

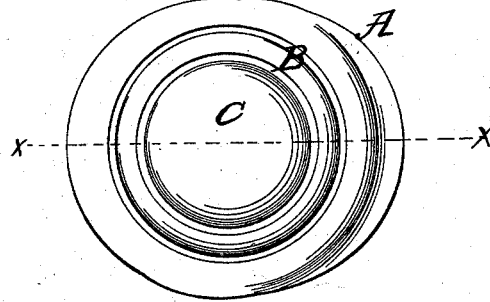
*C. H. Bassett,*

*Turning Regular Forms.*

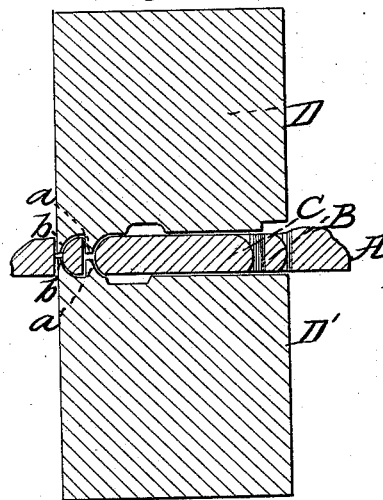
*No. 49,191,*

*Patented Aug. 1, 1865.*

*Fig. 1*



*Fig. 2*



*Witnesses:*

*Wm. Brown  
Jas. Fuchs*

*Inventor:*

*C. H. Bassett  
per *Wm. H. Le*  
*Attorneys**

# UNITED STATES PATENT OFFICE.

CHARLES H. BASSETT, OF BIRMINGHAM, CONNECTICUT, ASSIGNOR TO THE  
BIRMINGHAM BUTTON COMPANY, OF SAME PLACE.

## IMPROVEMENT IN MACHINES FOR CUTTING RINGS FROM IVORY.

Specification forming part of Letters Patent No. 49,191, dated August 1, 1865.

*To all whom it may concern:*

Be it known that I, CHARLES H. BASSETT, of Birmingham, in the county of New Haven and State of Connecticut, have invented a new and useful Improvement in the Method of Cutting out Buttons and Rings from Ivory, Bone, &c.; and I do hereby declare that the following is a full, clear, and exact description thereof, which will enable those skilled in the art to make and use the same, reference being had to the accompanying drawings, forming part of this specification, in which—

Figure 1 represents a plan view of a button-blank, a ring, and the material or substance out of which they are cut. Fig. 2 represents a pair of cutters, by means of which the button and ring are formed, and also a section taken on the line *x* of Fig. 1.

Similar letters of reference indicate corresponding parts.

This invention consists in a novel method of cutting buttons and rings from ivory, bone, vegetable ivory, wood, and other substances.

In the art to which my invention belongs, as now conducted, buttons are cut out of plates or disks of the material used by placing the disks in a lathe and bringing up against them on each side cutters of the proper shape, which cut out and separate the buttons from the said material. That portion of the material which is left after the separation of the button was accounted as waste. This is especially true of the manufacture of vegetable ivory into buttons. This substance comes in pieces of small diameter, not great enough to furnish two ordinary-sized buttons for coats and other articles of apparel, and yet so much larger than one button as to leave a great part of the material unused. My object is to utilize this waste portion of the material, and I accomplish this object by cutting out therefrom one or more rings at the same operation which produces the button.

The drawings illustrate one way of carrying out the said invention.

A designates a disk or piece of vegetable ivory. Its thickness is to be that which is required of the button to be cut out from it. Having been properly fixed in a lathe or other suitable machine, it is next subjected to the action

of the knives or cutters which cut out the articles to be manufactured. I have found that in cutting buttons and other articles of circular form from disks of ivory, animal or vegetable, and from other disks, there is plenty of material left in the rest of the disk for the production of a ring; but owing to the shape of the fragment or residue which is left after the removal of the central part it is not possible to get out a ring therefrom at a reasonable cost. It becomes necessary, therefore, to form the ring at the same time the button is formed. This I have effected by making cutters of such a shape as to form both articles simultaneously.

D D' designate such cutters. The cutting-edges *a* form or make the rounded edge of the button C and separate it from the material beyond, the outer or straight sides of the cutting-edges *a* forming the interior of the ring B. The cutting-edges *b b* form or make the outer circumference of the ring and at the same time separate it from the rest of the disk. If there is enough of the material left, another ring may be cut outside of the first by giving a proper form to the cutters.

I have not shown any mechanism for operating the cutters, because I do not claim anything in such mechanism; nor do I claim making cutters with multiform cutting-edges; but my invention is to be applied and carried out by means of the ordinary lathes and mechanism used in the art of cutting out buttons, the knives or cutters being advanced toward the disk or material to be operated on in a way well known to mechanics.

I claim as new and desire to secure by Letters Patent—

Forming rings from any material out of which buttons or other circular articles are cut, by cutting them from that portion of the material which is exterior to the button and at the same operation with the cutting of the button, by the means substantially as described.

CHARLES H. BASSETT.

Witnesses:

CHAS. H. MITCHELL,  
JOHN S. PEPENGE.