

No. 897,641.

PATENTED SEPT. 1, 1908.

C. L. MOSES.
METAL WORKING TOOL.
APPLICATION FILED APR. 21, 1908.

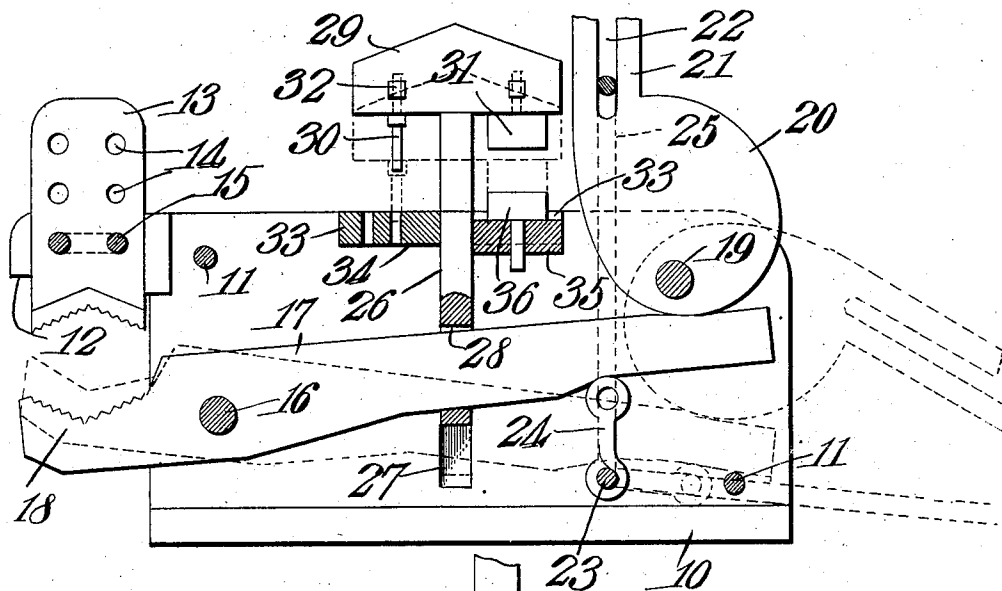


Fig. 1.

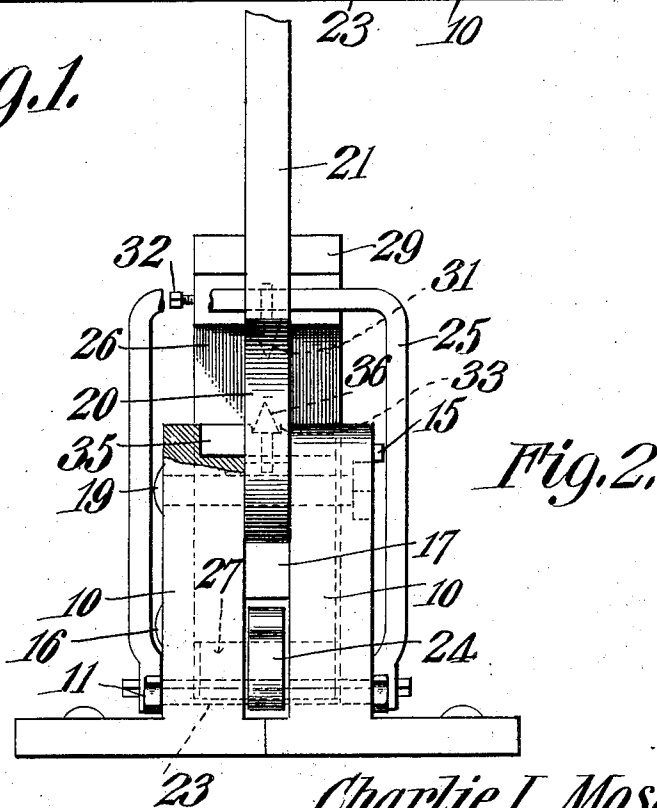


Fig. 2.

Witnesses

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CHARLIE L. MOSES, OF HILLTOP, WEST VIRGINIA.

METAL-WORKING TOOL.

No. 897,641.

Specification of Letters Patent.

Patented Sept. 1, 1908.

Application filed April 21, 1908. Serial No. 428,321.

To all whom it may concern:

Be it known that I, CHARLIE L. MOSES, a citizen of the United States, residing at Hilltop, in the county of Fayette and State of West Virginia, have invented a new and useful Metal-Working Tool, of which the following is a specification.

This invention relates to metal working tools and has a special reference to combined tools.

The object of the invention is to provide an improved form of combined tool and the invention consists of a frame whereon are mounted suitable vise members, and shearing members together with means for operating the same.

The invention further consists in certain novel details of arrangement and details of parts hereinafter fully described, illustrated in the accompanying drawings, and specifically set forth in the claims.

In the accompanying drawings, like characters of reference indicate like parts throughout the several views.

Figure 1 is a side elevation of the invention with one of the framed sides removed to show the working parts. Fig. 2 is a rear elevation of the invention.

The frame comprises two straight side portions 10, which are secured together rigidly by bolts 11. Each of these straight sides 10 is provided with an extended portion 12 at the upper part of the front of said frame sides and these portions 12 have suitable bolt holes formed therein. Between these portions 12 is held a vise jaw 13 provided with a plurality of openings 14 therein arranged to receive a bolt 15. In the preferred form of the invention these bolt holes are arranged in pairs as shown clearly in Fig. 1, and the bolt 15 is arranged to be readily grasped by the hand and withdrawn or inserted. The vise jaw 13 may thus be readily adjusted. When the vise jaw is thus adjusted it becomes the stationary member of the device, and will be referred to as the stationary vise jaw.

Pivotally mounted on a bolt 16 is a lever 17 the outer end of which is formed as a vise jaw 18. The bolt 16 serves the double purpose of the pivot for the lever 17 and assists in the rigid securing of the frame sides.

Pivotally mounted upon the bolt 19 is a cam 20 provided with a handle 21 having a slot extending longitudinally thereof. This cam is so arranged that when the handle is depressed, the cam will cause the inner end

of the lever 17 to be depressed, the cam being in contact with the upper face of said lever. Beneath the inner end of the lever 17 is a rock shaft 23 whereon is mounted a rock arm 24 the end of which bears against the under side of the lever 17. A bail 25 is arranged to pass through the slot 22 and is mounted on the rock shaft 23, being rigidly secured thereto.

It will be obvious that as the handle 21 is depressed the cam 20 will rotate and at the same time the rock shaft 23 will rotate. The cam 20 is so proportioned that in whatever position it may be placed the lever 17 will be closely held between the cam and the rock arm 24. The lever 17 is thus positively moved either up or down by the coaction of the cam and rock arm.

A plate 26 is slidably mounted in suitable recesses 27 in the frame sides 10. This plate is provided with an opening 28 through which passes the lever 17. A head 29 is rigidly attached to this plate, and is provided with suitable recesses to receive the shanks of metal working tools as the punch 30 and the shear blades 31. These tools are held in position by means of set screws 32. Recesses 33 are provided in the frame sides' end and die blocks 34 and 35 are held in these recesses. The die block 35 is provided with an opening to receive the shank of the shear blades 36.

It is obvious that the shear blades 31 and 36 may be positioned as shown in Fig. 1, in which case they are used for cutting off a bar or the like, or they may be turned at right angles and positioned for use in slitting. Upon inspection of Fig. 1 it will be apparent that when the inner end of the lever 17 is depressed, it will carry with it the plate 26, and head 29 with the tools mounted thereon.

It is further obvious that tools of various shapes and sizes may be mounted in the head 29 and corresponding die blocks may be held within the recesses 33. There is thus provided a simple and efficient device of great utility.

Having thus described the invention, what is claimed as new is:—

1. In a device of the character described, a frame, a tool actuating lever pivotally mounted thereon, an operating lever provided with a slot and a cam head resting against one face of said first mentioned lever, a rock shaft, a rock arm mounted thereon to press against the opposite face of the first

mentioned lever, and a bail passing through said slot and fixedly mounted on said rock shaft.

2. In a device of the character described, 5 a frame, a tool actuating lever pivotally mounted thereon, a vise member formed on said lever, a second vise member adjustably mounted on said frame, in opposition to the vise member on the lever, an operating lever 10 provided with a slot and a cam head resting against one face of said tool actuating lever, a rock shaft, a rock arm mounted thereon to press against the opposite face of the first mentioned lever, and a bail passing through 15 this slot, and fixedly mounted on said rock shaft.

3. In a device of the character described, a frame, a lever pivotally mounted thereon, a tool supporting head actuated by said 20 lever, a vise member formed on said lever, a second vise member adjustably mounted on said frame in opposition to the vise member on the lever, an operating lever provided with a slot and a cam head resting against 25 one face of said first mentioned lever, a rock shaft, a rock arm mounted thereon to press against the opposite face of the first mentioned lever, and a bail passing through this slot, and fixedly mounted on said rock shaft.

4. In a device of the character described, 30 a frame, a lever pivotally mounted thereon, a tool supporting head actuated by said lever, tools detachably mounted on said head, die blocks mounted on said frame, a 35 vise member formed on said lever, a second

vise member adjustably mounted on said frame in opposition to vise member on the lever, an operating lever provided with a slot and a cam head resting against one face of said first mentioned lever, a rock shaft, a rock 40 arm mounted thereon to press against the opposite face of the first mentioned lever, and a bail passing through said slot and fixedly mounted on said rock shaft.

5. In a device of the character described, 45 a frame, a lever pivotally mounted thereon, a tool supporting head actuated by said lever, a punch and a shear blade detachably mounted on said head, die blocks mounted on said frame, a shear blade held in one of said 50 die blocks to coact with the shear blade on the head, a vise member formed on said lever, a second vise member pivotally mounted on said frame in opposition to the vise member on the lever, an operating lever pro- 55 vided with a slot and a cam head resting against the face of said first mentioned lever, a rock shaft, a rock arm mounted thereon to press against the opposite face of the first mentioned lever, and a bail passing through 60 said slot and fixedly mounted on said rock shaft.

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

CHARLIE L. MOSES.

Witnesses:

I. R. MITCHELL,
IRA D. MAYNOR.