W. H. Jones,

Winding Silk.

No. 2,458. Patented Feb. 12. 1842.

Fig. 1.

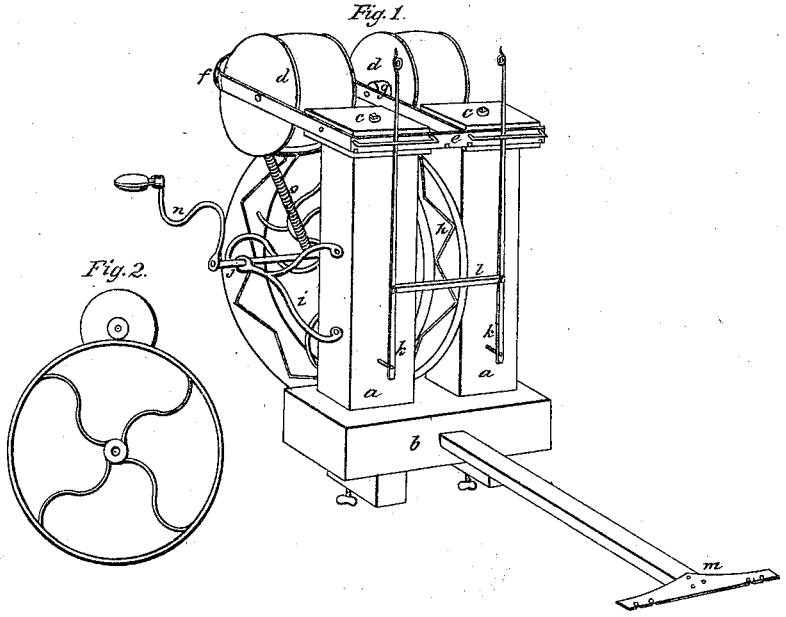

Fig. 2.

UNITED STATES PATENT OFFICE.

WM. H. JONES, OF MANCHESTER, CONNECTICUT, ASSIGNOR TO A. B. JONES, OF MANCHESTER, CONNECTICUT.

REEL FOR REELING SILK.

Specification of Letters Patent No. 2,458, dated February 12, 1842.

To all whom it may concern:

Be it known that I, WILLIAM H. JONES, of Manchester, in the county of Hartford and State of Connecticut, have invented a new and useful Improvement on Reels for the Reeling of Silk; and I do hereby declare that the following is a full and exact description.

The nature of my improvement consists in the simplicity of the machine—the ease by which it is operated, and not being liable to get out of order; being constructed without a tooth-wheel or a belt or band.

To enable others skilled in the art to make and use my invention, I will proceed to describe its construction and operation. I will describe the machine as I make them in size, &c., though they may be made of any size that may be required. The frame work consists of two upright posts tenoned into a crosspiece or sill at bottom, with a cap on the top of each post; the tops of the posts are secured and held in place by a plate of iron or other metal screwed or fastened on across the fronts of these caps, extending a a little over at each end. The posts with the sill and caps are nine or ten inches in height as I make them. Into the plate in front of the caps are inserted two long staples or guards in which the fingers vibrate. Two plates of iron or other metal three quarters of an inch, more or less, bent somewhat in the shape of an ox bow are attached to the sides of the caps or tops of the posts, (one end upon each side,) by means of a screw or pin on the outer sides and a pin on the inner sides which passes from one post or cap to the other, and let into each, forming a pivot on which those bent plates turn. These bow plates I call hangers of the spools or barrels on to which the silk is wound, and must extend back long enough to admit the reception of the spools back of the posts. On the inner end of each spool is a small friction wheel resting upon the periphery of a drum or metal wheel, which may be eight or ten inches in diameter, more or less. This drum is formed of two wheels cast in one mold; one edge of the periphery of each wheel is notched into points somewhat resembling saw teeth, so that twining these edges of two wheels together they will match into each other; these wheels thus fitted on to an axle or shaft, drawn a little apart, form a zigzag groove. The axle or shaft on which the drum is fixed is hung in two braces or supporters, one fastened on the outside of each of the upright posts and extending back so far as to let the front of the drum, when hung in them, project a trifle beyond the front of the posts, the drum turning between the posts.

In front of the posts, and parallel with them, are two small rods, extending from near the bottom of the posts to a little above their tops; the points at the tops are coiled so as to form an eye for the silk to pass through; at their lower ends, they turn upon pins projecting out from the posts. These rods I call fingers. They are connected together by a small arm, with a pin at each end, on which they turn and move together. This arm is placed across against the center of the drum, and in the center of this arm is a pin projecting into the zigzag groove in the drum, so that when the drum turns, the pin following the groove drives the fingers back and forth distributing the silk in a proper manner upon the spools, the guards before mentioned confining the tops of the fingers to their place. A conductor for conducting the silk from the cocoons to the fingers is formed of a small bar of convenient length, say from fifteen to eighteen inches, one end of which enters a mortise in the center of the front of the sill, and across the other end in the shape of an **I**, is fastened a piece of metal in the edge of which are small apertures through which the silk passes from the cocoons and is conducted to the fingers.

The axle of the drum extends out on one side to receive a crank for turning the drum, and from the axle, attached to a ring, is a spiral spring of wire, extending to the outer end of each of the hangers of the spools, and hooked into them, by which the friction wheels are kept pressed down upon the drum so as to secure their regular motion.

Under the bottom of the sill are fastened two clamps with a screw passing up through each to confine the reel to the edge of a table.

The above describes a machine as I make them, but they may be varied in height and size, as any one may desire. The frame may be made to stand upon the floor. The drum may be made in one wheel with a groove cut or cast in it, and the principle still be preserved.

I do not claim as my invention the wind-

ing of silk from the cocoons on to barrels or spools nor the lateral motion by which it is spread upon them. But I do claim as new—

The drum, with the spools, so resting upon the plane of its periphery as to be turned by friction, in combination with the alternate angular groove, and pin passing around through the middle of the same, giving the lateral motion to the fingers for spreading the silk.

WM. H. JONES.

Witnesses:
ABNER REED,
E. W. BULL.