

(No Model.)

2 Sheets—Sheet 1.

J. G. MEYERS, Jr.
PUZZLE.

No. 557,003.

Patented Mar. 24, 1896.

Fig. 1

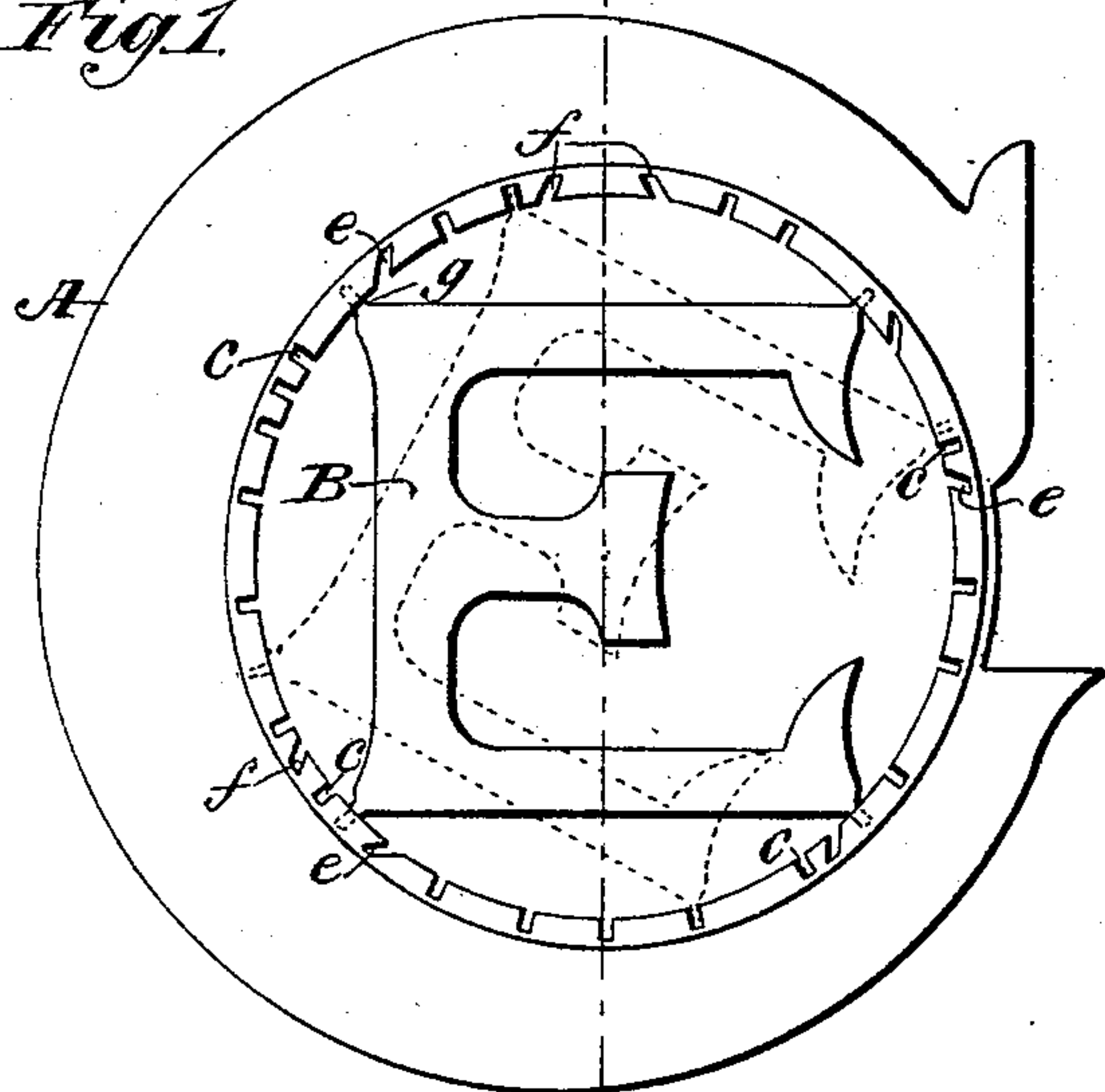


Fig. 2

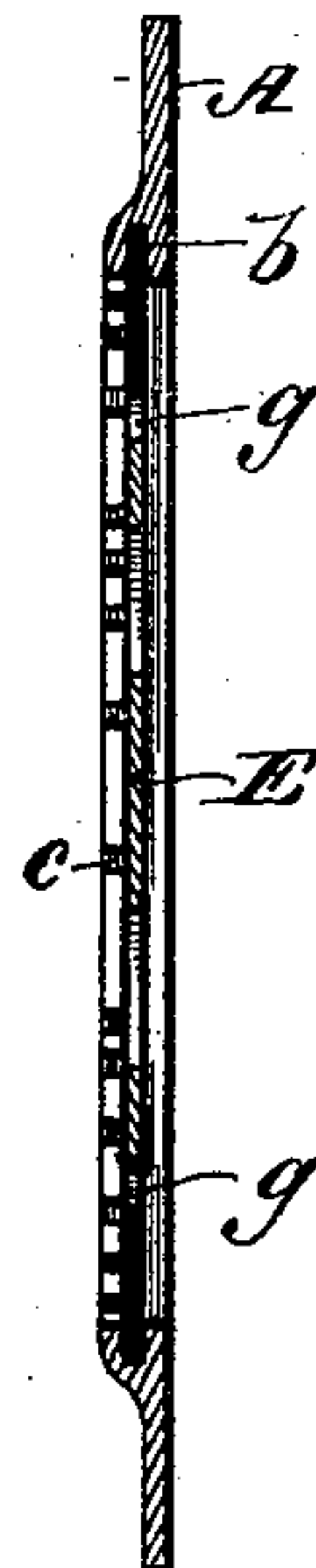


Fig. 3

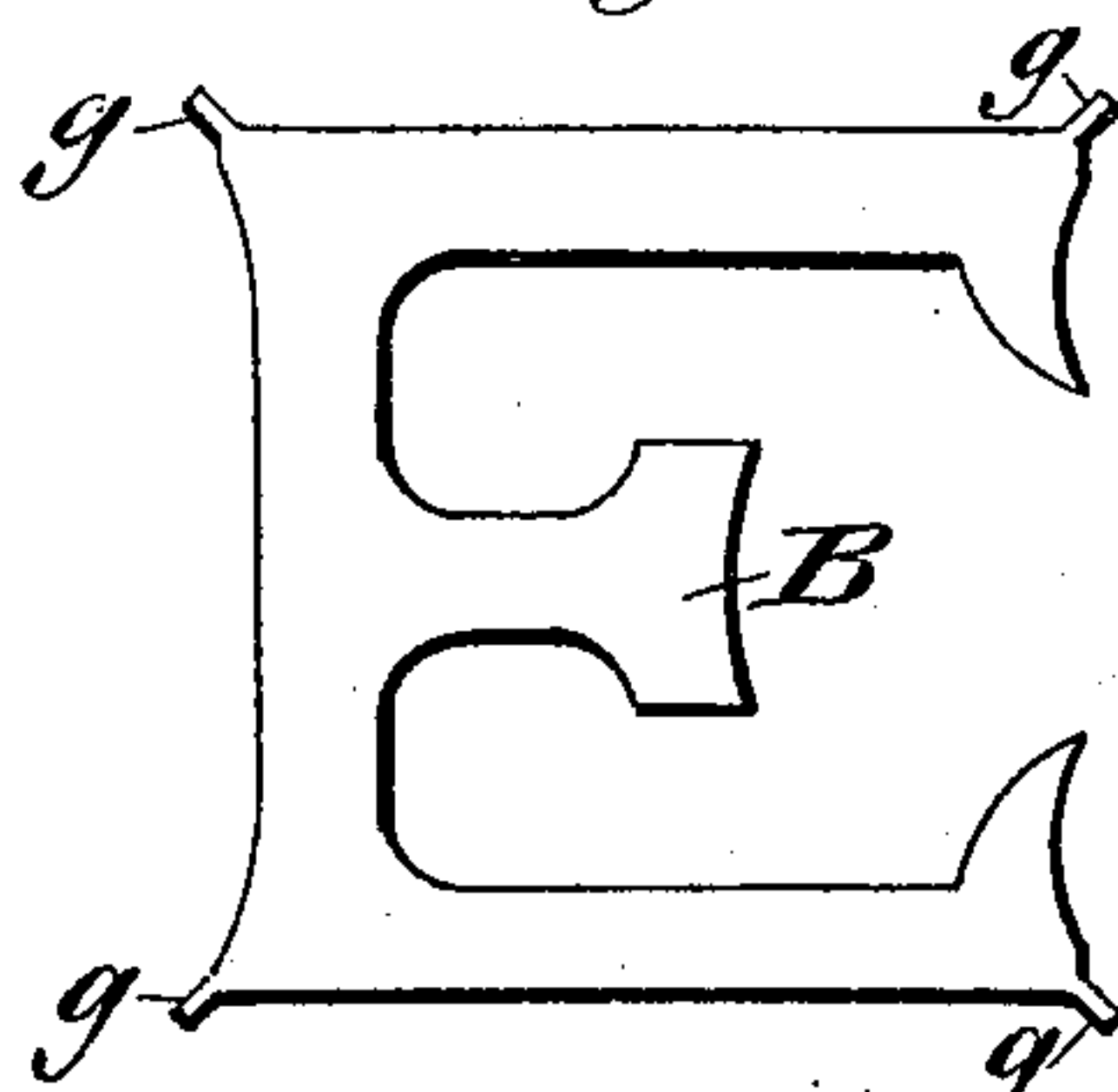


Fig. 4

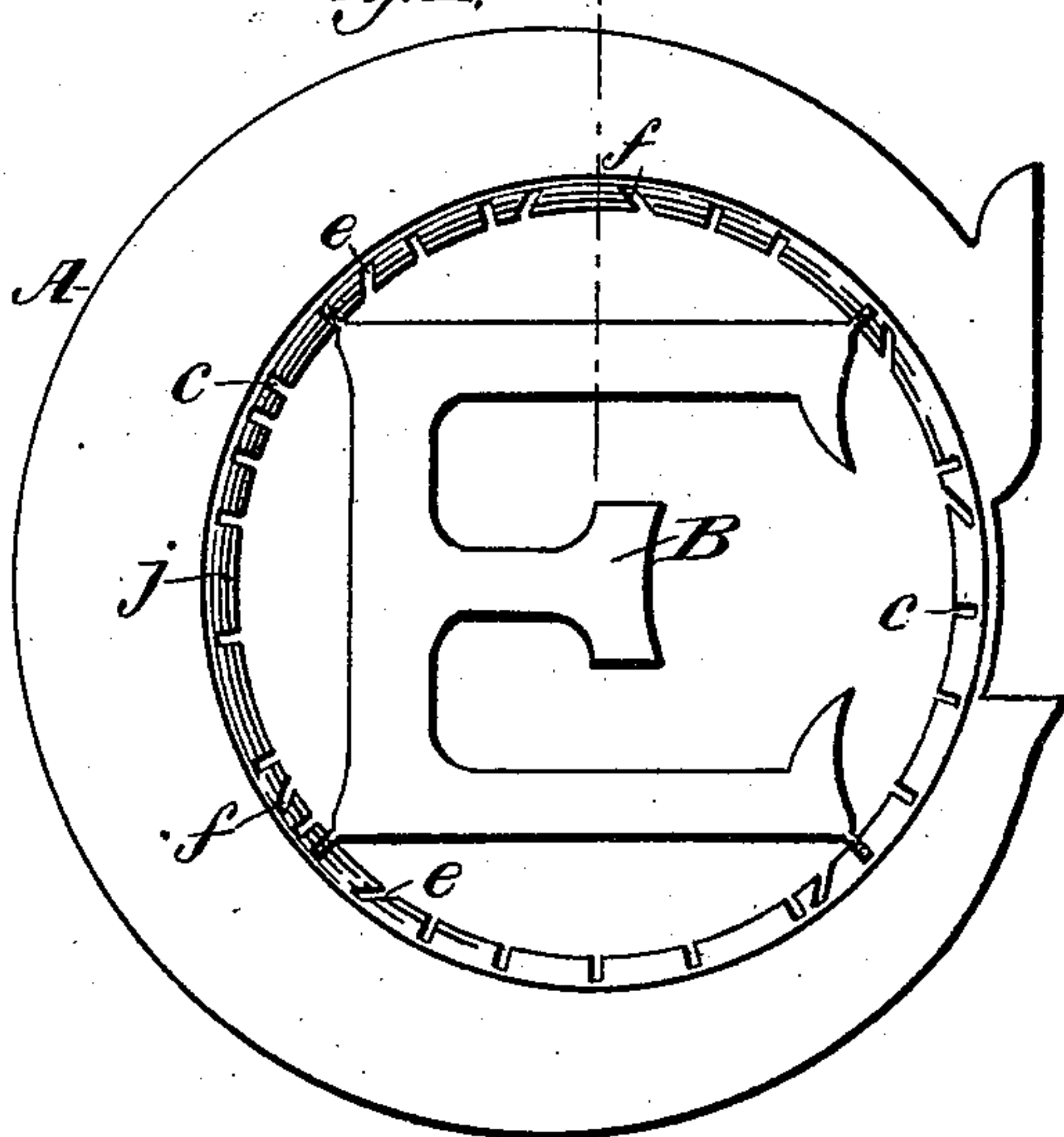


Fig. 5

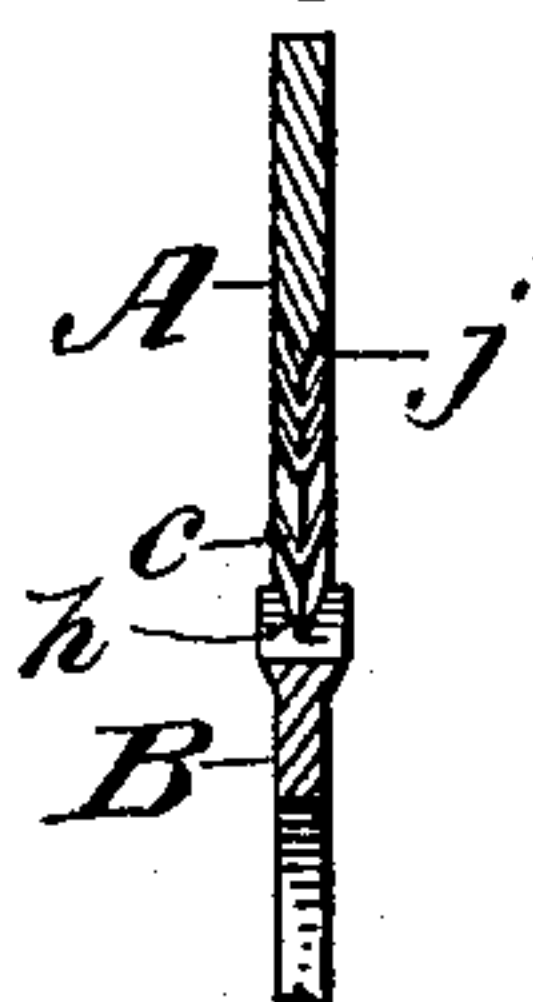
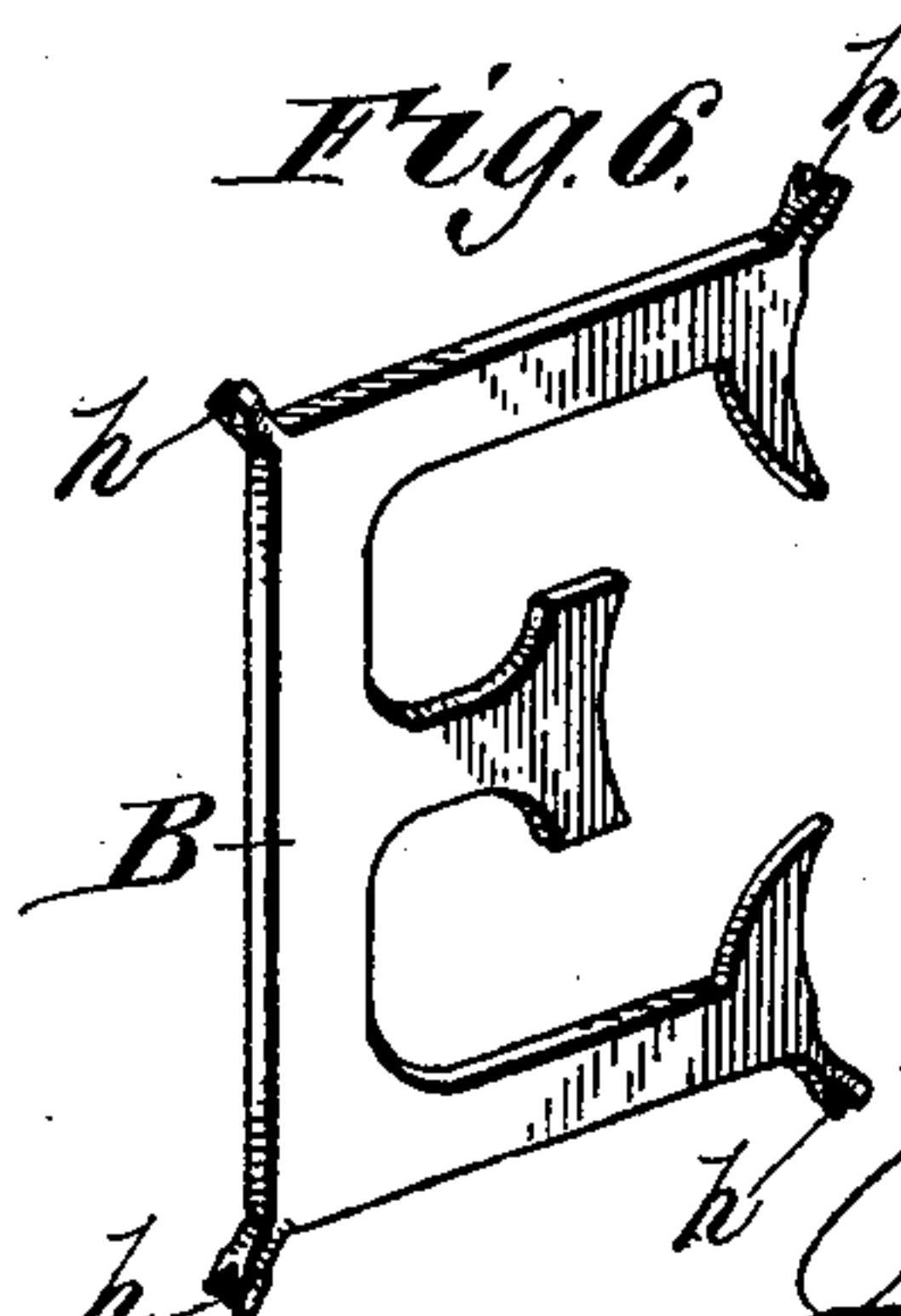


Fig. 6



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Fig. 7.

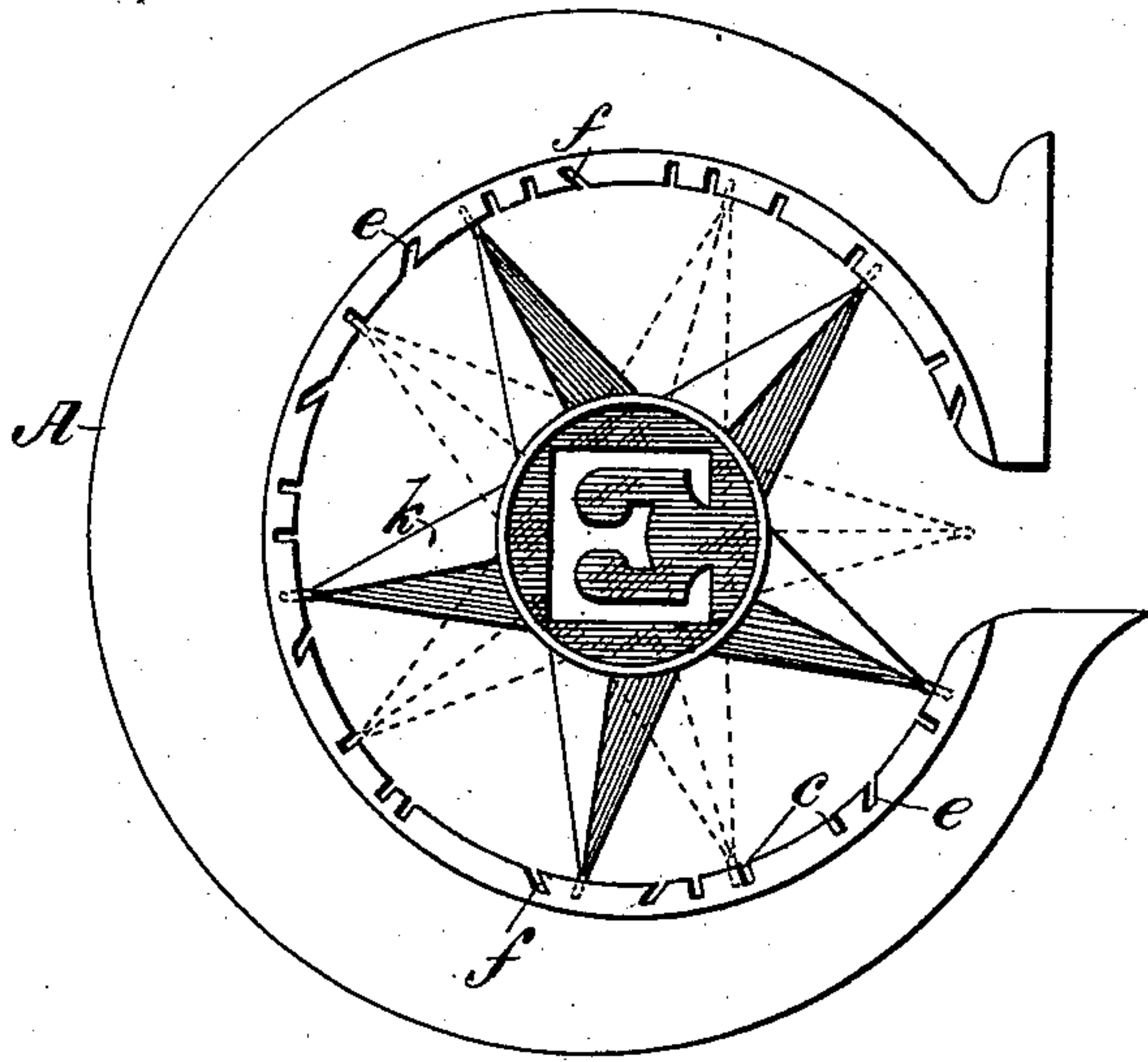
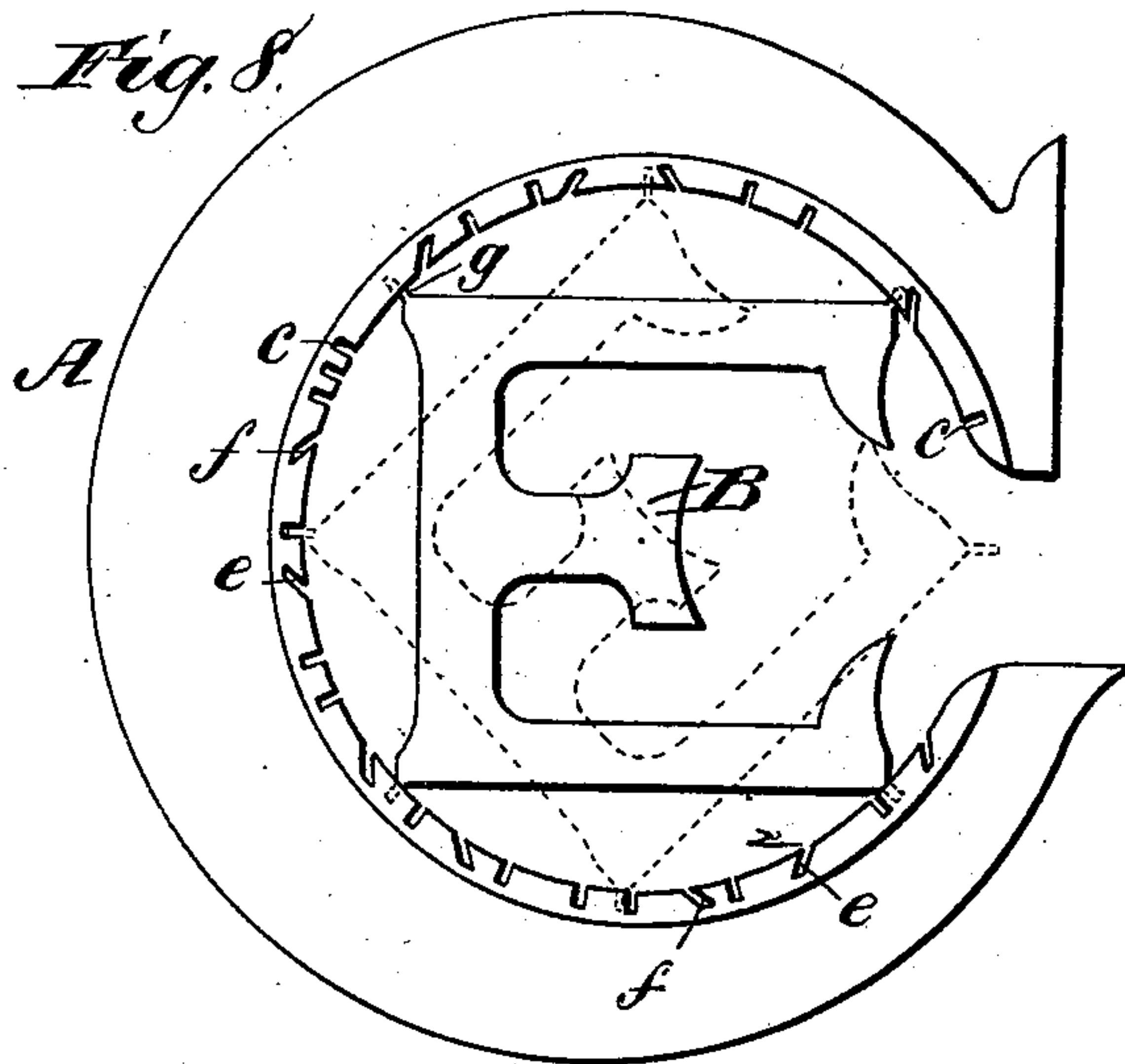


Fig. 8.



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UNITED STATES PATENT OFFICE.

JOHN GRANVILLE MEYERS, JR., OF WASHINGTON, DISTRICT OF COLUMBIA.

PUZZLE.

SPECIFICATION forming part of Letters Patent No. 557,003, dated March 24, 1896.

Application filed December 20, 1895. Serial No. 572,787. (No model.)

To all whom it may concern:

Be it known that I, JOHN GRANVILLE MEYERS, Jr., a citizen of the United States, residing at Washington, in the District of Columbia, have invented new and useful Improvements in Toy Puzzles, of which the following is a specification.

My invention relates to toy puzzles, or more particularly to what may be termed "souvenir" or "emblematic" puzzles; and it has for its object to provide an article of this character which will be neat and attractive in appearance and comparatively inexpensive in its manufacture.

It is the purpose of my invention to arrange and assemble various letters of the alphabet or other characters in such a manner that they will be temporarily interlocked, so that one may be turned upon the other until it is brought to a certain position, whereupon it may be detached, or, in other words, the two letters may be separated.

While I have here set forth that my invention consists in combining together certain letters of the alphabet, I do not wish to be understood as limiting myself to such specifically, as it can obviously be made equally as effective by combining any two or more figures or other characters together. The broad idea, therefore, sought to be covered and protected by this invention is one member in any suitable form or configuration having an opening formed therein and a second member or members so placed within said opening and held to the first-named member that by certain turning and manipulation it may when brought to a certain position be detached or disconnected therefrom.

In this particular instance I have shown my invention as composed of the letters "C" and "E," the latter being arranged within the opening in the letter "C," so as to freely turn therein, and adapted when brought to a certain position to be disconnected therefrom.

To these ends my invention consists in the novel features of construction and new combination of parts hereinafter referred to, reference being made to the accompanying drawings, in which—

Figure 1 is a plan view of one form of my invention. Fig. 2 is a vertical section of the same on the line 2 2 of Fig. 1. Fig. 3 is a detail view of one of the members or letters. Fig. 4 is a plan view of a modified form of my invention. Fig. 5 is a vertical section of a portion of the same. Fig. 6 is a detail view of one of the letters or parts. Fig. 7 is a further modification, and Fig. 8 is another modified form of my invention.

Referring to the drawings, the reference-letter A designates one of the parts or members, which in this instance is the letter "C." This letter is formed as usual and made from any suitable metal or other material, the open portion of the letter being in shape a perfect circle, and around the inner edge of which is formed or provided a groove *b*. There are a series of niches or notches *c* arranged around the inner edge of the open portion of the letter "C," said notches being cut entirely or only partially through the letter, and preferably cut on an angle or line struck from the center of the letter. I prefer to arrange some of the notches at a different angle, as shown at *e f*, Fig. 1, for the purpose of rendering the separation of the members of the puzzle more difficult.

The reference-letter B designates the second part or member of my invention, which in this instance is in the form of the letter "E." This second member is in outline a perfect square, or, more properly speaking, its extreme points or corners are all the same distance from the center of the letter, and the distance between each point or points is equal.

The letter "E" is provided at each corner with a small lug or projection *g*, which when the parts are assembled extend within the groove *b* of the letter "C," whereby the said parts or members are interlocked, and at the same time said letter "E" is adapted to be freely turned until certain of the projections *g* register with certain of the notches *c*, whereupon the letter "E" can be disconnected from the letter "C."

In Fig. 6 I have represented a modified form of my invention, which consists in forming a notch or groove *h* in each corner of the member B and beveling the inner edge of the mem-

ber A as at *j*, Fig. 5, the latter member being notched, as shown. The groove *h* at each corner of member B may be of **V** or other shape.

In Fig. 7 I have shown a still further modification of my invention, which consists in arranging a five-pointed star *k* within the letter "C," the points on the star being constructed substantially like the lugs or projections on the letter "E." The star may be stamped, ornamented, or engraved in any suitable manner, or a letter or character may be stamped therefrom.

The modification illustrated in Fig. 8 is substantially like that shown in Fig. 1, only instead of continuing the notched ring entirely around the letter it is terminated at that portion usually left open.

While I have described my invention as made up of the letters "C" and "E," I do not wish to be understood as limiting myself thereto, for I may use the letters "G" or "O," or any other character or characters, and instead of placing one letter within the circular recess I may arrange two or more letters therein and have different notches with which the projections on these different letters will be made to register.

It is obvious that the letters or characters comprising my invention may be engraved or ornamented in any suitable manner or design and that they may be made of metal, celluloid, wood, or any composition of matter.

Various changes and modifications may be made without departing from the spirit or essence of my invention.

The operation of my puzzle is as follows: The inner member of the puzzle is moved around until two of the projections taken diagonally from point to point, as shown in dotted lines in Fig. 1, are made to register with two correspondingly-positioned notches. Then this member will be free to be swiveled or swung within the outer member, whereby the two registering projections will be freed from their engagement with the outer member; but said inner member will still be held to the outer member by the remaining projections, and to remove these it is only necessary to again turn the inner member back to the position at which the other projections were freed and the inner member may then be separated from the outer member.

It should be understood that there will be but one pair of notches with which the projections will register, and these notches will be arranged to register with the projections on the inner member diagonally instead of from point to point when taken on the side of the member, although the notches with which the projections are made to register may be located in other positions.

If there are more points or projections than four and it is desired to remove them by swiveling the inner member upon which the projections are formed, then all the projections but two should be made to register with

notches. An instance of this will be seen by referring to Fig. 7 of the drawings, the inner member of which represents a five-pointed star. In this case three of the points of the star register with openings, while two do not register, and upon these two points or projections the star is swung or swiveled when the members are being separated.

What I claim is—

1. A puzzle monogram formed of two thin, disk-like letters or characters normally interlocked and lying in the same plane, said members being adapted to be moved relative to each other so as to be separated when brought to a predetermined position.

2. A toy puzzle consisting of a plurality of members one of which is provided with a circular opening and a guideway, visible notches intersecting the guideway, and another member provided with points arranged to travel freely around said guideway and adapted when in a certain position to be detached from the first-named member, the number of said notches being in excess of the number of points, substantially as described.

3. A toy puzzle consisting of separately-connected members one of which is provided with an opening and an inner peripheral groove with notches intersecting the groove, said notches being at all times exposed to view, the other member being temporarily attached to said first-named member by portions thereof extending within the peripheral groove and adapted to be detached therefrom when certain of the said portions are made to register with certain of the notches in said first-named member, the number of said notches being in excess of the portions which extend within said peripheral groove, substantially as described.

4. A toy puzzle consisting of two members one of which is provided with an opening and having an inner peripheral groove, said other member being provided with projections which ride freely within said peripheral groove, the first-named member having a series of notches arranged around the inner edge of the opening, the number of which notches is in excess of the number of projections, said notches and projections being exposed to view so that their position with respect to each other may be readily seen, substantially as described.

5. A souvenir or emblematic puzzle consisting of two members one being of **C** shape and provided with a groove around its inner curved edge and with notches intersecting said groove, said notches being open to view, the other member being of **E** shape and provided with lugs or projections which enter said groove in the first-named member so as to detachably connect the two members together, the number of notches being in excess of the number of projections, substantially as described.

6. A toy puzzle consisting of separable mem-

bers one of which is provided with an opening within which the other member is arranged to freely rotate and adapted to be swung or swiveled therein when rotated to
5 the proper position and then to be detached from the first-named member by further rotation, substantially as described.

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

J. GRANVILLE MEYERS, JR.

Witnesses:

A. V. CUSHMAN,
JAMES L. NORRIS.