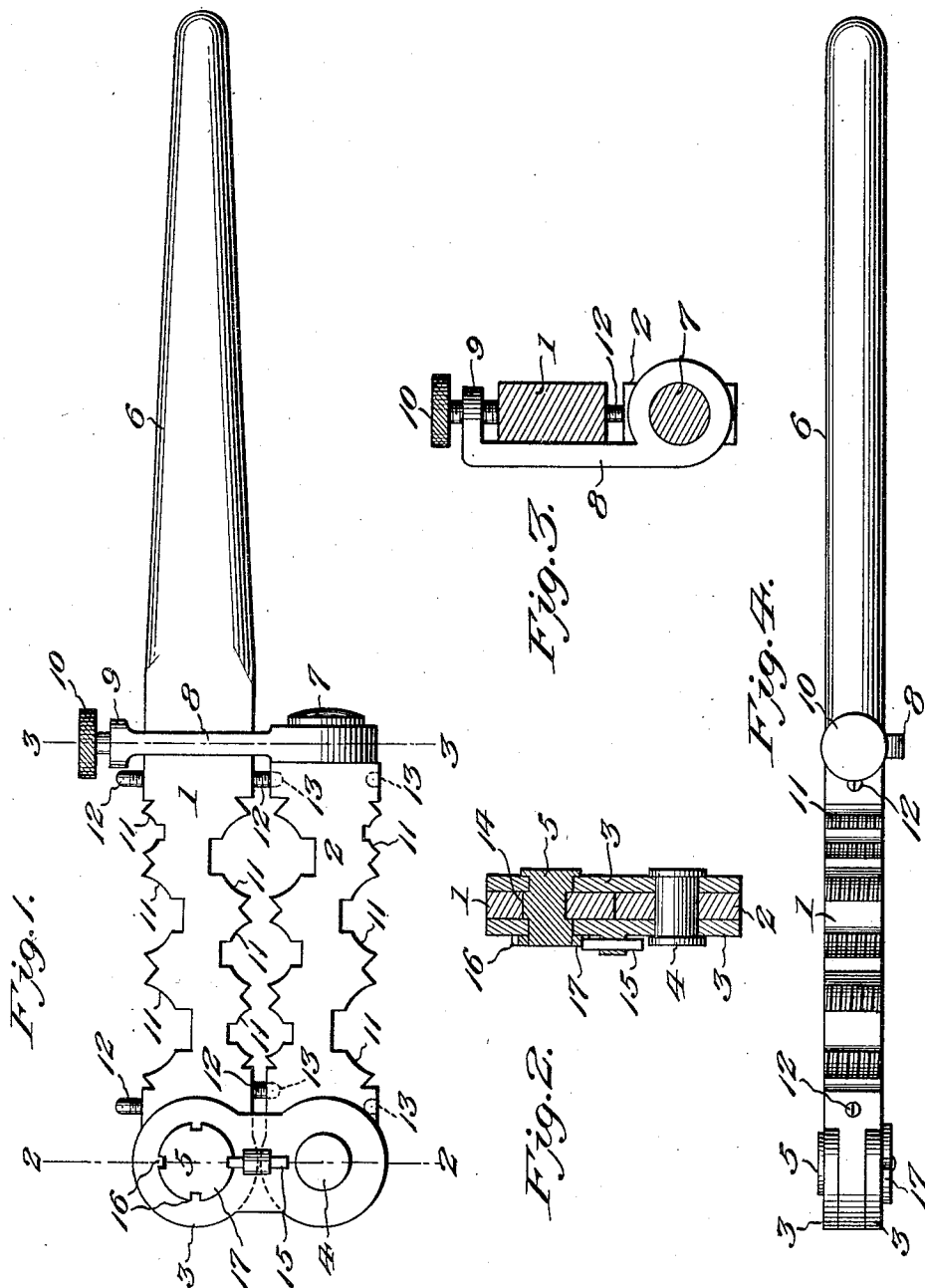




Witnesses

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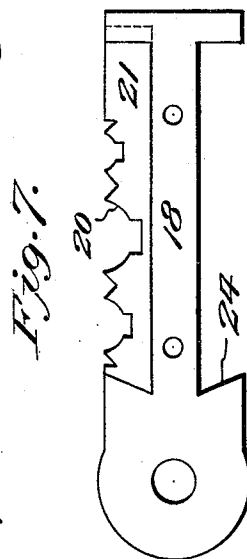
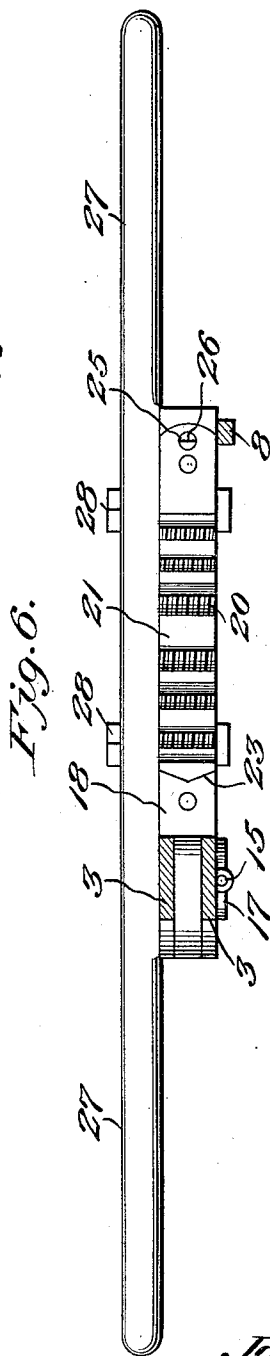
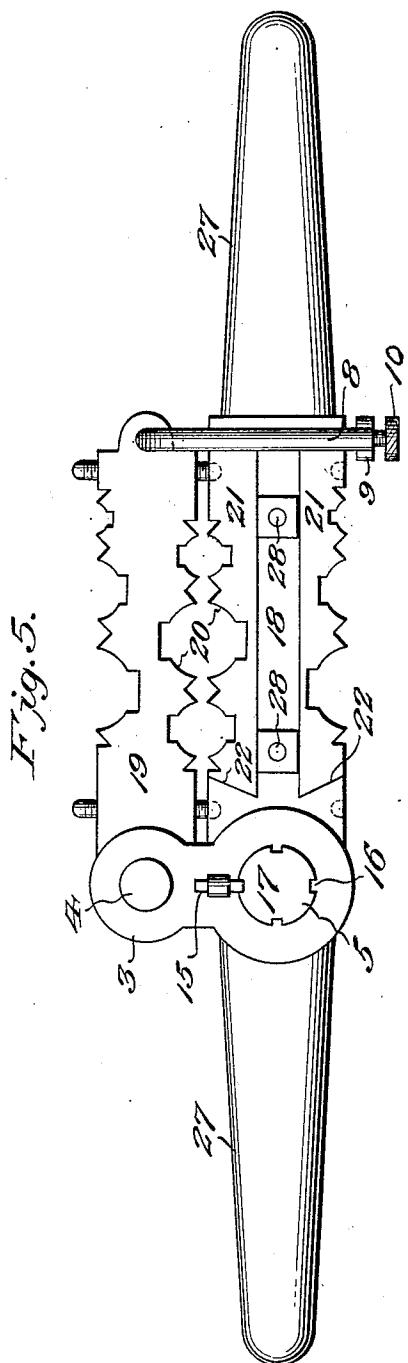
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1,005,604.

J. W. COWELL.
 THREAD CUTTER.
 APPLICATION FILED JAN. 21, 1911.

Patented Oct. 10, 1911.

2 SHEETS-SHEET 2.



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UNITED STATES PATENT OFFICE.

JOHN W. COWELL, OF LOS ANGELES, CALIFORNIA.

THREAD-CUTTER.

1,005,604.

Specification of Letters Patent.

Patented Oct. 10, 1911.

Application filed January 21, 1911. Serial No. 603,891.

To all whom it may concern:

Be it known that I, JOHN W. COWELL, 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 Thread-Cutters, of which the following is a specification.

This invention relates to thread cutters and one of the principal objects of the invention is the provision of a simple and inexpensive device whereby threads may be cut upon rods of different diameters and with threads of different pitch.

A further object of the invention is the provision of a device of this character having a plurality of jaw surfaces with cutting dies formed therein and means for holding the jaw surfaces together so that the dies in each side will coact with each other.

A still further object of the invention is the provision of a device of this character having a plurality of jaw surfaces together with means for holding the jaw surfaces in coacting relation and also in adjusting relation whereby rods, bolts, pipes, etc. of different diameters may be readily threaded.

Further objects of the invention will appear as the following specific description is read in connection with the accompanying drawings, which form a part of this application, and in which:—

Figure 1 is a side elevation. Fig. 2 is a section taken on the line 2—2 of Fig. 1. Fig. 3 is a similar section taken on the line 3—3 of Fig. 1. Fig. 4 is an edge view. Fig. 5 is a side elevation of a modified form. Fig. 6 is an edge view thereof. Fig. 7 is a detail side elevation of one of the members shown in Fig. 5.

Referring more particularly to the drawings, 1 and 2 represent the separate members of the device which are connected together at one end by means of a pair of pivoting plates 3 and the rivets 4 and 5. The member 1 is provided with an elongated shank or handle 6 and the lower end of the member 2 is provided with a cylindrical headed boss 7 upon which is pivoted an arm 8 having a right angular extension 9 adapted to surround the member 1. Threaded into the extension 9 is a set screw 10 which engages the shank of the member 1 and holds the separate parts together. The arm 8 is mounted upon the boss 7 so as to swing in a complete circle whereby it may be uti-

lized for locking the parts together in either normal or reverse positions.

The members 1 and 2 have their opposite edges, between the plates 3 and the boss and shank, provided with a plurality of different sized die faces 11 and these opposite die faces are adapted to be held in coacting relation with each other by the arm 8 and by means of alinement pins 12 secured to each member and adapted to enter apertures 13 in the opposite side of the opposite member. The rivet 5 is revolubly mounted in the plates and in the member 1 and is provided in its center or upon the portion upon which the member 1 is journaled with a cam 14 which is adapted to be turned by a sliding latch 15 carried by the front plate 3 and engaging suitable notches 16 formed in the enlarged head 17 of the rivet 5. This cam regulates the distance between the separate members 1 and 2 at their pivotal end and the set screw 10 may be adjusted to limit the separating movement of the opposite end of said members so that several different sized pipes may be cut by the same die with the same pitch of thread.

In the modified form illustrated in Figs. 5 to 7 a pair of members 18 and 19 are shown having coacting die faces 20 arranged in opposite sides thereof. These die faces are secured in the members in the form of plates 21 which have one end beveled off and wedged, as shown at 22 and 23 in Figs. 7 and 6 respectively, so as to engage the V-shaped undercut shoulder 24. The opposite end of the members 21 is provided with an aperture 25 through which is passed a locking screw 26 adapted to enter the member to which the plate is secured. The joint between the member 21 and the frame 18 at the end where the screw 26 is used must be somewhat loose in order that the wedged and beveled end of the member 21 may be inserted. While the member 19 has not been shown as constructed in the manner just described, it will be clearly understood that it may be so constructed if desirable. The members 18 and 19 are connected together in the manner described in Figs. 1 to 4 and the member 18 is provided with longitudinal handle extensions 27 at each end which are secured to the member 18 by means of a bolt 28. When it is desired to adjust the members 1 and 2 or 18 and 19 the arm 8 is re-

leased from the shank and turned either at right angles or in a plane parallel with the member to which it is attached and the arm to which it is attached is turned upon its rivet 5 until the catch 15 comes into register with a notch 16 farther around upon the head 17. The member 2 is then moved back into coöperating position with the member 1, thus rotating the cam 14 to force the members 1 and 2 farther apart. This catch 15 also acts to lock the rivet or pin 5 from rotation. The members are made parallel by adjusting the set screw 10. When it is desired to renew any of the parts the rivets 4 or 5 may be removed and if the part 2 is worn a new part may be placed between the plates 3. If the plates 21 are worn the set screw 25 may be removed and the plate lifted at that end and removed from the socket in which it is seated and a new plate substituted therefor.

The device may be used for threading any bolt, pipe or rod and may also be used for cleaning old threads.

Having thus described the invention, what I claim as new is:—

1. A device of the class described comprising a pair of members having coacting die faces on opposite sides, a pivotal connection for one end of said members, and means including a part of said pivotal connection for regulating the separation of said members.

2. A device of the class described comprising a pair of members having coacting die faces on opposite sides, a pivotal connection for one end of said members, means

including a part of said pivotal connection for regulating the separation of said members, together with adjustable means for holding the members in operative parallel relation.

3. A device of the class described comprising a pair of members having coacting die faces on opposite sides thereof, means for pivoting said members together at one end, whereby either side of said members may be used together, means including a part of the pivoting means for regulating the separation of said members, and a swinging clamping arm carried by one of the members and adapted to lock with the other member to secure the members in parallelism.

4. A device of the class described comprising a pair of members having coacting die faces on opposite sides thereof, a pair of pivoting plates, means passing through said plates and through said members for pivotally connecting said members together, one of said connecting means having a cam to engage its associated member, means carried by one of the plates for operating said cam to adjustably control the separation of said members, and a swinging clamping arm carried by one of the members and adapted to adjustably engage the opposite member to lock said members in parallel relation.

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

JOHN W. COWELL.

Witnesses:

L. C. WOODS,
R. W. CLAPP.