

(No Model.)

2 Sheets—Sheet 1.

C. BOWMAN.

MACHINE FOR STRIPPING AND BOOKING LEAF TOBACCO.

No. 504,799.

Patented Sept. 12, 1893.

Fig. 1.

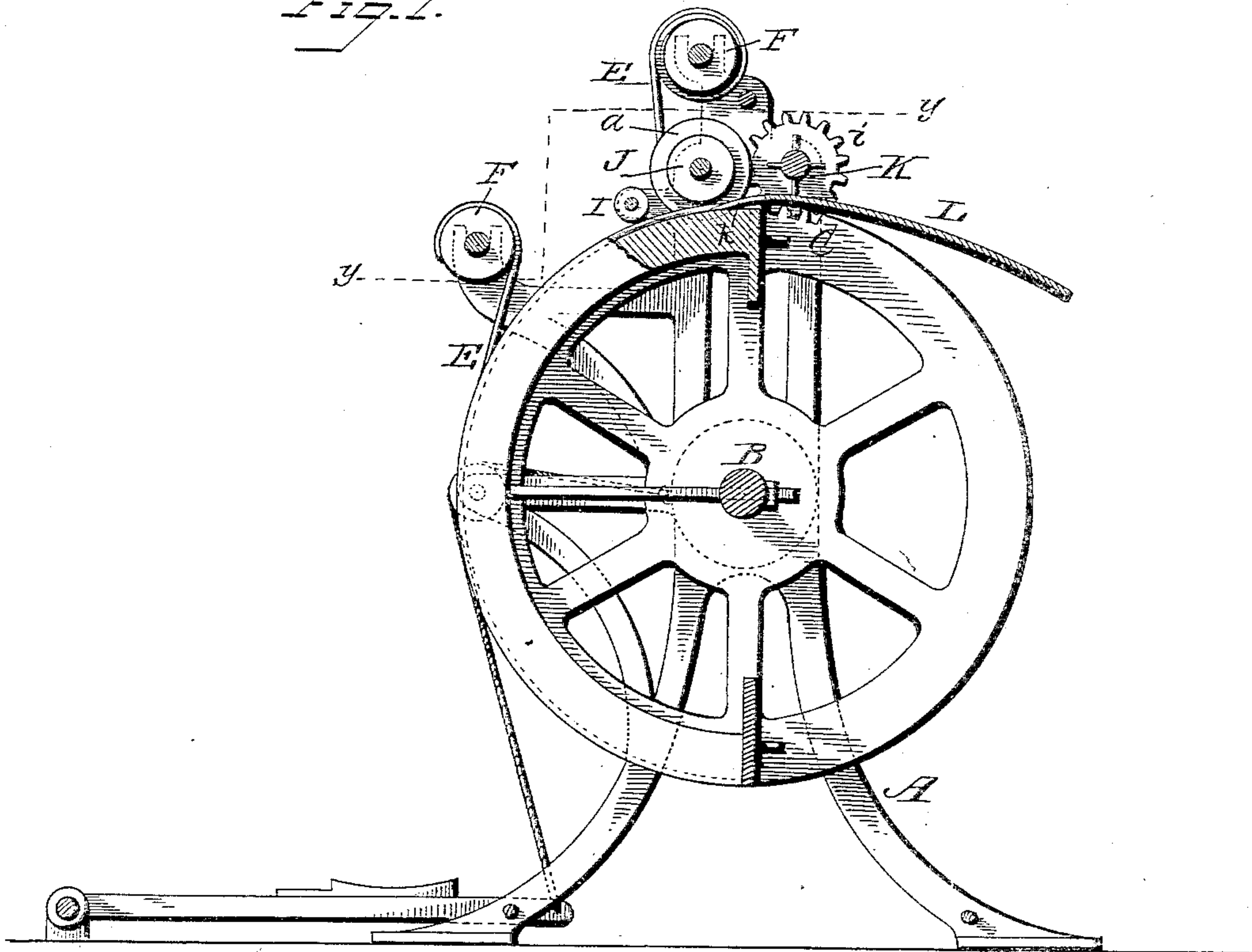
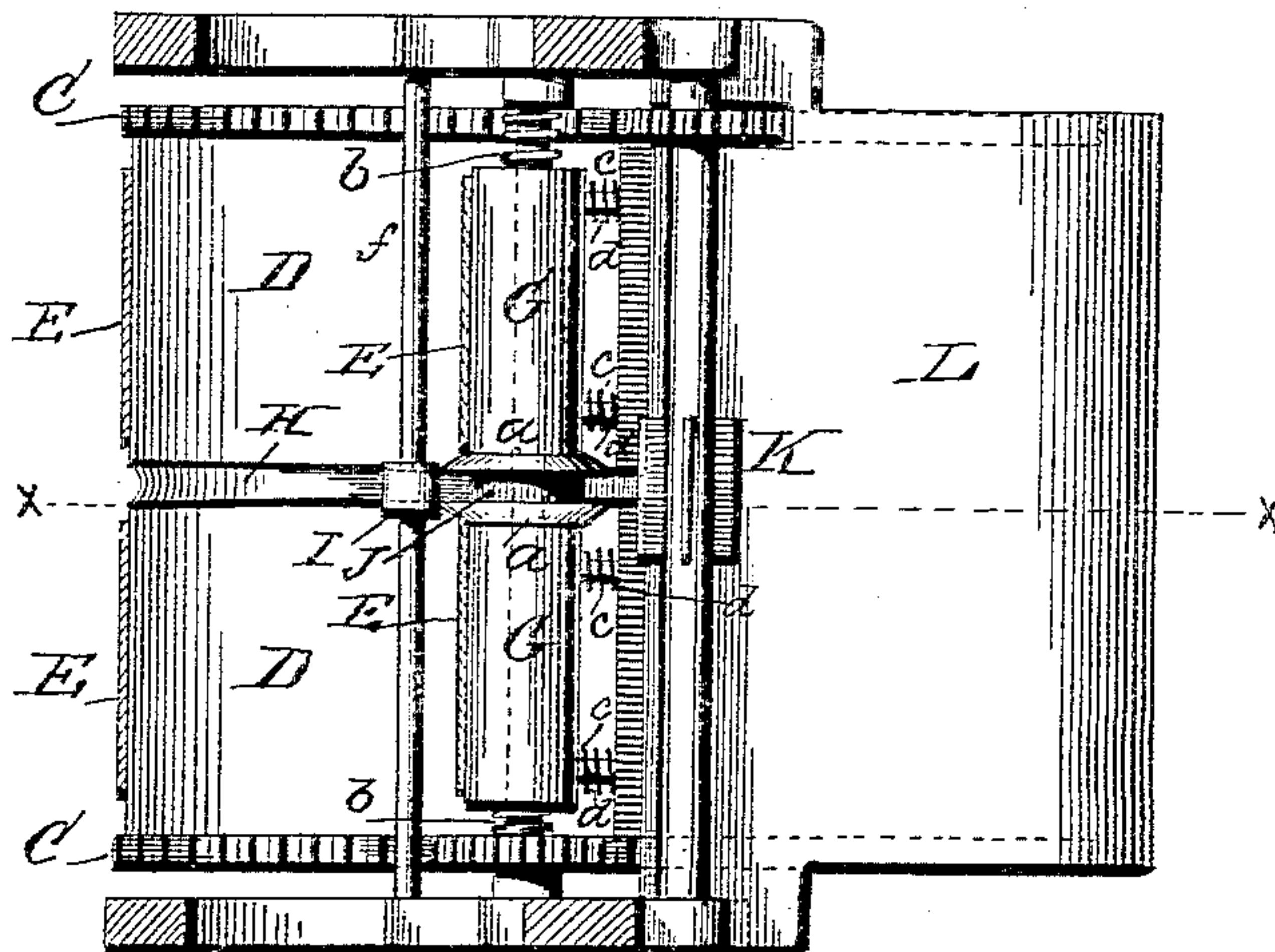


Fig. 2.



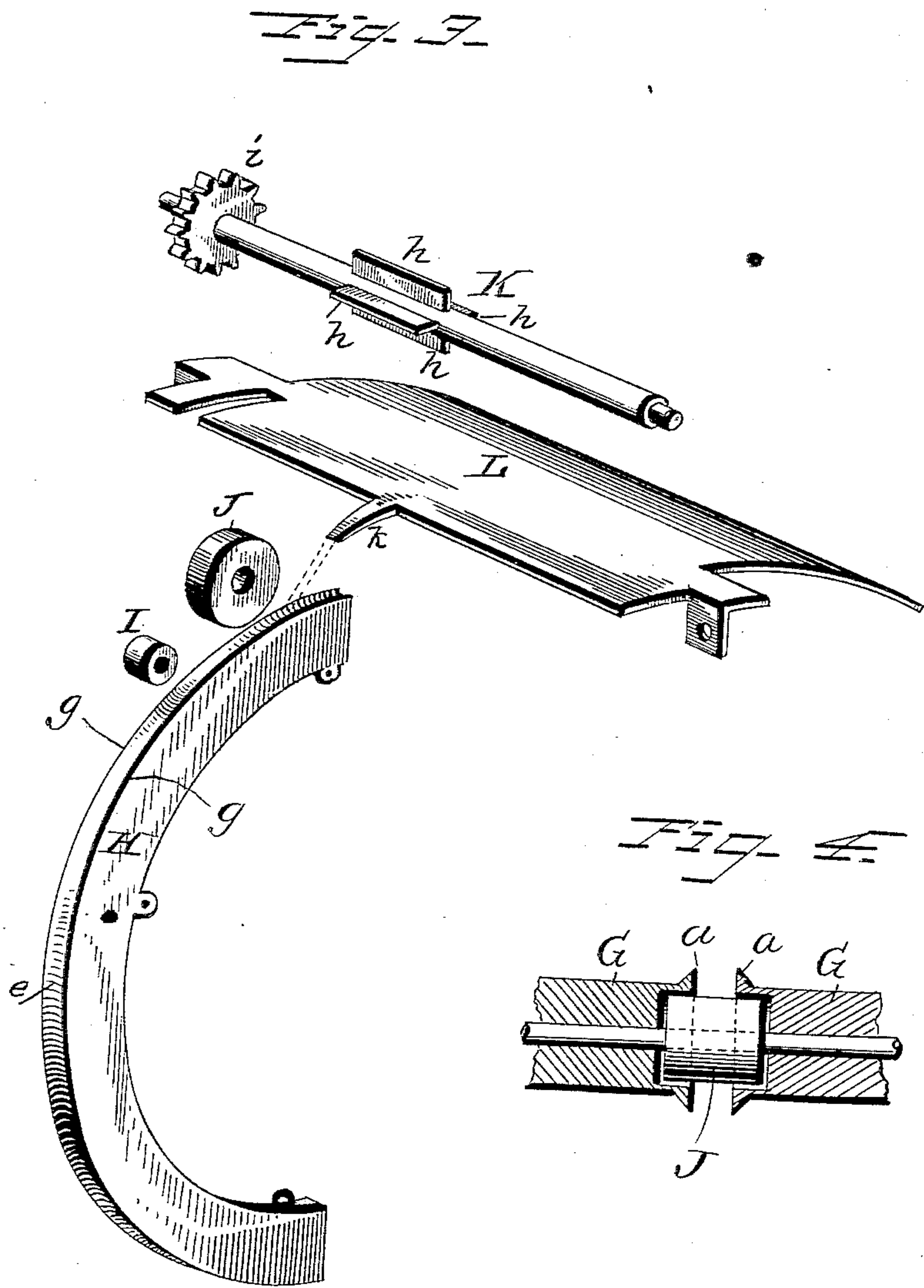
Witnesses
G. Williamson.
V. B. Hillyard.

Inventor
Charles Bowman.
per Cha. N. Fowler
Attorney.

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UNITED STATES PATENT OFFICE.

CHARLES BOWMAN, OF HANOVER, PENNSYLVANIA.

MACHINE FOR STRIPPING AND BOOKING LEAF-TOBACCO.

SPECIFICATION forming part of Letters Patent No. 504,799, dated September 12, 1893.

Application filed June 19, 1893. Serial No. 478,079. (No model.)

To all whom it may concern:

Be it known that I, CHARLES BOWMAN, a citizen of the United States, residing at Hanover, in the county of York and State of Pennsylvania, have invented certain new and useful Improvements in Machines for Stripping and Booking Leaf-Tobacco; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the annexed drawings, making a part of this specification, and to the letters of reference marked thereon.

The present invention has reference to that class of machines for stripping and booking leaf-tobacco for which a patent was granted to me July 26, 1892, No. 479,550, and the invention consists in the several details of construction whereby the stem of the tobacco leaf is securely held in position and prevented from lateral displacement while in the act of stripping and the stem fed forward and discharged from the machine, as will be hereinafter described and subsequently claimed.

Figure 1 of the drawings represents a sectional elevation of my improved machine taken on line *xx* of Fig. 2. Fig. 2 represents a sectional plan view of the machine taken on line *yy* of Fig. 1. Fig. 3 represents detail views in perspective of those parts of the machine constituting my invention; Fig. 4 a detail view partly in section of the knife rollers and the interposed elastic roller.

In the accompanying drawings A represents a suitable standard or frame for supporting the several operating parts of the machine, the standard or frame being of any preferred form and construction found best adapted to the purpose. A shaft B has its bearings in the sides of the standard or frame A and has connected to it segmental gears C between which are located the curved tables D, over which pass the flexible booking aprons or bands E connected at their respective ends to rollers F and at their opposite ends to the frame A or to any other part of the machine. The aprons operate in the same manner as the aprons in use in my former patent and a detail description thereof is deemed unnecessary. Rollers G are located above the curved tables D and are provided upon their inner ends with cutting disks *a*, said rollers loosely fitting upon a shaft and have a laterally yield-

ing motion. This yielding motion of the rollers G is attained by the coiled springs *b* as in my former patent, said spring encircling the shaft of the rollers upon each end thereof.

In describing the construction of a machine of this character, it is deemed necessary to refer only to such parts in a general way as will enable one to understand the operation, as the several parts herein referred to form no part of my invention and therefore may be changed or modified as found desirable without departing from the principle of my invention, as it is not essential to the successful operation of the machine that the parts above described should be constructed exactly as shown in the drawings but are subject to many changes in the construction and arrangement of parts as would be found best adapted to the purpose.

Between the tables D is located the stem-support H which has a grooved seat *e* for the stem of the tobacco leaf to rest in and thus prevent it from lateral displacement while the leaf is being stripped. The stem support H may be provided with lugs as shown in Fig. 3 or other well known means whereby it may be connected to the inner ends of one or both of the tables D by means of screws or bolts or other like fastenings, or it may be connected in any desirable manner to any fixture of the machine so that it will be held stationary between the tables. The grooved seat of the stem-support is formed tapering to substantially conform to the gradual taper of the stem, this thickest part thereof resting in the widest portion of the grooved-seat.

To form a guide for the stem of the tobacco-leaf I provide a guide roller I which is located over the stem-support H, said roller being elastic so as to yield to the irregularities in the thickness of the stem, the surface of said roller being either plain as shown or grooved as found preferable. The guide roller I which forms a guide to the stem while the leaf is being stripped, is suitably connected or supported upon a shaft *f*, which shaft has its bearings in the frame of the machine. The side of the stem-support H has cutting edges *g* which together with the cutting-disks *a* produce a shear cut in severing the leaf from the stem.

Between the inner ends or sides of the cut-

ting-disks *a* is located an elastic roller *J* which is supported upon the same shaft that supports the rollers *G*. This elastic roller *J* which may have a plain or grooved surface, 5 acts with the cutting-disks and holds the stem of the tobacco leaf while it is being separated therefrom and assisting the stem to the short track *k* upon the chute *L*. The stem as it is severed from the leaf passes under a 10 feeder *K* which has radial feeding blades *h*, and as the feeder rotates, it will force the stem forward over the chute *L* from whence it is discharged into a receptacle or deposited upon the floor. The feeder has motion im- 15 parted to it through the medium of the gear wheel *i* meshing with the teeth of the segmental gear *C*.

The machine may be operated by a foot-treadle *M* or by any other suitable and well 20 known means. The track *k* of the chute *L* is located on line with the grooved seat *e* so that when the stem passes from the grooved seat it will ride over the track and onto the chute where it is fed forward by the feeder herein- 25 before described. The cutting disks *a* have their central portion cup-shaped so as to form seats for the ends of the elastic roller *J* as shown in Fig. 4.

Having now fully described my invention, 30 what I claim as new, and desire to secure by Letters Patent, is—

1. In a machine for stripping and booking leaf-tobacco, a grooved seat for the stem of the tobacco-leaf, and a guide roller and roll- 35 ers having cutting disks located over it, substantially as and for the purpose set forth.

2. In a machine for stripping and booking leaf-tobacco, a stem support having a taper-

ing grooved seat, and a roller to guide the stem located over the seat and rollers having 40 cutting disks also arranged over the grooved seat, substantially as and for the purpose described.

3. In a machine for stripping and booking leaf-tobacco, a stem support having a grooved 45 seat, a guide-roller and rollers having cutting disks located above the grooved seat, and means for feeding the stem forward after being removed from the leaf, substantially as and for the purpose specified. 50

4. In a machine for stripping and booking leaf-tobacco, a chute and a feeding device having radial feeding blades, substantially as and for the purpose set forth.

5. In a machine for stripping and booking 55 leaf-tobacco, a stem support having a grooved seat, an elastic guide-roller located over the seat, suitable cutting disks and an elastic roller located between the cutting-disks, sub- 60 stantially as and for the purpose set forth.

6. In a machine for stripping and booking leaf-tobacco, a stem support having a grooved seat, an elastic guide-roller located above it, suitable cutting disks and leaf supporting means an elastic roller located between the 65 cutting-disks, a chute having a short track on line with the grooved seat, and a feeder located over the chute, substantially as and for the purpose described.

In testimony that I claim the above I have 70 hereunto subscribed my name in the presence of two witnesses.

CHARLES BOWMAN.

Witnesses:

H. D. SHRIVER,

C. M. WINEBRENNER.