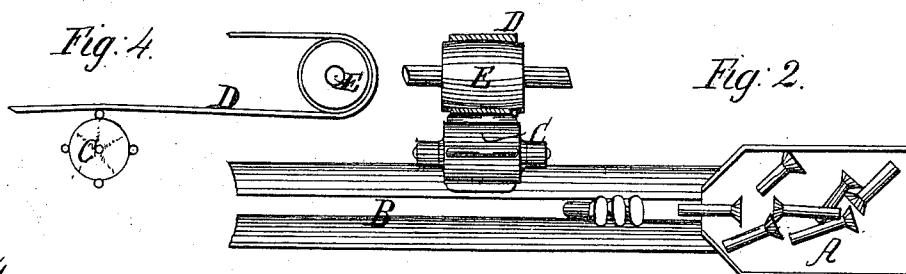
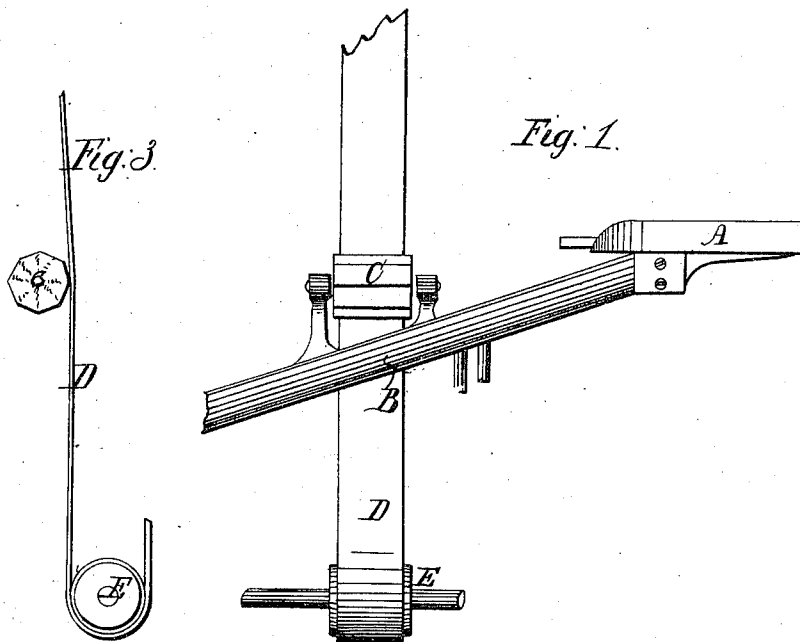


E. S. PIERCE.

APPARATUS FOR FEEDING SCREW BLANKS.

No. 81,404.

Patented Aug. 25, 1868.



Witnesses;

H. Brigham Hall
Geo. C. Davis.

Inventor;

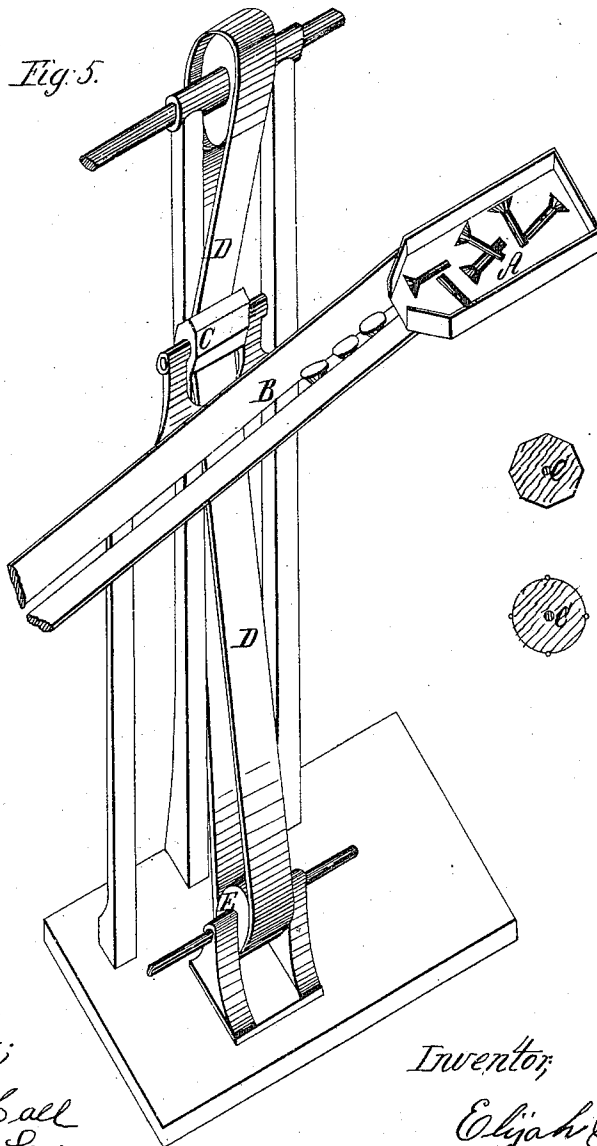
Eliah S. Pierce

E. S. PIERCE.

APPARATUS FOR FEEDING SCREW BLANKS.

No. 81,404.

Patented Aug. 25, 1868.



Witnesses;
W. Brigham Hall
Thos. D. Davis.

Inventor;
Elijah S. Pierce

United States Patent Office.

ELIJAH S. PIERCE, OF HARTFORD, CONNECTICUT.

Letters Patent No. 81,404, dated August 25, 1868.

IMPROVED APPARATUS FOR FEEDING SCREW-BLANKS.

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

TO ALL WHOM IT MAY CONCERN:

Be it known that I, ELIJAH S. PIERCE, of Hartford, in the county of Hartford, and State of Connecticut, have invented a new and useful Improvement in Feeding Screw-Blanks or other similar articles; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the accompanying drawings, and to the letters of reference marked thereon.

Figure I shows a front view of a hopper and trough for feeding screw-blanks into a machine, with my improvement attached.

Figure II shows a top view of the same.

Figure III is a section through the middle of the belt and pulleys shown in Fig. I.

Figure IV is a section through the middle of the belt and pulleys shown in Fig. II.

Figure V shows a perspective view of my improvement as applied to the hopper of a screw-machine, together with sections of two forms of roller.

Like letters in the several figures indicate like parts.

My invention consists in attaching to some part of the hopper or feeding-trough of a machine for performing some operation upon screw-blanks or other similar articles, a pulley or roller, having an uneven or flat-sided surface, running against a belt, so that a vibratory motion is given to the several parts of the feeding-mechanism, whereby the blanks are jarred and shaken down from the hopper to the machine where they are to be operated upon.

A is the hopper, placed at a slight inclination, into which the blanks are put.

B is an inclined trough, of the usual construction, for conveying the blanks to the machine.

C is a roller or pulley, attached to the feeding-trough, for giving the vibratory or jarring motion to the feeding-apparatus. It is shown in Figs. I and III of a polygonal form, and in Figs. II and IV of a circular form, with raised ridges, made of wire, bent into the form of a staple, and the ends driven into the roller.

Any form of roller can be used, the surface of which is sufficiently uneven to give a proper vibration to the feeding-apparatus. This roller can be attached to any part of the hopper or feeding-apparatus that may be most convenient for communicating with one of the belts of the machine.

D is a belt, which presses against the roller C with sufficient force to communicate to it a rolling motion. This belt may be one of the ordinary belts of the machine to which the feeding-apparatus is attached, or a belt especially for the purpose described, in which case it might pass around the roller or pulley C.

E is a pulley upon the machine, around which the belt D passes, in the arrangement shown in the drawings.

The operation of my invention is as follows:

The hopper A being filled with blanks, and motion given to the belt D, the roller C rolls upon the belt in such a manner as to give a vibratory motion to all the parts of the feeding-apparatus, and thereby shakes or jars the blanks, so that they gradually pass down the slightly-inclined surface of the bottom of the hopper A, and drop, at a nearly uniform rate, into the feeding-trough B, the rapidity of their passing from the hopper being regulated by the inclination of the bottom of the hopper A. The blanks are caught by the trough B, and fall into the groove in a single line, in the usual manner, which operation, as well as their passage through the trough, is assisted and rendered more certain in its action by the jarring motion given by the roller C.

Claim.

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

The combination of the roller C and belt D with the hopper and trough A B, when constructed and arranged substantially as herein described.

ELIJAH S. PIERCE.

Witnesses:

N. BRIGHAM HALL,
THO. G. ELLIS.