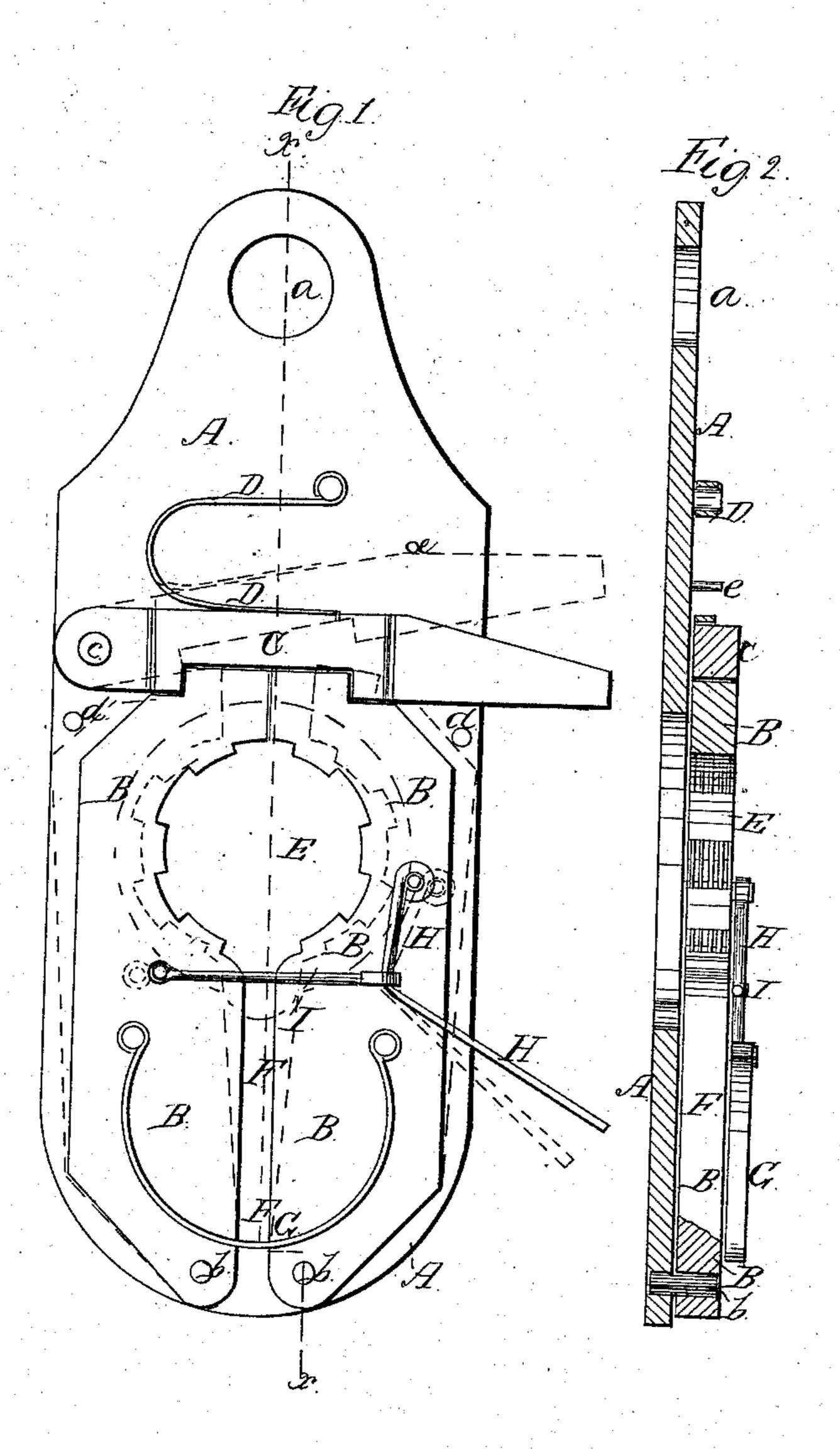
### 17. I. Cole.

The for Cutting Threads on Tubes.

Nº67,958.

Patented Aug. 20, 1867.



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THE GRAPHIC CO.PHOTO-LITH.39 & 41 PARK PLACE, N.Y.

## Anited States Patent Effice.

# WILLIAM T. COLE, OF NEW YORK, N. Y., ASSIGNOR TO JACOB F. HUNTER AND PETER P. KELLER, OF THE SAME PLACE.

Letters Patent No. 67,958, dated August 20, 1867.

### IMPROVED DIE FOR CUTTING THREADS ON TUBES.

The Schedule referred to in these Petters Patent and making part of the same.

#### TO ALL WHOM IT MAY CONCERN:

Be it known that I, WILLIAM T.-Cole, of the city, county, and State of New York, have invented a new and improved Die for Cutting Threads on Tubing; and I do hereby declare that the following is a full, clear, and exact description thereof, which will enable others skilled in the art to make and use the same, reference being had to the accompanying drawings, forming part of this specification, in which—

Figure 1 is a front view of my improved die, and

Figure 2 is a vertical section of the same, taken on the line x x, fig. 1.

Similar letters of reference indicate corresponding parts.

This invention relates to a device whereby screw-threads are cut on tubes and other cylindrical, solid, or hollow articles, and consists in making the die by which the screw-threads are cut, of two or more pieces, which are pivoted to a vertical suspended plate, and which are clamped together, so as to form a circular die while the thread is being cut, but which are thrown apart by means of springs or weights as soon as the thread has been cut, thereby allowing the easy removal of the tube, while heretofore, when full dies were used, the tube had to be turned back out of the die. A great saving of time and labor is thus accomplished by the use of this invention, and the cutting of threads on tubes, &c. is thus considerably simplified and cheapened; the apparatus itself being of the most simple construction, and cheaply made.

A represents a plate, which is made of cast or wrought iron, and which is suspended from a stationary pin which passes through a hole, a, in the upper part of the plate. To the lower part of the plate A are pivoted, by means of pins b b, two steel arms B B, in each of which a semicircular recess is formed, in which the teeth or edges for cutting the thread on a tube are arranged, as is clearly shown in the drawings. On top the two plates B B meet or touch each other, and when they are clamped together by a recessed lever, C, which is held down by a spring, D, and pivoted to the plate A by a pin, c, the circular die is formed by the two semicircular recesses, as shown in fig. 1. Below the circular opening E, which is thus formed between the plates BB, is formed a channel, F, between the inner edges of the die-plates BB, for the purpose of conducting off the borings or shavings, which would otherwise clog the dies. A semicircular or other spring, G, of which one end is secured to either plate B, as shown, serves to throw the latter apart as soon as the clutch C is raised, thereby bringing the parts into the position which is indicated by red lines in fig. 1. The tube on which a thread was cut while the dies were locked together can now be withdrawn with ease and facility. By a lever, H, which is pivoted to one of the plates B, and which is connected with the end of an arm, I, which is pivoted to the other plate B, the latter can be instantly locked. It is only necessary to raise the ends of the lever whereby the die will be formed or closed, and then the spring D will instantly force the clutch C upon the upper ends of the plates B, whereby the same are locked. dd are stop-pins, which prevent the dies from being drawn too far apart, whereby the spring G is protected from being overstrained. The spring D is protected in a similar manner by a stop, e, which prevents the lever C from being elevated too high.

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

1. The combination of the base-plate A, pivoted die-plate B, spring C, lever H, and link I, arranged substantially as described.

2. The combination with the above of the clutch C, applied and operating in the manner and for the purpose specified.

WILLIAM T. COLE.

Witnesses:

WM. F. McNamara, Alex. F. Roberts.