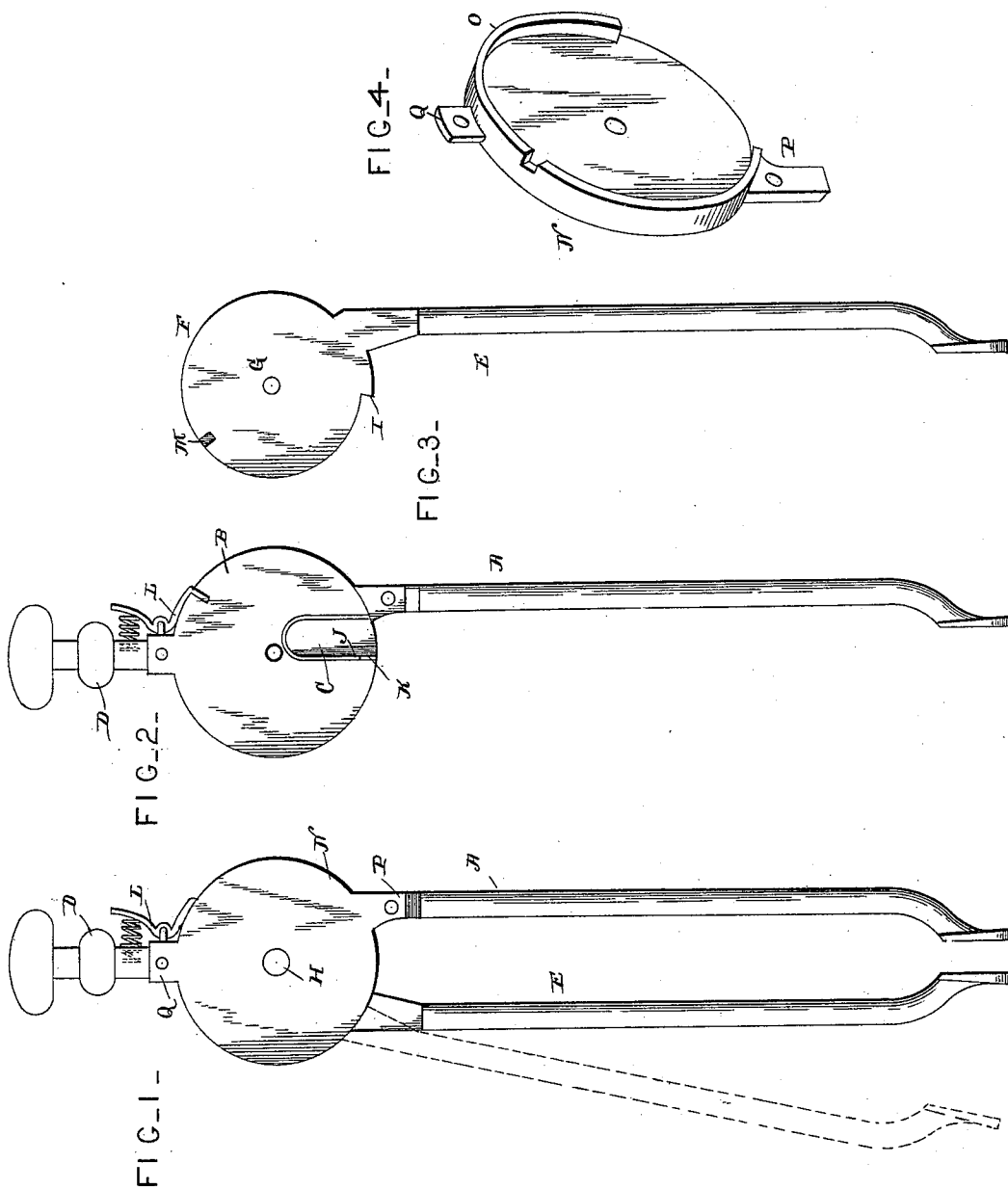


(No Model.)

R. M. BRUCE.
FIRE TONGS.

No. 463,887.

Patented Nov. 24, 1891.



Witnesses

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UNITED STATES PATENT OFFICE.

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FIRE-TONGS.

SPECIFICATION forming part of Letters Patent No. 463,887, dated November 24, 1891.

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To all whom it may concern:

Be it known that I, ROBERT M. BRUCE, of Rolling Fork, in the county of Sharkey and State of Mississippi, have invented certain
5 new and useful Improvements in Fire-Tongs; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it pertains to make and use it,
10 reference being had to the accompanying drawings, which form part of this specification.

My invention relates to an improvement in fire-tongs; and it consists in the special construction and arrangement of parts which
15 will be fully described hereinafter.

The object of my invention is to construct a pair of fire-tongs with broad flanged bearing for a hinge which will prevent the ends
20 of the tongs wobbling and thus slipping off the log, stick, coal, or other thing being handled by them prematurely and pinching the fingers or scattering fire over the floor, thus endangering the building, and to provide a
25 means for holding the feet together when not in use, so that they will not spread out to be run against and knocked down in passing about the fire-place where they are standing ready for use, and a spring to throw them
30 open for use, thereby saving a good part of the manipulation in their use.

Figure 1 is a plan view of a pair of tongs which embodies my invention, the tongs being shown closed in solid lines and open in
35 dotted lines ready for use. Fig. 2 is a detached view of the rigid tong which is provided with a disk having a circular flange, a spring, handle, and a spring-actuated catch. Fig. 3 is a detached view of the other tong
40 having a circular disk and a central opening. Fig. 4 is a detached view of the hinged covering or jaw.

A represents one of the tongs, which has its outer end turned slightly inward and flattened in the ordinary manner, and is secured
45 rigidly at its upper end to a circular disk B, which is provided with a U-shaped recess C adjacent to the upper end of the tong A.

Rigidly secured to the opposite and upper
50 edge of the disk B is a handle D, by means of which the tongs are handled and lifted

around. The other tong E has its outer end similarly shaped to the outer end of the tong A, and has its upper end rigidly secured to the edge of a circular disk F, which is provided with a central opening G, through which
55 a pivotal bolt H passes. This central disk F is provided with a shoulder I upon its lower edge inside of the upper end of the tong E, and this shoulder engages one end of a U-shaped spring J, which is placed within the U-shaped recess C. The upper end of the
60 tong A slightly overlaps the adjacent wall of the recess C, so that the adjacent end of the spring J will engage the upper end of the tong A, and thus prevent the spring from
65 sliding out of the recess. The other end of the spring J has a projection or lip K, which engages the shoulder I, formed upon the circular flange F.

Pivoted or loosely connected between its
70 ends to the handle D is a spring-actuated catch L, which has its inner end engage a recess M, formed in the upper edge of the disk F, and thus lock the tongs A E in the position
75 shown in solid lines in Fig. 1.

Placed over the disk F is a cover or circular disk N, which acts as a jaw which has a circular flange O formed around its upper
80 edge, and is provided with a projection P, which extends over the upper end of the tong A, and a projection Q, which extends over the lower end of the handle D, and through which screws or rivets are passed for the purpose of clamping and holding the parts or
85 jaws together. The circular flange O does not extend around that portion of the disk N which is over the upper end of the tong E, so as to allow the tong a free swinging movement between the disk or jaw N and the disk
90 or jaw B.

In the ordinary fire-tongs, where there is a small pivotal connection or hinge, after a little use they wear in the joints, so as to allow the tongs a wobbling movement at their outer
95 ends, so as to pass each other, and thus slip from off the article being clamped, which discharges it prematurely and often scatters fire over the floor, which is very dangerous and often disfigures the floor or carpet. I overcome these objections by the construction
100 above described of forming a broad disk or

hinge-joint, which prevents all wobbling of the tongs A and E. It will be seen that the flange F of the pivoted tong E is clamped between the flange or jaw B of the tong A and the disk or jaw N, by means of which a very broad bearing-surface is provided, and thus all wobbling of the tongs is prevented.

When the tongs are not in use, they are to be closed in the position shown in solid lines in Fig. 1, when the catch L engages the recess M in the flange F, and thus holds the tongs in this position. The spring J is slightly compressed when the tongs are closed and not in use, so that when it is desired to use them it is only necessary to press the outward end of the catch L, when the spring J will throw the tongs apart, as shown in dotted lines in Fig. 1, ready for use.

By providing means for holding the tongs together they are prevented from spreading out and thus being in the way and liable to be kicked and knocked down in passing around the fire-place where they are standing convenient for use, altogether making a fire-tong much more durable and convenient in use than the ordinary tong and effectually preventing the pinching of the hand or fingers by having all of the edges and corners which could come in contact therewith rounded and smooth.

Having thus described my invention, I claim—

1. In a pair of tongs, the tongs provided with circular disks at their upper ends, a handle secured to one of the said disks, a cover or disk placed over the said circular disks having a circular flange, and a pivotal bolt which passes concentrically through all of said disks, the parts combined substantially as described.

2. In a pair of tongs, the combination of the tongs provided with circular disks, a handle secured to the rigid disk, a disk which is placed over the pivoted disk, a pivotal bolt, and a catch placed upon the handle, which engages the pivoted disk for locking the tongs together, substantially as shown.

3. In a pair of tongs, the combination of the tongs provided with circular disks, the disks being pivoted together, a handle secured to one of the disks, a disk placed over the pivoted disk, a catch locking the tongs together, and a spring for throwing the tongs open, substantially as shown and described.

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

ROBERT M. BRUCE.

Witnesses:

A. L. NEAL,
JNO. R. BAGGETT.