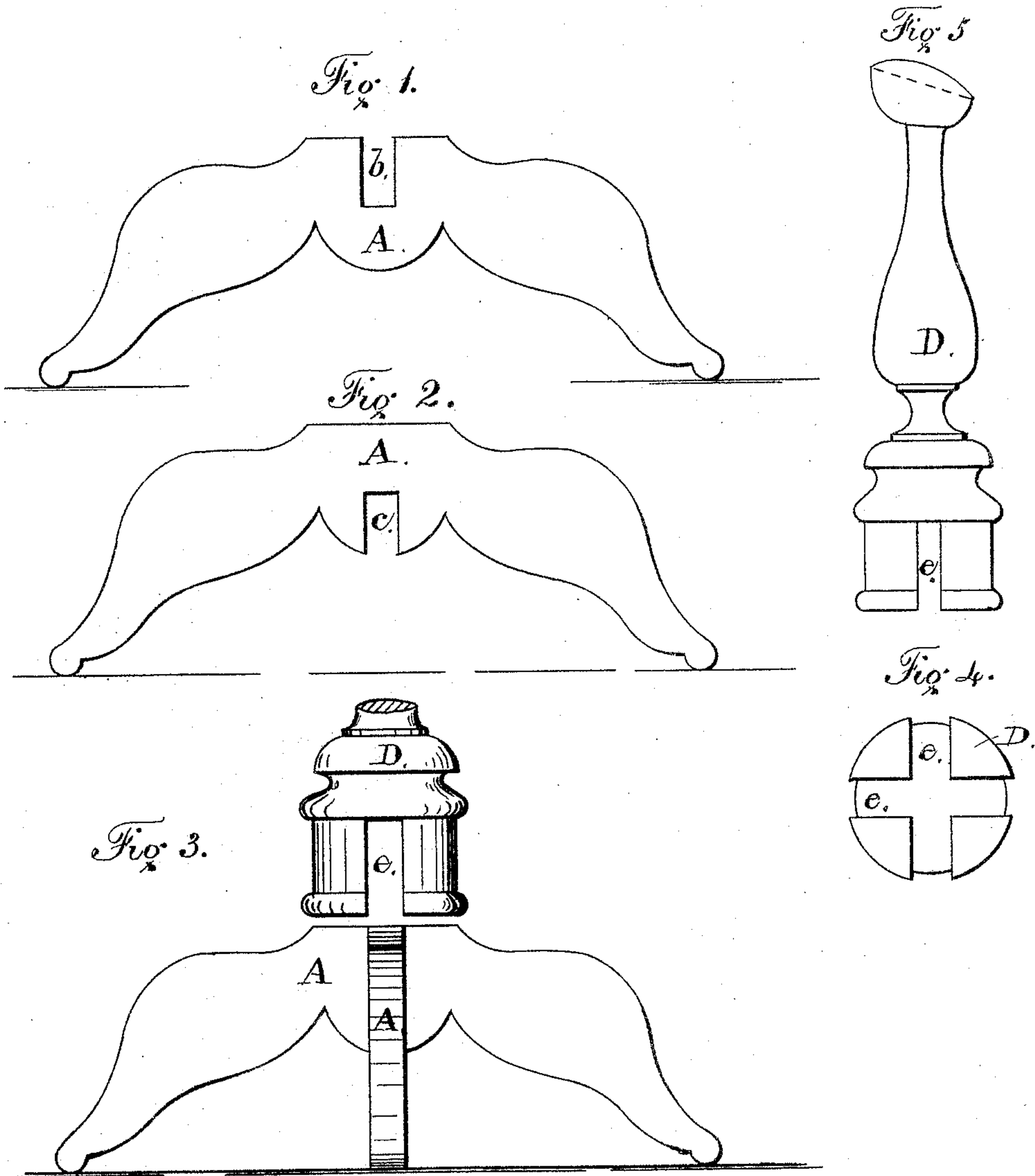


C. G. BUSH.
Kaleidoscope-Stands.

No. 156,875.

Patented Nov. 17, 1874.



Witnesses.
Geo. T. Smallwood, Jr.
Jos. B. Wildman

Inventor.
Chas. G. Bush.
per. John J. Halsted.
Atty.

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Fig. 6.

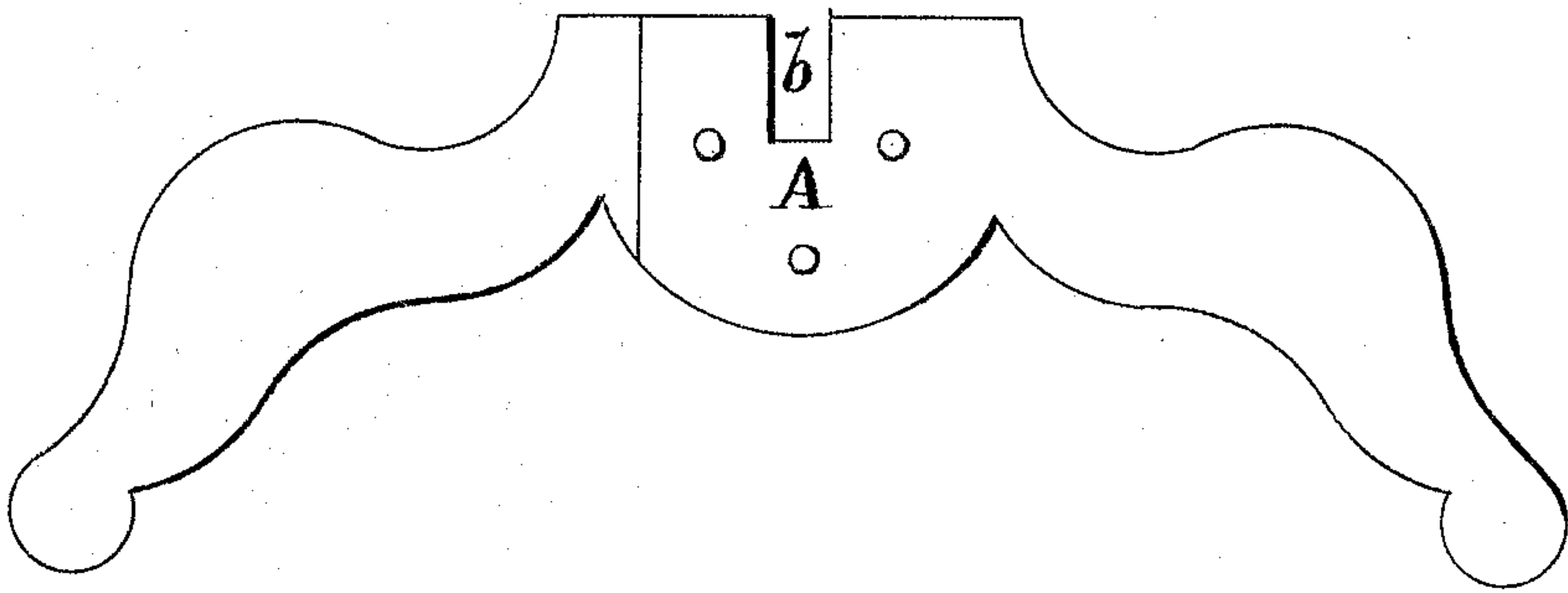


Fig. 7.

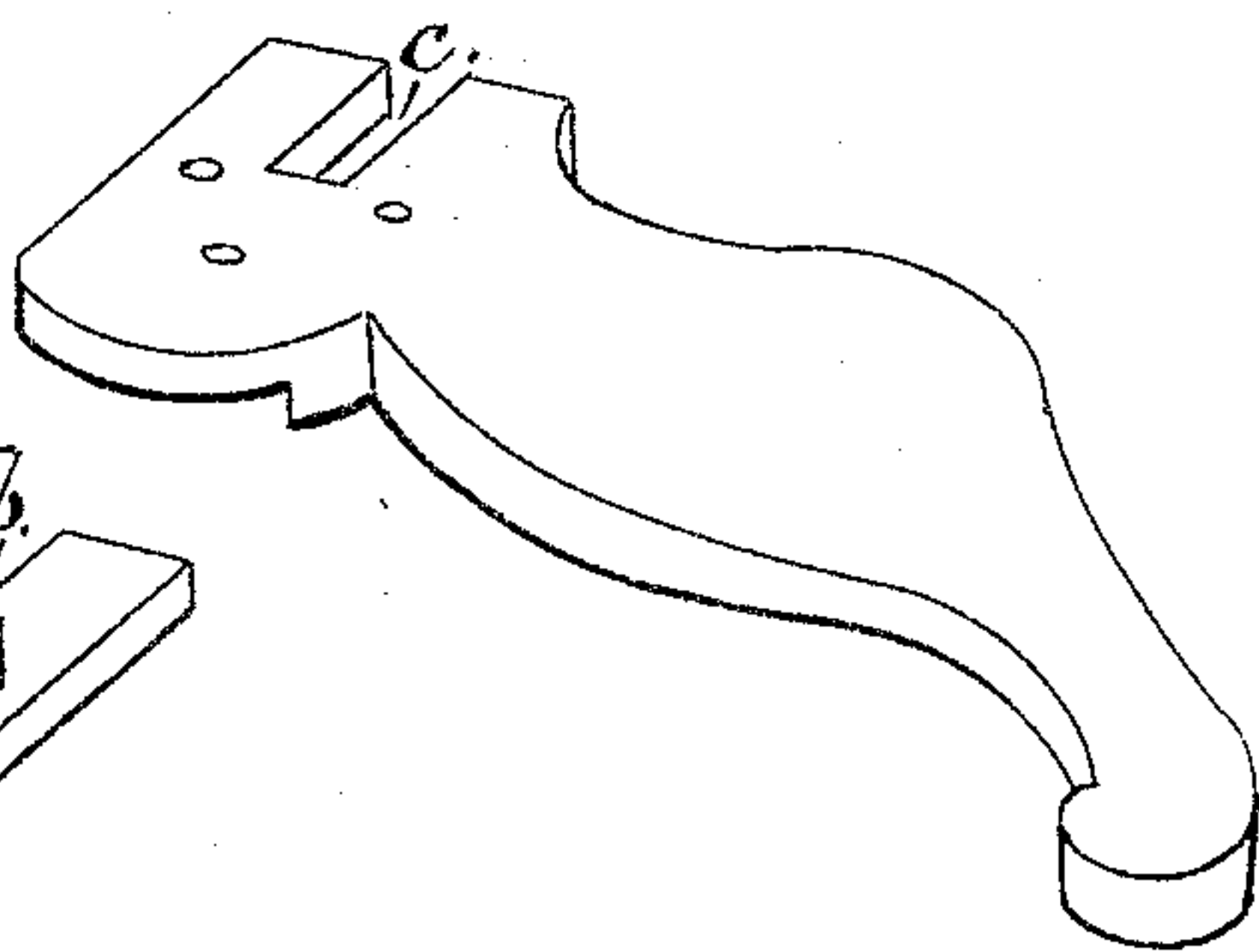
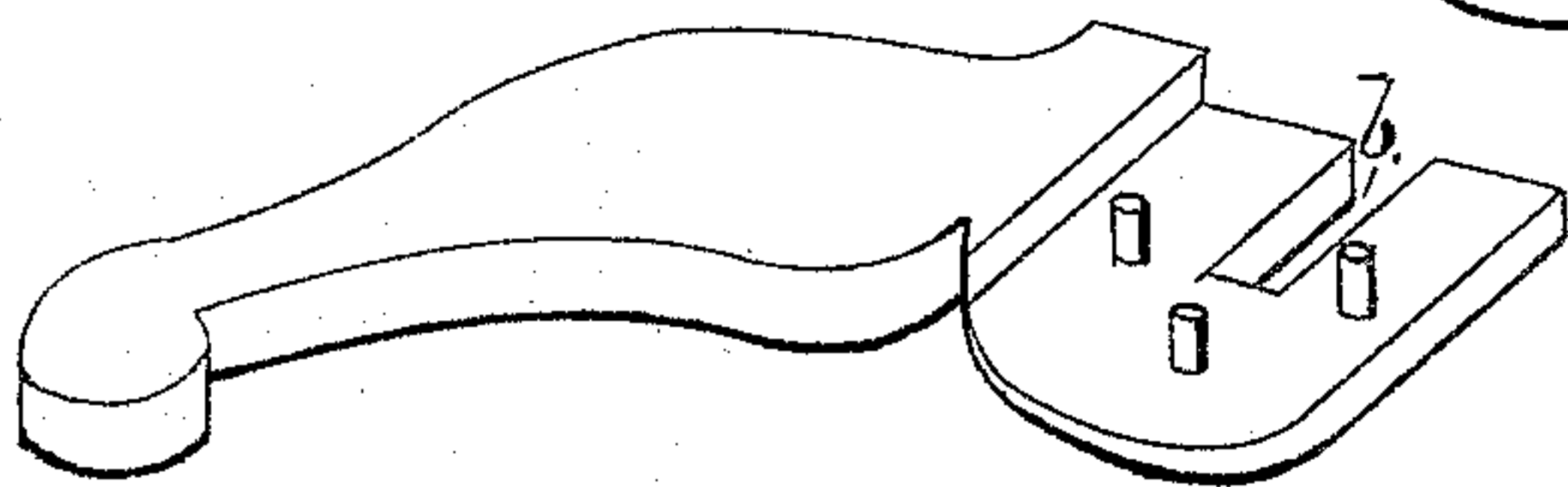


Fig. 8.



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UNITED STATES PATENT OFFICE.

CHARLES G. BUSH, OF BOSTON, MASSACHUSETTS.

IMPROVEMENT IN KALEIDOSCOPE-STANDS.

Specification forming part of Letters Patent No. **156,875**, dated November 17, 1874; application filed May 22, 1874.

To all whom it may concern:

Be it known that I, CHAS. G. BUSH, of Boston, State of Massachusetts, have invented an Improvement in Stands for Parlor-Kaleidoscopes, &c., of which the following is a specification:

My improvement relates to the mode of constructing the stand and its legs, used for supporting a parlor-kaleidoscope and for similar purposes, the object being to facilitate the packing them in a small compact compass for transportation or storing away, and yet to readily put the same together firmly for use without the use of glue, nails, rivets, or any fastening device.

Heretofore kaleidoscope-stands for parlor use have been made with the standard or post secured or screwed into a solid block or base, which needed to be of considerable diameter, and was of thick expensive wood.

In the present improvement I use for the bottom or base two flat cross-bars or pieces, A A, of any appropriate material, such as wood, metal, rubber, *papier-maché*, pasteboard, &c., each long enough to serve, when applied to the standard, in the place of two opposite legs. I form or cut away a notch in each of these transversely at the center, about half-way across, as seen at *b c*, but upon opposite sides, so that, when interlocked with each other, they shall snugly fit and cling to each other, as seen at Fig. 3, and needing no appliance to hold them together. I then form or cut in the bottom of the post D two transverse grooves or cuts, *e e*, adapted to receive snugly the cross-bars A A, the cuts being preferably of a depth about equal to or in excess of the width of the cross-bars. The cross-bars are then, at their jointed centers, pressed into the cross-cuts of the post, and the whole is complete.

The advantages of this mode of construction are, that the base may be made of thin narrow boards; that in packing the kaleidoscope and its stand, the cross-bars may be taken apart, and, with the post, laid lengthwise in the waste space in a box small enough to receive the kaleidoscope; that the whole will pack better, and that a child can separate the

parts of the stand or reunite them in a moment; that no tools are required; that there is also great strength in these legs or bars, inasmuch as each two opposite legs are integral or in one piece, and hence all the pressure or weight in handling the kaleidoscope by careless persons comes edgewise upon the center of a broad board, as distinguished from the ordinary mode of inserting legs in a table by using short legs fastened or glued at the periphery of the post, so that all the strain and leverage must in such case be sustained at the point of junction, and the stand be always liable to break down.

Another advantage is, that the cross-bars may be as long as the box in which the kaleidoscope is to be packed, so that any desired breadth or area of base may be had for the stand, and the bars may be of quite a thin material, and of any width preferred.

This mode of construction also allows a wider latitude of artistic taste in the form of the base or cross-bars, as compared with the customary solid base-block, and it also dispenses with the making of screw-threads on the leg and in the base.

My invention is applicable for stands or tables for supporting other articles as well as kaleidoscopes.

As a modification, each cross-bar may be made in two pieces, lapped at the center, and united by pins, so as to form a single bar, as shown in Figs. 6, 7, 8. When so united they are crossed and fitted into the post, as before described.

I claim—

The stand constructed with the cross-cuts in the post, and with the central cross-cuts in the cross-pieces which compose the legs or base, the whole being fitted and adapted to be united and held together by pressure and frictional contact only, and to be instantly taken apart, in the manner and for the purpose shown and described.

CHARLES G. BUSH.

Witnesses:

JOHN C. PURKIS,
CHARLES SELDEN.