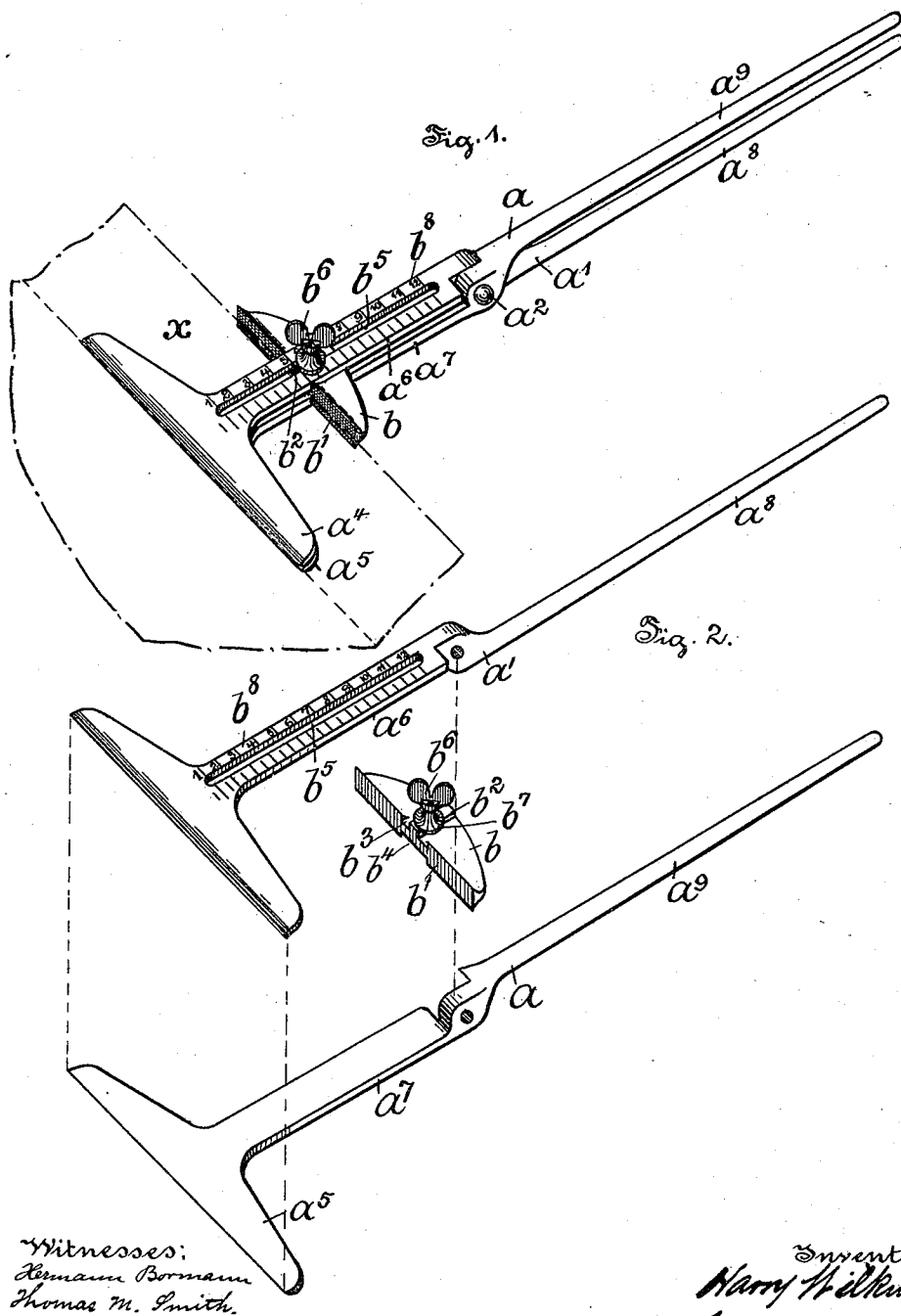


(No Model.)

H. WILKINS.
METAL WORKER'S TONGS.

No. 464,759.

Patented Dec. 8, 1891.



Witnesses:
Hermann Bornmann
Thomas M. Smith.

Inventor:
Harry Wilkins,
by Walter Douglas
Att'y.

UNITED STATES PATENT OFFICE.

HARRY WILKINS, OF PHILADELPHIA, ASSIGNOR OF FIFTY-ONE ONE-HUNDREDTHS TO MILTON H. EVANS, OF MOUNT CARMEL, PENNSYLVANIA.

METAL-WORKER'S TONGS.

SPECIFICATION forming part of Letters Patent No. 464,759, dated December 8, 1891.

Application filed June 15, 1891. Serial No. 396,303. (No model.)

To all whom it may concern:

Be it known that I, HARRY WILKINS, a citizen of the United States, residing at the city of Philadelphia, in the county of Philadelphia and State of Pennsylvania, have invented certain new and useful Improvements in Metal-Workers' Tongs, of which the following is a specification.

The principal object of my present invention is to provide simple, compact, durable, and comparatively inexpensive metal-workers' tongs for turning up, bending, or otherwise forming upon a sheet of metal a flange or gutter of any required width.

The present invention consists of the improvements in metal-workers' tongs herein-after fully described and claimed.

The invention further consists of the improvements hereinafter fully described, and particularly pointed out in the claims.

The nature and objects of the present invention will be more fully understood from the following description, taken in connection with the accompanying drawings, forming part hereof, and in which—

Figure 1 is a perspective view of a pair of metal-workers' tongs, showing an edge guide or gage embodying features of my invention in application thereto; and Fig. 2 is a detached view showing details of construction of the parts illustrated in Fig. 1.

In the drawings, a and a' are the levers or spindles of the tongs. These levers or spindles a and a' are pivotally connected by means of the pivot a^2 , and may be of the usual or of any preferred type or kind. a^4 and a^5 are jaws of the usual or of any preferred construction. The shanks a^6 and a^7 of these jaws a^4 and a^5 are attached to or formed integral with the levers or spindles a and a' . a^8 and a^9 are handles attached to or formed part of the spindles or levers a and a' .

Having thus described one of the many types of metal-workers' tongs to which my invention is applicable, a description will now be given of certain parts embodying features of the invention.

b is an edge guide or gage provided with a lip b' for contacting with the edge of a sheet of metal x in a manner to be presently de-

scribed, and with a transversely-ranging lug b^2 . This lip b' is cut away on opposite sides of the lug b^2 of the edge guide or gage, so as to form slots or recesses b^3 and b^4 for the reception of the shanks a^6 and a^7 of the jaws. 55

b^5 is a slot cut or otherwise formed in the shank a^6 of the jaw a^4 and adapted for the reception of the transversely-ranging lug b^2 .

b^6 is a set-screw, provided with a flange or gasket b^7 and adapted to engage the lug b^2 , so as to permit the edge guide or gage b to be clamped to place or shifted upon the shank a^6 . It may be remarked that the side walls of the lug b^2 and of the slot b^5 fit the shank a^6 snugly, thus maintaining the working-edge of the edge guide or gage b parallel with the working edges of the jaws a^4 and a^5 in all positions of the edge-guide. b^8 is a suitably-graduated scale for permitting of the accurate adjustment of the edge guide or gage b toward or away from the working edge of the jaws a^4 and a^5 . 70

The mode of operation of the hereinabove described metal-workers' tongs is as follows: After the set-screw b^6 is unscrewed, the edge guide or gage b is adjusted toward or away from the working edges of the jaws a^4 and a^5 by means of the scale b^8 , until the distance between the working edges of the guide or gage b and jaws a^4 and a^5 corresponds to the required width of the flange or gutter, whereupon the edge guide or flange b is again clamped to place. The sheet of metal x is then inserted between the jaws a^4 and a^5 until it contacts with the edge guide or flange b , whereupon the jaws a^4 and a^5 are caused, by means of the handles a^8 and a^9 , to grip the sheet of metal x , whereupon the latter is bent or curved in the usual manner. It may be remarked that the tongs may be employed in the manner indicated in Fig. 1—i. e., with the jaw having the edge guide or gage b above the sheet of metal; or, if preferred, the jaw having the edge guide or gage may be inserted underneath the sheet of metal x . The jaw having the edge guide or gage is shown in the drawings above the sheet of metal in order to more clearly illustrate the invention. 95

It will be obvious to those skilled in the art to which the invention relates that modifica- 100

tions may be made in details without departing from the spirit thereof, and hence I do not limit myself to the exact construction and arrangement of parts hereinabove set forth and
5 illustrated in the drawings; but,

Having thus described the nature and objects of the invention, what I claim as new, and desire to secure by Letters Patent, is—

10 The combination, in metal-workers' tongs, of fulcrumed levers or spindles provided with handles, transversely-ranging jaws connected with said spindles or levers by shanks, whereof one is longitudinally slotted, an edge-guide

provided with a lug adapted to work in said slotted shank and with an operating-lip recessed for the reception of both of said shanks, and a set-screw engaging said lug and slotted shank, substantially as and for the purposes set forth. 15

In witness whereof I have hereunto set my signature in the presence of two subscribing witnesses. 20

HARRY WILKINS.

Witnesses:

THOMAS M. SMITH,
RICHARD C. MAXWELL.