R. J. HEARNE. CLOTH CUTTER.

(Application filed July 14, 1899.)

(No Model.)

United States Patent Office.

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CLOTH-CUTTER.

SPECIFICATION forming part of Letters Patent No. 645,953, dated March 27, 1900.

Application filed July 14, 1899. Serial No. 723, 781. (No model.)

To all whom it may concern:

Be it known that I, ROBERT J. HEARNE, a subject of the Queen of Great Britain, and a resident of New York, in the county of New 5 York and State of New York, have invented certain new and useful Improvements in Rotary Cutter-Machines, of which the following is a specification.

The invention relates to improvements in ro rotary cutter-machines; and it consists in the novel features of construction and combinations of parts hereinafter described, and more particularly pointed out in the claims.

I have embodied the invention in its pres-15 entation in this application in a pinkingmachine comprising a cutting-wheel, an anvil-wheel, means for rotating the cuttingwheel, and an adjustable table supporting the anvil-wheel and connected with a main 20 frame comprising means for attaching the same to a table or other support.

The invention resides more particularly in the general construction of the frame of the machine and in the means for adjustably sup-

25 porting the anvil-wheel.

The object of the invention is to produce a pinking-machine which shall be at once durable, simple, and efficient and in which the feed-table and anvil-wheel will preserve their 30 due relation to one another while being adjusted toward or from the cutting-wheel.

The nature and objects of the invention will be fully understood from the detailed description hereinafter presented, reference 35 being had to the accompanying drawings, in which—

Figure 1 is a front elevation, partly in section, of a pinking-machine constructed in accordance with and embodying the invention; 40 and Fig. 2 is a vertical transverse section of same on the dotted line 2 2 of Fig. 1.

In the drawings the numeral 5 designates the general frame of the machine, said frame comprising the standard 6, having at its up-45 per end a bearing-sleeve 7 and at its lower end the bed-plate 8 and clamp-arm 9, the latter extending below said bed-plate 8 and carrying the clamping-screw 10, by which the machine may be secured to the table 11 or 50 other support, as indicated, said table passing inward below the bed-plate 8 and above

upper end of the standard 6, is mounted the shaft 12, carrying at one end the cuttingwheel 13 and at its opposite end being sup- 55

plied with the usual crank 14.

The bed-plate 8 is of substantial width and length, as shown, and at its front end is formed with the hub 15, containing the threaded socket 16 to receive the adjusting-screw 17, 60 whose head 18 is furnished with wings or arms 19 and disposed centrally below the front end of the table 20. The rear end of the bed-plate 8 has the upwardly-turned portion or extension 21, to which, upon a pin 22, 65 is hinged the rear end of the table 20, the front end of which simply rests upon the head 18 of the adjusting-screw 17. The table 20 has formed on its lower side the lugs 23, receiving the tranverse pin 24, upon which is 70 mounted the anvil-wheel or annular anvil 25 of usual construction. The table 20 is disposed longitudinally over the base-plate and at its rear end curves downward to the upper edges of the upwardly-turned portion or ex- 75 tension 21 of said plate, as clearly indicated in Fig. 1. The table 20, adjacent to the annular anvil 25, is provided on its outer edges with the extension 26, which serves as a convenient table for the use of the operator in 80 handling and guiding the fabric. The anvil 25 is in line with the cutter-wheel 13, and the fabric to be cut passes between said anvil and said wheel in a manner well understood in this art.

In the use of the machine hereinbefore described, the same having been applied to a support 11, the table 20 will be properly adjusted by means of the screw 17, and the fabric to be cut will be fed longitudinally over 90 the table 20 and between the cutting-wheel 13 and anvil 25, the rotation of the cuttingwheel 13, by means of the crank 14, serving to move the fabric along and to cut the same. It will be observed that by means of the ad- 95 justing-screw 17 the table 20, with the anvil 25, may be adjusted to give the required pressure against the cutting-wheel 13 and that during any such adjustment the relation of the anvil 25 with the table 20 is preserved, roc since said anvil and table are connected together and therefore move in unison. The screw 17 furnishes a very convenient and the screw 10. Within the sleeve 7, at the positive means for adjusting the table 20 and

anvil 25, and said screw 17 in the location and combination presented constitutes a portion of my invention. The table 20, constructed as shown, is of great advantage, in that it not only affords a desirable surface over which to feed the fabric and carries the anvil 25, but owing to the slight yielding of the material in the form of table shown there is established a slight yielding pressure of the anvil 25 against the cutting-wheel 13, said table when thus yielding moving freely at its front end on the head 18 of the screw 17. The table 20 is, as shown, positively held at its rear

end on the head 18 of the screw 17. The table 20 is, as shown, positively held at its rear end, but simply presses upon the head 18 at its front end.

The bed-plate 8 is directly below the ta-

ble 20 and substantially corresponds in width with the width of the main portion of said table, whereby a very durable machine is formed and one which is capable of withstanding all of the uses to which machines of

this class are put.

The machine constructed as above described is entirely efficient in and convenient for use and fully meets the want of a small

durable hand-machine for pinking.

The invention is not, of course, limited to any special character of cutting-wheel 13, since the outlines of the cutting edges of the 30 wheel 13 must vary in accordance with the particular patterns to be cut. The wheel 13 is therefore held upon the shaft 12 by a suitable nut 27, in order that it may be readily removed and a cutter-wheel different in character substituted therefor. The wheel 13 is not in itself novel, and is formed with a blunt edge.

What I claim as my invention, and desire

to secure by Letters Patent, is—

1. In a rotary cutter-machine of the character described, the cutter-wheel, combined with the table 20 hinged at one end and hav-

ing at its lower side the lugs 23, the shaft 24 mounted in said lugs, the anvil-wheel 25 on said shaft and between said lugs and extend-45 ing upward within a slot formed in said table below said cutter, and means engaging the other end of said table for adjusting said table and anvil-wheel in their fixed vertical relation to one another, toward and from said 50 cutter-wheel; substantially as set forth.

2. In a rotary cutter-machine of the character described, the bed-plate having at one end the raised hub 15 forming a threaded socket 16, the adjusting-screw 17 within said 55 socket and having a head at its upper end, and the rotary cutter-wheel, combined with the table 20 hinged at one end and at its other end resting freely upon said head as an adjustable support therefor, and the anvil-wheel 60 25 in fixed relation to and carried by said table and extending a slight distance above the upper surface of said table; substantially as set forth.

3. In a rotary cutter-machine of the char-65 acter described, the rotary cutter-wheel, the rotary anvil-wheel, and the movable table within a slot in which the lower one of said wheels projects and which lower wheel is always in fixed vertical relation to said table, 70 combined with the shaft for said lower wheel, the bearings for said shaft connected with said table and being below said table, and means for adjusting said table and its wheel in their fixed vertical relation to one another 75 and in unison toward and from the upper wheel; substantially as set forth.

Signed at New York, in the county of New York and State of New York, this 12th day

of July, A. D. 1899.

ROBERT J. HEARNE.

Witnesses:

CHAS. C. GILL, GUNDER GUNDERSON.