

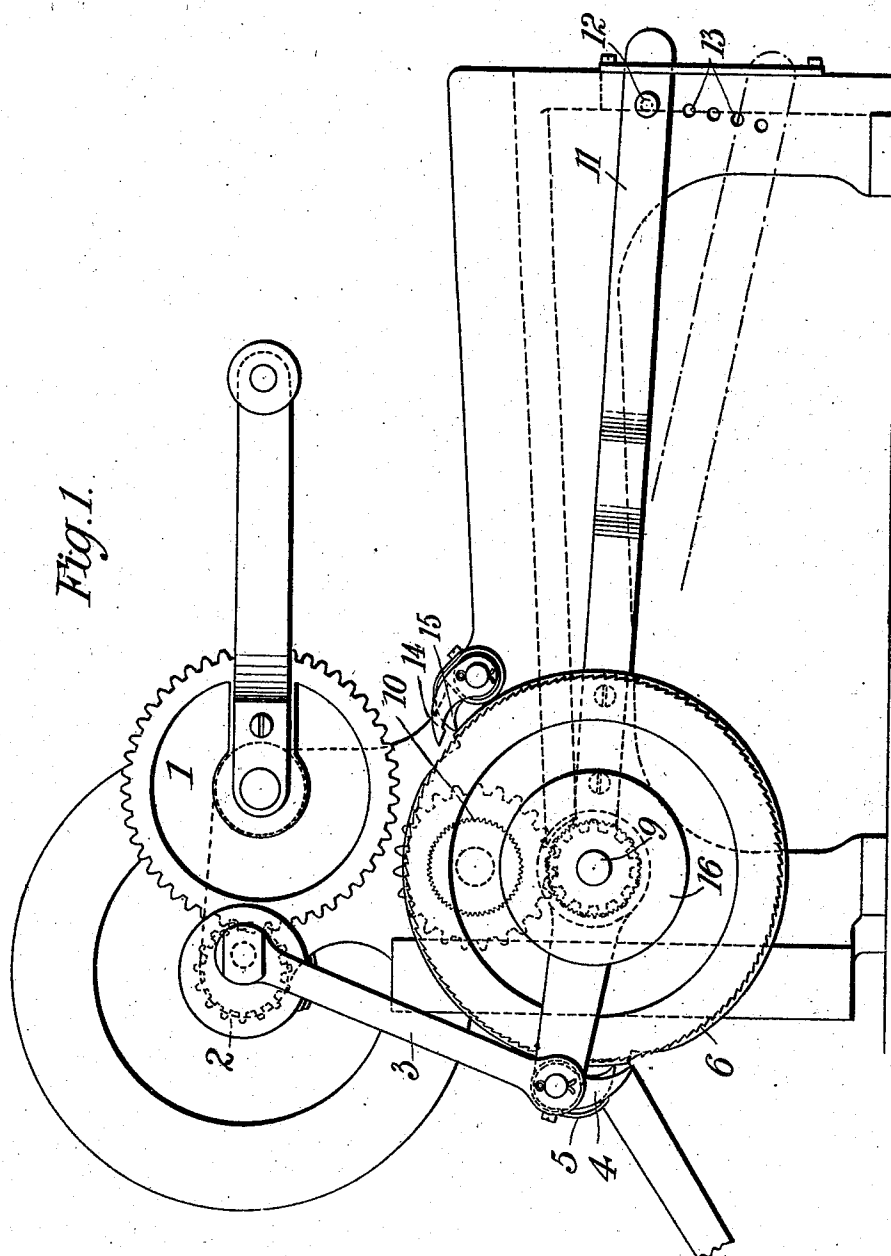
No. 855,039.

PATENTED MAY 28, 1907.

B. BARON.
INTERMITTENT FEED APPARATUS.

APPLICATION FILED NOV. 12, 1906.

3 SHEETS--SHEET 1.



WITNESSES.

C. Helen Taylor
J. J. McCarthy

INVENTOR.

Birnhard Baron
by Foster Freeman Watson atty

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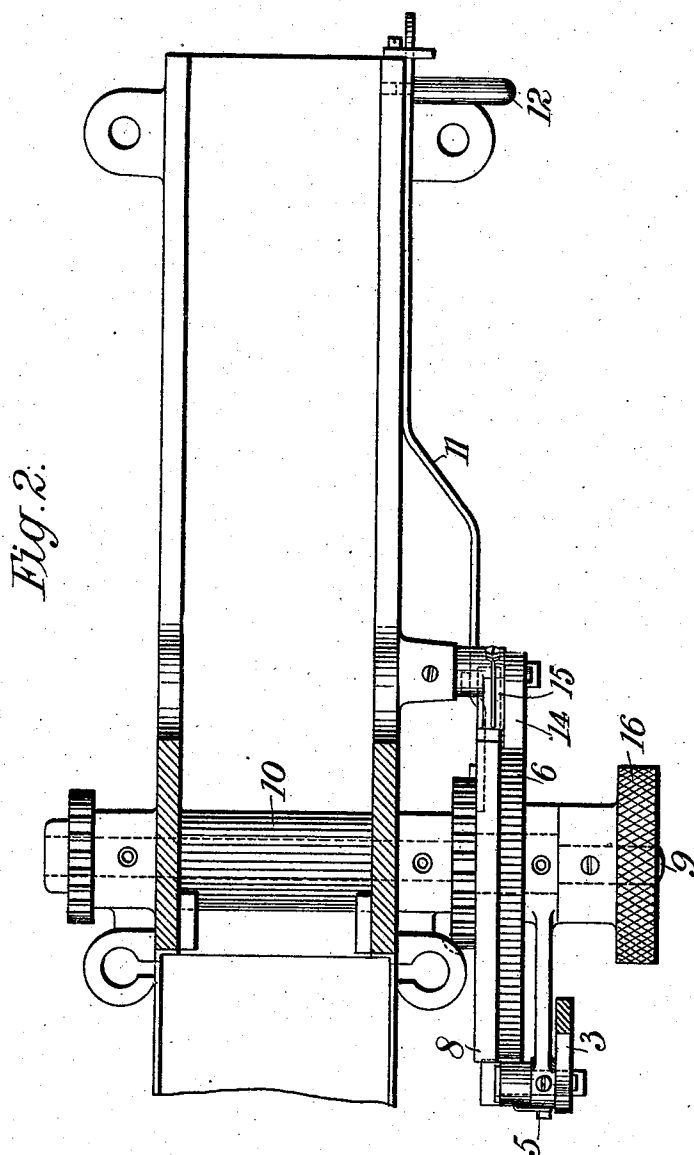
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3 SHEETS--SHEET 2.



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3 SHEETS—SHEET 3.

Fig. 3.

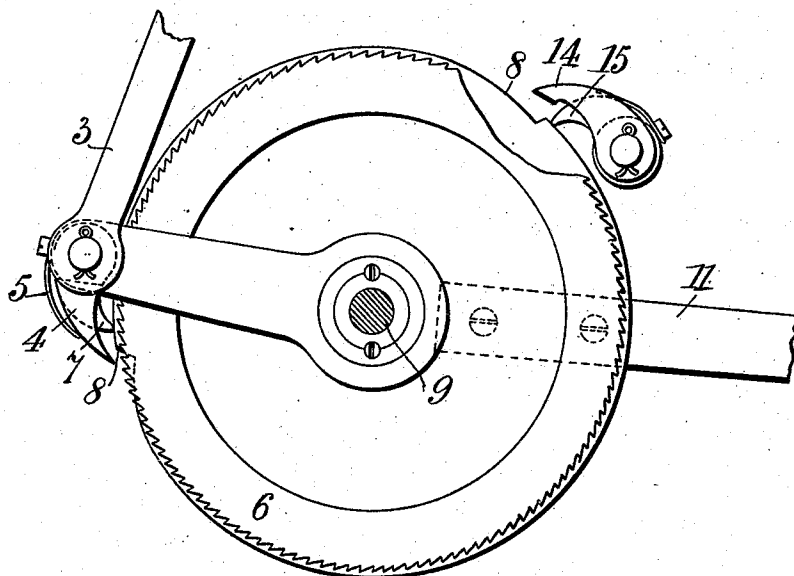
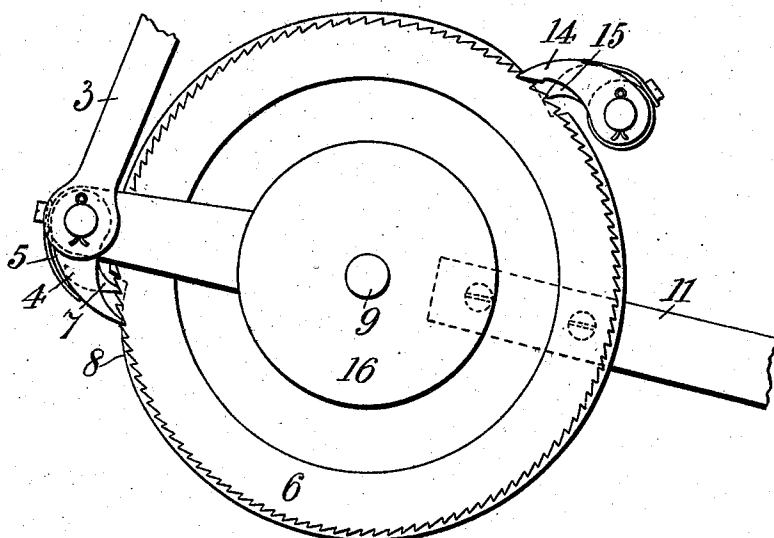


Fig. 4.



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UNITED STATES PATENT OFFICE.

BERNHARD BARON, OF LONDON, ENGLAND.

INTERMITTENT-FEED APPARATUS.

No. 855,039.

Specification of Letters Patent.

Patented May 28, 1907.

Application filed November 12, 1906. Serial No. 343,143.

To all whom it may concern:

Be it known that I, BERNHARD BARON, a citizen of the United States of America, residing at London, England, have invented a certain new and useful Improvement in Intermittent-Feed Apparatus, of which the following is a specification.

In cutting, heading and other machines having an intermittent feed from a continuously moving part it has heretofore been proposed to vary such feed by causing a ratchet to engage with a greater or lesser number of teeth on a toothed wheel from which motion is transmitted to the feed, and the present invention relates to machines of this general class and has for its object simplicity of construction of such apparatus coupled with ease of operation for changing or stopping the feed without stopping the main driving mechanism.

As illustrated in the accompanying drawings the invention is shown as applied to an apparatus adapted to cut cake or leaf tobacco or like articles, and from same its application to other machines will be obvious.

In said drawings:—Figure 1 is a side elevation, Fig. 2 a plan view, Fig. 3 a side view on a larger scale with part of the ratchet wheel broken away showing the position of the parts when the feed is stopped, and Fig. 4 is a similar view showing the parts in position adapted to give full feed.

As shown 1 is the driving wheel which gears with 2 eccentrically mounted on which is rod 3 upon which is pivoted ratchet finger 4 normally pressed down by spring 5 in the already well known manner so as to engage with ratchet wheel 6. Attached to and working with ratchet finger 4 is a second finger 7 adapted to bear on cam surfaces 8 loosely mounted on shaft 9 to which ratchet wheels 6 and feed roller 10 are secured. Cam surfaces 8 are operated as desired by lever 11 which may be set and held in any desired position by any convenient means those shown consisting of a pin 12 carried by lever 11 and adapted to enter any one of a series of holes 13 in the frame of the machine.

When lever 11 is in the position shown in Figs. 1 and 3 then cam surface 8 has raised finger 7 and with it ratchet finger 4 which consequently fails to engage with ratchet wheel 6. If then lever 11 be turned to the position indicated by dotted lines in Fig. 1 and full lines in Fig. 4 finger 7 falls to its lowest position on the cam owing to the ac-

tion of spring 5 and ratchet finger 4 engages wheel 6 to which it imparts the full motion of rod 3.

It will be seen that by varying the position of cam surfaces 8 the travel of the finger 7 thereover will cause finger 4 to engage wheel 6 at an earlier or later period of the stroke of rod 3, and consequently any desired amount of intermittent feed may be secured or such feed may be instantly stopped even though driving wheel 1 be constantly revolving. To prevent any back travel of ratchet wheel 6 a pair of spring operated fingers 14 and 15 similar to those on rod 3 are pivoted to the frame of the machine and may if desired be raised and lowered by a similar cam surface so as to leave the feed roll 10 quite free to be turned by knob 16 to withdraw or advance the material being fed. Where freedom of feed wheel 10 is not required an ordinary ratchet pawl may be employed.

What I claim is:—

1. Apparatus for varying the amount of or stopping intermittent feed consisting of a ratchet wheel, a ratchet finger normally adapted to engage therewith, an operating arm carrying said finger, a second finger working in unison with the ratchet finger, an adjustable cam loosely mounted on the shaft carrying the ratchet-wheel and in the same plane as the second finger, a lever attached to said cam, and means for holding said lever in the desired position so as to raise or lower the second finger and hold the ratchet finger out of engagement with the ratchet wheel or permit it to engage therewith and move same a predetermined distance irrespective of the length of stroke of the operating arm substantially as and for the purposes set forth.

2. Apparatus for varying the amount of or stopping intermittent feed consisting of a ratchet wheel, a ratchet finger normally adapted to engage therewith, an operating arm carrying said finger, a second finger working in unison with the ratchet finger, an adjustable cam in the same plane as the second finger and means for adjusting and holding said cam so as to raise or lower the second finger and hold the ratchet finger out of engagement with the ratchet wheel or permit it to engage therewith and move same a predetermined distance irrespective of the length of stroke of the operating arm, a pawl normally adapted to engage with the ratchet wheel, a second finger working in unison with the pawl, a second adjustable cam in the

same plane as the pawl finger adapted to
be worked in unison with the first cam and
to hold the pawl out of engagement or per-
mit it to engage at a predetermined point
5 with the ratchet wheel substantially as and
for the purposes described.

In testimony whereof I have hereunto set

my hand in the presence of two subscribing
witnesses.

BERNHARD BARON.

Witnesses:

H. D. JAMESON,

R. F. WILLIAMS.