

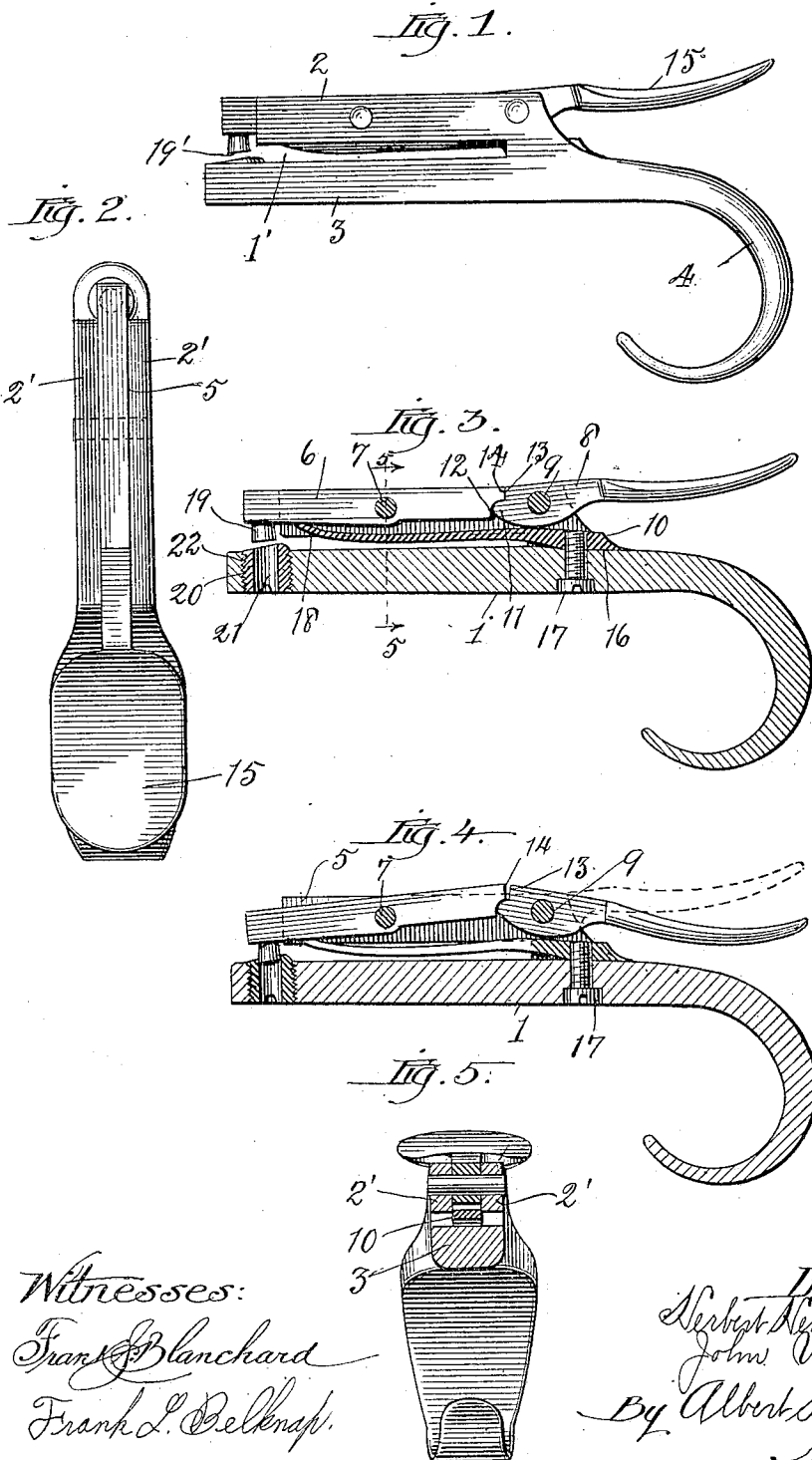
No. 839,410.

PATENTED DEC. 25, 1906.

H. H. NORTH & J. URION.

TICKET PUNCH.

APPLICATION FILED MAY 14, 1906.



Witnesses:
 Frank Blanchard
 Frank L. Delaney.

Inventors:
 Herbert Henry North,
 John Urion,
 By Albert N. Graves
 Attorney.

UNITED STATES PATENT OFFICE.

HERBERT HENRY NORTH, OF OMAHA, AND JOHN URION, OF SOUTH
OMAHA, NEBRASKA.

TICKET-PUNCH.

No. 839,410.

Specification of Letters Patent.

Patented Dec. 25, 1906.

Application filed May 14, 1906. Serial No. 316,625.

To all whom it may concern:

Be it known that we, HERBERT HENRY NORTH, residing at Omaha, and JOHN URION, residing at South Omaha, in the county of Douglas and State of Nebraska, citizens of the United States, have invented certain new and useful Improvements in Ticket-Punches, of which the following is a specification.

This invention relates to improvements in ticket-punches; and among the salient objects of the invention are to provide a novel form and arrangement of parts which renders the punch extremely compact and capable of being made small and yet sufficiently powerful; to provide a construction which affords an unusual depth of jaw-opening; to provide a construction consisting of extremely few parts, and those of a design susceptible of being very economically manufactured, and in general to provide an improved device of the character referred to.

The invention consists in the matters hereinafter described, and more particularly pointed out in the appended claims.

In the drawings, Figure 1 is a side elevation of the punch. Fig. 2 is a top or plan view of the punch. Fig. 3 is a vertical sectional view taken centrally through the main member and showing the moving jaw and operating-lever in side elevation. Fig. 4 is a view similar to Fig. 3 with the parts in changed position. Fig. 5 is a cross-sectional view taken on line 5 5 of Fig. 3 and looking in the direction of the arrows.

In said drawings, 1 designates as a whole the main body of the punch, which is longitudinally slotted in from one end to form upper and lower parallel members 2 and 3, respectively, and is provided at one end with a suitably-flattened tapering and curved handle 4. This handle portion is curved around hook-fashion, so that the punch may be conveniently suspended by hooking it over one of the fingers of the operator. The upper member 2 is longitudinally slotted and divided in a vertical plane to form a parallel-sided seat 5, within which are seated the several moving parts of the mechanism. These parts comprise an upper moving jaw 6, fulcrumed between the arms 2' 2' of the member 2 upon a through pin or pivot 7, extending through said parts about mid-length of the jaw member 6, a thumb-lever 8, similarly fulcrumed between the members 2' 2' upon

a through pin or pivot 9, located a short distance from the proximate end of the movable jaw, and a spring 10, which underlies the members 6 and 8 and exerts its tension to hold the forward or acting end of the jaw 6 normally retracted.

The thumb-lever 8 is provided at its forward end with a rounded nose 11, extending within and engaging a correspondingly-shaped recess 12 in the jaw member 6, and with a stop-shoulder 13, which normally engages a corresponding shoulder 14 upon the jaw member. The handle portion of said thumb-lever desirably takes the form of a flattened spoon-like member 15 of convenient shape for applying strong pressure by the ball of the thumb. The spring 10 has a thickened base portion 16, the under side of which is fitted to the bottom of the slot or recess which divides the upper half of the main frame and which is rigidly clamped to said seat by means of a screw 17, inserted through the underlying portion of the member 1 and threaded into the spring. The acting portion of the spring is curved upwardly from the base portion, so as to avoid obstructing the throat 1', and at its extreme end is deflected upwardly, as indicated at 18, and engages the under side of the movable jaw 6 near the acting end of the latter. The forward end of the lever 6 carries a male die member 19, which may be of any suitable and preferred cross-sectional configuration, that shown herein being circular, and the lower member or fixed jaw 3 carries a female die member 20, which is desirably removably seated in said jaw member. As shown, the die member 20 is axially bored, as indicated at 21, and is externally threaded, as indicated at 22, to fit within a correspondingly-threaded aperture formed through the jaw member 3. The upper or cutting end of the die member 20 is inclined relatively to the cooperating cutting end 19' of the die 19, so that as the parts are brought together a shearing cut is effected. The bore 21 extends entirely through the die member 20, so that the punchings are ejected.

We claim as our invention—

1. A ticket-punch having a main body comprising two upper spaced-apart parallel arms, a fixed jaw underlying said arms, parallel therewith and spaced therefrom to form a throat-opening, a pistol-handle formed as

an extension of said body, said parallel arms and fixed jaw being integral with each other, a movable jaw pivoted between its ends between the spaced-apart parallel arms, a thumb-lever likewise pivoted between the spaced-apart arms and interengaged with the proximate end of the movable jaw, a thumb-piece handle formed as an extension of said thumb-lever, a spring-tongue having its base end secured at the rear end of the throat-opening, its intermediate portion overlying the throat-opening and its free extremity engaging the under side of the forward end of the movable jaw, and male and female die members mounted the one upon the movable jaw member and the other upon the fixed jaw member.

2. A ticket-punch comprising a straight main body member longitudinally slotted in from one end to a point near the opposite point of the body member to form a ticket-receiving throat, the upper part of said main member above said throat being also longitudinally divided in a plane perpendicular to the plane of the throat-opening to form parallel arms and an intervening jaw-seat, a curved hook-shaped handle formed as a downwardly and forwardly returned integral

extension of said main body member, a movable jaw pivoted between said parallel arms at a point intermediate its length, a thumb-lever likewise pivoted between said arms at the rear end of said movable jaw, said thumb-lever being provided with a rounded lever extension and the proximate end of the movable jaw with a corresponding curved recess receiving said extension, limiting-shoulders formed upon the meeting ends of the thumb-lever and movable jaw, respectively, a tongue-like spring having its base portion rigidly secured in the rear end of the throat within which the thumb-lever is mounted and its acting end engaging the under side of the movable jaw in front of the fulcrum thereof, a male die member seated in the forward end of the movable jaw member and a female die member seated in register with the male die member in the fixed jaw, said female member being threaded into its seat and provided with a die-bore extending entirely therethrough.

HERBERT HENRY NORTH.
JOHN URION.

Witnesses:

W. E. BOLIN,
ALBERT W. LOGAN.