

(No Model.)

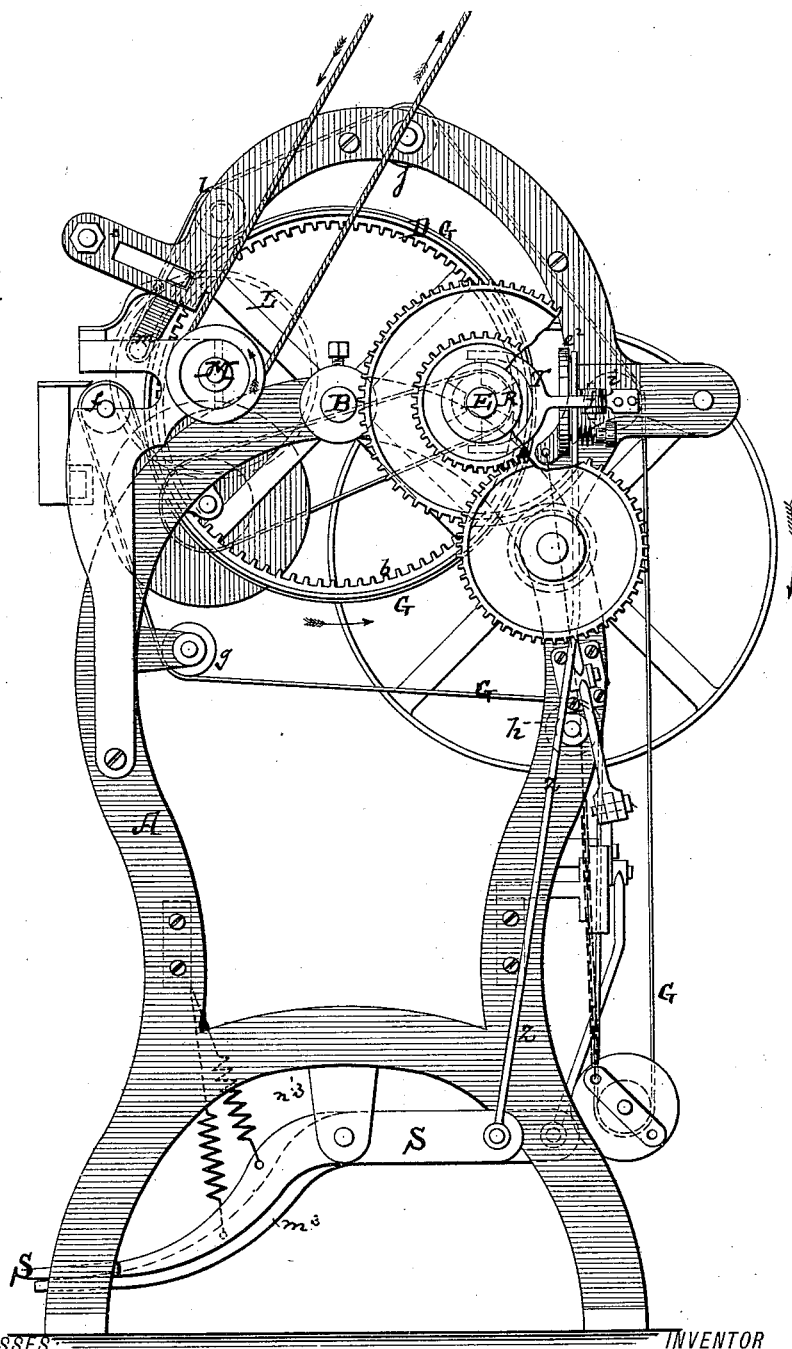
2 Sheets—Sheet 1.

O. HAMMERSTEIN.
CLUTCH FOR TOBACCO STRIPPING MACHINES.

No. 347,795.

Patented Aug. 24, 1886.

Fig. 1.



WITNESSES:

A. Schehl.
Hammerstein

INVENTOR

Oscar Hammerstein.
BY
Briesen & Steele
ATTORNEYS

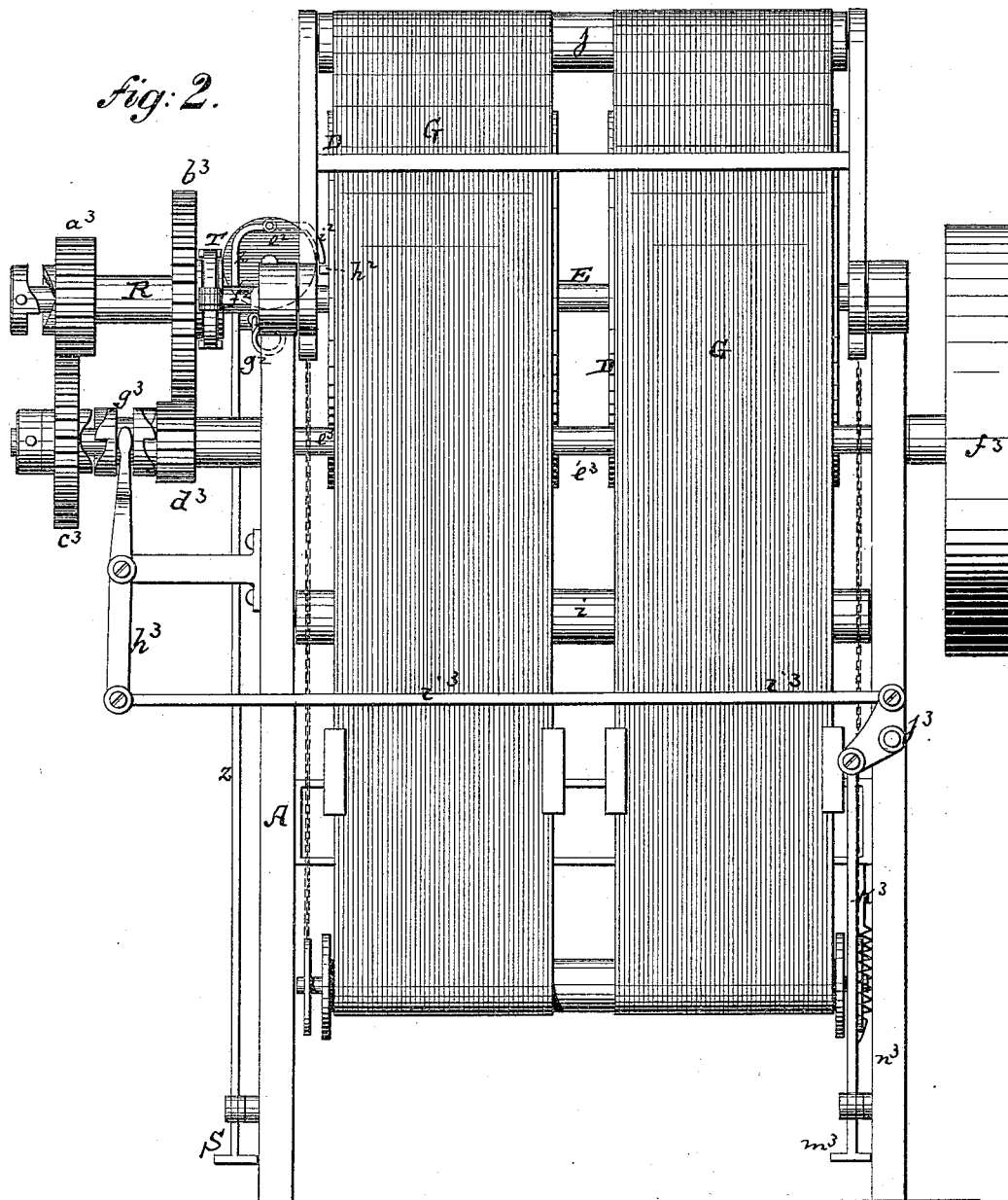
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WITNESSES:

A. Schuhl.
Harry M. Burk

INVENTOR

Oscar Hammerstein.
BY *Wiesen & Steele*

ATTORNEYS.

UNITED STATES PATENT OFFICE.

OSCAR HAMMERSTEIN, OF NEW YORK, N. Y.

CLUTCH FOR TOBACCO-STRIPPING MACHINES.

SPECIFICATION forming part of Letters Patent No. 347,795, dated August 24, 1886.

Application filed February 27, 18 6. Serial No. 193,435. (No model.)

To all whom it may concern:

Be it known that I, OSCAR HAMMERSTEIN, of the city of New York, in the county and State of New York, have invented an Improved Clutch for Tobacco Stripping and Booking Machines, of which the following is a complete specification, reference being had to the accompanying drawings.

This invention relates to certain additional improvements on the clutch for tobacco stripping and booking machines for which I filed application for patent on February 23, 1886, and has for its object to speed the operation of the machine after it has ceased stripping, but while it continues to move in booking the stripped tobacco.

The operation of the machine must be necessarily slow while stripping in order not to tear the leaves of tobacco that are being grasped between the moving drum and apron; but after the stripping has been completed and the separated parts of the leaf completely received between the drum and apron the motion can safely be speeded; and my invention therefore seeks so to construct the machine that it can be worked more rapidly after the stripping has been finished than while the stripping is going on.

The invention consists in combining the movable clutch, which is described in the above-mentioned application, and which is controlled automatically by a projection on the drum, with certain gear-wheels on the main driving-shaft and with a clutch on the latter shaft, which, when moved by the operator, will increase the speed of the machine.

In the accompanying drawings, Figure 1 is a side elevation, and Fig. 2 a rear elevation, of the machine.

A represents the frame of the machine.

B is the shaft carrying the drums D, which are embraced by the aprons G, and which are revolved intermittently by the shaft E, that has a toothed wheel meshing into an internal gearing, *b*, with which each drum is provided. Each apron G is laid around rollers *f g h i j l m*, as is described in the above-mentioned specification.

The stripping saws or cutters L, which are indicated by dotted lines in Fig. 1, are mounted upon the shaft M, and rotated to strip the

tobacco that enters between the rollers *f m*. The shaft E carries the clutch R, which connects with the forked lever T, said forked lever being connected with the disk *e*² by the link *f*², the disks *e*² carrying also the projecting piece *i*², which at the proper time is struck by the projection *h*² of one of the drums. The treadle S connects by the rod *z* with the disk *e*².

So far as at present described the parts are the same as in the above-mentioned specification, the letters of reference so far used applying to the identical parts in both cases. The difference consists in mounting upon the clutch R two toothed wheels, *a*³ *b*³, the latter being much larger than the former, and in engaging both these wheels with toothed wheels *c*³ and *d*³, respectively, that are hung loosely upon the driving-shaft *e*³, to which rotary motion is imparted by a belt passing over a pulley, *f*³, or by other suitable means. The toothed wheel *d*³ is smaller than the toothed wheel *c*³, as shown in Fig. 2. Between the two wheels *c*³ and *d*³ is a movable clutch, *g*³, on the shaft *e*³, which clutch connects by a lever, *h*³, rod *i*³, elbow *j*³, and rod *k*³ with a treadle, *m*³. Normally the treadle *m*³ is by a suitable spring, *n*³, held in such position as to lock the smaller wheel, *d*³, by the clutch *g*³, as in Fig. 2. In this position of parts the small wheel *d*³, meshing into the teeth of the large wheel *b*³, drives the latter slowly and causes the shaft to be revolved slowly. As soon as the treadle S is depressed it throws the clutch R into engagement with the shaft E. The moment this slow motion begins the leaf of tobacco is to be inserted for stripping, and as soon as the end of the leaf has left the hands of the operator he puts his foot on the treadle *m*³ and moves the clutch *g*³, so as to bring it against the wheel *c*³. This motion of the clutch *g*³ will bring the toothed wheels *c*³ and *a*³ into action to turn the shaft E more rapidly, until, by the projection *h*² on the drum D, the disk *e*² is turned so as to carry the clutch R entirely out of gear and stop the machine.

Thus I have succeeded in providing a machine which has an intermittently-movable drum with means for varying its speed at will between the automatic arrests of motion, which are caused by the projection on the drum.

Although I speak in this specification of

treadles S and m^3 , it is clear that, instead of treadles, hand-levers or other devices may be used to properly move the clutch g^3 and the disk e^2 when the operator desires to move either one of these. It is also clear that with my invention the machine can be run altogether slowly or altogether fast when desired instead of being run first slowly and then fast, as described.

10 What I claim is—

1. The combination of the drum D and its actuating-shaft E with the movable clutch R on said shaft, and with the toothed wheels a^3 and b^3 on said clutch, toothed wheels c^3 and d^3 on the driving-shaft, and clutch g^3 , and mechanism, substantially as described, for moving

said clutches, all arranged to permit the driving-shaft to move the drum with greater or less speed, as desired.

2. The combination of the shaft E, clutch R, 20 lever T, link f^2 , disk e^2 , projection h^2 and drum D, rod z and treadle S with the toothed wheels a^3 and b^3 on the clutch R, loose toothed wheels c^3 and d^3 on the driving-shaft e^2 , and movable clutch g^3 on said driving-shaft, and means, 25 substantially as described, for moving said clutches, all as specified.

OSCAR HAMMERSTEIN.

Witnesses:

CHARLES G. M. THOMAS,
HARRY M. TURK.