(No Model.)

2 Sheets—Sheet 1.

E. BRISSAUT.

MACHINE FOR CUTTING INTO STRIPS AND REELING PAPER.

No. 375,728. Patented Jan. 3, 1888.

FIG. 1

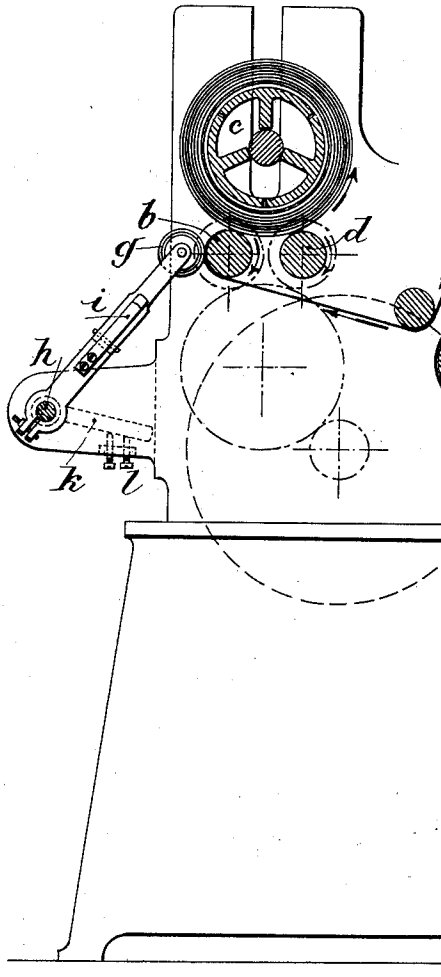
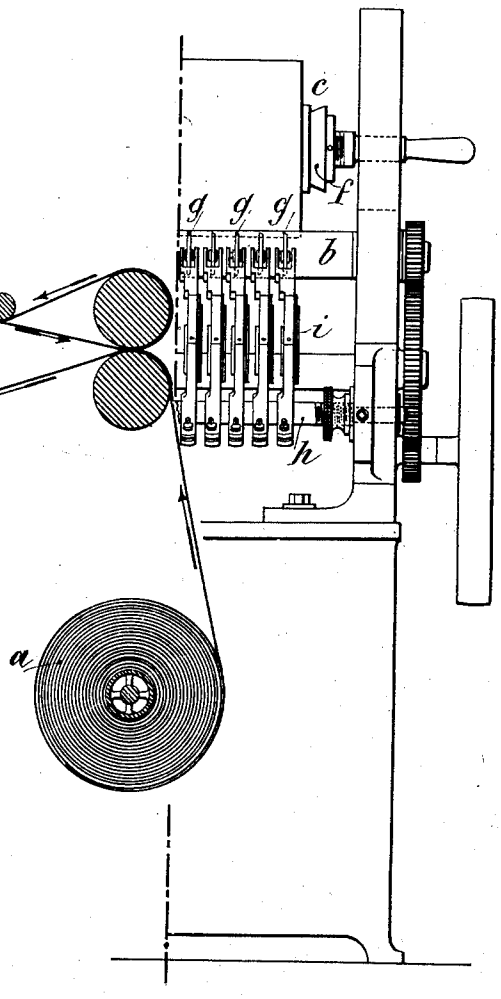


FIG. 2



Witnesses:

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Inventor

Eugène Brissaut

by Brieson & Steele

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(No Model.) 2 Sheets—Sheet 2.

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FIG. 4

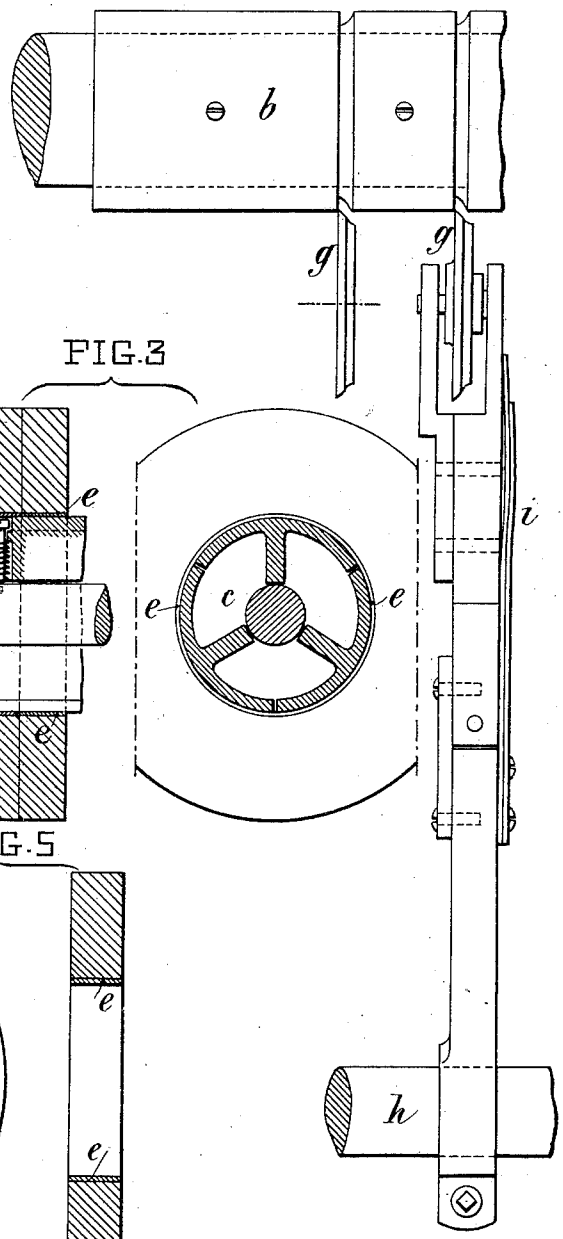


FIG. 3

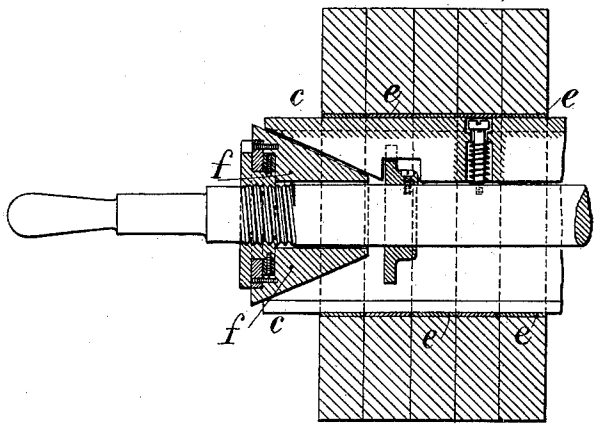
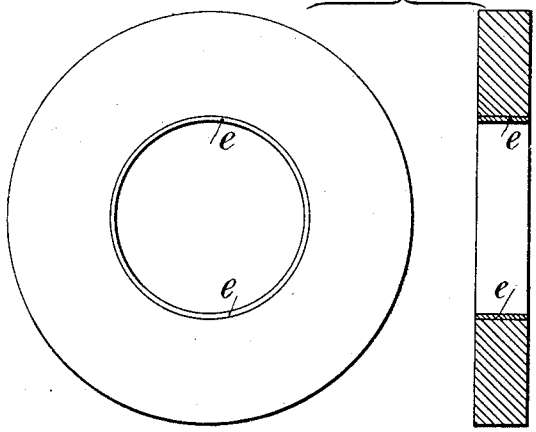


FIG. 5



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UNITED STATES PATENT OFFICE.

EUGÈNE BRISSAUT, OF PARIS, FRANCE.

MACHINE FOR CUTTING INTO STRIPS AND REELING PAPER.

SPECIFICATION forming part of Letters Patent No. 375,728, dated January 3, 1888.

Application filed March 7, 1887. Serial No. 229,975. (No model.) Patented in France June 12, 1886, No. 174,743.

To all whom it may concern:

Be it known that I, EUGÈNE BRISSAUT, of the city of Paris, France, have invented a new and Improved Machine for Cutting into Strips and Reeling Paper, of which the following is a full, clear, and exact description, and for which I have obtained Letters Patent in France, No. 174,743, dated June 12, 1886.

This invention relates to an improved machine for cutting or dividing into strips and reeling at one operation paper to be used for machine-made cigarettes and other purposes; and the invention consists in the new combination of parts hereinafter described.

The principle of the invention is illustrated in the accompanying drawings, forming part of this specification, the details of construction being capable of modification.

Figure 1 is a section showing the general arrangement of the machine. Fig. 2 is a front view of part of the machine. Fig. 3 shows details of the expansible mandrel. Fig. 4 shows one of the cutting-disks with its counterpart; and Fig. 5 shows one of the reels of paper produced in the machine, the three latter figures being drawn to a larger scale.

The same letters of reference indicate the same parts in all the figures.

The roll of paper to be cut up and reeled is placed at *a*, whence the paper follows the direction indicated by the arrows in Fig. 1 and passes round a roller, *b*, which is grooved, as shown more clearly in Fig. 4, to form with the disks *g* pairs of circular shears, by which the paper is severed into strips, which are immediately wound upon the paper rings *e*, corresponding to the width of the strips and slipped onto the expanding mandrel *c*. The mandrel *c* rests upon the rollers *b d*, and is rotated by surface contact, the friction increasing proportionately to the diameter and weight of the reels, so that the strips are wound with the proper amount of tension. The strips correspond in width to the distance between the pairs of cutters, and the rings *e*, on which they are wound, are slipped onto the expansible mandrel *c*, (shown separately in longitudinal and transverse section in Fig. 3,) after slackening the mandrel by screwing back the cone *f*, the mandrel being then expanded to hold the rings tight by screwing up the cone, so as to force apart the segments composing the mandrel.

The cutters *g* are mounted in forked arms *g'*, all fixed on a shaft, *h*, on which they are adjusted with regard to the counterpart cutter on the cylinder *b;* and to insure constant contact of the cutters the arms are jointed and acted on by springs *i*, so as to press the faces of the cutters *g* against their counterparts— that is, the edges of the grooves on cylinder *b*, from which they receive their motion. The shaft *h* has an arm, *k*, resting against set-screws *l*, by which the position of the cutters is adjusted toward or away from cylinder *b*. The expanding mandrel *c* is mounted as close as possible to the cutting-point, so as to avoid any lateral deviation of the strips and insure their being wound evenly and at the proper tension.

When the operation is completed, the core-rings *e* remain in the rolls of paper and serve as further supports for the same.

I claim—

1. The combination of the reel *a*, grooved counterpart cutting-roller *b*, rotary cutter *g*, pivoted arm *g'*, reel-cores *e*, and expansion-mandrel *c f*, all arranged for joint operation in reeling and cutting the paper and for leaving the reel-cores in the paper, as specified.

2. The combination of the reel *a*, grooved counterpart cutting-roller *b*, rotary cutter *g*, jointed forked arm *g'*, spring *i*, and receiving-reel, all arranged so that the spring *i* crowds the face of cutter *g* against the edge of a groove in the roller *b*, as set forth.

The foregoing specification of my improved machine for cutting into strips and reeling paper signed by me this 4th day of February, 1887.

EUGÈNE BRISSAUT.

Witnesses:

ROBT. M. HOOPER,

ALBERT MOREAU.