

No. 815,564.

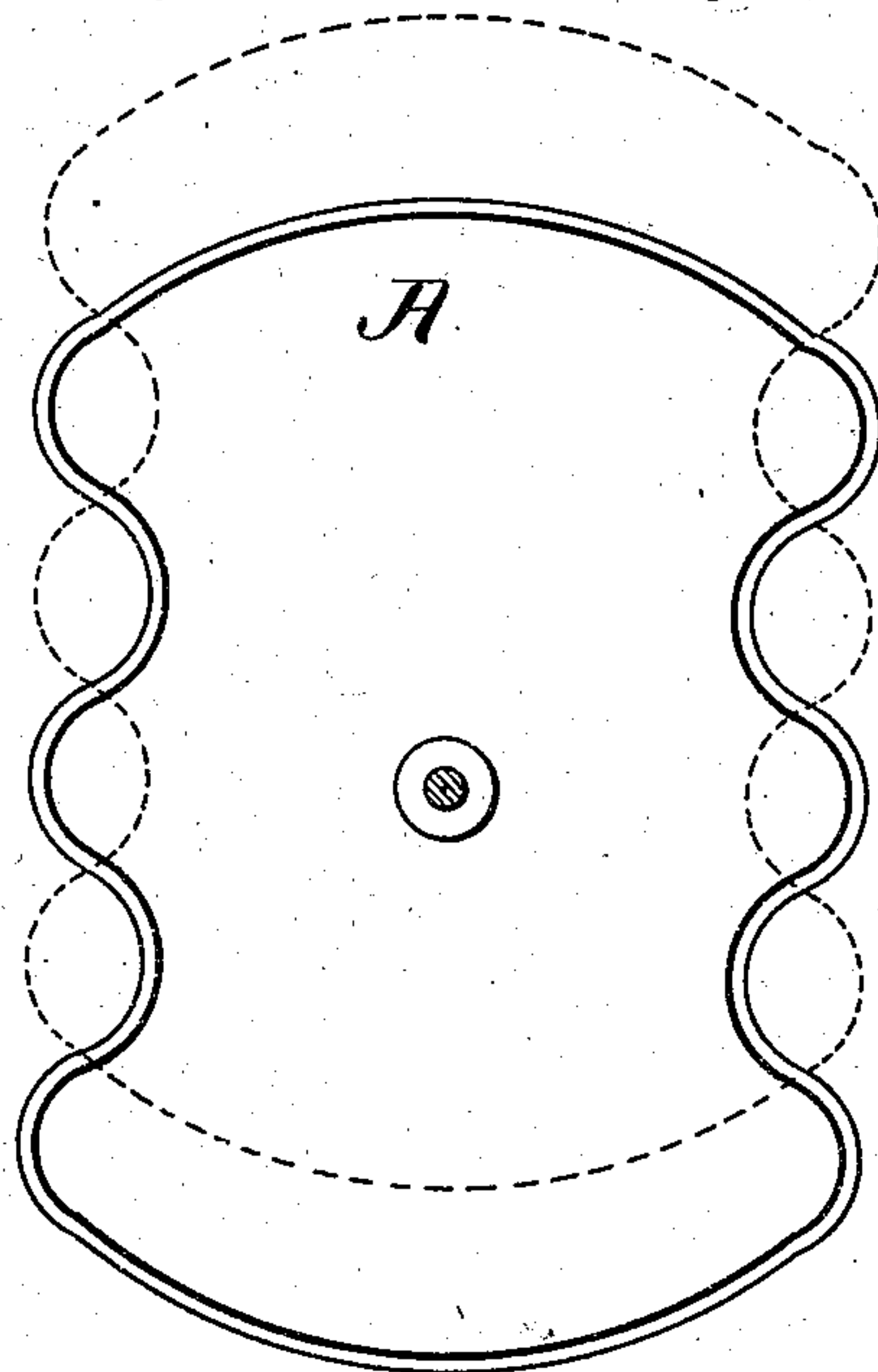
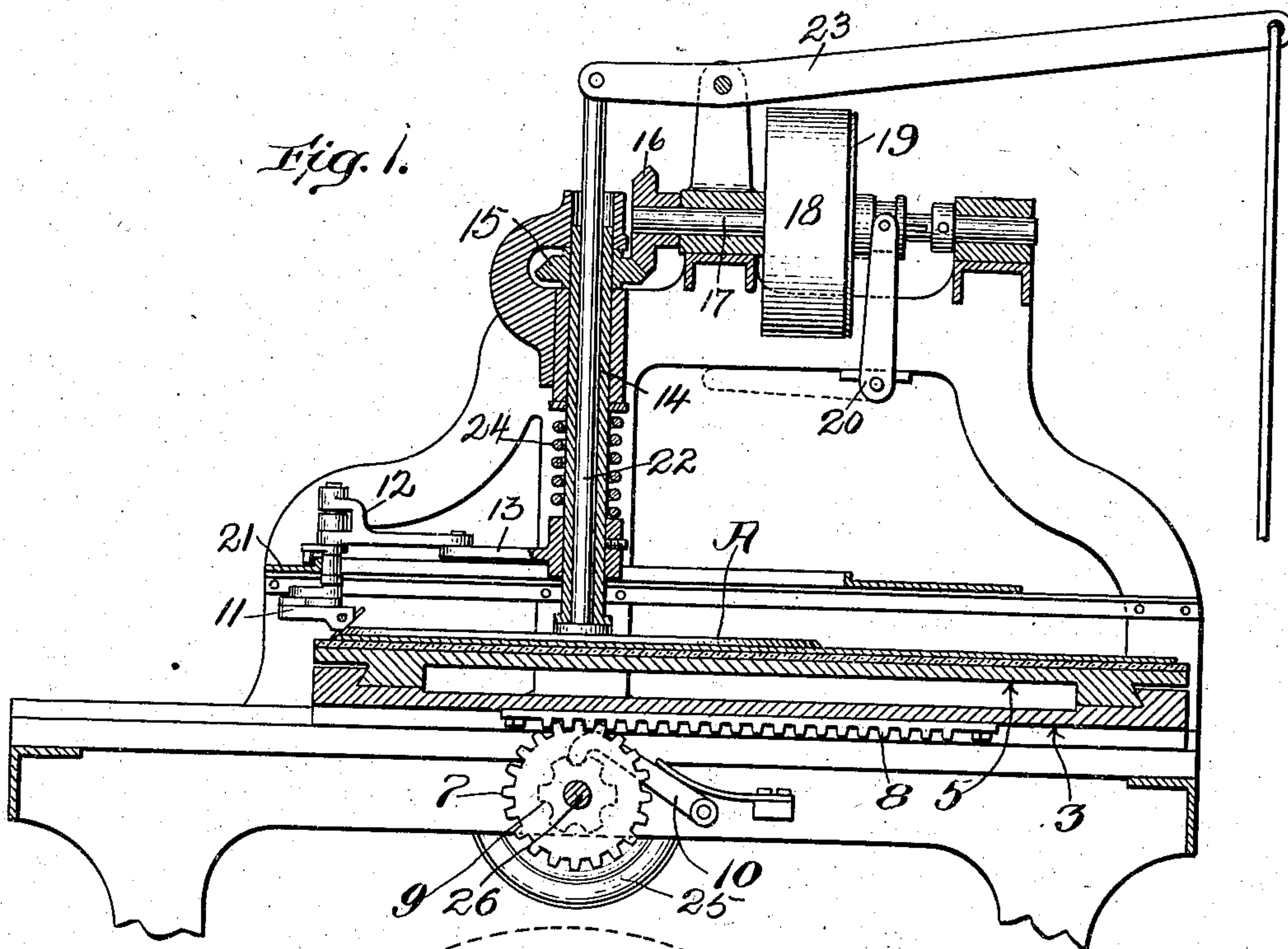
PATENTED MAR. 20, 1906.

A. M. STICKNEY.

MACHINE FOR CUTTING BLANKS WITH BEVELED EDGES.

APPLICATION FILED FEB. 16, 1905.

3 SHEETS—SHEET 1.



*Witnesses:*

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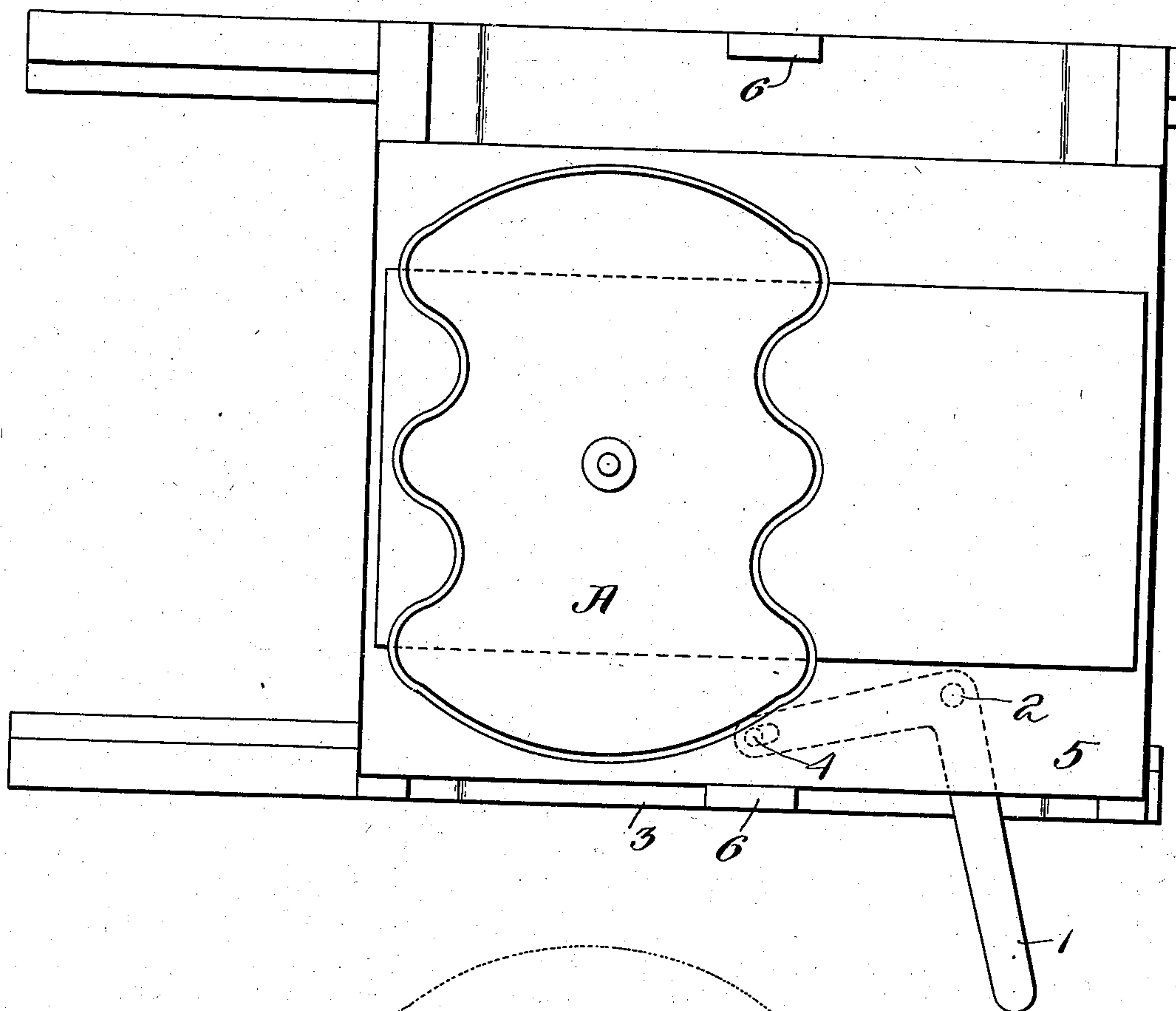
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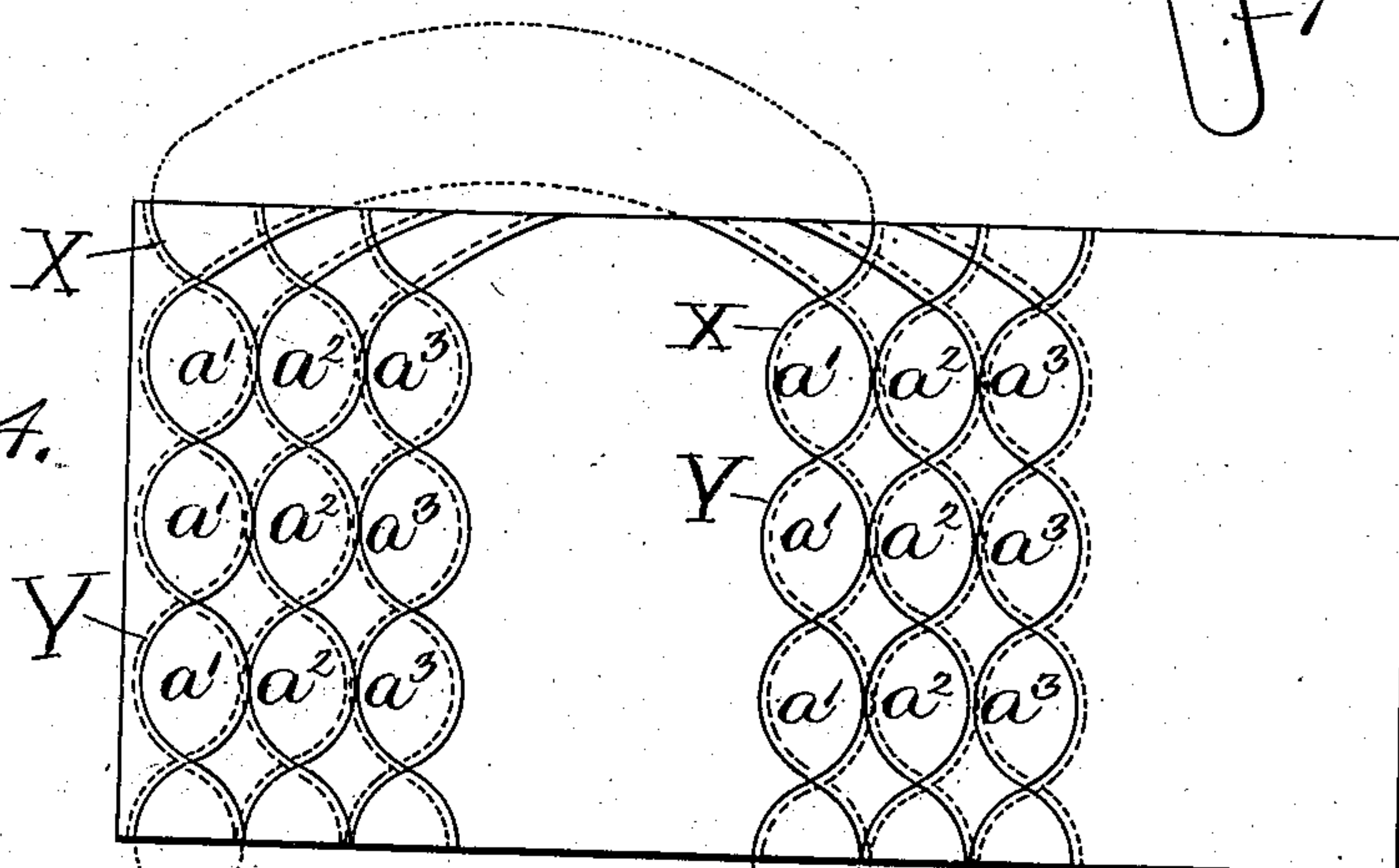
APPLICATION FILED FEB. 16, 1905.

3 SHEETS—SHEET 2.

*Fig. 2.*



*Fig. 4.*



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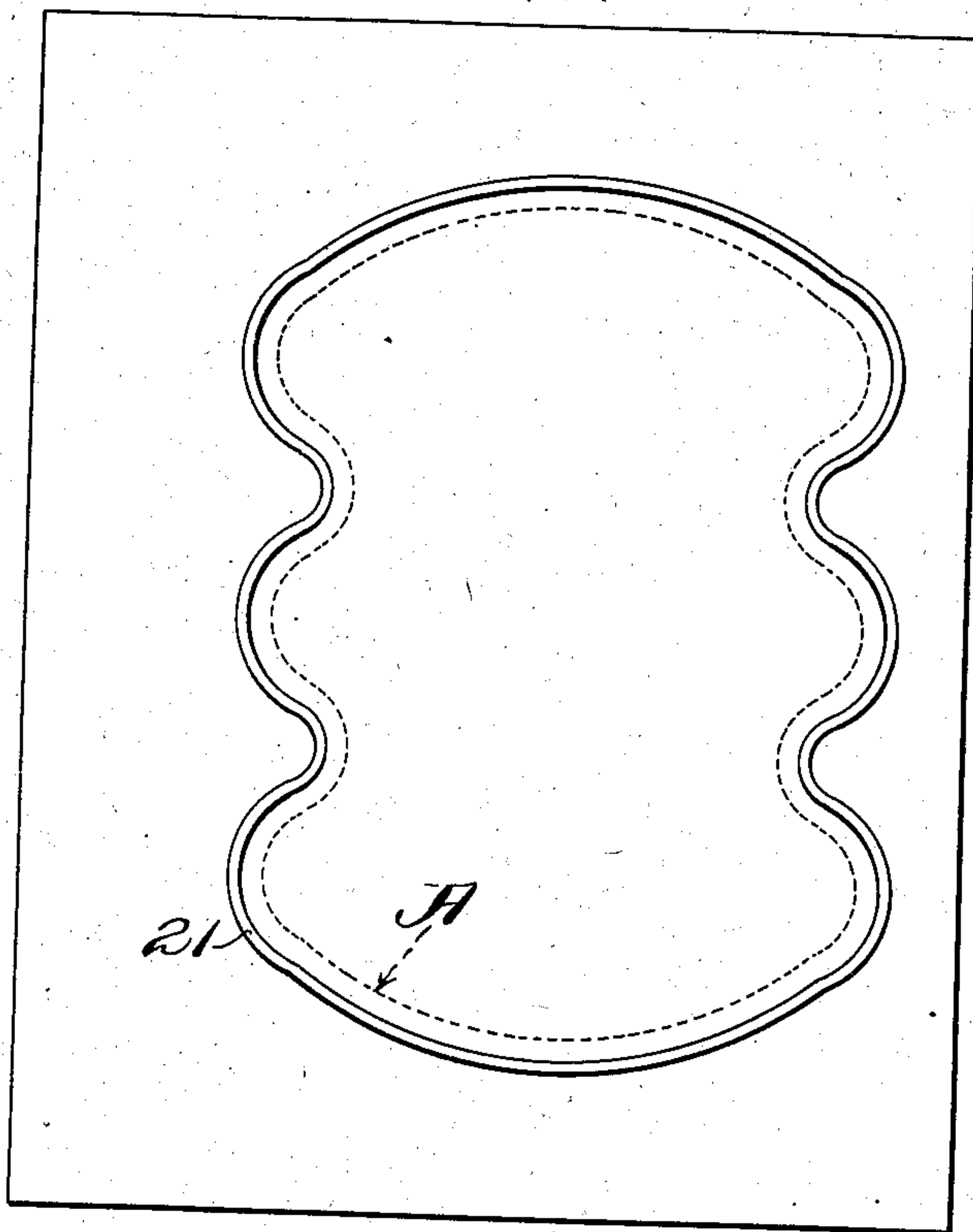
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3 SHEETS—SHEET 3.

*Fig. 5.*



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# UNITED STATES PATENT OFFICE.

ALLISON MORRIS STICKNEY, OF MEDFORD, MASSACHUSETTS, ASSIGNOR  
TO WELLMAN SOLE CUTTING MACHINE COMPANY, OF PORTLAND,  
MAINE, A CORPORATION OF MAINE.

## MACHINE FOR CUTTING BLANKS WITH BEVELED EDGES.

No. 815,564.

Specification of Letters Patent

Patented March 20, 1906.

Application filed February 16, 1905. Serial No. 245,812.

*To all whom it may concern:*

Be it known that I, ALLISON MORRIS STICKNEY, of Medford, in the county of Middlesex and State of Massachusetts, have invented an Improved Machine for Cutting Blanks with Beveled Edges, of which the following is a specification, reference being had to the accompanying drawings, making a part hereof, in which—

Figure 1 is a sectional elevation of my improved machine. Fig. 2 is a plan of my improved work-supporting table. Figs. 3 and 4 are diagrams described below. Fig. 5 is a plan of the guideway.

In my Patent No. 647,888, dated April 17, 1900, I have fully described a machine for cutting soles with beveled edges, and my present machine has much in common with the machine of that patent and will be fully understood by reference thereto, for my present invention consists, mainly, in a sinuous form with beveled edges, in combination with means for shifting the stock relatively to the form in order to produce the cuts, as shown in Figs. 3 and 4, Fig. 3 showing in dotted lines the path of the first cut and in full lines the path of the second cut, the second cut being produced after shifting the stock relatively to the form and lengthwise of cut, as indicated in Fig. 3. Fig. 4 shows the two cuts for each row of blanks  $a'$   $a^2$   $a^3$ , two cuts being required for each row of blanks, as will be plain from Fig. 4, where the dotted lines show the full path of the knife in making the first two cuts, thereby producing the two rows of blanks  $a'$ , the next two cuts producing the two rows of blanks  $a^2$ , and so on until the stock is used up, for after each pair of cuts the stock is fed crosswise of the cuts in order to present fresh portions of the stock to the two-sided form. The means for feeding the stock lengthwise of the cuts in order to make the cuts cross, as shown in Fig. 3, may be a bell-crank lever 1, pivoted at 2 to the bed 3 and connected at 4 with the stock-holder 5, this device working, in connection with the stop-gages 6 6, to limit the movement of stock-holder 5 with the necessary accuracy in both directions. The means for feeding the stock crosswise of the cuts may be the rack and pinion 7 and 8, with the index-wheel 9 cooperating with the spring-pawl 10. Of course any other suitable devices for feed-

ing the stock lengthwise and crosswise of cuts may be substituted.

Any suitable cutting mechanism may be employed, but that herein shown comprises a knife-carrier 11, carrying a knife cooperating with form A, as shown in Fig. 1. This carrier is connected by a link 12 and arm 13 with a hollow shaft 14, to which the arm 13 is rigidly fixed. At its upper end shaft 14 carries a beveled gear 15, keyed to said shaft, so that the latter can move endwise through said gear. Gear 15 is driven by a gear 16 on a shaft 17, the latter driven through a belt (not shown) engaging a pulley 18. The pulley 18 is one member of a clutch, the other member 19 of which is controlled by a lever 20, so that the wheel 18 can be connected with and disconnected from shaft 17 at the will of the operator. Through the mechanism described shaft 14 is rotated and acts, through arm 13 and link 12, to propel the knife-carrier 11 around the endless guideway 21, fixed to the frame of the machine. This guideway 21 is in plan of the same general shape as the form A.

Within shaft 14 is a rod 22, fixed at its lower end to form A and pivotally connected at its upper end to a lever 23. As will be clear, the form A and knife-carrier 11 may be raised by means of lever 23 when the stock is to be inserted or withdrawn from the machine, and at such times the shaft 14 is free to move endwise in gear 15. A spring 24 is provided for yieldingly holding the form A against the stock with the necessary pressure, and so that said form, together with the knife-carrier, may be raised and lowered when necessary.

The operation of the machine is as follows: The operator through lever 23 raises form A and the knife-carrier 11, inserts the stock between form A and bed 3, and then lowers form A and the knife-carrier 11. He then operates lever 20 and connects wheel 18 with shaft 17, thereby setting the machine in motion and causing carrier 11 to travel around guideway 21 and form A. When the knife-carrier has traveled once around the form, shaft 17 is disconnected from wheel 18, form A and carrier 11 are elevated, and then by means of lever 1 the operator shifts the work-holder 5 from one side of bed 3 to the opposite side or from one gage 6 to the opposite



gage 6, lowers form A and carrier 11, and again connects wheel 18 and shaft 17, thus causing carrier 11 to travel around guideway 21 and form A a second time. The result of the operation, so far as described, is that four sinuous cuts X X and Y Y, Fig. 4, have been made across the stock, thus completing two rows of blanks. The form A and carrier 11 are again elevated, and the stock is next fed crosswise of the cuts, a distance equal to the widths of the blanks being cut by rotating a shaft 26, which carries the pinion 7, index-wheel 9, and a hand-wheel 25, after which form A and carrier 11 are lowered and the cutting operations repeated.

What I claim as my invention is—

1. The improved machine above described comprising a sinuous form; a stock-holder between which and the form the stock is clamped; cutting mechanism coöperating

with the form, and means to feed the stock-holder lengthwise of the first cut produced by the cutting mechanism to cause the second cut to cross the first.

2. The improved machine above described comprising a sinuous form with beveled edges; a stock-holder between which and the form the stock is clamped; cutting mechanism coöperating with the form; means to feed the stock-holder lengthwise of the first cut produced by the cutting mechanism to cause the second cut to cross the first, and means to feed the stock-holder crosswise of the cuts to present a fresh portion of the stock to the cutting mechanism.

ALLISON MORRIS STICKNEY.

Witnesses:

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