G. W. HENRY, Jr.
NUMBERING ATTACHMENT FOR PIN TICKETING MACHINES.
APPLICATION FILED JUNE 18, 1918.

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Fig. 1.

Fig. 7.

Fig. 8.

Fig. 9.

Inventor;
George W. Henry, Jr.

by his Attorneys
Haas & Haas.
G. W. HENRY, Jr.,
NUMBERING ATTACHMENT FOR PIN TICKETING MACHINES.
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1,352,959.
2 SHEETS—SHEET 2.

Inventor:
George W. Henry Jr.

By his Attorney,
Hann & Truax
To all whom it may concern:

Be it known that I, George W. Henry, Jr., a citizen of the United States, residing in Philadelphia, Pennsylvania, have invented certain improvements in Numbering Attachments for Pin-Ticketing Machines, of which the following is a specification.

My invention relates to certain improvements in pin ticketing machines such as illustrated in the patent granted to H. G. Davis, #1,156,672 and dated October 12, 1915.

One object of the invention is to apply a numbering attachment to such a machine so that the cloth, or other material, to which the tickets are to be secured can be properly numbered.

A further object of the invention is to provide means by which the numbers can be printed consecutively or can be repeated, as desired.

The invention is shown as applied to a machine of the type illustrated in said patent and also in an application for patent filed by me on the 23rd day of September, 1916, under Serial No. 121,709, although it will be understood that it can be applied to any machine in which there is a reciprocating type-carrying form and a ticket feeding device.

In the accompanying drawings:

Figure 1 is a side view of a pin ticketing machine illustrating my improved numbering attachment applied thereto;

Fig. 2 is the sectional view on the line 2—2,

Fig. 1;

Fig. 3 is a detached inverted plan view of the number carrying form;

Fig. 4 is a transverse sectional view on the line 4—4, Fig. 3;

Fig. 5 is a detached plan view of the device for actuating the numbering mechanism;

Fig. 6 is a sectional view on the line 6—6,

Fig. 5;

Fig. 7 is a perspective view of the number carrying form;

Fig. 8 is a detached perspective view of the actuating mechanism;

Fig. 9 is a detached perspective view of a section of the ticket strip; and

Fig. 10 is an inverted plan view illustrating a modification of the number carrying form.

My invention is especially adapted for use in connection with means for cutting and numbering cloth used in tailoring. In the manufacture of men's clothing, particularly, a number of thicknesses of cloth is formed into a single pile and the machines are designed to cut through the pile of cloth in a single operation. This cutting operation is very accurate and rapid and one of the greatest difficulties is to insure the proper matching of the cloth after the material is cut, as it is the uniform practice to cut all of the pieces which are to form a garment out of the same piece of material and as close together as possible to insure the proper color in the finished garments; as, in weaving, the shade may vary slightly, owing to the fact that yarn is used which has been dyed at different times. It is exceedingly difficult to secure a long piece of goods in which the shade is substantially uniform throughout.

It has been the general practice to number the cuts of cloth and this has usually been done by marking the tickets by hand and applying them to the goods. Ordinarily, the piles of cloth are forty thicknesses, except when duplicates are required, such as sleeves; and then the cloth is folded and there are eighty thicknesses.

The machine is so designed that it can number from "1" to "40" consecutively, or in duplicate from "1" to "40", according to the will of the operator. This method not only insures accuracy, but it is also a check to the cutter, as the number of cuts must agree with the numbers on the tickets. The present machine is designed to number consecutively from "1" to "40" and it will return automatically to "1". The mechanism, however, can be shifted so as to repeat the figures any desired number of times.

Referring to the drawings, 1 is the base of the machine in which is secured an electric motor 2, in the present instance, for driving the mechanism. 3 is a driving shaft geared through a worm and worm wheel to a cam shaft adapted to suitable bearings in the frame of the machine. 5 is a bed plate over which the ticket strip is fed. Above this plate is a rear guide 6, a feeding slide 7, and a forward guide 8. The strip passes from the roller under the rear guide...
and under the slide and out through the forward guide 8. The feeding slide 7 is provided with suitable feed pawls 9, which engage the notches in the side of the ticket strip, as shown in Fig. 9, and feed the strip forward at each reciprocation. In this machine, the pin, or staple, is formed from a roll of wire, which is cut and bent into U-shape form and driven through the ticket and the cloth by the mechanism located in the head 10. The pin is bent flat after passing through the ticket and cloth by the block 11. This mechanism forms no part of the present invention, as any suitable means may be used for securing the ticket to the cloth.

The type-carrying form 12 is mounted in the head 13 formed in the plunger 14, which is actuated by a cam 15 on the shaft 4. This type-carrying form is made as clearly shown in Figs. 3, 4 and 7. In the present instance, the feeding device is in the form of a slide 7, which is reciprocated by means of the arm 16 on the shaft 4 through the lever 17, which is adjustably connected by a screw rod 18 to the projection 19 on the rear of the slide. When the slide 7 moves forward, the inking pad 7 is under the type and when the plunger 14 makes the first movement, the type pad inks the type and on the withdrawal of the slide and its pad the type form makes an impression on the ticket. This mechanism forms no part of the present invention, although it is intimately related to the mechanism which I will now proceed to describe.

The number carrying form, or chase, 12 consists of a body portion 20 in which is a shaft 21 carrying the numbering disks 22 and 23. These disks are turned by a rocker 24 which has a spring pawl 25 and the shaft 21 is actuated by a plunger 26 located in a casing 27 in the body portion 20. The detent pawls 28 are pressed against the ratchet teeth by springs and prevent the disks from turning with the rocker on its return movement. This arrangement of pawl and ratchet is used in connection with ordinary numbering machines. The chase or number carrying form 12 has a recess 29 at one side for the reception of the type, in the present instance, the recess having a series of projecting ribs for the type, as clearly shown in Fig. 3, so that a line of printing type can be set up in the chase and a type impression can be made simultaneously with the number impression. At one side of the carrying form 12 is a beveled rib 31 and on the opposite side is a shouldered rib 32. The beveled rib is adapted to an undercut portion in the head 13, while the shouldered rib is held by a plate 33.

Secured to the side of the base 1 is a block 34 forming the support for the actuating mechanism shown clearly in Figs. 5, 6 and 8. In this block is mounted a shaft 35 in which is loosely mounted a wheel 36 having, in the present instance, four high points 37 and having recesses between the high points. On the hub of this wheel are 70 ratchet teeth 38. 39 is a rocker mounted on the shaft 35 and this rocker carries a pivoted pawl 40, which engages the teeth 38 and moves the wheel 36, in the present instance, one-eighth of a revolution at each stroke. 75 A spring 41 tends to hold the pawl in engagement with the teeth. This spring is so located that the pawl can be drawn away from the teeth and held out of engagement by the spring 41. The long arm of the rocker is connected by a rod 42 to a pin 43 on the rear end of the slide 7 so that as the slide is reciprocated the rocker 39 will be rocking and will turn the wheel 36 independently. The wheel 36 is in direct line with the plunger 26 of the type-carrying form, as shown in Fig. 2, so that when one of the high points 37 of the wheel is in a vertical position the plunger 26 will strike the high point on its downward movement and will be depressed, turning the numbered disks one number. On the next movement, one of the low spots of the wheel will be directly in line with the plunger 26 and when the type form is again depressed the numbered disk will be operated as the plunger 26 will simply pass into the space formed by the low portion of the wheel and the number previously printed will be duplicated on another ticket. On the next movement, the high spot will be in line with the plunger and the number will be changed. By this arrangement, tickets having duplicate numbers are provided, which are applied to duplicate parts of the garment. 100 When the pawl is thrown out, with one of the high spots 37 in the vertical position, then, with each downward movement of the type form, the plunger 26 will be operated and the type wheels will be turned so as to print the numbers consecutively. Therefore, the device can be used for securing tickets consecutively numbered to sections of garments, or duplicate tickets can be printed and secured to duplicate parts of the garment.

The first disk 22 has numbers from "1" to "9", while the second disk 23 has numbers from "1" to "4", the balance of the space being blank so that, in this instance, forty 120 numbers can be printed consecutively or in duplicate, returning to "1". This is especially adapted for use in conjunction with cutters for cutting garments for men, where the material is piled either in forty or in eighty thicknesses. Where the number of thicknesses differs, the machine can be made correspondingly.

The third disk 44 is numbered "1" to "6", consecutively, and the fourth disk 45 is also 130
numbered "1" to "0", consecutively, and, in this instance, the second disk 23° is numbered "1" to "4" and the balance of the space is filled with naughts. The first type disk 22° is numbered "1" to "0", as previously stated.

By this arrangement, the first two numbers are the numbers for the separate pieces of cloth, while the last two numbers serve as index numbers and are set at will by the operator.

By filling in the blanks on the second wheel with naughts, then the numbers read consecutively "105," "106," &c., or "1106," &c.

I have illustrated a certain form of device for actuating the numbering mechanism, and it is shown as coupled to the reciprocating slide for feeding the tickets. When the invention is applied to machines having different feeding mechanisms from that shown in Fig. 1, then other devices may be arranged to be moved into and out of the path of the plunger 26. In some instances, the slide may be provided with high and low points which will be reciprocated into and out of position, or a vertically movable plunger may be substituted for the wheel and actuated by means connected to the parts of the pin ticketing mechanism.

1. The combination in a pin ticketing machine, of a slide; a reciprocating type carrying form; a series of numbering disks carried by the form, some of the disks being automatically operated; a plunger in the form arranged to actuate the first mentioned disks; a wheel having high and low points adapted to operate the plunger; means for actuating the wheel from the control of the slide; and means for releasing the wheel from the control of the slide.

2. The combination in a pin ticketing machine, of a numbering device having automatically operated numbering disks, said numbering disks being secured in a reciprocating head; a plunger forming part of the numbering device; a wheel having high and low points, said wheel being in line with the plunger so that when one of the high points is uppermost it will actuate the plunger; pawl and ratchet mechanism for turning the wheel, said mechanism being operated by the ticket feeding mechanism of the machine, the pawl being arranged to be thrown out of engagement with the ratchet wheel so as to prevent the movement of the disk on the movement of the feeding mechanism.

3. The combination in a pin ticketing machine, of a reciprocating type-carrying form; a slide; means for reciprocating the slide at an angle to the form, said slide carrying inking mechanism; a plunger carried by the type-carrying form and arranged to actuate the printing type numbers; a wheel having high and low points, said wheel being mounted on the frame of the machine in line with the plunger carried by the type form and means for actuating the wheel from the reciprocating slide so that as the ticketing machine is operated the numbering mechanism will print the numbers in duplicate or consecutively on the tickets as they pass through the machine.

4. The combination in a pin ticketing machine, of a plunger; a head carried by the plunger; a duplicate number carrying form secured to the head and having numbered disks thereon; a plunger carried by the form and arranged to turn the disks so that when the plunger is actuated the numbers will be printed consecutively; a wheel mounted on the frame of the machine having high and low points; a rocker for rotating the wheel intermittently; ratchet teeth on the hub of said wheel; a pawl carried by the rocker; a connection between the rocker and the reciprocating slide so that when the pawl is in engagement with the ratchet teeth the numbers will be printed in duplicate and when the pawl is moved out of gear and the high point of the wheel is uppermost the machine will print the numbers consecutively.

In witness whereof I affix my signature.

GEORGE W. HENRY, Jr.