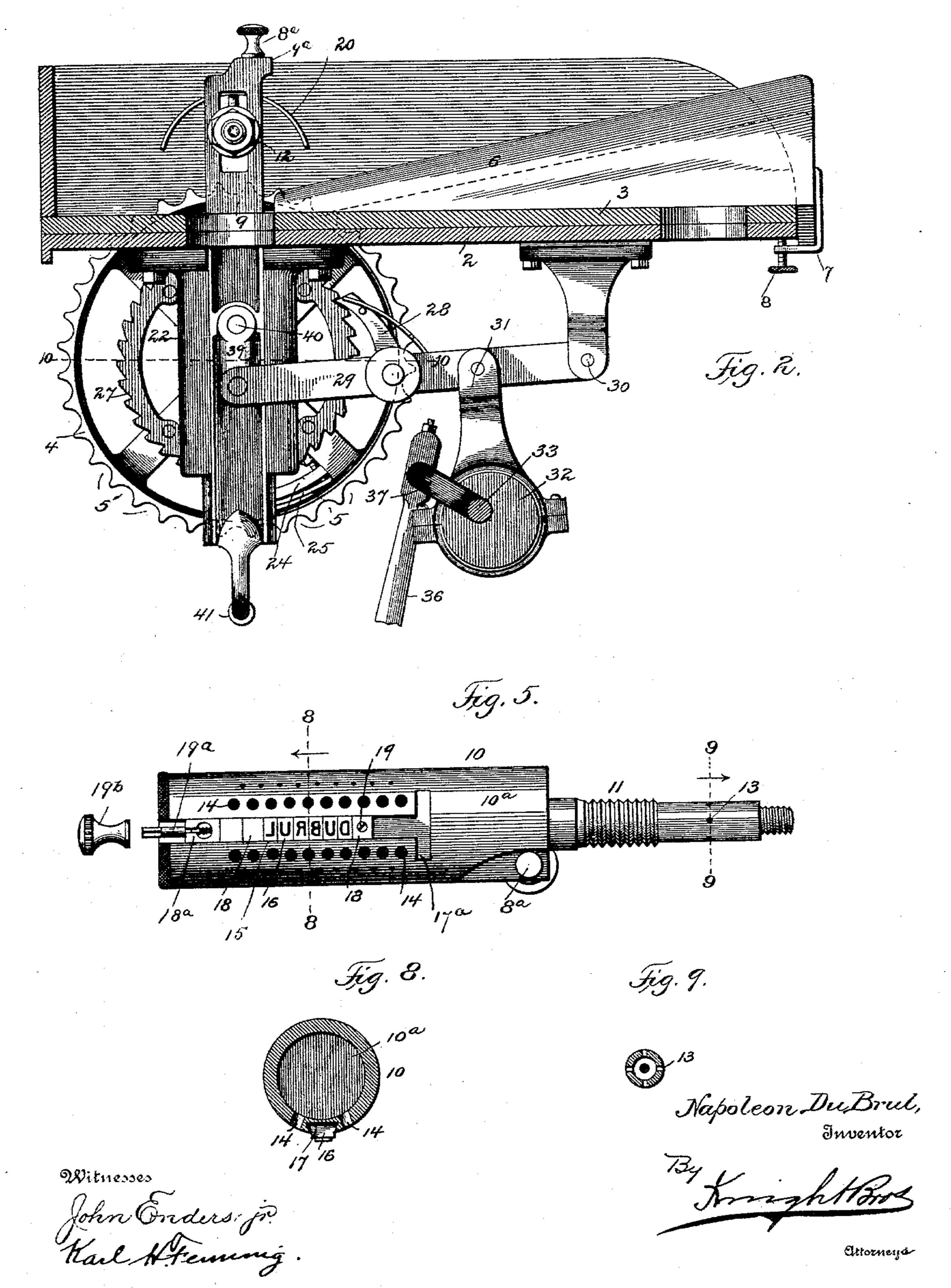


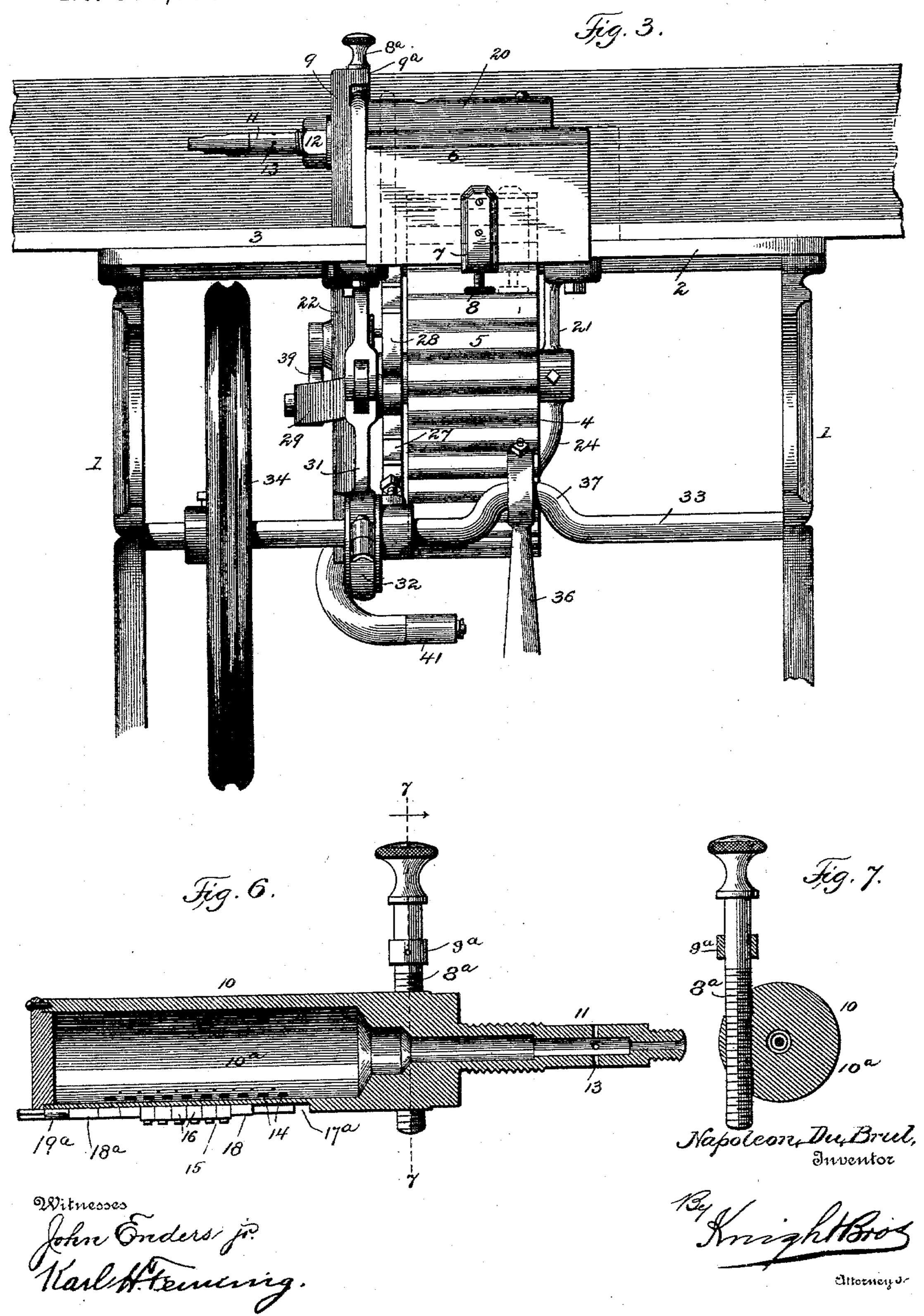
No. 596,860.

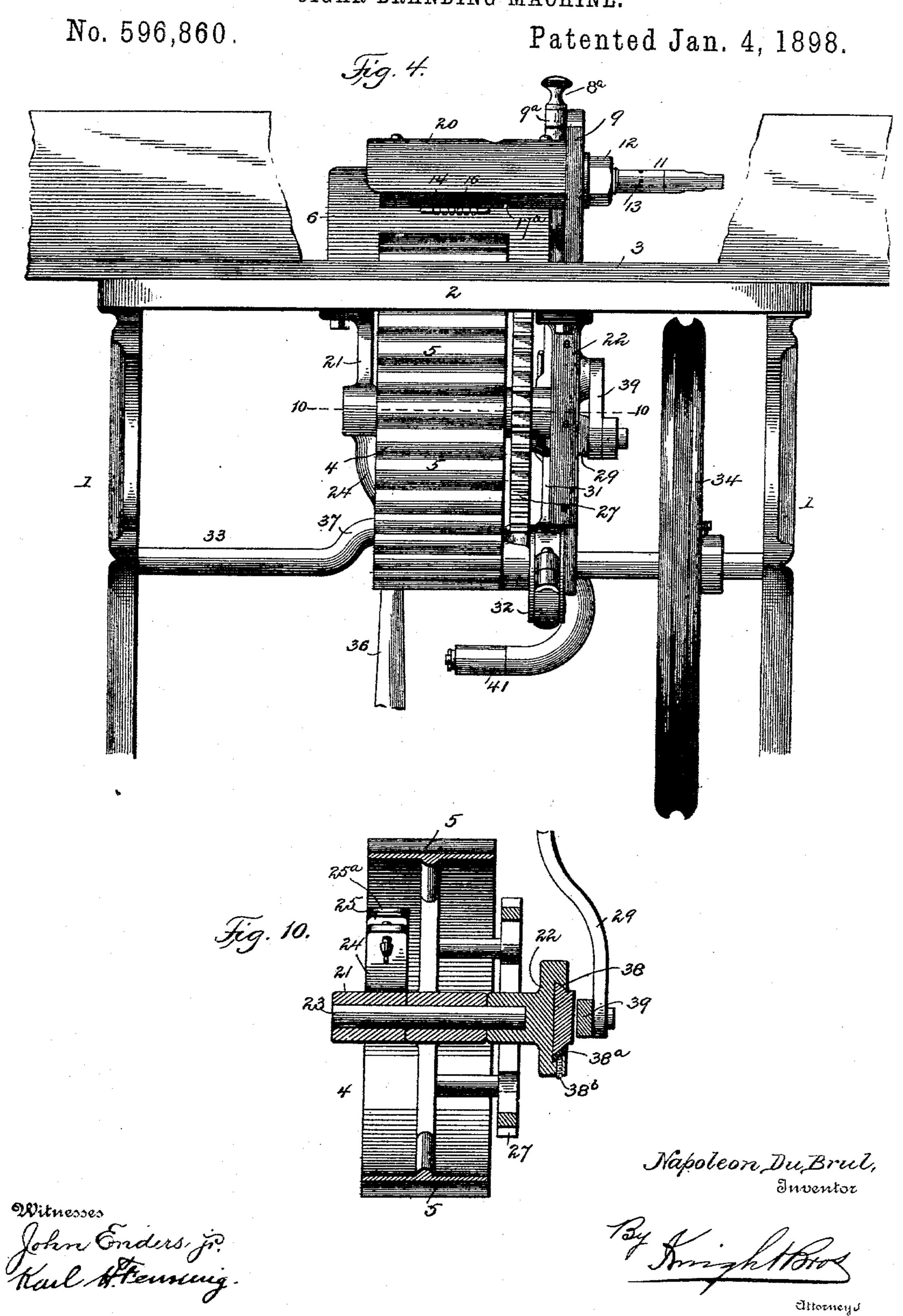
Patented Jan. 4, 1898.



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### United States Patent Office.

NAPOLEON DU BRUL, OF CINCINNATI, OHIO.

#### CIGAR-BRANDING MACHINE.

SPECIFICATION forming part of Letters Patent No. 596,860, dated January 4, 1898.

Application filed April 22, 1897. Serial No. 633,367. (No model.)

To all whom it may concern:

Be it known that I, Napoleon Du Brul, a citizen of the United States, and a resident of Cincinnati, in the county of Hamilton and State of Ohio, have invented certain new and useful Improvements in Cigar-Branding Machines, of which the following is a specification:

My invention relates to a machine which will receive cigars and pass them successively to a branding or equivalent marking device and then deliver said cigars from the machine.

The primary object of my said invention is to produce a machine of simple, durable, and efficient construction which will act with accuracy in performing its several functions.

Another object is to employ a single cylinder having peripheral pockets which will select the cigars one at a time from the point at which they are presented to the machine, then pass them successively to the branding device and afford rigid support for them as the brand is applied, and finally deliver them from the machine.

Another object is to provide the machine with a brake or retarding device which will prevent racing beyond the point to which it is positively moved.

Another object of my said invention is to provide means for justifying the position of each pocket with its contained cigar beneath the branding device, so that the brand will be applied at the proper point to insure a full imprint and avoid breaking the wrapper by striking sidewise.

Another object is to provide means for accurately adjusting the branding device vertically and thereby repeating at will the branding pressure.

A further object is to provide a laterally-adjustable chute by which the cigars are presented to the cylinder, which chute is adapted by its lateral adjustment to deliver cigars of different sizes and shapes upon the cylinder in such a position that each will receive the imprint at the desired point.

I accomplish the several objects of my invention in the manner and by the means substantially as hereinafter described; and my invention consists in such novel features as are hereinafter defined by the claims.

In the accompanying drawings, Figure 1 is an elevation of the right-hand end of a branding-machine constructed in accordance with my present invention, the table being shown 55 in section. Fig. 2 is a vertical section looking from the left-hand end, the lower parts of the frame being omitted. Fig. 3 is a front elevation, the lateral adjustability of the feedchute being indicated by dotted lines. Fig. 60 4 is a rear elevation. Figs. 5 to 9 illustrate the construction of the branding device, Fig. 5 being a bottom view, Fig. 6 a vertical axial section, Fig. 7 a section on line 77, Fig. 6, Fig. 8 a section on line 8 8, Fig. 5, and Fig. 9 65 a section on line 9 9, Fig. 5. Fig. 10 is a horizontal section through parts of the machine, the plane of section being indicated by the line 10 10, Figs. 2 and 4.

Any suitable support may be employed for 70 my improved machine. For the purpose of illustration I have shown a common form of frame 1. For the sake of stability and to afford good mounting for the parts, I prefer to surmount this frame by a metallic plate or table 75 2, upon which may be secured the ordinary cigar-maker's table 3.

4 represents a cylinder projecting through the plate or table 2 and table 3 or other equivalent part and formed with peripheral pockets 5 of size and shape suitable to receive and hold cigars, which may be fed to said cylinder by means of an inclined chute 6, suitably mounted on the table. The chute 6 is preferably mounted to slide laterally on the 85 table 3, and provided with a clamp 7, whose set-screw 8 may be employed to lock it at any adjustment. Owing to the many shapes and lengths of cigars this is very desirable, for it is desirable to press the brand at or above the 90 thickest part of the cigar to get a complete impression.

10 is the branding device carried by a plunger 9, which reciprocates in a direction radial to the cylinder. The branding device is constructed of a cylindrical body 10° and reduced end 11, which may be fitted with a nut 12 to secure itadjustably in the slotted end of plunger 9, and which reduced end will receive a tube to supply a heating agent. Said end 11 100 is also perforated radially at 13 to admit air, and the cylindrical body forms a mixing-

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chamber from which the mixed gas and air escape through apertures 14 on opposite sides of the branding-form 15. Said form is made up of removable type 16, from which may be 5 composed any distinguishing-mark to be applied to the cigars, and said type are dovetailed to fit in the undercut groove 17 of the branding device, where they are confined at either end by blanks 18. 17° is a segmental 10 slot on the burner to enable the milling-tool to be run clear out. Said blank may be held by a binding-screw 19, which impinges on the bottom of the groove and binds said blank in the undercut groove, as shown at the inner 15 end, or they may be constructed like the outer retaining-blank 18a, with an opening in which fits an expanding-screw 19a, adapted to be turned by a key 19<sup>b</sup> and screwed into the blank to expand it into binding contact with 20 the walls of the slot. The branding device may carry a shield or hood 20.

I provide for adjustment of the branding device to a nicety by means of a screw 8<sup>a</sup>, having shouldered bearing in an open seat 25 9° on the plunger 9, and screw-threaded in the cylindrical body 10° or other convenient portion of the branding device, as shown in

Figs. 5 and 6.

2122 represent two hangers depending from 30 the plate 2 and affording bearing for the shaft 23 of cylinder 4. Hanger 21 has a projection 24, which carries a spring or shoe 25, secured to said projection at 26 and carrying at its opposite end a friction-facing 25°, which is 35 adapted to be pressed against the inner face of the rim of cylinder 4. Said cylinder is thereby prevented from racing or moving by its own momentum farther than it may be positively moved at any time.

A ratchet-wheel 27, fixed on cylinder 4, is engaged by a spring-pressed pawl 28 on a lever 29, which is fulcrumed at 30 and connected by pitman 31 with an eccentric 32 on a power-shaft 33. Said shaft 33 may be ro-45 tated by any suitable means, such as bandwheel 34, or by treadles 35, having connection 36 with crank bend 37 in said powershaft, and when so rotated each revolution causes the eccentric 32 to raise lever 29 and 50 move ratchet-wheel 27 a distance sufficient to move a pocket 5 in cylinder 4 squarely beneath the branding device. A step-by-step feeding movement of the cylinder is thereby accomplished.

For simplicity of construction the hanger 22 is made to serve the additional purpose of affording a bearing for plunger 9, and for this purpose said plunger is made dovetailed in cross-section, and the hanger is provided with 60 an undercut channel 38, as shown in Fig. 10; but other equivalent means may be adopted to afford sliding connection between these parts. Said channel 38 has a bearing-plate 38a, adjustable by screws 38b, to take up wear 65 of the parts.

Vertical reciprocation is imparted to plunger 9 by means of the lever 29, the outer end

of which is connected to said plunger by a link 39 and wrist-pin 40. It will be observed that the branding device is raised as the cylinder is fed forward, the movement of one being completed slightly in advance of the other. As the cylinder 4 comes to rest the slight remaining motion of the plunger is employed to advantage to bring a justifying- 75 stop 41, carried on the lower end of the plunger, into a pocket of the cylinder. This stop corresponds substantially in size and shape to the pockets and it insures the arrest of the cylinder just at the proper point. The brake 30 25 may be adjusted at will to prevent movement of the cylinder out of reach of the justifying-stop, and it is only necessary for the stop to strike within the dividing-rib between two pockets when it will accurately center the 35 cigar in the diametrically opposite pocket accurately beneath the branding-form.

A machine constructed as above described is simple and durable in construction, necessarily accurate in its work whether running 90 slowly or fast, and is conveniently adjusted to suit different styles of cigars. The cylinder affords a holder and conveyer for the cigars, which is under control of a brake and a rectifying or justifying stop. I do not, how- 95 ever, confine myself to the precise details of

these parts.

Having thus described my invention, what I claim as new therein, and desire to secure by

Letters Patent, is—

1. A cigar-branding machine comprising a cylinder having peripheral pockets which receive and convey the cigars to be branded, a suitable branding device, the hangers in which the cylinder is mounted, the projection formed 105 on one of the hangers, and the spring-shoe secured to the projection having a frictionfacing bearing against the inner face of the rim of the cylinder; substantially as described.

2. A cigar-branding machine comprising a single cylinder having peripheral pockets which receive and convey the cigars to be branded, a suitable branding device, means for operating the cylinder comprising a 115 ratchet-wheel fixed on the cylinder, a lever, a spring-pressed pawl mounted on the lever, a power-shaft, an eccentric mounted on the power-shaft and a pitman connecting the eccentric with the lever, hangers in which the 120 cylinder is mounted, the projection formed on one of the hangers, and the spring-shoe secured to the projection having a friction-facing bearing against the inner face of the rim of the cylinder; substantially as described.

3. A cigar-branding machine comprising a plate, a table located on the plate, a cylinder formed with peripheral pockets and projecting through the plate and table, the adjustable feeding-chute, a branding device, a plun-130 ger by which the branding device is moved radially to the cylinder, a ratchet-wheel fixed to the cylinder, a spring-pressed pawl engaging the ratchet-wheel, a lever fulcrumed to

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the plate and carrying the pawl, a powershaft, an eccentric on the power-shaft, a pitman connecting the eccentric with the lever, the wrist-pin on the plunger, and a link where-5 by the wrist-pin is connected with the lever;

substantially as described.

4. In a cigar-branding device, the combination of the conveying-cylinder, and means for moving the same substantially as described, 10 an arm projecting within the cylinder, a spring brake-shoe secured to said arm and bearing against the inner face of the cylinder, and means for adjusting said spring brakeshoe, as and for the purpose set forth.

5. In a cigar-branding machine, the combination of the conveyer-cylinder, means for operating said conveyer-cylinder, a brake for retarding said cylinder, and a justifying-stop for correcting the position of the cylinder, sub-

20 stantially as explained.

6. In a cigar-branding machine, the combination of a suitable branding device, means for conveying the cigars to said branding device, and a justifying-stop for insuring the 25 accuracy of the position of the means which conveys the cigars to the branding device,

substantially as explained.

7. In a cigar-branding machine, the combination of the reciprocating branding device, 30 the cylinder having peripheral pockets which receive and convey the cigars to said branding device, and a justifying-stop formed to fit in one of said pockets and to fix the cylinder accurately in position, as explained.

8. In a cigar-branding machine, the combination of a cylinder having peripheral pockets, a branding device, a plunger carrying said branding device, and a justifying-stop moved by said plunger into one of the pockets of the

40 cylinder, as the branding device is raised whereby the cylinder is fixed in proper position previous to the descent of the branding device, substantially as explained.

9. In a cigar-branding device, the combination of a suitable conveyer for the cigars, 45 formed with pockets, a branding device, a reciprocating plunger upon which said branding device is carried, a guide in which said plunger works, and a justifying-stop projecting from the lower end of said plunger and 50 adapted to be moved thereby into one of the pockets to correct the position of the conveyer, as explained.

10. In a cigar-branding machine, the combination of a cylinder having peripheral pock- 55 ets, a reciprocating plunger working diametrically across one end of said cylinder and carrying at its respective ends a branding device and a justifying-stop which are moved alternately into said pockets to correct the 60 position of the cylinder and to brand the cigar, a lever fulcrumed upon the machine and having connection with said plunger, and a powershaft having connection for oscillating said

lever, as explained.

11. In a cigar-branding machine, the combination of the cylinder having peripheral pockets and being provided with a ratchet-wheel, the plunger mounted in a suitable guide and provided with a branding device adapted to 70 be pressed upon cigars in the pockets of the cylinder, a lever suitably fulcrumed upon the machine and having connection with the plunger, a pawl carried by said lever and engaging the ratchet on the cylinder, a power-shaft, 75 and connection between said power-shaft and the lever whereby the latter is oscillated, substantially as herein set forth.

NAPOLEON DU BRUL.

Witnesses:

H. WHYRICH, E. F. Du Brul.