(No Model.) 2 Sheets—Sheet 1.

R. L. ROGERS.

CHECK PUNCH.

No. 454,156. Patented June 16, 1891.

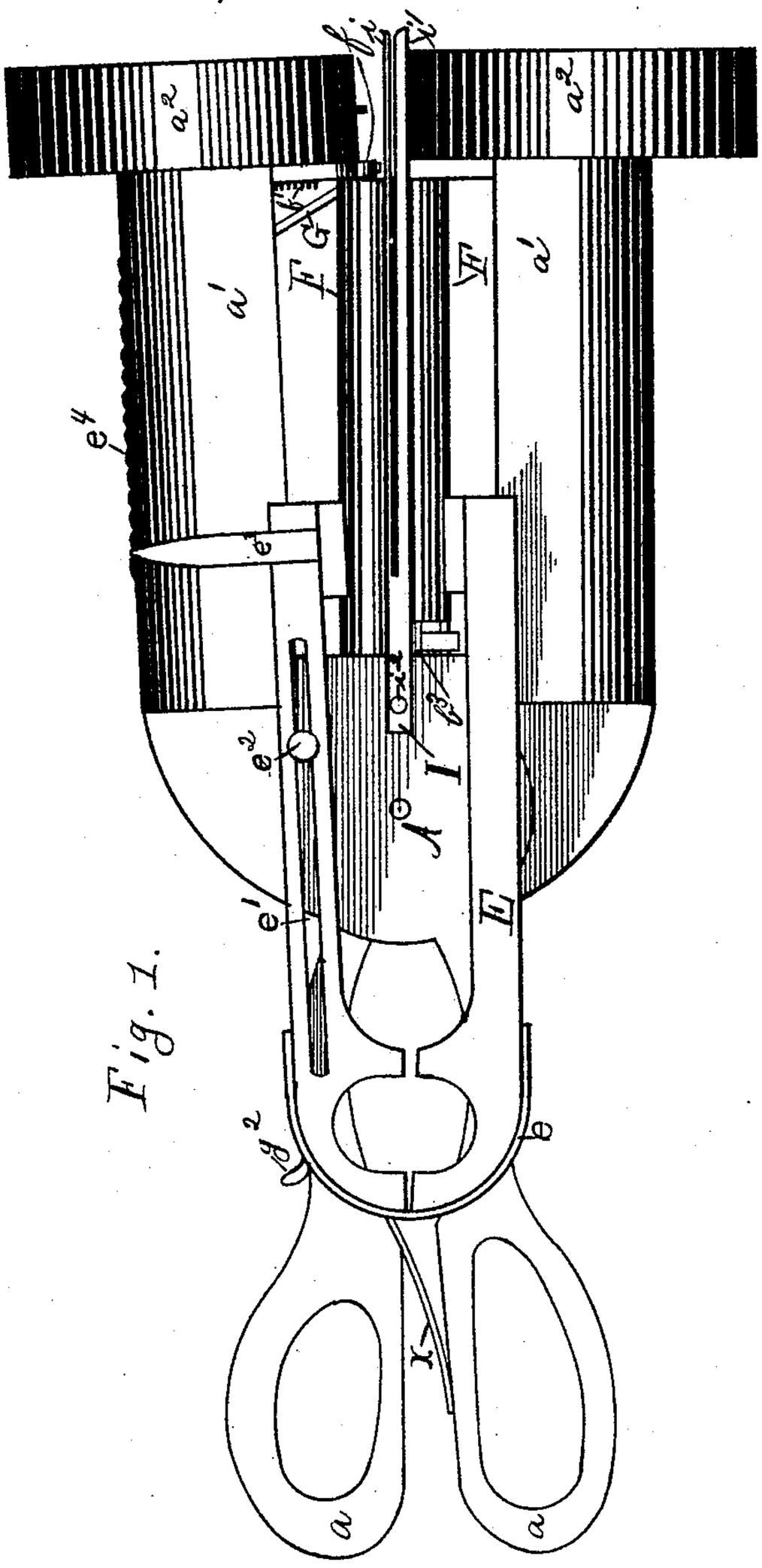

Fig. 1.

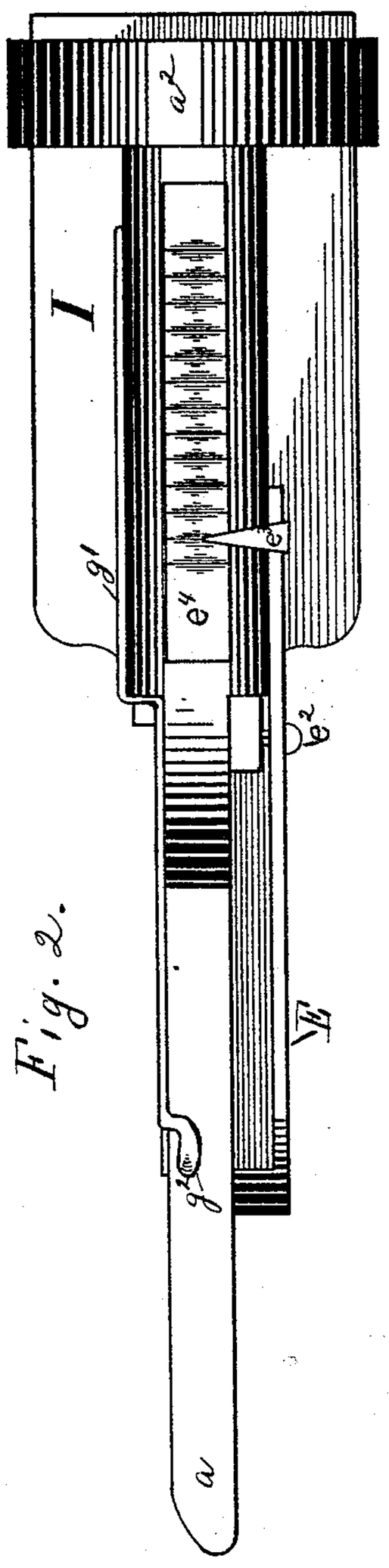

Fig. 2.

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Fig. 3.

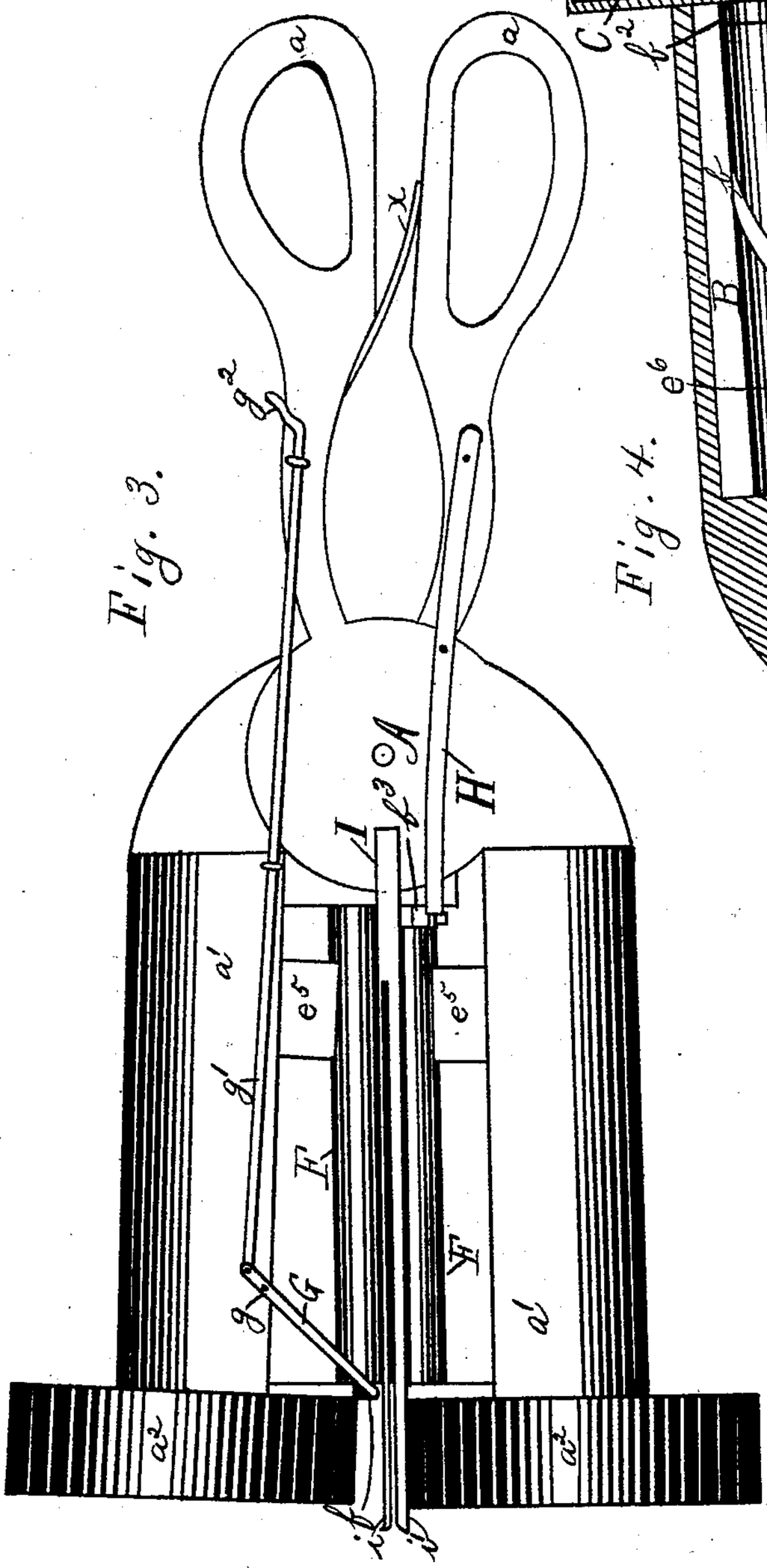
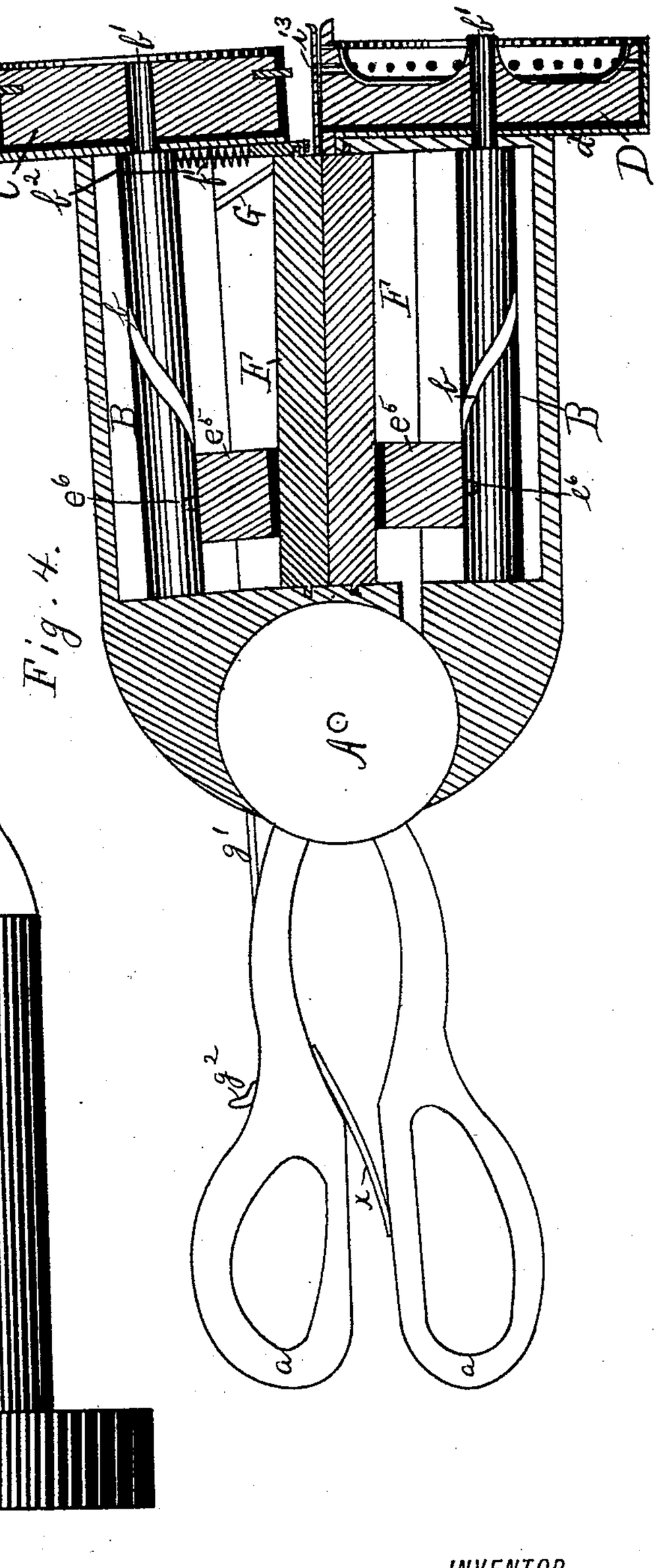


Fig. 4.



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ROBERT LEE ROGERS, OF ST. LOUIS, MISSOURI.

CHECK-PUNCH.

SPECIFICATION forming part of Letters Patent No. 454,156, dated June 16, 1891.

Application filed July 23, 1890. Renewed May 2, 1891. Serial No. 391,321. (No model.)

To all whom it may concern:

Be it known that I, ROBERT L. ROGERS, a citizen of the United States, residing at St. Louis, in the State of Missouri, have invented certain new and useful Improvements in Check-Punches; and I do declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to the letters of reference marked thereon, which form a part of this specification.

My invention has relation to punches; and it consists in the novel arrangement and construction of its parts.

The object of my invention is to substitute in the place of the cumbersome and unwieldy punches now used in banks and large business-houses an automatic punch, as hereinafter described.

In the accompanying drawings, Figure 1 is a side elevation of my invention. Fig. 2 is a top elevation of my invention. Fig. 3 is a view of the side opposite to the side shown in Fig. 1. Fig. 4 is a longitudinal sectional view of Fig. 1.

My invention is described as follows:

It consists of an upper and lower jaw pivoted together at A, each jaw being provided with a perforated handle a and elongated semi-cylindrical hollow extension a', on the end of which is securely fixed a hollow cylinder a^2. Inside each of said hollow extensions is journaled a roller B. Said rollers are each provided with a spiral groove b, their outer ends terminating in rollers b', of much smaller diameter, which pass through a perforation in the head of the cylinder a^2 and act as an axle for the castings C and D, respectively. (See Fig. 4.) On the right side of said punch, or the side shown in Fig. 1, is fixed a slide E, which consists of an upper and lower half fastened together in the rear by a strip of spring metal e. The upper half of the slide has a guide-slot e' and a guide-bolt e^2, and on its free extremity an index e^3, which passes up and partly around the upper hollow extension, its pointed end resting in the grooved face of a scale e^4. On the free extremity of each half of said slide is securely fixed a block e^5, one face of which is slightly sunk in to receive a roller F, and from the opposite face extends a nose e^6, (see Fig. 4,) which works in the spiral groove b of the roller B.

F F are corrugated rollers journaled between the two jaws of the punch. The outer end of the upper one is journaled in a movable upright slide f, to the upper end of which is attached a spiral spring f', the other end of which is braced against a washer f^2 around the axle b'. Under the lower end of slide f passes the free end of a lever G. (See Fig. 3.) Said lever is pivoted at g, and to its upper end is attached a rod g', which passes down and terminates in a thumb-pad g^2 on the handle of the lower jaw. On the inner end of the lower corrugated roller F are cut notches f^3, in which catches the free end of the stationary bar H. (See Fig. 3.)

Said invention is further provided with a table I, which consists of the upper and lower plates i and i', with a slot between the two to admit a sheet of paper of an ordinary thickness. One end of said table is fastened to the upper jaw at i^2, and the other to the top of the cylinder a^2 on the lower jaw. Said plates are beveled at their outer ends and have a perforation through them at i^3. (See Fig. 4.)

The casting C in the cylinder of the upper jaw is provided at regular intervals around its periphery with punches of either a numerical or alphabetical character, and in casting D in the lower cylinder are cut dies of a corresponding character to those in the upper casting and at corresponding intervals. The scale e^4 is also provided with characters corresponding to those on the two said castings.

Between the two handles a and a and fastened to one of them is a spring x, which keeps them apart when the punch is not in use. This has the effect of keeping the jaws of the punch open and ready for use.

My invention is operated as follows: I place my thumb and middle finger in the perforations of the upper and lower handles, respectively, and with my index-finger I pull back the lever-rod g^2. This pulls up the outer end of the upper corrugated roller. Then I slip a check or any paper to be punched between the two plates of the table I, and when it is far enough between the two corrugated roll-

ers I release the lever-rod, and the spiral spring f' will then push down the outer end of said upper roller, and the paper will then be firmly grasped between the two corrugated rollers. Now with my index-finger I move the slide E until the index e^3 points to the character on the scale e^4 that I wish to be punched through the paper. As the slide E is moved it moves the blocks e^5, and consequently the noses e^6, which work in the spiral groove of the rollers B, revolve the said rollers simultaneously, and as said rollers revolve the corresponding characters on the dies and punches of the castings D and C are brought face to face. These characters correspond with the one pointed to by the index e^3. Now I press the two handles together, and the punch on the casting C will descend, pass through the perforation i^3, and penetrate the paper. When the handles are pressed together, the bar H will slip down one notch on the lower corrugated roller, and when the pressure is released on the handles the bar will push the roller around one notch. This will pass the paper along one space, and it is then ready for another penetration. Thus it is seen that a check or any piece of paper may be punched any number of times with any of the characters placed on the castings C and D.

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

1. A punch having the upper and lower jaws, said jaws consisting of the perforated handles a and the semi-cylindrical hollow extensions a', said extensions having securely fixed to their outer ends the hollow cylinders a^2, slide E, working on the guide-bolt e^2 in the guide-slot e', spring e, connecting the two halves of said slide, index e^3, secured to said slide, scale e^4, blocks e^5, each having a nose e^6, rollers B, each having the spiral groove b, casting C, rigidly secured to the upper roller B and provided at regular intervals with punches, casting D, rigidly secured to the lower roller B and provided at corresponding intervals with dies, corrugated rollers F, movable upright bar f, spring f', table I, having the plates i and i', bar H, its free end working in the notches of the lower roller, and spring x, all substantially as shown and described, and for the purposes set forth.

2. A punch having the upper and lower jaws, said jaws consisting of the perforated handles a and the semi-cylindrical hollow extensions a', hollow cylinders a^2, securely fixed to the ends of said extensions, slide E, working on the guide-bolt e^2, spring e, connecting the two halves of said slide, index e^3, secured to said slide and pointing to the scale e^4, blocks e^5, secured to said slide and each having a nose working in the spiral groove b, rollers B, having the spiral grooves b, and castings C and D, rigidly secured to said rollers and working in the hollow cylinders a^2, substantially as shown and described, and for the purposes set forth.

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

ROBERT LEE ROGERS.

Witnesses:

FRANK OBEAR,

H. HAYNES.