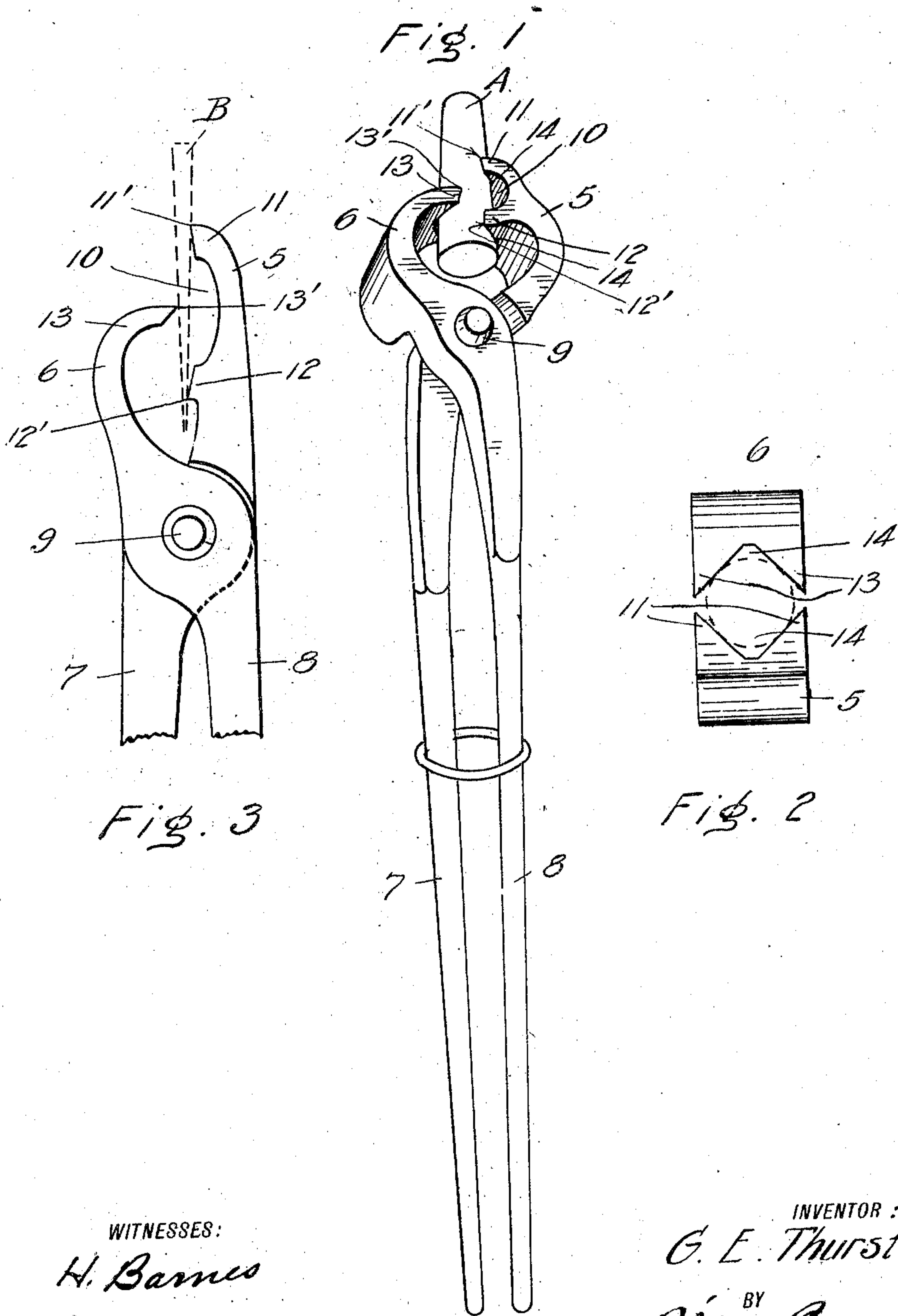


G. E. THURSTON.
TONGS.
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967,463.



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TONGS.

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To all whom it may concern:

Be it known that I, GEORGE E. THURSTON, a citizen of the United States, residing at Colby, in the county of Kitsap and State of Washington, have invented certain new and useful Improvements in Tongs, of which the following is a specification.

This invention relates to certain new and useful improvements in tongs such as are employed in blacksmithing or analogous work.

The object of my invention is the provision of an implement of this kind which will be more serviceable for general purposes than other tools of the character hitherto in use by affording a rigid grasp upon work of various shapes and sizes, and sufficiently strong and durable to withstand the rough usage to which tongs are subjected.

The invention consists in the novel form of the tong-jaws as will be hereinafter particularly described and claimed.

In the accompanying drawings, where like reference characters designate corresponding parts throughout the several views—Figure 1 is a perspective view of a pair of tongs embodying my invention with a round tapered piece of work represented as engaged between the jaws thereof. Fig. 2 is an end elevation of the jaws. Fig. 3 is a side elevation of portions of a pair of tongs to illustrate a modified construction.

The reference numerals 5 and 6 designate the jaw-members of a pair of tongs provided with handles 7 and 8 and pivotally connected by a rivet or pin 9.

According to my invention the jaw 5 is bifurcated by a recess 10 extending transversely of the jaw and separating the two gripping elements 11 and 12. The other jaw 6 has but a single gripping element 13 which is arranged to operate intermediate the gripping elements of the jaw 5; in other words, when the jaws are brought together, the element 13 would oppose the recess 10. Advantageously, the ends of the aforesaid gripping elements would be beveled or inclined with respect to a plane projected through the axis of the rivet 9 to include the edges 11', 12' and 13' of the several elements.

To enable the jaws to effectually grasp a square bar, or round piece of work, as A, Fig. 1, when held in alinement with the tongs, they are each provided with a notch 14, as best shown in Fig. 2. These notches

are, by preference, of a substantially angular configuration with their sides respectively diverging toward the opposing jaws.

The invention operates as follows: When a piece of work of greater width than the jaws is to be grasped upon opposite plane surfaces, as for example, a tapering body B, Fig. 3, then it will be mutually engaged by the three gripping elements of the two jaws and firmly held against the elements 11 and 12 by an interposed force applied rectangularly to their plane of contact by the action of the other element 13. When the work is round or square it may be seated in and similarly acted upon in notches 14 of the two jaws.

In Fig. 3 substantially all of the elements found in Fig. 1 are present except that the notching of the engaging faces of the jaws is omitted, while the distance is increased between the elements 11 and 12 while the jaw 5 is slightly flattened and thickened.

By reason of having three lines of support, the gripping effect with my appliances is found to be more reliable than with other tongs which I have used.

What I claim, is:—

1. A pair of tongs having one of its jaws provided with two gripping elements arranged in spaced relation, and the other jaw having but a single gripping element which is disposed to operate intermediate the aforesaid gripping elements, each of said elements having a V-shaped notch and the inner end of said notches being squared and the walls of said notches being beveled.

2. A pair of tongs, provided on one of its jaws with two notched gripping elements and a single notched gripping element on the other jaw, said last named element being arranged to oppose the recess formed between the first named elements, the walls of said two notches of said elements being inwardly beveled toward each other adapted to form sharpened outer edges on said elements, the walls of the notch of said other element being beveled in the same direction as the inner of said two elements.

3. A pair of tongs having on one of its jaws two projections which serve as gripping elements and disposed to have one of said elements at the extremity of the jaw and the other situated between such extremity and the tongs-rivet, the other jaw of the tongs being constructed to operate between the said projections of the first named jaw,

each of said elements having a V-shaped notch and the inner end of said notches being squared, the walls of the notches upon said two elements being inwardly beveled
5 toward each other adapted to form sharpened outer edges on said elements, and the walls of the notch of said other element be-

ing beveled in the same direction as the inner of said two elements.

GEORGE E. THURSTON.

Witnesses:

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