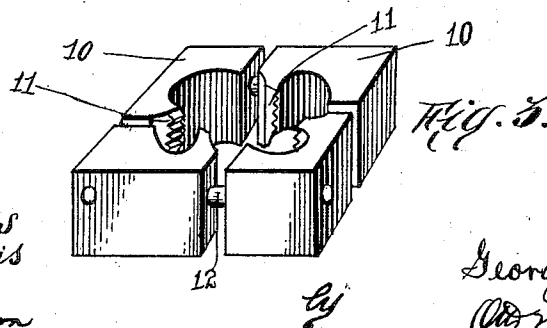
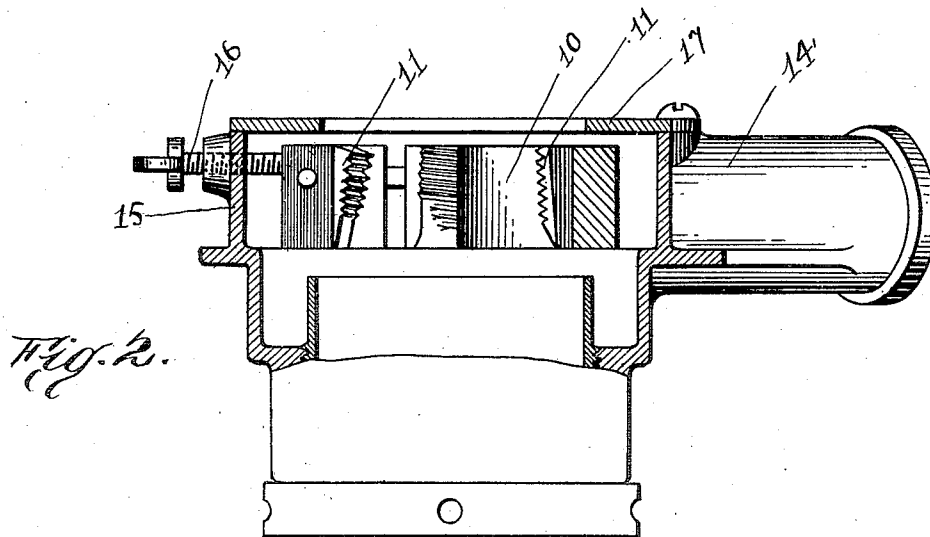
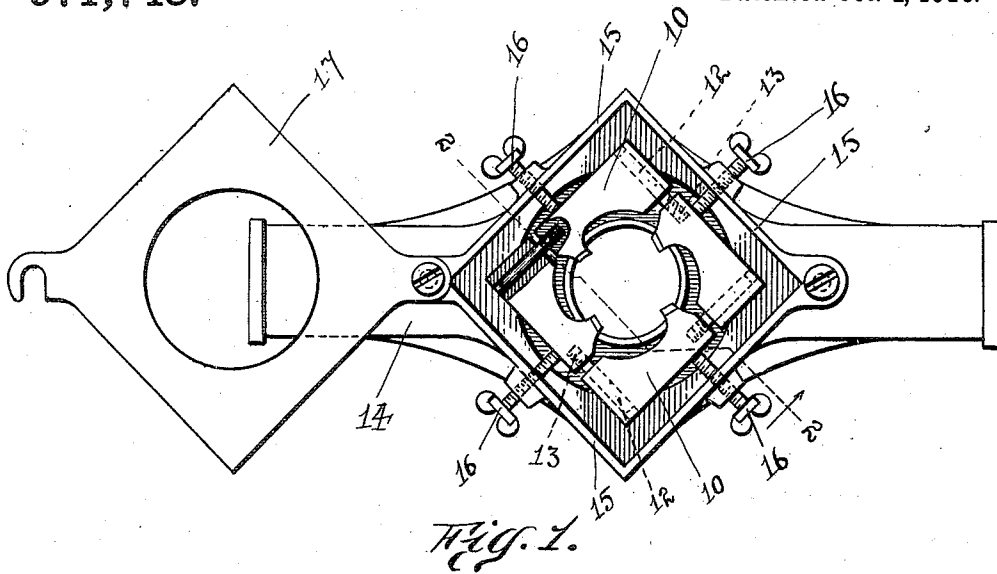


G. E. HILL.
DIE FOR CUTTING THREADS.
APPLICATION FILED NOV. 26, 1909.

971,748.

Patented Oct. 4, 1910.



Witnesses
C. A. Jarvis
R. L. Peterson

Inventor
George E. Hill
Attorney
his attorney

UNITED STATES PATENT OFFICE.

GEORGE E. HILL, OF NEW YORK, N. Y.

DIE FOR CUTTING THREADS.

971,748.

Specification of Letters Patent.

Patented Oct. 4, 1910.

Application filed November 26, 1909. Serial No. 529,884.

To all whom it may concern:

Be it known that I, GEORGE E. HILL, citizen of the United States, residing at New York city, New York, have invented certain new and useful Improvements in Dies for Cutting Threads, of which the following is a specification.

This invention relates to an improved form of die for cutting threads on pipes and the like, and the special feature of importance in my invention consists in making the die of a plurality of sections, preferably four sections whereby a double extension die results.

It is one object of the invention to provide a die of this character by means of which threads may be cut on pipes varying between one half inch to say two inches in diameter, and varying the size of the threads to suit the requirement of the occasion.

A further object of the invention is to provide means whereby old and discarded dies may be suitably treated and reused, this result being attained by softening old dies, as by heating the same, dividing them into sections, and then hardening such sections and sharpening the teeth thereon.

A further object is to provide a die wherein the sections are easily interchangeable and replaceable, and by the use of which the starting of a thread is greatly facilitated. In using a die such as herein referred to, it is possible, in case the die is caught while a thread is being cut, to ease up on one or more of the sections and permit the work to proceed, without material loss of time or energy.

Other objects and advantages of the invention will be hereinafter more fully set forth, reference being had to the accompanying drawing, wherein—

Figure 1 is a top plan view of a die stock containing my improved form of die, part of the latter being shown in section; Fig. 2 is a vertical sectional view through the stock and die on line 2—2 of Fig. 1 and Fig. 3 is a perspective view of a die.

Referring to Fig. 3 wherein the die is illustrated, the numerals 10 indicate four die sections, which when suitably juxtaposed form the cutting die proper. Each section 10 is provided with the usual internal thread cutting teeth 11, which serve to cut the threads on the pipe. Each die section is also provided with a projecting pin or stud

12 and on its opposite lateral face with a bore 13, the construction being such that when a plurality of die sections are juxtaposed the stud 12 on one section is adapted to enter the bore 13 of its adjacent section whereby four such sections may be interlocked to form a practically integral, but easily separable die. The sectional die as thus constituted is adapted to be retained in a die stock 14, that shown in the drawing being of the usual construction, except that the side walls 15 of the die seat are each provided with an adjusting set screw 16, which set screws thread through the walls 15 and are adapted to be screwed into contact with the die sections 10 to firmly retain the same against the pipe upon which a thread is being cut. The cover for resting over the die is designated 17.

It will be noted that my improved die is extremely simple in construction and has been found thoroughly effective in operation. Owing to the relative adjustability of the several parts of the die a wide range of work is possible which is not attained by any of the dies heretofore employed for similar work. It is also to be noted, that inasmuch as each die section is positively engaged by one of the set screws 16, the sections are firmly pressed against the pipe being threaded and threads of uniform smoothness and size may be cut.

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

1. As a new article of manufacture, a die for cutting pipe threads and the like, comprising a plurality of die sections, each section having a stud on one face at right angles to a bore on another face, whereby when the sections are juxtaposed the said studs will enter the said bores.

2. In combination, a die comprising a plurality of separable sections, each section having a stud on one face at right angles to a bore on another face, a die stock adapted to contain the die, and means carried by the die stock whereby the sections, when juxtaposed, may be forced together to cause the studs to enter the bores.

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

GEORGE E. HILL.

Witnesses:

FRANK D. KOERKLE,
OTTO MUNK.