No. 886,401. PATENTED MAY 5, 1908.

M. B. PICKETT.

CRUSHING TONGS.

APPLICATION FILED AUG. 7, 1907.

Fig. 1.

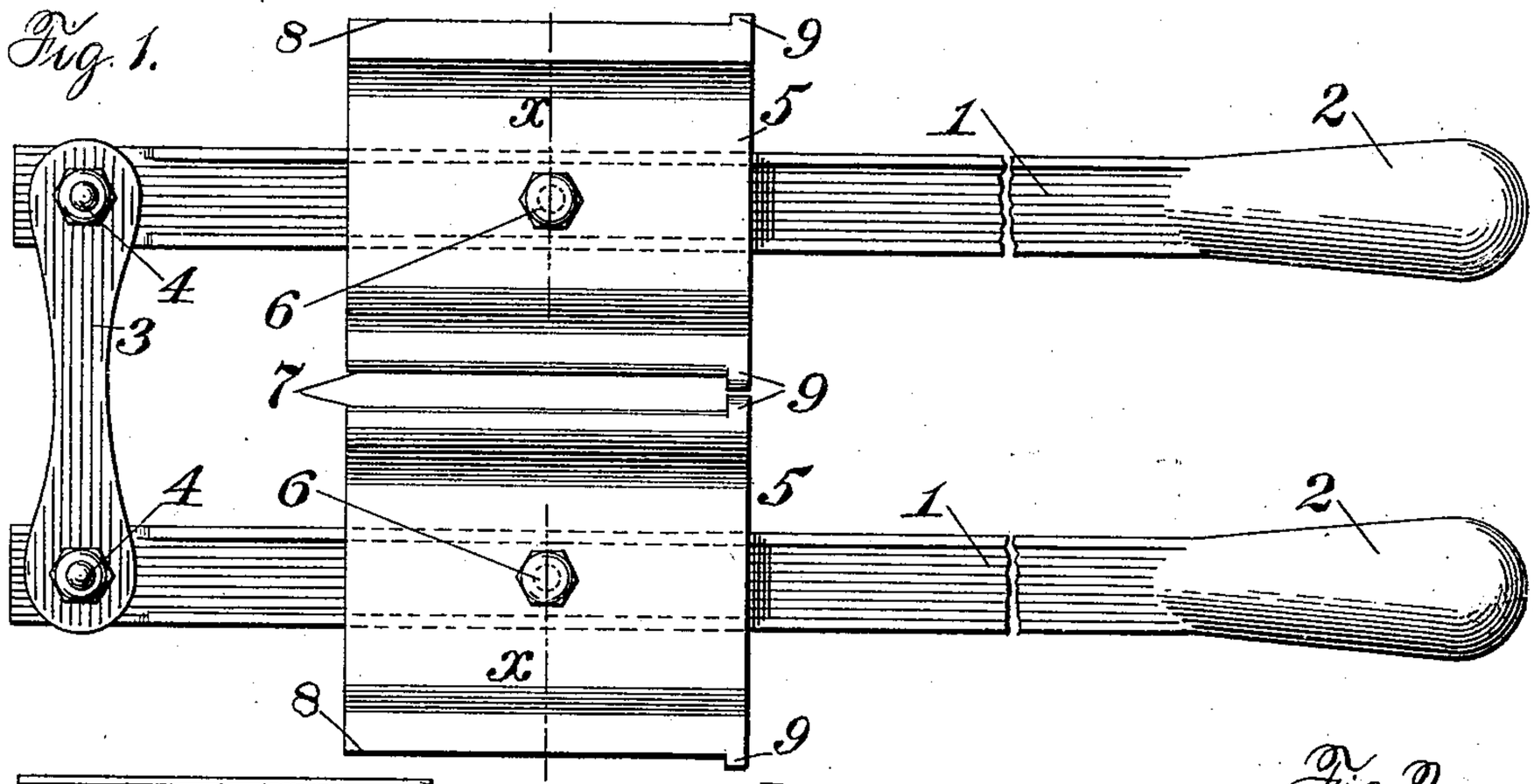


Fig. 2.

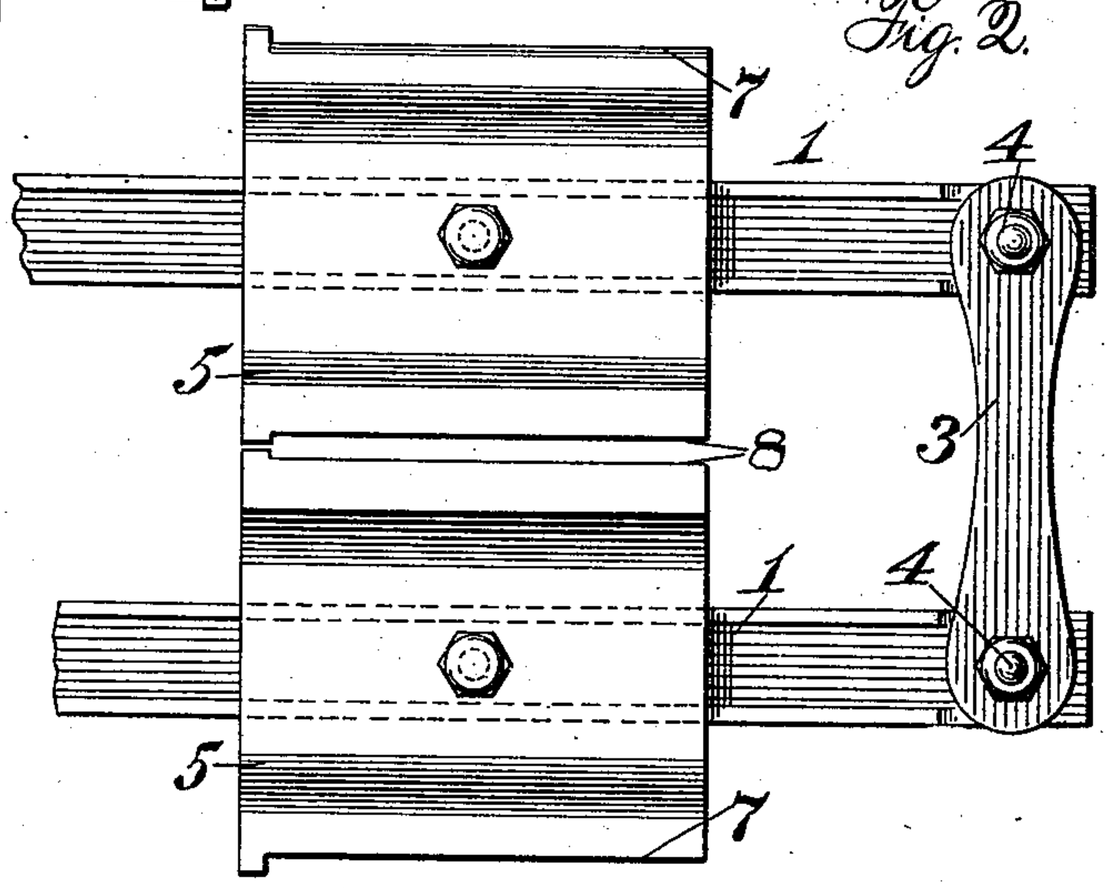


Fig. 3.

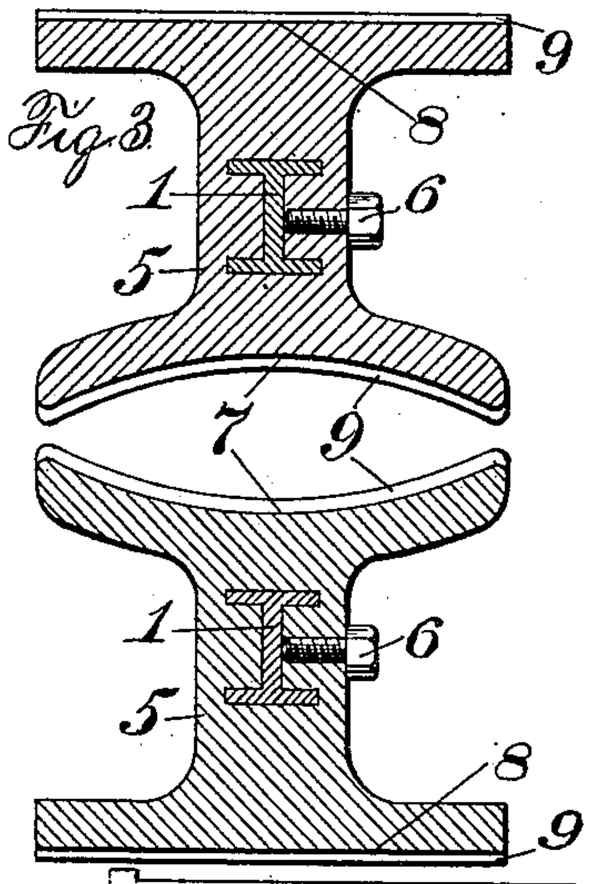
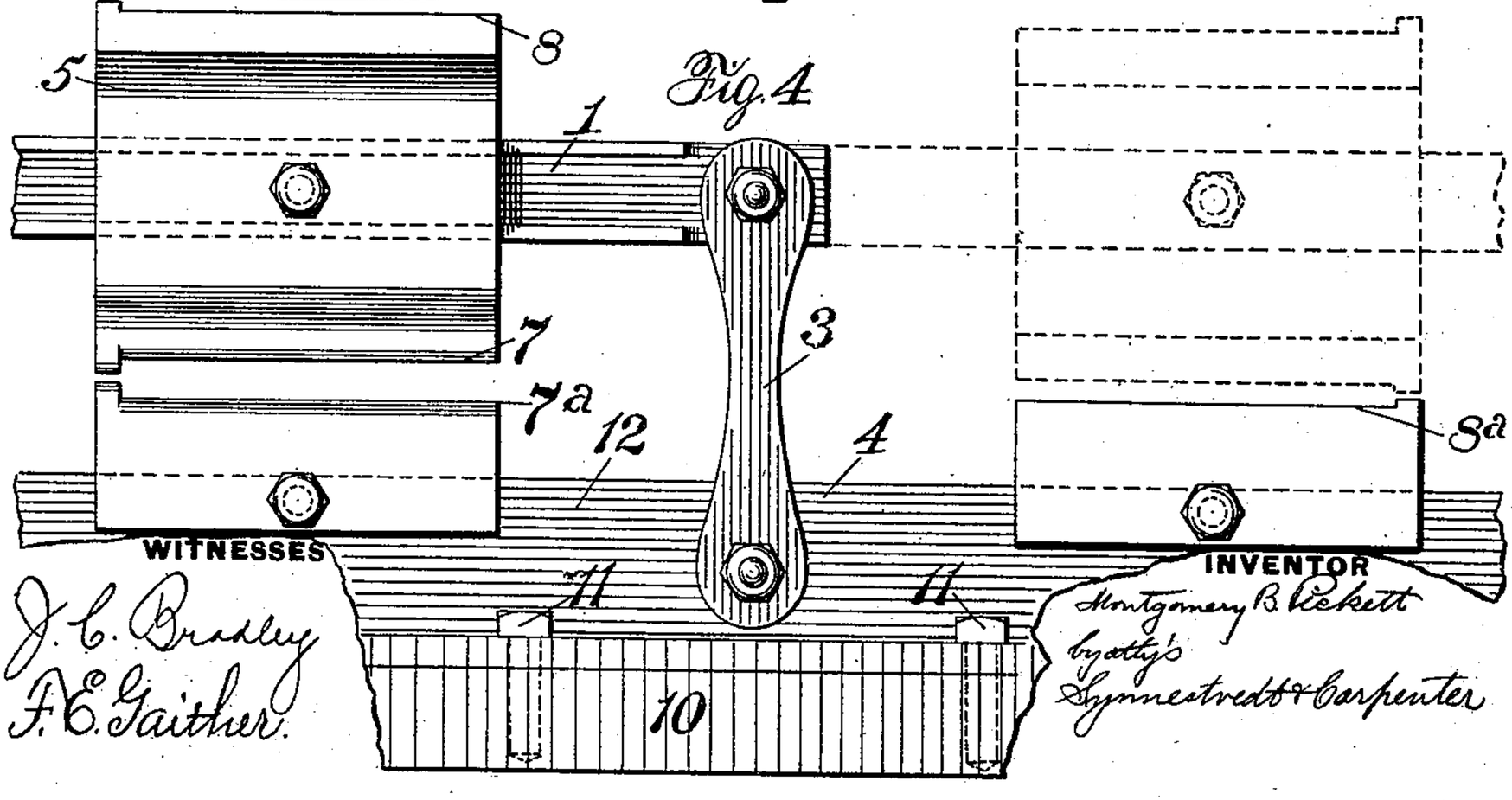


Fig. 4.



WITNESSES

J. C. Bradley

F. E. Gaither.

INVENTOR

Montgomery B. Pickett

by atty's

Symmestredt & Carpenter

UNITED STATES PATENT OFFICE.

MONTGOMERY B. PICKETT, OF MAYWOOD, ILLINOIS, ASSIGNOR OF ONE-HALF TO ROBERT F. PALMER, OF CHICAGO, ILLINOIS.

CRUSHING-TONGS.

No. 886,401. Specification of Letters Patent. Patented May 5, 1908.

Application filed August 7, 1907. Serial No. 387,448.

To all whom it may concern:

Be it known that I, MONTGOMERY B. PICKETT, a citizen of the United States, residing at Maywood, in the county of Cook and State of Illinois, have invented certain new and useful Improvements in Crushing-Tongs, of which the following is a specification.

My invention relates to crushing tongs, and has for its objects; the provision of a device of this type which will grip and securely hold the object to be crushed, to provide tongs adapted to reduce articles of a large bulk to compact form, to provide tongs so constructed as to be easily and expeditiously applied to the object to be crushed, to provide a device of this character which is readily adjustable for use upon articles of varying sizes and shapes, and to provide tongs of great simplicity, easy and rapid of operation and inexpensive of construction. One form of the invention is illustrated in the accompanying drawings, wherein:

Figure 1 is a side elevation of the tongs in my preferred form of construction,

Figure 2 is a side elevation of the tongs showing the jaws closed in position reverse to Figure 1,

Figure 3 is a cross section on the line X—X of Figure 1, and

Figure 4 is a side elevation of a modified type which may be permanently secured to a support.

My device as herein disclosed is described primarily for the purpose of crushing tin cans, such as accumulate about large hotels, summer places, etc., which are difficult and expensive of storing and removal and valueless on account of the shape and bulk, but which if mashed or crushed into a compact form are more readily and quickly handled and cared for, and when so compressed become a marketable product for purposes of recovery of the tin and scrap metal, and lessens the expense of disposing of such cans as refuse, etc. The device is, of course, adaptable to a much wider use.

Referring to the drawings, it will be seen that the device consists of a pair of jaws 5 adjustably mounted upon two I-beam members or levers 1 provided at one end with handles 2 for gripping in operation of the tongs and at the other end with links 3, pivotally joining the levers together by means of pins 4 and giving them the proper spacing for operating the jaws. The levers 1 which serve to operate the jaws are preferably made of the shape indicated in Figure 3, or square, to prevent turning or loosening of the jaws thereon. The jaws are slidably mounted upon the levers admitting of adjustment for cans of different sizes and shapes and may be adjusted as closely or remotely distant from the connecting link as may be required for the proper operation of the crusher, and are secured upon the levers in the position desired by means of the set-screws 6 as most clearly shown in Figure 3. The jaws are identical in construction and shape so that a description of one will cover both. Each jaw is provided with two contact surfaces 7 and 8, which bear upon the can in operation, the surface 7, which contacts with the can in one operation being concave and its opposite surface 8, which contacts with the can in the reverse operation being plane. The axis of the concave surface 7 is parallel to the axis of the levers 1, though the jaw may also be provided with a concave surface with its axis across the axis of the levers. The intermediate or connecting portion which supports the contact surfaces may be varied as shown in Figure 3 to reduce the weight and cost of material leaving it of sufficient weight and size to admit the levers and to insure against breaking. The ends adjacent the handle of the contact surfaces 7 and 8 have flanges 9 as indicated in Figures 1, 2, and 4. These flanges prevent the can from snapping away from the jaws when the force is applied to the I-beam levers. For use on certain objects flanges may also be provided on the edges of the contact surfaces adjacent the links 3. The links 3 are arranged one on each side of the levers and are preferably of the shape and size indicated to permit the jaws to be adjusted as close as possible to the fulcrum points 4 thereby giving the greatest leverage possible to the force applied to the levers, and permit the proper opposition of the jaws with each other. In Figure 4, 1 is an I-beam pivotally linked to a base 12 mounted on any suitable support 10 with screws or bolts 11. The I-beam or lever is mounted with a jaw of the same shape and construction as above described. The base 12 is provided with two adjustable jaw blocks having contact surfaces 7^a and 8^a as indicated, the surface 7^a being concave and of the same shape and

construction as the surface 7 of the jaws described above and adapted to oppose the surface 7 of the jaw on the I-beam. The surface 8ª being plane and of the same shape and construction as surface 8 of the jaws and adapted to oppose the reverse surface 8 of the jaw mounted upon the I-beam. The I-beams being pivotally linked together, or in Figure 4 the lever being pivotally linked to the base bearing the contact surfaces, the levers may be reversed in operation, so that when the I-beams or levers are operated in one direction the concave surfaces of the jaws oppose each other in bearing on the can, and when the beams are reversed the plane surfaces of the jaws oppose each other in bearing on the can. The can to be crushed is placed between the concave surfaces and given an initial compression, the concave surfaces with the flanges being expressly adapted to seize and securely hold the can from snapping out of the crusher or from bouncing up and injuring the operator. The can is then placed between the plane surfaces of the jaws by reversing the levers and is given a final compression reducing it to a flat compact form. The flanges on the jaws operate throughout to securely hold the can between the jaws. The surfaces of the jaws may be clamped together in whatever order desired and for certain purposes the result may be obtained without reversing the jaws.

Having thus described my invention and illustrated its use, what I claim as new and desire to secure by Letters Patent, is the following:

1. In combination in a crushing device, a pair of contact-surfaces, one of which surfaces is concave and the other plane, a jaw provided with two contact-surfaces arranged on opposite sides thereof, one surface being concave and adapted to oppose in operation the concave contact-surface, and the other being plane and adapted to oppose in operation with the plane contact-surface, a pivoted lever having said jaw adjustably mounted thereon, all substantially as described.

2. A crushing tongs of the character described, comprising a pair of members pivotally linked together at one of their ends, and having adjustably mounted thereon opposing jaws, each provided with one concave and one plane contact-surface adapted to oppose each other substantially as described.

3. A can crushing device, comprising operating levers, and two sets of opposing jaws therefor, the jaws of one set being concave for partially flattening the cans and the jaws of the other set being plane for completing the crushing operation.

4. A crushing device of the character described, comprising two pairs of contact-surfaces, the one concave and adapted to oppose each other in operation, the other plane and adapted to oppose each other in operation, the contact-surfaces being provided with flanges, substantially as described.

5. A crushing tongs, comprising a pair of opposing jaws each having a concave contact-surface adapted to oppose each other when the jaws are in one position and having a plane contact-surface adapted to oppose each other when the jaws are in a reverse position, the jaws being adjustably mounted upon members pivotally linked together for operation, all substantially as described.

6. A crushing tongs comprising a pair of opposing jaws each having a concave contact-surface provided with a flange on one of its edges adapted to oppose each other when the jaws are closed in one position and having a plane contact-surface provided with a flange on one of its edges adapted to oppose each other when the jaws are closed in a reverse position, the jaws being adjustably mounted upon members pivotally linked together for operation, substantially as described.

In testimony whereof I have hereunto signed my name in the presence of two subscribed witnesses.

MONTGOMERY B. PICKETT.

Witnesses:
JAMES NICHOLAS LORENZ,
PAUL CARPENTER.