To all whom it may concern:

Be it known that I, George H. Powell, a citizen of the United States, and resident of Arlington, in the county of Hudson and State of New Jersey, have invented a new and useful Pivoted-Jaw Tool, of which the following is a specification.

The object of this invention is to provide a pivoted jaw tool having a new mechanical movement for obtaining a great advantage in leverage, which movement will be very simple and positive in its action thus rendering the tool applicable for various uses such, for instance, as a nut cracker, pincers, wrench, punch, and shears or other cutting tools.

The invention furthermore consists in a pivoted jaw tool comprising a jaw and its handle fixed relative to each other and a second jaw and movable relative to each other, the movable handle being pivoted to the fixed handle.

In the accompanying drawings the tool is shown as a nut cracker.

Figure 1 is a view in elevation looking toward one side of the tool, portions of the same being broken away. Fig. 2 is a similar view looking toward the other side of the tool, the jaws being shown in their open position in full lines and in their closed position in dotted lines, and Fig. 3 is a top plan view of the tool, a portion of the free ends of the handles being broken away.

The two jaws of the tool are denoted by 1 and 2, respectively, which jaws are pivoted together at 3.

The jaw 1 is countersunk as at 4 and the jaw 2 is countersunk as at 5 where the jaws overlap for bringing the jaws opposite each other. The jaw 1 is provided with a rearwardly extended handle 6 fixed with respect thereto. In the present instance, this handle 6 and the jaw 1 are formed integral. A second handle 7 is pivoted at 8 to an ear 9 on the handle 6 at the rear of the pivotal connection 3 of the two jaws 1 and 2.

The jaw 2 is provided with a rearward extension 10. The handle 7 and the jaw 2 are connected by a link 11, one end of which is pivoted at 12 to the rearward extension 10 of the jaw 2 and the other end of which is pivoted at 13 to the handle 7 at the rear of the pivotal connection 8 of the handle 7 with the handle 6. This handle 7 is cut away as shown at 14 to bring the link 11 within the plane of the two handles. A spring 15 is seated at one end within the socket 16 in the handle 6 and at its other end within a socket 17 within the rearward extension 10 of the jaw 2 for yieldingly holding the jaws in their open position.

In action, as the handles 6 and 7 are brought toward each other, the pivotal connection 8 between the handles 6 and 7 will move outwardly along a curve with the pivotal connection 3 of the two jaws as a center and the pivotal connection 13 between the link 11 and the handle 7 will move inwardly toward the pivotal connection 3 along a curve with the pivotal connection 12 between the link and the jaw 2 as a center. This double movement of these pivotal connections will gradually increase the power of the jaws as they are caused to approach each other by the bringing together of the handles 6 and 7.

By the arrangement of the several parts of the mechanical movement as herein described, it will be seen that the crushing or cutting power of the jaws is gradually increased as they approach each other thus giving to the said jaws the greatest power at the time most needed, viz: as they approach each other most closely.

This tool is shown in the present instance as a nut cracker but it is to be understood that the mechanical movement may be equally well applied to pivoted jaw tools of any character without departing from the spirit and scope of this invention.

What I claim is:

1. A pivoted jaw tool comprising a jaw and handle fixed relative to each other, a second jaw and handle movable relative to each other, the last named jaw having a rearward extension and the last named handle being pivoted to the other handle, and a link pivoted to the said last named handle and to the extension, the said pivotal connections being so located that as the handles are moved toward each other, the pivotal connection of the handles will move away from a line between the pivotal connection of the jaws and the pivotal connection of the link and the extension, while the pivotal connection of the link and the handle will move toward such line.

2. A device of the character described comprising pivoted jaws, a handle fixed with relation to one jaw, another handle movable with relation to the other jaw, the last named handle being pivoted to the first named han-
the last named jaw having a rearward extension, and a link pivoted to the movable handle and to the said extension between the handles, whereby the closing of the handles will cause the pivotal connection of the handles to move in a path about the pivotal connection of the jaws as a center and the pivotal connection of the handle and link to move in a path about the pivotal connection of the link and the extension as a center, thereby engendering a progressively increasing power in the movement of the jaws.

3. In a device of the character described comprising overlapping pivoted jaws, a handle fixed with relation to one jaw, another handle movable with relation to the other jaw, the last named handle being pivoted to the first named handle, and the last named jaw having a rearward extension, and a link pivoted to the movable handle and to the said extension between the handles, whereby the closing of the handles will cause the pivotal connection of the handles to move in a path about the pivotal connection of the jaws as a center and the pivotal connection of the handle and link to move in a path about the pivotal connection of the link and the extension as a center, thereby engendering a progressively increasing power in the movement of the jaws.

In testimony, that I claim the foregoing as my invention, I have signed my name in presence of two witnesses, this fourth day of June 1909.

GEORGE H. POWELL.

Witnesses:
F. George Barry,
C. S. Sundgren.