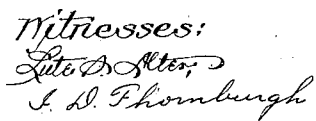


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Inventor:
Oscar C. Beach,
Lawrence, Mo.

UNITED STATES PATENT OFFICE.

OSCAR CLARENCE BEACH, OF LOS ANGELES, CALIFORNIA, ASSIGNOR TO F. W. BRAUN,
OF LOS ANGELES, CALIFORNIA.

CRUSHER.

1,045,499.

Specification of Letters Patent.

Patented Nov. 26, 1912.

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To all whom it may concern:

Be it known that I, OSCAR C. BEACH, a citizen of the United States, residing at Los Angeles, in the county of Los Angeles and State of California, have invented new and useful Improvements in Crushers, of which the following is a specification.

This invention relates to crushers of a type shown in United States Letters Patent No. 783,323, issued February 21st, 1905.

Referring to the drawings: Figure 1 is a vertical cross section through the machine. Fig. 2 is a front elevation. Fig. 3 is a side elevation of the adjusting device. Fig. 4 is an enlarged section on line x^4-x^4 Fig. 3. Fig. 5 is an enlarged section on line x^5-x^5 Fig. 2. Fig. 6 is an enlarged section on line x^6-x^6 Fig. 2.

1 designates the side frame plates, there being on the inner side of each plate 1 a projecting cheek plate 2 which forms the side wall of the crushing chamber.

3 is the driving shaft which is mounted in the upper end of the plates 1, and is formed with an eccentric 4 which operates the movable jaw 5. The lower end of the movable jaw 5 is pivotally mounted so as to ride on a rocking fulcrum 6 in the usual manner.

7 designates the stationary jaw, the lower end of which rests against the inclined face of an abutment block 8 which is pivotally mounted on an eccentric 9, formed on a shaft 10 as clearly shown in Fig. 4. The lower end of the stationary jaw 7 is not fixed to the abutment block 8 but simply rests against the inclined face of the abutment block so that the stationary jaw 7 may be instantly removed when desired. The upper end of the stationary jaw has a broad supporting hook 11 which is adapted to engage over an arbor 12, the latter serving to support the stationary jaw in position. Pivoted on the crown of, by their inner arms, and projecting beyond the supporting hook 11 are locking and lifting hooks 13 which are provided with a handle 14 at the crown of the hooks. The locking hooks 13 are so weighted that when allowed to drop into horizontal position they will stand as shown in Figs. 1 and 5, and their inner faces will securely lock the stationary jaw 7 in po-

sition and prevent it from jumping up. The locking hooks 13 are approximately of U-shape and their crowns extend beyond the hook 11 of the stationary jaw 7 so that the handle 14 is well spaced from the broad supporting hook 11. The stationary jaw may be instantly removed by lifting up, with the handle 14, the pivoted locking hooks 13 and then pulling the jaw 7 upward. Upon removal of the stationary jaw 7 the abutment block 8 will tip slightly until it strikes the cheek faces 2 which hold it from revolving except for a slight amount, so that the stationary jaw may be easily reinserted.

On the end of the shaft 10 is an arm 15 in which is a bolt 16 adapted to detachably engage in slots 17 formed in a segment 18. When the bolt 16 is released the arm 15 may be swung into the proper angular position to adjust the shaft 10 and eccentric 9, to give the proper space between the stationary jaw and movable jaw, after which the bolt 16 may be reengaged. A stop pin 19 is arranged in the segment 18 to prevent the arm 15 from being accidentally moved too far. A bolt 20 extends between the side plates and a spacing sleeve 21 is arranged to properly space the side plates.

What I claim is:

A crusher comprising side frame plates, an arbor extending across and mounted in the upper part of the side frame plates, and a jaw having a U-shaped broad supporting hook whereby it is suspended from the arbor between the side frame plates, and a pair of horizontally-arranged U-shaped locking and lifting hooks pivoted by their inner arms to the sides of the crown of the supporting hook, projecting beyond the supporting hook and having their outer arms engaging the arbor beneath the supporting hook and provided with a handle secured to and between the crowns of the locking hooks and spaced from the supporting hook.

In testimony whereof, I have hereunto set my hand at Los Angeles, California, this 20th day of July, 1911.

OSCAR CLARENCE BEACH.

In presence of—

ARTHUR P. KNIGHT,
GLADYS RUSSELL.