

(No Model.)

2 Sheets—Sheet 1.

G. W. TANNER.
CIGAR CUTTING MACHINE.

No. 596,728.

Patented Jan. 4, 1898.

Fig. 1.

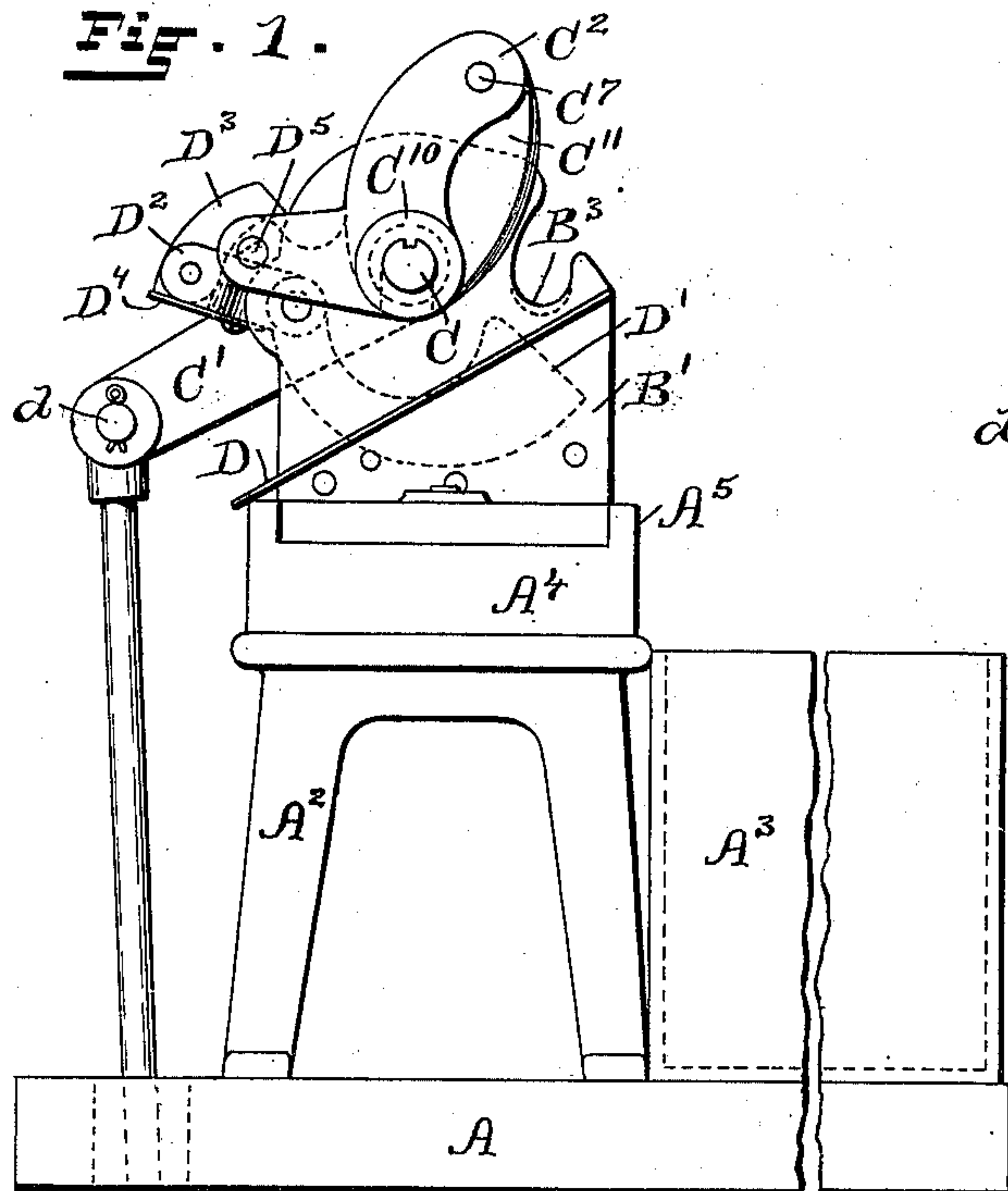
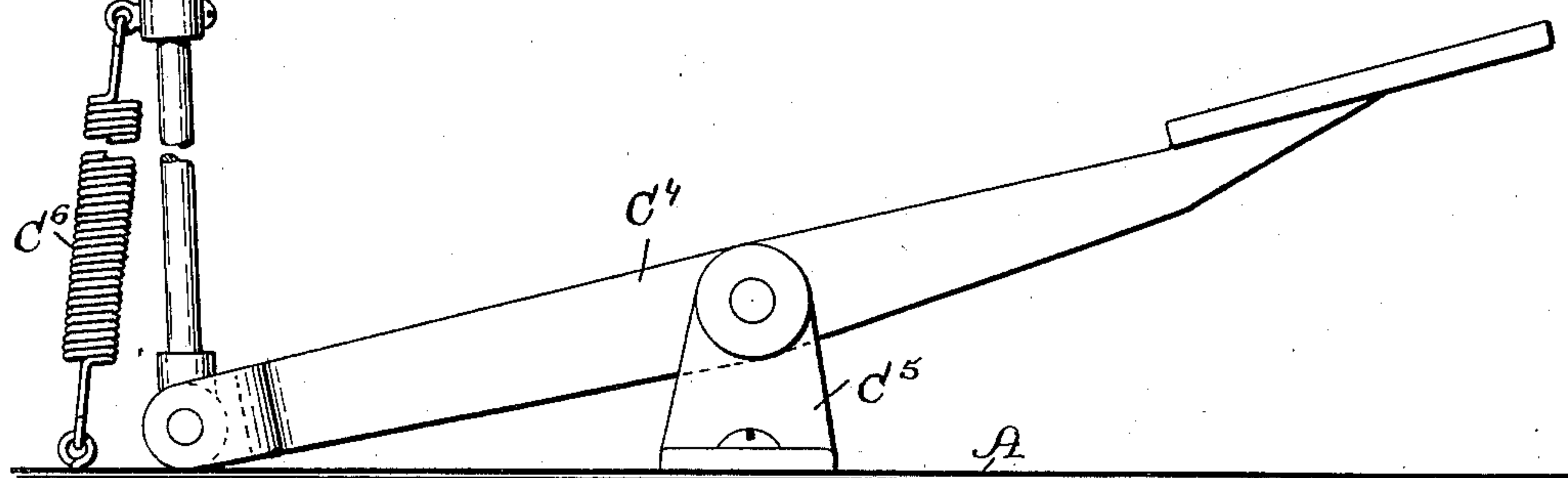
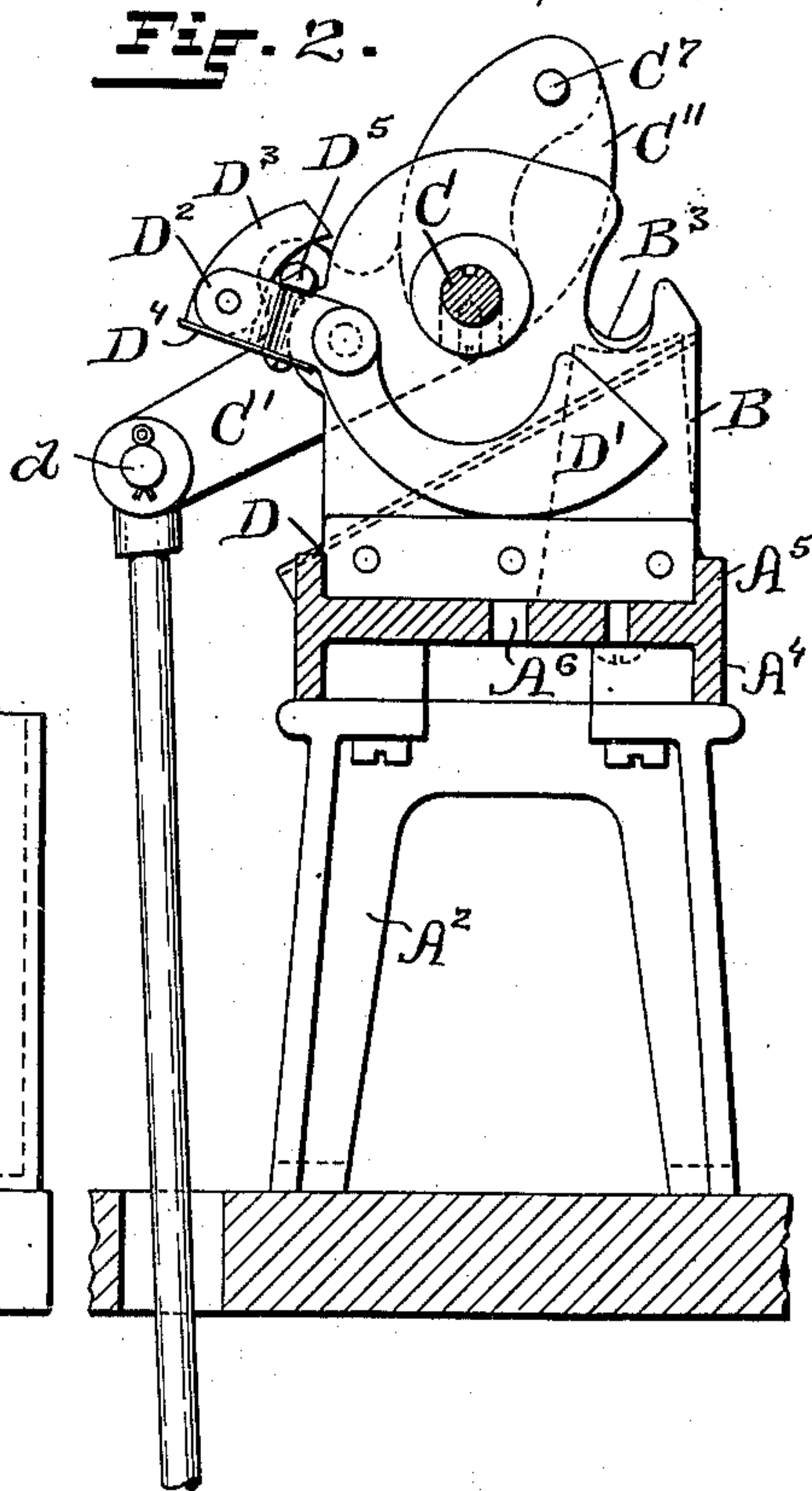


Fig. 2.



WITNESSES:

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Chas. M. Mumford.

INVENTION:

George W. Tanner
 Per Joseph A. Miller Esq.
 Attys.

(No Model.)

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Fig. 3.

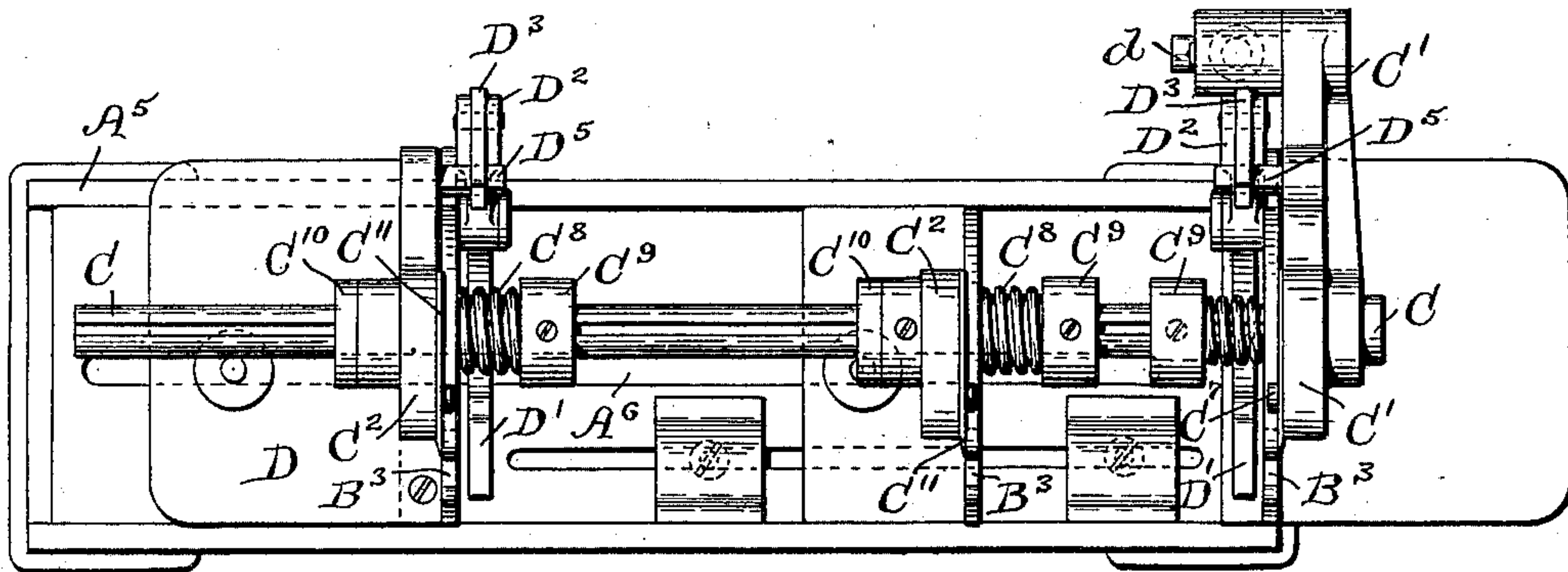


Fig. 4.

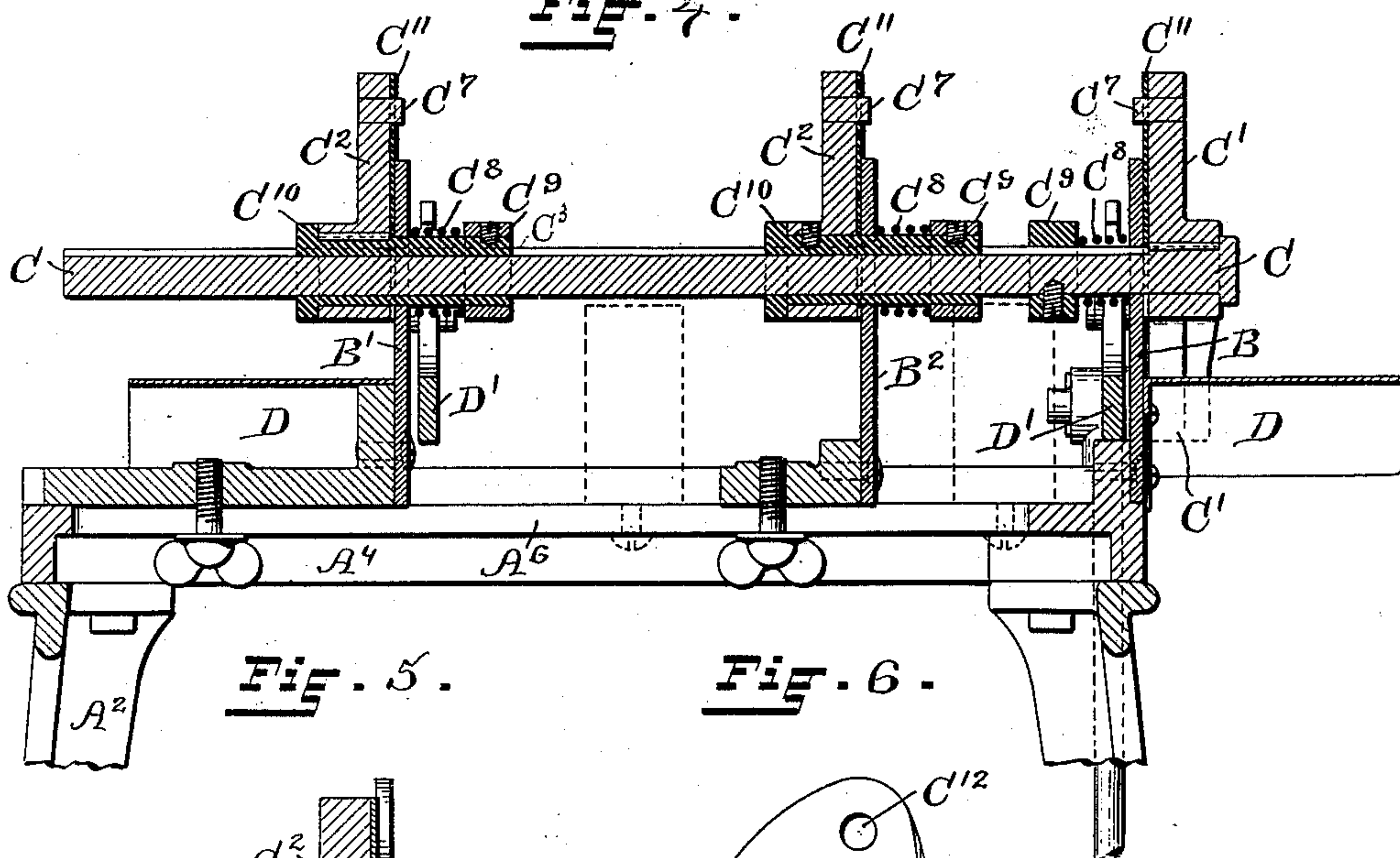


Fig. 5.

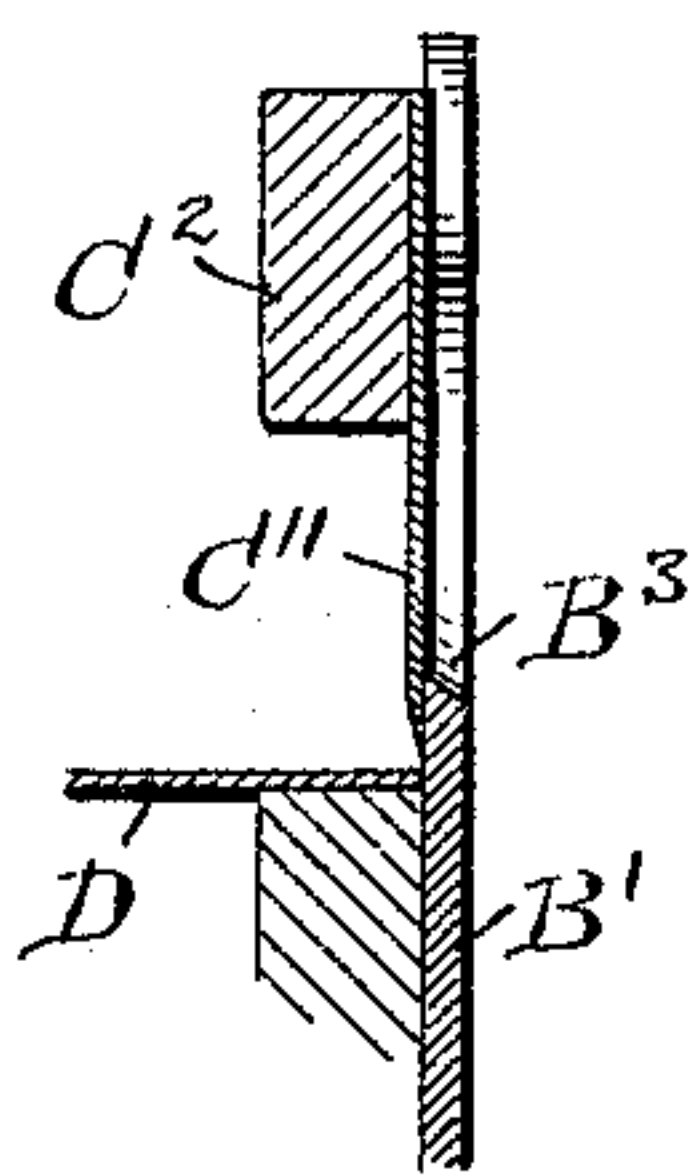
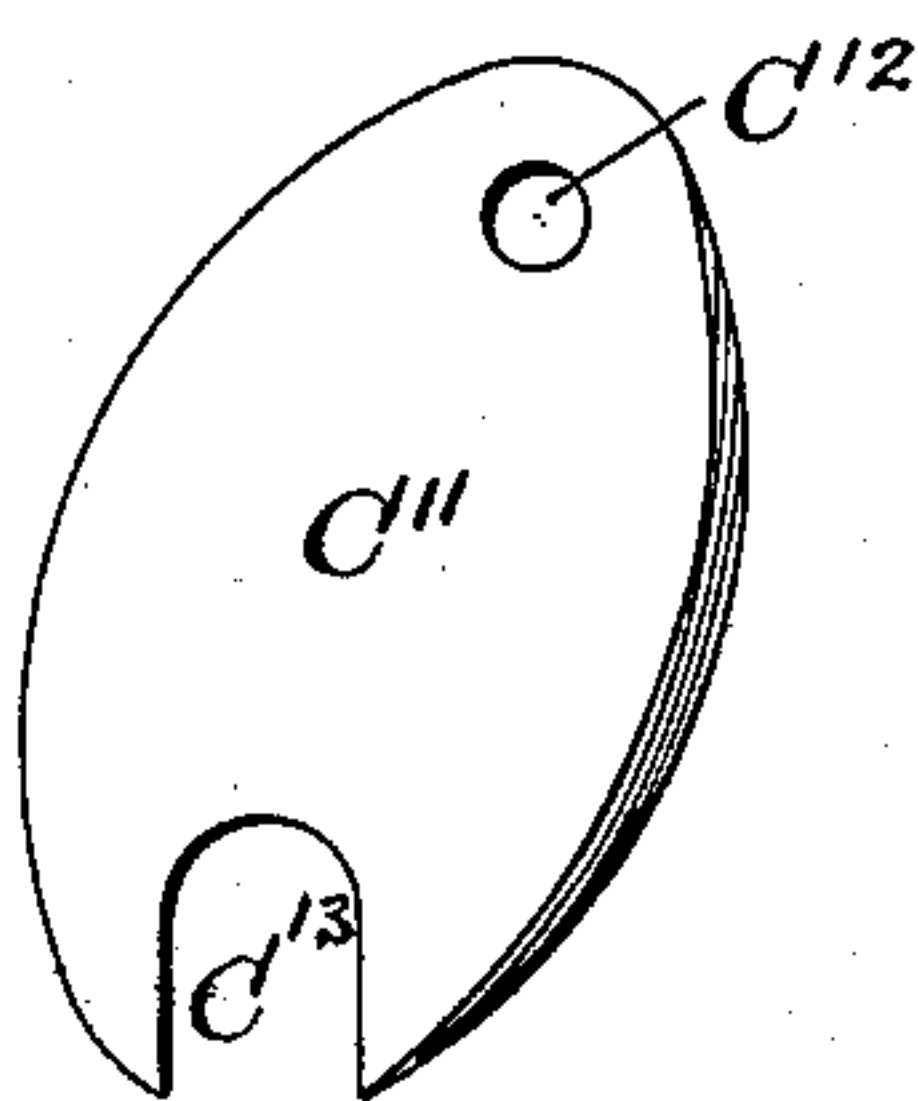


Fig. 6.



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INVENTOR:

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UNITED STATES PATENT OFFICE.

GEORGE W. TANNER, OF PROVIDENCE, RHODE ISLAND.

CIGAR-CUTTING MACHINE.

SPECIFICATION forming part of Letters Patent No. 596,728, dated January 4, 1898.

Application filed August 30, 1897. Serial No. 649,928. (No model.)

To all whom it may concern:

Be it known that I, GEORGE W. TANNER, of Providence, in the county of Providence and State of Rhode Island, have invented a new and useful Improvement in Cigar-Cutting Machines; and I hereby declare that the following is a full, clear, and exact description of the same, reference being had to the accompanying drawings, forming part of this specification.

This invention has reference to an improvement in machines for cutting or trimming rolled tobacco or cigarettes; and it consists in the peculiar and novel construction whereby the rolls of tobacco are cut into the desired lengths, discharged into a receptacle, and the cutters secured so as to be readily removed for grinding, as will be more fully set forth hereinafter.

Figure 1 is an end view of the machine, showing the connection with a foot-lever by which the same is operated. Fig. 2 is a transverse sectional view of the machine. Fig. 3 is a top view of the same. Fig. 4 is a longitudinal vertical section of the machine; Fig. 5, a section through the cigar-support and the cutter-plate; Fig. 6, a side view of one of the cutters.

In the drawings, A indicates the top of a table or bench suitably supported above the floor A'; A², the supporting-frame of the machine; A³, a suitable receptacle for the cigars; A⁴, the bed of the machine; A⁵, upwardly-projecting flanges; A⁶, a central slot; B, the end supporting-frame secured to one end of the bed A⁴ of the machine; B', the adjustable supporting-frame secured by a thumb-screw extending through the slot A⁶ to the opposite end of the machine; B², an adjustable intermediate supporting-frame. In the supporting-frames B, B', and B² the shaft C, provided with a longitudinal groove, is carried. The arm C' is secured to the shaft C on the fixed end of the machine. The outer end is provided with the stud d, to which the connecting-rod is pivoted. The lower end of the connecting-rod is pivotally secured to the foot-lever C⁴, supported on the fulcrum C⁵. The coiled spring C⁶ is fastened at one end to the floor A' and at the other end to the connecting-rod.

The supporting-frames B, B', and B² are

each provided with a rest B³, having a beveled cutting edge. The arms C² C³, which may be secured to the shaft C in the same manner as the arm C' is secured, are preferably secured to the sleeves C³ C³, which have a longitudinal spline that enters the longitudinal groove in the shaft C, so that the arms C² C² may be adjusted lengthwise on the shaft C to the desired length or lengths of the cigars to be cut. The arms are each provided with the pin C⁷. The cutters C¹¹ are provided with the holes C¹², corresponding with the pin C⁷ and with the opening C¹³, so that the lower part of the cutter may extend over and by the sleeve C¹⁰ or the shaft C to be held in place and operated by the pin on the arm. The spring C⁸, coiled around the sleeve or the shaft, is held by the collar C⁹, so as to bear against the plate of the supporting-frame and holds the cutter C¹¹ against the same to insure a clean cut, as indicated in Fig. 5.

As shown in Fig. 4, the arm C', secured to the shaft, is drawn with the cutter close to the plate of the supporting-frame B by the coiled spring C⁸, bearing on the collar C⁹, secured to the shaft and the plate of the supporting-frame, while the arms C² C², with their cutters secured to the sleeves C¹⁰ C¹⁰, are drawn against the plates of the supporting-frames B' and B² by the coiled springs C⁸, which bear against the plate and the collars C⁹, secured to the sleeves C¹⁰ C¹⁰.

On the outside of each of the end frames B and B' an inclined plate D is secured. On these plates the waste ends of the rolled tobacco drop as they are cut off and are delivered into any suitable receptacle.

The cut roll of tobacco forming the cigar, cheroot, or cigarette is lifted from its support and dropped into the receptacle A³ by the lever D', pivoted on the inside of the end supporting-frames and, if desired, on each side of the central supporting-frame B². This lever D' has the arm D², on which is pivoted the pawl D³. The spring D⁴, secured to the under side of the arm D², bears on the lower end of the pawl D³. The pin D⁵ projects from the arm C' and bears on the arm D² of the lever D'. As the cutter descends and the rear of the arm C' is raised the pin D⁵ bears on the concaved face of the pawl D³ and moves the

same outward. As soon as it has passed above the pawl the spring D^4 returns the pawl to its original position, and as soon as the cut has been completed the pin D^5 bears on the end
 5 of the pawl and in its descent moves the arm D^2 downward and the free end of the lever D' upward to lift the cut roll of tobacco out of the rest B^3 and allow it to drop into the receptacle A^3 . The pin D^5 passes now by the
 10 inner edge of the pawl D^3 and resumes the original position.

In operating the machine the rolled tobacco is placed into the rests B^3 . The operative now depresses the foot-lever C^4 , thereby rais-
 15 ing the rear end of the arm C' , to which the connecting-rod is secured. As the arm C' is secured to the shaft C and the arms C^2 C^2 are also secured to the shaft C by means of the sleeves C^{10} C^{10} all the arms, and with them
 20 the cutters C^{11} , move together to cut the tobacco into the desired length or lengths. On releasing the front of the lever C^4 the spring C^6 draws, by means of the connecting-rod, the rear end of the arm C' down and raises all
 25 the arms and cutters into the positions shown in Figs. 1 and 2, and in this movement the pin D^5 operates the arm D^2 and raises the lever or levers D' to discharge the cut tobacco.

The rolled tobacco may be cut into any re-
 30 quired length or into two or, if desired, more lengths. The intermediate arm C^2 may be disconnected from the sleeve C^{10} , and thereby put out of operative connection when re-
 35 quired. By thus discharging the cut tobacco automatically the operative can use his hands to supply the rolls more quickly and more and better work can be performed.

Having thus described my invention, I claim as new and desire to secure by Letters
 40 Patent—

1. In a cigar-machine, the combination with the frame of the machine and the support-
 45 ing-frames provided with curved rests for supporting the rolled tobacco, of a shaft extending through the supporting-frames, arms supported by the shaft, cutters detachably secured to the arms, means, substantially as

described, for partially rotating the shaft and operating the cutters and levers operated by the arms to discharge the cut roll of tobacco, 50 as described.

2. In a cigar-machine, in combination, a frame forming the support for the machine, plates provided with rests for supporting the rolled tobacco, a shaft provided with arms, 55 cutters detachably secured to arms, coiled springs holding the cutters in contact with the supporting-plates, a foot-lever connected with an arm secured to the shaft for partially turning the shaft and operating the cutters, 60 and levers actuated through the operating mechanism to discharge the cut roll of tobacco, as described.

3. In a cigar-machine, the combination with the bed A^4 and the supporting-frames B and 65 B' , of the shaft C , the arm C' , the mechanism for operating the arm, the arms C^2 , the cutters C^{11} detachably secured to the arms, the coiled springs C^8 and collars C^9 whereby the cutters are held in close contact with the 70 plates of the supporting-frames, as described.

4. In a cigar-machine, the combination with an arm and mechanism for imparting oscillating motion to the arm, of the shaft C , the pin C^7 , and the cutters C^{11} provided with the 75 hole C^{12} and opening C^{13} whereby the cutter is detachably secured to the arm, as described.

5. In a cigar-machine, the combination with the bed A^4 , the supporting-frames secured to the same, the shaft C and the arms provided 80 with cutters secured to the shaft, of the levers D' provided with the arm D^2 , the spring-supported pawl D^3 , the pin D^5 , foot-operated mechanism for actuating the arms and cutters, and the plates D , whereby the divided 85 parts of the rolled tobacco are discharged, as described.

In witness whereof I have hereunto set my hand.

G. W. TANNER.

Witnesses:

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