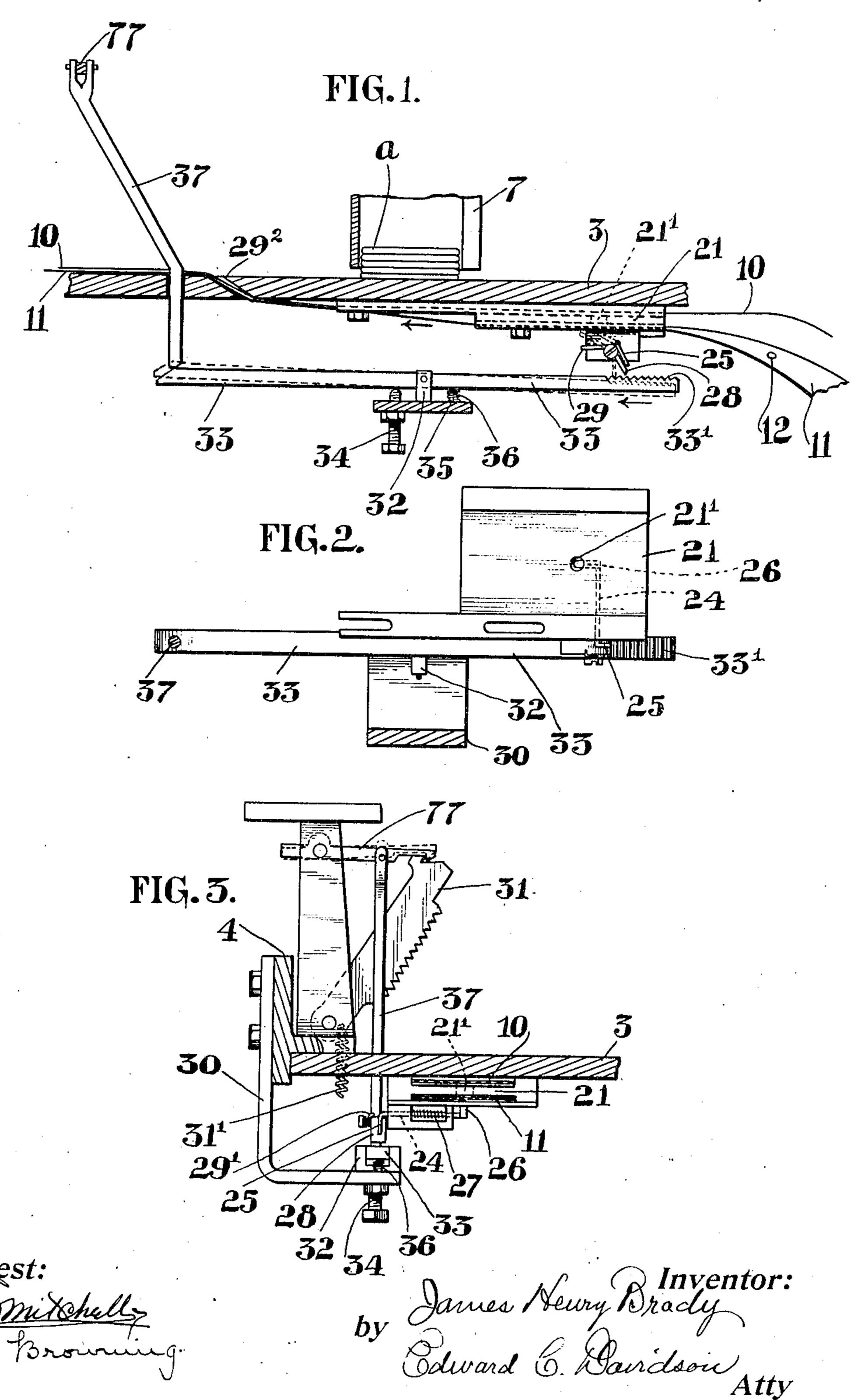
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WEB CUTTING ATTACHMENT FOR WRAPPING MACHINES.

APPLICATION FILED JUNE 13, 1907.

913,352.

Patented Feb. 23, 1909.



UNITED STATES PATENT OFFICE.

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WEB-CUTTING ATTACHMENT FOR WRAPPING-MACHINES.

No. 913,352.

Specification of Letters Patent.

Patented Feb. 23, 1909.

Application filed June 13, 1907. Serial No. 378,700.

To all whom it may concern:

Be it known that I, JAMES HENRY BRADY, a citizen of the United States, residing at Louisville, in the county of Jefferson and 5 State of Kentucky, have invented certain new and useful Improvements in Web-Cutting Attachments for Wrapping-Machines, of which the following is a specification.

This invention relates to machines for 10 wrapping articles such as cakes of chewing gum, soap and the like where individual wrappers are fed to the machine in the form of a continuous web which is automatically severed at the proper point.

15 A machine in which this invention is particularly applicable is disclosed in Letters Patent, No. 854,021 granted to me May 21, 1907.

The invention consists in an improved or-20 ganization of devices for severing the wrapper web at the proper time.

In the accompanying drawings: Figure 1 is a detail longitudinal section: Fig. 2, a detail plan view taken immediately below the 25 bed plate: and Fig. 3, a view looking from the left hand end of Fig. 1 and in which only so much of the machine is shown as is desirable to illustrate the construction and mode of operation of this improvement.

In the several figures of drawings parts are omitted for the sake of clearness of illustration.

7 is a hopper in which the cakes a to be wrapped are deposited and from which they 35 are to be delivered upon the wrapper web by any suitable feed device after which the web and cake are drawn forward and during such traverse of the web it is to be severed. Such a machine in all its details is 40 disclosed in the above mentioned patent in which as here shown there are two continuous webs, one 10 of waxed paper and the other 11 that may be printed with appropriate labels and which is perforated as 45 shown at 12 between the printed labels.

On the bottom of the bed plate 3 is supported a partition plate 21 above which passes the web 10 of waxed paper and below which traverses the perforated label web 11, 50 the two webs passing together through an inclined slot 292 in the bed plate to the upper surface thereof. The partition plate 21 is

formed with a perforation 21' in line of traverse of the perforations in the label web. The arrow in Fig. 1 indicates the direction 55

of travel of the webs.

The web severing knife 31 is pivoted in a standard mounted at one side of the bed plate and has applied to it a coiled spring 31' the reaction of which tends to throw the 60 knife down into a transverse slot in the bed plate as described and shown in the before mentioned patent. The knife, however, is normally held elevated by a pivoted latch or trigger 77 mounted in the before men- 65 tioned standard. This is the normal condition. At the proper time, the latch 77 is tripped and the knife is thrown down to sever the web passing along the bed plate after which, as described in said patent, the 70 knife is elevated and reëngaged by its retaining latch.

Mounted in bearings on the under side of the bracket or frame applied to the under side of the bed plate and of which the par- 75 tition plate 21 forms a part, is a short light rock shaft 24 carrying at one end a right angle extension 26 that bears against the under face of the web opposite the perforation 21' in the partition plate and therefore in 80 line with the perforations in the wrapper web. The other or outer end of the shaft 24 has a downwardly turned part or arm 25. A light coiled spring 27 applied around the rock shaft tends by its re-action to throw the 85 extension 26 upwardly against the wrapper web and the other extension 25 downwardly.

On the outer face of the bracket or frame of which partition plate 21 forms a part is mounted a downwardly extending pivoted 90 dog 28 provided with a counter balancing arm 29 and the axis or pivot of which is slightly below the axis of the rock shaft 24. The counter balance 29 of the dog 28 tends to swing the dog upwardly and into contact 95 with the arm or projection 25 on the end of the rock shaft. That is the normal position indicated by the full lines in Fig. 1. A light coiled spring 29' may be applied to the axis of the dog and serves by its reaction 100 also to throw the dog upwardly into contact with the projection 25 on rock shaft. The right hand reciprocating side plate 4 of the carriage that travels upon the bed plate

as described in my patent before mentioned has a downwardly extending bracket 30 turned inwardly at right angles at its lower end and supporting bearings 32 for a lon-5 gitudinally arranged pivoted bar 33, the front end of which is limited in its downward movement by an adjustable stop screw 34 and the rear end of which is limited in its downward movement by a fixed stop 35 10 around which is applied a coiled spring 36, the reaction of which tends to lift the rear end of the bar. The upper face of the pivoted rocking bar at its rear end is provided with transverse grooves or serrations 33' 15 adapted to be engaged by the chisel shaped end of the dog 28 when the latter is thrown downwardly. Normally spring 36 keeps the end of the bar in front of its pivot 32 depressed to such extent that it will not en-20 gage the end of a pendent trip rod 37 movable vertically with sufficient freedom in a hole in the bed plate and pivoted at its upper end to the knife latch or trigger 77. The operation of these devices is as fol-25 lows; the bar 33 being carried by the side plate 4 is reciprocated with it and the parts are so arranged and proportioned that at the time the perforation should come under the projection 26 on the rock shaft 24, the 30 forward bevel end of bar 33 will have advanced sufficiently to strike the end of the pendent tripping rod 37 and if that end of the bar be then thrown upwardly, it will lift the rod 37 and tripping latch 77 will re-35 lease the web-severing knife. When in the forward traverse of the web, a perforation therein comes opposite the perforation 21' in the plate 21, the spring pressed extension 26 of rock shaft 24 will fly up into the per-40 foration suddenly, throwing downward the right angular extension 25 of the other end of the rock shaft which abruptly striking the pivoted dog 28 throws it downwardly, as indicated in dotted lines, Fig. 1, and as 45 the rocking bar 33 moves forwardly, the dog turning about its axis will depress the rear end of the bar against the reaction of spring 36, and lifting its forward end will raise the trip rod 37 and trip the web-severing 50 knife. This action should be so timed as to sever the web transversely in line with a perforation and in rear of the cake or article lying upon it, the severing action occurring

during the forward traverse of the cake

tioned patent. On return or backward

which the side plate 4 forms part, the for-

ward end of the bar 33 will pass from be-

will draw down the latch 77 into position to

engage the web-severing knife as it is auto-

matically raised during the backward move-

ment of the carriage. The effect also is to

60 neath the tripping rod 37 which by gravity

55 and web as fully set forth in my before men-

disengage the rear end of the bar 33 from 65 dog 28 and permit the bar to assume its normal position shown by full lines in Fig. 1.

I claim:—

1. A cutting attachment for package wrapping machines in which the cake to be 70 wrapped is drawn forward with a continuous web from which the wrappers are to be severed, comprising the combination of a web severing knife normally held to potential position by a tripping latch, a trip- 75 ping rod applied to the latch, a longitudinally arranged tripping bar carried by a reciprocating part of the machine and pivoted thereon intermediate its ends, and whose front end is adapted to engage the 80 tripping rod, a rock shaft having a spring pressed projection adapted to enter a perforation in a continuous wrapper web, a second projection from the rock shaft and a pivoted dog adapted to be struck thereby 85 and thrown into engagement with the longitudinally arranged tripping bar in rear of its pivot to thereby depress that end of the bar and cause its forward end to act upon the tripping rod to release the knife.

2. A cutting attachment for wrapping machines in which the article to be wrapped is drawn forward with a continuous web from which the wrappers are to be severed, comprising the combination of a longitudinally 95 arranged knife tripping bar pivoted intermediate its ends and mounted upon a reciprocating part of the machine, a pivoted dog adapted to engage the bar in rear of its pivot and to thereby depress the same and a 100 spring pressed device adapted to fly up into a perforation in the web and thereby throw the dog into engagement with the bar.

3. A cutting attachment for wrapping machines in which the article to be wrapped is 105 drawn forward with a continuous web from which the wrappers are to be severed, comprising a plate beneath which the perforated wrapper web is drawn forward, a recess in the plate in line with the traverse of the per- 110 forations in the web, a pivoted part having a projection on one side of its axis adapted to enter the perforation in the plate when a perforation in the web coincides therewith, and a projection on the other side of its axis, 115 a spring applied to said part and tending to throw the first named projection upwardly into said perforation and the last named projection downwardly, a pivoted dog arranged in operative relation to the last named pro- 120 movement of the reciprocating carriage of jection and adapted to be struck thereby, a longitudinally disposed bar pivoted intermediate its ends and mounted upon a reciprocating part of the machine, a knife tripping trigger and a tripping device con- 125 nected therewith, the pivoted bar being in such relation to said tripping device and dog that when engaged by the dog the bar is

rocked about its pivot and the tripping device actuated.

4. A cutting attachment for wrapping machines in which the article to be wrapped is 5 drawn forward with a continuous web from which the wrappers are to be severed, comprising the combination of a tripping bar pivoted intermediate its ends on a reciprocating part of the machine, a dog pivoted

upon a fixed part of the machine and means 10 acting when the web is to be severed, to throw the dog into engagement with the bar. In testimony whereof, I have hereunto

subscribed my name.

JAMES HENRY BRADY.

Witnesses:

J. W. Parrish, JOHN COLGAN.