(No Model.)

W. H. MANNES.

TONGS.

No. 370,961. Patented Oct. 4, 1887.

Fig. 1.

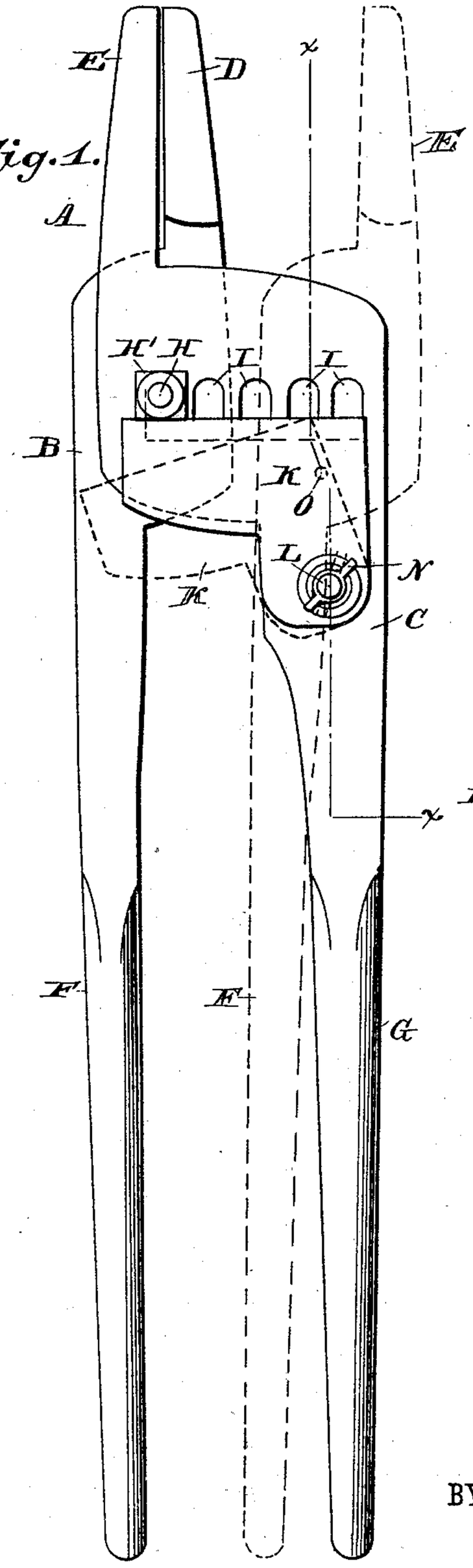


Fig. 2.

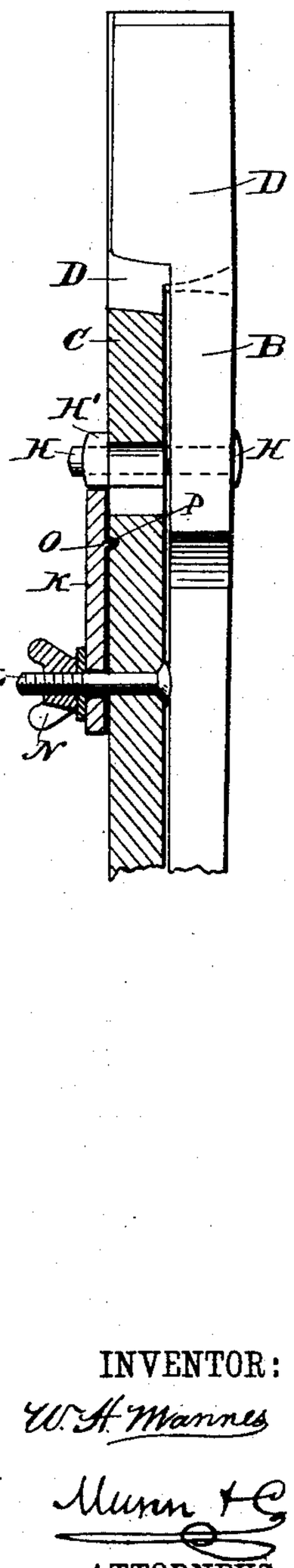
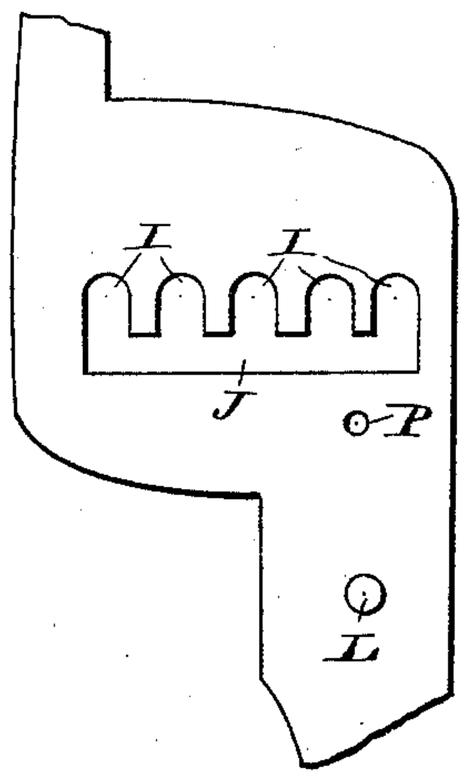


Fig. 3.



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TONGS.

SPECIFICATION forming part of Letters Patent No. 370,961, dated October 4, 1887.

Application filed June 15, 1887. Serial No. 241,454. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM HENRY MANNES, of Colorado Springs, in the county of El Paso and State of Colorado, have invented new and Improved Tongs, of which the following is a full, clear, and exact description.

The object of my invention is to provide a new and improved pair of tongs in which the jaws can be so adjusted as to leave any desired space between them.

The invention consists in providing one part of the tongs with the pivot-pin and the other part of the tongs with a cross-slot, into which lead a number of parallel slots adapted to engage the pivot-pin, so as to form the fulcrum for the last-named part, and of a square plate for holding the last-named part of the tongs in place on the pivot-pin.

The invention also consists of certain parts and details and combinations of the same, as will be fully described hereinafter, and then pointed out in the claims.

Reference is to be had to the accompanying drawings, forming a part of this specification, in which similar letters of reference indicate corresponding parts in all the figures.

Figure 1 is a front elevation of my improvement. Fig. 2 is a sectional end elevation of the same on the line *x x* of Fig. 1, and Fig. 3 is a face view of part of one part of the tongs.

The pair of tongs A is made in the usual two parts, B and C, provided with the jaws D and E and the handles F and G, respectively. In the part B is held to turn a pivot-pin, H, adapted to engage with its shank one of a number of slots, I, arranged parallel to each other and across the part C between the handle G and the jaw E. The slots I lead into a cross-slot, J, which permits of moving the part C so that the shank of the pivot-pin H may engage either one of the slots I, whichever is desired. The pivot-pin H is provided on the end held in one of the slots I with a square head, H′, which may be formed directly on the shank of said pin or may be a nut secured on the threaded end of said shank.

On the part C of the pair of tongs A is held a guard-plate, K, by means of the bolt L, secured to the part C, and provided with a winged nut, N, screwing down on said plate K. The latter is provided with a projection, O, which fits into a corresponding aperture, P, formed in the part C, so as to prevent said guard-plate K from turning after it is in place. The upper end of the guard-plate K covers the slot J, and when said guard-plate is in place the upper edge rests against one of the sides of the square head H′ of the pivot-pin H, so that said pivot-pin H cannot disengage the respective slot I, in which it had been previously placed.

It will be seen that when the two parts B and C of the pair of tongs A are in the position shown in Fig. 1—that is, the pivot-pin H is held in the extreme left-hand slot I—then the jaws E and D can be used for holding very small objects by manipulating the handles F and G in the usual manner, as said jaws E and D are closed very tightly. If the operator desires to hold larger objects, he unscrews the winged nut N and swings the guard-plate K downward, so as to free the slot J. The operator now moves the part C outward, so that the shank of the pivot-pin H passes into the slot J, and then the part C is moved to the left until the shank of the pivot-pin H is opposite the desired slot I, into which said shank is moved, and then the plate K is swung upward again to its former position, engaging with its upper edge one side of the head H′, and the projection O again drops into the aperture or indentation P, after which the winged nut N is again screwed up against the guard-plate K. The pair of tongs can now be used again in the ordinary manner by manipulating the handles F and G; but the jaws D and E are separated from each other a distance equal to the distance between the extreme left-hand aperture I and the aperture I in which the shank of the pivot-pin is now held. The operator is thus enabled to hold a large or a small object with the pair of tongs.

It will further be seen that the two parts B and C can very easily be adjusted so as to increase or diminish the distance between the two prongs E and D.

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

1. The combination, with two tong parts, of which one carries the pivot-pin and the other is provided with a number of parallel slots leading into a cross-slot, of a guard-plate held

on the slotted tong part and serving to hold the pivot-pin in one of the parallel slots, substantially as shown and described.

2. The combination, with two tong parts, of which one is provided with a number of parallel slots leading into a cross-slot, of the pivot-pin having a square head, and passing with its shank through an aperture in one tong part and through one of the parallel slots in the other tong part, and a guard-plate adjustably fastened to the slotted tong part and engaging with its upper edge the square head of the pivot-pin, so as to hold the latter in its respective parallel slot, substantially as shown and described.

3. The combination, with two tong parts, of which one is provided with a number of parallel slots leading into a cross-slot, of the pivot-pin provided with a square head and passing with its shank through an aperture in one tong part and through one of the parallel slots in the other tong part, a guard-plate held on the slotted tong part and engaging with its upper edge the square head of the pivot-pin, a bolt held on the slotted tong part on which said guard-plate is pivoted, and a nut screwing on said bolt and against said guard-plate for holding the latter in position on the slotted tong part, substantially as shown and described.

WILLIAM HENRY MANNES.

Witnesses:
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