

(No Model.)

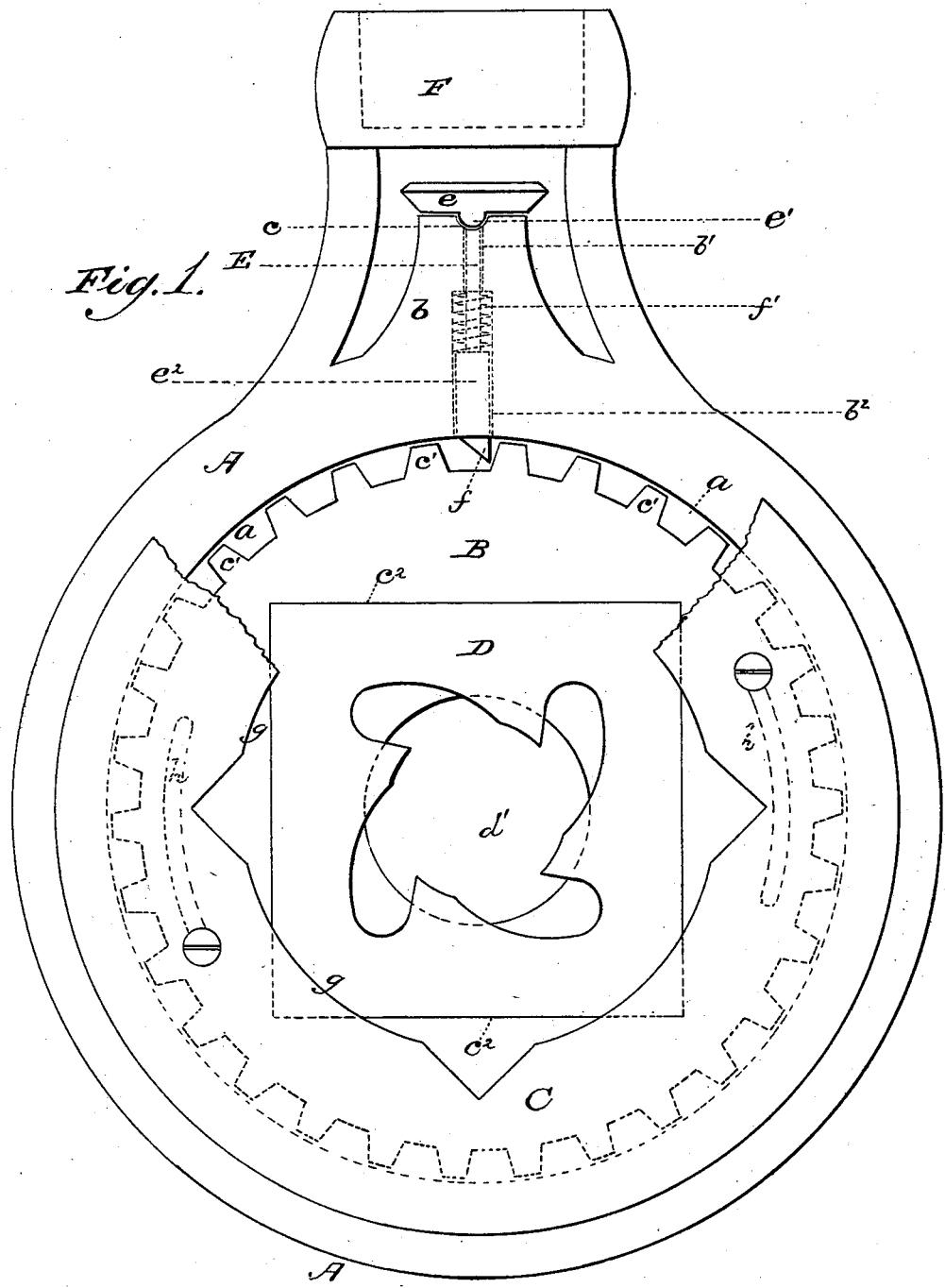
2 Sheets—Sheet 1.

H. R. PROCTOR.

SCREW CUTTING DEVICE.

No. 262,615.

Patented Aug. 15, 1882.



WITNESSES

James J. Sheehy,
John Zimmerman.

INVENTOR

H. R. Proctor
by Wm. H. Bates & Co.
his ATTORNEYS

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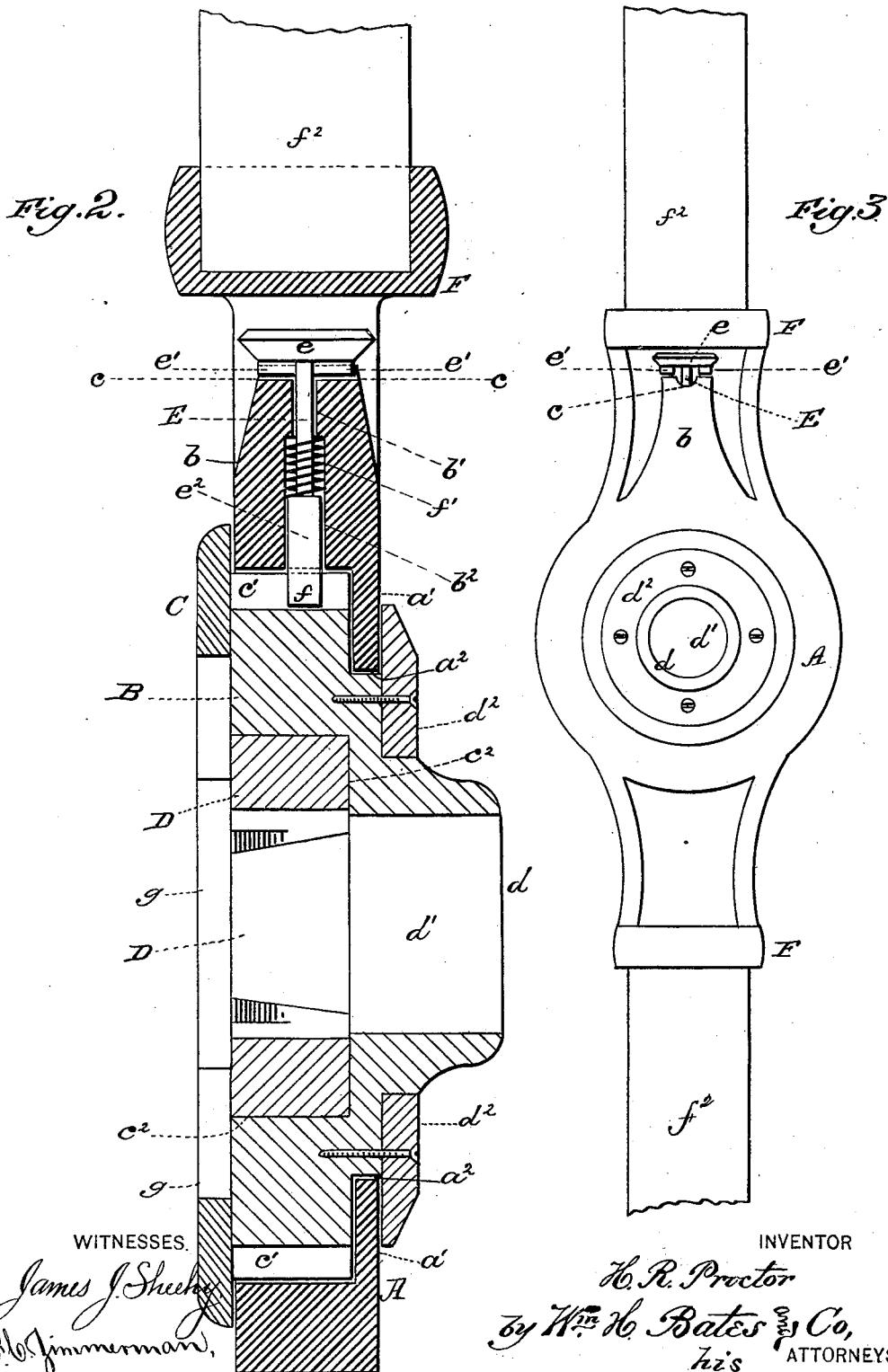
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UNITED STATES PATENT OFFICE.

HARRY R. PROCTOR, OF BRADFORD, PENNSYLVANIA.

SCREW-CUTTING DEVICE.

SPECIFICATION forming part of Letters Patent No. 262,615, dated August 15, 1882.

Application filed June 13, 1882. (No model.)

To all whom it may concern:

Be it known that I, HARRY R. PROCTOR, a citizen of the United States, residing at Bradford, in the county of McKean and State of Pennsylvania, have invented certain new and useful Improvements in Screw-Cutting Devices, of which the following is a specification, reference being had therein to the accompanying drawings.

10 This invention has relation to improvements in that class of devices used for cutting screw-threads on pipes and bolts; and it consists in the novel construction and arrangement of the parts hereinafter described.

15 The annexed drawings, to which reference is made, fully illustrate my invention, in which—

Figure 1 represents a side view of my device. Fig. 2 represents a vertical sectional view of 20 the same; and Fig. 3 is also a side view, showing the device with two handles.

A designates the body of the thread-cutter, which is constructed in circular form, having a recess, *a*, that is open on one side thereof, 25 and on the opposite side the body is provided with a circular flange, *a'*, in which is an opening, *a²*, and at one side of the body *A* is an extension, *b*, in which is made a hole, *b'*, that communicates with a larger hole, *b²*, that has 30 its outlet in the circular recess *a* of the body *A*. In the outer face of the extension aforesaid is made a transverse groove, *c*, for a purpose hereinafter explained.

B indicates a wheel having on its outer face 35 teeth *c'*, and provided on one side with a square recess, *c²*, and on the opposite side with a circular projection, *d*, having an opening, *d'*, smaller in diameter than the recess *c²*, which projection has removably secured to it a circular plate, *d²*. On the opposite side to the plate *d²* the wheel is provided with a removable plate, *C*, that is larger in diameter than the recess *a*, and the same is provided with an opening, *g*, in the center, a portion of which is 40 equal to the width of the die *D*, that is seated within the recess *a*.

E represents a rod having at its upper or outer end a knob, *e*, beneath which and attached thereto are two teeth, *e'* *e''*, extending

laterally from said rod, and at the lower or inner end of the rod *E*, and a part thereof, is a dog, *e²*, having a beveled point, *f*, that engages the teeth of the wheel aforesaid.

Within the hole *b²* is placed a spring, *f'*, that encircles the rod *E*, one end of which bears 55 against the shoulder of the dog *e²*, and the other end has its bearing against the end wall of the hole *b²*.

F designates a socket piece projecting from the body *A*, that has secured therein the handle *f²*, by which the device is worked.

Having described the different parts of my device, I will now explain its operation.

Fig. 1 of the drawings shows the device in position for cutting screw-threads on bolts and 65 pipes, with the dog *e²* in engagement with the teeth *c'*, and held by the spring *f'*. The handle is grasped by the operator and given an up-and-down or a reciprocating movement, which has in the one direction the effect of 70 turning the wheel *B*, at the same time turning the die *D*, thereby cutting screw-threads on the pipe.

It will be seen that in the opposite movement of the handle to that of cutting, the teeth 75 of the wheel *B* escape the beveled point of the dog *e²*. When the thread is of sufficient length and the cutter is to be removed from the pipe the knob *e* is raised and turned, causing the point *f* to be in a position reverse to 80 that of its former position, thereby reversing the movement of the wheel and the die, while at the same time the handle is worked as before. When the point *f* is engaging the teeth *c'* of the wheel the teeth or ribs *e'* *e''* rest within the 85 groove *c*, and hold the rod in the desired position, and in releasing the wheel from the body *A*, so that both will not turn together, the knob *e* is raised and turned partly around, thus bringing the teeth or ribs *e'* on the upper 90 surface of the extension *b*.

It will be noticed that a full revolution of the device is unnecessary, and the backward movement does not carry the die backward, the advantage of which gives the operator full 95 control of the machine at all points. The die can be readily removed and another inserted when desired.

A slot, *h*, may be made in the plate *C* for each securing-screw, and when it is desired said plate can be turned sufficiently to bring the corners of the opening in the plate in line 5 with the corners of the die, thus permitting said plate to always remain attached to the wheel, instead of removing it when the dies are to be changed.

A cutter constructed as herein described is 10 durable, simple in operation, and cheap to manufacture.

What I claim, and desire to secure by Letters Patent, is—

1. In a thread-cutter for pipes and bolts, the 15 combination herein shown and described of the rod *E*, having on one end the beveled dog *f* and on the opposite end the knob *e*, provided with the teeth or ribs for engagement with the

groove *c*, and operated by the spring *f'*, working in the hole *b*², with the wheel *B* and the 20 body *A*, constructed as described, having the extension *b*, recess *a*, holes *b'* *b*², and flange *a'*, as and for the purpose set forth.

2. The combination herein shown and described of the body *A*, having the extension *b*, 25 handle-projection *F*, recess *a*, and flange *a'*, the wheel *B*, having teeth *c'*, recess *c*², projection *d*, plates *C* *d*², and die *D*, rod *E*, dog *f*, spring *f'*, groove *c*, and knob *e*, having ribs *e'*, the whole operating as described. 30

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

HARRY R. PROCTOR.

Witnesses:

LLOYD F. KELEHER,
A. T. SANGSTON.