

No. 657,776.

Patented Sept. 11, 1900.

G. KAUTZMANN.
FINGER RING.

(Application filed Apr. 29, 1899.)

(No Model.)

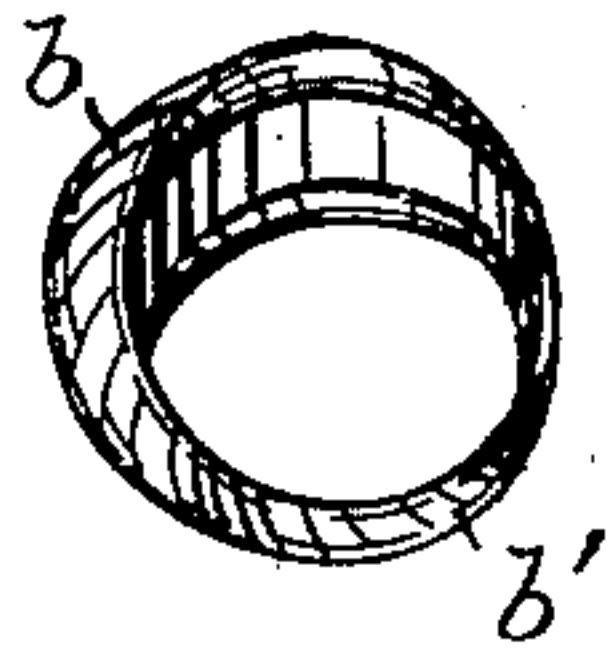


Fig. 1.

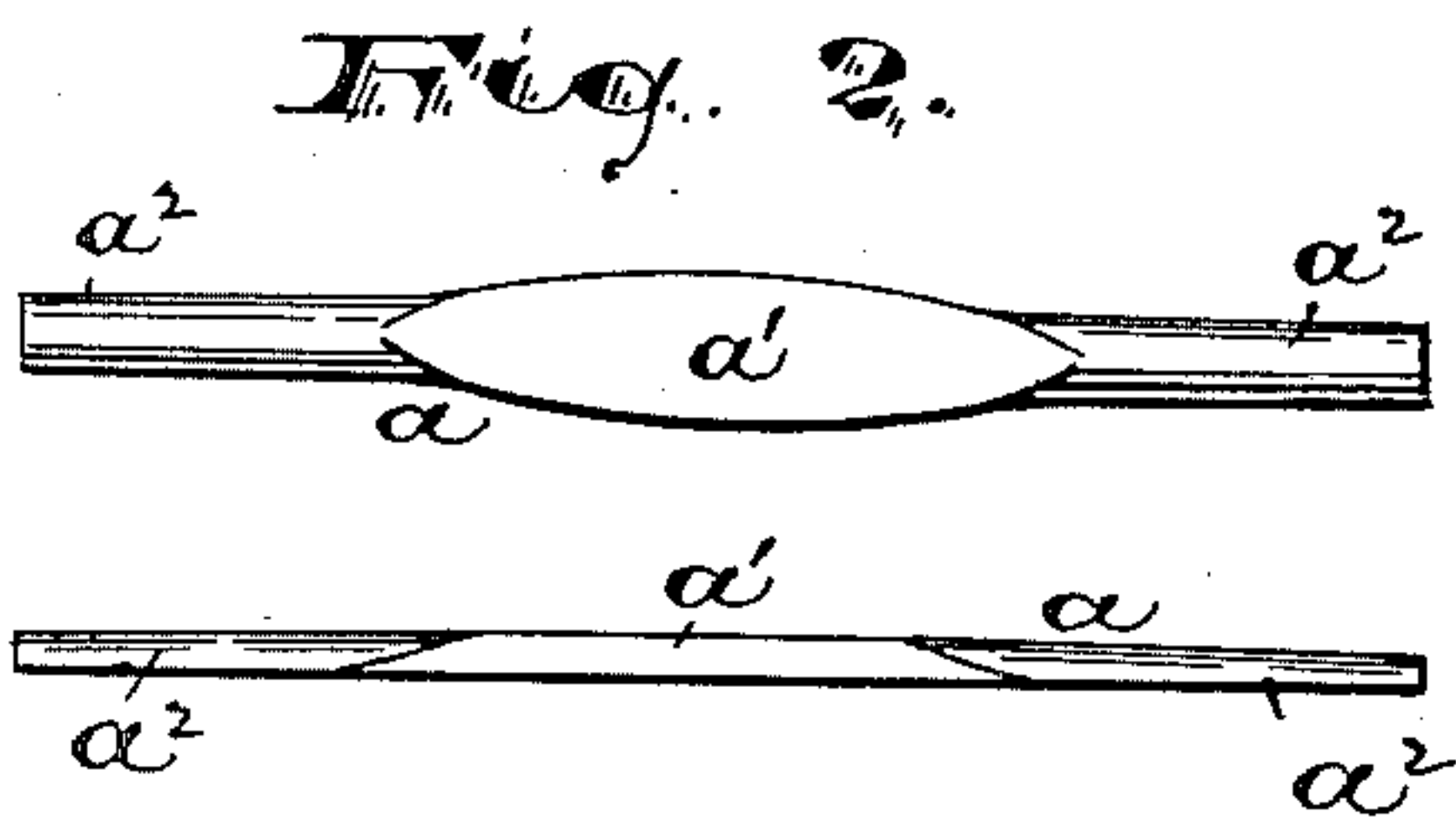


Fig. 2.



Fig. 3.

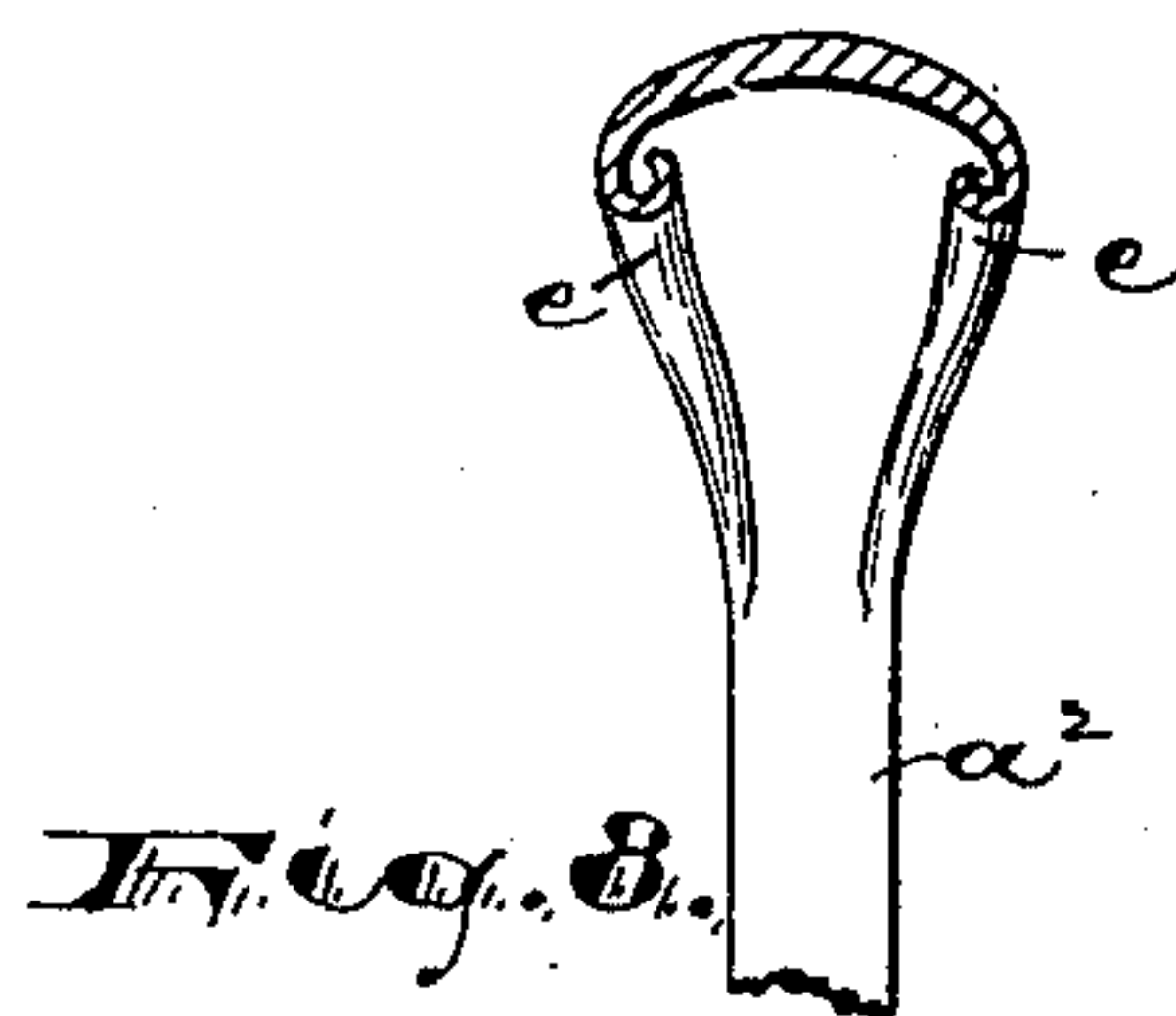


Fig. 4.

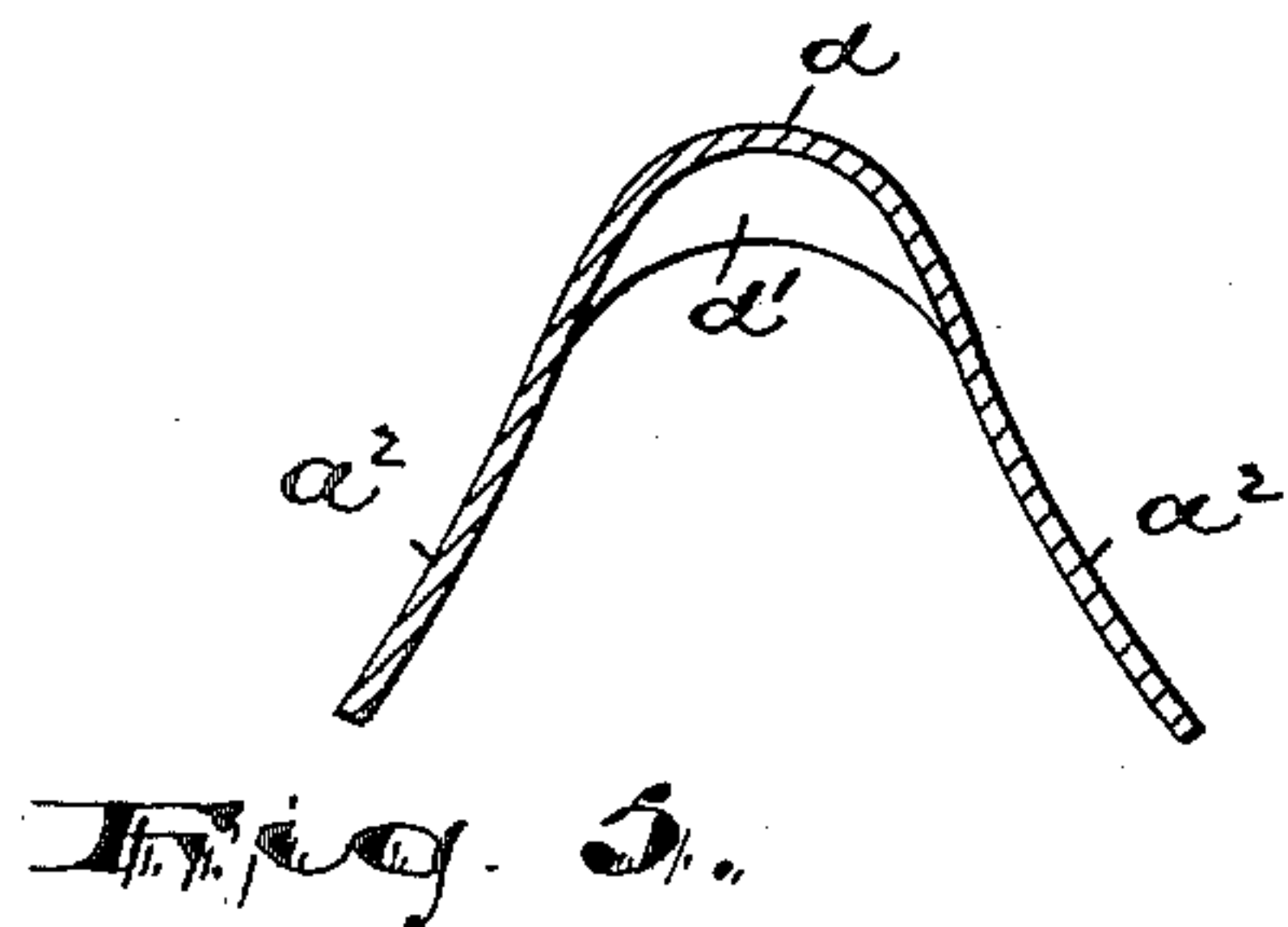


Fig. 5.

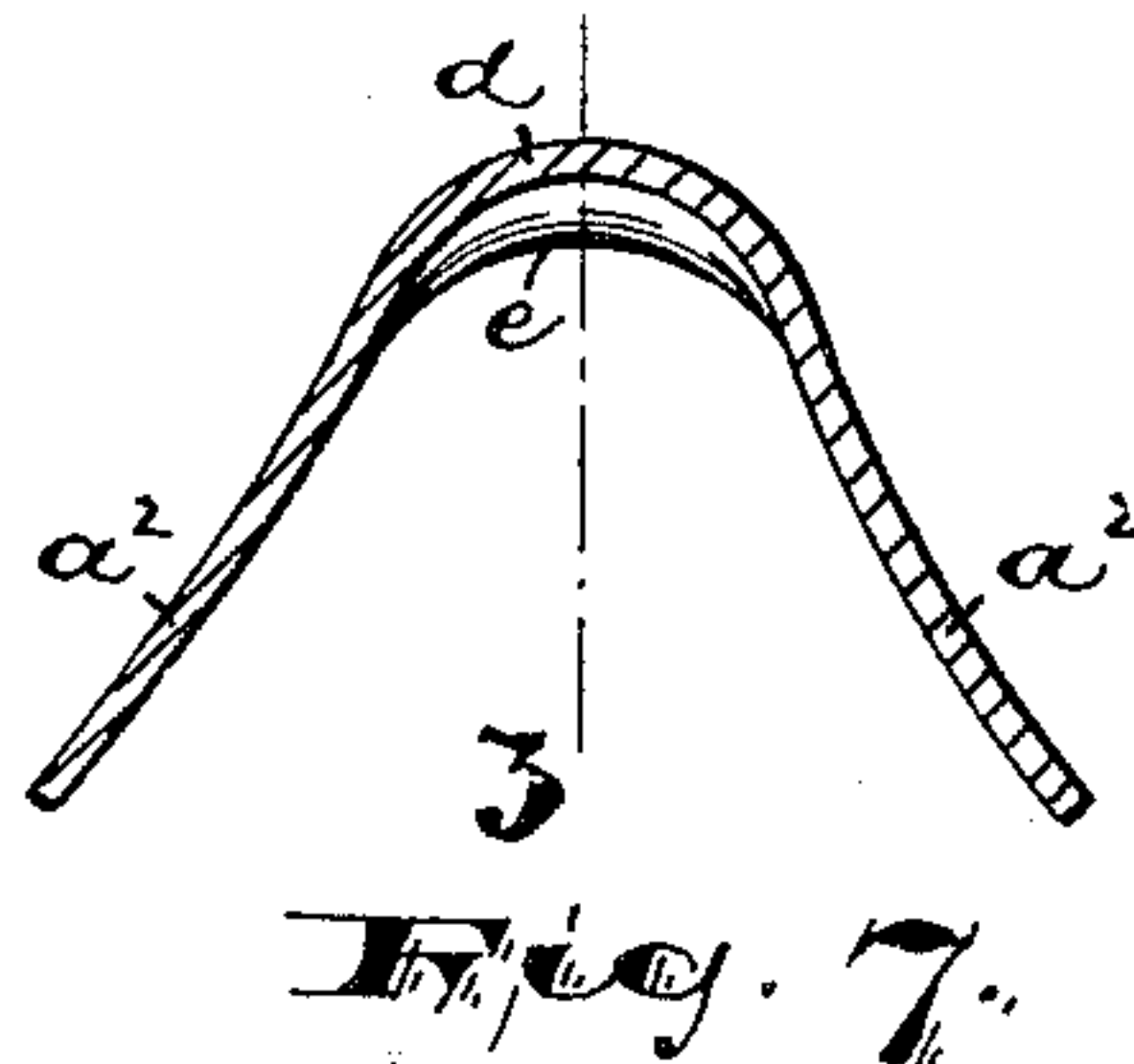


Fig. 6.

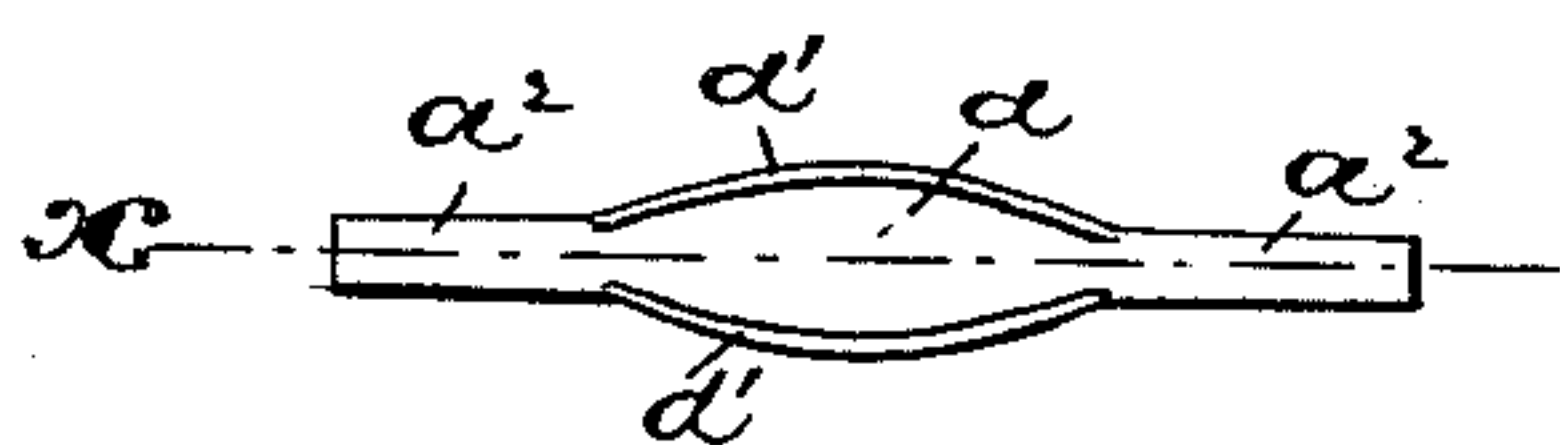


Fig. 7.

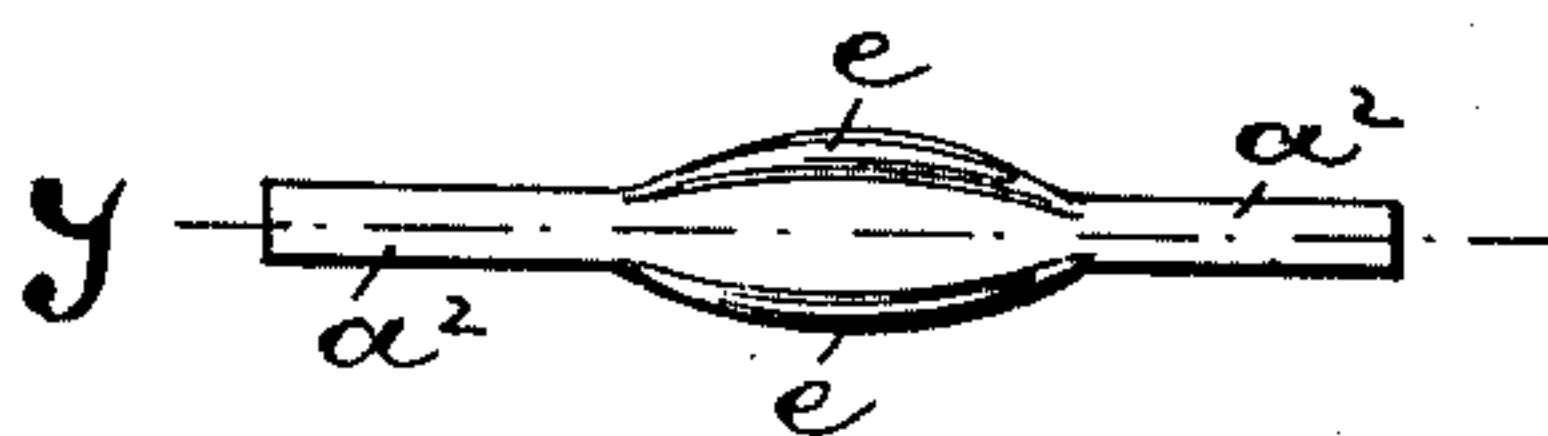


Fig. 8.

WITNESSES:

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UNITED STATES PATENT OFFICE.

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FINGER-RING.

SPECIFICATION forming part of Letters Patent No. 657,776, dated September 11, 1900.

Application filed April 29, 1899. Serial No. 714,935. (No model.)

To all whom it may concern:

Be it known that I, GOTTLOB KAUTZMANN, a citizen of the United States, residing at Newark, in the county of Essex and State of New Jersey, have invented certain new and useful Improvements in Finger-Rings; 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, reference being had to the accompanying drawings, and to letters of reference marked thereon, which form a part of this specification.

The objects of this invention are to enable a finger-ring to be made of thin and light material and yet with an appearance of solidity and weight, to obtain such a construction which shall present no sharp edges to hurt or cut the finger of the wearer, to form a wide opening at the inside of the ring at the jewel head or enlargement, such as will permit a free access of light-rays to the back of the stone, and thus give greater brilliancy to said stone when the ring is on exhibition, to avoid the use of back plates in the hollow jewel-head, such as have been heretofore employed and made of inferior metal, and thus giving to the purchaser of my improvements the knowledge that the head is not filled with base metal, to avoid the use of a plurality of pieces and reduce the soldering operations in the construction of the ring and the consequent admixture of base metal therewith, and to secure other advantages and results, some of which may be referred to hereinafter in connection with the description of the working parts.

The invention consists in the improved finger-ring and in the arrangements and combinations of parts of the same, all substantially as will be hereinafter set forth, and finally embraced in the claim.

Referring to the accompanying drawings, in which like letters of reference indicate corresponding parts in each of the several views, Figure 1 is a perspective view of a ring of my improved construction. Fig. 2 is a plan of the blank from which the ring is formed, and Fig. 3 is an edge view of the same. Fig. 4 is a reverse plan of the blank after it has been swaged and bent, and Fig. 5 is a section of the same on line x . Fig. 6 is a reverse plan

of the blank after certain edges have been rolled inward, and Figs. 7 and 8 are sectional views of the same on line y , Fig. 6, and line z , Fig. 7, respectively.

In said drawings, a indicates the blank out of which I form my improved ring, said blank consisting of a strip of suitable metal widened at its middle part, as at a' . This widened central portion is of substantially-uniform thickness with square edges; but the ends a^2 of the blank are rounded at the upper surface, so as to be convex in cross-section, with thin edges. Said ends are thus in proper condition to form the band portion or shank b' of the ring, and the operations hereinafter described are mainly to give the desired form to the central part a' of the blank, whereby it may constitute the enlarged portion b of the finished ring.

In the first operation the blank a is by swaging bent into a V shape with rounded bend, as shown in Fig. 5, the middle portion a' at the same time being rounded on its upper surface and having its edges forced or pressed downward to form deep flanges d' at the sides. This swaging operation leaves the bend d of the partially-completed ring thicker in the middle than at the edges in cross-sectional view, as shown in Fig. 8, the metal at and near the edges having been forced down into the flange d' .

The next step in the manufacture of the ring consists in rolling the thin edges of the flanges d' inwardly, as shown more particularly in Fig. 8, this being done by suitable dies in any manner common in the art. Said inwardly-rolled edges present smooth rounded contact-surface to the finger of the wearer, and I thus secure a light hollow enlargement b on the ring without the objectionable irritation or injury due to sharp edges. The ends a^2 of the blank in its V-shaped form are then bent toward each other around a suitable former into the shape of a circle and are cut off at the required length and jointed by soldering or any other means common to the art. The ring may now be finished and polished as desired, the enlarged portion b being chased or ornamented with stones according to the taste.

It will be understood that the cross-sectional shape of the ends a^2 of the blank a

may be varied at will to produce different styles of the shank *b'* in the ring, and, furthermore, by altering the middle widened portion *a'* of the blank or by using different swages
5 in operating on said blank the enlarged portion *b* of the ring may be modified without departing from the spirit or scope of the invention.

The head or enlarged portion *b*, in which
10 the jewels are ordinarily set, at the inside presents a large open recess, permitting a free access of light to the rear of the stone or jewel when the same is set therein, and thus
15 when the said jewel is thus set and the ring is placed on exhibition in the store of the jeweler the said stone is given greater brilliancy than if set so that the back is covered with opaque metal or in a deep perforation such as would be formed in a tube-section.

20 As will be clearly seen upon examination of Fig. 8, the inwardly-curved edges do not extend entirely around the inside of the ring, but extend only at the sides of the jewel head or enlargement, and to secure a proper
25 finish and prevent the formation of shoulders or projections upon the inside of the ring, such as might be uncomfortable to the finger, I have graduated the curls so that at the ends of the jewel head or enlargement they terminate by gradual reduction in diameter and
30 are worked off into the flat or otherwise unrecessed metal at the small part or shank of

the ring, and at the center of said jewel-head the curls are of increased diameter, so as to give a larger rounding where the curls are
35 far apart to permit a free in-passage of light and where the recess between the curls is the deepest.

Having thus described the invention, what I claim as new is—

The improved finger-ring herein described, having a portion forming an arc of its circumference pressed outward beyond the line of the circle in the form of a crescent in cross-section, said pressed-out portion being thick-
45 est in the middle and gradually becoming thinner toward each edge in cross-section, and diminishing in width from the middle toward each end, the opposite thin edges being rolled inward and forming curls decreasing in diameter from the middle toward each
50 end and merging at said ends into the plain shank, whereby the ring is provided with an apparently massive enlargement at one side which is in reality hollow and permanently
55 open toward the finger of the wearer, substantially as set forth.

In testimony that I claim the foregoing I have hereunto set my hand this 26th day of April, 1899.

GOTTLOB KAUTZMANN.

Witnesses:

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C. B. PITNEY.