

(Model.)

N. DU BRUL.
WRAPPER CUTTER.

No. 599,228.

Patented Feb. 15, 1898.

Fig. 1.

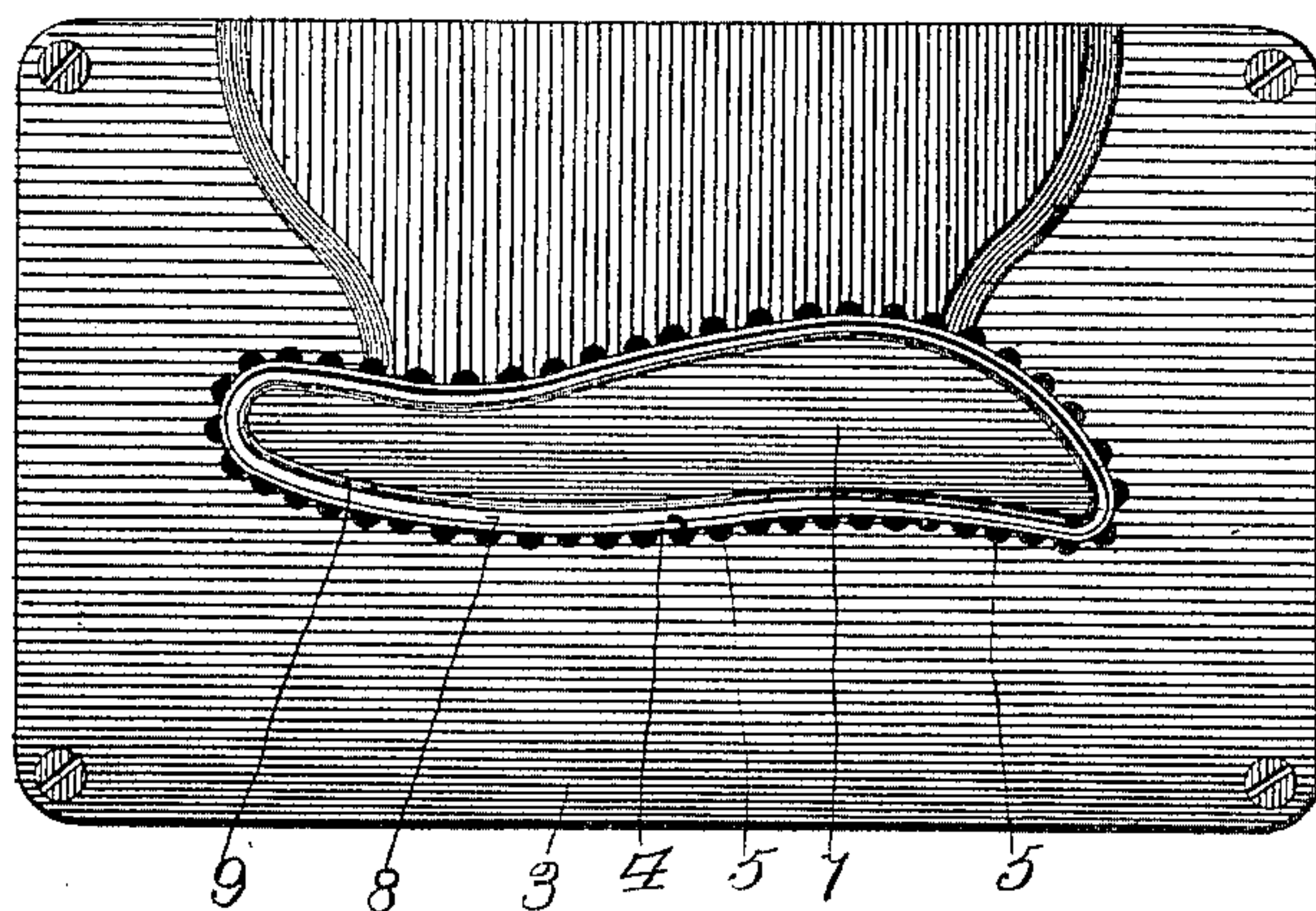


Fig. 2.

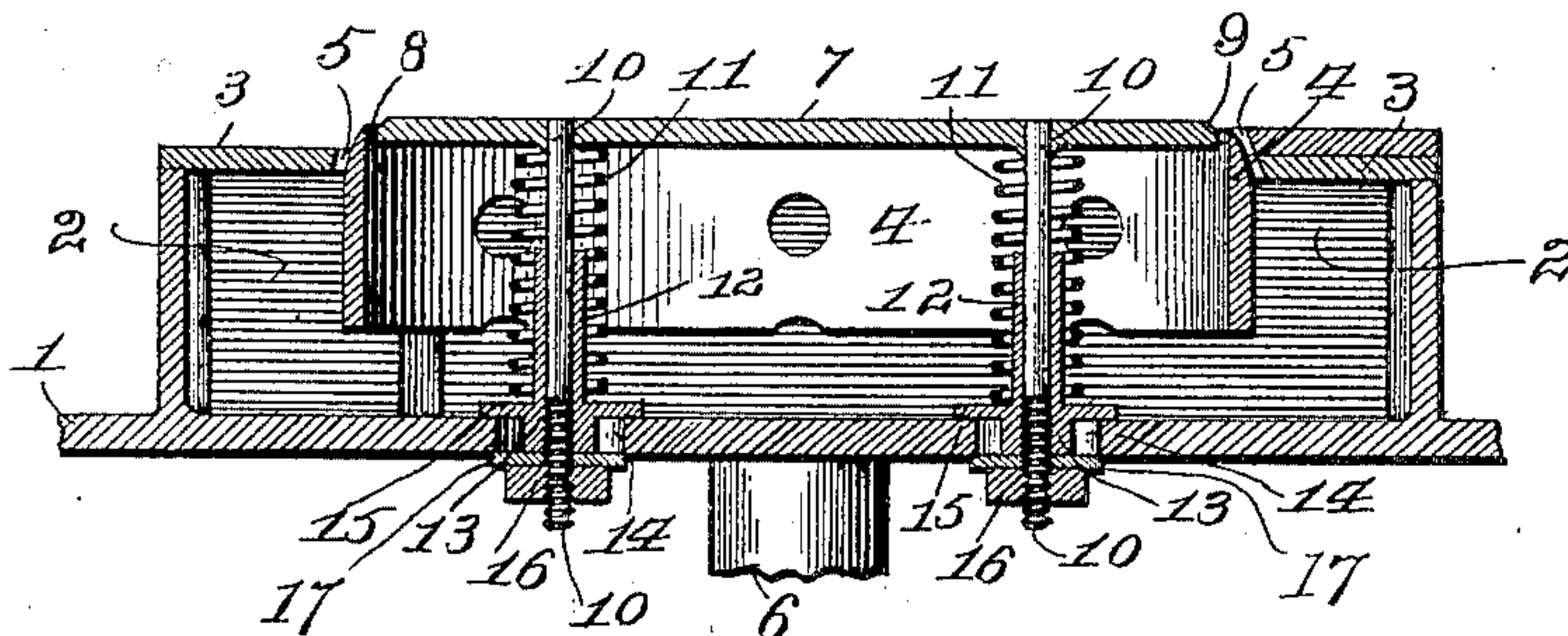


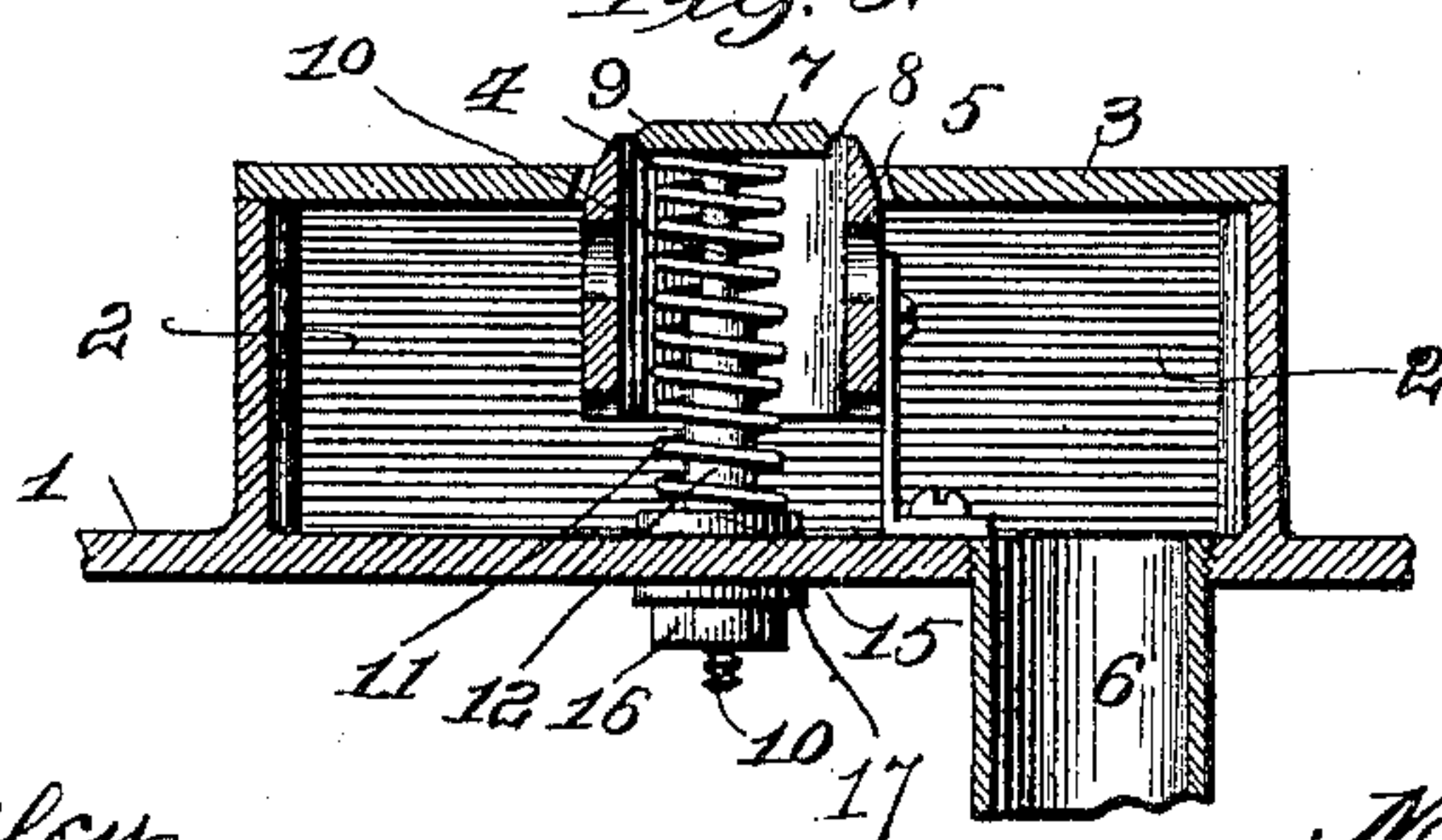
Fig. 4.



Fig. 5.



Fig. 3.



Witnesses:
Herbert Bradley.
Karl H. Fenning.

Inventor
Napoleon Du Brut.
By Knight Bros.
Attys.

UNITED STATES PATENT OFFICE.

NAPOLEON DU BRUL, OF CINCINNATI, OHIO.

WRAPPER-CUTTER.

SPECIFICATION forming part of Letters Patent No. 599,228, dated February 15, 1898.

Application filed April 26, 1897. Serial No. 633,858. (Model.)

To all whom it may concern:

Be it known that I, NAPOLEON DU BRUL, a citizen of the United States, residing at Cincinnati, in the county of Hamilton and State of Ohio, have invented certain new and useful Improvements in Wrapper-Cutters, of which the following is a specification.

My invention appertains to cigar-wrapper cutters in which air-suction is employed for holding the wrapper smooth over the cutting-die; and my present invention relates more particularly to the construction of the supporting-platen within the cutting-die, which I shall term the "supporting-block." This I form without perforations, so that the wrapper is prevented from becoming dried out by the current of air which is employed to hold its smooth. This supporting-block is cut away at its periphery, so as to provide it with a bevel or recess at its upper edge to form a depressed seat for the edges of the leaf, and it is fitted loosely within the cutting-die, so that when suction is applied the wrapper will be held all around its edges and thus enable the bunch to be rolled in the wrapper on the supporting-block, the edges of the wrapper being drawn inward into the space formed by the cutting away of the edges of the supporting-block.

One object of my invention is to provide an imperforate supporting-block with a depressed seat for the edges of the wrapper, the top edges of the block being beveled or rounded off, so that when the suction is applied underneath the cutting-die the leaf is brought onto the depressed edges of the supporting-block from the space which is left clear around the cutting-die, and as the supporting-block gives to the springs the rollers are passed over it and the leaf is cut. By having the beveled or rounded-off portion all around or sufficiently around the edges of the supporting-block the suction holds the wrapper all around onto the supporting-block and enables the rolling of the bunch into the wrapper. The advantage of this construction is the practical use of an imperforate supporting-block to avoid the drying of the wrapper.

Another object of my invention is to provide an improved spring-seat for the supporting-block.

One feature of my invention consists of the

combination of the usual cutting-die surrounded by a suction-chamber, a platen through which the cutting-die projects and which may have perforations or notches adjacent to the cutting-die for exhaust of air, and the beveled or recessed supporting-block loosely fitting in the cutting-die.

A further feature consists in certain means in connection with the supporting-block for holding it yieldingly at or about the level of the top of the cutting-die and for easily and accurately guiding it in its up-and-down movement in the cutting-die when yielding to the roller or equivalent pressure device passed over the cutting-die to cut the wrapper.

In order that my invention may be fully understood, I will proceed to describe the same with reference to the accompanying drawings, in which—

Figure 1 is a plan view, Fig. 2 a vertical longitudinal section, and Fig. 3 a vertical transverse section, of the portion of a wrapper-cutter to which my invention is applied. Figs. 4 and 5 are modifications of the supporting-block.

1 represents a suitable support; 2, the suction-chamber; 3, the platen surmounting said suction-chamber, and 4 the cutting-die, which projects through the platen. Said platen may have openings 5 for exhaust of air from beneath the leaf, and a pipe 6 connects with suction-chamber 2 to exhaust air therefrom.

7 represents the inner platen or supporting-block, which is fitted to the cutting-die so as to leave air-exhaust space 8, and this supporting-block or inner platen has its corner beveled, as shown at 9, and which bevel extends around the periphery of said supporting-block or inner platen. By this means air is exhausted from beneath the leaf which comes within the cutting-die and holds the wrapper upon said supporting-block after it is cut and until it is wrapped around the bunch. As shown in Figs. 4 and 5, I may substitute for this bevel edge a rabbeted edge 9^a or a concaved edge 9^b, which will serve the same purpose as the bevel.

To afford means for yieldingly supporting the block 7, I provide rods 10, projecting downwardly from said block and surrounded by springs 11, and to afford an easy and accurate guide for these rods and to preserve the

space 8 around the edge of the block said rods are made to work in sleeves 12. These sleeves are provided with heads 13, which fit transversely in the slots 14 in the support 1, but which may be adjusted longitudinally in said slots to afford convenience in setting up the parts and prevent binding of the rods within their guides. Said sleeves are further provided with flanges 15, which cover the slots and prevent the admission of air to the suction-chamber 2. Rods 10 are provided at the bottom with nuts 16, threaded to the ends of said rods, and washers 17, and thereby adapted to adjust the vertical position of the block 7.

While it may be desirable to employ a perforated outer platen 3, this is by no means essential, as the functions of the novel features of my device will be equally well served when said novel features are used in connection with a tight outer platen.

The advantage of the non-perforated supporting-block is that it prevents drying out of the tobacco-leaf, which causes breaking of the wrapper, and the bevel edge causes the air to be exhausted from beneath the edges of said wrapper after it is cut, so that the wrapper will be held in position by its edges until it is removed for wrapping about the bunch.

Whether the supporting-block be beveled, as shown in Figs. 1, 2, and 3, or rabbeted, as shown in Fig. 4, or concaved, as shown in Fig. 5, it will be seen that in either case the edge is cut away, so as to form substantially the same construction, and I do not therefore limit myself to any particular way of cutting away the edge.

Having thus described my invention, what

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

1. An imperforate supporting-block having its peripheral upper edge cut away to provide a depressed seat for the edges of the cut wrapper in combination with a cutting-die, separated from the supporting-block and in which the supporting-block is located, a suction-chamber, and means for exhausting the air from the suction-chamber; substantially as described.

2. The combination of a suitable support having slots, the guide-sleeves having heads fitting in the slots, and flanges whereby they are supported, the springs surrounding the guide-sleeves, the supporting-block seating on the springs and sliding in the guide-sleeves, the cutting-die surrounding and separated from the supporting-block, a suction-chamber, and means for exhausting the air from the suction-chamber; substantially as described.

3. The combination of a suitable support having slots, the guide-sleeves having heads fitting in the slots, and flanges whereby they are supported, the springs surrounding the guide-sleeves, the supporting-block seating on the springs and having screw-threaded rods sliding in the guide-sleeves, the washers, the nuts for adjusting the rods in the guide-sleeves, the cutting-die surrounding and separated from the supporting-block, a suction-chamber, and means for exhausting the air from the suction-chamber; substantially as described.

NAPOLEON DU BRUL.

Witnesses:

H. WHYRICH,
JOS. C. SCHEVE.