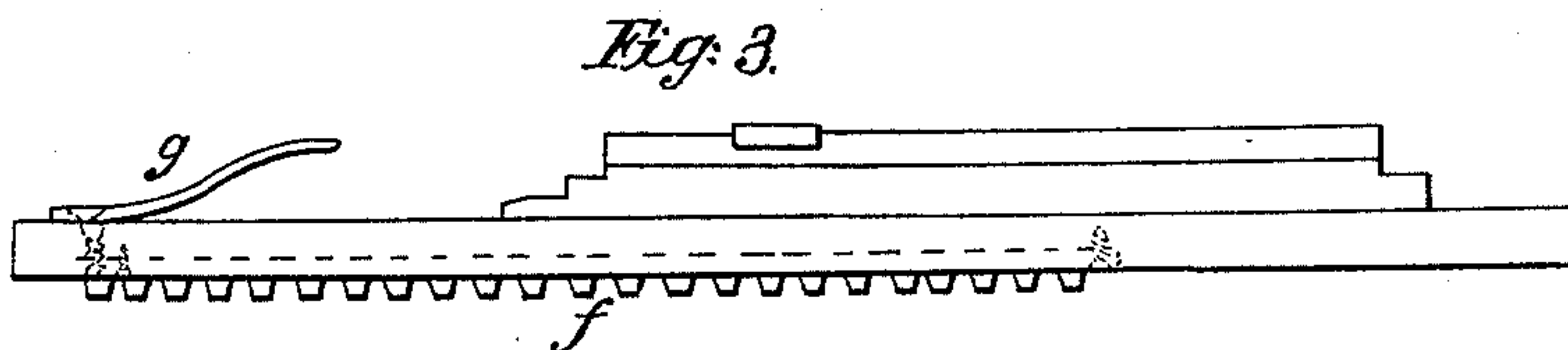
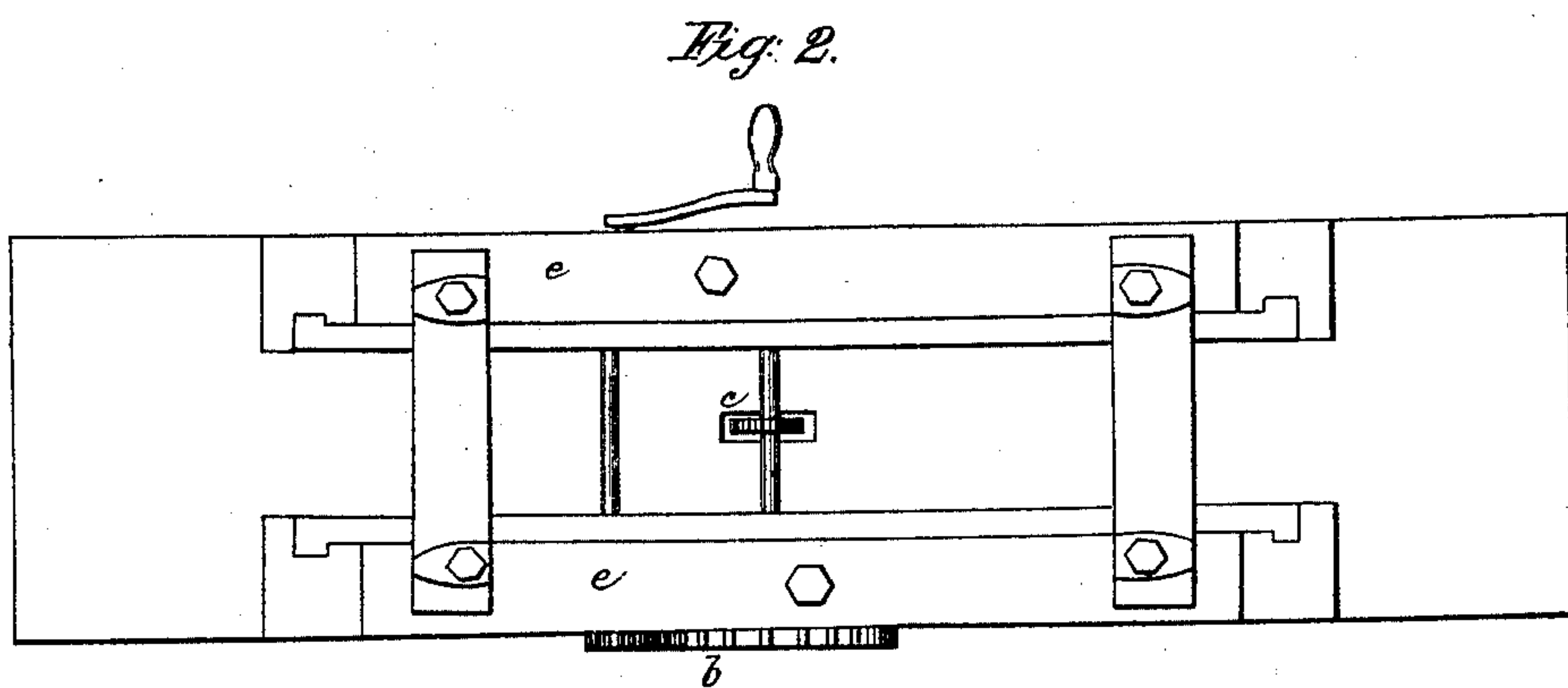
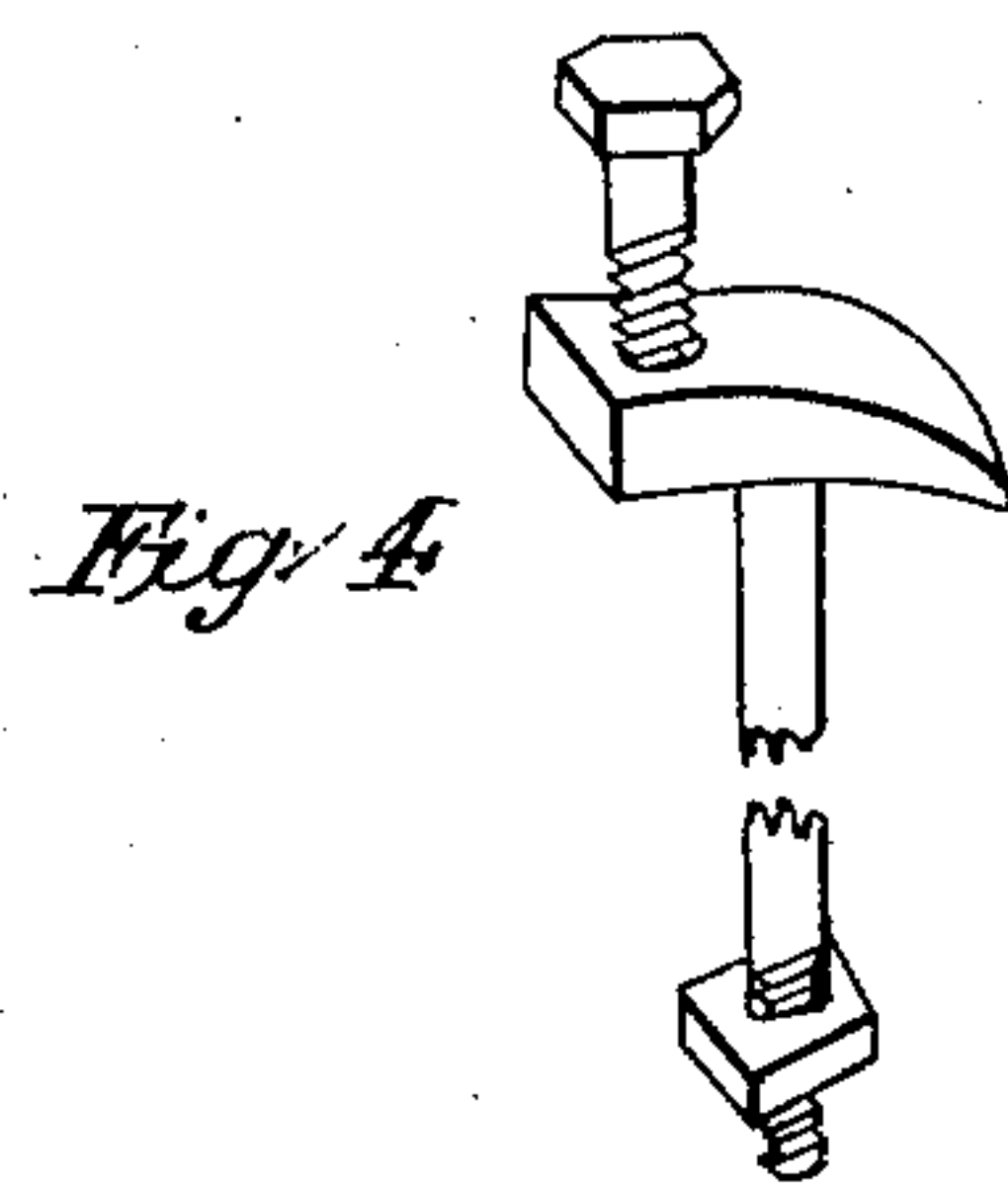
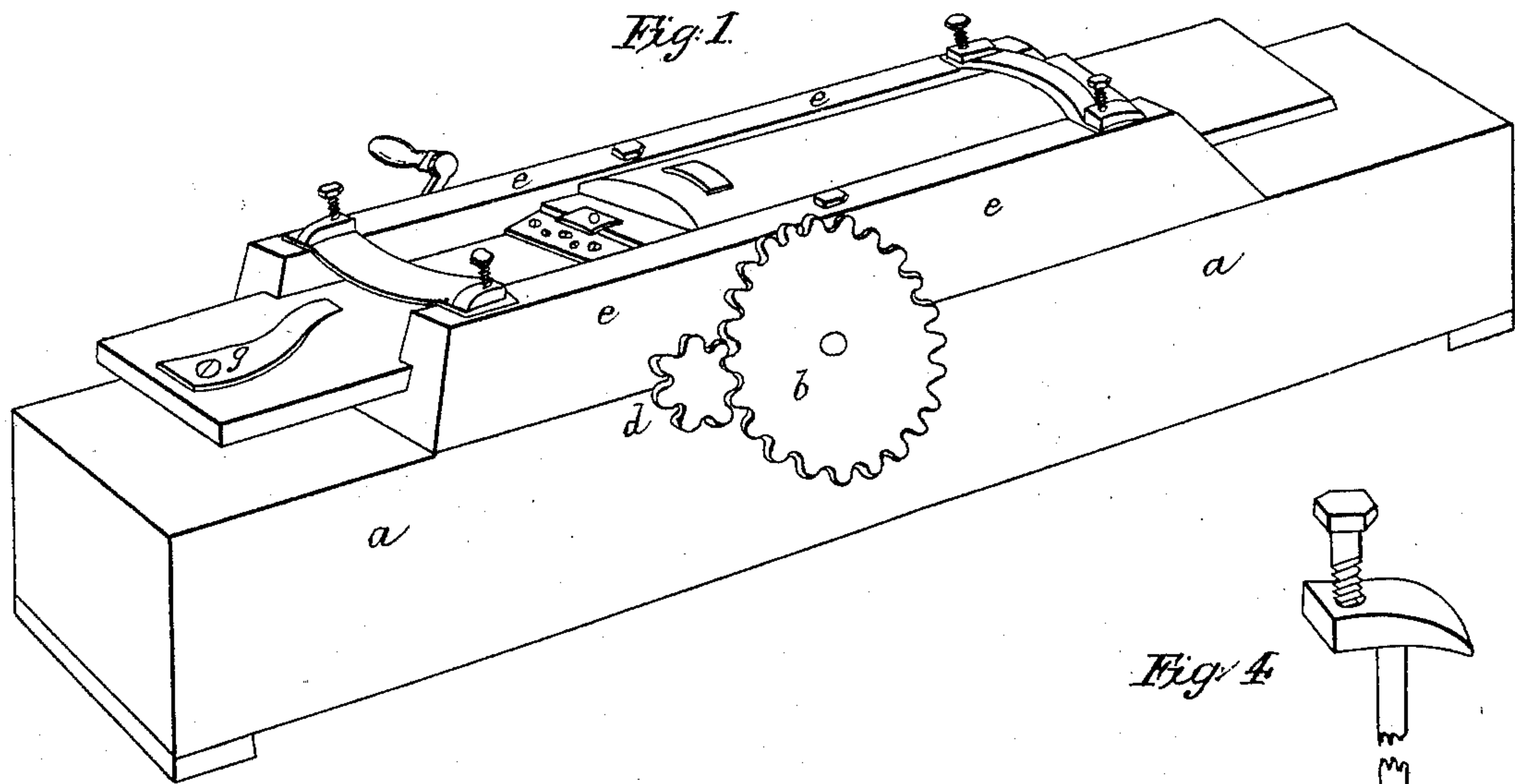


*L. B. Averill,*  
*Dressing Staves.*  
*N<sup>o</sup> 19,064.      Patented Jan. 12, 1858.*



# UNITED STATES PATENT OFFICE.

L. B. AVERILL, OF BARRE, VERMONT.

## STAVE-MACHINE.

Specification of Letters Patent No. 19,064, dated January 12, 1858.

*To all whom it may concern:*

Be it known that I, LEONARD B. AVERILL, of Barre, in the county of Washington and State of Vermont, have invented a new and useful Machine for Shaving Staves; and I do hereby declare that the following is a full, clear, and exact description of the construction and operation of the same, reference being had to the annexed drawing, making a part of this specification, in which—

Figure 1 is a perspective view, Fig. 2 represents the top of the main frame with the shaves, pinion wheel, cog wheel and crank in their proper places and attached to the frame. Fig. 3 represents the carriage with the rack on the bottom of the same, and Fig. 4 represents the clamps, with which each end of the shaves is made fast to the frame. For a machine of the size requisite to shave staves not exceeding nineteen inches in length I use a piece of hard wood plank about six feet long, one foot wide, and about two and one-half inches thick, for the bed piece, marked A, in the drawing with a groove across the same in the center, for the resting place of the arbor to the driving wheel, with a deep groove across the middle of the before mentioned groove, in which the pinion wheel, to drive the carriage, runs on one end of said arbor there is a driving wheel marked b, in the drawings, and at the middle of said arbor there is a pinion wheel, marked c, in the drawings which connects with the rack, on the under side of the carriage.

About ten or eleven inches from the above mentioned groove there is another groove across the bed piece, for the resting place of the arbor of the crank, on one end of which there is a pinion wheel marked d, in the drawings, which connects with the driving wheel, and at the other end of said arbor there is a crank, if the machine is to be operated by hand, or a pulley if it is to be operated by water power. At each side of the bed piece, I put on side pieces marked e, in the drawings, being about four feet long, three inches wide, six inches high, with a groove in the inner side of each to receive the sides of the carriage. The side pieces are bolted to the bed piece, near each end of the side pieces, and crossing from one to the other the shave is made fast there-

to by means of the clamps, which may be raised or lowered as may be found necessary. The shaves are made crooked, one of them curving downward and the other upward. The carriage is made of two inch plank about five feet long and of a width sufficient to fill the grooves in the side pieces, with a rack on the under side of the same marked f, in the drawings. At one end of the carriage there is a steel spring one end of which is bolted to the carriage and the other is raised from one to two inches above it and is marked g, in the drawings. Near the other end of the carriage and extending to within about twelve to fifteen inches of the end of the spring a piece of plank is bolted to the carriage, being about two inches thick and of a width sufficient to fill the space between the side pieces, one end of which is cut down half the thickness for about three inches from the end, near the end of which there is a dog to hold one end of the stave to be shaved and near the edge of the dog there are screws which may be raised or lowered to govern the thickness of the stave to be shaved. Near the center of the last mentioned plank there is another dog to hold one end of the stave to be shaved. One end of the stave is placed on the end of the spring and the other is made fast by the dog and in such a manner that the shave will cut a little across the grain and the shave begins to cut over the spring, and completes one side of the stave by taking off one shaving. The inner side of a stave is shaved first and it is then passed to the other end of the carriage and made fast in a similar manner to shave the outside thereof by turning the crank in an opposite direction. By this arrangement timber that is winding or not straight grained will make equally good work as timber that is straight grained.

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

The arrangement and combination of the different parts of the machine in the manner and for the purpose hereinbefore specified.

LEONARD B. AVERILL.

Witnesses:

ORAMEL H. SMITH,  
N. A. CHASE.