

W. AIKEN.

Machines for Shaving the Heads of Screw Blanks.

No. 149,967.

Fig. 1.

Patented April 21, 1874.

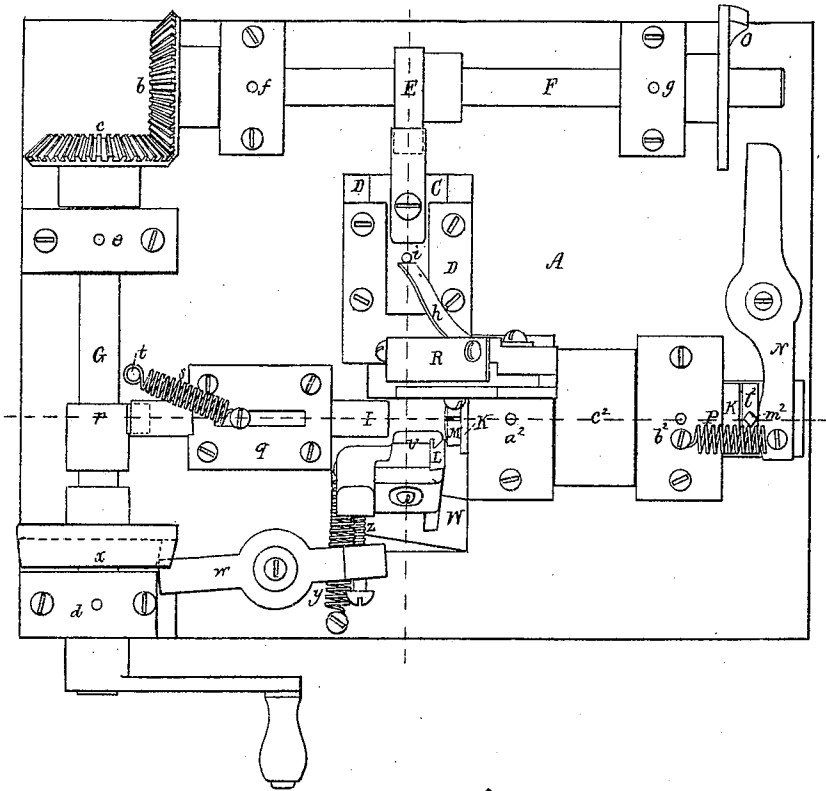
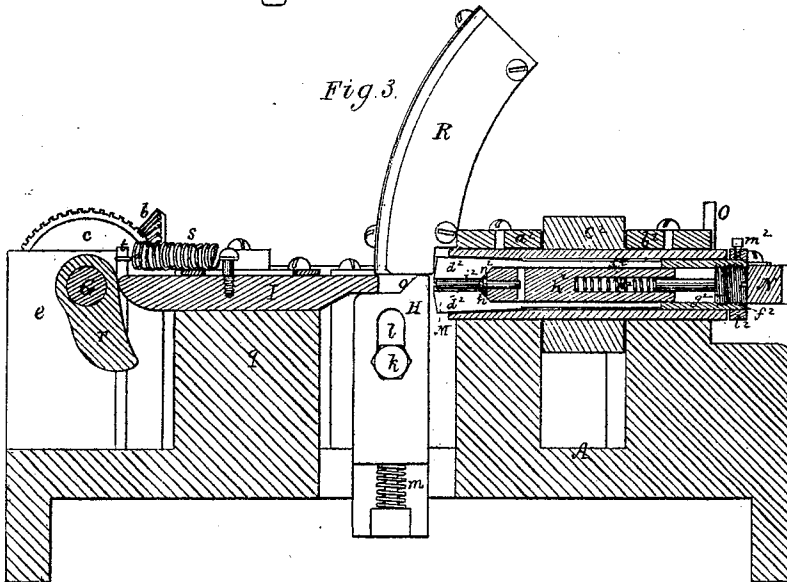


Fig. 3.



Witnesses

S. W. Piper

L. N. Keeler

Walter Aiken

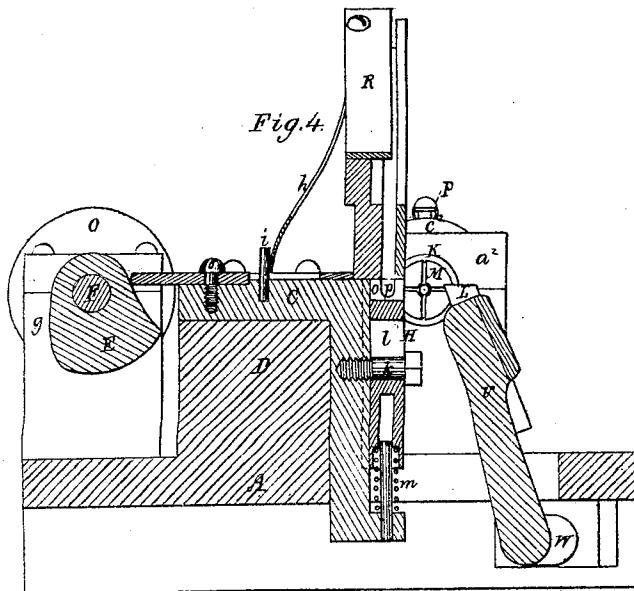
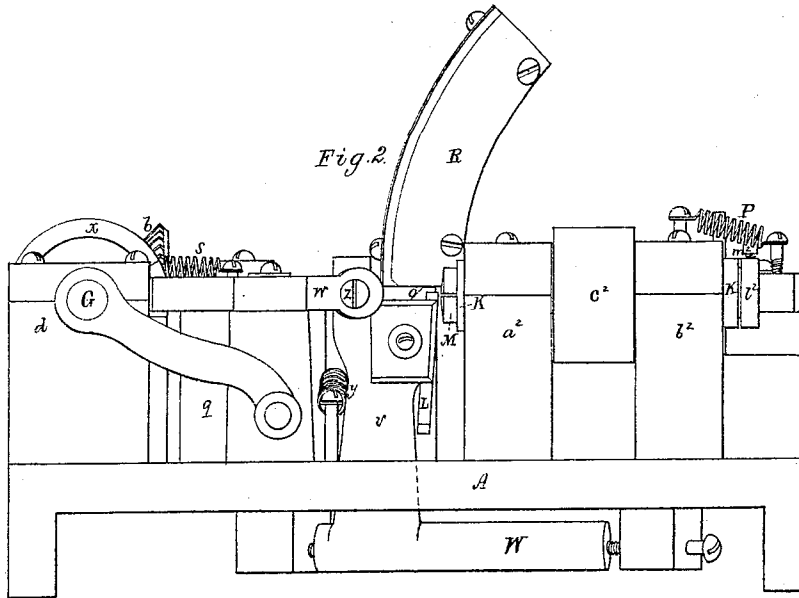
by his attorney

R. H. Aiken

W. AIKEN.

Machines for Shaving the Heads of Screw Blanks.

Patented April 21, 1874.



Witnesses.
S. W. Piper
L. N. Miller

Walter Aiken.
by his attorney
R. H. Gray

UNITED STATES PATENT OFFICE.

WALTER AIKEN, OF FRANKLIN, NEW HAMPSHIRE.

IMPROVEMENT IN MACHINES FOR SHAVING THE HEADS OF SCREW-BLANKS.

Specification forming part of Letters Patent No. 149,967, dated April 21, 1874; application filed April 1, 1874.

CASE No. 6.

To all whom it may concern:

Be it known that I, WALTER AIKEN, of Franklin, of the county of Merrimack and State of New Hampshire, have invented a new and useful Machine for Dressing, Shaving, or Turning the Heads of Screw-Blanks; and do hereby declare the same to be fully described in the following specification and represented in the accompanying drawings, of which—

Figure 1 is a top view, Fig. 2 a front elevation, Fig. 3 a longitudinal section, and Fig. 4 a transverse section, of it.

Each screw-blank to have its head dressed or turned by the machine is composed of a short piece of round wire, having a head in the form of a conic frustum formed upon it by means of dies, such a blank being shown in side view in Fig. 5. As the dies leave the head with fins upon its inner surface, and with a base more or less irregular at the circumference thereof, the object of the present machine is to turn down the head, so as to remove from it such irregularities, and reduce it to a true conic frustum.

In the drawings, A denotes a bed or base plate, having erected upon it sundry posts or standards, for sustaining various portions of the operative parts of the machine. Projecting upward from the first of such standards, viz., that marked D, is a curved reservoir, R, for holding the blanks one upon the other, in the manner as shown at *a a a* in Fig. 6, which is a vertical section of the reservoir. Below the reservoir R, and disposed with it as represented, is a feeder, C, which, formed as shown, is arranged to slide horizontally within the post or standard D. This feeder is impelled forward, at the proper time, by a cam, E, fixed on a shaft, F, arranged at a right angle with a driving-shaft, G, and geared thereto by bevel-gears *b c*. These two shafts, arranged as represented, are supported in four posts or standards, *d, e, f*, and *g*, erected on the base-plate A. A spring, *h*, fastened to the reservoir, and bearing against a stud, *i*, extended up from the feeder, serves to move backward the feeder at the proper time, in order to enable a screw-blank to fall from the hopper or reservoir R into the depressible and cammed receiver H of the feeder. The said receiver H, formed as shown in top view in Fig. 7, and in front ele-

vation in Fig. 8, is supported against the feeder by a screw, *k*, which passes through a vertical slot, *l*, in the said part H, the same being so as to allow the receiver H to move vertically upon a spring, *m*, supported by the feeder, and arranged as shown, the purpose of the spring being to elevate the receiver H after each depression of it. The said part H has on its top an inclined plane or cam, *o*, which, on its top, is notched, as shown at *p*, to receive the shank of the screw-blank, the head of which will at the time rest on the top of the receiver H. An auxiliary feeder, I, formed and arranged, and supported in a standard, *q*, as represented, so as to be capable of sliding therein longitudinally, serves to advance a screw-blank from the receiver H into the space between the jaws of the tube M in the turning-arbor K, arranged as shown. A cam, *r*, fixed upon the driving-shaft, effects the advance of the auxiliary feeder. A spring, *s*, fixed to the feeder and a post, *t*, operates to cause the retreat of the feeder I at the proper periods. The turning-arbor K ranges with the feeder I, and is a rotary tubular shaft, provided not only with a mechanism for seizing the blank by its shank and holding it firmly during the process of turning its head, but with a mechanism for discharging the blank or expelling it from the holding-jaws after the head may have been sufficiently reduced or turned by the cutter L, arranged as shown in Figs. 1 and 2. The said cutter L is secured to an arm, *v*, extended up from a rock-shaft, W, arranged as represented. At the proper time the arm is moved inward by a lever, *w*, actuated by a cam, *x*, carried by the driving-shaft. A spring, *y*, fixed to the arm and the base-plate A, serves to retract the cutter-arm. A screw, *z*, screwed into and through the lever, bears against the cutter-carrying arm, and serves to regulate the advance thereof. The turning-arbor K, supported in standards *a² b²*, is provided with a pulley, *c²*, for effecting its revolution by an endless belt. This arbor is tubular, and receives within its bore a jawed tube, M. (Shown in top view in Fig. 9, in front-end view in Fig. 10, in longitudinal section in Fig. 11, and in rear-end view in Fig. 12.) This jawed tube M, made of steel, is split lengthwise in planes at right angles,

A. ANGST.
Knitting-Machines.

No. 149,968.

Patented April 21, 1874.

Fig. I.

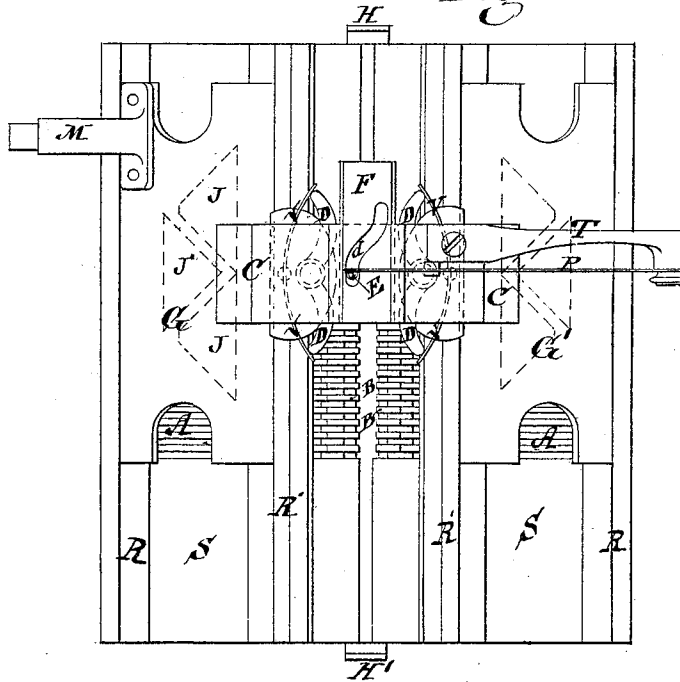
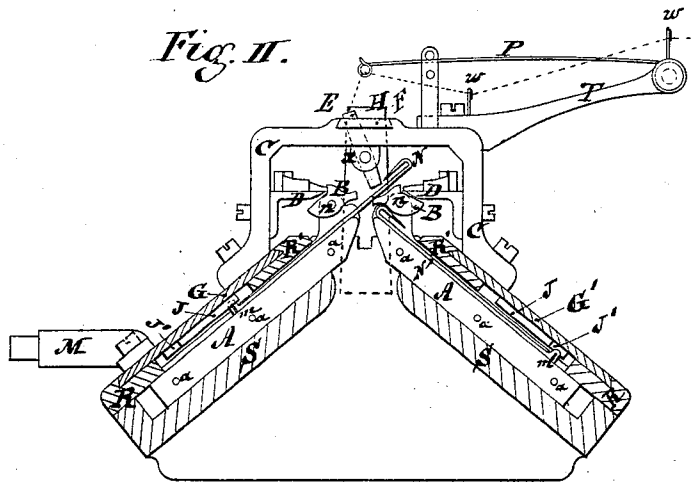


Fig. II.



Witnesses.
A. E. Collins.
F. M. Ewan

Inventor.
Adolf Angst
per Henry E. Roeder
Attorney.

