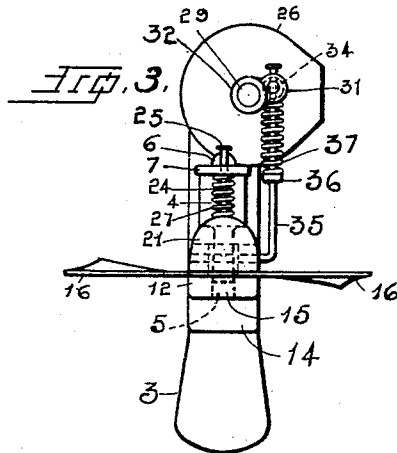
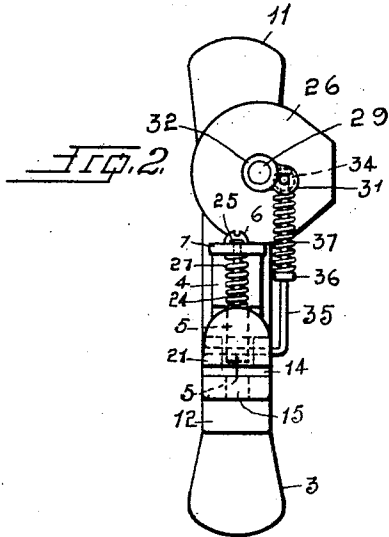
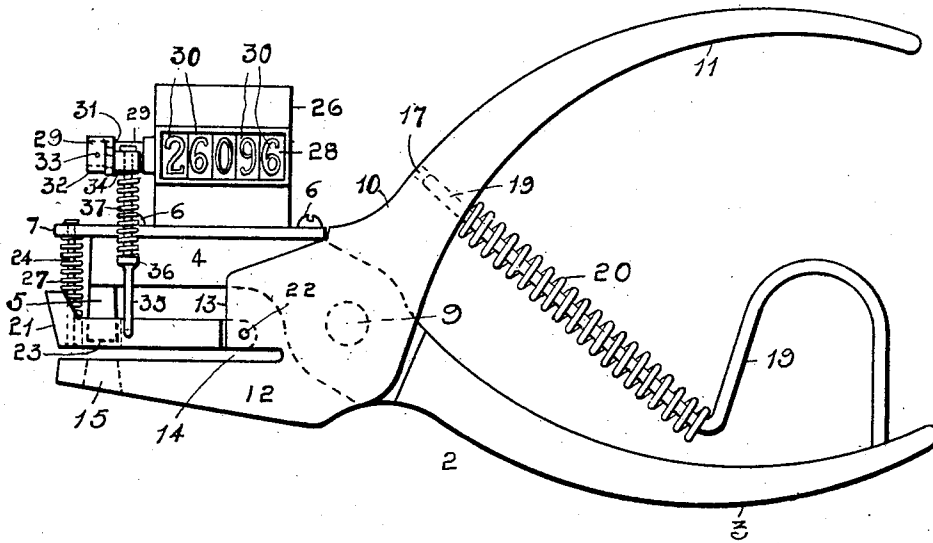


H. E. HUSTED.
REGISTERING PUNCH.
APPLICATION FILED DEC. 3, 1909.

971,538.

Patented Oct. 4, 1910.

FIG. 1.



Witnesses.

P. Nelson
Myrtle Norton

Inventor.

H. E. Husted
By *H. M. Richards*,
Attorney.

UNITED STATES PATENT OFFICE.

HIGHLAND E. HUSTED, OF GALESBURG, ILLINOIS.

REGISTERING-PUNCH.

971,538.

Specification of Letters Patent.

Patented Oct. 4, 1910.

Application filed December 3, 1909. Serial No. 531,226.

To all whom it may concern:

Be it known that I, HIGHLAND E. HUSTED, a citizen of the United States, and a resident of Galesburg, in the county of Knox and State of Illinois, have invented a new and useful Registering-Punch, of which the following is a specification.

My invention relates to that general type or class of punches known as hand punches, and which are employed by conductors, checkers, stewards, and by those engaged in many other occupations, for perforating tickets, checks and the like.

The principal object of my invention is to furnish a device of the character described, provided with registering means, or a registering-counter, whereby an accurate check or tally is automatically kept of each actuation of the punch, the number of these actuations being indicated by numerals appearing on the edges or perimeters of wheels or disks constituting any suitable register.

A further object is to provide a device of the nature described in which any ordinary wheel-and-cylinder registering counter may be employed.

A further object is to provide a device of the character described which will be certain and effective in its operation, inexpensive of manufacture, strong, and durable.

Other objects will be in part obvious and in part pointed out.

To the end of carrying out these ends and objects the invention consists in constructions and combinations hereinafter described.

In the accompanying drawings, my improvements are illustrated in a simple and preferred manner.

In said drawings: Figure 1 is a side elevation; Fig. 2, a front elevation, the parts shown in open positions; and Fig. 3, same elevation as Fig. 2, but the parts in closed positions, a punched card being shown as held in place.

The same reference character wherever herein used refers to the same part in the different figures of the drawing.

2 indicates one member of an ordinary ticket-punch, which for the purposes of this specification I shall term the "fixed" member, and which comprises a grip portion or handle 3 and a jaw 4, the latter provided near its forward end with a die 5. The upper face of the jaw 4 is provided with threaded apertures for the reception of

screws 6 by which means an extension plate 7 is secured thereto. A transverse aperture for a pivot-pin 9 is also provided.

The movable punch-member 10 comprises a handle portion 11 and a jaw portion 12. The portion 12 is cut away at 13 and there provided with a rearwardly extending ticket receiving slot 14. It is provided also with an aperture 15 which receives the die 5 and which also permits the punched-out portion of the ticket 16 to pass. At the junction of the portions 11 and 12 the member 10 is longitudinally slotted in the usual manner for the passage and reception of the central portion of the member 2, they being united by the pivot-pin 9. The portion 11 is provided with a pin-hole 17 which permits reciprocation of the free end of a bent spring 19, the other end of which is fixed in the handle portion 3. The forwardly projecting portion of the spring 19 is embraced by a coil spring 20, and combined they hold the portions 3 and 11 and thereby the jaws 4 and 12 normally spread, or in open positions.

An L-shaped stripper 21 is pivoted at the cutaway portion of the jaw 4 and is apertured at 23 for the reception of the die 5. A pin 24 is seated in its forward portion, the upper portion thereof passing through an aperture in the extension plate 7, where it is provided with a head 25. An expansion spring 27 embraces the pin 24 and returns the stripper to its normal position after an actuation of the jaws in an evident manner.

The foregoing are parts of a well known type of ticket punch and need not be further herein described.

26 indicates a cylinder provided with a sight-opening 28, and its front end is centrally apertured for the reception of a reciprocating actuating shaft 29, the latter passing centrally through the cylinder and carrying any suitable mechanism for actuating the numbered disks 30.

I have successfully operated a registering counter device made under Patent No. 634,073, granted to C. H. Veeder October 3, 1899, in connection with my improvements, but it may be here stated that I do not limit the scope of my claims to any specific form of register. It will be evident that another form than a multi-cylinder may be readily attached if preferred.

The projecting end of the shaft 29 has fixed thereto a lever 31 having a hub 32 by

means of a pin 33 passing through said hub and through the shaft. Journaled in a bearing in the power arm of the lever is an eye-block 34 through which passes a link 35, the other end of which is secured to the stripper. Near its midlength the link is provided with an annular shoulder 36 to support the lower end of an expansion spring 37, the upper end of which takes against the eye 34. If preferred, the spring 37 may be omitted, its main function being to prevent strain on the register or counter. Another function of the spring is, however, to prevent double registry when an unusually thick card or ticket is punched.

In operation, as the operator compresses the grips 3 and 11 he will thereby actuate the jaws 4 and 12, and as the latter rises it will drive the stripper upwardly, the die passing therethrough in the ordinary manner to puncture the card 16. The lever 31 will by means of the link 34 be given a simultaneous actuation to impart a part revolution to the shaft 29 which actuates the register, it being understood that suitable mechanism is interposed therebetween.

While I have illustrated and described a specific embodiment of the invention, it will be understood that without departing from the essential spirit and scope, or sacrificing any of the advantages thereof, it is susceptible of various changes as regard the punch *per se*, the register, and the intermediate or connecting mechanism.

Having thus set forth the preferred construction and operation, the purposes and advantages of my invention, I claim as my invention and desire to secure by Letters Patent the following, to-wit:—

1. In a device of the character described,

a fixed member, a movable member pivoted thereto, a stripper pivoted to the movable member and actuable thereby, a register secured to the fixed member and including a shaft, a lever fixed at one end on said shaft, an eye-block journaled in the other end of said lever, and a spring-controlled link connection intermediate said stripper and eye-block whereby actuation of the movable member will actuate said shaft.

2. In a device of the character described, a fixed member, a movable member, a stripper pivoted to the movable member and actuable thereby, a register fixed to the fixed member and including a shaft, a lever fixed at one end on said shaft, an eye-block on the other end of said lever, a link secured to said stripper and passed through said eye-block, there being a shoulder intermediate its ends, and a spring interposed between said eye-block and shoulder.

3. In a device of the character described, a fixed member, a movable member pivotally engaged therewith, a stripper pivoted to the movable member and actuable thereby, a register fixed to the fixed member and including a shaft, a lever fixed at one end on said shaft, an eye-block on the other end of said lever, a link secured to said stripper and passed through said eye-block, there being a shoulder intermediate its ends, and a coil spring embracing said link, one of its ends resting against said eye-block and the other against said shoulder.

In testimony whereof I have hereunto set my hand this 21st day of November, 1909.

HIGHLAND E. HUSTED.

Witnesses:

CHARLES J. WOOD,
JOHN C. GEER.