

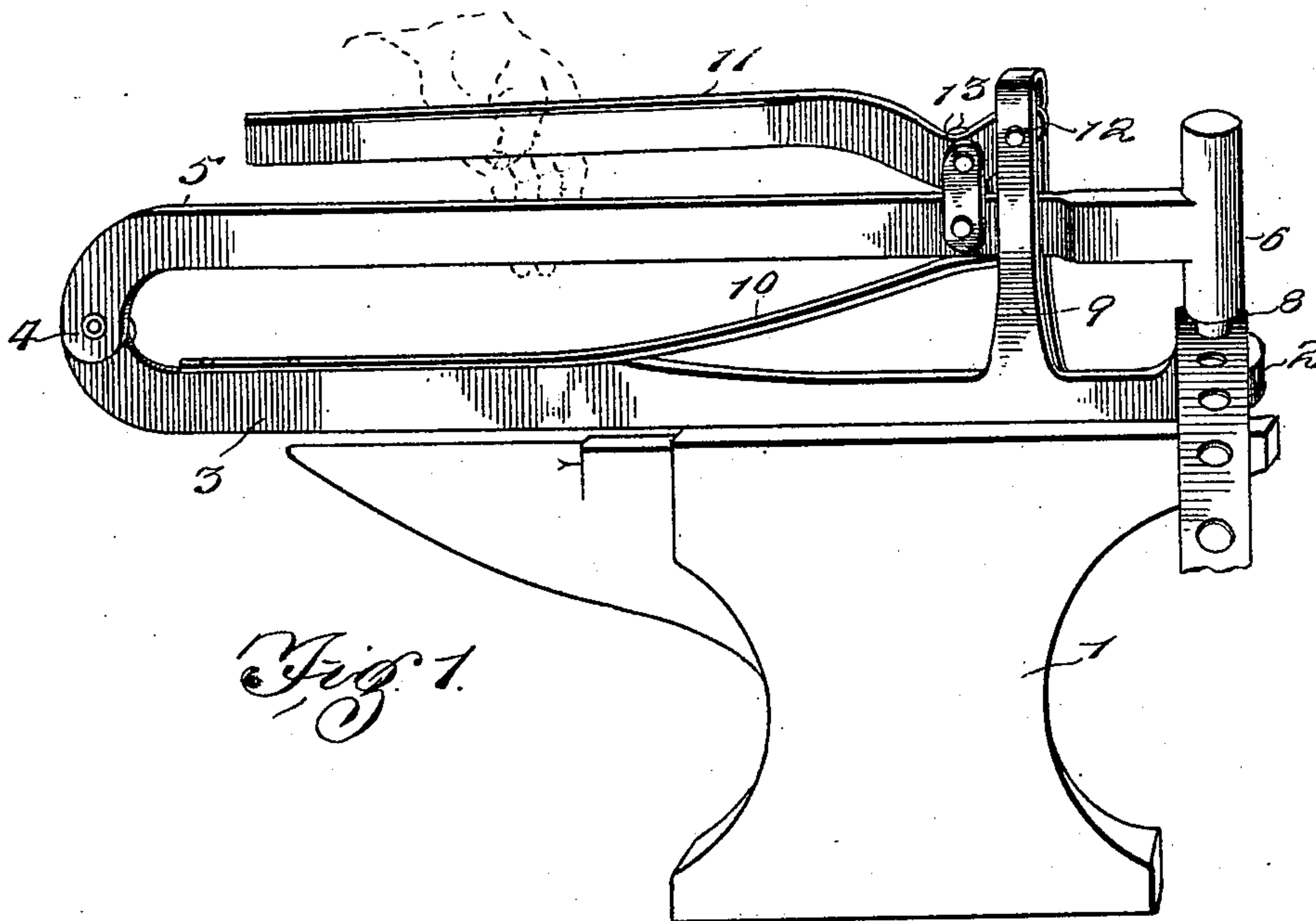
No. 689,432.

Patented Dec. 24, 1901.

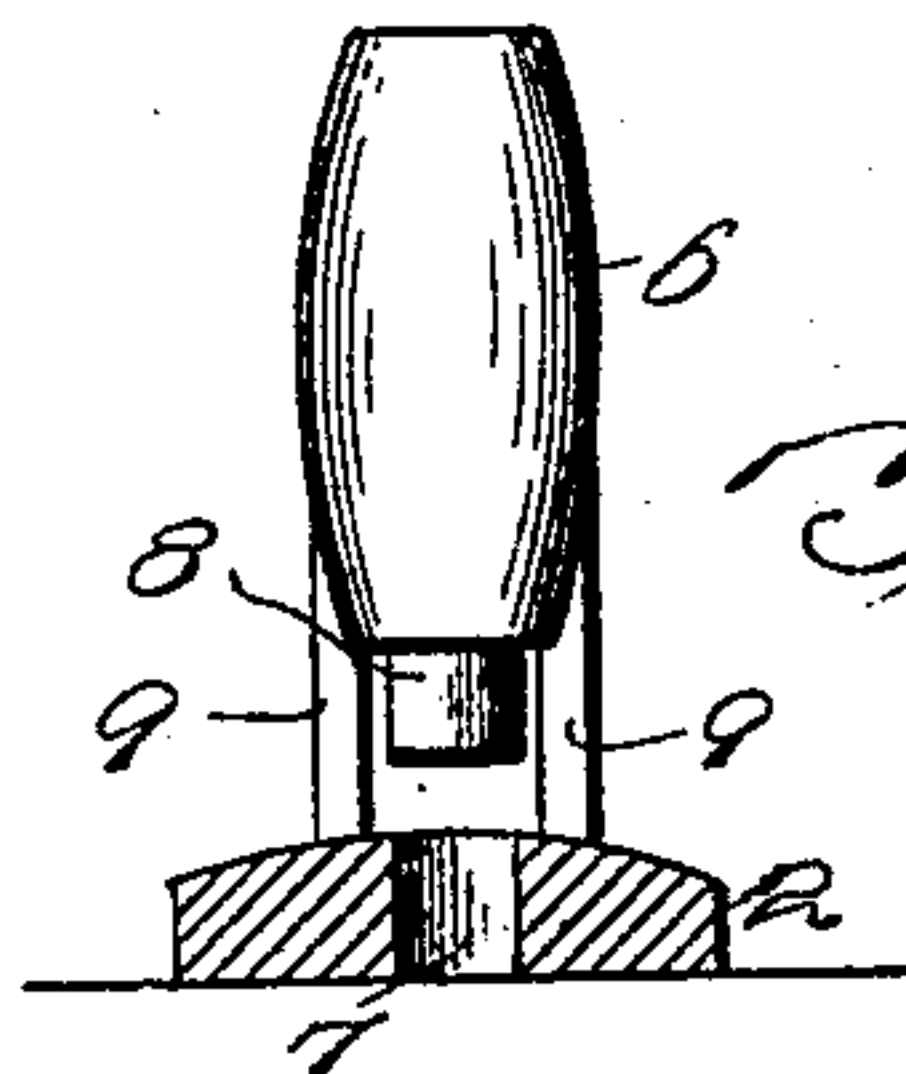
H. C. TEVEBAUGH.  
PUNCH.

(Application filed May 25, 1901.)

(No Model.)



*Fig. 1.*



*Fig. 2.*

Witnesses

*O. M. Simpson*  
*C. H. Woodward*

by

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# UNITED STATES PATENT OFFICE.

HENRY C. TEVEBAUGH, OF HONDO, TEXAS.

## PUNCH.

SPECIFICATION forming part of Letters Patent No. 689,432, dated December 24, 1901.

Application filed May 25, 1901. Serial No. 61,956. (No model.)

*To all whom it may concern:*

Be it known that I, HENRY C. TEVEBAUGH, a citizen of the United States, residing at Hondo, in the county of Medina and State of Texas, have invented a new and useful Punch, of which the following is a specification.

This invention relates to implements employed for perforating metal when cold; and it consists in the peculiar construction and combination of devices hereinafter fully set forth and claimed.

In the accompanying drawings, Figure 1 is a perspective view of the device complete. Fig. 2 is an end elevation of the same, partly in section, in which a modified form of the head is shown.

This implement is designed to be used in punching cold metal in blacksmith and machine shops and in similar localities and will generally be employed in connection with an ordinary blacksmith's anvil as a base or support, and for the purpose of illustration I have shown it in Fig. 1 thus arranged, the anvil being designated at 1.

The base proper of the punch is shown at 2 and is an anvil containing the die, is extended backwardly, as at 3, and turned upwardly, to which upturned portion is pivotally united, as at 4, a bar 5, the latter extending forwardly and terminating in a head 6, adapted to be struck by a sledge or hammer, and having a punch 8 at its lower end. The anvil 2 contains the die 7. The lengths of the two parts 5 and 3 will be so proportioned that the same will coact. The bar 3 may be formed smaller than the anvil or nether part 2, as shown, to lighten the implement, as the strains sustained by the bar portion of the base will not be so great as those to which the anvil portion will be subjected, and the same is true of the upper portion of the implement, wherein the bar 5 may be formed much smaller than the head portion 6, as the only function of the bars 3 and 5 and the standard 9 is to support the head 6 and the material being held thereby while the active member of the punch is being operated. The member 6 may be actuated by the blow of a sledge or hammer or by any other suitable force. Generally, however, the blow of a sledge will be the power employed. Rising from the part 3, near the anvil portion 2, is a slotted standard 9, em-

bracing and supporting the two parts 3 and 5 and insuring their permanent proper vertical alinement at all points of the stroke of the punch. A spring 10 will be arranged between the parts 3 and 5 to keep the part 5 and its punch-head normally elevated, as shown. When thus arranged, a simple and convenient implement is produced which may be employed in any locality and in connection with other implements and in localities and under circumstances where the larger and more bulky punching-machines could not be employed.

In operating the device the metal to be punched is placed upon the anvil 2 in the proper position and the punch member 6 pressed down upon the work by compressing the arm 5 by any suitable means, either manually or by a system of levers, by which means the work is firmly held while being acted on and all danger of the punch flying off or the metal being punched becoming displaced is prevented. The punch member 6 is then actuated, as before stated, by any suitable outside force. The work is more quickly and uniformly accomplished, and less danger exists for the displacement of either the work or the punch.

The relative location of the die and the part to be punched out can be more certainly and quickly insured than with the ordinary hand-operated punches, and by a device which is very simple, cheap, and of so few parts that it is not liable to become disarranged or otherwise get out of order.

The bar 5 may be actuated by any suitable means, such as a lever 11, pivoted at 12 in the standard 9 and connected by links 13 to the bar 5, as shown. By this means the bar 5 may be actuated with a large degree of force by reason of the short "nip" of the lever 11 upon the bar 5, whereby the pressure upon the work may be greatly increased, as may be required to hold the work while being punched. By this arrangement the work being acted upon is held as in a vise and the efficiency of the implement thereby greatly increased.

What I claim as new is—

1. In an implement of the class described, a pair of bars pivotally connected together, one having a guide-standard engaged by the



other, said bars being respectively provided with a punch and a die, a spring to open said bars, and a grip-lever fulcrumed to said guide-standard, said grip-lever being adapted to operate on one of said bars, substantially as described.

2. In an implement of the class described, two opposing bars pivotally united at their outer ends and provided with the opposing members of a punch at their other ends, a slotted standard upon one of said bars and embracing the opposite bar and forming a combined support and guide thereto, and a spring disposed between said bars to retain them normally separated, a grip-lever pivoted to the outer end of said standard and disposed to exert its force upon the bar embraced by said standard, whereby the material to be acted upon by the punch will be forcefully held in position upon the nether or anvil member while force is applied to the active member of the punch, substantially as described.

3. In an implement of the class described, two opposing bars pivotally united at their outer ends and provided with the opposing members of a punch at their other ends, a slotted standard upon one of said bars and embracing the opposite bar and forming a combined support and guide thereto, a grip-lever pivoted to the outer end of said standard and disposed to exert its force upon the bar embraced by said standard, whereby the material to be acted upon by the punch will be forcefully held in position upon the nether or anvil member while force is applied to the active member of the punch, substantially as described.

In testimony that I claim the foregoing as my own I have hereto affixed my signature in the presence of two witnesses.

HENRY C. TEVEBAUGH.

Witnesses:

AUGUST KEMPF, Jr.,  
W. J. HARPER.