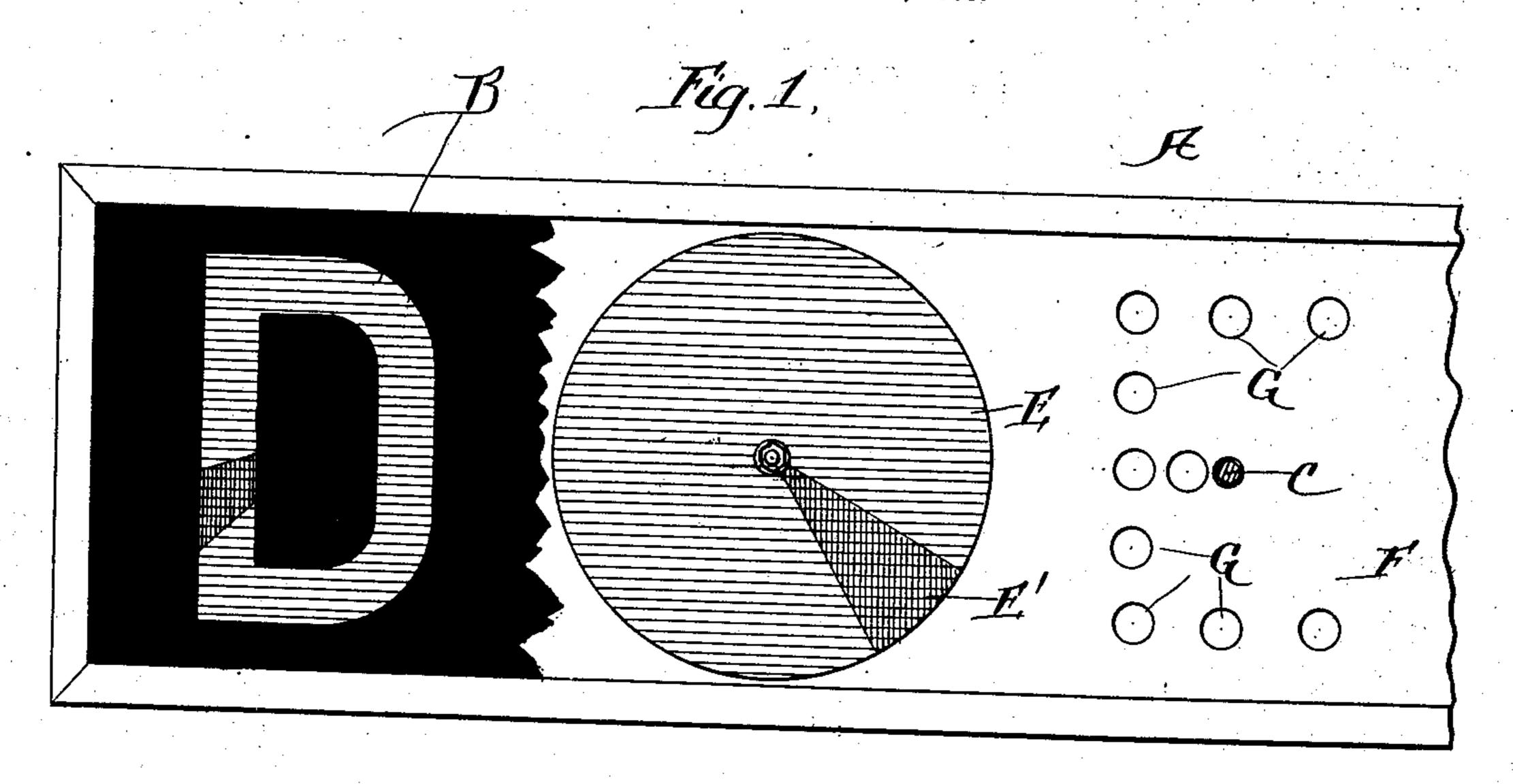
No. 791,303.

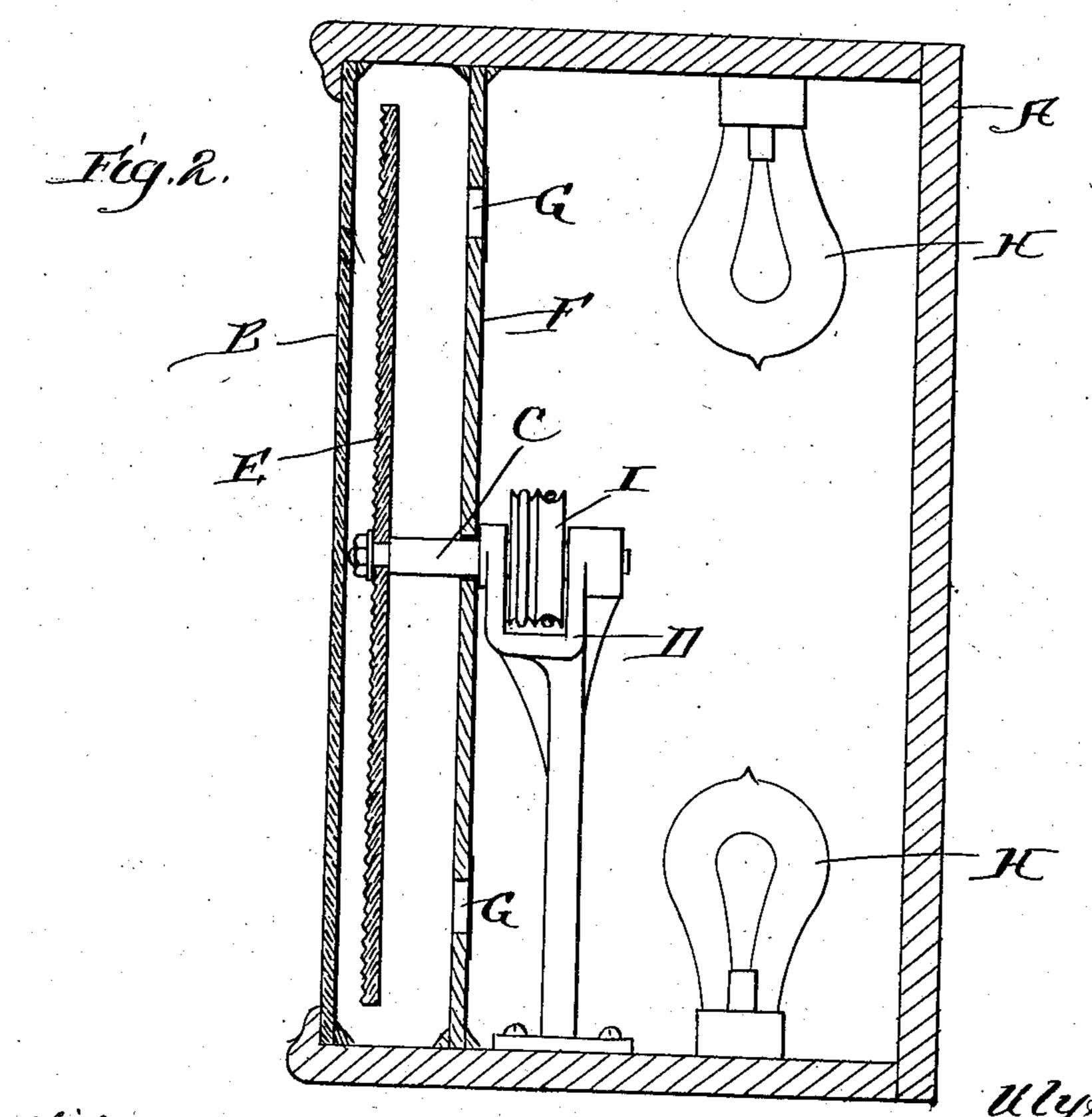
PATENTED MAY 30, 1905.

U. B. STUART & O. ARMBRUSTER.

SIGN.

APPLICATION FILED MAR. 7, 1905.





Witnesses. HBHallock, Inventors Ulysses, B. Stuart Otto Armbruster

By Williams on Att

United States Patent Office.

ULYSSES B. STUART AND OTTO ARMBRUSTER, OF PHILADELPHIA, PENNSYLVANIA.

SIGN.

SPECIFICATION forming part of Letters Patent No. 791,303, dated May 30, 1905.

Application filed March 7, 1905. Serial No. 248,897.

To all whom it may concern:

Be it known that we, ULYSSES B. STUART and OTTO ARMBRUSTER, citizens of the United States, residing at Philadelphia, county of 5 Philadelphia, and State of Pennsylvania, have invented a certain new and useful Improvement in Signs, of which the following is a specification.

Our invention relates to a new and useful 10 improvement in signs, and has for its object to provide a sign the letters of which are transparent, and behind these transparent letters a revolving corrugated disk causes fantastic moving shapes to be displayed through the let-15 ters.

With these ends in view this invention consists in the details of construction and combination of elements hereinafter set forth and then specifically designated by the claims.

In order that those skilled in the art to which this invention appertains may understand how to make and use the same, the construction and operation will now be described in detail, referring to the accompanying draw-25 ings, forming a part of this specification, in which—

Figure 1 is a front elevation of a portion of a sign made according to our improvement, different portions being broken away to show 30 the successive construction of the sign; Fig. 2, a cross-section through our improved sign.

A represents the case of the sign, which is box-shape. The front B of the sign is adapted to have the letters or characters displayed 35 thereon, the letters or characters being transparent and the rest of the front B being opaque.

letter or character and journaled in suitable

40 bearings D, secured to the casing.

To the forward end of the shaft C, just behind the front B, is secured a disk E, of transparent material—such as glass, celluloid, or the like—one or both surfaces of said disk E 45 being roughened or corrugated, as shown in Fig. 2, and behind the disk E and in front of the bearing D is arranged an opaque partition F, said partition being provided with transparent spots or openings G, and behind

the partition F are arranged lights H, the 50 transparent spots or openings G being arranged in the partition F in the same shape as the character or letter in front of the same and in alinement or directly in the rear of said character or letter, so that when the 55 lights H are lighted and the disk E is stationary the openings or transparent spots G can be seen through the letters and disk, but when the disk E is revolved the corrugated, roughened, or prismatic surface upon said 60 disk will provide an opaque illusion, causing moving fantastic shapes to be displayed through the letters, thus attracting attention to the sign. Of course by varying the corrugations or treating the surface of the disk in 65 a different manner different effects can be produced and by coloring the openings or spots G of the opaque partition F different color effects can be produced.

In Fig. 1 we have shown a portion of the 70 disk E colored, as represented at E'. This portion E' of the disk is colored darker than the balance of the disk, and, in fact, this portion or other portions of the disk could be made opaque; but we have found that it is 75 preferable to make these colored portions only semitransparent, and as the disk revolves these portions E will produce an effect like a flash-sign and make the same still more at-

tractive in appearance. Of course it is understood that the rear portion of the sign can be lighted in any suitable manner, and a reflector could be used, if so desired, or the sign could be made double, so as to be read from both sides, with the lights 85 in the center, and the shafts C can be driven C is a shaft arranged centrally behind each | in any suitable manner, either by clockwork, electric motor, or any other source of power desired, and the different shafts of the different characters or letters could be connected 90 together by gearing, chains, belts, or any other device. In the drawings we have shown a double pulley I located upon each shaft, so that the movement could be transmitted from one to the other by means of belts.

> Having thus fully described our invention. what we claim as new and useful is—

1. In a sign, a casing, transparent letters or

characters arranged at the front of the casing, the balance of said front being opaque, a shaft arranged centrally behind each letter or character, means for revolving these shafts from a suitable source of power, a transparent disk secured to the forward end of each shaft, the surface of said disks being corrugated, roughened or treated in any other similar manner, an opaque partition arranged behind the disks, said partition provided with transparent spots or openings directly behind the letters or characters and arranged in the same shape as the letters or characters, and lights arranged behind the opaque partition, as and for the purpose specified.

2. In a sign, a casing, the front of the casing being of glass or other transparent material, said glass being treated or covered so as to be opaque except where the letters or characters occur, disks arranged directly behind the front, one disk for each letter or character,

•

a shaft journaled in suitable bearings, to the forward end of which is secured the disk, means for revolving the shafts from a suitable source of power, the surface of said disks 25 being prismatic or corrugated, an opaque partition arranged behind the disks, said opaque partition provided with transparent spots or openings arranged in the same shape and in alinement with the letters or characters, portions of the surface of the disks being darkened or colored, and lights arranged behind the opaque partition, as and for the purpose specified.

In testimony whereof we have hereunto af- 35 fixed our signatures in the presence of two subscribing witnesses.

ULYSSES B. STUART. OTTO ARMBRUSTER.

Witnesses:

CHAS. H. DOUGHERTY, FRANK OLIVER.