

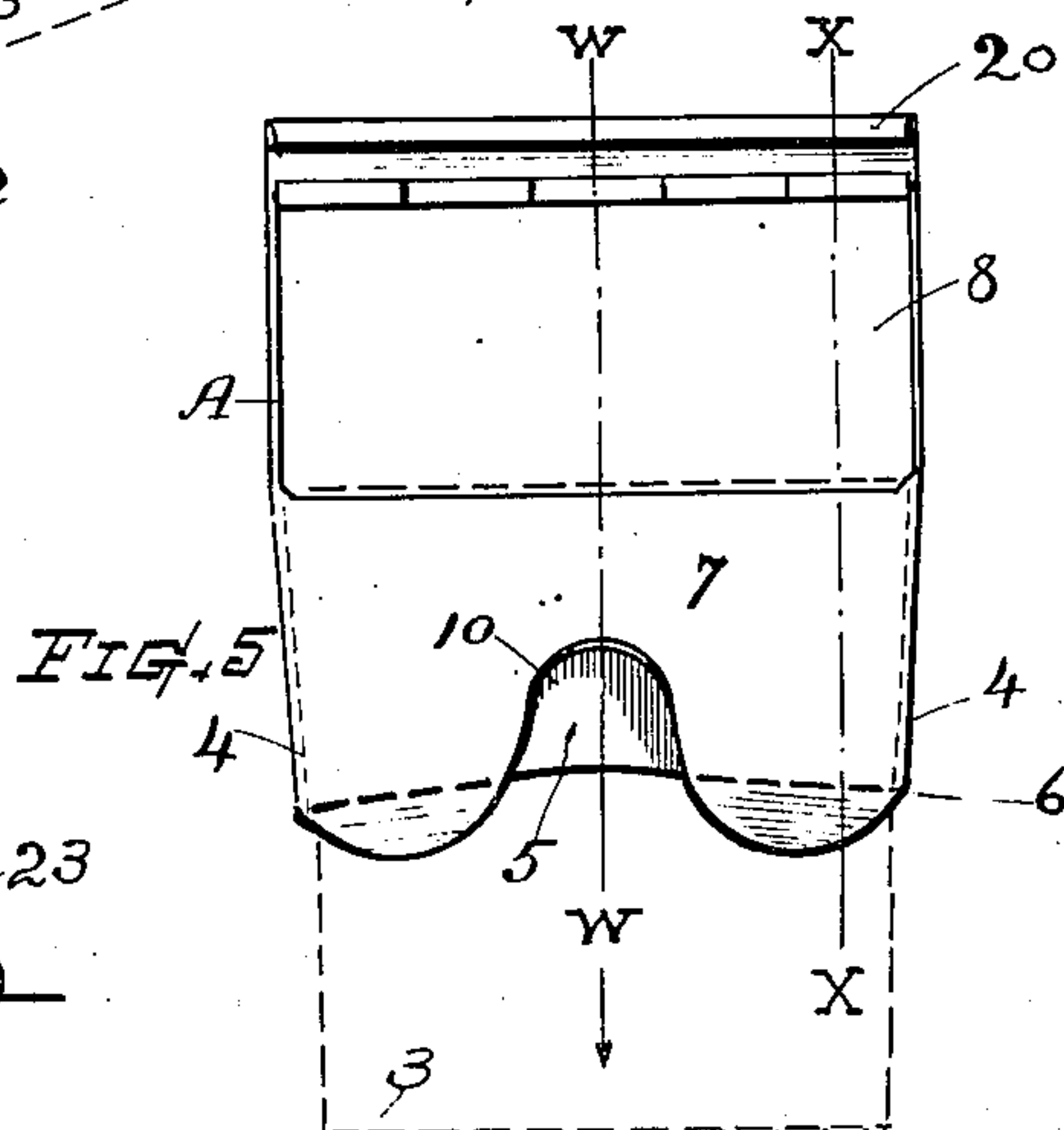
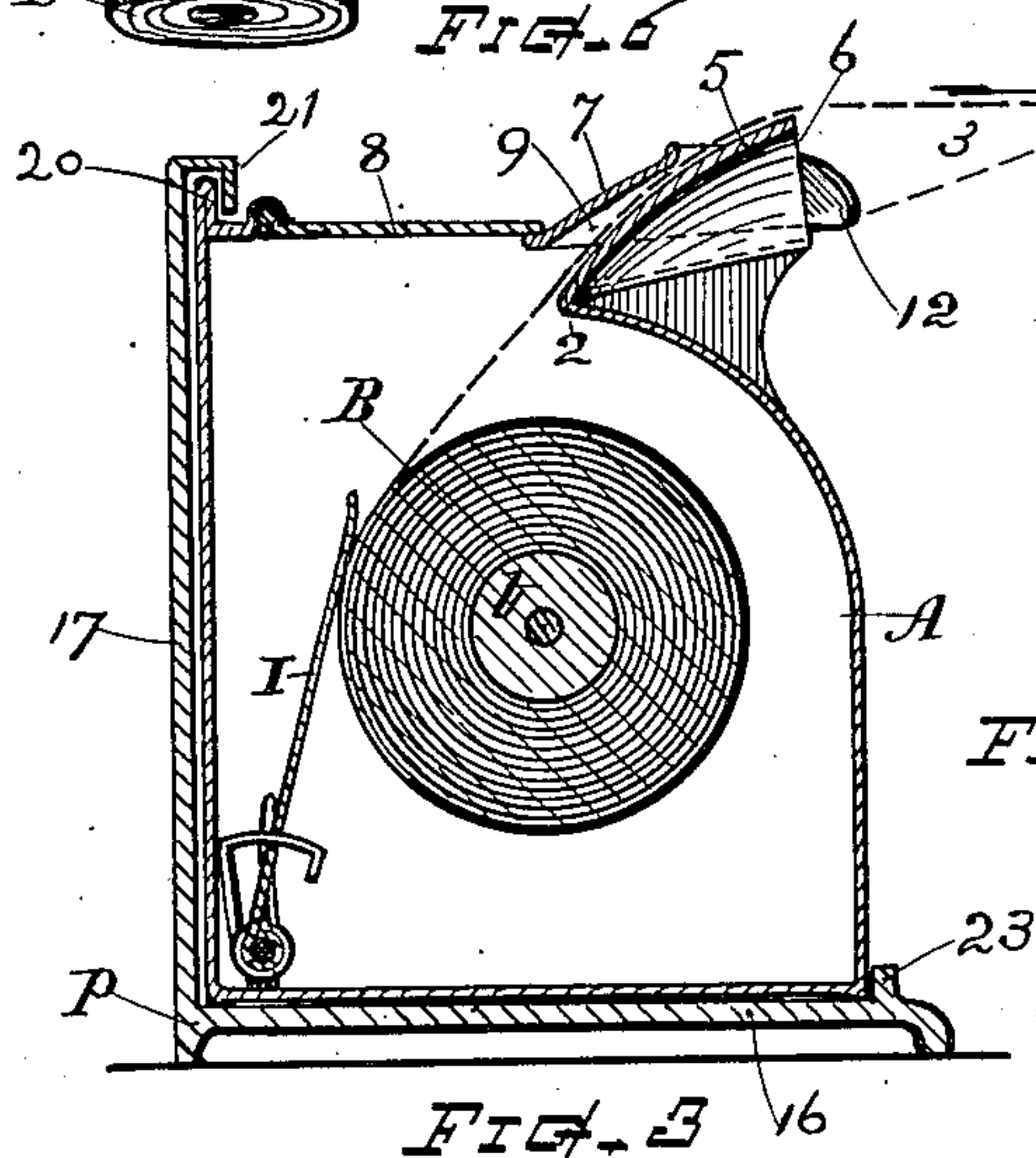
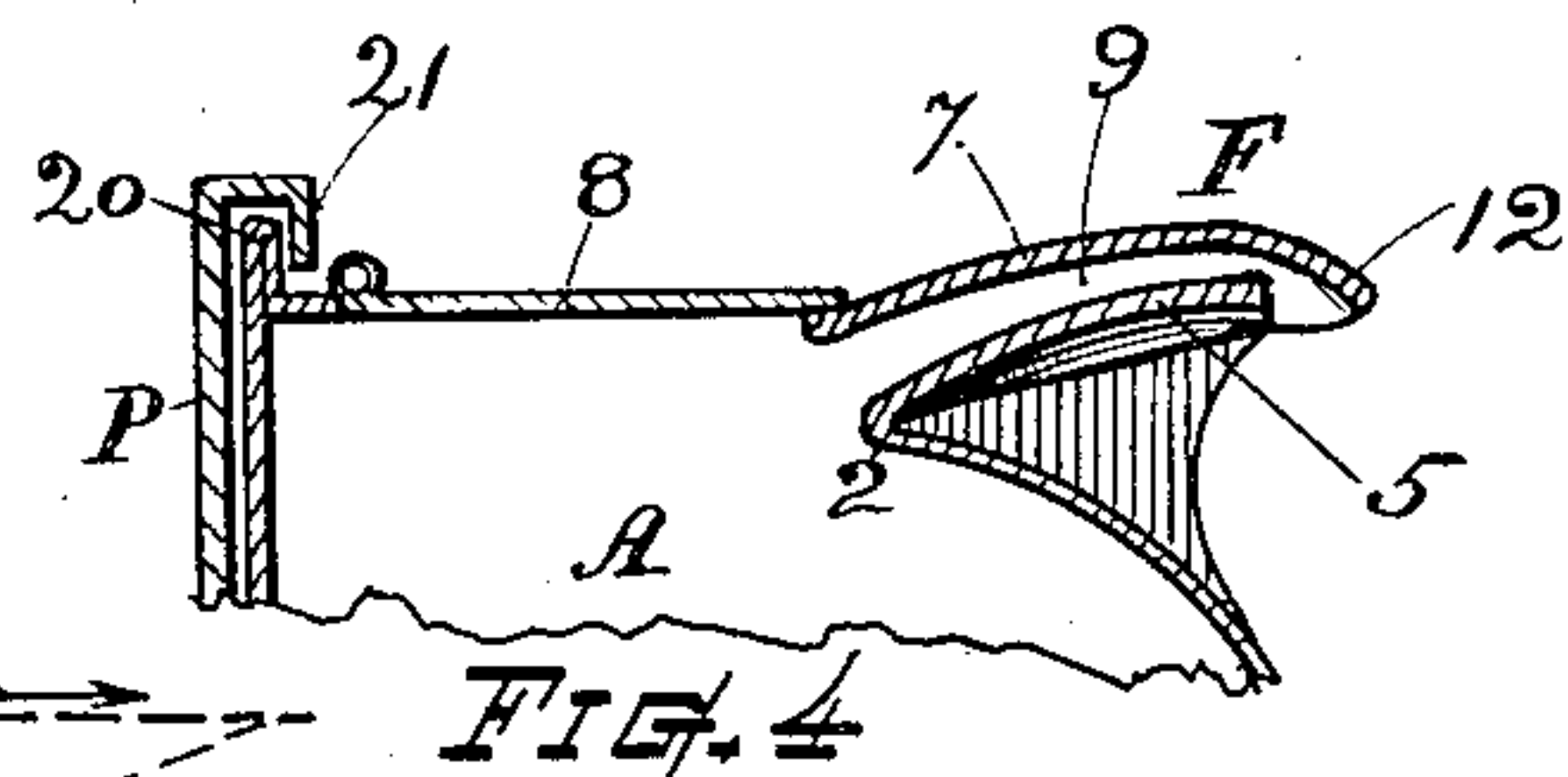
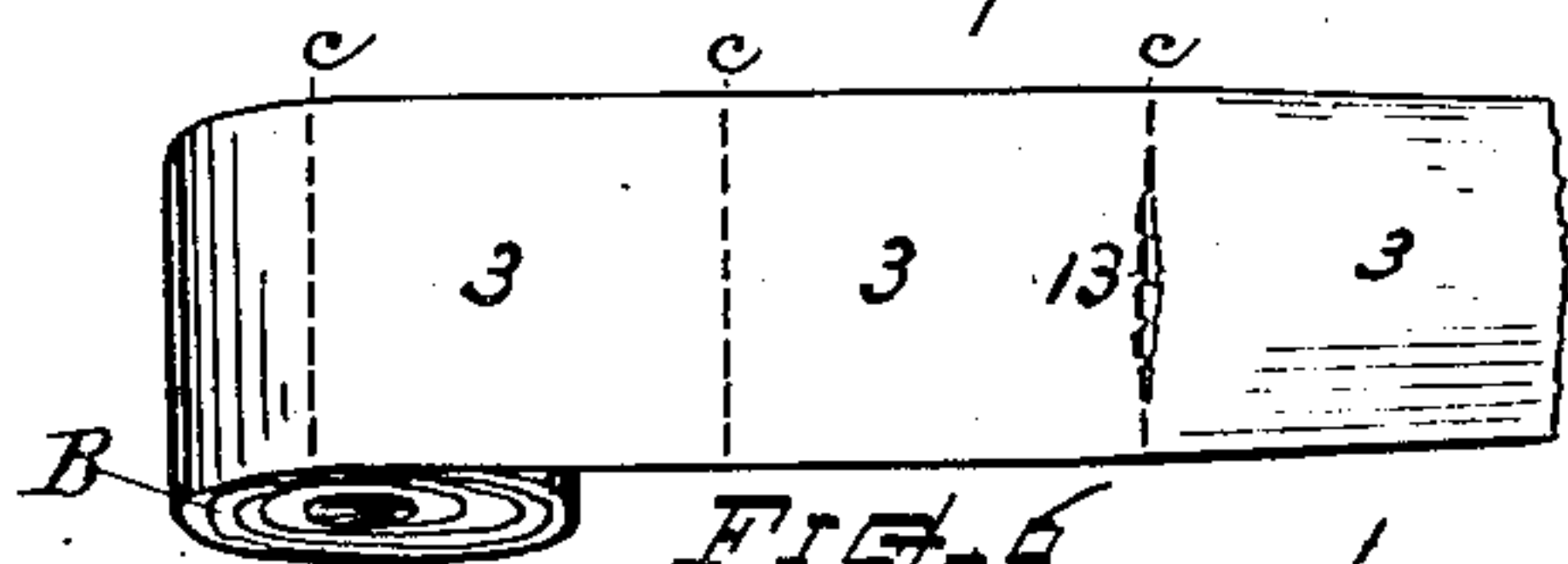
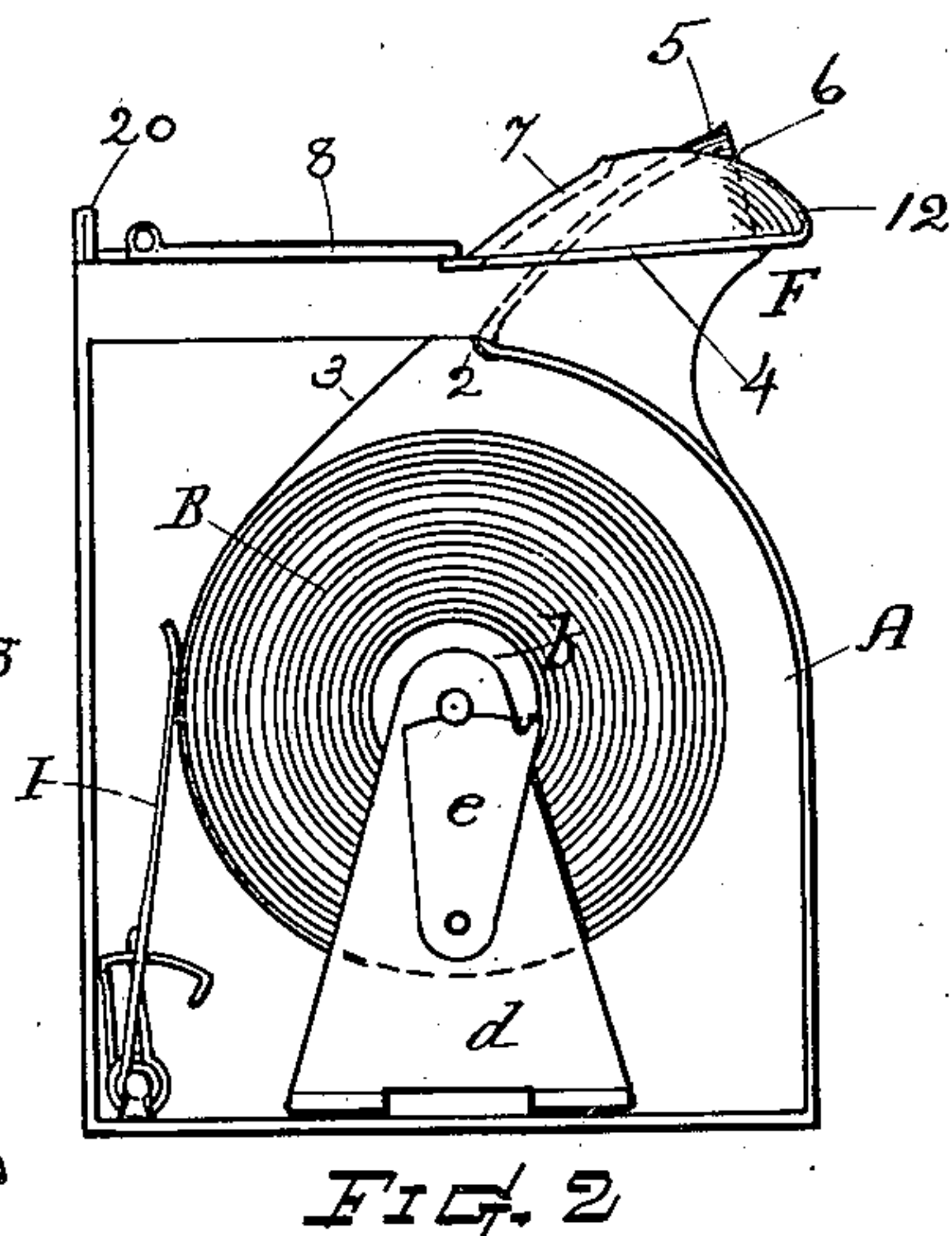
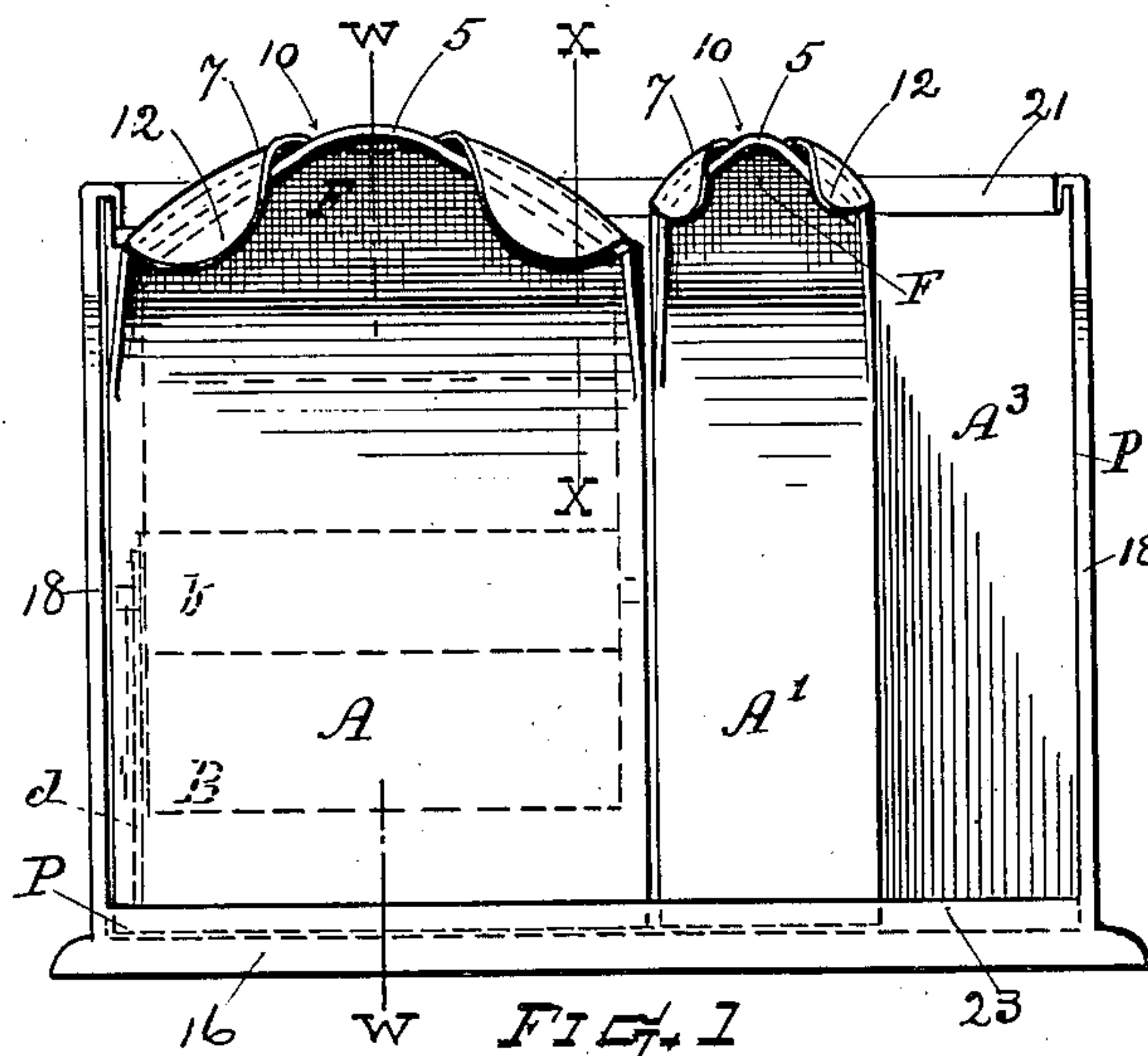
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G. W. BURR & G. H. DAVIS.

MEANS FOR HOLDING AND DETACHING RIBBON STRIP LABELS.

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Witnesses.

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UNITED STATES PATENT OFFICE.

GUY W. BURR AND GEORGE H. DAVIS, OF WORCESTER, MASSACHUSETTS.

MEANS FOR HOLDING AND DETACHING RIBBON-STRIP LABELS.

No. 843,579.

Specification of Letters Patent.

Patented Feb. 12, 1907.

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To all whom it may concern:

Be it known that we, GUY W. BURR and GEORGE H. DAVIS, both citizens of the United States, residing at Worcester, in the county of Worcester and State of Massachusetts, have invented a new and useful Means for Holding and Detaching Ribbon-Strip Labels, of which the following is a specification, reference being made therein to the accompanying drawings.

Our present invention relates to mechanism for holding and delivering that class of labels, tickets, or the like which are prepared in connected rolls or ribbon-strip form, with the respective labels partially severed or divided by weakened lines across the fabric, the prime object of our invention being to provide a simple, efficient, and more convenient means whereby the respective labels or tickets will become severally detached by simply taking them from the delivery-mouthpiece, and the end of the strip held presented in proper position to be easily seized for taking the successive label, as hereinafter more fully explained.

Another object is to afford a simple and convenient means of combining removable label-holding boxes with a supporting-case and for retaining the same against displacement by pull upon the labels when the latter are drawn out of the delivery-guides of the respective boxes.

We attain these objects by the mechanism illustrated in the drawings and explained in the following detailed description, the particular subject-matter claimed being definitely expressed in the summary.

In the drawings, Figure 1 represents a front elevation view of mechanisms embodying the features of our invention. Fig. 2 represents a side view of one of the label-boxes and its delivering-guide. Fig. 3 represents a vertical section at line W W on Figs. 1 and 5. Fig. 4 is a vertical section of the mouthpiece at line X X on Figs. 1 and 5. Fig. 5 is a top plan view; and Fig. 6 shows, on somewhat smaller scale, a roll of ribbon-strip labels.

Referring to the drawings, A indicates a label-holding box of suitable dimensions for containing the supply of labels, which, according to the various instances of use, may be of any desired size, the labels or tickets being prepared in well-known manner in a ribbon-strip or continuous roll B of convenient length, with partially severed or weak-

ened lines *c* across the fabric, dividing off the individual labels 3 at positions where severance is desired. The roll is shown supported upon a journal or axis-core *b*, one end of which is carried by a releasable bearing-standard *d*, hinged at the base and having a confining-catch *e*, which permits ready release and readjustment to facilitate recharging the box with label-strips. The label-strip may be supported in any suitable manner for the delivery of its end outward through the guide or mouthpiece F, from which the labels 3 are taken as required for use.

A yielding resistance-brake or spring-presser I is arranged within the box to act against the label strip or roll for preventing its movement except when the labels are pulled from the end of the strip.

The peculiar construction and mode of operation of the delivery-guide or mouthpiece F constitutes a prime feature of our invention. Said mouthpiece comprises an under lip, plate, or member 5, projecting from the front of the box and affording a guide-surface that starts approximately laterally horizontal at the inner point 2 and is thence transversely arched or made with increasingly-inclined opposite side portions that merge into an elevated rounded curve at or near the central line W, and said member is also longitudinally arched or directed upward along its median line, while its edge lines 4 are approximately horizontal or in plane with the base of the mouthpiece. The front edge of the under member 5 terminates on a line 6, which may be straight or slightly curved, is approximately transverse to the longitudinal axis of the guide, and is positioned at or near its greatest central elevation. (See dotted line, Fig. 5.) The extreme front edge of the plate 5 may, if desired, be slightly turned up at the central part or made with a comparatively sharp angle, so as to give the greatest concentration of pressure on the severance line of the labels.

The upper member of the mouthpiece or guide comprises a plate 7, corresponding to the under plate along the longitudinal edges 4 and overlying the plate or guide member 5 at such distance therefrom as will afford an intervening space 9 sufficient for the ready passage of the label-strip therethrough with such degree of friction as may be desired. The plate 7 may be approximately parallel

with the plate 5 transversely and somewhat convergent thereto in longitudinal direction, so as to form a tunnel entrance or passage for the strip, as shown. The guide-plates are

5 curved or arched both longitudinally and transversely, so that the guiding mouthpiece presents approximately either a conoidal, a semi-ovate, ellipsoidal, or spherical contour through which the flat label-strip is passed.

10 The member 7 is provided with a cut-away recess or thumb-space 10 to facilitate seizing or gripping the end of the label-strip between the thumb and finger. Said recess has its inner edge located some distance rearward from

15 the edge 6 of the under guide member 5, as best shown in Figs. 3 and 5, while the corners or side portions 12 of the upper member 7 are made to extend some distance forward beyond the terminal edge 6 of the lower

20 member 5 and are suitably rounded and curved or inclined downward, so as to depress the edges of the label from the normal plane of its delivery direction as it leaves the edge of the guide or mouthpiece when pulled

25 outward, as indicated by the dotted lines on Fig. 3 when taking a label from the delivery-mouth. In this construction the central elevation or protuberance of the guide gives a longer distance at the central line W than at

30 the edges 4.

The end of the ribbon or label strip is threaded outward through the guide or mouthpiece F. The individual labels are simply picked off from the end of the strip as

35 required for use by seizing the end of the label as presented at the recess 10 and pulling it forward in the direction indicated by the arrow on Fig. 3. As the label-strip is drawn forward in the mouthpiece the compound

40 curvature of the guide-plates 5 and 7 tends to curve the label both longitudinally and transversely, exerting a strain at the central part thereof and causing a primary rupture of the fabric as the weakened division-line c

45 passes over the apex of the plate 5, such rupture commencing at the center of the strip, as indicated at 13 on Fig. 6, and running toward either edge thereof. Then by the action of the downwardly-overhanging portions

50 12 of the top member 7 the rupture on the weakened line is extended right and left, so that complete detachment of the label or ticket is effected and all executed simply by an outward pull on the label. The severed

55 end of the label-strip is held as left in the mouth of the guide at position to be conveniently seized for taking the next label in order.

The label-box A is preferably provided

60 with a hinged cover 8 at the rear of the guide-plate 7 to facilitate inspection of the interior. One side of the label-box is made open for convenience of inserting the roll or ribbon-strip B, and suitable means is provided for

65 retaining the roll-supports in proper relation.

In this specification we have employed the terms "upper," "lower," and "horizontal" in respect to the parts of the delivery-guide or mouthpiece when placed as shown in the drawings; but it is obvious that the same operation would ensue if the mechanism was inverted or placed in other position without changing its structural nature. Hence we do not desire to be limited to any special position of use.

In many instances in practice it is desired to employ a variety of labels. We therefore provide a supporting-case P, in which a plurality of our label-holding boxes in any desired number and of different widths are removably supported. Fig. 1 shows such case containing two boxes A and A' and a space A² for receiving another box or boxes. Said case comprises a base 16, a back 17, and ends 18 of approximately the same form as the sides of the box A. For retaining the label-boxes in position within the case in opposition to the pull exerted thereon when drawing labels from the mouthpiece we provide the label-box with an upwardly-projecting flange, lip, or lug 20 at its upper rear angle and form upon the case P an overhanging lip, lug, or flange 21, beneath which the flange 20 of the label-box can be readily engaged and disengaged by tilting the box to a slight degree as it is placed in or removed from its position in the supporting-case. The front of the case is made with a low rim 23, that permits of the several boxes being easily assembled and taken out, while it suitably retains them when in position without other fastenings than the engaging lips above described.

We claim and desire to secure by Letters Patent—

1. A label delivering and detaching guide or mouthpiece, comprising a transversely-arched under guide member, and an arched overlying guide member provided with a central thumb-space, and having extended downwardly-curved corners that project beyond the edge of the under guide member for deflecting the edges of the label, as set forth.

2. A label detaching and delivering guide having its opposite guiding members transversely and longitudinally arched, rendering the median line of the guideway longer than the edge lines of the guideway, whereby excess of strain is brought upon the central portion of the label-strip to cause primary rupture of the weakened portions at the center of the strip.

3. A label delivering and detaching means, comprising a guideway inclosed between a pair of frictional guide-plates arched or du- ally inclined to bend the label both transversely and longitudinally as it passes through, one of said guide-plates having a recess or cut-away space to facilitate seizing the end of the label-strip, the other guide-

plate terminating on an approximately transverse line and of shorter length than the recessed plate.

4. A holder for ribbon-strip labels and the
5 like, comprising a containing-box having a projecting delivery mouth or guide, consisting of a compoundly-arched under-lip member having a plain terminal edge in transverse or slightly-curved relation, and an
10 overlying compoundly-arched plate having an open thumb-space reaching to rearward of said terminal edge, and also provided with forwardly-projecting portions that overhang the terminal edge of the under-lip member.
15 5. In a mechanism for the purpose speci-

fied, the combination, of the box for containing ribbon-strip labels or the like, the delivery-mouthpiece comprising guide-plates that bend the label longitudinally and transversely as it passes through the same, means for sup- 20 porting the roll of ribbon-strip labels within the box, and a yieldable presser or brake acting against said roll.

Witness our hands this 17th day of December, 1906.

GUY W. BURR.
GEORGE H. DAVIS.

Witnesses:

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ELLA P. BLENUS.