No. 663,581. Patented Dec. 11, 1900.

J. F. RICE.

TONGS.

(Application filed June 19, 1900.)

(No Model.)

Fig. 1.

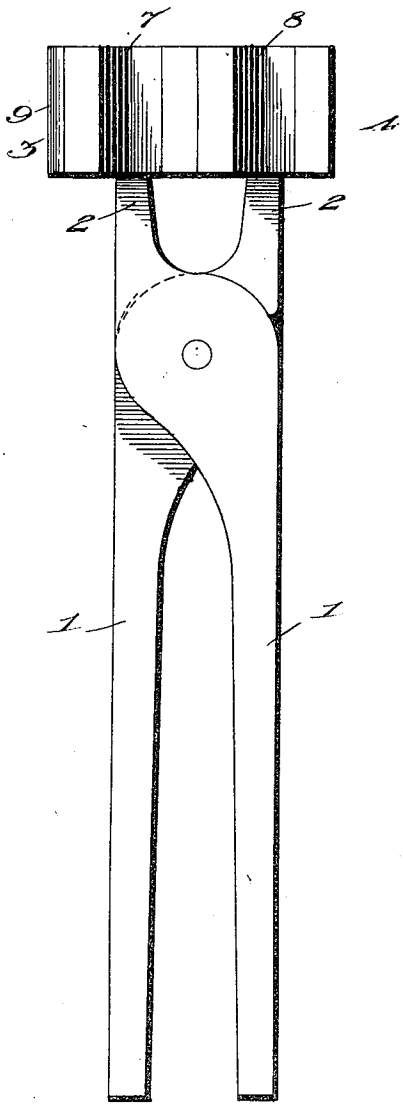


Fig. 2.

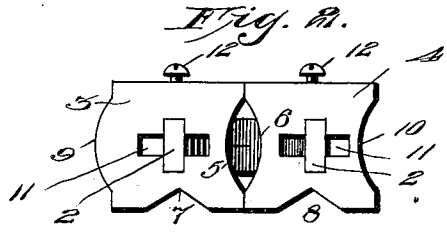


Fig. 3.

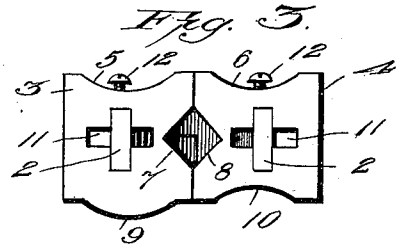
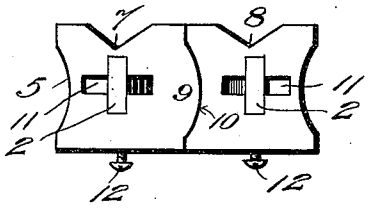


Fig. 4.



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UNITED STATES PATENT OFFICE.

JOHN F. RICE, OF CENTRALIA, TEXAS.

TONGS.

SPECIFICATION forming part of Letters Patent No. 663,581, dated December 11, 1900.

Application filed June 19, 1900. Serial No. 20,899. (No model.)

To all whom it may concern:

Be it known that I, JOHN F. RICE, a citizen of the United States, residing at Centralia, in the county of Trinity and State of Texas, have invented new and useful Improvements in Tongs, of which the following is a specification.

The object of this invention is to provide a pair of tongs with gripping-jaws capable of a change in their relative position and having the faces thereof adapted for holding the various kinds of work heretofore requiring the employment of a number of tongs; and to this end the invention consists in the novel construction and arrangement of parts, all as hereinafter described, and pointed out in the appended claims.

In the drawings, Figure 1 represents a view in side elevation of a pair of tongs provided with the changeable gripping-jaws in accordance with the invention. Fig. 2 is an end view showing the jaws as arranged in Fig. 1, and Figs. 3 and 4 are end views showing two more arrangements of the jaws.

In carrying out the invention I employ a pair of tongs 1 of the well-known form of construction. These are preferably formed with narrow slightly-tapering jaws 2 and rectangular in cross-section, but it is not absolutely essential that this form be adhered to, as the invention can be put into practice with the jaws 2 formed for use independently of the changeable removable jaws 3 and 4 with which they are shown provided. These jaws 3 and 4 are approximately in the form of cubes, with three of the vertical sides of each modified to form a variety of gripping-surfaces. In the drawings the jaws are shown provided with corresponding concave surfaces 5 and 6, corresponding angular depression surfaces 7 and 8, and a convex and concave surface 9 and 10, respectively, and are shown in Figs. 2, 3, and 4 in their usual combinations, but it will be obvious that the jaws are capable of being formed with an indefinite variety of forms as to the said gripping-surfaces and that the character and form of the work held by the tongs will often make it desirable to vary the combination from that shown—as, for example, using gripping-face 7 with face 6.

Vertically through the jaws 3 and 4 is provided an opening 11, formed of intersecting slots at right angles to each other and to the gripping-faces and each adapted to receive the jaw 2, to the cross-section of which the slots conform. Each face of the removable jaws is provided with a screw-threaded opening adapted to receive a set-screw 12, which engages the jaw 2 for the purpose of making the attachment the more secure.

It will be obvious that the changeable jaws of this attachment may be in various forms and have a greater or less number of sides or faces than shown, and also that the tong-attachment slots may be increased or diminished in number to conform to the shape of the jaws, the essential feature of the slots being that they are of sufficient number and so arranged as to parallel the gripping sides.

Having thus described the invention, what is claimed, and desired to be secured by Letters Patent, is—

1. The combination with the jaws of a pair of tongs; of removable jaws having gripping-faces formed on the sides thereof, and tong-receiving slots paralleling the said gripping-faces and intersecting each other; screw-threaded openings in each face of the removable jaws formed to receive a set-screw adapted to bear against the jaws of the tongs and hold the removable jaws securely in position.

2. The combination with the jaws of a pair of tongs; of removable jaws having gripping-faces of different form, formed in the sides thereof and adapted to register with each other; tong-receiving slots paralleling the said gripping-faces and intersecting each other; screw-threaded openings in each face of the removable jaws formed to receive a set-screw adapted to bear against the jaws of the tongs and hold the removable jaws securely in position.

In testimony whereof I affix my signature in presence of two witnesses.

JOHN F. RICE.

Witnesses:
SAM F. KENBY,
ED. CHANDLER.