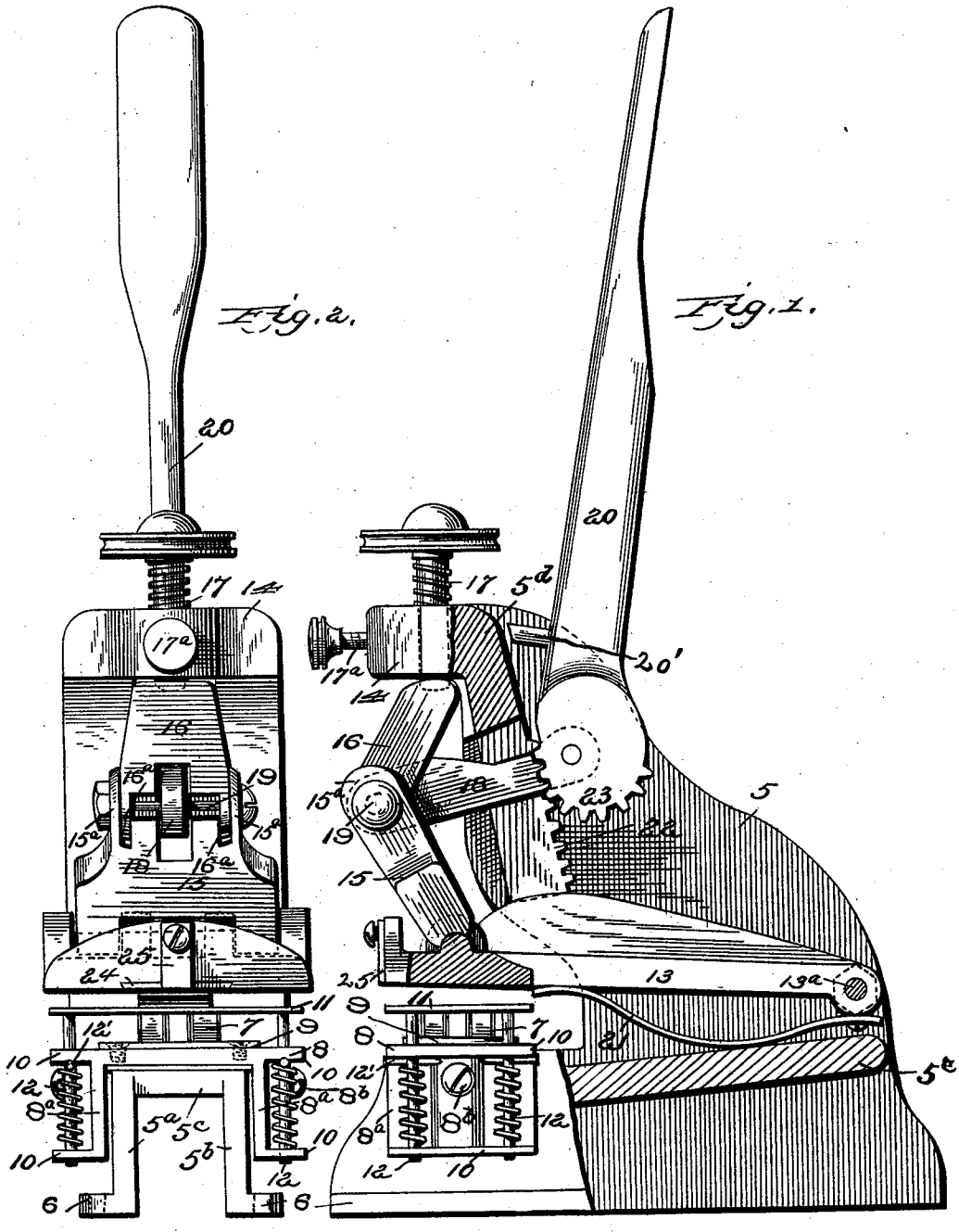
(No Model.)

J. M. WILLBUR.

CHECK CANCELING DEVICE.

No. 593,795. Patented Nov. 16, 1897.



Attest,
C. S. Middleton
L. B. Middleton.

Inventor
James M. Willbur
by Ellis Spear
Atty.

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

UNITED STATES PATENT OFFICE.

JAMES MONROE WILLBUR, OF NEW YORK, N. Y.

CHECK-CANCELING DEVICE.

SPECIFICATION forming part of Letters Patent No. 593,795, dated November 16, 1897.

Application filed April 30, 1897. Serial No. 634,593. (No model.)

To all whom it may concern:

Be it known that I, JAMES MONROE WILLBUR, a citizen of the United States, residing at New York, in the county of New York and State of New York, have invented certain new and useful Improvements in Check-Canceling Devices, of which the following is a specification, reference being had therein to the accompanying drawings.

My invention relates to improvements in machines for canceling bank-checks; and the object of the invention is to provide a cheap, simple, and durable machine in which great force may be applied to force the knives through the checks and in which the checks will be immediately removed from the knives when the pressure on the hand-lever is relieved.

My invention is illustrated in the accompanying drawings, in which—

Figure 1 is a side elevation of the machine, partly in section. Fig. 2 is a front view of the same.

In the drawings, 5 5 represent the upper side plates of the frame of the device, which are preferably cast in the form shown and are connected by the cross-web 5^d. The lower side plates 5^a and 5^b are connected by the cross-webs 5^c and provided with flanges 6 at the bottom to form the broad bearing-surface. Holes are provided in these flanges, through which screws may be passed to secure the frame rigidly to any suitable support or frame.

The cutting of the checks is accomplished by forcing them down upon stationary knives 7, supported upon a frame 8, removably secured to the main frame of the canceler. This frame 8 is of inverted-**U** shape, the arms 8^a depending on either side of the main frame, to which they are removably held by set-screws 8^b, passing through the depending portion of the frame 8 and engaging corresponding openings in the main frame. I prefer to connect the knives to this frame 8 by forming them slightly wedge-shaped and driving them through openings in the plate 9, this plate in turn being secured to the top of the frame 8 by screws, as shown.

The frame 8 has two projecting flanges 10 on each side and a stripper-plate 11, having openings corresponding with the stationary knives, yieldingly supported by the rods 12, passing through openings in the flanges. Helical springs surround the rods between the lower flanges and pins 12′ and tend to force the stripper-plate normally upward, the stripper-plate being retained flush with the edges of the knives by the pins 12′ bearing against the under side of the upper flanges.

In order to force the checks down upon the knives and against the pressure of the stripper-plate, I provide a lever or arm 13, having its rear end pivoted between the walls of the frame at the rear part, as shown at 13^a. A knee-joint is provided between the forward end of this lever and an abutment 14 at the upper part of the frame, this knee-joint consisting of a lower link 15, having a pivoted bearing at its lower end on a rib on the upper face of the arm and a pivotal connection at its upper end to the second link 16, the upper end of which bears against the lower end of a set-screw 17, passing through the abutments 14, before referred to. Pressure is exerted to straighten the knee or toggle joint by a link 18, connected to the pivot-pin 19 of the knee-joint, which link is connected to an operating hand-lever 20. The lever or arm is normally held upward away from the stripper-plate by a flat spring 21, interposed between the arm and the frame of the machine, as shown. I prefer to connect the links of the knee and the draft-link in the manner shown more particularly in Fig. 2, in which it will be observed that the links 15 and 16 have overlapping side ears 15^a and 16^a, through which the bolt 19 passes. This bolt rests in grooves formed in the abutting ends of the links between the ears, so that the pressure is borne partly by the body portion of the bolt and knee-joint, thus relieving the ears of a part of the strain, recesses being provided in the center of the links to permit the draft-link to be connected directly to the bolt.

In order to gain greater power, I prefer to provide racks 22 between the walls of the frame forming a part of the main frame, which mesh with segmental gears 23, formed on the end of the hand-lever 20. The end of the hand-lever is bifurcated between the gears, and the end of the draft-link is pivoted in this bifurcated portion of the hand-lever, the parts being arranged in such a manner that as

the end of the hand-lever is drawn downwardly the draft-link is drawn inward and downward in proportion to the opening between the lower face of the arm and the knives, thus retaining a horizontal position on its movement downward to straighten the toggle-joint and apply pressure to the arm. The toggle or knee joint may be adjusted to vary the throw of the arm by a set-screw 17, before referred to, and this in its turn may be locked against movement by the set-screw 17^a.

In order to provide for wear, it is desirable that a removable cutter-plate be provided at the point where the knives would strike the face of the arm, and to this end I form a recess in the lower face of the arm, with beveled edges, into which is slid a plate 24, which is retained in position by a button or similar fastening 25.

A stop 20′ may be extended from the lever 20 to strike against the web 5^d at the limit of its upward movement.

Having thus described my invention, what I claim is—

1. A check-canceler comprising a frame, the cutting-knives, the movable arm, the toggle-joint connected to said arm, the hand-lever having a toothed end, the rack adapted to be engaged by said teeth to prevent the slipping of said end and the connection between the toggle-joint and the hand-lever, substantially as described.

2. In combination, the main frame, the knife-carrying frame of inverted-U shape removably carried upon the main frame and having side flanges, the yielding stripper-plate having guides extending through openings in the side flanges, the arm and means for operating it, substantially as described.

3. In combination, the frame, the knives, the hand-lever, the pivoted arm, the toggle-joint the members thereof having their meeting ends recessed and provided with overlapping ears, the pin passing through said ears and bearing within said recessed portion, and the link connecting said pin to the hand-lever, substantially as described.

4. In combination, the main frame, the rack fixed thereto, the movable arm, the segmental gears of the hand-lever engaging said racks of the main frame, the hand-lever being provided with a projection or pin to stop it striking against the main frame on its upward movement after the pressure is removed, the toggle-joint with means for operating the same, the set-screw for adjusting the upper end of the toggle-joint and means for locking the set-screw against movement, substantially as described.

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

JAMES MONROE WILLBUR.

Witnesses:

JOHN A. SHIELDS,

EDSON C. MARSHALL.