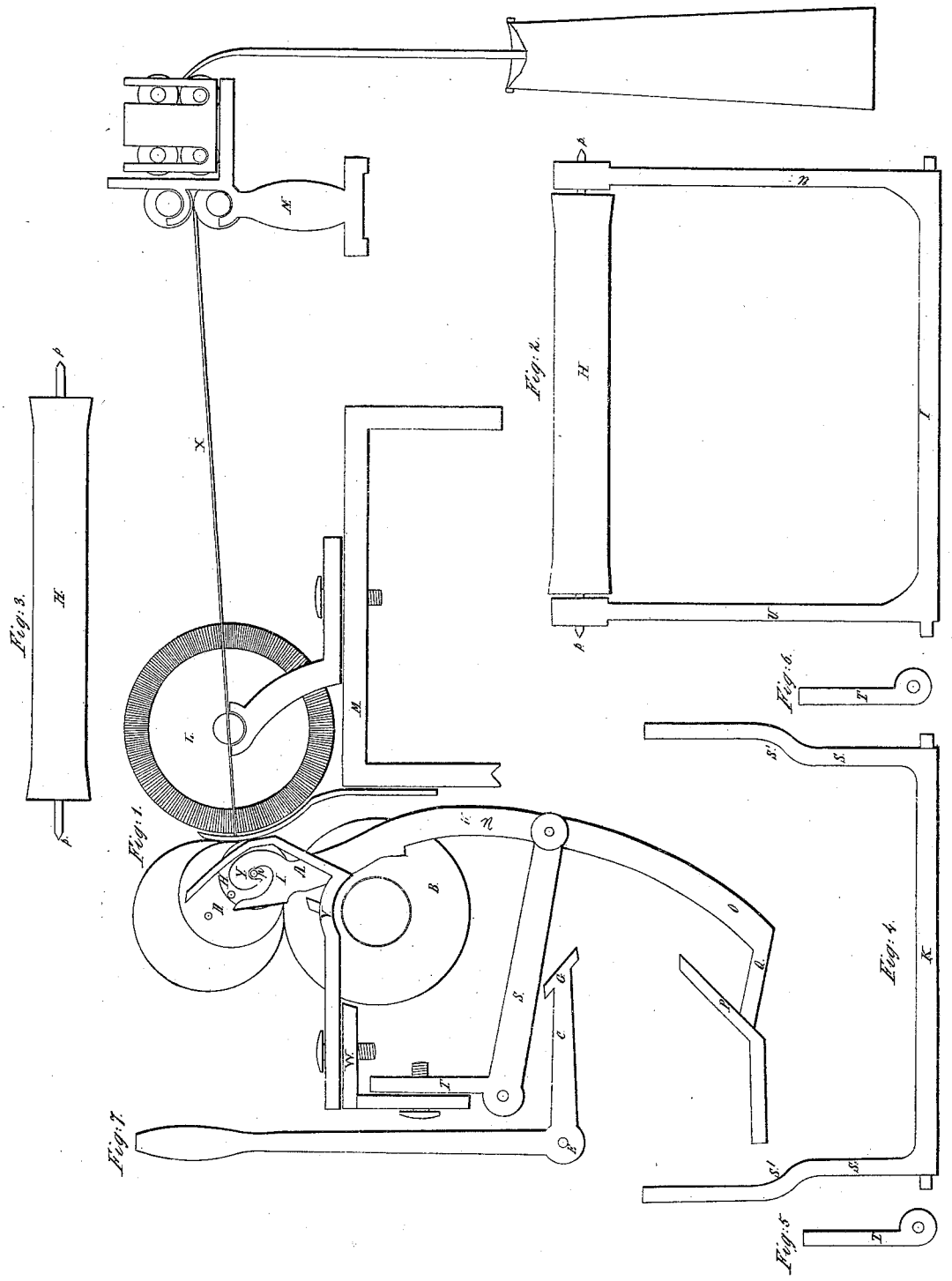
J. Whitehead,
Carding Machine.

No. 1,186.

Patented June 24, 1839.



UNITED STATES PATENT OFFICE.

JESSE WHITEHEAD, OF MANCHESTER, VIRGINIA.

MACHINE FOR MAKING COTTON ROPING.

Specification of Letters Patent No. 1,186, dated June 24, 1839.

To all whom it may concern:

Be it known that I, JESSE WHITEHEAD, of Manchester, in the county of Chesterfield and State of Virginia, have invented a new and useful Improvement in Machines for Making Cotton Roping, which is described as follows, reference being had to the annexed drawings of the same, making part of this specification.

The nature of my invention consists in the method of giving to the spools of a counter twist speeder a steady receding motion, regulated by the increasing diameter of the bobbin, to preserve the same distance between the surface of the bobbin and the guide through which the roving passes, by means of the application of stationary inclines or guides to the frame of the bars holding the spools in the manner hereafter described.

Figure 1 represents the right side of a section of the machine; Fig. 2, front view of the rising arms and an empty spool between the same; Fig. 3, an empty spool; Fig. 4, top view of horizontal vibrating bar and parallel arms; Figs. 5 and 6, hanging boxes of said vibrating bar, and Fig. 7, lever for throwing up the spools.

Similar letters refer to similar parts in the figures.

The improvement consists in the construction and application of a frame which consists of a solid vibrating bar K turning on pivots in hanging boxes T,—said arm being about 8 inches long and of any convenient diameter, having horizontal parallel arms S projecting therefrom at right angles and attached permanently thereto near the ends thereof and are about five inches long. The hanging boxes T in which the pivots of said vibrating bar K turn are attached firmly to the back rail W of the speeder so that the bar is parallel to, below, and behind the drum or block on which the spool or bobbin turns. The arms S are bent out about the middle as at S′ Fig. 4. In the extremities of the arms S are holes—one in each arm—in which turns on pivots at its extremities another bar I, which may be called the second bar, lying parallel to the first bar S. The second bar is placed below the drum B and a little in advance of it. To this bar are attached two rising arms *w*, one at each end of said bar I. These rising arms are about 6 inches long, parallel to each other and a little bent, backward. At their upper extremities they terminate in hooks *y* resembling the human hand when the fingers are bent down toward the palm and the thumb partly closed. These hooks receive and hold the pivots *p* of the spool H, and are distant from each other a little more than the length of the spool; and the spool when placed between these hooks with its pivots in them is parallel to and rests on or against the drum. There are two stationary inclines or guides V, one on each side of the rising frame *w*, each consisting of a plate screwed firmly to the upper face of the rail W of the speeder in front of the drum, one at each end of it, placed a little farther apart than the rising arms are placed asunder extending forward horizontally until it passes the periphery of the drum; it then curves over its axle—then rises at an angle of about 80 deg., more or less, with a horizontal plane extending forward; it then curves backward at an angle of about 45 degs., and forms one of the guides or inclines. The other is made in a similar manner and is placed parallel to it on the opposite side of the rising frame or arms. The hooks *y* of the rising arms bear against the inner surface of the guides V or inclines, which, being bent backward at and above the points where the hooks touch them in the manner before described cause the spool to recede as it fills, the roping being conveyed to the spool through the hook F in the usual manner.

Below and parallel with the vibrating bar K is placed a horizontal shaft E turning in round apertures in plates fastened to the frame of the speeder. From this shaft E projects at right angles an arm C at the outer extremity of which is a T head G which is to strike the under side of the arm S for raising the spool from the drum which is done by means of a lever Z fastened to the end of said shaft E.

The frame, delivering rollers, and speeder plates are made in the usual manner.

The same effect as that above described may be produced by the arrangement of the bars O, P, Q, represented in the drawings on the under side of Fig. 1, which is not used when the upper guide V is employed,

the bar O being a continuation of U the same effect, it is evident, will be produced and by substantially the same means.

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

The method of giving to the spools a steady receding motion, regulated by the increasing diameter of the bobbin, to preserve the same distance between the surface of the bobbin and the guide through which the roving passes, by means of the application of the stationary inclines or guides to the frame of the bars holding the spools, in the manner substantially as herein described.

JESSE WHITEHEAD.

Witnesses:
WM. P. ELLIOT,
WM. BISHOP.