

D. A. Faulkner

PATENTED JUN 27 1871

Punch.

116288

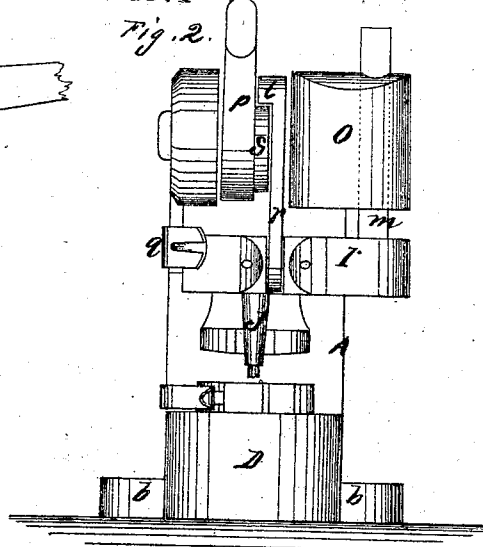
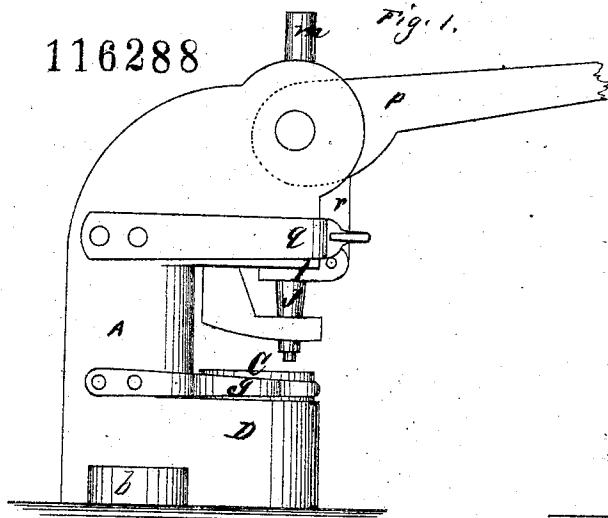


Fig. 3.

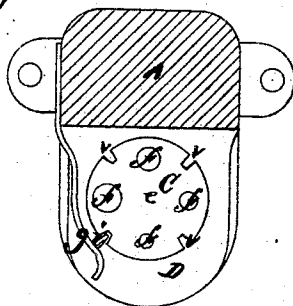
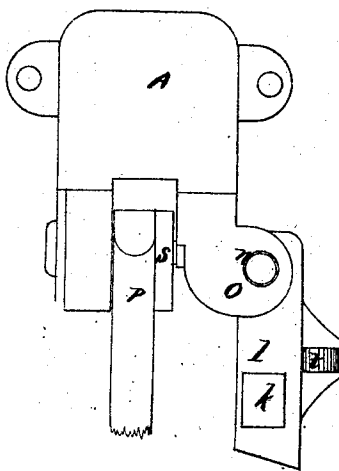


Fig. 4.



Witnesses.
Geo. A. Strong
Wm. H. Runnels

Inventor.
Daniel A. Faulkner
By his Atty.
Dewey & Co.

UNITED STATES PATENT OFFICE.

DANIEL ANDERSON FAULKNER, OF CENTREVILLE, CALIFORNIA.

IMPROVEMENT IN PUNCHING-MACHINES.

Specification forming part of Letters Patent No. 116,288, dated June 27, 1871.

To all whom it may concern:

Be it known that I, DANIEL ANDERSON FAULKNER, of Centreville, county of Alameda, State of California, have invented an Improved Punch; and I do hereby declare the following description and accompanying drawing are sufficient to enable any person skilled in the art or science to which it most nearly appertains to make and use my said invention or improvements without further invention or experiment.

My invention relates to improvements in stationary punches, such as are used for punching leather, metal, and other substances; and it consists in the arrangement and combination of parts, as hereinafter set forth.

In order to more fully illustrate and explain my invention, reference is had to the accompanying drawing forming a part of this specification, in which—

A represents the stand or casting, which is secured upon a table or bench by means of a screw passing through holes in the side lugs *b*, and is constructed similar to the body of an ordinary punch. The die *C* is a circular plate of metal, which is secured upon the projecting base *D* by a screw, *e*, which passes through its center and about which it can revolve. Through this die-plate, and at equal distance from the rim, are made two or more holes, *f*, of the different sizes required. A spring, *g*, is secured to the side of the stand *A*, and extends forward along the face of the base *D*. The extremity of this spring is formed into a lug, *i*, which engages with slots *v* in the rim of the plate *C*, thus forming a ratchet to retain the die-plate in the position required. There are as many slots as there are holes in the die, and they are so arranged that by setting the spring-ratchet in any slot one of the holes will be brought under the punch. The punch-stem *J* is provided with an enlarged head, *k*, and passes down through a hole in the block *l* until the head rests upon the upper side of the block. To one end of the upper side of the block *l* is fixed a vertical pin, *m*, which slides up into a hole, *n*, through the jaw *o*, at one side of the cam-lever *p*. The block *l* is then swung around so as to

close upon the opposite side, where it is held by a spring, *q*, or equivalent device. An arm, *r*, is secured to the front of the block *l*, and extends upward above and alongside of the side cam *s* of the lever *p*. On the upper end of this arm is a side projection, *t*, which engages with the side cam *s* when the lever is being raised and lifts the punch and block *l* from the die.

When it is desired to punch a particular-sized hole the spring *g* is retracted and the plate *C* turned until the proper hole is brought under the punch; the spring will then engage in one of the notches *v* and fix it in place. The free end of the block *l* is then released from the spring *g* and swung open; the punch-stem is then removed and the required size substituted, when, by closing the block, the punch is ready for use. In bringing down the lever *p* the cam will bear upon the enlarged head *k* of the punch-stem and force the punch into the hole under it; and in again elevating the lever the side cam *s* raises the punch into its former position. By this means I provide a punch which can readily be adjusted to make any desired size of hole.

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

1. The block *l* with its vertical guide-stem *m* and punch-stem *J*, in combination with handle *P* carrying the cam *s*, and arm *r* with its projection *t*, substantially as and for the purpose set forth.

2. The block *l* with its vertical guide-stem *m*, punch-stem *J*, and circular die-plate *C* provided with different-sized holes *f* and with slots *v*, in combination with the spring-ratchet *g*, handle *P* carrying the cam *s*, and arm *r* with its projection *t*, substantially as and for the purpose described.

In witness whereof I have hereunto set my hand and seal.

DANIEL ANDERSON FAULKNER. [L. s.]

Witnesses:

H. C. GREGORY,
CHAS. J. BOND.