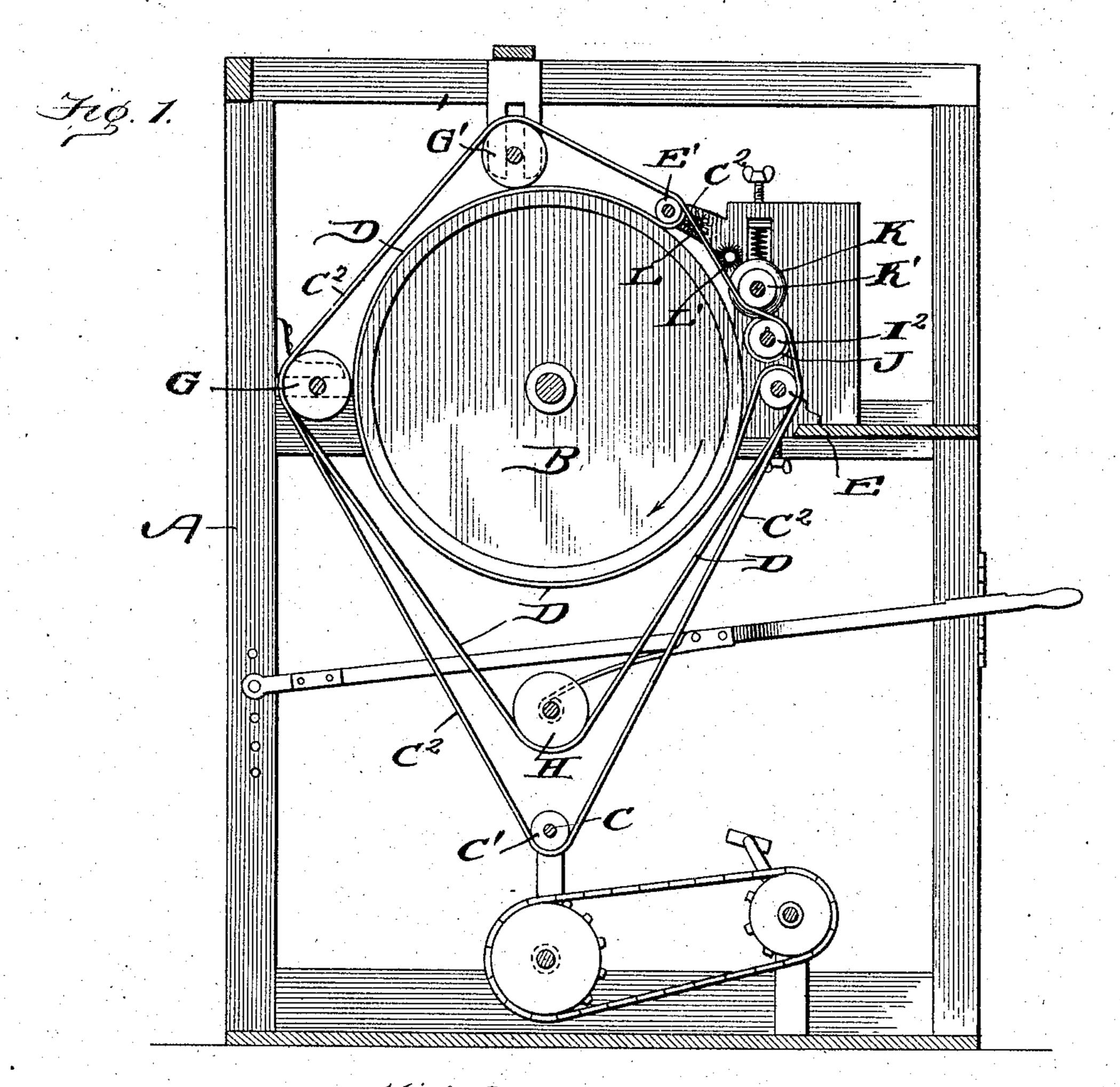
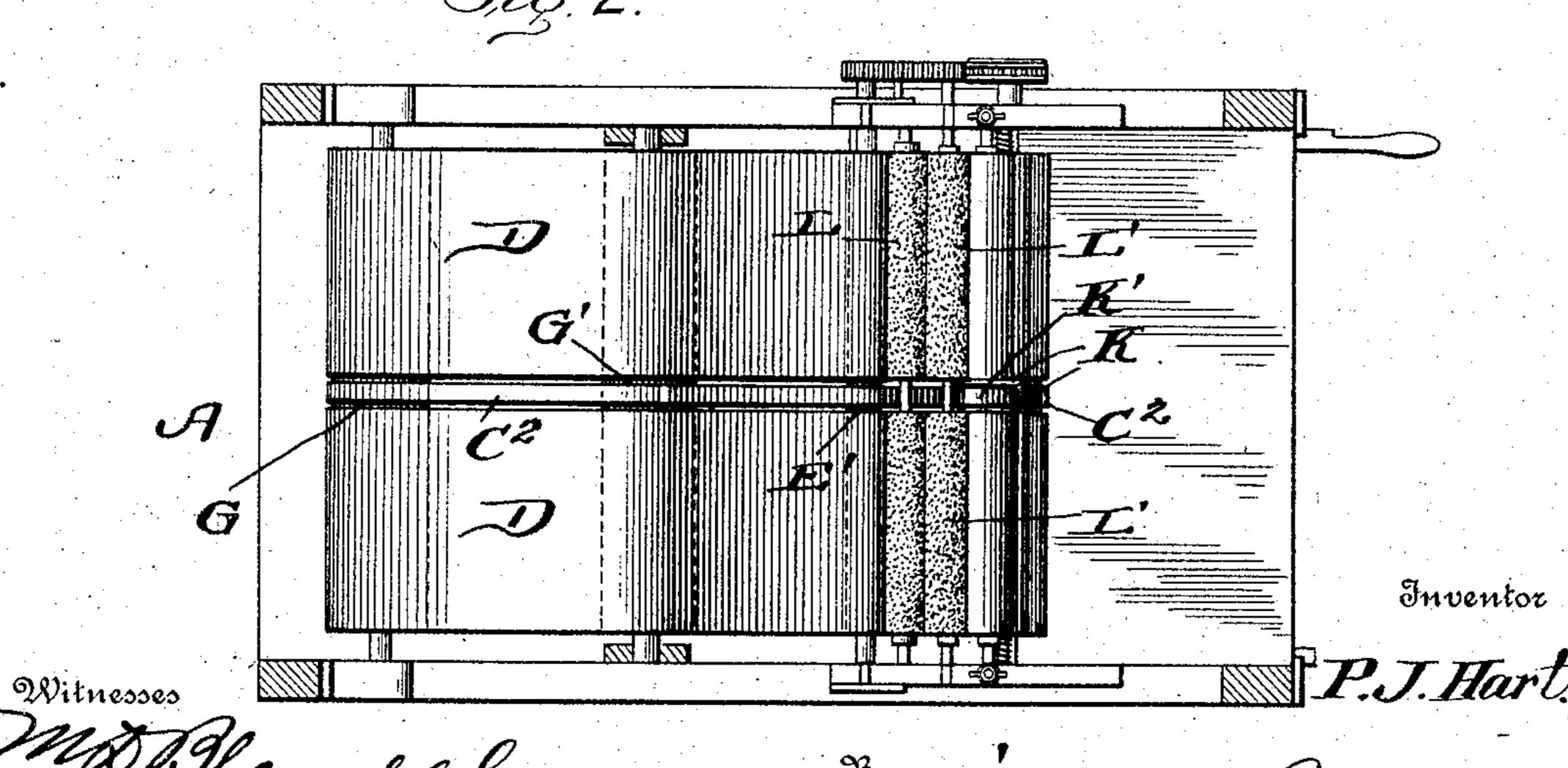
P. J. HART.
TOBACCO STEMMING AND BOOKING MACHINE.

APPLICATION FILED DEC. 31, 1903.





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PATRICK J. HART, OF MENDOTA, ILLINOIS.

## TOBACCO STEMMING AND BOOKING MACHINE.

SPECIFICATION forming part of Letters Patent No. 778,362, dated December 27, 1904.

Application filed December 31, 1903. Serial No. 187,351.

To all whom it may concern:

Be it known that I, Patrick J. Hart, a citizen of the United States, residing at Mendota, in the county of Lasalle and State of Illinois, have invented a new and useful Improvement in Tobacco Stemming and Booking Machines, of which the following is an improvement.

This invention is an improvement on the machine for which Letters Patent were granted to me October 28, 1902, No. 711,963, and has for its object the separating of the stem from the leaf and the drawing in of the leaf between the cutters by applying extra pressure on the stem, whereby the strain of the inward pull is borne by the stem instead of the leaf, thus avoiding danger of the latter tearing.

My invention consists of a narrow strip of leather forming an endless belt, the strip being approximately the width of the stem, this strip or belt traveling in the same direction and at the same speed as the belts receiving and booking the two halves of the leaf when stripped or stemmed and passing between the cutters under the stem and then upward, carzying the stem in a direction opposite the path taken by the leaf portion.

In the accompanying drawings, Figure 1 is a side elevation of my improvement shown applied to my booking and stemming machine, the latter being shown in transverse section. Fig. 2 is a plan view of my machine, showing the improvement applied thereto.

Referring briefly to those parts of the device more fully described and shown in the 35 Letters Patent heretofore referred to, A is a suitable frame. B is one of the bookingdrums; D, the endless belts running over said drums. These belts travel over the rollerpulleys E G G' and the tension-pulley H, 40 the belt also passing over a guide-pulley E', arranged above and spaced apart from the pulley E, the belts passing around the drums in traveling from pulley E to pulley E'. Between the last-mentioned pulleys and parallel 45 with them are arranged rollers K' and I2, carrying cutting-disks K and J, respectively. Between the upper cutter and the guide-pulley E' are arranged the brushes L L'. These

parts are shown and described in detail and given the same reference characters in the 50 Letters Patent above mentioned. In applying my improvement to this machine I arrange a shaft C below the tension-pulley H, and on this shaft is arranged a pulley C'. Over this pulley runs the narrow leather belt 55 C<sup>2</sup>, not wider than the largest of the tobaccoleaf stems. This belt travels upwardly from the pulley C', over the elongated pulley E, and between the two belts D, as clearly shown in Fig. 2. It then passes between the cutting- 60 rollers I2 and K' and under the brush-rollers, the brushes L L' being cut away to allow free passage of the belt to the pulley E' and also to permit removal of the stems. After passing over the pulley E' the belt C2, passing 65 over the pulleys G' and G, returns to the pulley C', and thus passes practically entirely around the booking-machine. The leaf is inserted with the stem under the belt C2-that is, between the belt C<sup>2</sup> and the cutter-roller K'. It 70 will be noted that the belt C<sup>2</sup> at this point is traveling inward. This places an extra pressure on the stem and draws the stem inward, and thus draws the leaf between the cutters, the extra pressure and pulling stress coming 75 on the stem. When stripped, the leaves separate and follow the course described in the patent previously mentioned; but the stem is held by the belt C<sup>2</sup> and carried around the roller K' between the disks K and J and is 80 then fed outwardly and ejected from the machine. As the belt C<sup>2</sup> travels over the same pulleys as the belts D, it is obvious that it will travel in the same direction and with the same speed.

Having thus fully described my improvement, what I claim as new, and desire to secure by Letters Patent, is—

1. A booking-machine comprising cutting-rollers, endless belts spaced apart, a narrow 90 endless belt in alinement with the space between the two first-mentioned belts, the said belt passing between the cutting-rollers, and means for moving all the belts in the same direction and with the same speed.

2. The combination with a booking-drum,

roller-pulleys arranged around and spaced from the drum, endless belts adapted to travel over the roller-pulleys and partially around the drum, and rollers carrying cutting-disks arranged one above the other in advance of the drum, of a narrow endless belt traveling over said pulleys between the two belts first

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mentioned, passing upwardly over the lower roller, inwardly between the disks, and thence upwardly, as and for the purpose described. 10 PATRICK J. HART.

Witnesses:
Corhus P. Gardner,
Godfrey Hoerner.