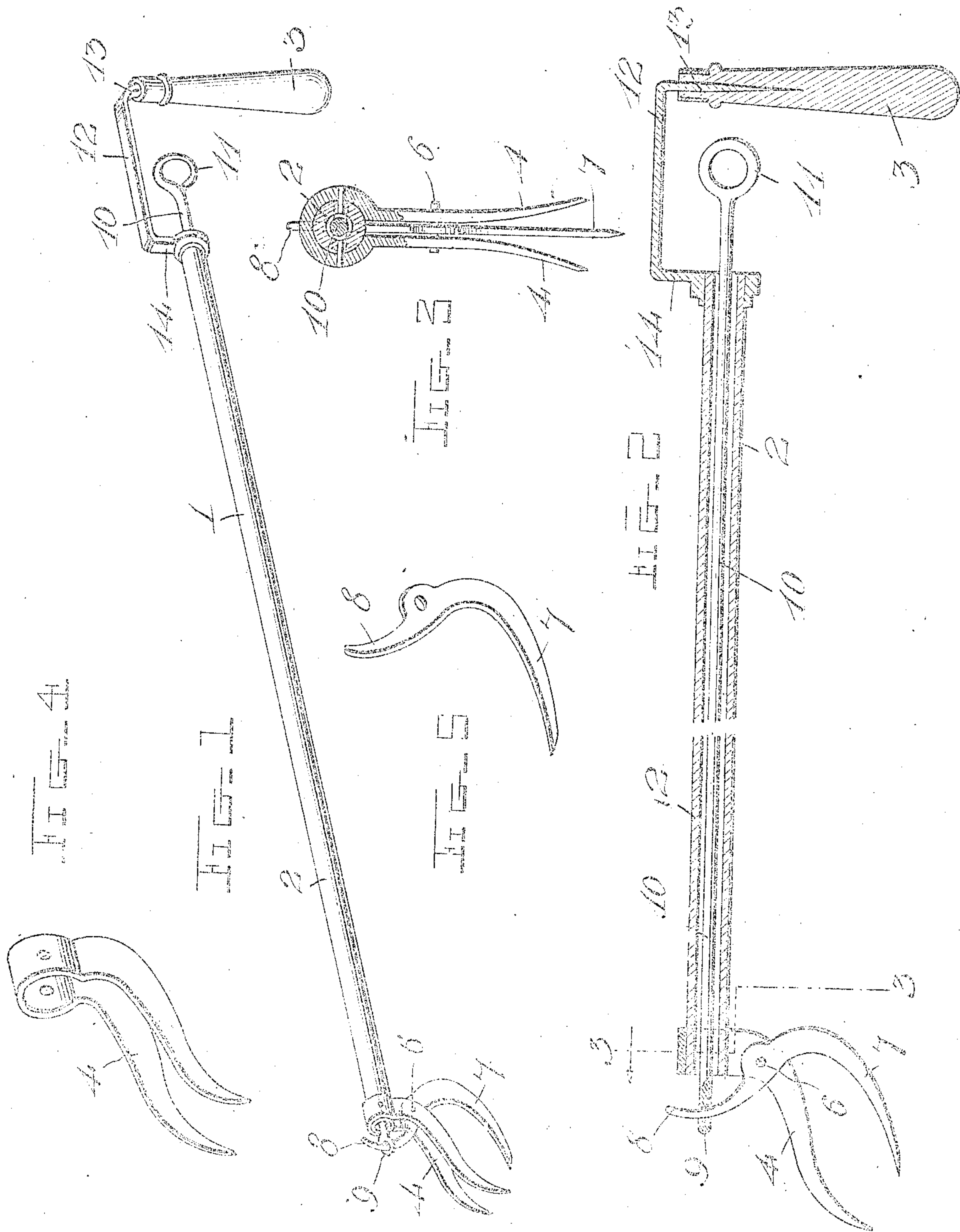


No. 827,561.

PATENTED JULY 31, 1906.

J. R. PLACE.  
CLINKER EXTRACTOR.  
APPLICATION FILED NOV. 13, 1905.



Witnesses  
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# UNITED STATES PATENT OFFICE.

JOSEPH R. PLACE, OF BURLINGTON, IOWA.

## CLINKER-EXTRACTOR.

No. 827,561.

Specification of Letters Patent.

Patented July 31, 1906.

Application filed November 13, 1905. Serial No. 287,107.

*To all whom it may concern:*

Be it known that I, JOSEPH R. PLACE, a citizen of the United States, residing at Burlington, in the county of Des Moines and State of Iowa, have invented certain new and useful Improvements in Clinker-Extractors; and I do 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 appertains to make and use the same.

My invention relates to improvements in grapples or lifting devices, and more particularly to a device by means of which clinkers may be extracted from stoves, furnaces, grates, and the like.

The object of the invention is to provide a simple, inexpensive, durable, and efficient device of this character which will be well adapted for the purpose intended.

With the above and other objects in view the invention consists of certain novel features of construction, combination, and arrangement of parts, as will be hereinafter described and claimed.

In the accompanying drawings, Figure 1 is a perspective view of my improved clinker-extractor. Fig. 2 is a longitudinal sectional view through the same. Fig. 3 is a transverse sectional view, and Figs. 4 and 5 are perspective views, of the two jaws of the device.

Referring to the drawings by numeral, 1 denotes my improved clinker-extractor, which comprises a tubular body or handle 2, having at one end a fixed hand-grip 3 and at its opposite end a stationary jaw 4. The latter consists of two spaced longitudinally and outwardly curved claws, which preferably extend at an obtuse angle with respect to the tubular bar or handle 2, so that the device may be used in an almost vertical position, as presently explained. This jaw is preferably formed by shaping and bending a single piece of metal upon itself and around the end of the tubular bar 2 and by securing it thereto in any suitable manner. Pivoted by a rivet or similar fastening 6 between the two claws of the stationary jaw 4 is a swinging jaw 7. The latter has at one end a curved claw and at its opposite end a curved arm 8, which extends across the open end of the tubular bar 2. Said arm 8 is adapted to pass loosely through an eye 9, formed upon an operating-rod 10, which extends through the

tubular bar or handle 2 and has on its projecting outer end a finger loop or ring 11. The latter is disposed beneath the offset stem or shank 12 of the hand-grip 3, which latter lies in a transverse plane, as shown. The offset shank or stem 12 is of substantially U shape, the hand-grip 3 being secured upon one of its ends 13 and its other end 14 being formed with a collar or sleeve, which is secured in any suitable manner to the end of the tubular bar 2.

It will be seen that when the hand-grip is grasped by the hand and one of the fingers inserted in the loop or ring 11 the operating-rod 10, and hence the swinging jaw 7, may be moved to swing the latter toward and from the jaws 4 to engage or release a clinker or any other object. By shaping the jaws 4 and mounting them as shown it will be seen that the device may be readily inserted in the door-opening of a stove or furnace, so that the jaws may be engaged with clinkers upon any part of the grate, the angular disposition of the jaws 4 permitting clinkers close to the front of the grate to be readily engaged, since the device can be used in an almost vertical position.

From the foregoing description, taken in connection with the accompanying drawings, the construction, operation, and advantages of the invention will be readily understood without requiring a more extended explanation.

Various changes in the form, proportion, and the minor details of construction may be resorted to without departing from the principle or sacrificing any of the advantages of the invention.

Having thus described my invention, what I claim as new, and desire to secure by Letters Patent, is—

1. A device of the character described comprising a tubular bar, a stationary jaw at one end formed by bending a piece of metal upon itself to form claws, a swinging jaw pivoted between said claws and having an arm to extend across one of the open ends of said tubular bar, and an operating-rod extending through said bar and engaged with said arm.

2. A device of the character described comprising a tubular bar, a stationary jaw at one end thereof formed by bending a piece of metal upon itself to form angularly-extending curved claws, a swinging jaw pivoted between said claws and having a curved arm to



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extend across one of the open ends of said  
bar, an operating-rod extending through said  
bar and having an eye at one end to engage  
said curved arm and a finger loop or eye at  
its opposite end, an offset shank upon one  
5 end of said tubular bar, and a transversely-  
disposed hand-grip upon said shank, substan-  
tially as described.

In testimony whereof I have hereunto set  
my hand in presence of two subscribing wit- 10  
nesses.

JOSEPH R. PLACE.

Witnesses:

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H. M. MERCER.