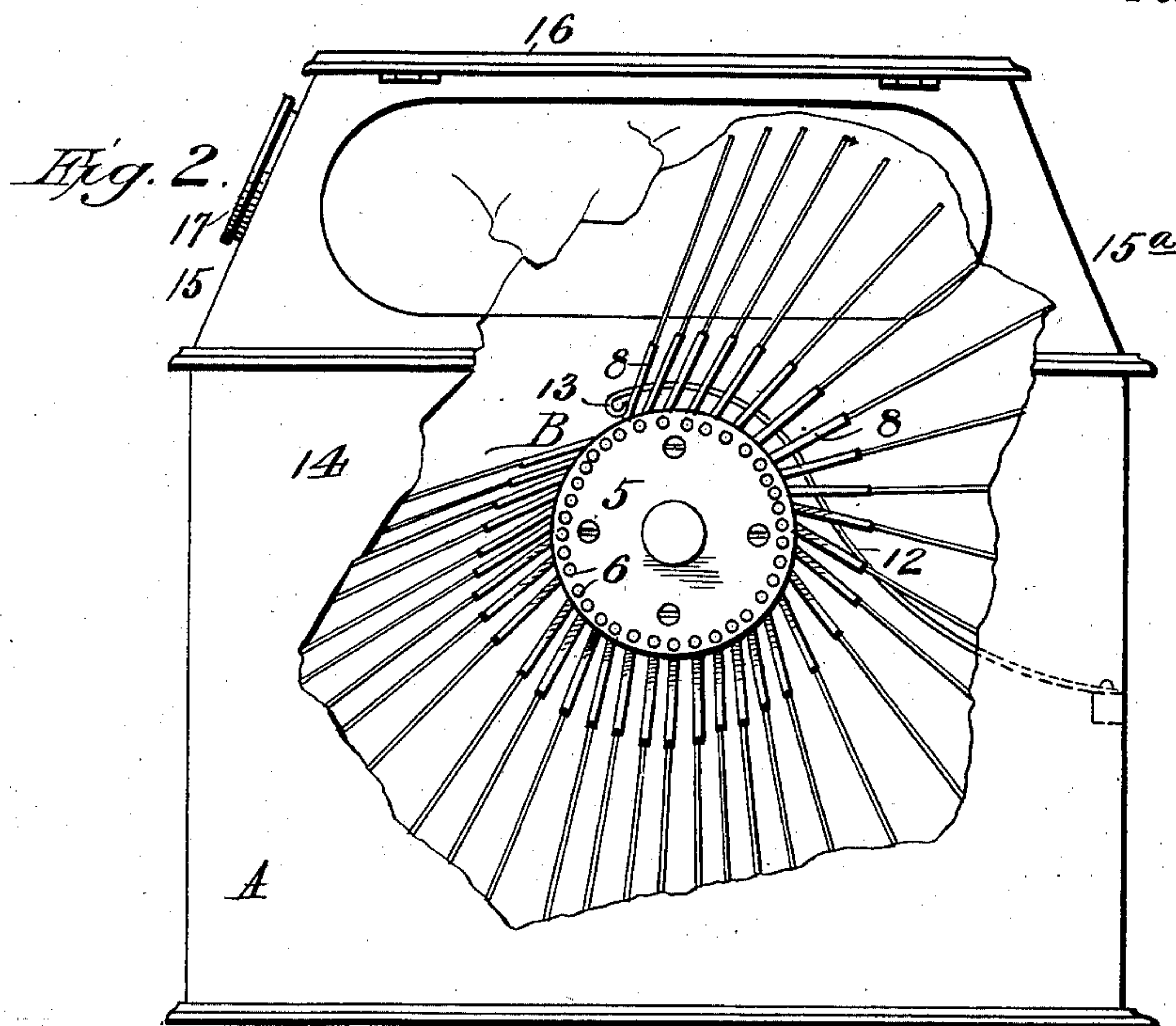


Fig. 3.

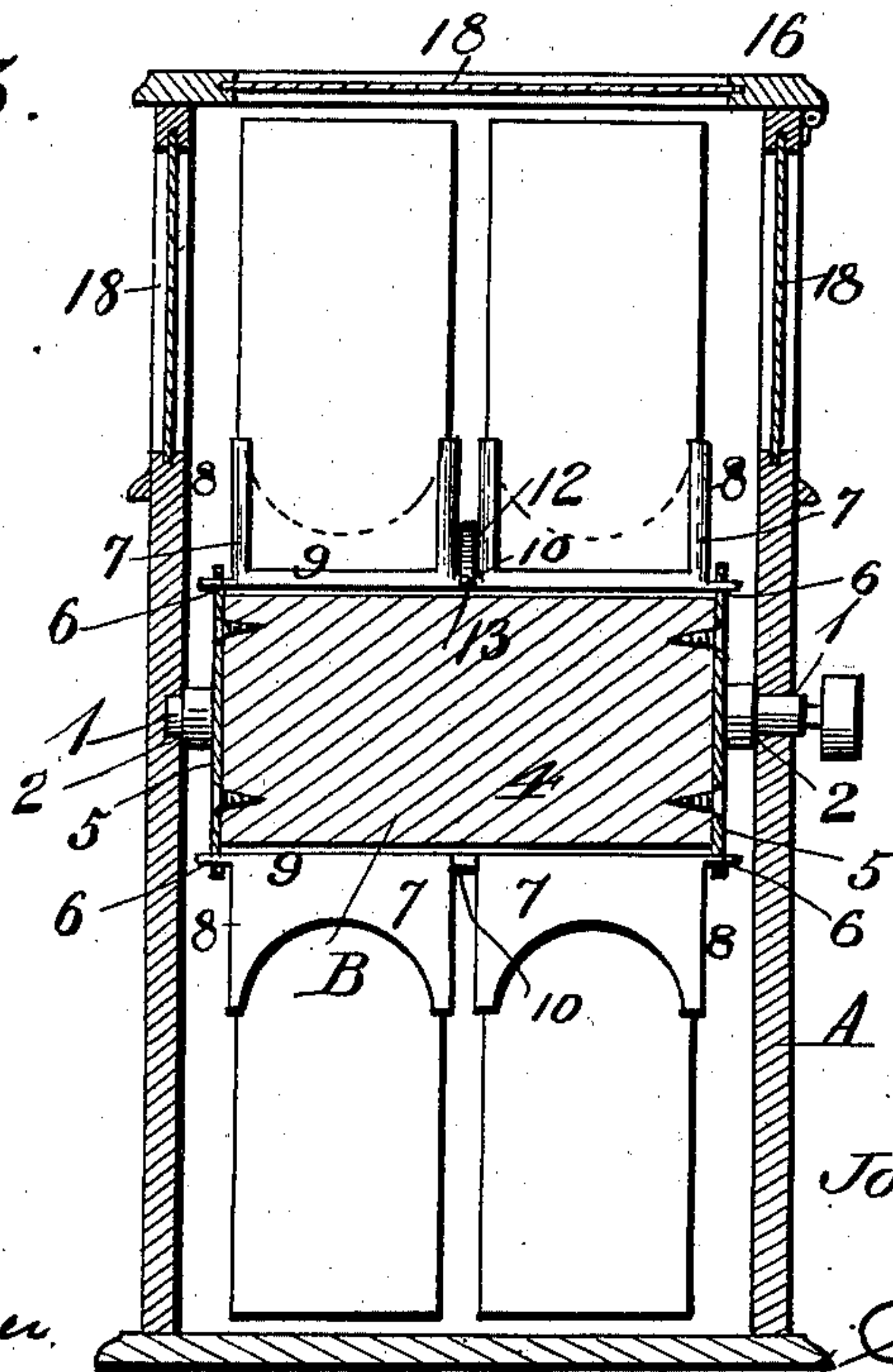
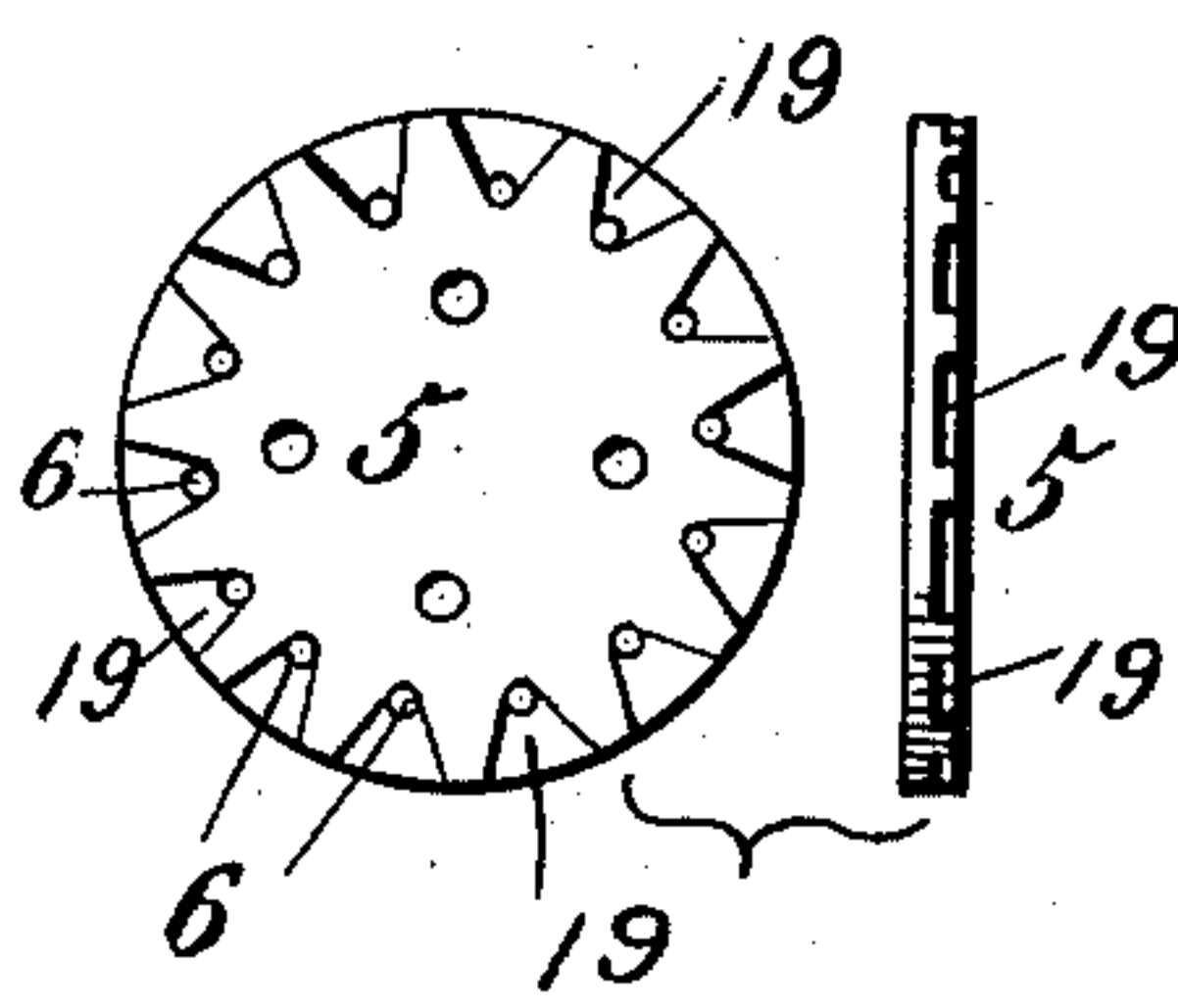


Fig. 5.



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UNITED STATES PATENT OFFICE.

JONAS O. BODÉN, OF YOUNGSTOWN, OHIO.

STEREOSCOPE.

SPECIFICATION forming part of Letters Patent No. 656,499, dated August 21, 1900.

Application filed April 20, 1900. Serial No. 13,609. (No model.)

To all whom it may concern:

Be it known that I, JONAS O. BODÉN, a citizen of the United States, residing at Youngstown, in the county of Mahoning and State of Ohio, have invented new and useful Improvements in Stereoscopes, of which the following is a specification.

My invention relates to stereoscopes, and more particularly to the kind in which a series of pictures can be successively brought into position for viewing through the lenses.

The object of my invention is to provide an apparatus of this character which combines simplicity with efficiency and beauty of design with usefulness—one in which the pictures will be secure in their frames, but at the same time may be easily removed and others substituted. These advantages are accomplished by a novel arrangement and combination of parts to be hereinafter fully described and claimed.

In the drawings which accompany this specification and of which they form a part, Figure 1 is a perspective of my machine. Fig. 2 is a side view of the same with parts broken away. Fig. 3 is a central transverse section of the same. Fig. 4 is a front elevation of one of the picture-holders. Fig. 5 is a modified form of cylinder-head which I may use.

In the drawings like characters of reference denote like parts wherever they occur.

My device consists of a cabinet A of convenient size and a picture-cylinder B, mounted in said cabinet. The cylinder B consists of the combination of stub-shafts 1, journaled in the sides of cabinet A, said shafts being provided with shoulders 2 to prevent wobbling and fitted at one end with an operating-knob, a cylinder 4 of light material keyed to shaft 1, cylinder-heads 5, fastened to the ends of said cylinder by screws or otherwise, said cylinder-heads having corresponding perforations near their periphery, and picture-holders 7, mounted in perforations 6, said picture-holders consisting of two single holders 8, formed integral with or mounted on member 9, with an intervening portion 10, member 9 having integral therewith cylindrical portions 11, which fit perforations 6. A spring 12, provided with a coiled end 13, is mounted in cabinet A, with one end extending between

the single holders 8 and curved over so that the coiled end catches on the portion 10 of one of the frames and holds it in position to be viewed. Cabinet A is formed of a lower portion of ordinary construction and a top portion consisting of sides 14, inclined ends 15 and 15^a, and hinged top 16. End piece 15 is inclined at an angle just sufficient to make it parallel to the plane of the picture in viewing position. Seated in sockets in end piece 15 are lenses 17 for viewing the pictures, and they are inclined so as to give the stereopticon effect. Set in sides 14 and top 16 are lights 18 to furnish a supply of light to the instrument.

In Fig. 5, illustrating a modified form of my cylinder-heads, V-shaped notches 19 are shown. These notches extend but part way through the cylinder-head 5 and serve to limit the swing of the frames 9 and prevent them from clashing.

The operation of my device is as follows: The hinged top of the cabinet is first raised and the holders filled with pictures or photographs, each pair of pictures being alike. The top is then closed and the knob turned in the direction of the arrow till the picture desired comes in position with the end of the spring holding it. It is then in a position parallel to the plane of the lenses and can be looked at as long as desired. When another is desired, the knob is turned farther, the spring releases the first one, and it falls by gravity, making room for the second to be seen. In this manner any picture can be brought into position for viewing. As the pictures lean backward during the time they are being looked at all danger of the spring releasing its grip is obviated.

My device is also adapted to be used as a kinetoscope to show a succession of pictures of a moving object. When used in this manner, a continuous series of pictures of the moving object is inserted in the picture-frames and the cylinder rapidly revolved, while the pictures are viewed through the lenses.

I do not wish to be limited as to details of construction, as many changes can be introduced without departing from the spirit of my invention.

Having thus completely described my invention, what I claim, and wish to secure by Letters Patent, is—

1. In a stereoscope, a cylinder journaled in
5 a casing, picture-frames mounted in pairs on
common shafts journaled in said cylinder,
and a curved spring arranged to extend be-
tween said pairs of frames and engage in suc-
cession said shafts to retard said frames and
10 hold them in viewing position as the cylin-
der is revolved.

2. In a stereoscope, a cylinder, a support

for said cylinder, a double picture-frame
mounted on a shaft supported by said cylin-
der, said shaft, and a curved spring adapted 15
to engage said shaft to retard said frames and
retain them momentarily in viewing position.

In testimony whereof I have hereunto set
my hand in presence of two subscribing wit-
nesses.

JONAS O. BODÉN.

Witnesses:

JAMES M. MCKAY,
JENNIE MORRISON.