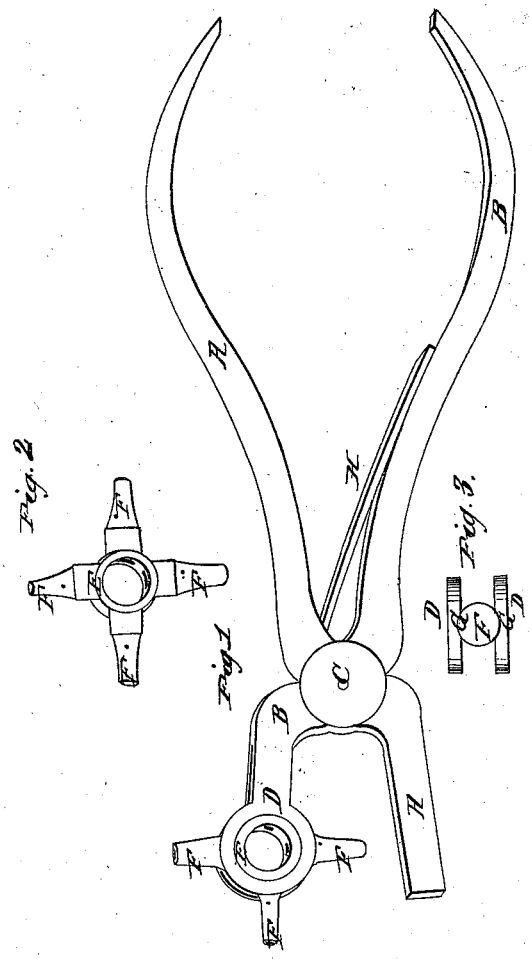
S. Merrick,

Punch,

№636, Patented Mar. 17, 1838



Witnesses

John Ingersoll

Jas. H. Goldthwait

Inventor

Solyman Merrick

UNITED STATES PATENT OFFICE.

SOLYMAN MERRICK, OF SPRINGFIELD, MASSACHUSETTS.

REVOLVING SPRING-PUNCH.

Specification of Letters Patent No. 636, dated March 17, 1838.

To all whom it may concern:

Be it known that I, SOLYMAN MERRICK, of Springfield, in the county of Hampden and State of Massachusetts, have invented an Improvement in Spring-Punches; and I hereby declare that the following is a full and exact description of my said improvement.

I construct the article in the same manner as the spring punch now commonly in use, except the arm or lever to which the punch is attached. This lever I make thick enough at the end to retain sufficient strength after making the hole hereafter described. I then divide this lever into two parts or shanks, by cutting a kerf or groove in a line at right angles to the axis extending back toward the fulcrum and of a width sufficient for the free motion or passage of the punches hereafter described. At or near the end of these shanks, I drill a hole or circular opening in a line parallel with the axis, large enough to admit the hollow open cylinder hereafter described. I construct an open hollow cylinder fitted to the above mentioned opening in the shanks. Around the middle of the cylinder, four or more holes are made for inserting the punches hereafter described. The cylinder is then fitted in its place, and the punches of various calibers but of equal length and with shoulders of equal diameters in order to fit in the circular catches hereafter described, are inserted in the holes prepared for them in the cylinder. When thus fitted, they radiate from the cylinder, or stand out like spokes from the nave of a wheel; and when put in motion, they turn with the cylinder, passing in succession between the shanks, or elastic sides, above described, till a punch of the required size is brought into the line of contact with the opposing lever. The cuttings, or chips that have been punched pass into the interior of said cylinder and out at the open ends thereof. In order that the required punch should be fixed and held stationary, on the inner faces of the shanks where they come in contact with the shoulders of the punches, one or more sections of the surface of each are somewhat elevated; in the sections are sunk hollows or circular grooves, opposite and corresponding to each other, and in lines coinciding with the radiating punches, and so fitted as to clasp the punch when it falls into it. When it is desired to change the use of one punch for another, and they are put in motion, turning on a common center, the shoulder of the punch comes in contact with the elastic section. The shanks being elastic, are thus separated, and when the punch has reached its proper place, the circular grooves clasp the shoulders of the punch and hold it firmly until another change is required.

The foregoing I have given as my present method of constructing the tool with my improvement, though not intending to confine my invention to the foregoing arrangement or particular construction of the parts, for the same may be varied in some respects to produce the same results, in accordance with the principles of my invention.

What I claim as my invention and desire to secure by Letters Patent, is—

The combination and arrangement of the punches, the cylinder, the elastic shanks or sides of the lever, and the circular grooves or catches, as herein set forth.

SOLYMAN MERRICK.

In presence of—
JOHN INGERSOLL,
JOHN H. GOLDTHWAIT.