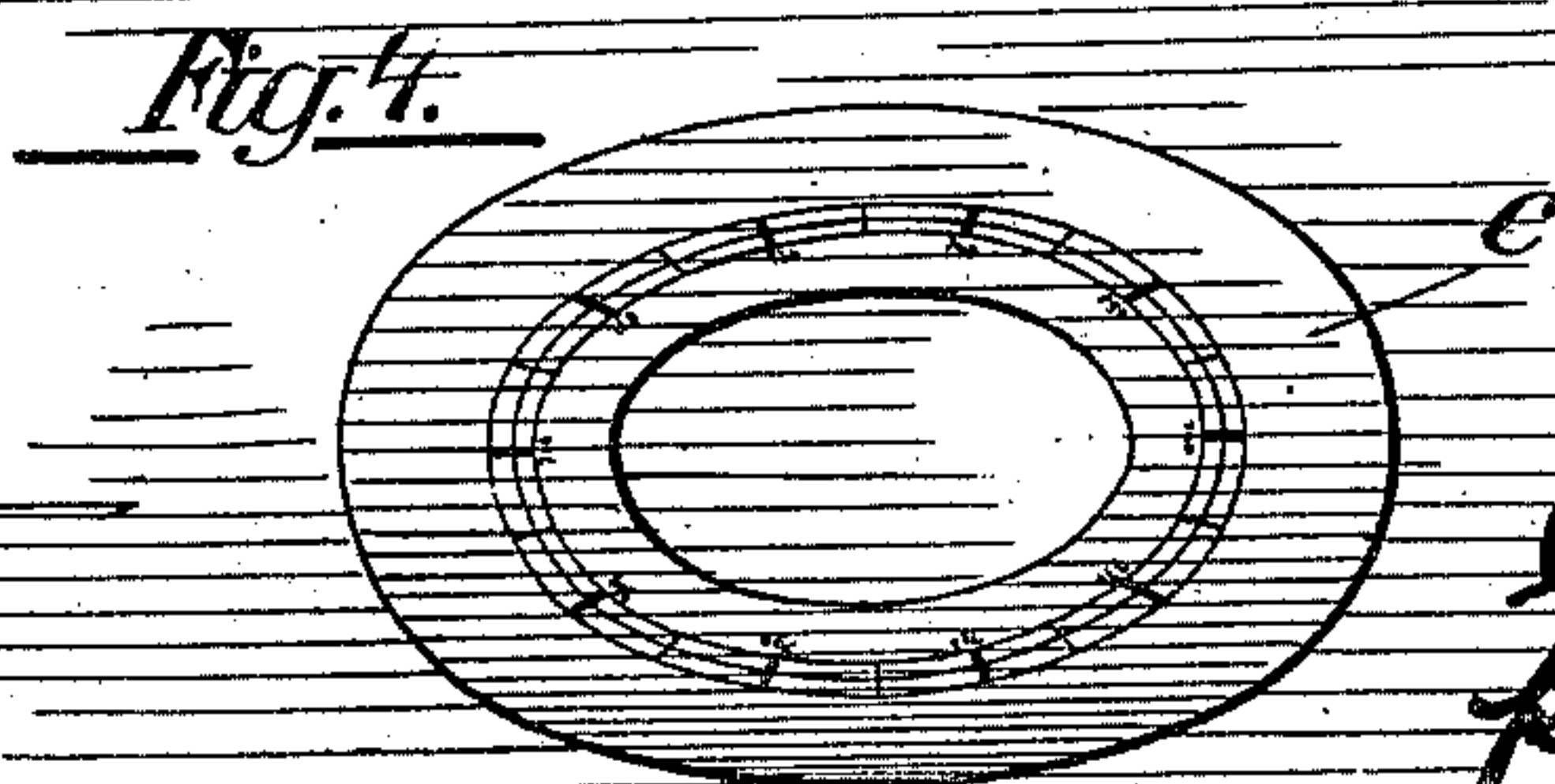
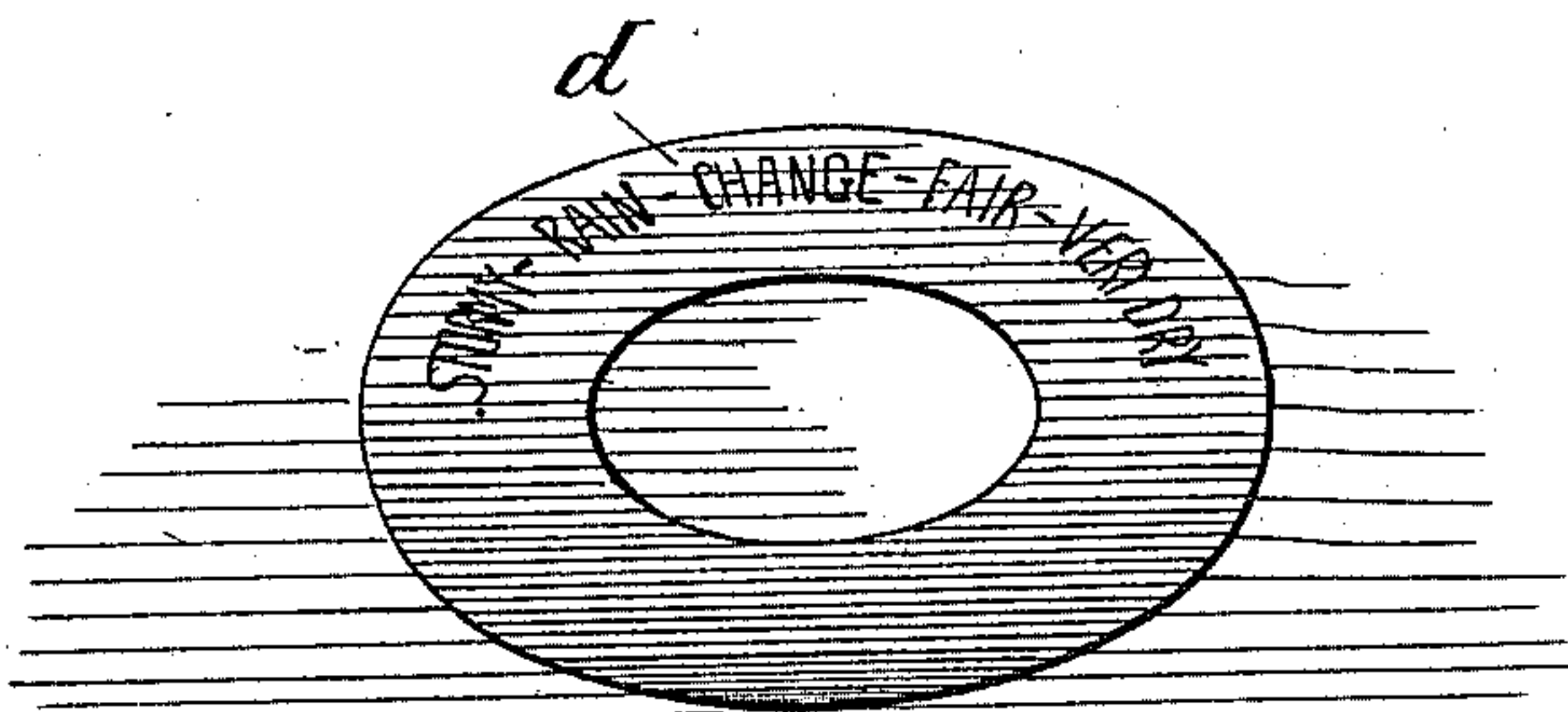
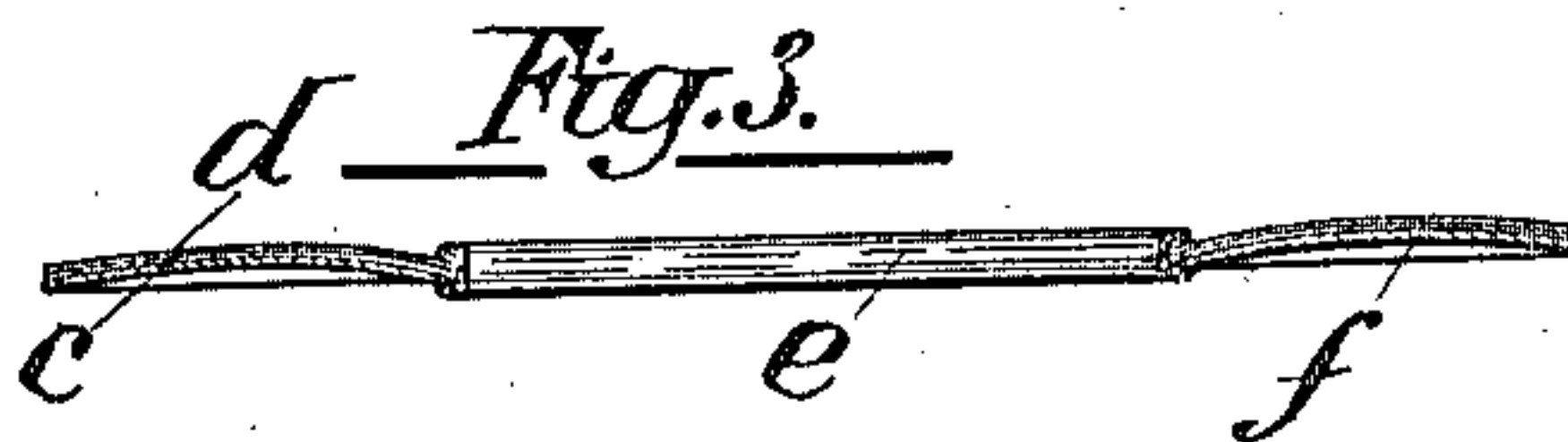
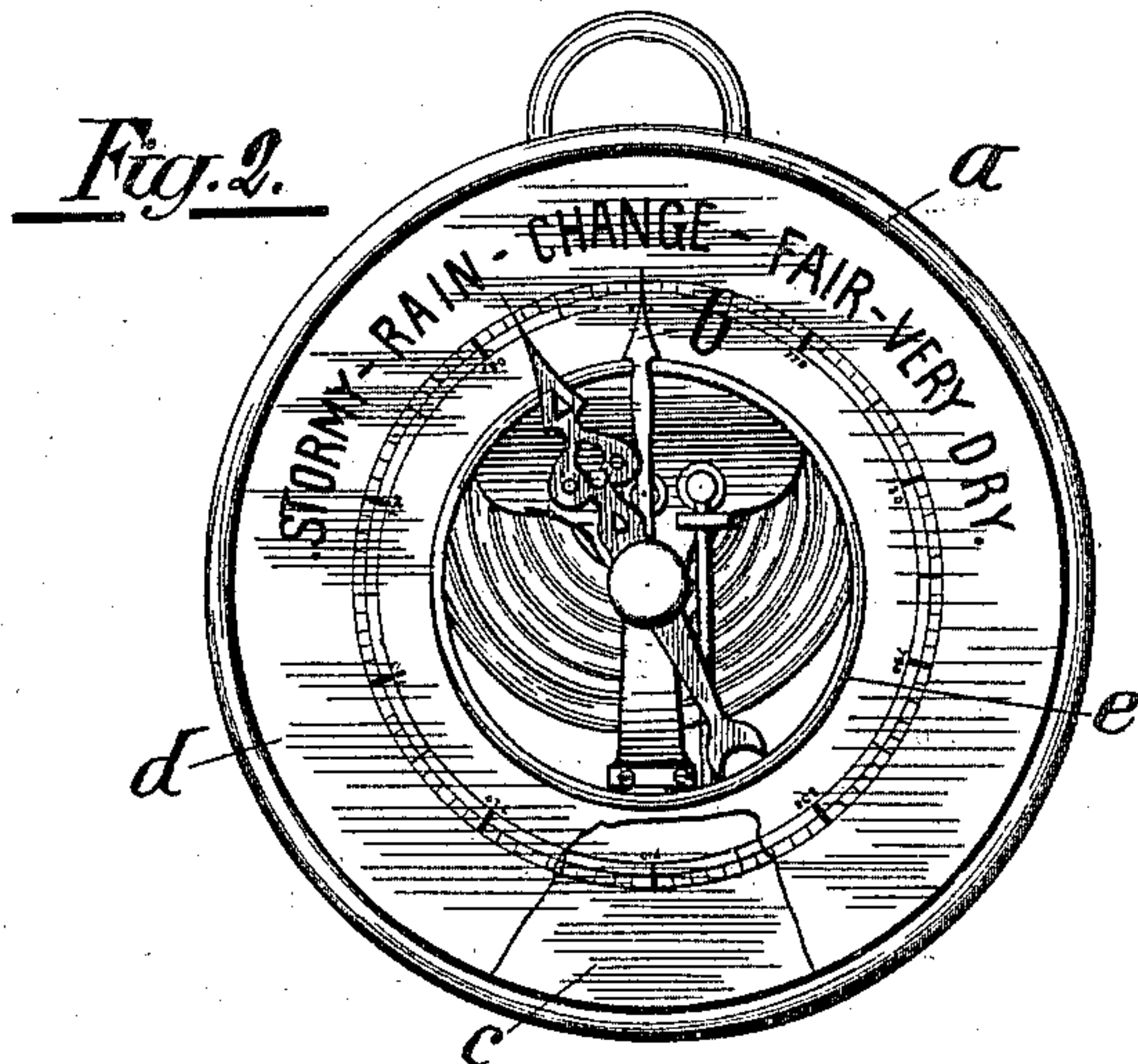
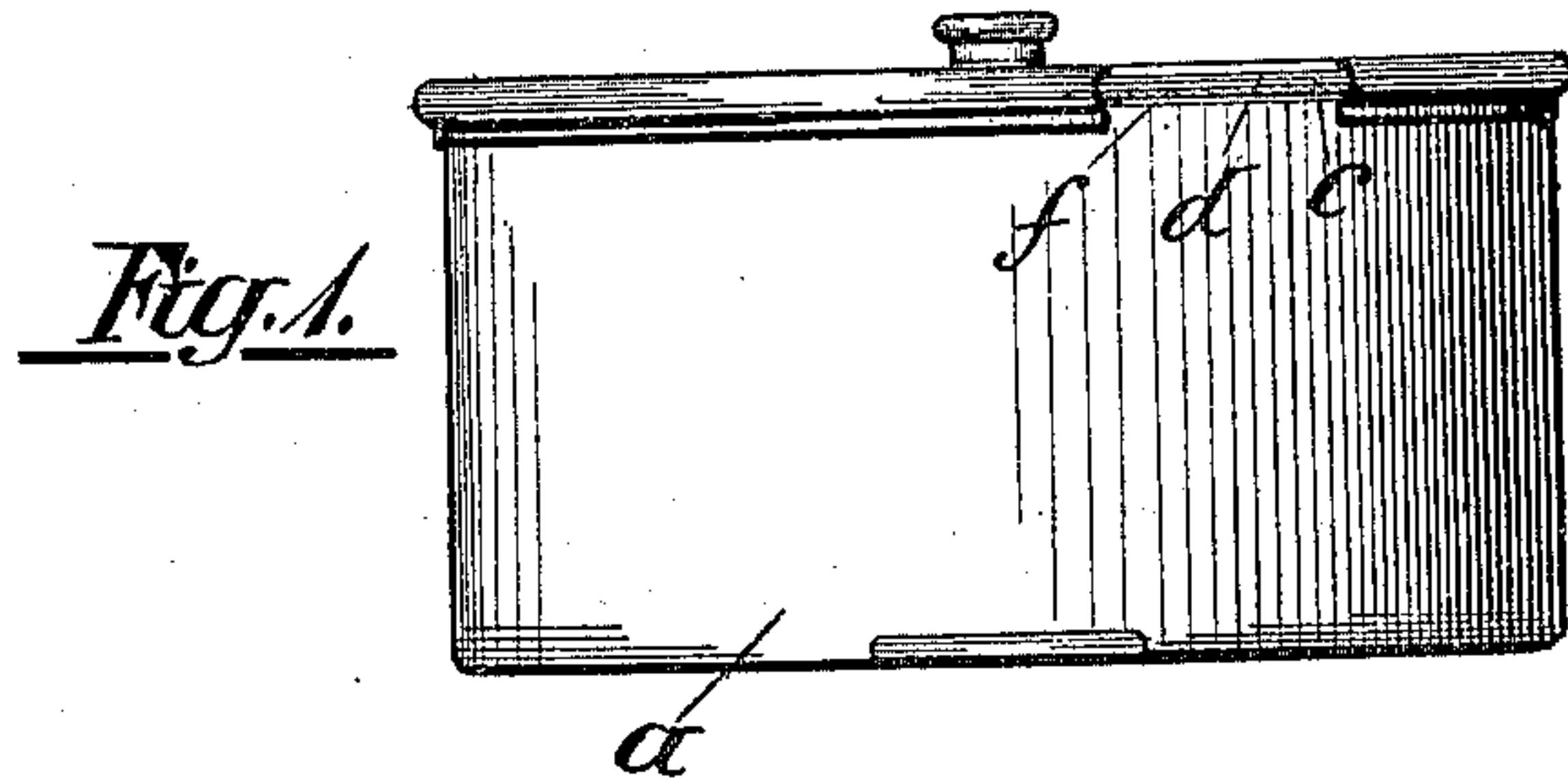


G. LUFFT.
ANEROID BAROMETER.
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983,916.

Patented Feb. 14, 1911.



Witnesses:

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UNITED STATES PATENT OFFICE.

GOTTHILF LUFFT, OF STUTTGART, GERMANY.

ANEROID BAROMETER.

983,916.

Specification of Letters Patent.

Patented Feb. 14, 1911.

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To all whom it may concern:

Be it known that I, GOTTHILF LUFFT, a citizen of the German Empire, residing at Stuttgart, in the Kingdom of Württemberg, Empire of Germany, have invented certain new and useful Improvements in Aneroid Barometers; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

This invention relates to an improvement in the dials of metal barometers, the so-called aneroid barometers. Hitherto cardboard, enamel, glass and the like were usually employed for these dials, which, however, involved various disadvantages. In moist climates, such as that of England and others, cardboard dials warp and contract and have an ugly appearance. If these disks are mounted so as to be revoluble in one another, that is to say are arranged so as to be relatively displaceable, their movability is frequently affected by the warping or distortion of the disks. In order to prevent this enamel or glass dials are employed. These, however, cannot be made displaceable as is necessary for adjusting the barometer with reference to the normal pressure of the place at which it is used, on the one hand because the enamel dials are not adapted for this, and on the other hand because glass dials have been found too brittle. They are also expensive to make and heavy, which again is very deleterious to their sale and transportation. These drawbacks are removed by this invention. Its characteristic feature is the provision of two superimposed mutually revoluble, preferably uniformly sized, disks, of which the upper (or if desired both disks) consists of light, non-brittle, transparent material, such as celluloid, gelatin foil or the like. The dial thus has the appearance of an enamel one and has also the advantage that it is conveniently revoluble without its being apparent that it is composed of two parts. It is also much lighter in weight and can be made much cheaper than enamel dials. On one of the two disks the air pressure figures are indicated, on the other the weather indications; the disks are revolubly mounted in a metal case of the barometer and coincide with one another, so that the dial appears a single piece.

The invention will now be more particularly described with reference to the accom-

panying drawings, in which one form of construction is shown as an example.

Figure 1 is a side elevation partly in section of the barometer; Fig. 2, a plan view partly in section; Fig. 3, an axial section of both dials; Fig. 4, an isometric view showing the two disks separated.

The barometer *a* itself is of ordinary construction and provided with an indicator *b*, which moves over a scale from which the height of the barometer can be ascertained in the ordinary way.

In order to adapt the barometer to the altitude of the place where it is used, the dial is made manually adjustable and consists of two, preferably equally sized, disks *c* and *d*, the upper one of which is made of transparent, non-brittle light material, such as celluloid, gelatin foil or the like. The two disks lie one upon the other and may be rotated independently of one another. One of the disks *c* (preferably the lower) carries the figures showing the barometric pressure, while the other *d* contains the weather indications. These two disks rest on a rigid foundation or support *f* in a grooved ring *e* and are revolubly arranged in the flanged edge of the latter. It will be understood that, since the two disks rest on a rigid support *f*, and are loosely held in the ring *e*, they can be revolved individually with perfect ease by merely grasping one or the other of them. In Fig. 3 it is seen, however, they rest upon the foundation *f*, which foundation is fast to the central ring *e* as also to the outer edge of the casing *a*. As the disks lie loose in the ring *e*, and are not attached to the case *a*, their capacity to revolve and be adjusted singly is evident.

I declare that what I claim is:—

1. In an aneroid barometer, the combination with a metal case containing the usual barometer mechanism, of a pair of revoluble disks arranged above said mechanism and within the case, and carrying suitable indicia, one disk being composed of transparent, light, non-brittle material and adapted to cover the other disk, a support in the central portion of the case for the disks having a grooved ring in whose flanged edge the disks are revolubly arranged, and suitable pointers connected with the barometer mechanism.

2. In an aneroid barometer, the combination with a metal case containing the usual barometer mechanism, of a pair of disks ar-

5 ranged opposite to the said mechanism and within the case and having suitable indicia on their faces, one of the disks being transparent and revoluble in relation to the other disk, and a rigid support in the central portion of the case on which both disks are located and are loosely retained by friction, said support having a circular part provided with a flanged edge which receives

the two disks and within which they are revolubly arranged.

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

GOTTHILF LUFFT.

Witnesses:

JEAN GULDEN,
HERMANN HOPPE.