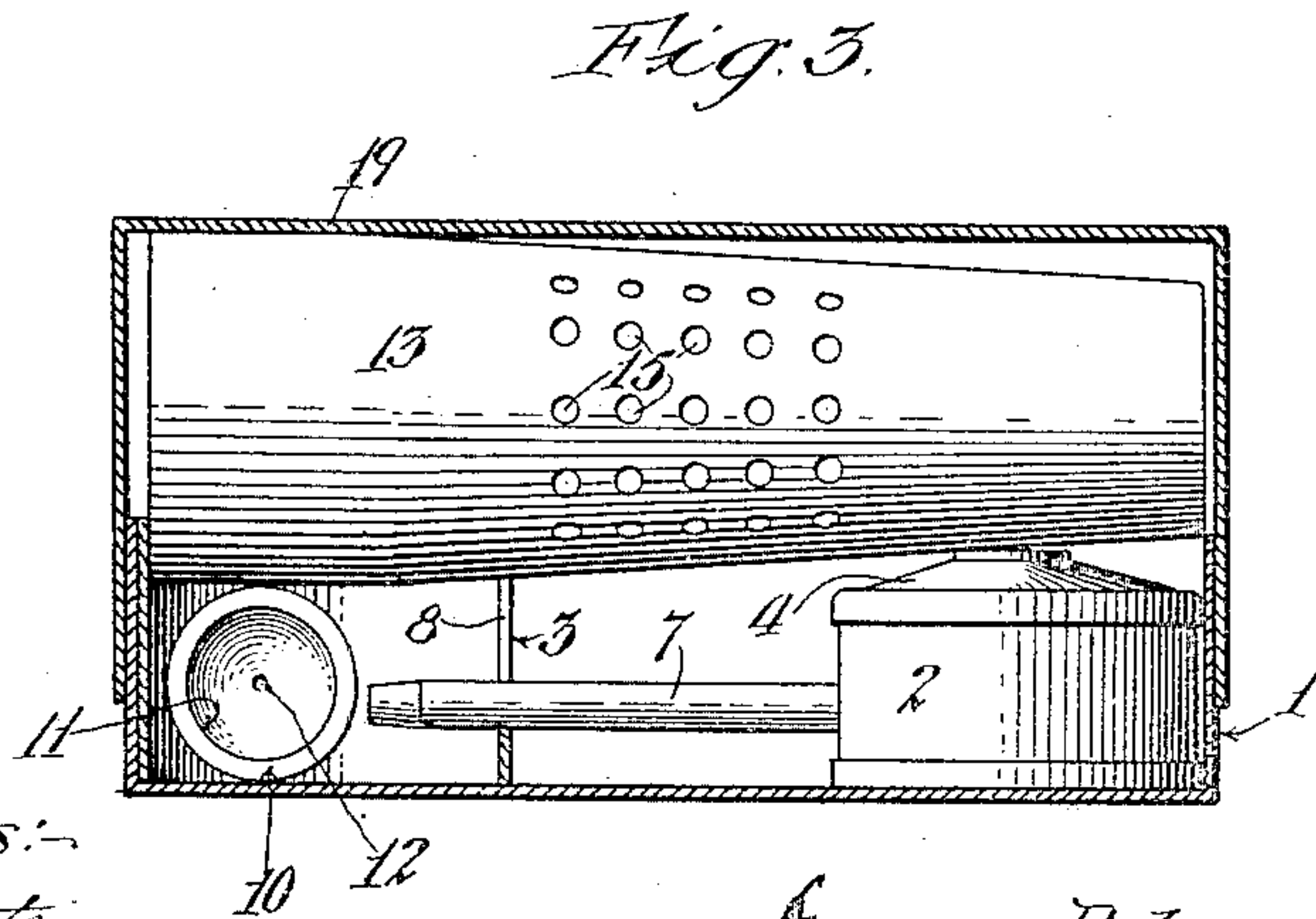
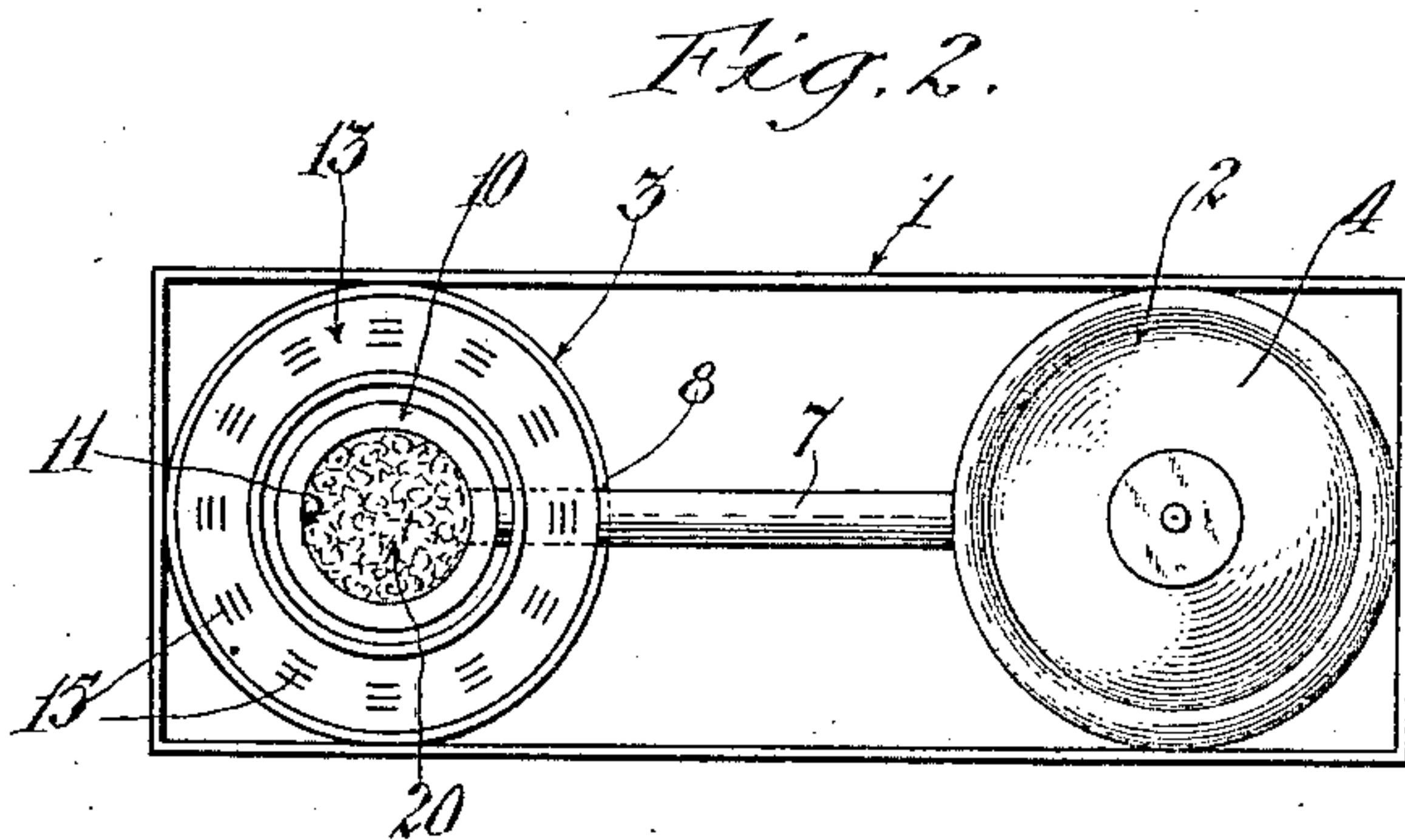
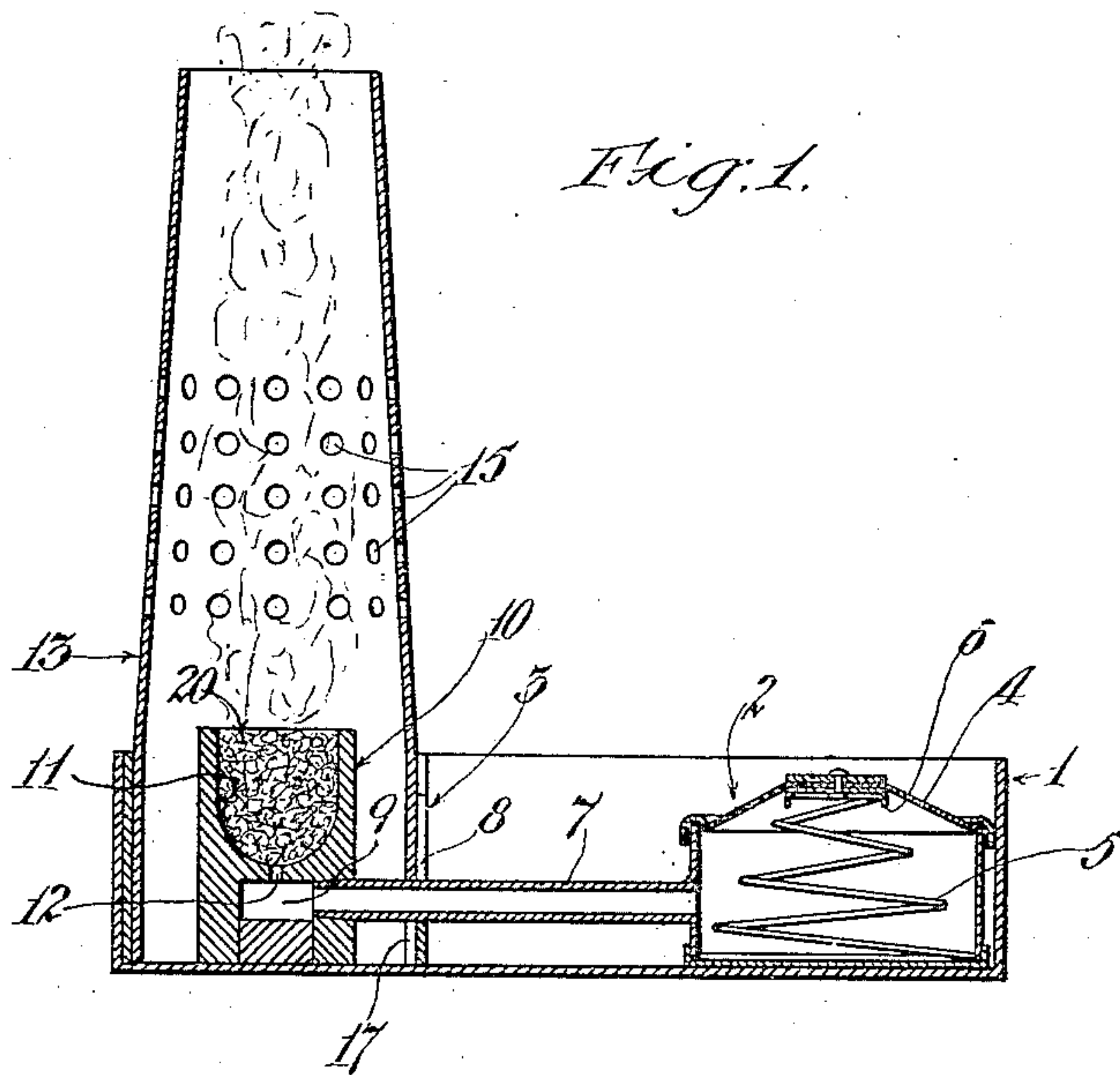


P. H. CHERRY.
 INHALING APPARATUS.
 APPLICATION FILED SEPT. 10, 1908.

943,180.

Patented Dec. 14, 1909.



Witnesses:
 Louis W. Gratz.
 Frank L. Graham.

Inventor
 P. H. Cherry
 by *Samuel Laushtackley*
 atty.

UNITED STATES PATENT OFFICE.

PETERSON H. CHERRY, OF LOS ANGELES, CALIFORNIA.

INHALING APPARATUS.

943,180.

Specification of Letters Patent.

Patented Dec. 14, 1909.

Application filed September 10, 1908. Serial No. 452,515.

To all whom it may concern:

Be it known that I, PETERSON H. CHERRY, a citizen of the United States, residing at Los Angeles, in the county of Los Angeles and State of California, have invented a new and useful Inhaling Apparatus, of which the following is a specification.

This invention relates to an apparatus for the production of fumes suitable for inhalation. The apparatus may, however, be used for other purposes, for example, for fumigation, and for bleaching.

The main object of the present invention is to provide an inhaling device which will permit the production of fumes to be easily and accurately regulated.

Another object of the invention is to provide an inhaling device in which the fumes are delivered with a minimum amount of combustion.

Another object of the invention is to facilitate ignition of the fume producing material.

The accompanying drawings illustrate the invention.

Figure 1 is a vertical section of the device. Fig. 2 is a plan thereof. Fig. 3 shows the various parts of the device packed in the containing box.

1 designates a box or support in which are secured a draft producing means 2 and a holder 3 for the inhaler chimney. Said draft producing means consists of a case or chamber having a flexible top 4 formed, for example, of any suitable fabric, a spring 5 being provided within the case and pressing against the bottom of said case and against a disk 6 at the center of said top so as to tend to expand the volume of chamber 2 to a certain limit. A pipe 7 communicating with said chamber extends through a slot 8 in the side of the chimney holder 3, the pipe being tapered at its end to fit within a lateral opening 9 in a cup member 10, said cup member being removably secured on the pipe 7 and having a cup 11 in its top communicating by a passage 12 with the lateral opening 9 aforesaid.

A chimney 13 adapted to fit within the holder 3 extends upwardly therefrom and is open at the upper end, said chimney being perforate, as at 15, at a portion thereof intermediate the upper and lower ends, the upper and lower portions being imperforate except for a slot 17 at the lower end to re-

ceive the pipe 7. Said chimney preferably tapers upwardly and is of such length and width as to enable it to be packed inside the cover 19 of the box when the parts of the apparatus are packed as shown in Fig. 3, cup member 10 being at this time detached from the pipe 7 and being placed on the bottom of the chimney holder.

The operation is as follows: A fume producing material, indicated at 20, is placed in the cup 11 and a match being touched thereto, the top of the draft producing means is depressed by manual pressure on the center member 6 thereof and then released, the spring then raising said top member and causing air to be sucked downwardly from the match into the body of the fume producing material, the material being thus ignited and the top of the draft producing means being alternately pressed and released to give vibration thereto through a slight range until the mass 20 is well ignited, the chimney 13 is then put in place and on then continuing to operate the draft producing means in the manner stated, partial combustion of fume producing material proceeds as follows: At each indraft or suction the oxygen of the outer air passing in mostly through the openings 15 will ignite a portion of the mass 20, and on the next outdraft or expulsion the partial combustion will be expelled from the mass 20 and will pass upwardly in the chimney, the heat of the fumes being sufficient to cause them to ascend and pass through the open top of the chimney, where they may be inhaled. It is found that the expulsion stroke does not produce any igniting effect, presumably for the reason that the space within the draft producing means and its connecting pipe is, after the device is in full operation, mainly occupied by the products of combustion; and the expelled fumes from the mass 20 are found to consist largely of vapor, indicating expulsion of a large proportion of volatile products from the mass 20 without combustion thereof. This is a valuable feature of the invention, as in some cases it is not desired to burn the volatile oils, etc., in the medicament, but only to furnish sufficient heat to produce vapor fumes therefrom. The air admitted through openings 15 of the chimney also serves to cool the fumes and to furnish oxygen thereto, which is desirable for inhala-

tion. The receptacle formed by the chimney holder serves also to hold the ashes and sparks.

What I claim is:—

5 1. An inhaler comprising a support, an air draft means mounted on said support and consisting of a chamber having a flexible top, a spring for raising the top of said chamber, said top adapted to be manually depressed, a
10 cup mounted on said support, a tube connecting said cup with said air draft means, and a chimney removably attached to the support and extending upwardly from said cup, and having a perforate portion inter-
15 mediate its upper and lower ends.

2. An inhaler comprising a support, an air draft means mounted on said support and consisting of a chamber having a flexi-

ble top, a spring for raising the top of said chamber, said top adapted to be manually 20 depressed, a cup mounted on said support, a tube connected with said air draft means and detachably connected with said cup, and a chimney holder on said support, a chimney removably attached to the chimney holder 25 and extending upwardly from said cup, said chimney having a portion perforate intermediate its upper and lower ends.

In testimony whereof, I have hereunto set my hand at Los Angeles, California, this 3rd 30 day of September 1908.

PETERSON H. CHERRY.

In presence of—

ARTHUR P. KNIGHT,
FRANK L. A. GRAHAM.