

No. 776,114.

PATENTED NOV. 29, 1904.

A. N. COATES.
MOLD FOR SEAMLESS CROWN SWAGERS.

APPLICATION FILED FEB. 4, 1904.

NO MODEL.

Fig. 1-

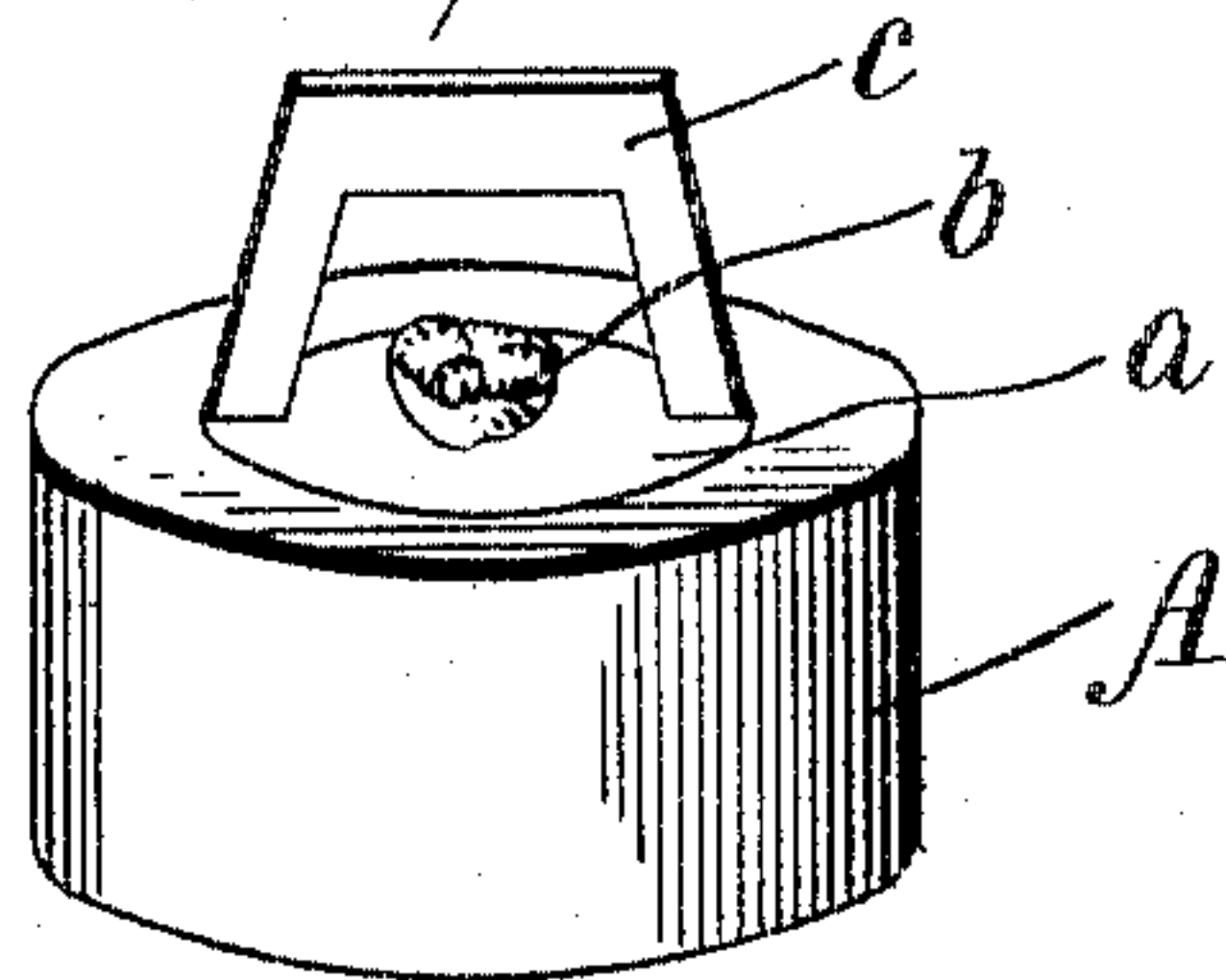


Fig. 2-

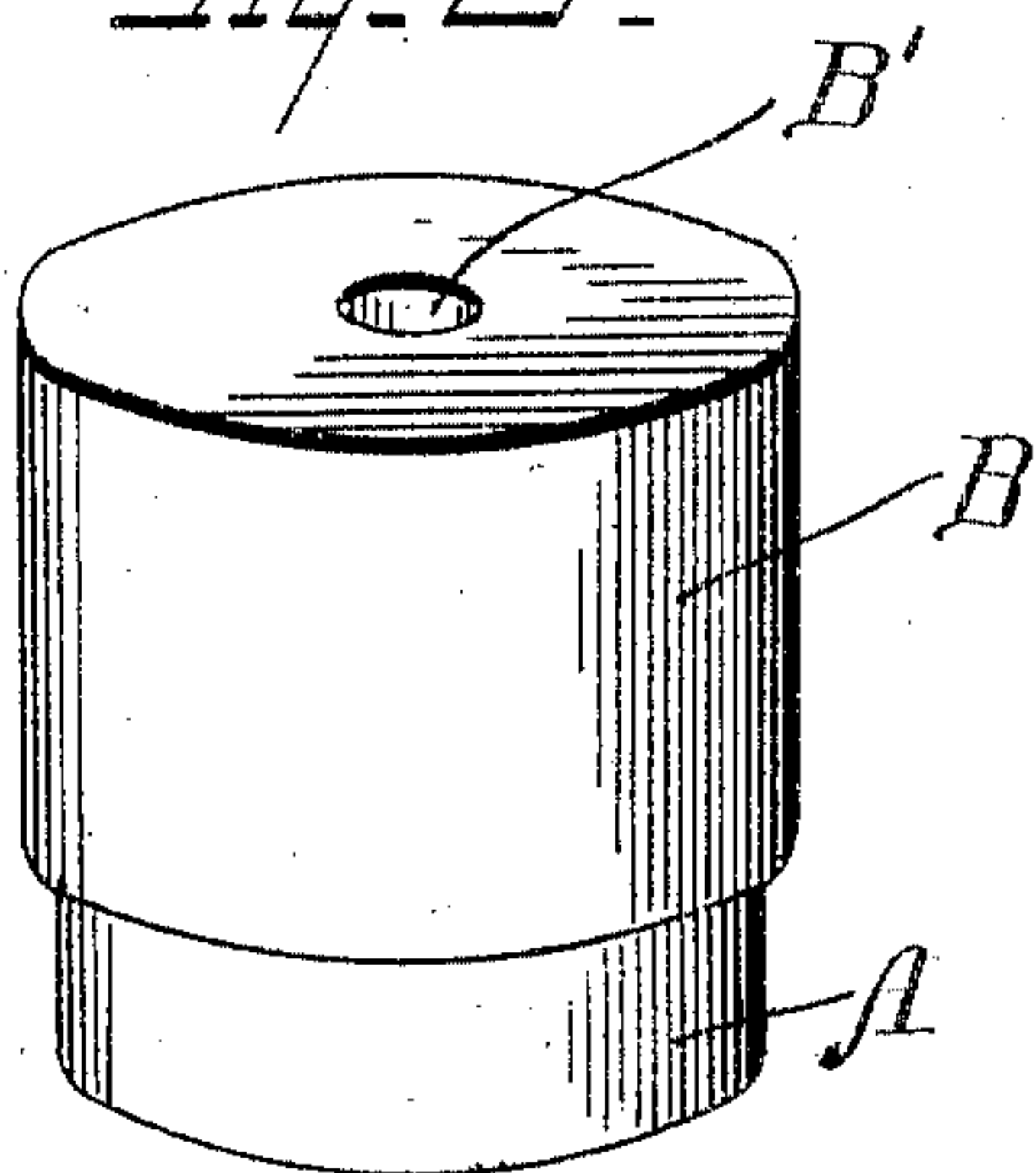


Fig. 3-

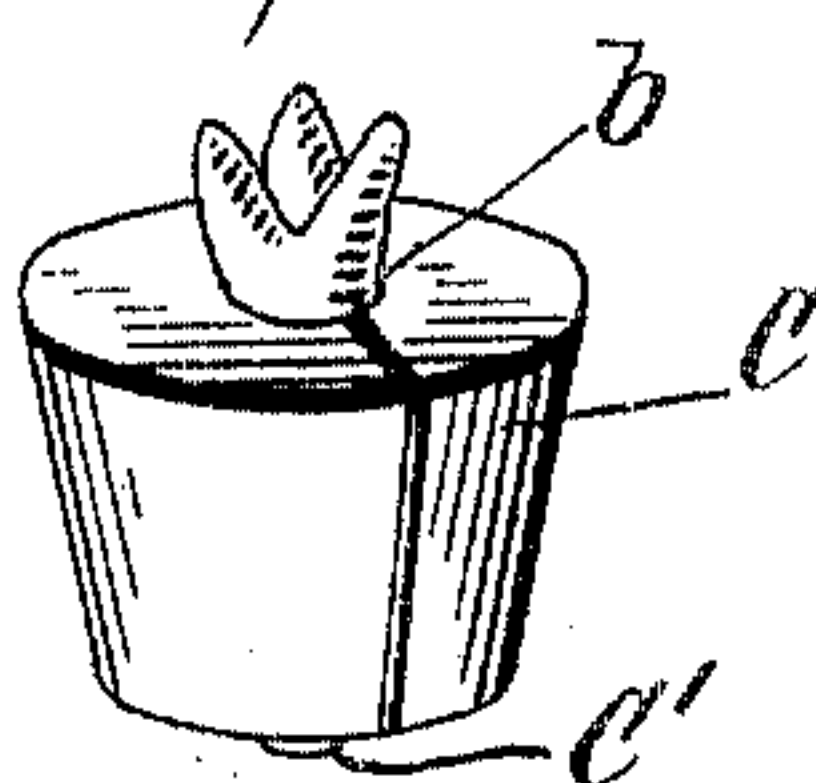


Fig. 4-

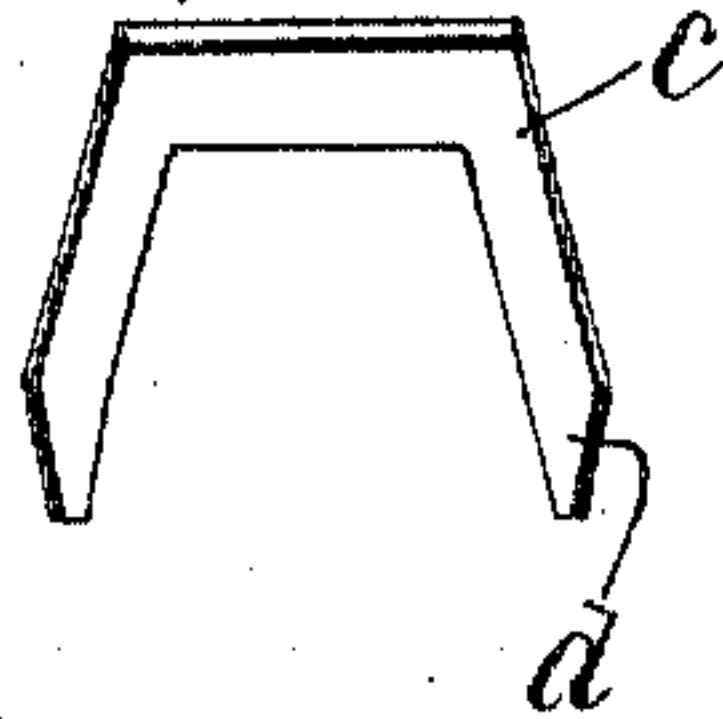
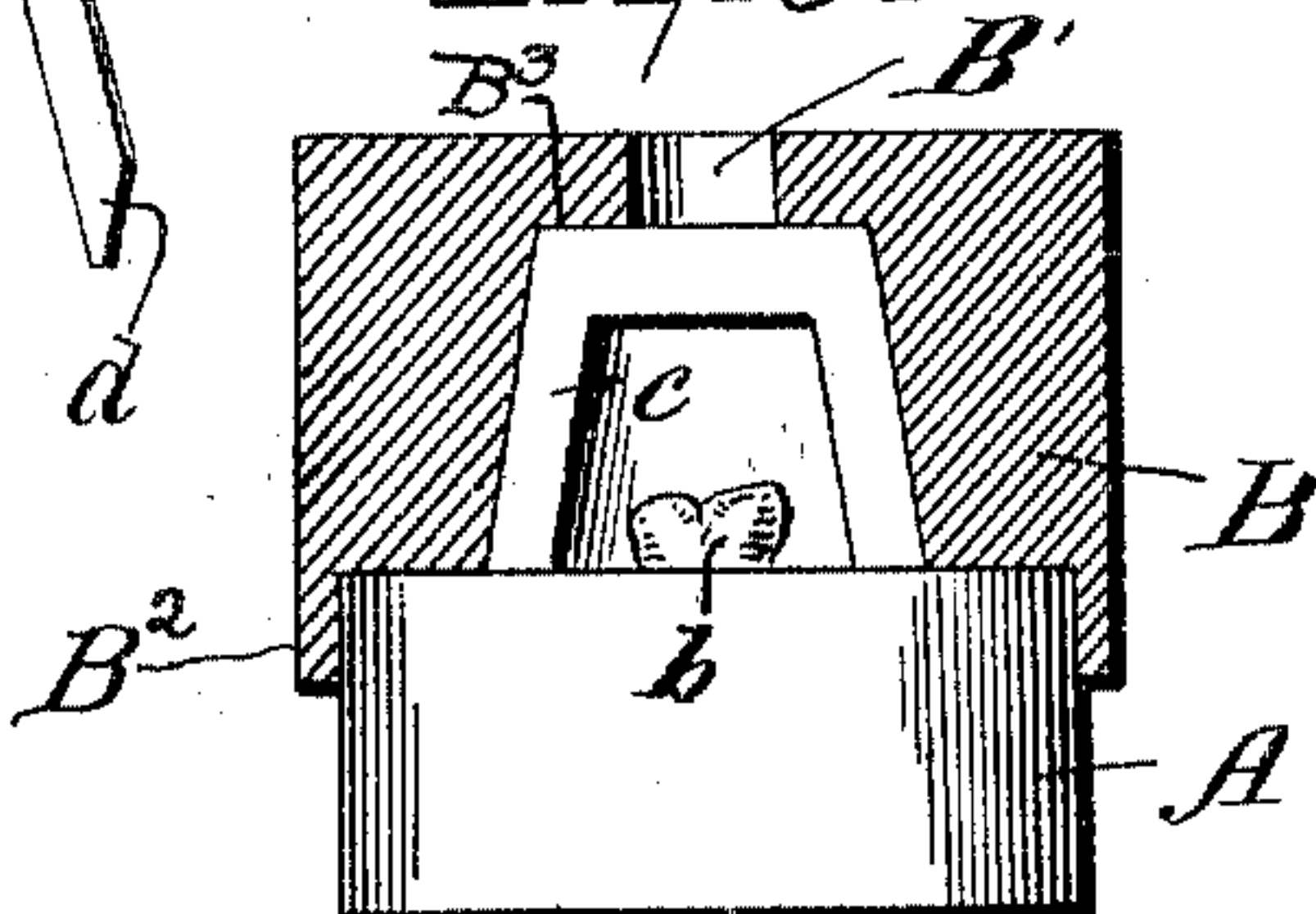


Fig. 5-



WITNESSES:

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UNITED STATES PATENT OFFICE.

AMOS N. COATES, OF TOLEDO, OHIO.

MOLD FOR SEAMLESS-CROWN SWAGERS.

SPECIFICATION forming part of Letters Patent No. 776,114, dated November 29, 1904.

Application filed February 4, 1904. Serial No. 191,972. (No model.)

To all whom it may concern:

Be it known that I, AMOS N. COATES, a citizen of the United States of America, residing at Toledo, in the county of Lucas and State of Ohio, have invented certain new and useful Improvements in Molds for Seamless-Crown Swagers, of which the following is a specification.

This invention relates to dentistry, and has for its object to produce a mold having a cavity the walls of which have the outline or contour of a tooth to which a crown is to be applied.

With the foregoing and other objects in view the invention consists in the details of construction and in the arrangement and combination of parts to be hereinafter more fully set forth and specifically claimed.

In describing the invention in detail reference will be had to the accompanying drawings, forming part of this specification, wherein like characters denote corresponding parts throughout the several views, in which—

Figure 1 is a view in perspective of a form-carrier containing the materials for the first step of the method or process. Fig. 2 is a perspective view showing the form-carrier and casting-flask in place for receiving the metal to be cast to form the mold having a cavity the contour of the tooth. Fig. 3 is a perspective view of the mold detached and removed from the flask. Fig. 4 is a perspective view of the divider. Fig. 5 illustrates the fragments of the parts in their assembled relation for casting.

In the drawings, A is the form-carrier, having a cavity of suitable configuration for the reception of the moldine *a*, which is pliable and soft for the reception of the roots of the tooth *b*, the said roots being embedded in the moldine and the crown of the tooth projecting therefrom. A divider *c* has tapered ends *d*, the said divider being approximately A-shaped and has its tapered ends embedded in the moldine with the top bar thereof in line with the highest and longest ridge of the tooth and to contact with the shoulder *B*³ of the flask-section B. The form-carrier as thus equipped is covered by the flask-section B, which flask-section has a tapered socket with

a shoulder for the reception of the cast metal, and a gate *B'*, through which the metal is poured. The section B is further provided with an annular flange *B*², which embraces the edge of the section A.

When the parts are assembled in the position shown in Fig. 2, with the tooth *b* and the divider *c* within the section B and the upper surface of the divider is in contact with the shoulder *B*³, metal is poured through the gate to one side of the divider *c* until the flask is filled. When the metal has hardened, the contents of the flask are removed and the product will be in the form shown in Fig. 3, which will be termed a "mold" C. This mold is divided with an edged tool of any suitable construction by driving the said tool in the joint formed by the divider *c*, when the two halves of the mold will come apart and permit the removal of the tooth or the crown of the tooth, leaving a cavity in the mold C. It is preferable to have lugs *C'* on the mold-sections, which are produced by filling the flask-section B to the top of the gate *B'*, the purpose of which will be clearly apparent to those skilled in the art.

The construction, operation, and advantages will, it is thought, be understood from the foregoing description, it being noted that various changes may be resorted to in the proportions and details of construction for successfully carrying the invention into practice without departing from its scope.

Having fully described the invention, what I claim as new, and desire to secure by Letters Patent, is—

1. In an apparatus for casting molds for teeth, a hollow form containing a pliable material, in which the tooth is partially embedded, a divider having its horizontal portion standing above the tooth, a flask-section having a socket to receive the divider, the upper bar of said divider being adapted to contact with the horizontal wall of the socket and an annular flange on the flask-section adapted to embrace the hollow form.

2. In an apparatus for casting molds for teeth, a hollow form-carrier containing a pliable material, in which the tooth is partially embedded, a divider having its ends pointed

and its horizontal portion standing above the
tooth, a flask-section having a tapered socket
to receive the divider, the upper bar of the said
divider being adapted to contact with the hori-
5 zontal wall of the socket, and means for re-
taining the sections of the flask in engage-
ment.

In testimony whereof I affix my signature,
in the presence of two witnesses, this 19th day
of January, 1904.

AMOS N. COATES.

Witnesses:

ELLSWORTH M. BEARD,
CORA STEWART.