(No Model.)

R. DOST.

SEPARABLE SCREW CUTTING DIE.

No. 530,166. Patented Dec. 4, 1894.

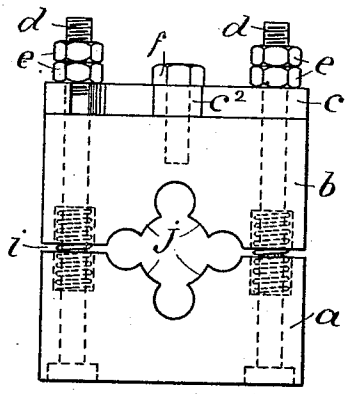

Fig. 1.

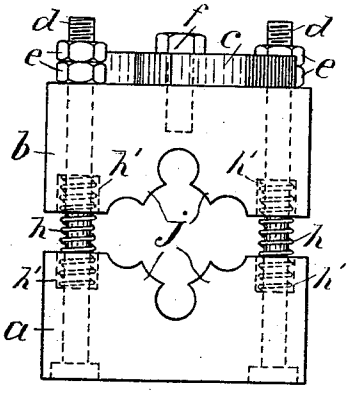

Fig. 2.

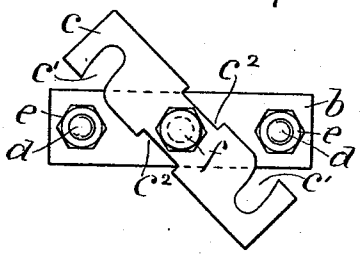

Fig. 3

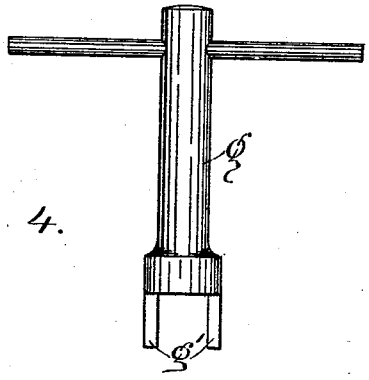

Fig. 4.

Witnesses
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UNITED STATES PATENT OFFICE.

RUDOLF DOST, OF CHICAGO, ILLINOIS.

SEPARABLE SCREW-CUTTING DIE.

SPECIFICATION forming part of Letters Patent No. 530,166, dated December 4, 1894.

Application filed August 18, 1894. Serial No. 520,686. (No model.)

To all whom it may concern:

Be it known that I, RUDOLF DOST, a citizen of the United States, residing at Chicago, in the county of Cook and State of Illinois, have invented certain new and useful Improvements in Separable Screw-Cutting Dies, which are fully set forth in the following specification, reference being had to the accompanying drawings, forming a part hereof, in which—

Figure 1 shows my said device in side elevation in its closed position. Fig. 2 shows the same in its open position. Fig. 3 shows a top view of Fig. 2. Fig. 4 shows the operating wrench thereto.

Like letters refer to like parts.

The object of my invention is to produce a divided die, or, one in which the two parts of which it is composed are separable, and which may quickly be separated and again placed into the position of a single die, as if said parts were united whereby such a die can quickly be stopped at any point and instantly returned to its starting place without the reversing or turning of the shaft to be threaded.

To attain said desirable ends I construct my said new device in substantially the following manner namely:

I divide the ordinary die-block into two parts, *a*, *b*, by a cut, *i*, and connect said parts by bolts, *d*, fitting closely into the lower block, *a*, but passing loosely through the block, *b*. I provide said bolt-ends with a pair of set-nuts, *e*, below which, and between the block, *b*, is a centrally pivoted and horizontally revolving filling-block, *c*, with oppositely facing curved notches, *c'*, which receive the bolts, *d*, and straight notches, c^2, on each side of the center-pin, *f*, to receive the spurs, *g'*, of the key, *g*. Around the bolts, *d*, are annular chambers, *h'*, of suitable depths to receive the ends of spiral springs, *h*, which push the liberated cutters, *j*, apart.

The operation of my said device is substantially as follows, namely: The springs, *h*, throw the parts, *a*, *b*, apart to a distance determined by the previously adjusted set-nuts, *e*. Said nuts with the filling block, *c*, determine the two positions of the part, *b*, of the die made by the operation of the filling-block and springs. When the filling-block is open the cutters, *j*, are far apart, as shown in Fig. 2. To bring them into their cutting position, shown in Fig. 1, the wrench, *g*, is applied to the notches, c^2, of the filling-block and pressed down until the springs have yielded sufficiently to let the filling-block pass under the set-nuts until it is stopped by the bolts, *d*. In said last position a thread of any length may be cut after which, by opening the filling-block the cutters, *j*, will be separated and the die may instantly be returned to its starting point without interrupting the motion of any driving mechanism; thus greatly expediting the work performed over that done with the old and entire die.

What I claim is—

1. The combination with a divided die provided with chambers on its facing edges and bolts connecting the parts, fast in one and loose in the other block, of springs in said chambers, set-nuts on said bolts, and a centrally pivoted filling block between said nuts and loose block, substantially as specified.

2. The combination with a divided die provided with chambers on its facing edges and bolts connecting the parts, fast in one and loose in the other block, of springs in said chambers, set nuts on said bolts, and a pivoted filling-block with oppositely facing and curved end notches, to operate substantially as specified.

3. The combination with a divided die provided with chambers on its facing edges: and bolts connecting the parts, fast in one and loose in the other block, of springs in said chambers, set-nuts on said bolts and a pivoted filling-block with oppositely facing and curved notches and oppositely facing central side notches, substantially as specified.

RUDOLF DOST.

Witnesses:
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