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PATENTED JULY 28, 1903.

H. R. PLIMPTON, 2D.
FOLDING AND CREASING DEVICE.

APPLICATION FILED FEB. 1, 1902.

NO MODEL.

Fig. 1.

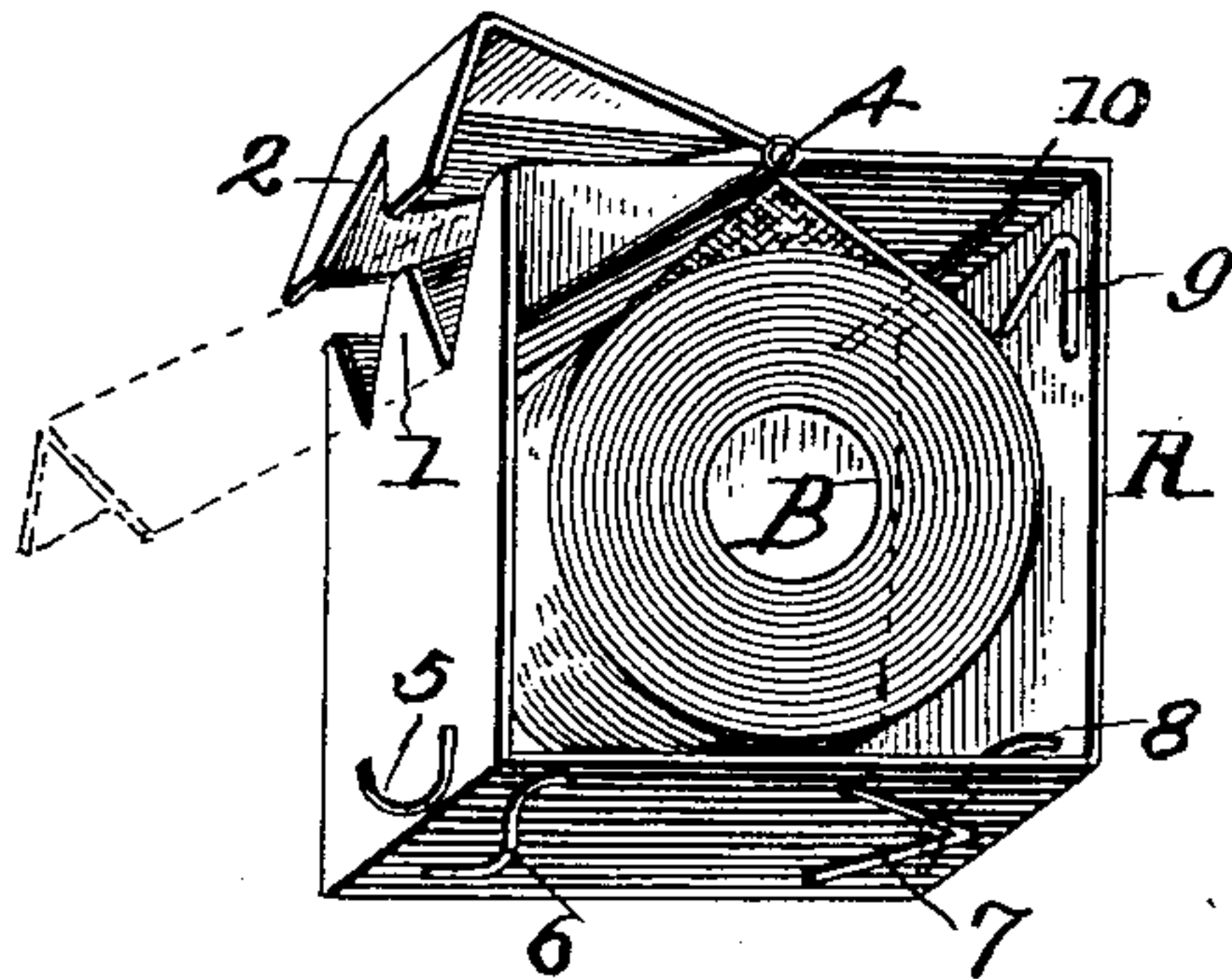


Fig. 2.

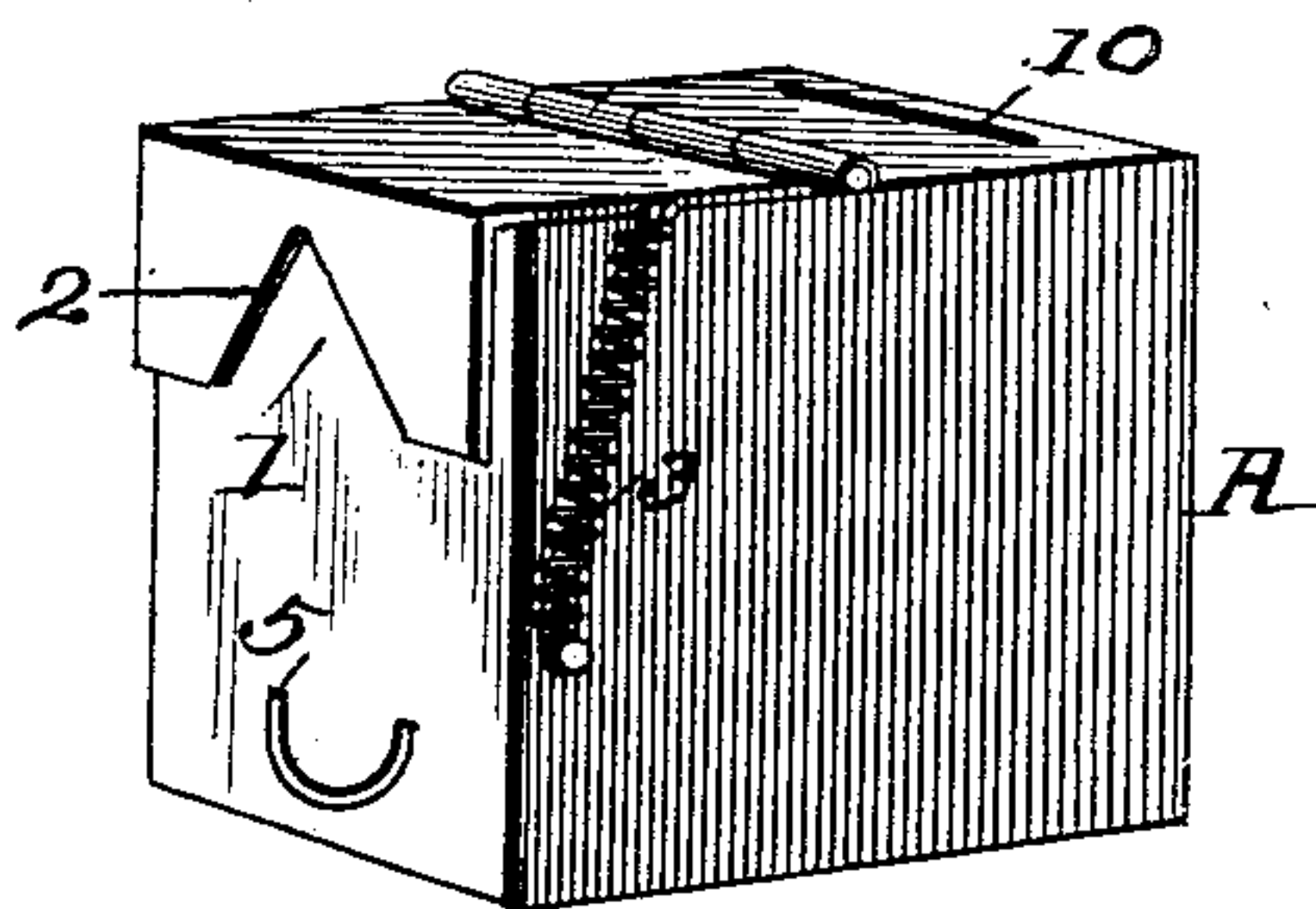
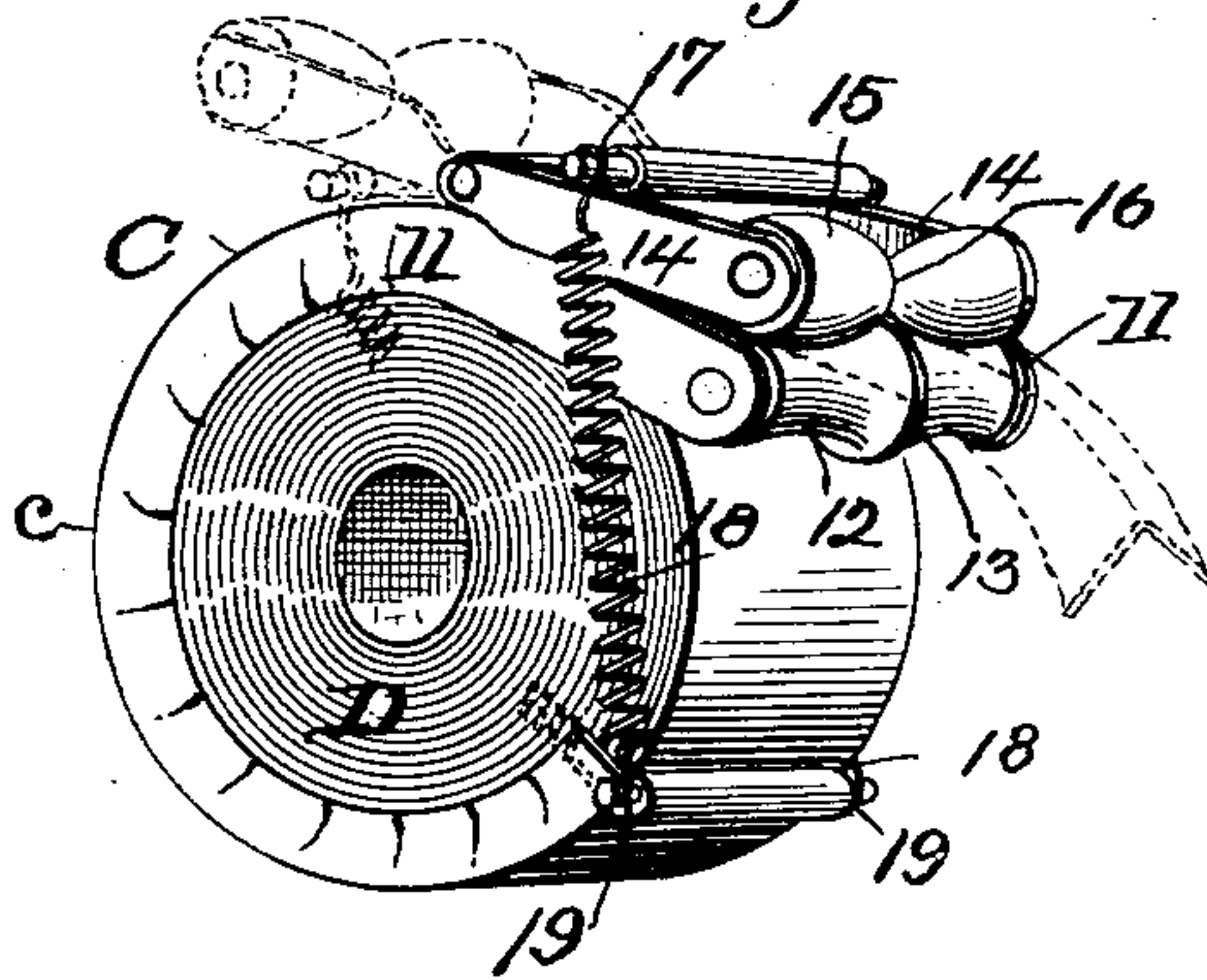


Fig. 3.



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HENRY RICHARDSON PLIMPTON, 2d, OF NEWTON CENTER,
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FOLDING AND CREASING DEVICE.

SPECIFICATION forming part of Letters Patent No. 734,943, dated July 28, 1903.

Application filed February 1, 1902. Serial No. 92,209. (No model.)

To all whom it may concern:

Be it known that I, HENRY RICHARDSON PLIMPTON, 2d, a citizen of the United States, and a resident of Newton Center, in the
5 county of Middlesex and State of Massachusetts, have invented a new and Improved Folding and Creasing Device, of which the following is a full, clear, and exact description.

10 The purpose of the invention is to provide means used in connection with a circular or other form of base for folding and creasing galloons, bindings, tapes, and ribbons of paper and other material through the medium
15 of which means the material may be taken from the base in either a folded or creased condition or in its usual flat condition.

A further purpose of the invention is to provide a construction for such device where-
20 by when the device is suitably applied to the material it may serve to normally hold the material from leaving the base until purposely drawn therefrom.

25 The invention consists in the novel construction and combination of the several parts, as will be hereinafter fully set forth, and pointed out in the claims.

Reference is to be had to the accompanying drawings, forming a part of this specification,
30 in which similar characters of reference indicate corresponding parts in all the figures.

Figure 1 is a perspective view of a rectangular form of base and applied roll of material, illustrating various means of effecting
35 an automatic folding and creasing of the material. Fig. 2 is a perspective view of the form of base shown in Fig. 1, the device being shown provided with springs for holding the movable die in close relation with the fixed
40 die; and Fig. 3 is a perspective view of another form of the device.

The principal intent of this invention is to provide means for movably holding and folding material in tape or ribbon form, said
45 means including the cutting or making of suitable openings or slots in a receptacle or attaching a suitable die or dies to a receptacle or standard or other form of base in such a manner that the material so movably held
50 may be shaped or folded by being drawn out through said slots or openings or over or be-

tween said die or dies, and, furthermore, to provide for drawing out the material in a flat condition when necessary.

In Fig. 1 I have illustrated a polygonal
51 base A, in which a roll B of tape or ribbon is held to freely turn. At one corner of this base-receptacle a fixed bottom die 1 is formed between the side portions of the receptacle, the top of the die being flush with the outer
60 or top surface of such side portions, and the said die 1 is also shown as of inverted-V shape in cross-section. A correspondingly-shaped female die 2 is also provided adapted to fit over the lower or male die and is
65 hinged to the base-frame. The hinged die 2 may be manually held in close relation with the male die 1, or a spring or springs 3, as shown in Fig. 2, or a spring latch or latches
70 or other suitable means may be employed for such purpose. A slot 4 is made in the base-frame between the inner portions of the two dies for the outward passage of the tape of ribbon, and it is evident that under such
75 construction the material may be drawn out from the base-frame either flat or creased, as desired.

In the construction of the device shown in Fig. 3 the base is in the form of a segmental frame C, which may be made of spring ma-
80 terial, and the frame is provided with side flanges c, forming a partially-open pocket constituting a receptacle adapted to receive and hold a roll D of tape or ribbon material. At the inner end of the base-frame C parallel side arms 11 are forwardly projected, and
85 a roller-die 12 is journaled in the outer ends of the arms provided with a central circular creasing-rib 13, from which the roller tapers in direction of its ends. A second set of arms
90 14 is also provided above the arms 11, hinged to the base-frame, and between the hinged arms 14 a second roller-die 15 is mounted to turn provided with a central groove 16, corresponding in position to the creasing-rib 13
95 on the lower roller-die 12, and the upper roller-die is tapered from its ends in direction of the said groove. Stud 17 extends beyond the sides of the hinged arms 14, and springs 18 are attached at one of their ends
100 to these studs, being secured at their opposite ends to studs 19, extending from the sides

of the frame at its front lower portion. The springs serve to hold the two dies in close relation when material is to be drawn between them and creased, and likewise serve to hold the upper die in an open position away from the lower die when the material is to be drawn from the base in a flat condition.

Instead of employing dies for creasing or folding the material slots of desired shape may be made directly in the base, and in Fig. 1 I have shown sundry forms of slots which will impart a correspondingly-shaped crease to the material drawn through them. One of these slots 5 is U-shaped; another, 6, S-shaped; another, 7, V-shaped. A fourth, 8, is crescent-shaped, and a fifth, 9, is of irregular shape, and adjacent to each creasing or folding slot a straight slot 10 may be provided, through which the material may be drawn in a flat condition.

I desire it to be understood that dies and different-shaped creasing-slots may be produced upon and in one base, or each base may be provided with a distinct form of creasing-slot and a straight slot or a particular form of dies and that the character and shape of the dies and the shape of the creasing-slots may be varied without departing from the spirit of the invention.

It is obvious that a device of the character described may be advantageously employed in many industries, among which may be mentioned the manufacture of garments, wherein the band or binding may be drawn from a roll flat or creased or folded ready to be applied, and in the art of binding or bordering various articles—as, for example, the slides of stereopticons, lanterns, and the like.

Having thus described my invention, I claim as new and desire to secure by Letters Patent—

1. A holder, comprising a receptacle adapted to receive and hold a roll of ribbon, tape or like material, the said receptacle being provided with a shaping-guide for creasing or folding the material, the said shaping-guide comprising dies between which the material is drawn, one of said dies being movable, as set forth.

2. A ribbon or tape holder, comprising a receptacle adapted to receive and hold a roll of ribbon, tape or the like, a die carried by the

receptacle and over which the material is adapted to be drawn from the receptacle, and a hinged die adapted to be held in close relation to the first-mentioned die as set forth.

3. A ribbon or tape holder, comprising a receptacle adapted to receive and hold a roll of ribbon, tape or the like, a die carried by the receptacle and over which the material is adapted to be drawn from the receptacle, a correspondingly-shaped movable die carried by the receptacle, and springs for holding the dies in close relation, as set forth.

4. A ribbon or tape holder, comprising a receptacle adapted to receive the ribbon, tape, or like material, a fixed die, and a correspondingly-shaped movable die carried by the receptacle, and adapted to be moved toward and from the fixed die, the said receptacle being provided with a slot between the inner portions of the two dies for the outward passage of the tape or ribbon, as set forth.

5. A ribbon or tape holder, comprising a receptacle for receiving and holding ribbon, tape or like material, a fixed bottom die at one corner of the receptacle between the side portions thereof, the top of the die being flush with the top surface of the side portions of the receptacle, the said die being of inverted-V shape in cross-section, and a correspondingly-shaped movable die adapted to fit over the lower die, as set forth.

6. A ribbon or tape holder, comprising a receptacle for the ribbon or tape, the said receptacle being provided with a shaping-guide, through which the material may be drawn from the receptacle to crease or fold the same, as set forth.

7. A ribbon or tape holder, comprising a receptacle adapted to receive a roll of ribbon, tape or like material, the said receptacle being provided with creasing-slots in its walls, and a fixed and a movable die on the receptacle between which the material may be drawn, as set forth.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

HENRY RICHARDSON PLIMPTON, 2d.

Witnesses:

JAMES S. PLIMPTON,
EDITH ALDEN PLIMPTON.