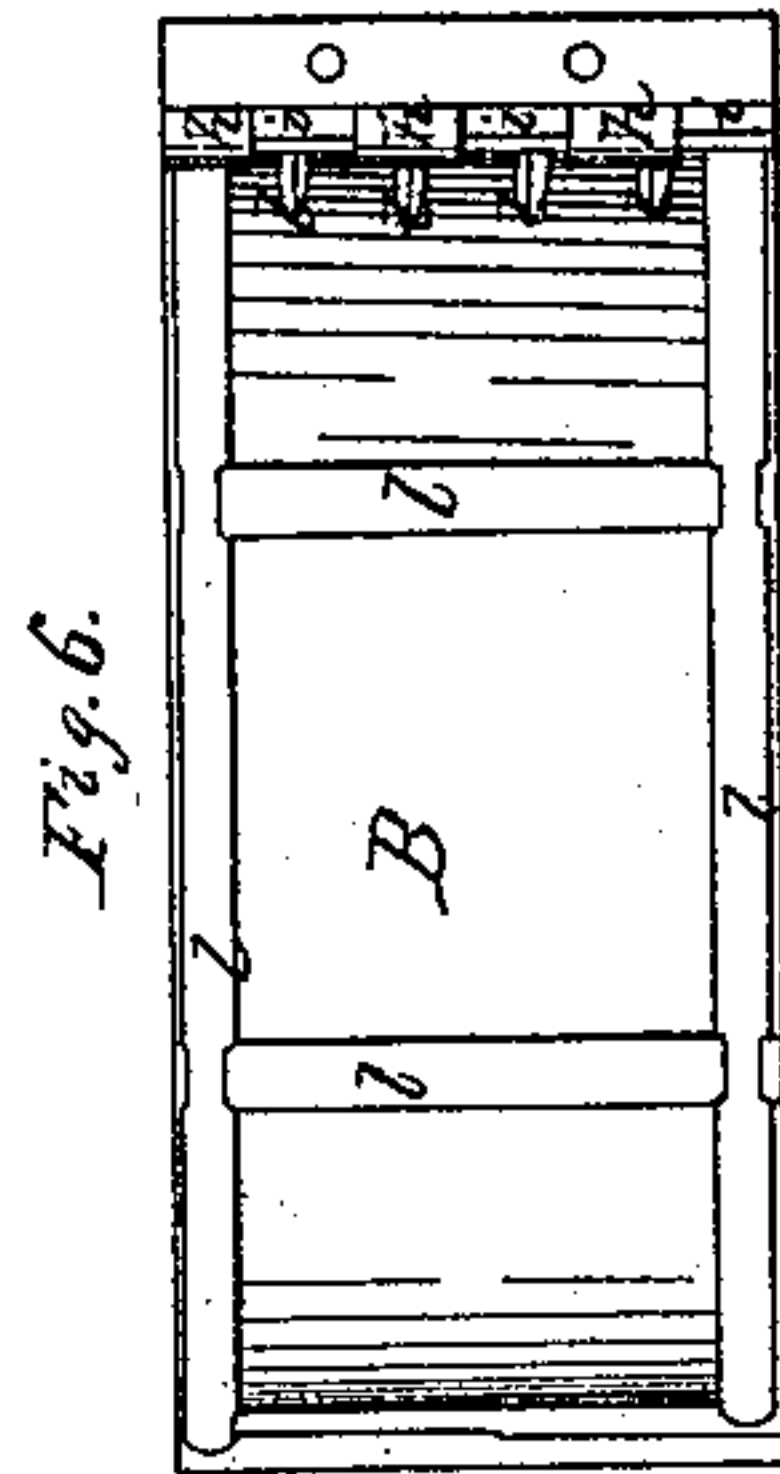
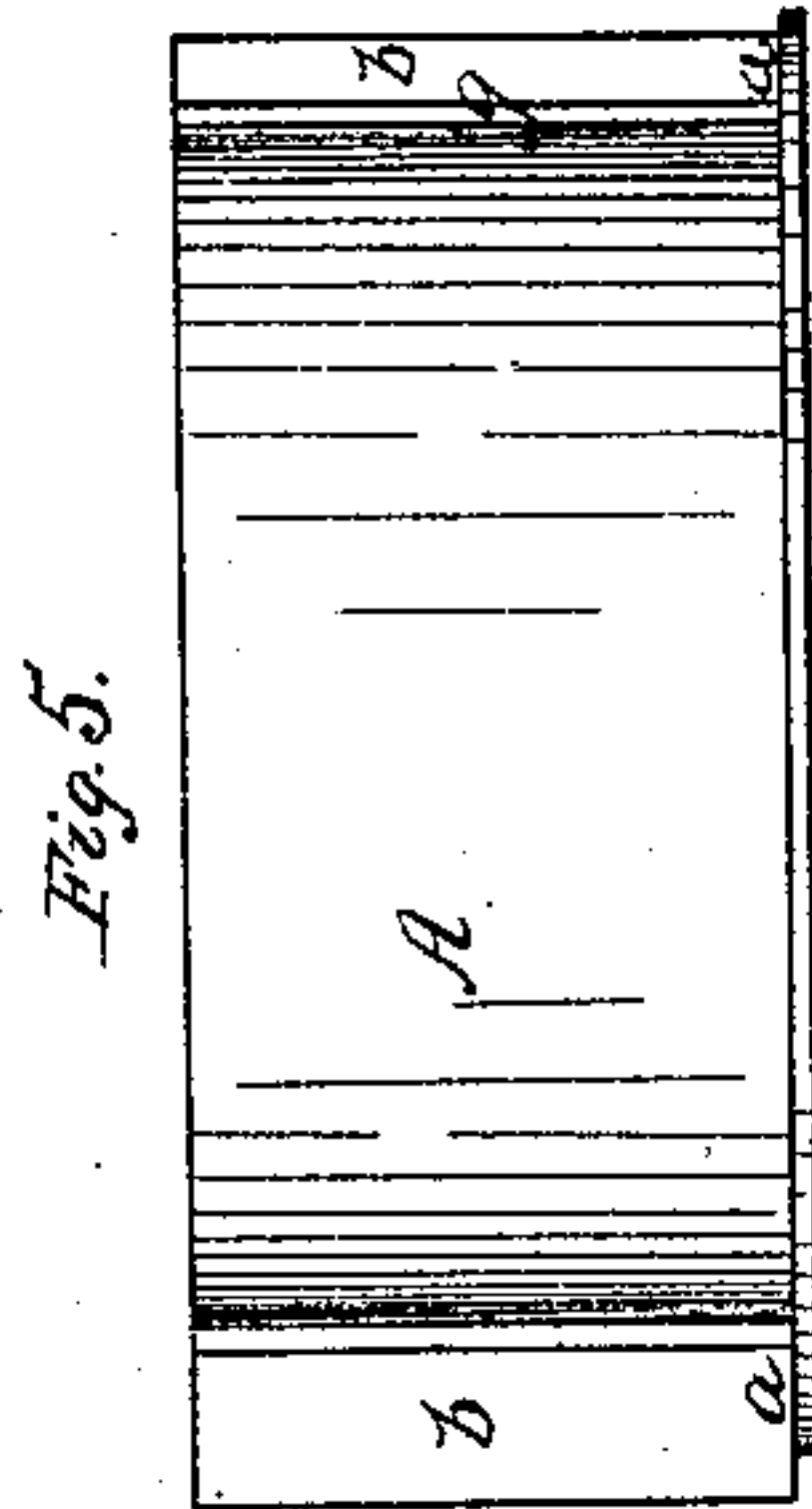
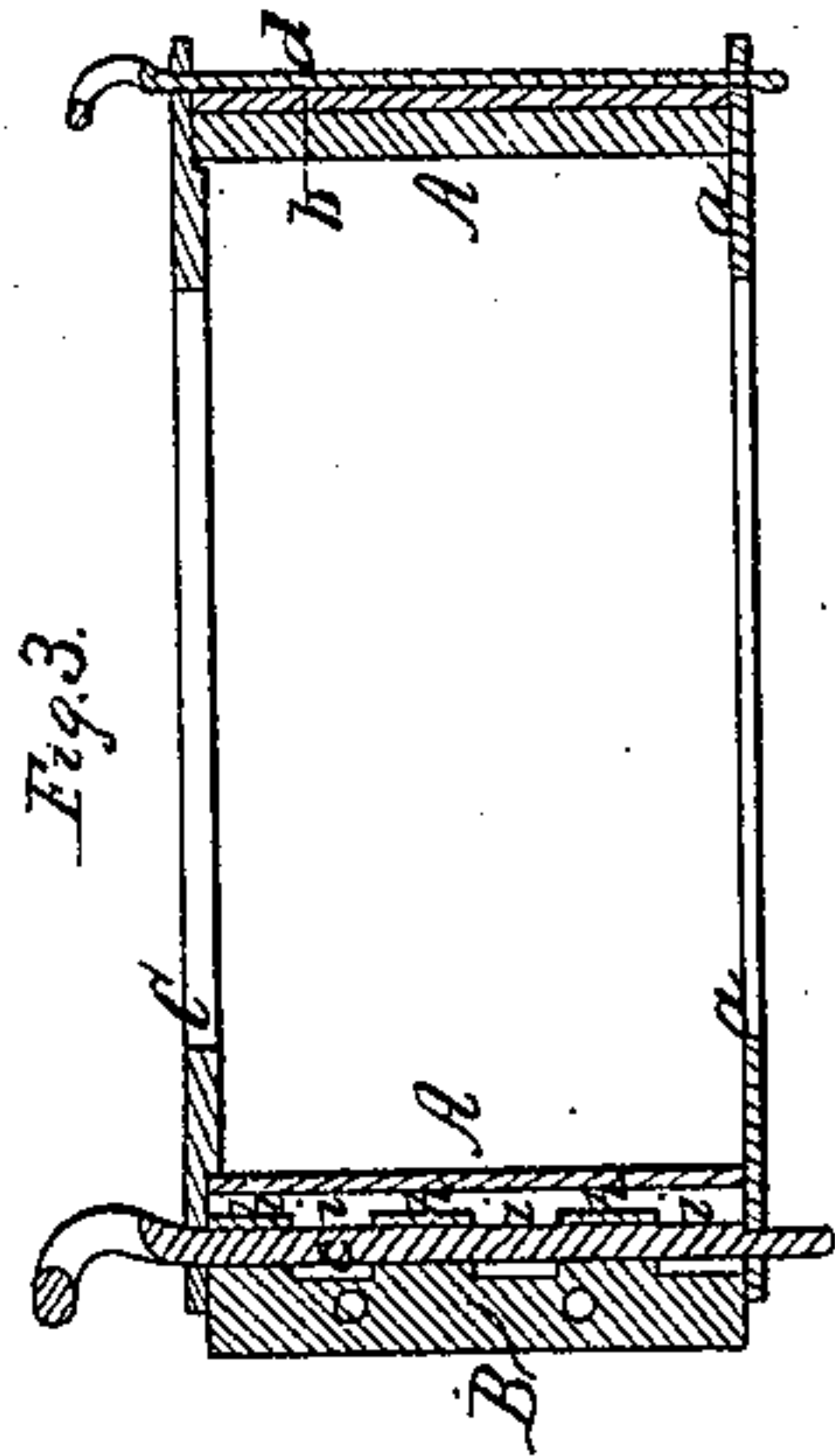
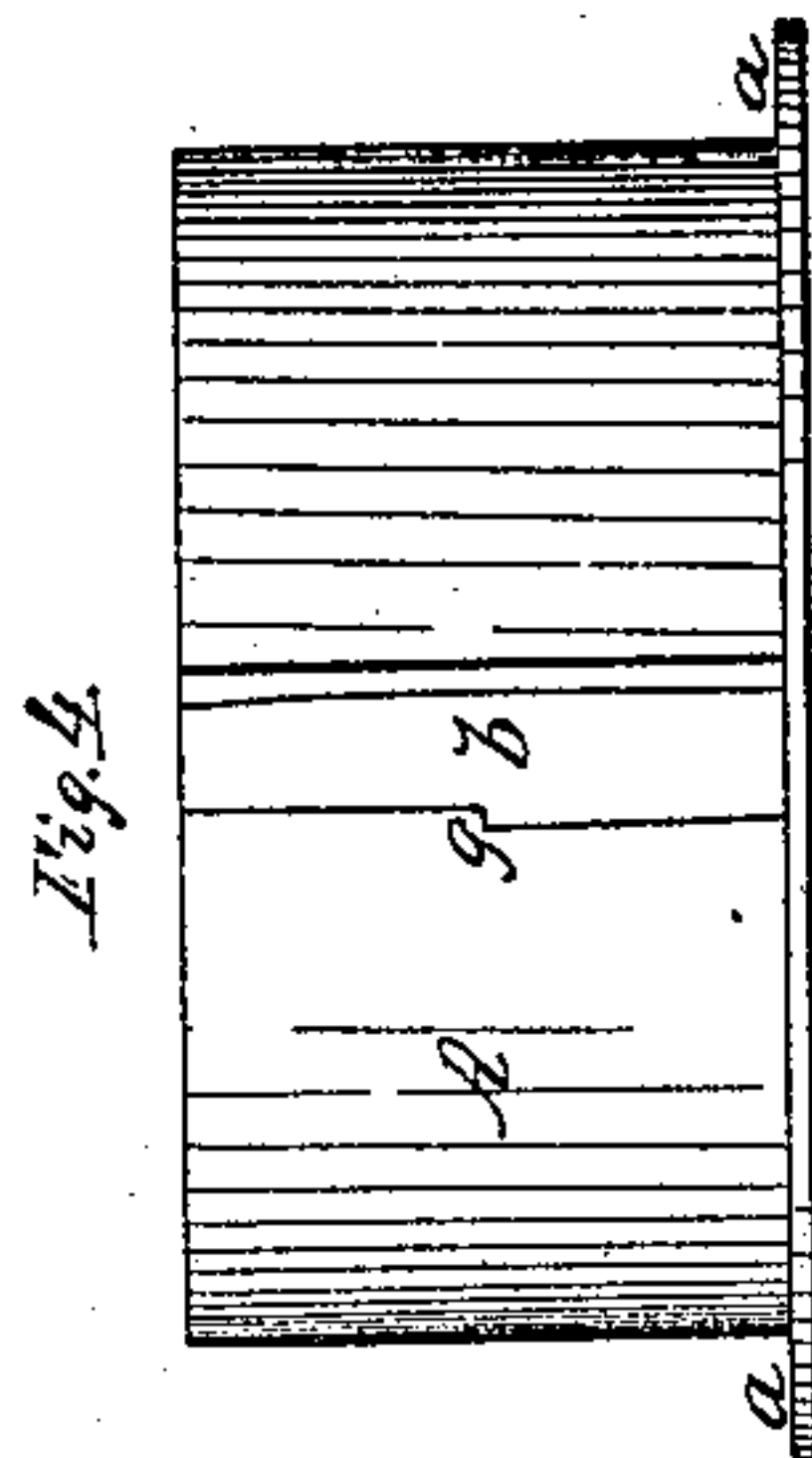
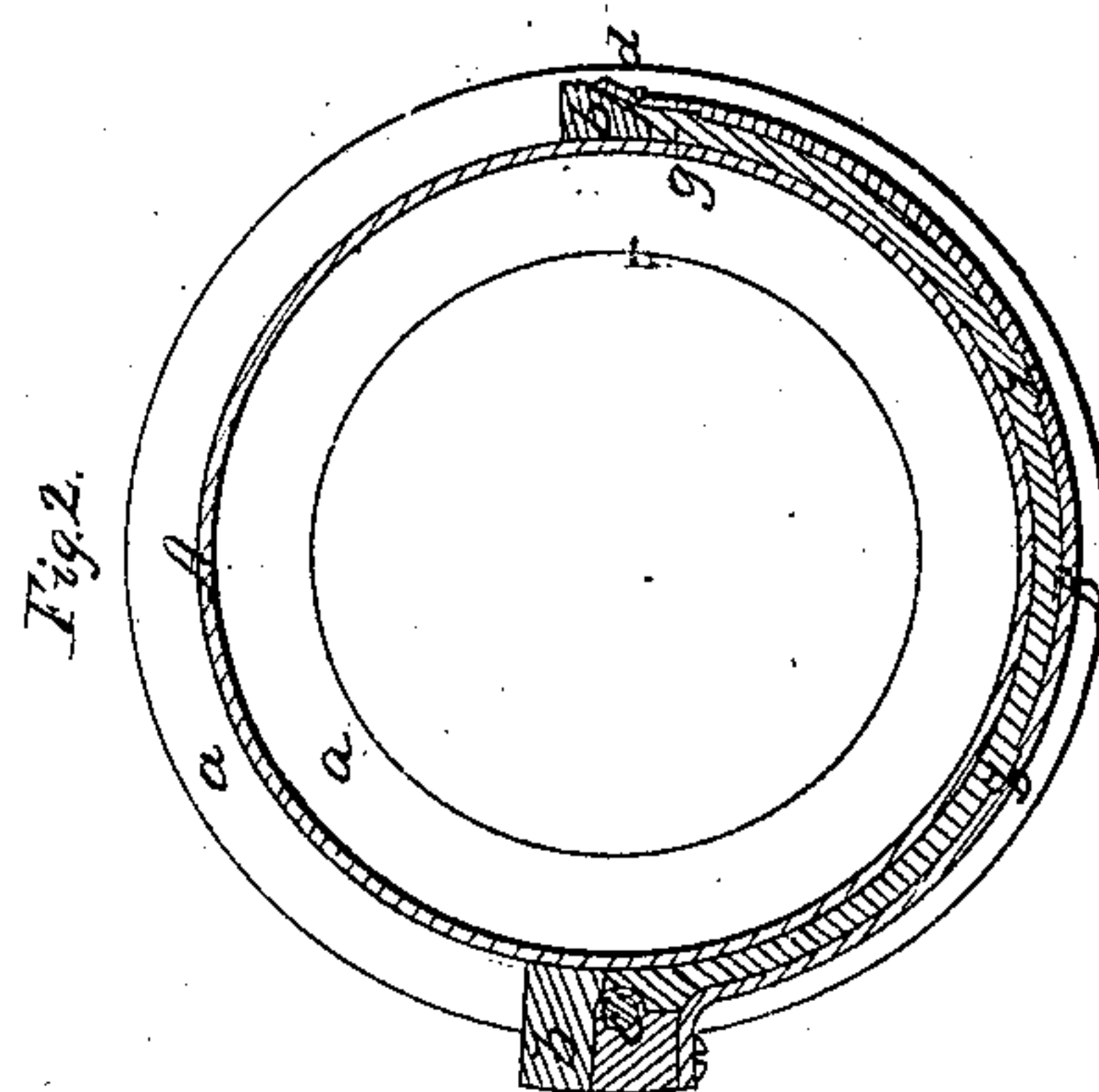
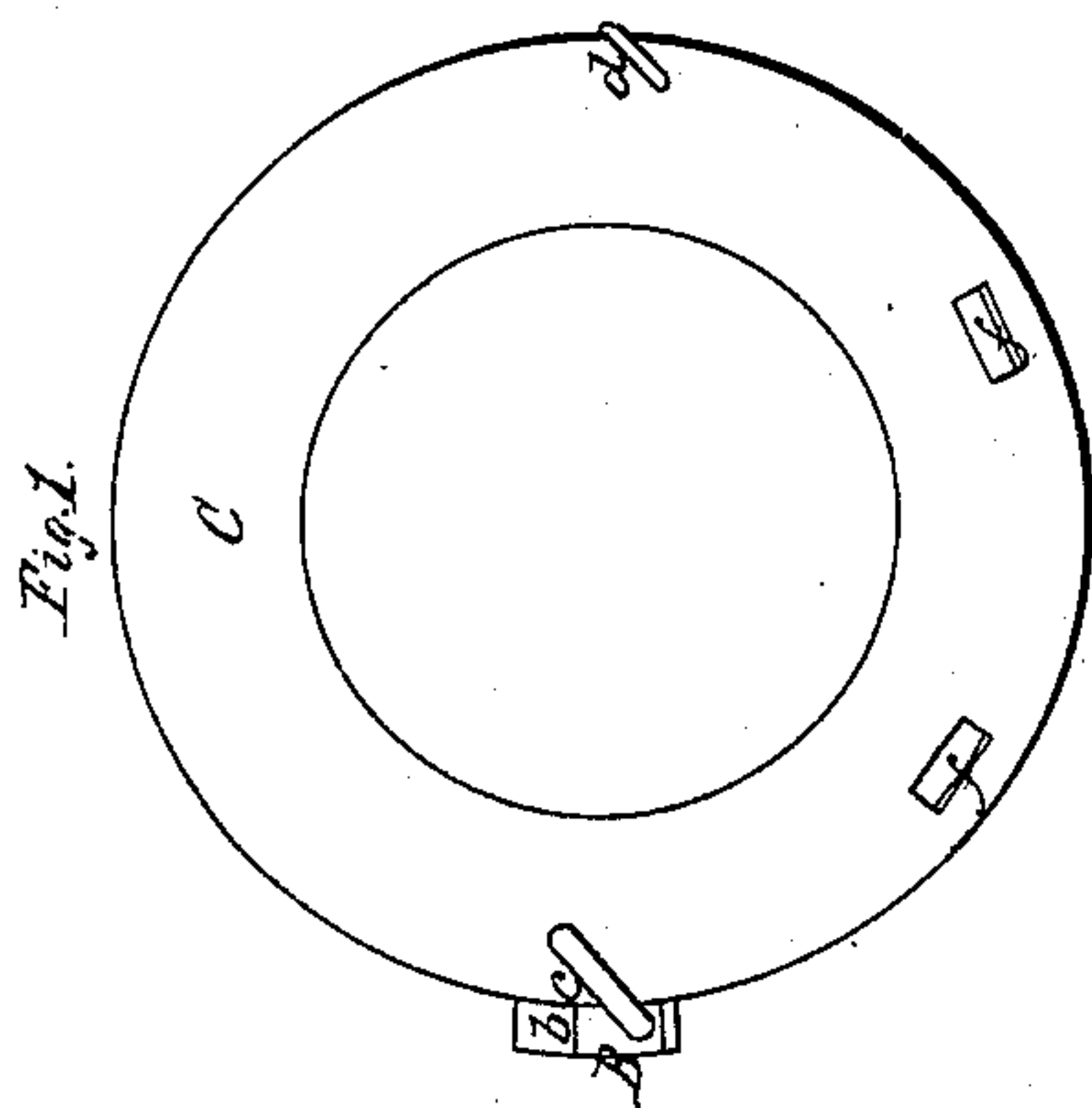


T. BROWN.

MOLD FOR CASTING METALLIC CHEESE HOOPS.

No. 19,677.

Patented Mar. 23, 1858.



UNITED STATES PATENT OFFICE.

TIMOTHY BROWN, OF GEORGETOWN, NEW YORK.

IMPROVEMENT IN CASTING METALLIC CHEESE-HOOPS.

Specification forming part of Letters Patent No. 19,677, dated March 23, 1858.

To all whom it may concern:

Be it known that I, TIMOTHY BROWN, of Georgetown, in the county of Madison and State of New York, have invented a new and Improved Mold for Casting Metallic Cheese-Hoops; and I do hereby declare that the following is a full and exact description thereof, reference being had to the accompanying drawings, making part of this specification—

Figure 1 being a plan of the mold; Fig. 2, a corresponding plan, the top being removed; Fig. 3, a vertical section through the center; Fig. 4, an elevation of the inner part of the mold, looking from the left, when in the position shown in Fig. 2; Fig. 5, an elevation thereof, looking from the bottom of the sheet, when in the same position; Fig. 6, an elevation of the inner side of the outer part of the mold.

Like letters indicate corresponding parts in all the figures.

I cast the hoops in halves to be hinged together, the two halves being exactly alike, so that the same mold is adapted to casting both.

The object of the improvement is so to construct the mold that the halves, although precisely alike, shall fit together properly to compose a suitable hinge at one joint, and a suitable firm connection to be opened and closed at pleasure at the other joint, and to accomplish this with great facility and rapidity. The inner part, A, of the mold consists of a cylinder of metal of the proper height and diameter to produce a cheese-hoop of the desired size. An annular plate, *a*, is secured to the lower end of the cylinder, projecting outward in the form of a flange sufficiently wide to serve as the bottom of the mold. It may also project inward beyond the cylinder. On opposite sides of the cylinder are two projections, *b b*, which serve as end pieces for molding the extremities of the half-hoops, and for holding the outer removable part, B, of the mold in place. On the side of the cylinder A where the hoops are to be cast the distance between the projections *b b* around said cylinder is just half of the circumference thereof. The outer part, B, of the mold consists of a half-cylinder or a little more, sufficient to produce the proper lap at one end over one of the projections *b*, which is beveled for the purpose, as seen at the right hand in Fig. 2. The cylinder of the outer part, B, is enough larger than

that of the inner part, A, to leave the proper space between them for the hoop. The height of both parts is the same. One end of the inner part is formed into a number of tubes, *h h h*, all in the same vertical straight line, with an equal number of spaces, *i i i*, alternating therewith, substantially as shown in Figs. 3 and 6. The apertures of the tubes are of proper size for the pivot of the joint where the halves are put together, and the diameter and length of the hollow spaces *i i i* are the same as of the tubes *h h h*, and all uniform. There is an equal number of tubes and spaces, so that a tube will terminate one edge of the mold-piece and a space terminate the other edge thereof. The other end of the mold-piece B has a lip on its outer edge, and the inner edge thereof is beveled, so as to fit closely over the beveled face of the projection *b* of the inner mold-piece, A. There is a shoulder, *g*, just at the center of the thin edge of said projection *b*, substantially as shown in Figs. 2 and 4, for the purpose of producing a projecting lip on one half of the breadth of the hoop at the end, and a corresponding depression in the inner edge of the end for the remaining half of the width, so that when the two halves of the hoop are shut together the two ends cannot move or slide, one by the other, either vertically or radially. Suitable depressions, &c., *l l l*, are formed in or on the inner surface of the outer mold-piece, B, for the purpose of producing any ribs, beads, or ornaments desired. The top of the mold is a separate piece, C, in the form of an annular plate of the same size as the bottom *a*. It has an annular groove in its under side, leaving a portion inside thereof just equal in diameter to the inside of the mold-piece A considerably thicker than the rest of the top, so that when said top is placed on the mold said thick portion will fit into the cylinder A, and thereby keep the top in the proper position. Apertures *f f*, Fig. 1, are made in it, through which the melted metal is to be poured. A hole is made in the bottom *a*, and another in the top C, exactly in a line with the hinge-tubes *h h h* when the mold-piece B is placed in its proper position, where it is held by passing a rod, *c*, through said holes in the top and bottom and through the tubes *h h h*, as shown in Fig. 3. The rod fits closely in the tubes *h h h*, and together therewith, and with the spaces *i i i*.

serves to produce the hinge of the exact form required. The other end of the mold-piece B is held in place by a rod, *d*, passing down through holes in the top and bottom, and just outside of the lip on the end of said mold-piece. After the metal is poured in and solidified, as indicated by the blue color in Fig. 2, the rods *c* *d* are withdrawn, and the mold-pieces A B separated, which leaves the half-hoop completely formed. The mold is then again put together and another half-hoop cast, and thus the process is continued with great rapidity. To complete the hoop it is only requisite to put a rod through the hinge-joint after putting two halves together, and to secure a suitable clasp to the unconfined edges for fastening them together.

What I claim as my invention, and desire to secure by Letters Patent, is—

The combination of the cylindrical guiding and supporting mold-piece A, provided with the flange-bottom *a* and side projections, *b b*, the semi-cylindrical mold-piece B, and the guide top C, all arranged in relation to each other as described, and united by the rods *c* and *d*, substantially in the manner and for the purpose herein specified.

The above specification signed by me this 7th day of October, 1856.

TIMO. BROWN.

Witnesses:

ALFRED BROWN,
WM. E. HOLMES.