B. HOLLY.

Fire Tongs.

No. 50,584. Patented Oct. 24, 1865.

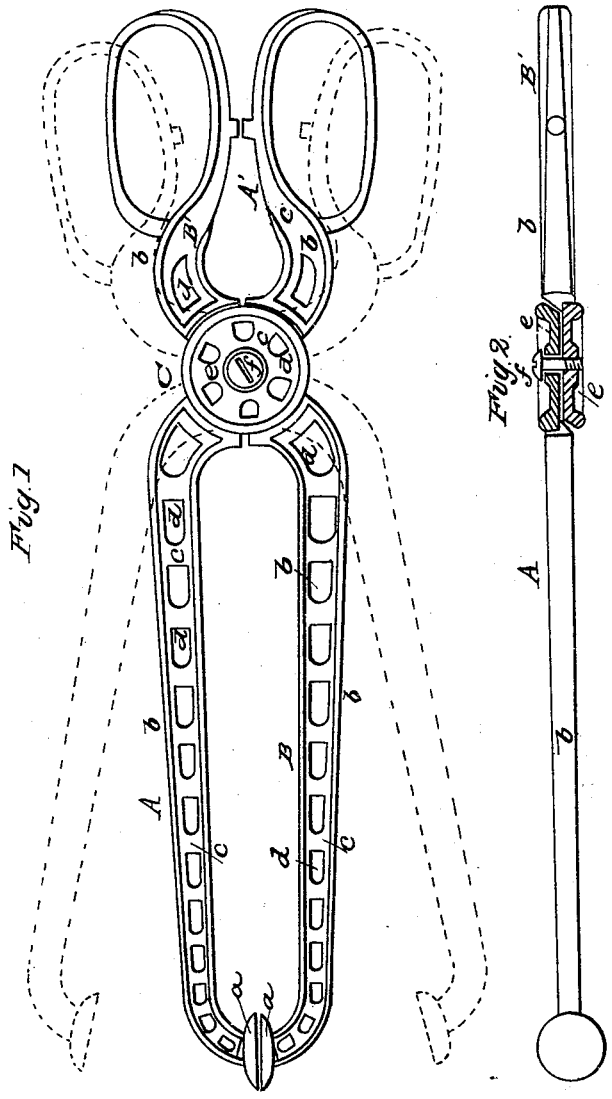

Fig. 1

Fig. 2.

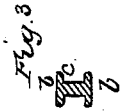

Fig. 3

WITNESSES

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UNITED STATES PATENT OFFICE.

BIRDSILL HOLLY, OF LOCKPORT, NEW YORK.

FIRE-TONGS.

Specification forming part of Letters Patent No. **50,584**, dated October 24, 1865.

To all whom it may concern:

Be it known that I, BIRDSILL HOLLY, of Lockport, in the county of Niagara and State of New York, have invented a new and useful Improvement in Fire-Tongs; and I do hereby declare that the following is a full and exact description thereof, reference being had to the accompanying drawings, making part of this specification, in which—

Figure 1 is a side elevation of my improved tongs; Fig. 2, a central longitudinal section of the bearings of the joint, showing the construction of the same; Fig. 3, a cross-section of one of the blades.

Like letters designate corresponding parts in all the figures.

The object of my improvement is the construction of fire-tongs that shall be superior to those in ordinary use in the following particulars, viz: lightness, cheapness of construction, elegance of form, ease and convenience in handling, and more perfectly accomplishing the use for which they are designed.

My improvement is designed to be made, ordinarily, of common cast-iron; but for the better class they may be made of malleable cast-iron or brass. As represented in the drawings, they are cast into two parts, A A′ and B B′, each piece consisting of a leg or blade, A, and handle B. These parts are so formed that when placed together in their proper position they cross each other, making the two handles come on the sides which are opposite to their respective blades, like shears.

A joint is formed at their intersection by reducing each part to half its thickness, making it of circular form, as shown at C, with a broad bearing-surface between, (*e*, Fig. 2,) and the parts are held together by a single screw or rivet, *f*.

The blades or legs A B and handles A′ B′ and joint *e* are constructed of two parallel bars or flanges, *b b*, connected together by an intermediate thin web of metal, *c*, Fig. 3, which serves to brace and stiffen the edges *b b* in one direction, while the webs are themselves braced and supported by the flanges in a contrary direction, thereby insuring the greatest amount of strength from the least metal. These thin webs are provided with openings or perforations *d d d*, which, while they render the tongs still lighter, also give them a more ornamental appearance.

The handles are formed like those of ordinary shears, even to the loops for the hand and thumb.

In ordinary fire-tongs the blades (legs) are jointed to a single piece of metal, called the "head," and in using the blades have to be grasped in the hand to seize or hold an object, and then only the muscular power can be exerted; but in my improvement the power is more effectively and conveniently applied, as the handles form levers, with their fulcrum on the pivot *f*, between the point of resistance and that where the power is applied, by which a considerable increase of power is obtained, and the loops prevent the implement from slipping from the hold, and by being placed at the extreme end of the tongs the hands are much farther removed from the fire, which admit of the tongs being made correspondingly shorter, and thereby rendering them cheaper, lighter, and more elegant.

The joint *e*, by being made with broad bearing-surfaces, as represented, prevents all that irregularity and lateral movement of the feet or claws *a a* of the legs, and consequently that inconvenience and annoyance which is occasioned by the "knuckling" or slipping by of the claws or points *a a*, which is so frequently the case with tongs of the ordinary construction, is obviated.

What I claim as my invention, and desire to secure by Letters Patent, is—

1. Constructing fire-tongs with their blades and other parts composed of the two flanges *b b*, connected together by the central perforated web, *c*, substantially as and for the purposes set forth.

2. The broad circular bearings *e e*, in combination with the skeleton blades A B and handles A′ B′, substantially as and for the purposes described.

In witness whereof I have hereunto signed my name in the presence of two subscribing witnesses.

BIRDSILL HOLLY.

Witnesses:

CHAS. G. HILDRETH,

J. K. MCDONALD.