(No Model.)

M. O. SMITH.

CHECK PUNCH.

No. 500,676. Patented July 4, 1893.

Fig. 1.

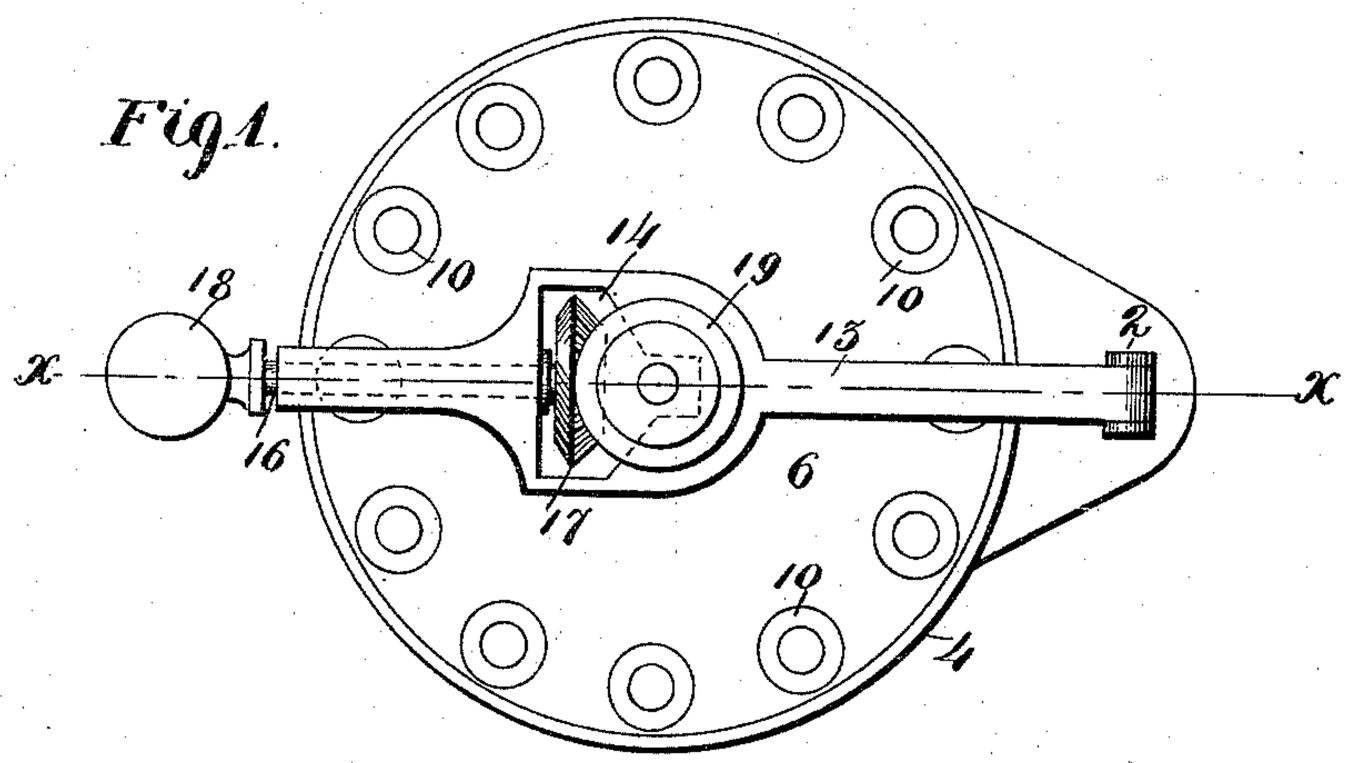


Fig. 2.

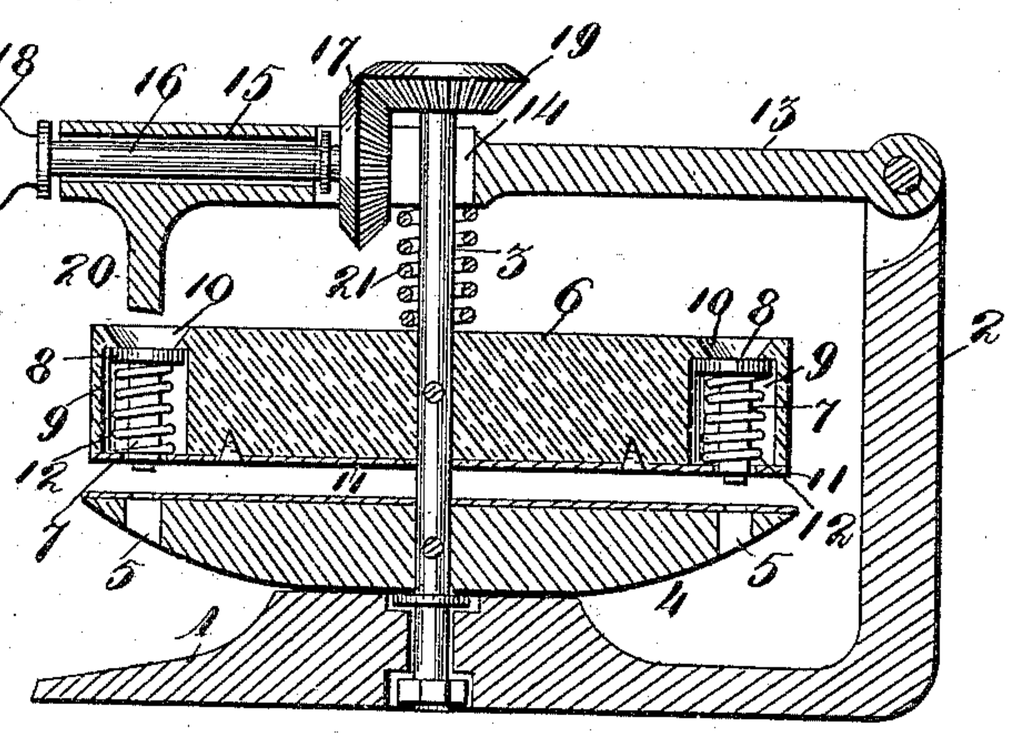


Fig. 3.

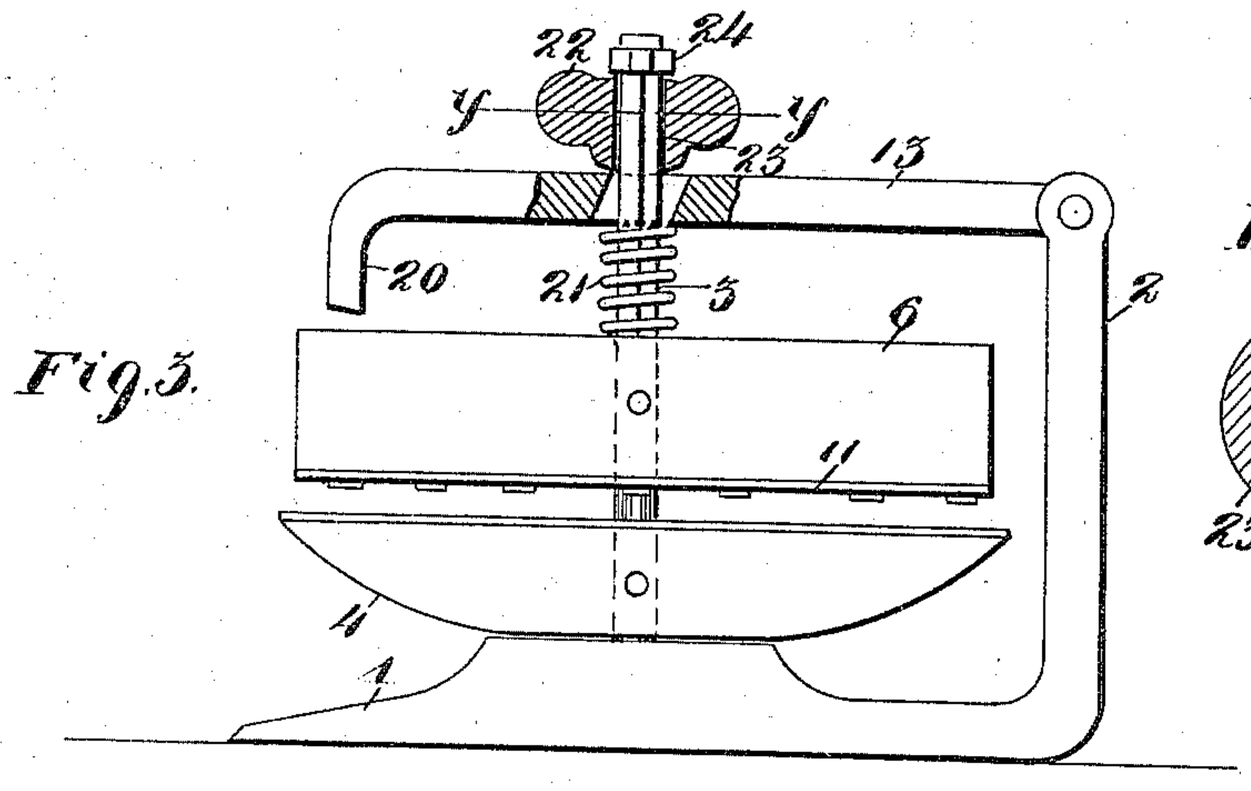
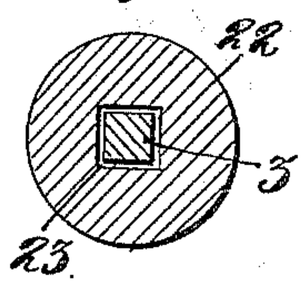


Fig. 4.



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CHECK-PUNCH.

SPECIFICATION forming part of Letters Patent No. 500,676, dated July 4, 1893.

Application filed February 4, 1891. Serial No. 380,247. (No model.)

To all whom it may concern:

Be it known that I, MINER OSGOOD SMITH, of Waverly, county of Tioga, State of New York, at present residing at St. Louis, State of Missouri, have invented certain new and useful Improvements in Check-Punches, of which the following is a full, clear, and exact description, reference being had to the accompanying drawings, forming a part hereof.

The invention is designed as an improvement in punches and consists in the novel arrangment and combination of parts more particularly set forth in the specification and pointed out in the claim.

In the drawings Figure 1 is a top plan view of my complete invention. Fig. 2 is a vertical section taken on the line *x*—*x* Fig. 1. Fig. 3 is a side elevation of a modification with parts broken away to more clearly show the construction thereof; and Fig. 4 is a cross section taken on the line *y*—*y* of Fig. 3.

The object of my invention is to construct a simple and cheap punch, and that may be entirely operated by one hand, allowing the operator the use of the other hand to feed the paper or other material through the same. It therefore consists in many advantages which will be more apparent from the description hereinafter set forth.

Referring to the drawings, 1 represents the stationary support and 2 an upright arm forming a part of said support to which the movable parts of my invention are attached.

3 represents a shaft the lower end of which is movably secured within the base or support 1 allowing the same to be turned independently of the support. To said shaft is fixed a circular plate 4 which is located adjacent to the base 1 and turns upon the same, and formed in said plate are openings 5 which receive the lower end of the dies in a manner well known.

6 represents a circular body which is preferably made of glass, but other material may be used if found desirable, said body being secured to the shaft 3 at a suitable distance above the plate 4 allowing sufficient space between the two for the passage of the paper or other material to be punched.

From the above description it will be seen that the plate 4 and body 6 are caused to rotate in the same direction and are locked against movement independent of one another. The dies which are carried upon the body 6 or more properly their cutting edges may be formed to indicate the Roman characters, viz., I, V, X, L, C, D, and M and another die to indicate the dollar sign, thus, $ wherein only eight dies would be necessary. However, in the drawings I have shown twelve dies (see Fig. 1) which is a common number in punches of this character comprising the ten Arabic numerals, the dollar sign and any additional sign deemed necessary.

The construction and operation of the several dies are alike and therefore I will only describe one in detail:

7 represents the die provided with a head 8 which loosely fits within a cavity 9; and in communication with the said cavity is a conical-shaped opening 10 which is normally covered from below by the head 8. Encircling the die 7 and interposed between the head 8 and a plate 11 is a coiled spring 12 which holds the die in position as shown in Fig. 2 and out of contact with the plate 4. Movably fixed to the upper end of the arm 2 is secured one end of an arm 13 cut away as shown at 14 allowing sufficient space for the shaft 3 and the bevel gear wheel to be hereinafter described. Formed in the free end of the arm 13 and leading to the cut-away portion 14 is a longitudinal opening 15 within which is located a shaft 16 to one end of which is keyed a bevel gear wheel 17 and the opposite end of said shaft is provided with a knob 18 for turning the shaft and parts co-operating therewith, and also for depressing the arm 13. To the upper end of the shaft 3 is fixed a bevel gear wheel 19 which meshes with the bevel gear wheel 17 when the arm 13 is in the position as shown in Fig. 2 whereby the body 6 and plate 4 may be turned in position in order to bring the proper die immediately beneath the depending extension 20 forming a part of the arm 13. After the proper die has been located or turned below the said extension 20, the arm 13 is depressed and the die forced through the paper in the well known manner, the lower end of said extension coming in contact with the head 8 of said die. When the arm 13 is depressed the bevel gear wheel 17 will move out of contact with the bevel gear wheel 19, but as the body 6 has been previously moved

in position it is not necessary that they should mesh under said circumstances. Encircling the shaft 3, and interposed between the arm 13 and the upper surface of the body 6 is a coiled spring 21 which operates to hold the arm 13 in its normal position for turning said body into position as shown in Fig. 2.

In Fig. 3 I have shown a modification of my invention the construction of which is similar to the preceding figures, the same however being modified to such a degree as to dispense with the gearing previously referred to. In said construction the body 6 and plate 4 are likewise keyed to the shaft 3 and the dies located in the body 6 are also similarly constructed. The shaft 3 in this case however, or more properly the upper portion thereof, is made square for receiving a knob 22 having a square opening 23 formed therein which opening loosely receives the said shaft. A nut 24 or other like device is secured to the upper end of the shaft 3 preventing the said knob from moving off the shaft, the lower surface of the said knob being always in contact with the arm 13, and is employed to depress the same after the proper die has been located or turned below the extension 20 of said arm. Thus it will be seen that the knob 22 is not only employed to turn the body 6 and plate 4, but to depress the arm 13 when its extension 20 is located over the proper die to be operated or depressed.

The punch described is intended to be principally used for perforating checks or other papers of value by cutting out numbers, letters or other signs. Should the body 6 be made of glass as previously stated the operator can easily feed the paper to be punched below the die and ascertain its exact location.

Having described my invention, what I claim is—

A punch comprising a base 1 and arm 2, a shaft 3 movably secured to said base, a plate 4 fixed to the said shaft, a body 6 also fixed to the said shaft, dies 7 located within said body and actuated in one direction by a spring, a movable arm 13 fixed to the upper end of the arm 2 and having a depending extension 20, a coiled spring 21 interposed between the said arm 13 and body 6, a bevel gear wheel 19 fixed to the upper end of the shaft 3, a shaft 16 carried by the arm 13, a bevel gear wheel 17 keyed to the one end of the shaft 16 and meshing with the gear wheel 19, and an operating knob 18 for operating the shaft 16, substantially as set forth.

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