

S. F. Stanton

Weaving Heddle,

N^o 15,623.

Patented Aug. 26, 1856.

Fig. 1.

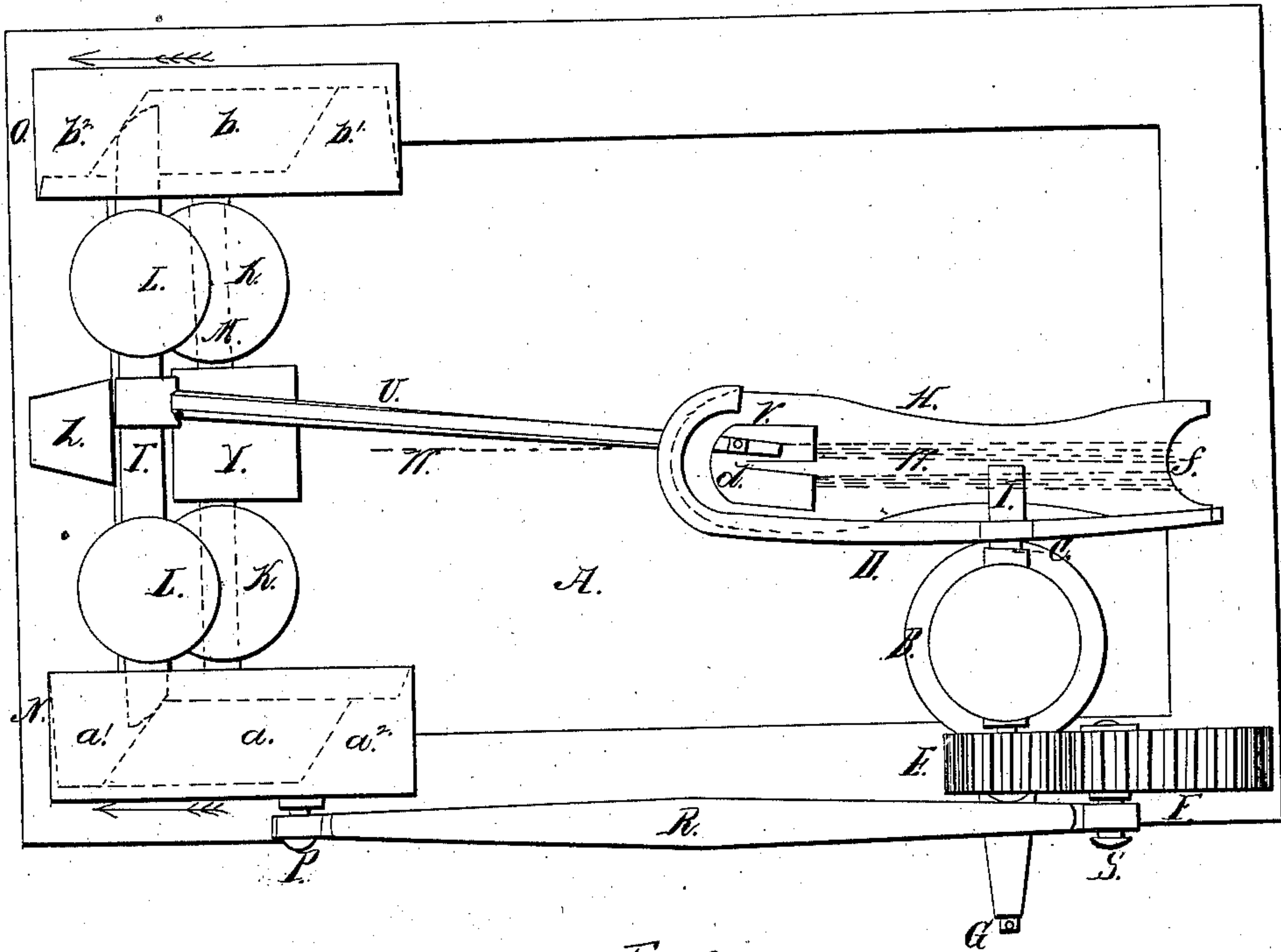
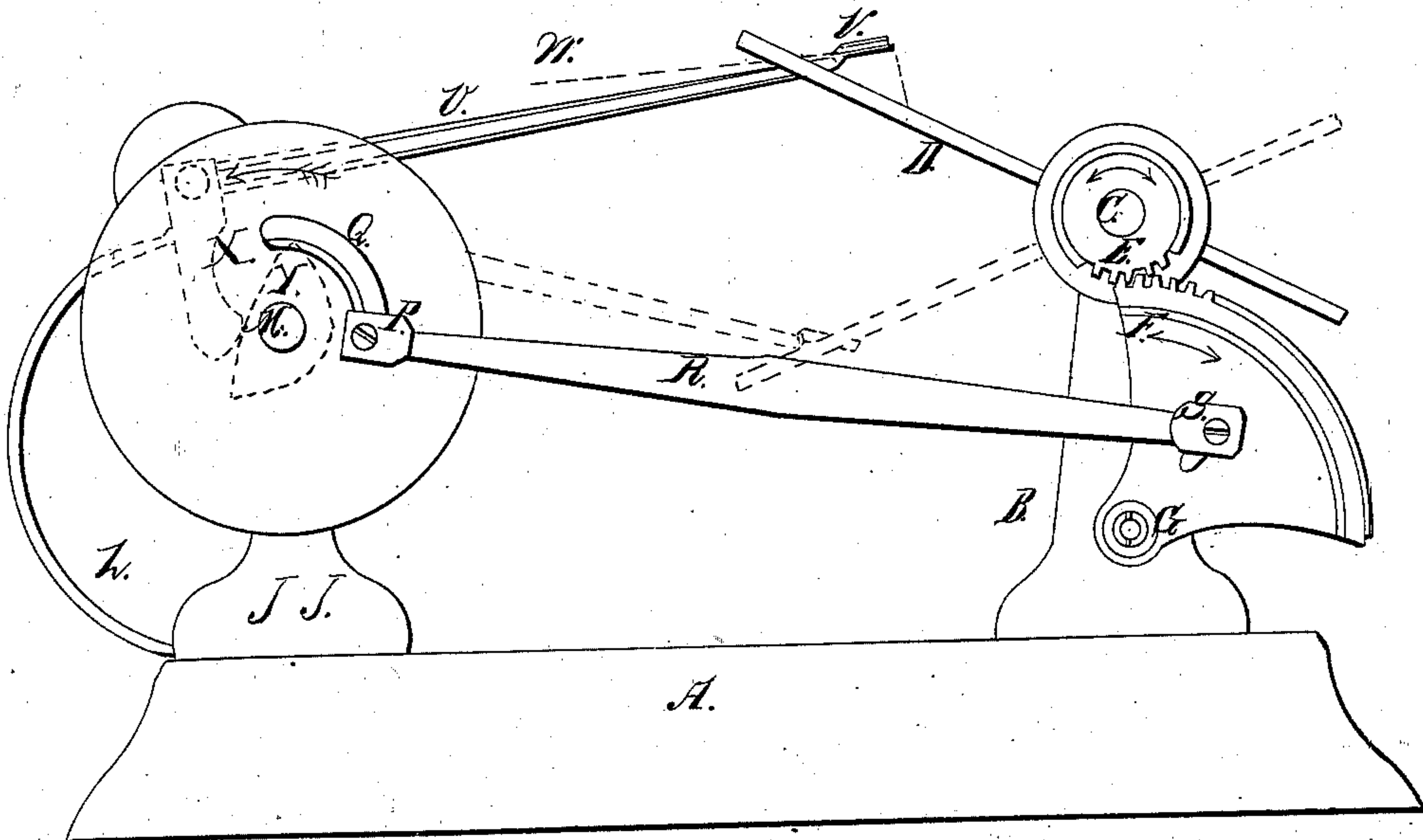


Fig. 2.



UNITED STATES PATENT OFFICE.

S. F. STANTON, OF MANCHESTER, NEW HAMPSHIRE, ASSIGNOR TO J. M. STANTON AND S. F. STANTON.

MACHINERY FOR FILLING SEINE-NEEDLES.

Specification of Letters Patent No. 15,623, dated August 26, 1856.

To all whom it may concern:

Be it known that I, SIMON F. STANTON, of Manchester, in the county of Hillsboro and State of New Hampshire, have invented a new and useful Machine for Filling Seine, Harness, and other Similar Needles with Twine, &c.; and I do hereby declare that the same is described and represented in the following specifications and drawings.

To enable others skilled in the art to make and use my invention I will proceed to describe its construction and operation, referring to the drawings in which the same letters indicate like parts in each of the figures.

Figure 1, is a plan or top view of the machine. Fig. 2 is an elevation of one side.

The nature of my invention consists in the construction and arrangement of certain devices, or apparatus for holding and vibrating the needles to be filled, so as to receive and wind the twine from a feeding or delivering arm, which arm is vibrated and traversed, so as to deliver the twine to the needle.

In the accompanying drawing A, is the base or bed which may be made in the form represented of cast iron, and fitted to receive the parts which are fastened to it.

B, is a stand fastened to the bed A, and provided with a large head which is perforated to receive the shaft C, which is fitted to turn freely in it and carry or vibrate the arm D, fastened to the shaft C, which has the pinion E, fastened to its opposite end, which is acted upon by the segment gear F, which vibrates on the stud G, fastened in the stand B. The arm D, is made in the form shown in the drawing, and a portion of each end is grooved to receive the needle H, which is seized and held in the middle by the spring forceps I, formed on the nut which secures the arm D, on the shaft C. The needle H is similar to those most commonly used for making seines weavers' harness or heddles, etc.

The stands J, J, are fastened to the bed A and are each provided with two heads or swells K, K, and L, L, the former of which are perforated for the shaft M, (shown in broken lines), which is fitted to turn in them and has the pulleys N, and O, fastened to it, and a belt may be applied to the latter to turn the shaft M and operate the machine. The pulley N, has the slot Q, in it, in which the stud P, is fastened to carry the pitman

R, which operates the segment gear F, by means of the stud S, fastened in said segment.

The heads L, L, are perforated for the traverse rod T, which is fitted to slide in them and carry the arm U which is fastened to it; the rod being operated by the cams a , and b , shown by broken lines in the pulleys N, and O; a' , and b' , showing the beginning of each cam, and a^2 , and b^2 , the ends of the same respectively. These cams are so arranged as to traverse the arm U, in each direction and hold the rod T endwise in the position to which it is carried for about one half of a revolution of the pulleys N and O.

The arm U, is made in the form shown in the drawing, the end V, being bent as shown in Fig. 2, and perforated to let the twine W, pass through it, as it is taken from the skein or a bobbin arranged in some convenient position, and mounted upon the needle H, as represented by broken lines. The end X, of the arm U, is bent at a right angle to the end V, and made in the form shown by broken lines in Fig. 2, and is pressed against the Y, which vibrates the arm U which is pressed against it by the C spring Z, fastened to the bed A, for that purpose.

The cam Y, is made in the form represented by broken lines in Fig. 2, and fastened to the shaft M, which turns it, and this cam is so formed as to carry the end of the arm U, up into the needle H, as shown by full lines in Fig. 2, and down into the opposite side of the needle, as shown by broken lines in the same figure as the cam is turned, and the cams a , and b , are so arranged in relation to the cam Y, as to carry the end V, across the point d , in the needle so as to carry the twine around said point d , while the end V, is in the needle; and as the arm U, and needle H, vibrate in opposite directions in the same time the twine is carried alternately across the score f , of the needle and around the spindle d , first in one direction and then in the other so as to fill the needle with twine as the machine is operated. When the needle is filled with twine it may be removed and another put in its place.

The advantages which this machine possesses over others for the same purpose, may be enumerated as follows to wit. It does a

given amount of work with half the number of revolutions; and it does not take half as much power to drive it; besides it can be made for less than one third of what other machines cost for the same purpose; and it is far more simple in its construction, and far less liable to get out of order. It neither adds to nor diminishes the twist in the twine which is an important advantage; and the faster it is run the firmer the needle is held being pressed into the hook by the centrifugal force derived from its motion.

I do not claim a rotating needle in combination with a vibrating arm as described in Humphrey M. Gline's invention, patented to John M and Simeon F. Stanton Oct 2d. 1855, but what I do claim I will proceed to state.

I believe I have described the construction operation and use of my invention for filling seine harness and other similar needles with

twine silk, etc., so as to enable any person skilled in the art to make and use it.

I will now specify what I desire to secure by Letters Patent, to wit: What I claim as my invention in the above described machine for filling seine and other similar needles, is—

Giving the needle a vibrating motion by devices substantially such as are herein described or their equivalents; in combination with the arm which delivers the twine vibrated perpendicularly and traversed horizontally, by devices substantially such as are herein described or their equivalents so as to deliver the twine across the score and around the tongue of the needle substantially as described.

S. F. STANTON.

Witnesses:

L. B. CLOUGH,
B. T. CILLEY.