(Model.)

F. W. TOEDT.

SHEET METAL PUNCH.

No. 278,633. Patented May 29, 1883.

Fig 1

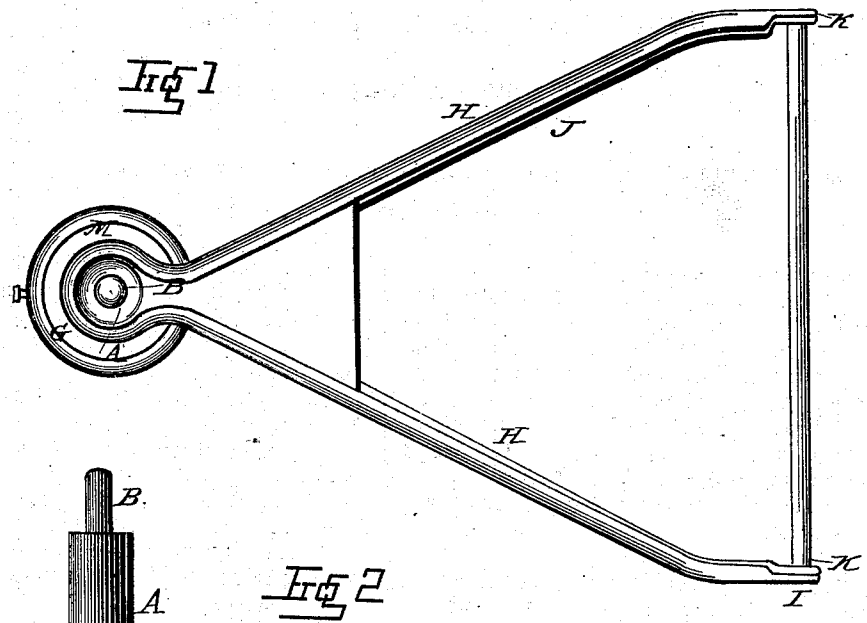


Fig 2

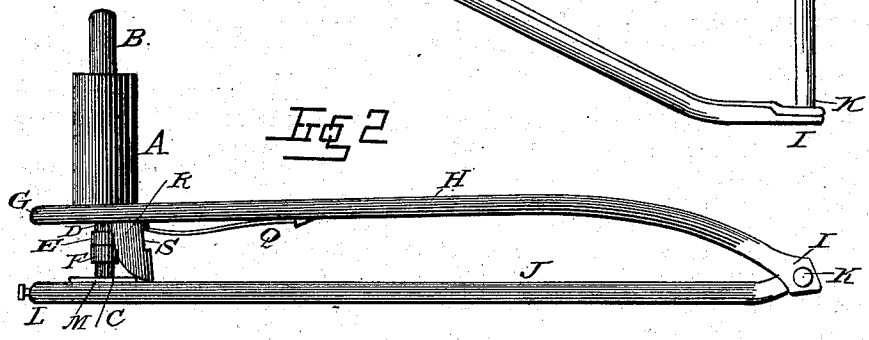
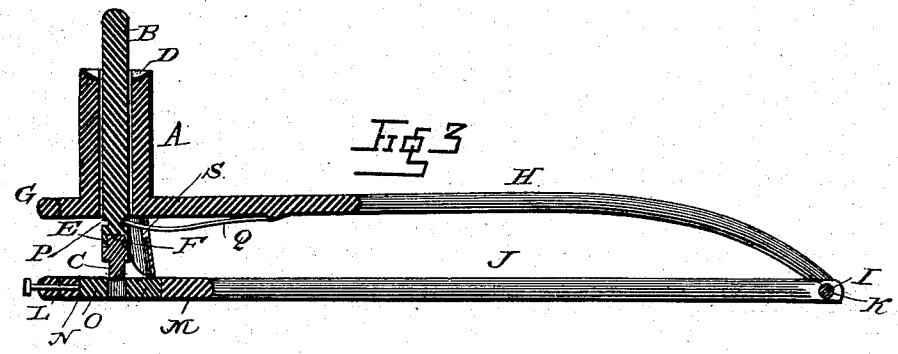


Fig 3



WITNESSES:

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UNITED STATES PATENT OFFICE.

FREDERICK W. TOEDT, OF GLENWOOD, IOWA.

SHEET-METAL PUNCH.

SPECIFICATION forming part of Letters Patent No. 278,633, dated May 29, 1883.

Application filed January 15, 1883. (Model.)

To all whom it may concern:

Be it known that I, FREDERICK W. TOEDT, of Glenwood, in the county of Mills and State of Iowa, have invented certain new and useful Improvements in Punches for Sheet Metal; and I do hereby declare that the following is a full, clear, and exact description of the invention, which will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, which form a part of this specification, in which—

Figure 1 is a top view of my improved punch for sheet metal. Fig. 2 is a side view, and Fig. 3 is a sectional view, of the same.

Similar letters of reference indicate corresponding parts in all the figures.

My invention has relation to punches for sheet metal; and it consists in the improved construction and combination of the same, as hereinafter more fully described and claimed.

In the accompanying drawings, the letter A indicates the bearing in which the stem B of the punch C slides. The top of this bearing is recessed at D, the recess, inclining toward the punch-stem, serving as a receptacle for oil. The lower end of the stem has a screw-threaded recess, E, into which the upper reduced and screw-threaded end, F, of the punch fits, so that the punch may be removed and another of different size put in its place. The bearing A is fastened in an eye, G, formed by a vent-rod, H, the curved ends of which are hinged at I to the ends of a bent rod, J, forming straight divergent arms upon the ends of a cross-bar, K. The rod J forms an eye, L, at its bent part, in which is fastened a disk, M, having a square or polygonous aperture, N, in which the die O is removably fastened, so that it may be removed and another inserted, according to the size of the punch used. The lower end of the punch-stem has an annular groove, P, in which the end of a spring, Q, projects, which serves to spring the punch back again when it has been driven through the metal and is fastened upon the frame. Upon the under side of the bearing A is fastened a foot, R, having a slot, S, to allow the spring to pass through, which rests upon the sheet to be punched.

By hinging the frame the punch may be used for different thicknesses of sheet metal, the foot R, resting upon the sheet, holding the punch in its proper position.

Having thus described my invention, I claim and desire to secure by Letters Patent of the United States—

1. A punch for sheet metal, consisting of two bars or rods bent in V shape, hinged together at their divergent ends, and forming eyes at their apices, in which the bearing for the punch and the die are fastened, substantially as and for the purpose shown and set forth.

2. The combination of the bent rod H, forming eye G, bearing A, having foot R, punch B C, bent rod J, forming eye L, die-disk M, and die O, as and for the purpose shown and set forth.

3. The punch for sheet metal, consisting of the punch C, having reduced screw-threaded part F, stem B, having screw-threaded recess E, and annular groove P, bearing A, having recess D, foot R, bent rod H, forming eye G, spring Q, cross-bar K, bent rod J, forming eye L, disk M, having aperture N, and die O, all constructed and combined substantially as and for the purpose shown and set forth.

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

FREDERICK WILLIAM TOEDT.

Witnesses:

MATHEW G. BURKE,

ALLIE A. QUAKENBUSH.