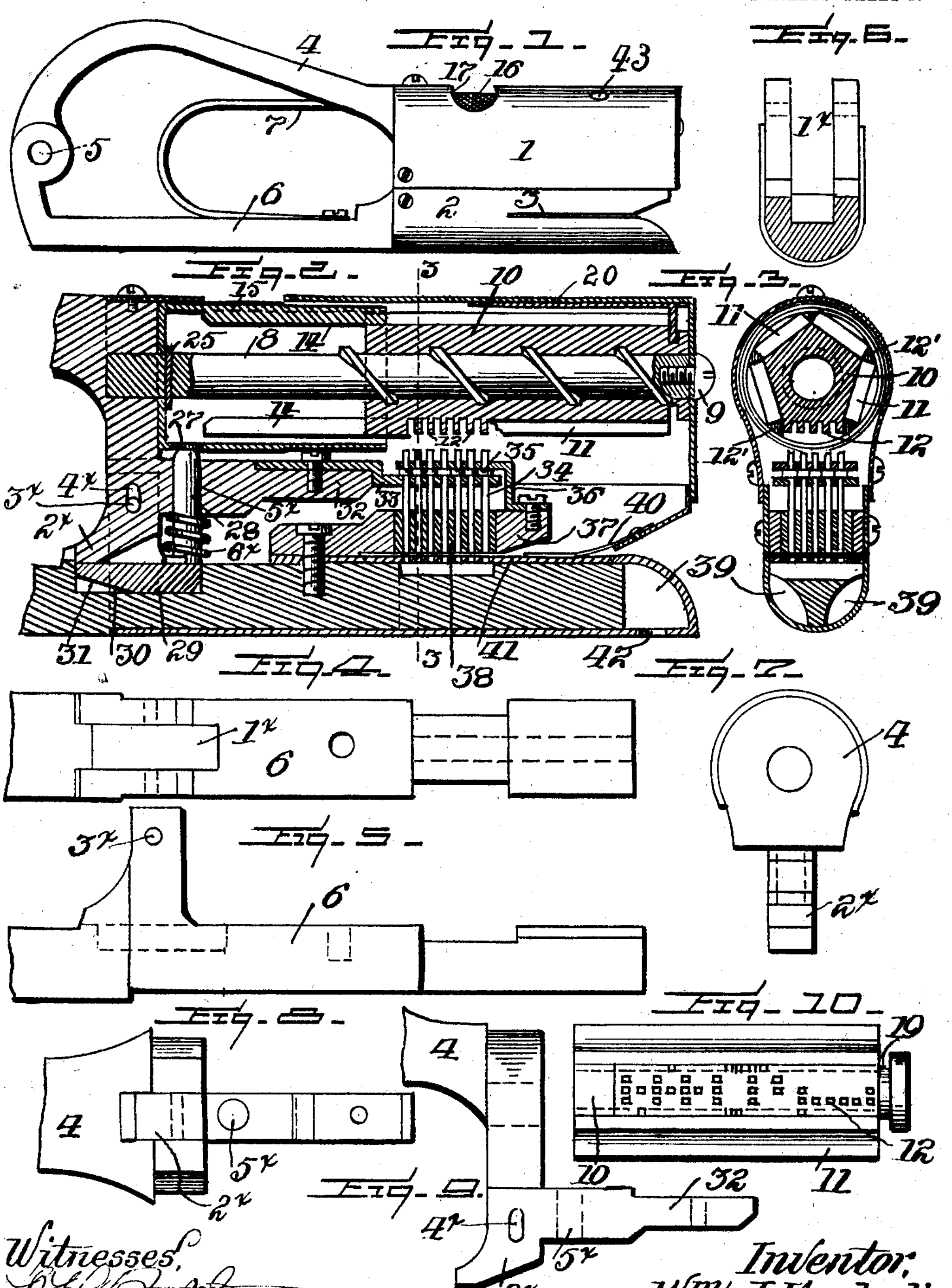
No. 718,848. PATENTED JAN. 20, 1903.

W. J. KENDERDINE.

CHECK PUNCH.

APPLICATION FILED APR. 1, 1902.

NO MODEL. 2 SHEETS—SHEET 1.



Witnesses,

Inventor,
Wm J. Kenderdine

By
Attorneys.

THE NORRIS PETERS CO., PHOTO-LITHO., WASHINGTON, D. C.

No. 718,848. PATENTED JAN. 20, 1903.

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NO MODEL. 2 SHEETS—SHEET 2.

Fig. 11.

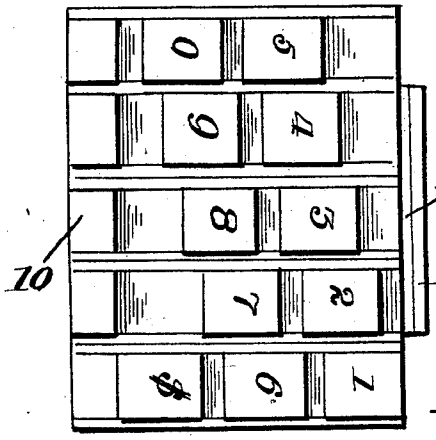


Fig. 15.

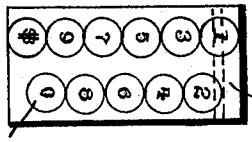


Fig. 16.

Fig. 17.

Fig. 18.

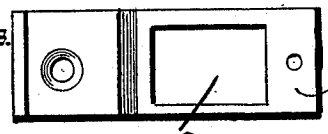


Fig. 12.

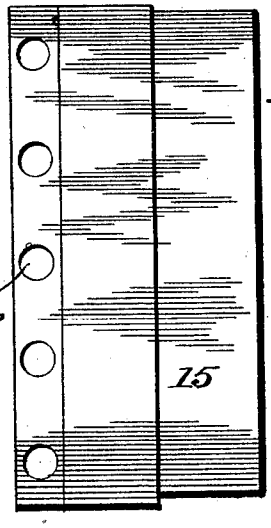


Fig. 19.

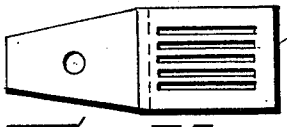


Fig. 20.

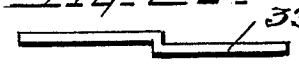


Fig. 21.

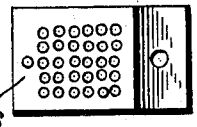


Fig. 22.

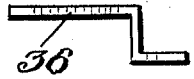


Fig. 23.

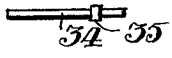


Fig. 13.

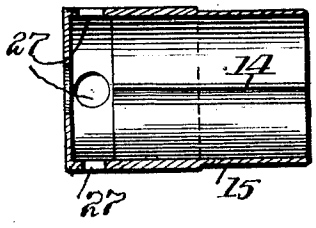


Fig. 14.

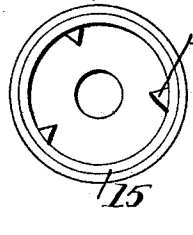


Fig. 24.

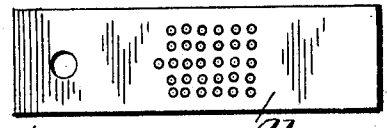
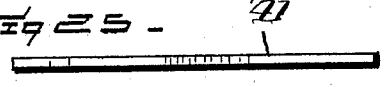


Fig. 25.



Witnesses:
A. F. Butler.
C. C. Potter.

Inventor:
Wm J. Kenderdine.
By A. C. Ewer & Co.
Attorneys

UNITED STATES PATENT OFFICE.

WILLIAM J. KENDERDINE, OF PHILADELPHIA, PENNSYLVANIA.

CHECK-PUNCH.

SPECIFICATION forming part of Letters Patent No. 718,848, dated January 20, 1903.

Application filed April 1, 1902. Serial No. 100,944. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM J. KENDERDINE, a citizen of the United States of America, residing at Philadelphia, in the county of Philadelphia and State of Pennsylvania, have invented certain new and useful Improvements in Check-Punches, of which the following is a specification, reference being had therein to the accompanying drawings.

This invention relates to certain new and useful improvements in check-punches, and has for its object the provision of novel means to perforate checks and other commercial papers.

Another object of the present invention is to provide a punch of the above-described character that may be carried in the pocket; furthermore, to provide a device that will contain novel mechanism and positive movements that are not apt to become out of order or deranged.

The present invention further aims to provide a device that will be extremely simple in its construction, strong, durable, and comparatively inexpensive to manufacture.

With the above and other objects in view the invention finally consists in the novel construction, combination, and arrangement of parts to be hereinafter more particularly described, and specifically pointed out in the claims.

In describing the invention in detail reference is had to the accompanying drawings, forming a part of this specification, and wherein like numerals of reference indicate like parts throughout the several views, in which—

Figure 1 is a side elevation of my improved punch. Fig. 2 is an enlarged longitudinal vertical sectional view of the same with the handles removed. Fig. 3 is a transverse vertical sectional view taken on the line 3 3 of Fig. 2. Fig. 4 is a plan view of the lower handle with a portion thereof broken away. Fig. 5 is a side elevation of the lower handle with a portion thereof broken away. Fig. 6 is a transverse vertical sectional view of the same. Fig. 7 is an end elevation of a portion of the upper section of the handle. Fig. 8 is a bottom plan view of the same. Fig. 9 is a side elevation thereof with a portion of the handle broken away. Fig. 10 is a side elevation of the platen or figure wheel. Fig. 11 is a plan view of the blank from which the platen or figure wheel illustrated in Fig. 10 is formed. Fig. 12 is a like view of the blank from which the operating-sleeve is formed. Fig. 13 is a longitudinal vertical sectional view of the operating-sleeve. Fig. 14 is an end view of the same. Fig. 15 is a plan view of the index-plate carrying numerals or characters. Fig. 16 is an end view of the same. Fig. 17 is a side elevation of the lower guide-plate, showing in dotted lines the openings formed therein. Fig. 18 is a plan view of the same. Fig. 19 is a plan view of the stripper-plate. Fig. 20 is a side elevation of the same. Fig. 21 is a plan view of the upper guide-plate. Fig. 22 is a side elevation of the same. Fig. 23 is a side elevation of one of the pins. Fig. 24 is a plan view of the die-plate. Fig. 25 is a side elevation of the same.

In the drawings the reference-numeral 1 indicates the upper portion of the outer casing.

2 indicates the lower casing, having a slit 3 formed therein, and 4 represents the upper section of the handle, which is pivotally secured at 5 to the lower section 6 of the handle. The said upper and lower sections of the handle have interposed therebetween a U-shaped spring 7. To prevent a lateral movement of the jaws, the lower section of the handle is slotted at $1^{\times}$ to receive the tongue $2^{\times}$, carried by the upper section of the handle. A pin $3^{\times}$ in the lower handle is passed through the opening $4^{\times}$ in the tongue of the upper handle to control the outward movement of said handles.

In the upper section of the handle 4 is firmly secured a stationary worm-shaft 8, which is held by means of a screw 9 passing through the end of the upper casing 1. Upon said stationary worm-shaft is sleeved the platen or figure wheel 10, this wheel having formed therein a screw-thread to receive the thread of the stationary worm-shaft 8. The platen or figure wheel is five-sided, (see Fig. 3,) and the sides 11 carry pins 12, so arranged as to form figures or characters. Between the sides 11 of the platen-wheel are formed V-shaped notches 12′, these notches being adapted to receive the V-shaped projections 14, which extend the length of the operating-sleeve 15. A portion of the outer face of this sleeve, as

shown at 16, is corrugated or roughened to facilitate the rotation of said sleeve, the said portion corresponding with an opening 17 formed in the casing 1. The platen or figure wheel carries at its outer end a flanged neck 19.

The reference-numeral 20 indicates an index-plate carrying two rows of numerals 22. The end of said index-plate is formed in the shape of a staple 23 and is adapted to straddle the neck 19 of the platen or figure wheel.

One end of the operating-sleeve 15 is fitted with a disk or plate having in its center an opening corresponding in size to the diameter of the stationary worm-shaft 8, on which it revolves. A longitudinal movement is prevented by the pin with projecting ends 25, which is secured in the stationary worm-shaft. This operating-sleeve 15 also has formed therein five openings 27, placed longitudinally opposite to the centers of the five sides 11 of the platen or figure wheel and adapted to receive a locking-pin 28, supported in an opening $5^{\times}$ and moving freely therein. The spring $6^{\times}$ presses the pin 28 against a block 29, which is seated in a recess 30 of the lower handle. This block has a part of the lower face inclined, as at 31, that it may rock on its support and allow an upward movement to the locking-pin when the handles are operated.

The reference-numeral 32 represents an extension of the upper handle, to which is secured the stripper-plate 33. Through this stripper-plate the pins 34 extend which serve to make the perforations in the check or paper. These pins carry shoulders 35 and extend through the guide-plate 36, secured upon the lower guide-plate 37, which, with the die-plate 41, is attached to the lower handle or jaw. This lower guide-plate 37 has an opening 38 formed therein, which opening is filled with a matrix of soft metal, through which the pins 34 when in their normal position extend only to its lower face.

The numeral 41 represents a die-plate on which the paper rests when being operated upon. The pins after passing through the paper enter the perforations in this plate a sufficient distance to insure a clean cut. The opening 39 is a receptacle for punchings.

40 represents a small spring secured to the lower casing to retain the paper in position as the perforation takes place.

42 represents an opening in the lower casing to permit the disposal of punchings.

One or more observation-openings 43 are provided in the upper casing 1.

The operation of my improved punch is as follows: The check or commercial paper that is desired to be perforated is slid into the slit 3 and the operating-sleeve revolved until the desired numeral of the index-plate becomes visible through one of the openings 43, formed in the upper portion of the casing. The handles are then brought together, thereby compressing the spring 7 and causing the tongue $2^{\times}$ to depress the outer end of block 29 and cause the locking-pin 28 to engage one of the openings 27 of the operating-sleeve, thus locking it and the platen or figure wheel. As the operation continues the pins 12 of the platen or figure wheel will engage certain of the punch-pins necessary to make the figure desired and carry them downwardly through the paper. When the handles are released, the spring 7 will automatically return the mechanism to its normal position, and the stripper-plate which has followed the downward movement of the pins 34 will tend to lift them from the apertures that are pierced in the paper, thereby releasing the same and allowing the check or other paper to be removed from the punch.

It will be noted that various changes may be made in the details of construction without departing from the general spirit and scope of my invention.

Having fully described my invention, what I claim as new, and desire to secure by Letters Patent, is—

1. In a punch, the combination of an upper and lower casing, the latter having a slit formed therein, suitable handles to operate said casings, a stationary worm-shaft secured in the upper casing, a platen-wheel secured upon said shaft carrying grooves, a die-plate, an operating-sleeve, pins carrying shoulders, guide-plates, and a stripper-plate, substantially as described.

2. In a punch, the combination of suitable handles, an upper and lower casing, a stationary worm-shaft mounted in the upper casing, a platen-wheel secured upon said worm-shaft, a die-plate, an index-plate operated by said platen-wheel, an operating-sleeve, pins operated by said platen-wheel, guide-plates, and a stripper-plate, substantially as described.

3. In a punch, the combination of suitable handles, an upper and lower casing, a platen-wheel journaled in said upper casing, a stationary worm-shaft secured in said upper casing, a platen-wheel secured on said worm-shaft, an index-plate secured to said platen-wheel, an operating-sleeve having openings, a die-plate, pins carrying heads, guide-plates through which said pins extend, a stripper-plate, and spring-pressed pin engaging in the openings formed in said operating-sleeve, substantially as described.

4. In a punch, the combination of suitable handles, a spring interposed between said handles, an upper and lower casing, a stationary worm-shaft secured in said upper casing, an operating-sleeve having V-shaped projections formed therein, a platen-wheel secured on said shaft, a die-plate, an index-plate secured to said platen-wheel, guide-plates through which said pins extend, and a stripper-plate, substantially as described.

5. In a punch, the combination of suitable handles, an upper and lower casing, a stationary worm-shaft mounted in the upper cas-

ing, a platen-wheel secured upon said worm-shaft, an index-plate operated by said platen-wheel, an operating-sleeve, pins operated by said platen-wheel, a die-plate, an upper and lower guide-plate, one of said guide-plates carrying a matrix of soft metal, and a stripper-plate, substantially as described.

6. In a punch, the combination of suitable handles, an upper and lower casing, a stationary worm-shaft mounted in the upper casing, a platen-wheel secured upon said worm-shaft, an index-plate operated by said platen-wheel, an operating-sleeve, pins operated by said platen-wheel, a die-plate, an upper and lower guide-plate, one of said guide-plates carrying a matrix of soft metal, means to retain the paper in proper position, and a stripper-plate, substantially as described.

In testimony whereof I affix my signature in the presence of two witnesses.

WILLIAM J. KENDERDINE.

Witnesses:
JOHN MÖLLER,
J. C. MÖLLER.