

No. 896,503.

PATENTED AUG. 18, 1908.

N. ZOGG.
THREAD CUTTER.
APPLICATION FILED MAY 18, 1907.

Fig. 1.

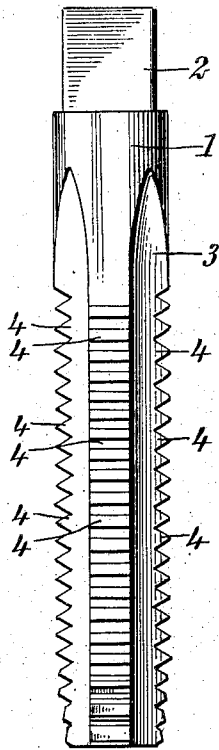


Fig. 2.

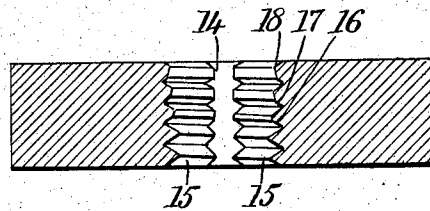
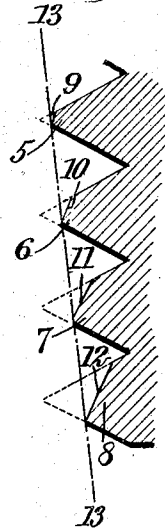


Fig. 3.



WITNESSES

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NICHOLAS ZOGG, OF NEW YORK, N. Y.

THREAD-CUTTER.

No. 896,503.

Specification of Letters Patent.

Patented Aug. 18, 1908.

Application filed May 18, 1907. Serial No. 374,416.

To all whom it may concern:

Be it known that I, NICHOLAS ZOGG, a citizen of the United States, and a resident of the city of New York, borough of Manhattan, in the county and State of New York, have invented a new and Improved Thread-Cutter, of which the following is a full, clear, and exact description.

This invention is designed to provide thread cutting taps and dies with lead cutters, adapted to readily start a thread in a nut, bolt or similar object, without the friction and effort incidental to thread cutters of ordinary construction.

In the constructions now in use grooved thread cutters are provided with lead teeth, cut away on their outer ends to form end surfaces, extending in a line inclined to the axial line of the cutter. When in use, the end surfaces of said teeth bear against the part acted upon and prevent the cutting edges of the teeth from feeding freely into a blank. This difficulty is overcome by means of the device illustrated in the accompanying drawings, in which

Figure 1 is a side elevation of a tap embodying my invention; Fig. 2 is a vertical cross section of a die embodying said invention, and Fig. 3 is an enlarged vertical section of a cutter, which may be the outer portion of a tap or the inner portion of a die.

As illustrated in the accompanying drawings, the shank 1 of a tap is provided with the usual angular head 2 and relief grooves 3, which extend longitudinally of the tap.

Segmental cutters or teeth 4 of the ordinary construction are formed in series in the tap, in the usual manner. Lead teeth 5, 6, 7 and 8 are formed on the entering end of the tap 1, and the outer portions of said teeth are cut away, forming end surfaces 9, 10, 11 and 12, respectively. These surfaces are situated back of the apices of the lead teeth, and recede from a line 13 joining the apices of said teeth toward the axial line of the tap, thereby making a clearance back of the apices of the teeth, and permitting the lead teeth on the entering end of the tap to feed freely into a blank; whereas, in the constructions now in use, the outer surfaces of the lead teeth, which extend in a line inclined to the axis of the cutter, bear against the surface of a blank, and in consequence of the friction caused thereby retard the cutter and prevent the cutting edge of the teeth from freely entering the blank.

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

A thread cutter having relief grooves, and lead teeth provided with end surfaces situated back of the apices of said teeth and receding from a line joining said apices.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

NICHOLAS ZOGG.

Witnesses:

ROBERT W. HARDIE,
JOHN P. DAVIS.