

(No Model.)

F. RAYMOND.
TONGS.

No. 530,455.

Patented Dec. 4, 1894.

Fig. 1.

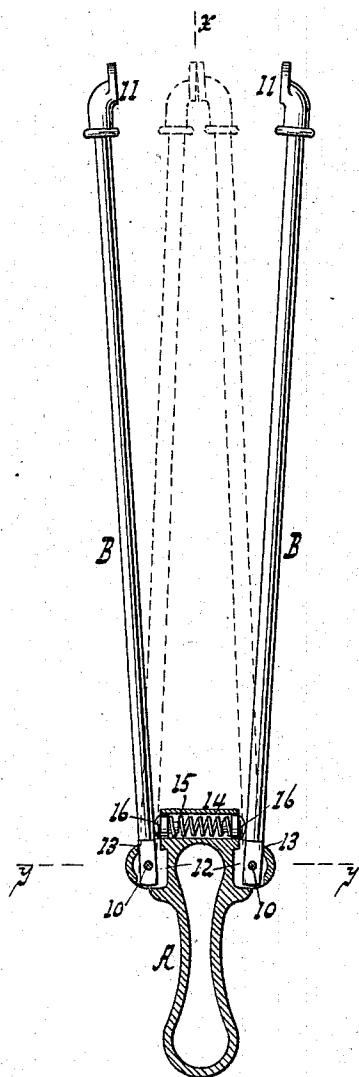


Fig. 2.

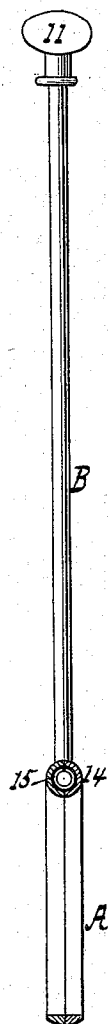
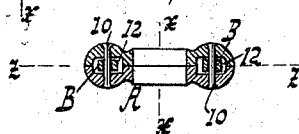


Fig. 3.



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SPECIFICATION forming part of Letters Patent No. 530,455, dated December 4, 1894.

Application filed September 27, 1894. Serial No. 524,275. (No model.)

To all whom it may concern:

Be it known that I, FRANCOIS RAYMOND, a citizen of the United States, residing at Woodhaven, in the county of Queens and State of New York, have invented new and useful Improvements in Tongs, of which the following is a specification.

My improvement relates to the peculiar and novel arrangement of a spring between the arms of a pair of tongs said spring being so located that it is perfectly protected against cinders, ashes or other impurities which would interfere with its proper action.

In the accompanying drawings—Figure 1 represents a longitudinal section in the plane $z z$ Fig. 3. Fig. 2 is a similar section in the plane $x x$ Figs. 1 and 3. Fig. 3 is a transverse section in the plane $y y$ Fig. 1.

In the drawings the letter A designates the handle and B B are two arms which are connected to the handle A by pivots 10, 10 and to the outer or free ends of which are secured suitable jaws 11, 11. The handle A is provided with cavities 12, 12 to receive the inner ends of the arms B B and the edges 13, 13 of these cavities form stops which limit the outward motion of the arms B B.

On the upper end of the handle A is formed a tubular socket 14 which is open at both ends and serves to receive a coiled spring 15 which acts upon the arms B B and has a tendency to throw the same open as far as the stops 13, 13 will permit. It will be seen from this description, that the tubular socket 14 completely incloses the coils of the spring 15 so that no cinders, ashes or other impurities can drop in between them but in order to guard against the entrance of such impurities at the open ends of the socket 14, I have provided plugs 16, 16 which fit the socket loosely and which are made convex at their outer surfaces so as to reduce the friction between these surfaces and the arms B B to a minimum.

In mounting my tongs I take the handle A, insert one of the arms B and secure the same in position by a pivot 10. Then I place the spring 15 with its plugs 16, 16 into the socket 14 and finally insert the second arm B into its cavity in the handle and secure it in position by a pivot. By these means the spring 15 is compressed in the socket 14 so that it has a tendency to throw the arms B B into the position shown in full lines in Fig. 1, but if the handle A is grasped with one hand, the arms B B can be easily compressed by the thumb and forefinger of the same hand or by the other hand to the position shown in dotted lines in Fig. 1.

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

1. The combination of a handle A provided at one end with cavities 12, the arms B having one end arranged in said cavities, the pivots 10 securing the arms in the cavities of the handle, the tubular-socket 14 mounted on one end of the handle at a point between the pivoted arms, and a spring 15 housed in said tubular-socket and acting against the arms to spread the same, substantially as described.

2. The combination with the arms B B of a handle A provided with cavities 12, 12 for the reception of the inner ends of said arms, pivots for securing the arms to the handle, an unbroken tubular socket 14 formed on or secured to the handle, a spring 15 inclosed by said socket and plugs 16 fitting the socket loosely and placed between the ends of the spring and the arms B B substantially as described.

In testimony whereof I have hereunto set my hand in the presence of two subscribing witnesses.

FRANCOIS RAYMOND.

Witnesses:

WM. C. HAUFF,
E. F. KASTENHUBER.