

J. F. SCHLICK.
METAL CALKING TOOL.

(No Model.)

(Application filed May 13, 1898.)

2 Sheets—Sheet 1.

Fig. 1.

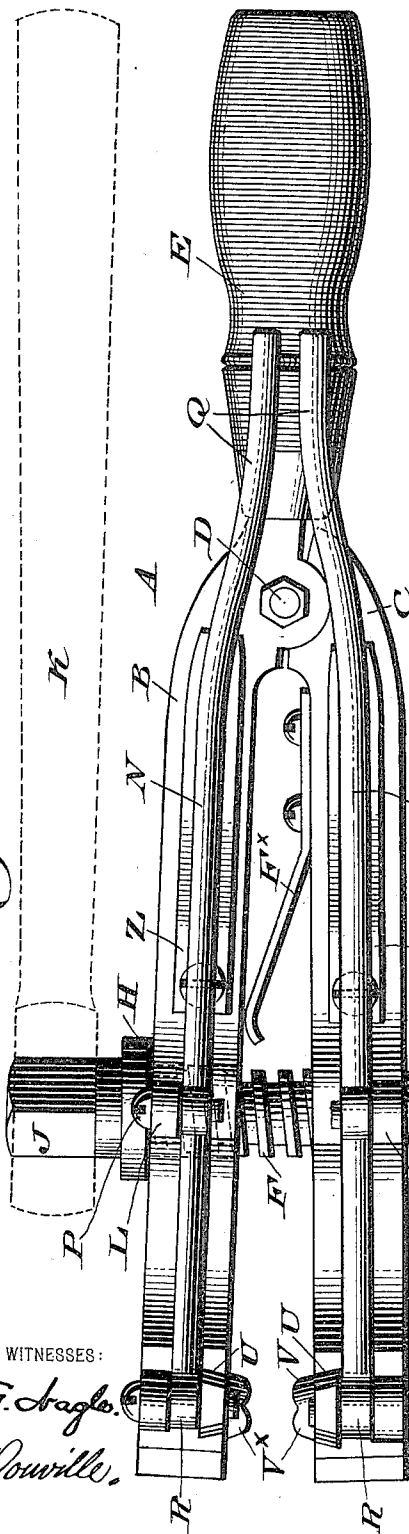


Fig. 2.

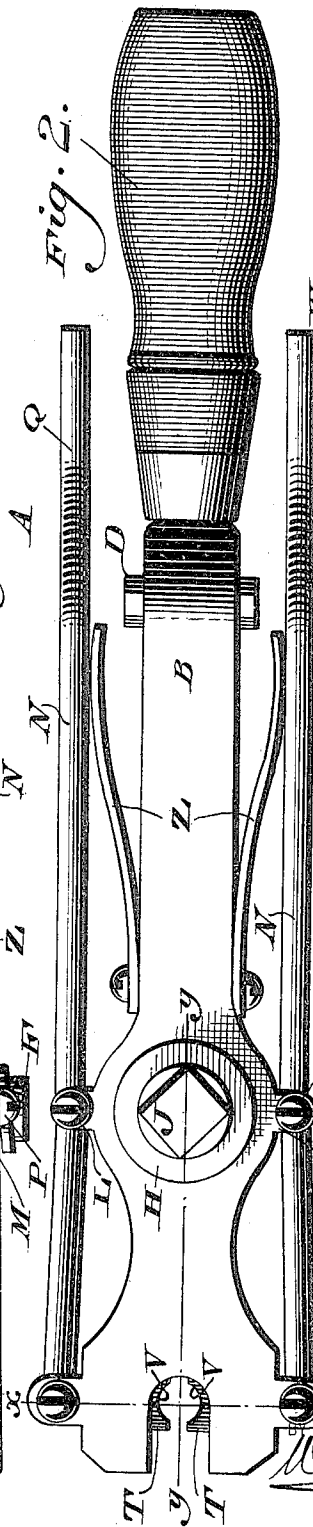


Fig. 8.

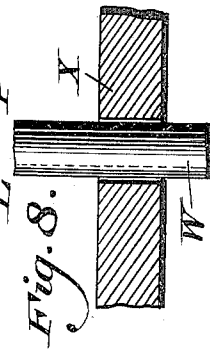
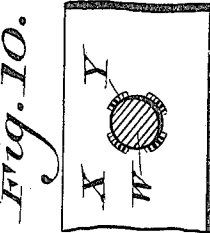
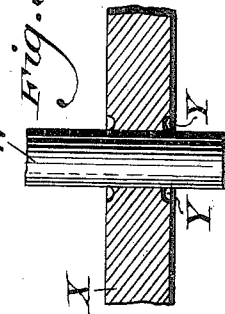


Fig. 9.



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No. 617,054.

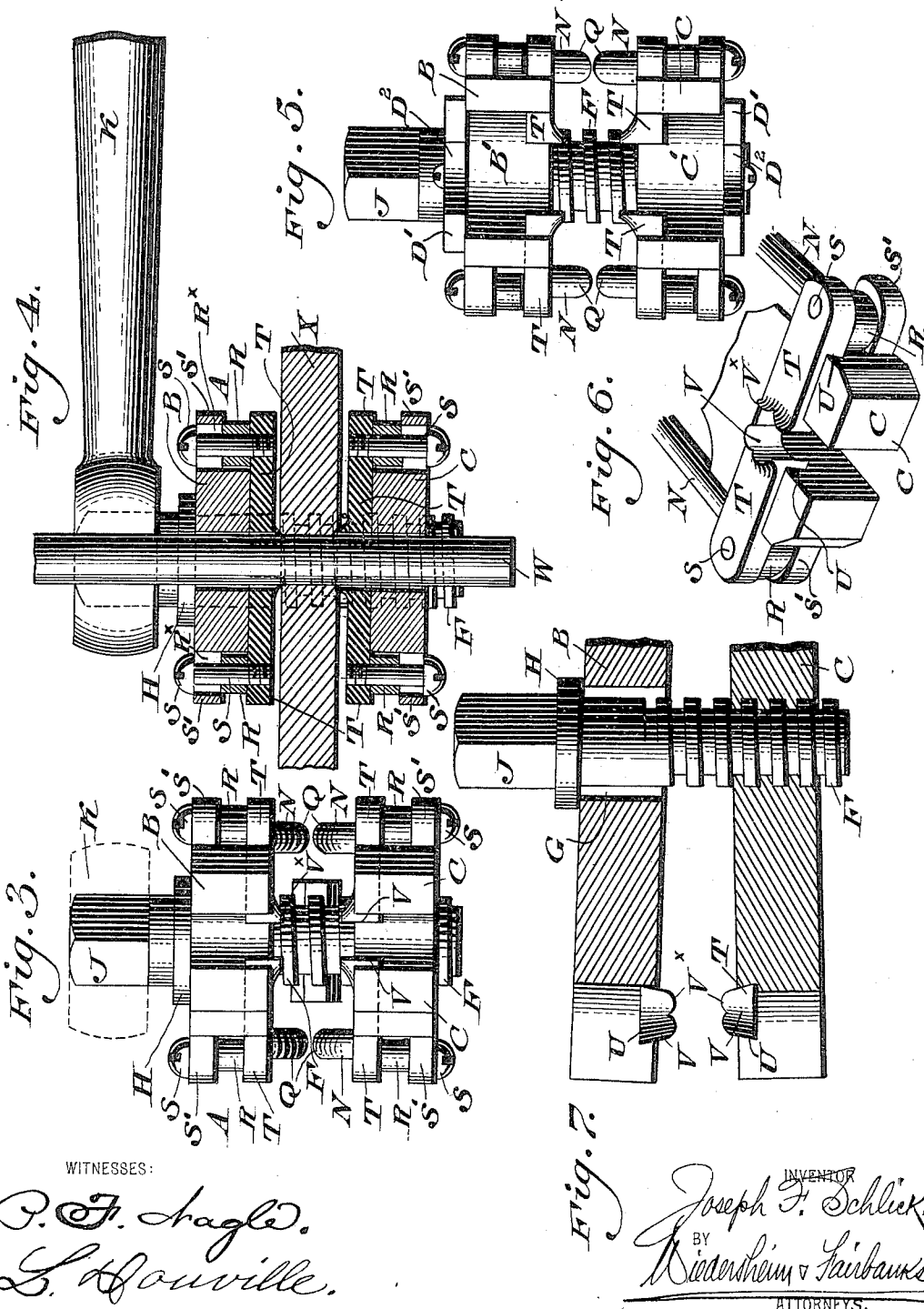
Patented Jan. 3, 1899.

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2 Sheets—Sheet 2.



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Fig. 7.

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JOSEPH F. SCHLICK, OF PHILADELPHIA, PENNSYLVANIA.

METAL-CALKING TOOL.

SPECIFICATION forming part of Letters Patent No. 617,054, dated January 3, 1899.

Application filed May 13, 1898. Serial No. 680,557. (No model.)

To all whom it may concern:

Be it known that I, JOSEPH F. SCHLICK, a citizen of the United States, residing in the city and county of Philadelphia, State of Pennsylvania, have invented a new and useful Improvement in Metal-Calking Tools, which improvement is fully set forth in the following specification and accompanying drawings.

My invention consists of an improved construction of metal-calking tool which can be cheaply manufactured and readily applied to the purposes for which it is designed, the number of parts being also reduced to a minimum, whereby the tool is rendered less likely to get out of order than heretofore.

It further consists of novel details of construction, all as will be hereinafter fully set forth, and particularly pointed out in the claims.

Figure 1 represents a side elevation of a calking-tool embodying my invention. Fig. 2 represents a top plan view of Fig. 1. Fig. 3 represents, on an enlarged scale, an end view of Fig. 1. Fig. 4 represents, on an enlarged scale, a section on line *x x*, Fig. 2, showing the tool in operation. Fig. 5 represents an end view of the tool similar to Fig. 3, but showing removable plates attached to the jaws, the function of which will be hereinafter referred to. Fig. 6 represents a perspective view of the inner portion of the lower left-hand extremity of Fig. 1. Fig. 7 represents a section on line *y y*, Fig. 2. Fig. 8 represents a sectional view of a portion of a metal fence or similar structure and a rod passing therethrough, the parts being shown in the position prior to the application of the tool thereto. Fig. 9 represents a sectional view similar to Fig. 8, showing the position of the parts after the tool has been applied thereto. Fig. 10 represents a top plan of the parts shown in Fig. 9.

Similar letters of reference indicate corresponding parts in the figures.

In the drawings, A designates a calking-tool, the same consisting of the arms or levers B and C, which are pivoted to each other at the point D and have a handle E common thereto.

F^x designates a spring having one end attached to the inner portion of one of said levers, as C, while its other or free end bears

against the other lever, said spring thus tending to keep the levers B and C normally apart.

F designates a screw which passes freely through an opening G in one of said levers, as B, said screw having a flange H thereon and a squared portion J for the application of a wrench K thereto, the lower portion of said screw engaging the lower lever C, said screw being preferably a double-threaded or other quick-acting screw, whereby the levers C are caused to rapidly approach each other when said screw is manipulated.

L and M designate lugs projecting laterally from the upper and lower levers B and C, respectively, and being located in the present instance at a point in proximity to the adjusting-screw F, said lugs being located on each side of each of said levers, as is evident.

N designates rods, which are fulcrumed in the lugs L by means of the screws or pins P or similar devices, said rods being preferably bent or deflected at or near their extremities Q, so as to terminate adjacent the handle E, and thus be readily grasped by the operator. The other extremities R of each of said rods are suitably secured by means of the pins or fastening devices S to the jaws T, which latter are adapted to reciprocate in ways U in the ends of each arm or lever, as will be understood from Fig. 6, said jaws being provided with the faces V and the gripping or biting edges of projections V^x, said faces in the present instance being rounded, although it will of course be evident that the same may be made of polygonal shape, if desired, so as to conform to the contour of the rod W, which is to be calked or otherwise secured to the metallic strip X of the fence or other device to which the tool is to be applied, said jaws V, after the proper manipulation of the screw F, causing the metal of the strip X to appear as indicated at Y in Figs. 9 and 10.

Z designates springs which serve to hold the rods N in their proper position relative to the levers B and C, said springs having one end suitably secured to the said levers on either side thereof, while the other or free ends of said springs bear against the rods M, so as to normally cause the jaws T to be moved inwardly toward each other.

The pins or screws T^x, which connect the

ends of the rods N to the jaws T, move in the slots R^x of the lugs S', as is evident from Fig. 4.

The operation is as follows: To use the tool, the screw F is adjusted so as to separate the levers B and C sufficiently so that the distance between the jaws T will be somewhat greater than the thickness of the strip X. The ends Q of the rods N, which actuate the jaws T, are then grasped by the operator, and the faces V of the jaws T are separated so as to partially inclose the rod W, which is to be calked. The rods N are then released, whereupon the springs Z will cause the same to tightly engage the periphery of the rod W, as indicated in Fig. 4. The adjusting-screw F is then turned by means of the wrench K or similar device until the metal of the strip or rail X is compressed or caused to tightly engage the metal of said strip, as indicated at the points Y, which will be understood from Figs. 4, 9, and 10, it being apparent that the rotation of the screw F will cause the edges V^x of the jaws T to approach each other, thus producing the desired result. The adjusting-screw J is now turned in the opposite direction, and the ends Q of the rods N being grasped by the operator so as to separate the jaws T the tool can be readily removed and applied wherever desired.

In Fig. 5 I show my tool constructed so as to be applied to different sizes of rods, the extremities of the levers B and C being provided with the recesses B' and C', which are partially closed by the plates D', which are attached to the outer faces of the levers B and C and provided with the recesses D² therein, it being evident that said plates can be removed, replaced, or interchanged, according to requirements.

It will be seen from the foregoing that by my invention the tool can be readily operated by unskilled labor and can readily be applied to and disconnected from the parts which it is desired should be calked.

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

1. In a metal-calking tool, the pivotally-supported levers, means for moving the free ends of said levers toward each other, the free ends of each of said levers being provided with oppositely-located jaws situated on opposite sides of the free end of each of

said levers and independently and transversely movable relative to the levers, and a longitudinal operating-rod connected with each of said jaws, mounted upon the levers and having their free ends situated near the rear ends of said levers.

2. In a metal-calking tool, two pivotally-supported levers, each of said levers having a notch or recess in its free end that is located transversely to the pivot thereof, means for moving said levers, two oppositely-located jaws upon the free ends of each of said levers, and on each side of said notch or recess, each of said jaws being transversely movable relative to the levers and adapted to move across the said notches or recesses.

3. In a metal-calking tool, a plurality of levers, a handle to which the same are pivotally attached, means for keeping said levers normally apart, an adjusting-screw for causing the free ends of said levers to approach each other, jaws mounted in the extremities of said levers, and operating-rods for said jaws, said rods terminating adjacent said handle.

4. In a metal-calking tool, a pair of levers movably attached to each other, a pair of jaws movably mounted upon the inner face of each of said levers, each of said jaws being transversely movable with respect to said levers, means for operating each of said jaws, the latter having their inner juxtaposed faces raised and recessed, and means for adjusting said levers.

5. In a metal-calking tool, a pair of levers pivotally supported by a common handle, means for keeping the latter normally apart, an adjusting-screw passing freely through one of said levers and engaging the other lever, operating-rods fulcrumed upon each of said levers, a portion of said rods being deflected and terminating adjacent said handle, springs for holding the free ends of said rods away from said levers, jaws movably mounted in the ends of said levers, connections common to said rods and jaws, the latter having their inner edges raised or sharpened so as to calk the metal to which they are applicable.

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Witnesses:

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