

No. 760,058.

PATENTED MAY 17, 1904.

F. DE MARE.
ILLUMINATING AND ADVERTISING DEVICE.

APPLICATION FILED JAN. 4, 1901.

NO MODEL.

3 SHEETS—SHEET 1.

Fig. 2.

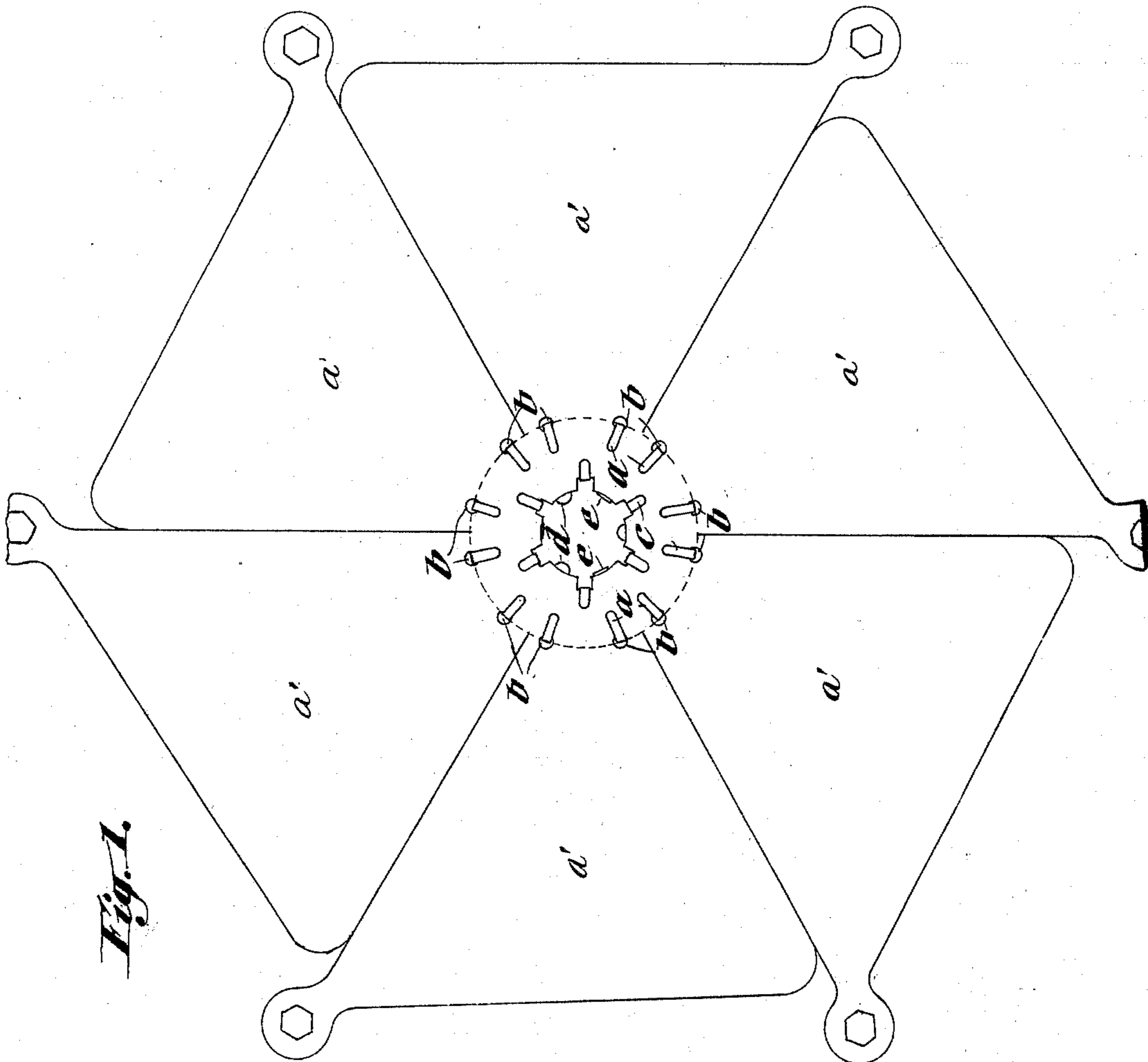
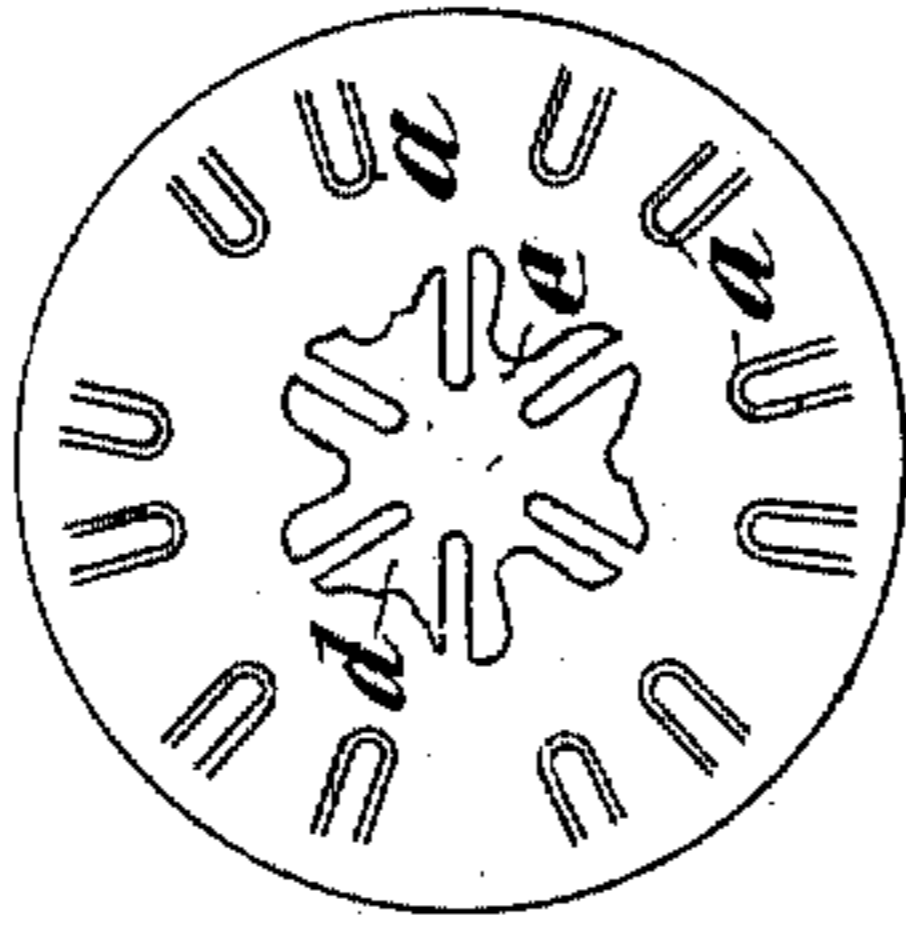


Fig. 1.

Witnesses:

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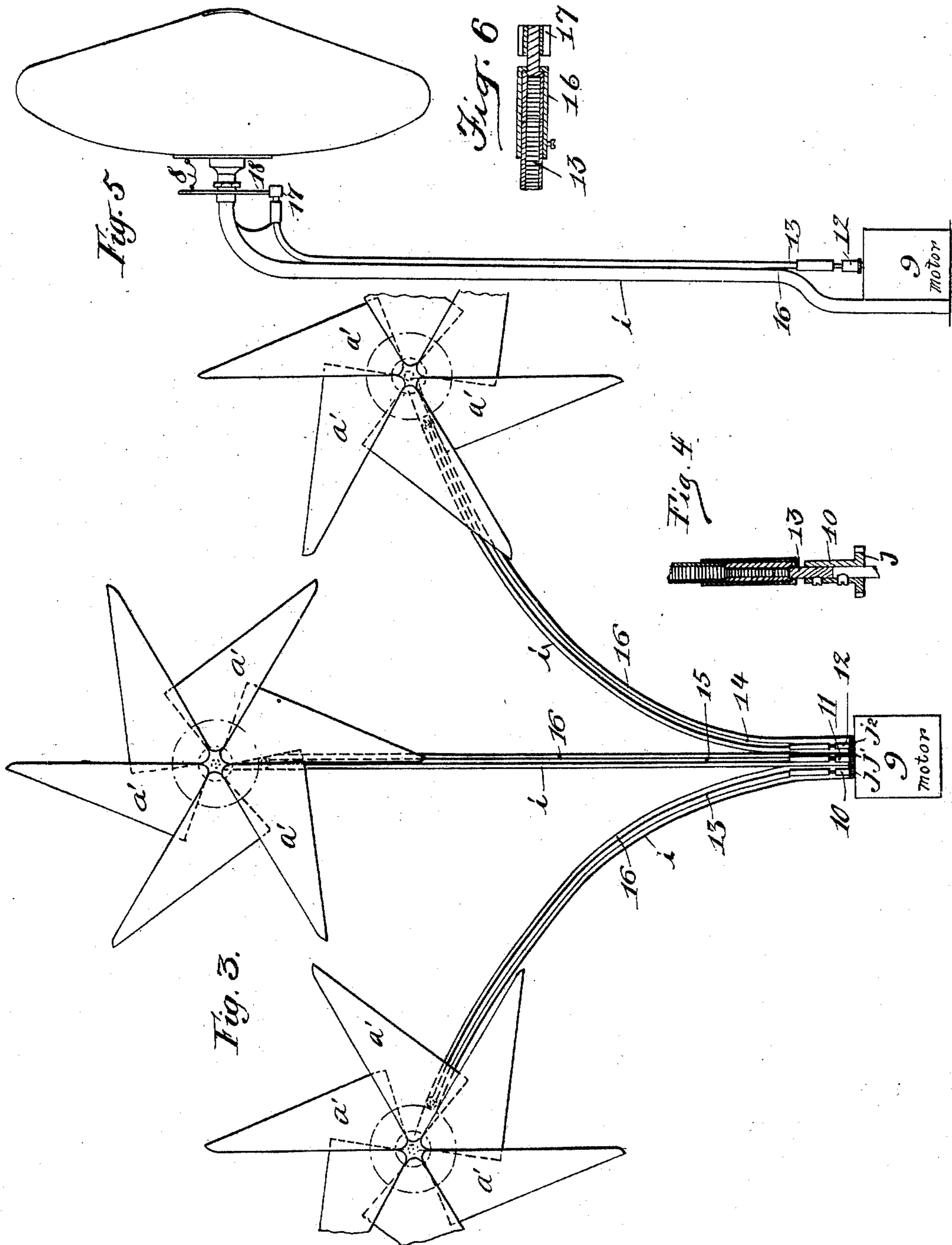
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3 SHEETS—SHEET 2.



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3 SHEETS—SHEET 3.

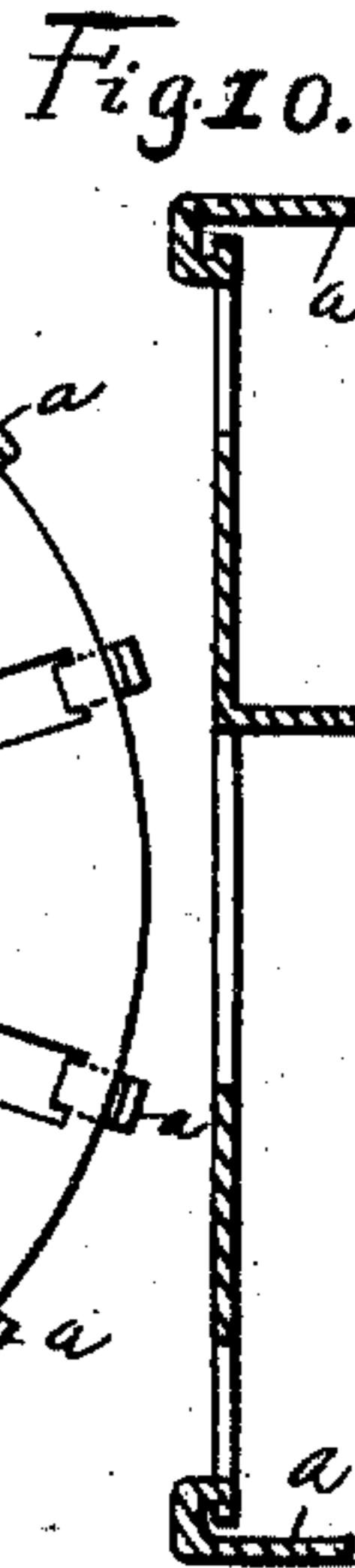
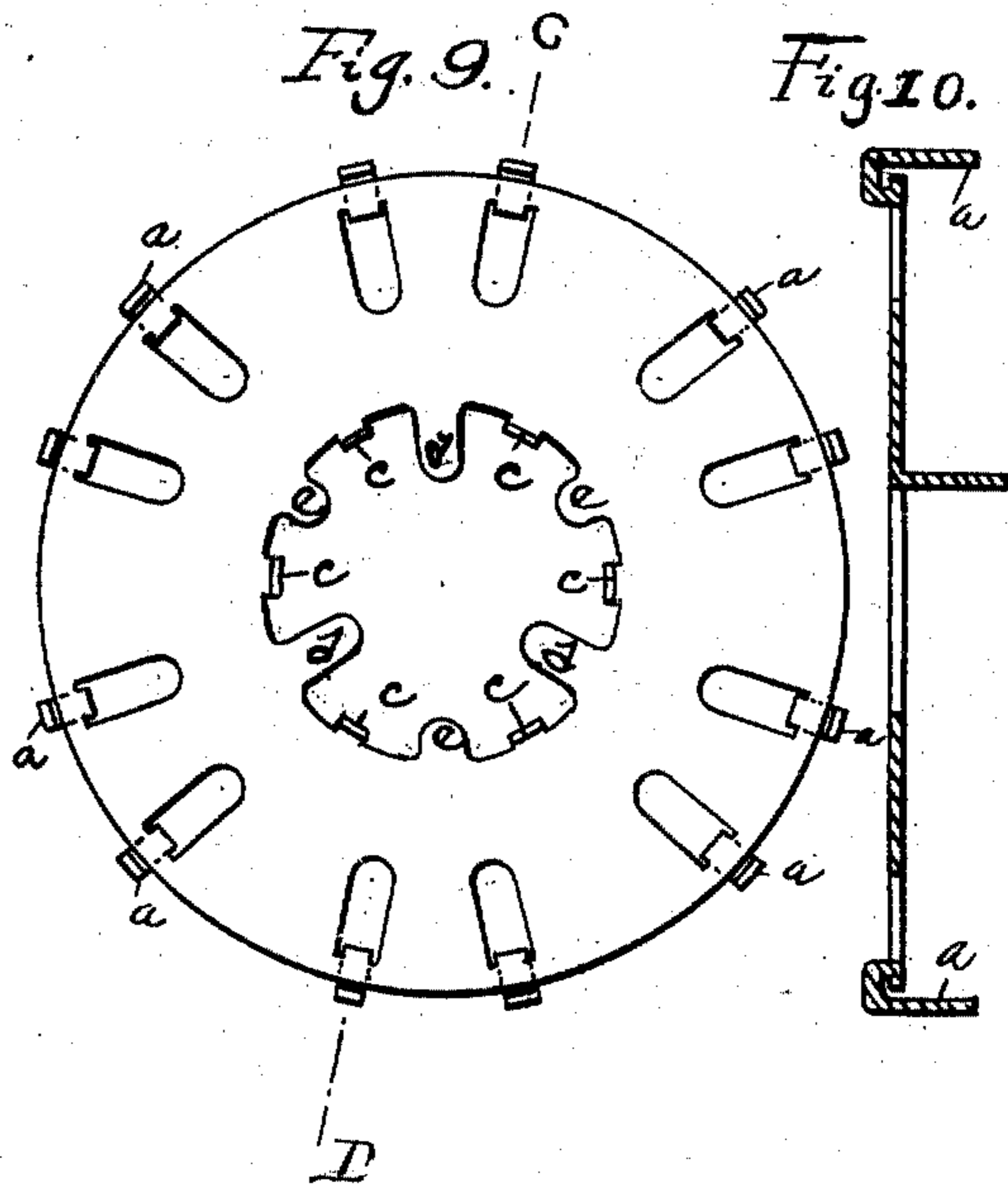
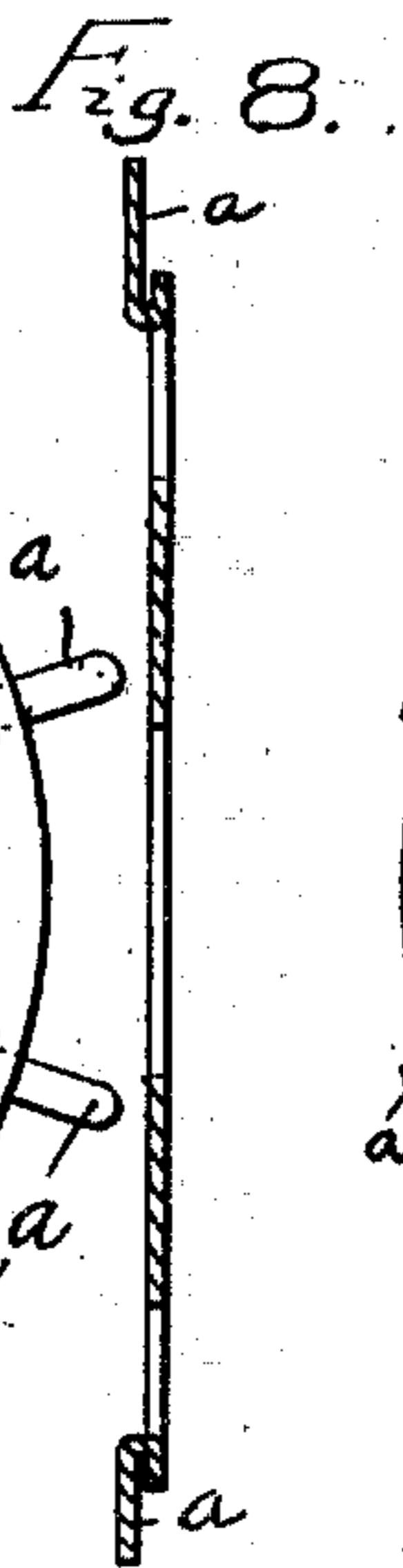
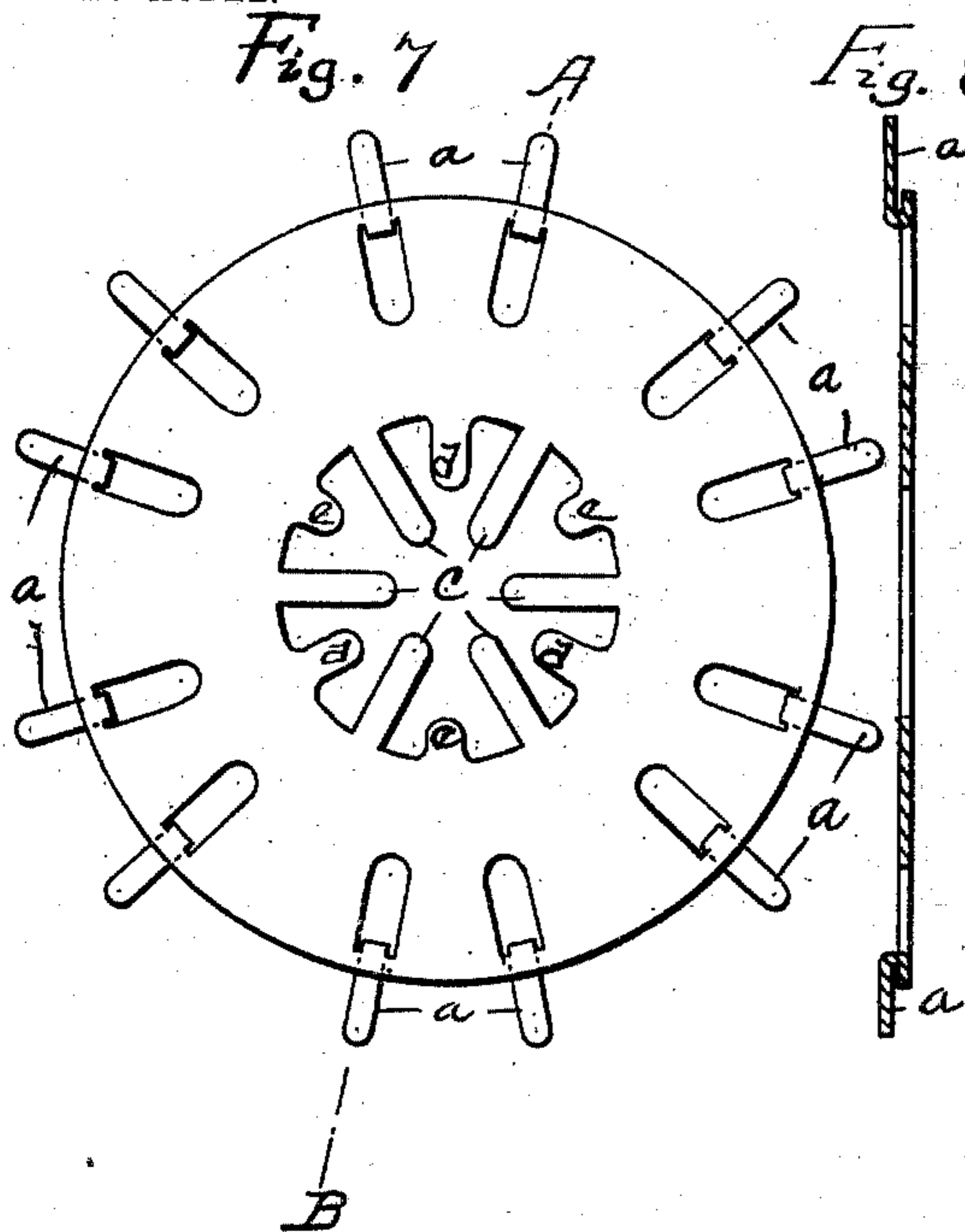
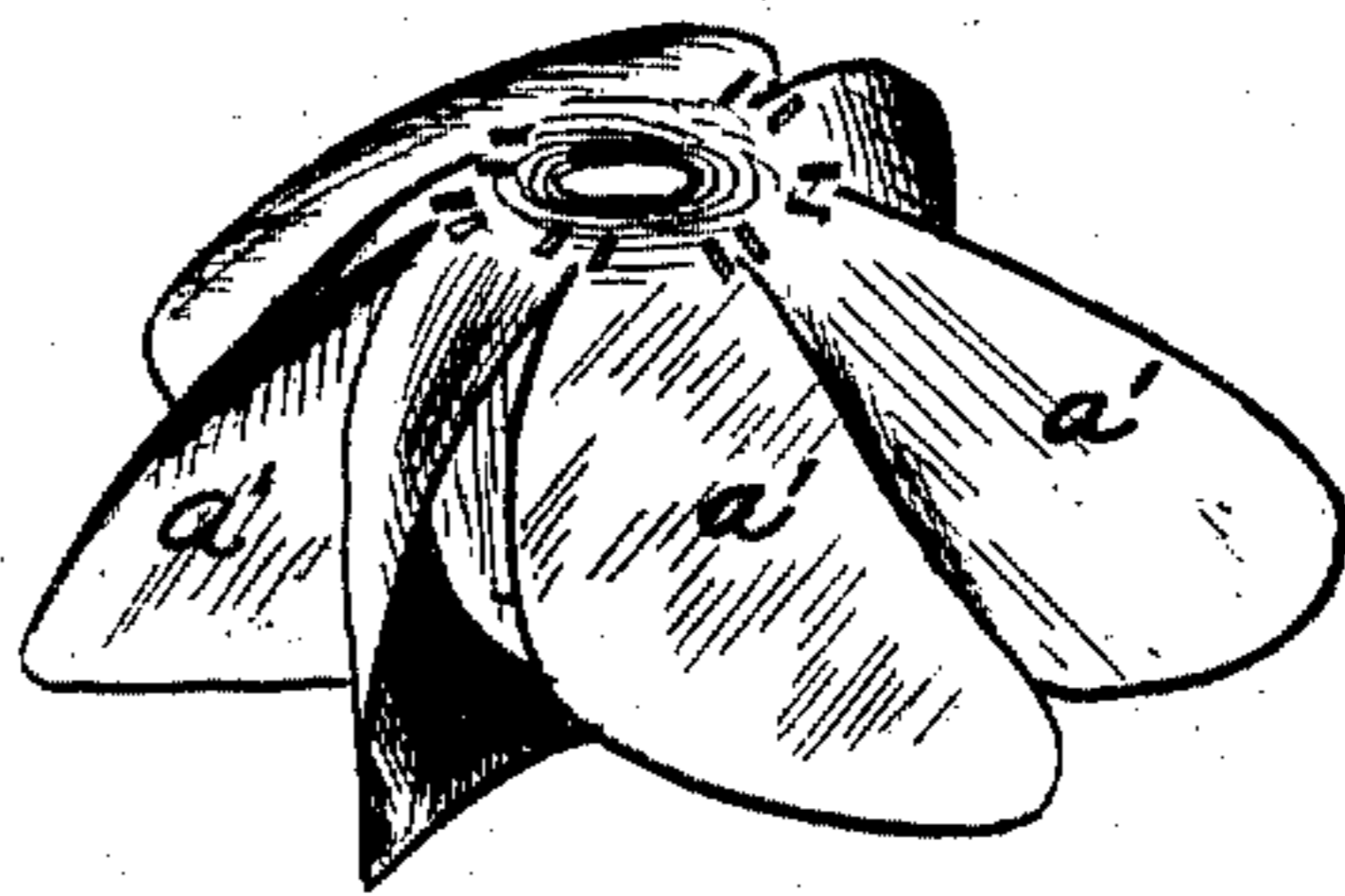


Fig. 11.



Witnesses:-
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UNITED STATES PATENT OFFICE.

FREDERIC DE MARE, OF BRUSSELS, BELGIUM.

ILLUMINATING AND ADVERTISING DEVICE.

SPECIFICATION forming part of Letters Patent No. 760,058, dated May 17, 1904.

Application filed January 4, 1901. Serial No. 42,055. (No model.)

To all whom it may concern:

Be it known that I, FREDERIC DE MARE, a subject of the King of Belgium, and a resident of Brussels, Belgium, have invented certain new and useful Improvements in Illuminating and Advertising Devices, of which the following is a specification.

My invention relates to illuminating and advertising devices; and the object thereof is to produce a simple device which can be readily actuated by any motive power.

In the accompanying drawings, Figure 1 is a plan view of a sheet of paper or other suitable material cut to form a plurality of wings. Fig. 2 is a plan view of a strengthening ring or disk. Fig. 3 is a front view of a group of my illuminating devices driven by a motor. Fig. 4 is a vertical sectional view of a part of the flexible shaft and one of the pinions employed with the motor-driven device. Fig. 5 is a partial front elevation of the same. Fig. 6 is a vertical sectional view of a part of the outer end of the flexible shaft and the pinion mounted thereon. Fig. 7 is an enlarged detail plan view of the bottom ring shown in Fig. 2, illustrating how the claws are bent. Fig. 8 is a sectional view taken on line A B of Fig. 7. Fig. 9 is an enlarged detail plan view of the top ring or plate. Fig. 10 is a sectional view taken on line C D of Fig. 9. Fig. 11 is a plan view in perspective of the blank shown in Fig. 1 with the wings bent to an operative position.

The design shown in Fig. 1 is cut out of a sheet of paper. In the said design there is a central perforation, and concentrically to this perforation there are a plurality of smaller perforations, all in the same circle and at equal distances apart, near the periphery of the design. The edge of the design may instead of being rectilinear, as shown in the drawings, be made with curved indents cut more or less deeply into the sheet. The sheets from which the wings or sails are thus cut may be of any suitable material—for example, celluloid or white paper printed in various colors—whereby various ornamental effects are produced. The paper may be made transparent and waterproof either by applying paraffin thereto or by using colored var-

nishes for the printing of the pattern. The wings *a'* may be made separately from one another, each constituting an equal part of the whole.

Whatever the material employed, when it is cut it must be strengthened by a thin metal ring, cut as shown in Fig. 2. This ring serves to hold the several wings together when they are cut separately.

The claws *a* are bent outwardly, then upwardly to engage the holes *b* cut in the sheet, and, finally, bent toward the center. The claws *c* are also bent normally and then folded back on the sheet toward the outside after passing through the central perforation in the said sheet.

The claws *d*, which are three in number, are intended to maintain the proper distance between the sheet and the lamp-support, while the claws *e e e* are bent rearwardly and adapted to space the disk from the support of the apparatus when the sails are made to turn.

The apparatus being intended for illuminating purposes, it is necessary to provide suitable means for fixing it in position. Such supporting devices may be constructed to hold several of the constructions, and thus produce a highly ornamental effect. They are composed of flexible tubes *i*, which are bent at right angles in order that the illuminating devices will turn on a horizontal shaft, Figs. 3 and 5.

Although it is by the agency of the wind that the devices are most frequently made to rotate, any motive power may be employed. A small electric motor, for instance, may be adapted for this purpose, and either a separate current or the current from the ordinary electric lamps may be used to drive it. Thus when there is no wind, as in inclosed places, my invention may be worked by electricity. In this latter connection I have introduced a small electric motor and mechanical device especially adapted to produce a flashing effect. In the drawings I have shown a three-branched design which is operated by a motor arranged at the base 9 of the design. Its shaft is geared with three pinions *j j' j''*. The sockets 10, 11, and 12 receive the ends of the flexible

shafts 13 14 15. Each of the latter is sheathed in a tube 16, arranged along the branches of the design. The other ends of the flexible shafts work in sockets formed in the pinions 5 17, driving the cog-wheel 18, which works the devices. In order to diminish the friction as much as possible and afford increased mobility, the interior of the cog-wheels is cut back. The device is connected to the cog-
10 wheels 18 by means of bolts.

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

1. In an improved illuminating and advertising device, the combination of a centrally-
15 perforated sheet doubled so as to form wings or sails, a metallic ring having a central opening provided at its edge with a series of claws, and a second series of claws intermediate the
20 edge of said opening and the outer edge of said ring, said last-named series of claws being struck out from the ring and passing through the sheet to hold the wings in form, said first-named series of claws passing

through the central aperture of said sheet and 25 being bent outwardly therefrom, and a support around which the sails are grouped and revolve.

2. In a device of the type set forth, the combination with a centrally-perforated sheet 30 folded to form wings, said sheet being formed with a series of openings concentric with the central opening, of a metallic disk having a central opening, a series of claws struck out from said disk, said claws passing through 35 the said series of openings in said sheet and being bent upon themselves, a second series of claws formed integral with said disk and passing through the central opening of said sheet and being bent upon themselves, and 40 means for rotatably mounting the device, substantially as described.

In testimony whereof I have hereunto set my hand in presence of two witnesses.

FREDERIC DE MARE.

Witnesses:

B. SCHEL,

GREGORY PHELAN.