

No. 781,405.

PATENTED JAN. 31, 1905.

M. A. COYKENDALL.
BLANK FOR DENTAL PLATES.
APPLICATION FILED SEPT. 3, 1903.

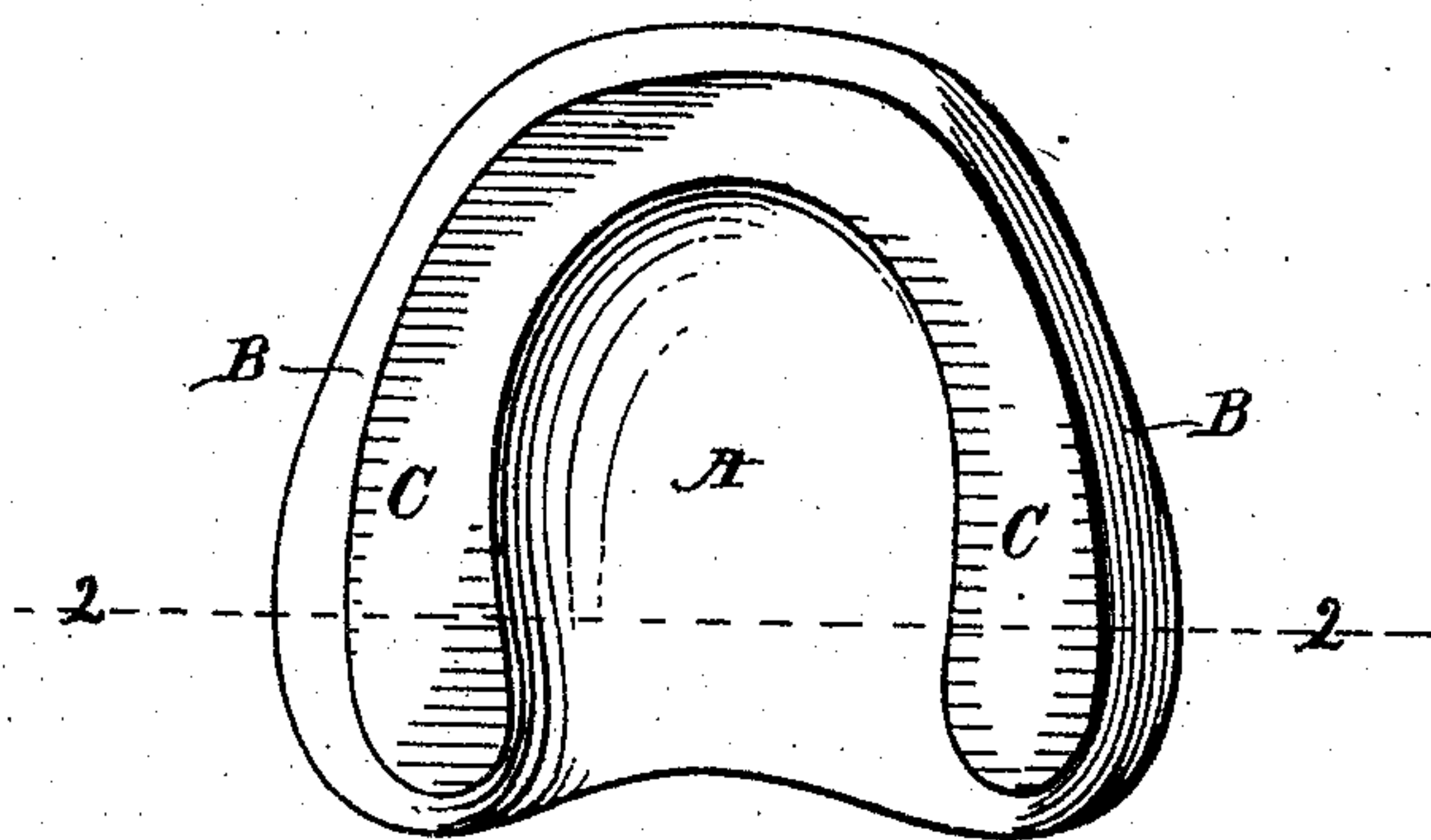


Fig. 1.

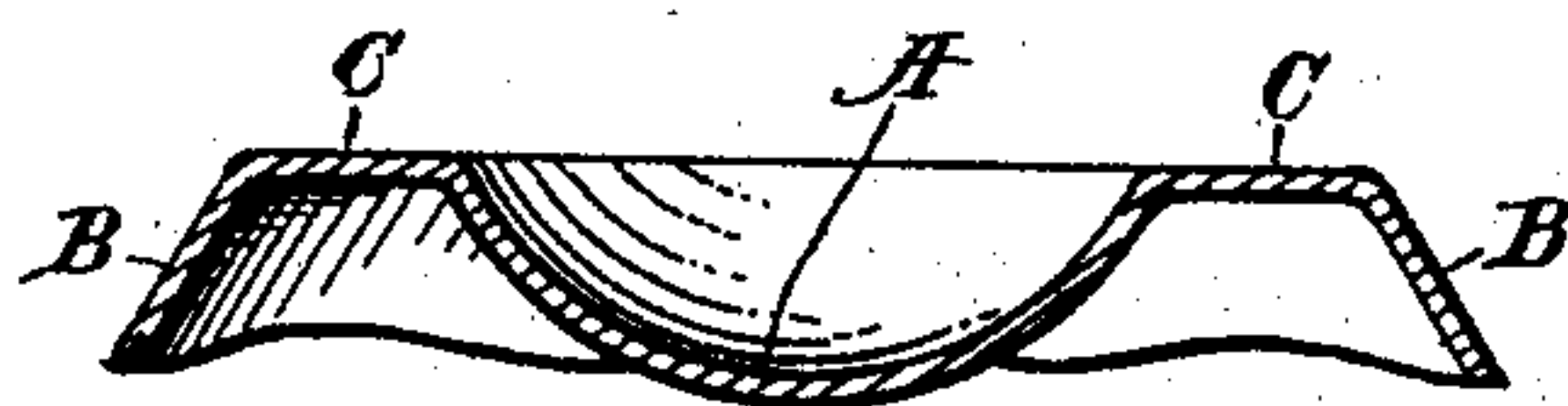


Fig. 2.

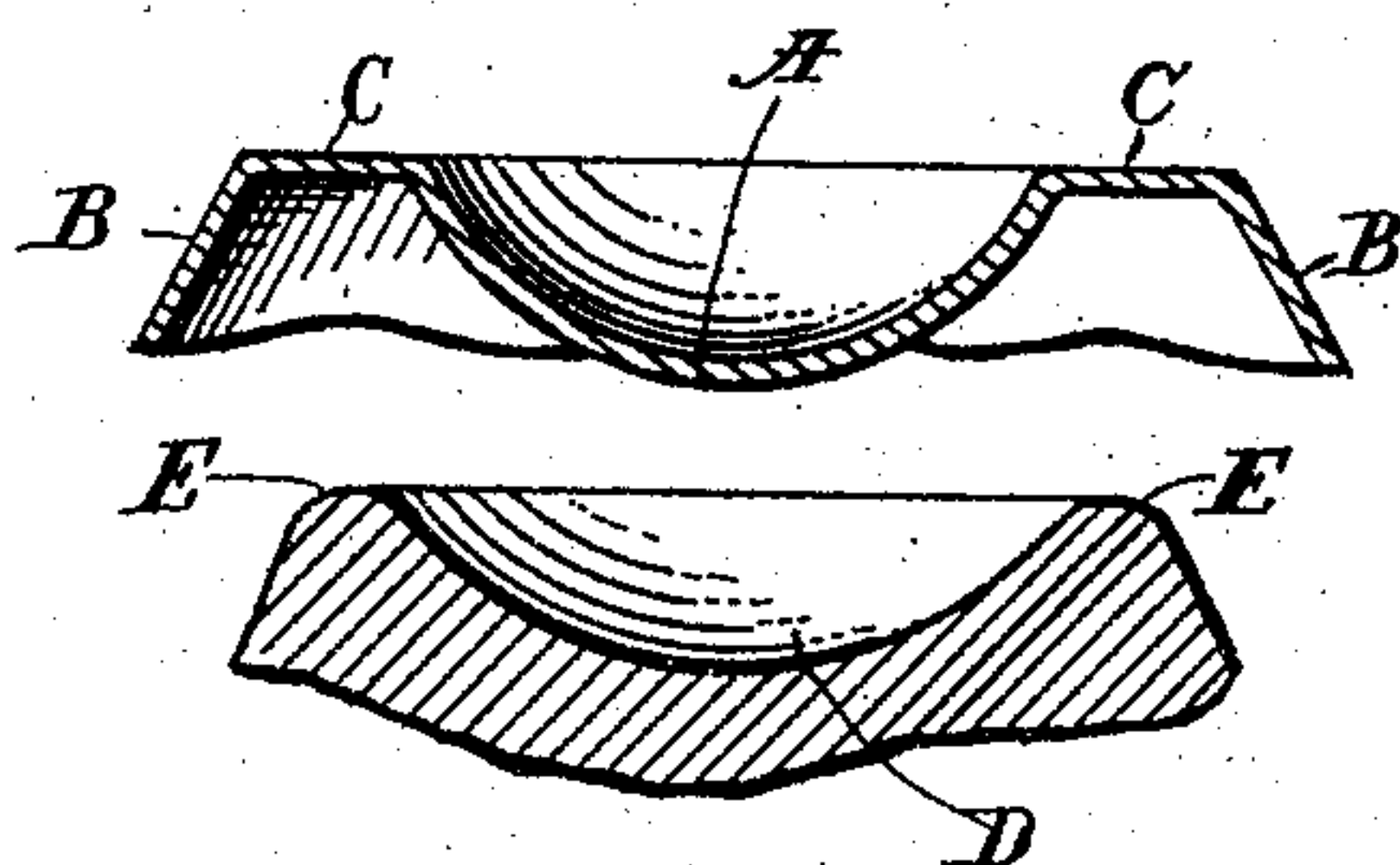


Fig. 3.

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UNITED STATES PATENT OFFICE.

MARCUS A. COYKENDALL, OF GRAND RAPIDS, MICHIGAN.

BLANK FOR DENTAL PLATES.

SPECIFICATION forming part of Letters Patent No. 781,405, dated January 31, 1905.

Application filed September 3, 1903. Serial No. 171,736.

To all whom it may concern:

Be it known that I, MARCUS A. COYKENDALL, a citizen of the United States, residing at Grand Rapids, in the county of Kent and State of Michigan, have invented certain new and useful Improvements in Blanks for Dental Plates; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

My invention relates to improvements in blanks for dental plates; and its object is to provide a partially-formed dental plate having such shape and construction that it will be readily stamped or swaged to conform to the shape of either large or small dies, as occasion may require, to provide blanks of substantially uniform thickness throughout that will not be stretched or made thinner in any part when swaged, and to provide the same with certain novel features hereinafter more fully described, and particularly pointed out in the claims.

Heretofore it has been customary to provide such blanks with concavo-convex ridge portions approximating the shape and size of the plate. Such blanks when formed up between dies are sometimes required to stretch in order to conform to the required shape, and thus are made too thin in part for want of sufficient material. I supply a greater amount of material in the ridge portion of the blank and at the same time retain uniform thickness of material throughout by forming the blank with a broad flat ridge portion and a small interior or roof portion. This provides more material by virtue of the angles where the flat ridge portion joins the roof and rim portions, so that when these angles are crushed down by the dies the material will be abundant and will not be stretched or made thinner, the requirement for greater material along the sides of the ridge thus being met by the extra supply in these angular portions of the blank.

My invention therefore consists in the configurations of the blank, as will more fully appear by reference to the accompanying drawings, in which—

Figure 1 is a plan view of a blank for dental plates embodying my invention; Fig. 2, a section of the same on the line 2 2 of Fig 1, and Fig. 3 the same and a corresponding section of a male die for swaging the same.

Like letters refer to like parts in all of the figures.

A represents the concavo-convex roof portion of the blank, which is made as small as the corresponding part of the smallest plate likely to be formed from the blank. B is the outer portion of the blank and made of dimensions large enough for the corresponding part of the largest finished plate liable to be formed from the blank. Connecting these parts is a broad flat ridge portion C of greater extent than the ridge portion of any plate to be formed therefrom and joining the other portion at each side in an obtuse angle. This angular form, with the broad flat ridge portion, provides more material at the respective sides of the ridge than the prior form and when the blank is crushed down between the dies produces a more perfect plate. It also forms down between the dies in a more satisfactory manner. The curved ridge form heretofore used unless exactly proportioned to the dies would form down at one side of the ridge in advance of forming the other side; but with this form the female die simultaneously engages the flat part of the plate at both sides of the opposing male die regardless of the relative proportions of the dies and blank, and thus forms down both sides of the ridge simultaneously.

Having thus fully described my invention, what I claim, and desire to secure by Letters Patent, is—

1. A blank for dental plates, comprising a concavo-convex roof portion, a broad flat ridge portion of greater extent than the ridge portion of any dental plate to be formed therefrom, and a depending marginal portion extending outward from the ridge portion.

2. A blank for dental plates, formed of material of substantially uniform thickness throughout, and comprising a concavo-convex roof portion as small as the corresponding portion of the smallest dental plate to be formed therefrom, a depending marginal portion as

large as the corresponding portion of the
largest dental plate to be formed therefrom,
and a broad flat middle portion connected at
obtuse angles to the roof portion and to the
5 marginal portion, and also of greater extent
than the corresponding portion of any dental
plate to be formed therefrom.

In testimony whereof I affix my signature in
presence of two witnesses.

MARCUS A. COYKENDALL.

Witnesses:

LUTHER V. MOULTON,
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