(No Model.)

J. SHERMAN.

Device for Threading Bolts.

No. 236,365. Patented Jan. 4, 1881.

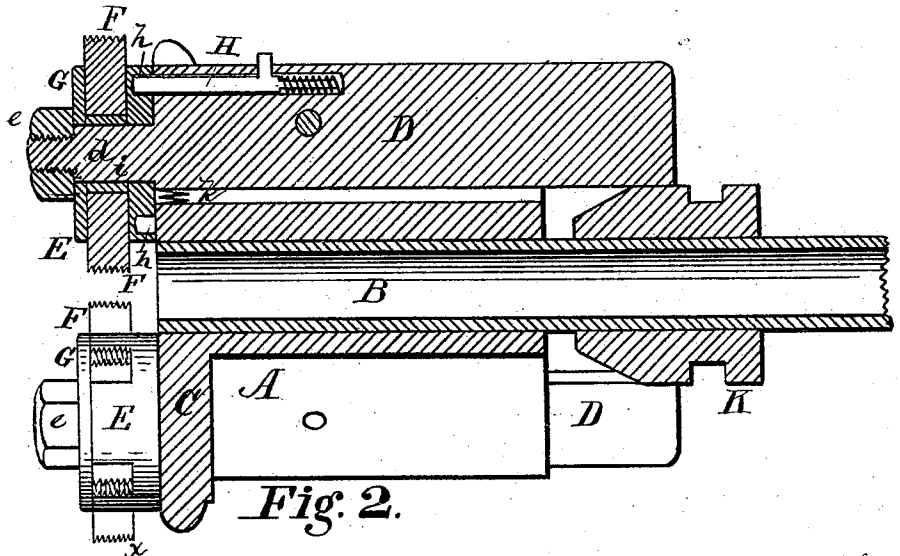

Fig. 2.

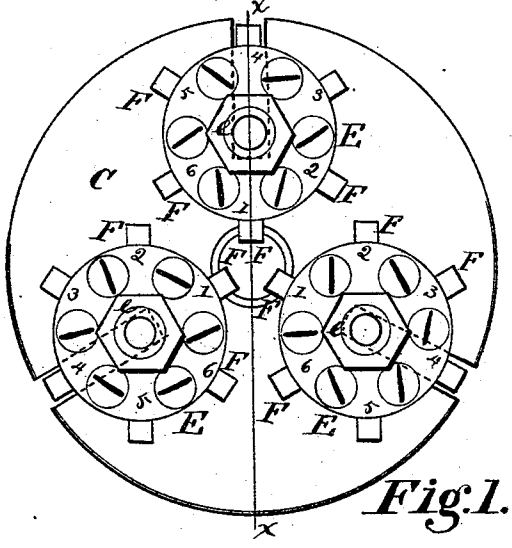

Fig. 1.

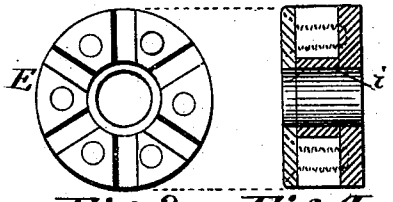

Fig. 3. Fig. 4.

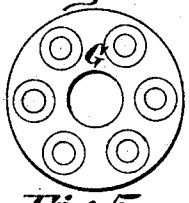

Fig. 5.

Witness:
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UNITED STATES PATENT OFFICE.

JOHN SHERMAN, OF CLEVELAND, OHIO, ASSIGNOR OF ONE-HALF TO LEONARD H. BURT, OF SAME PLACE.

DEVICE FOR THREADING BOLTS.

SPECIFICATION forming part of Letters Patent No. 236,365, dated January 4, 1881.

Application filed November 4, 1880. (No model.)

To all whom it may concern:

Be it known that I, JOHN SHERMAN, of Cleveland, county of Cuyahoga, and State of Ohio, have invented certain new and useful Improvements in Bolt-Cutter Heads, which are fully set forth in the following specification and accompanying drawings, in which—

Figure 1 is a face view of a bolt-cutter head showing my improvements. Fig. 2 is a longitudinal section of the same in line *x x* of Fig. 1. Fig. 3 is a face view of one of the die-holders, having front plate removed to show radial slots for the dies. Fig. 4 is a vertical section of same. Fig. 5 is a detached view of the front plate.

The nature and object of these improvements will fully appear in the subjoined description, when considered in connection with the accompanying drawings, which object is to supply a ready, simple, and economical means of setting and adjusting the cutting-dies to a variety of sizes of screw-threads without removing the dies. This I accomplish by the use of circular revolvingly-adjustable die-holders, as hereinafter described and claimed.

A is a head-block set onto a hollow shaft or spindle, B, and is provided with a circular face-plate, C. Said block has longitudinal radial slots, in which are pivoted levers D D. The front ends of said levers have pins *d*, which extend forward from the face-plate C, and upon which are placed circular revolvingly-adjustable die-holders E E, held in place by nuts *e* on said pins *d*. These die-holders E consist of disks or wheels (seen in Fig. 3) having radial slots, in which are set the cutting-dies F F, secured or clamped therein by the front plate, G, when screwed down firmly in place. The said disks have a central opening for setting them onto the aforesaid pins *d*. This central opening is enlarged from the front down to the depth of the slots for the purpose of inserting a sleeve or bushing, *i*, against which the inner ends of the dies F rest.

In the outer sides of the levers D are fixed spring-bolts H, which serve as guides for and means of adjusting and holding the die-holders in place when adjusted, there being a series of holes, *h*, in the rear side of said holders to receive the ends of the bolts H.

The cutting-dies F are simple straight pieces of steel, of uniform size, easily made, renewed, or replaced. Each holder is supplied with half a dozen or more of these dies, numbered from 1 to 6, in accordance with the varying sizes of thread. To adjust these dies for changing from one size or number of thread to another it is only necessary to slightly loosen the nuts *e* and slide back the bolts H, and turn the holders so as to bring the required numbers together at the center of the plate C, then allow the bolts H to enter the proper holes and again turn down the nuts *e*. Then the machine is ready to perform its work.

From the foregoing it will be seen that this device is readily and rapidly changeable for cutting a variety of work, requiring no great amount of skill to operate it, and also that the cuttings all fall away outside of the cutter-head, because the cutters are located outside, so that the machine is not clogged with cuttings, but readily clears itself. The bolts after being cut are released from the cutters by mechanism arranged to push back a slide-block, K, which releases the rear end of the levers. Then the holders E are expanded by springs *k* under the front of the levers.

Having described my invention, I claim—

1. The revolvingly-adjustable die-holder consisting of the circular disk E, having central opening, recesses *h*, and radial slots for holding the cutting-dies F, the sleeve *i*, and front clamping-plate, G, as described.

2. The revolvingly-adjustable die-holders E, constructed as described, in combination with the pivoted levers D, having pin *d* and nut *e*, spring-bolt H, and spring *k*, the said levers being operated to close or expand the dies and their holders by means of block K on the central shaft, B, substantially as and for the purpose specified.

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Witnesses:

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