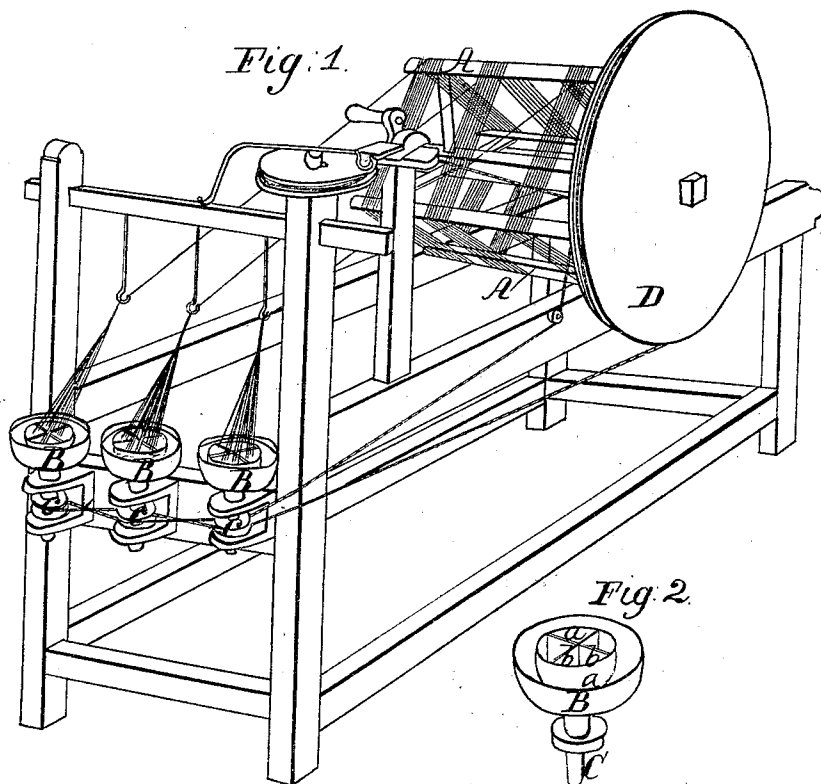


G. Heritage.
Silk Reeling Mach.
N^o 1910. Patented Dec. 17, 1840.



UNITED STATES PATENT OFFICE.

GEORGE HERITAGE, OF CHESTERTOWN, MARYLAND.

MACHINERY FOR AND MANNER OF REELING SILK FROM COCOONS.

Specification of Letters Patent No. 1,910, dated December 19, 1840.

To all whom it may concern:

Be it known that I, GEORGE HERITAGE, of Chestertown, in the county of Kent and State of Maryland, have invented an improvement in machinery for and the manner of reeling silk from cocoons preparatory to its being woven, spun, or otherwise manufactured into fabrics of various kinds; and I do hereby declare that the following is a full and exact description thereof.

In the ordinary mode of reeling silk from the cocoons, and forming from it what is known under the name of raw silk, the fibers from the respective cocoons form a flat, angular, or irregular, thread, as they do not receive any twist on their way to the reel, from the basin, or vessel containing them.

By my improved machinery, I cause the respective fibers which are to form one thread, to twist together, as the cocoons are unwound, and in consequence of said twisting, to form a round thread when wound upon the reel; which round thread is much better adapted to various uses in the silk manufacture than the raw silk as heretofore formed.

In order to effect this object, I cause the basin, or vessel containing the warm water in which the cocoons that are to be unwound are deposited, to receive a revolving motion, in consequence of which any desired degree of twist may be given to the fibers in forming the thread. In this apparatus provision is made to cause the same whirling motion which is given to the basins to be communicated to the water contained in them.

In the accompanying drawing, Figure 1, is a perspective view of my reel, represented as separated from the other parts of my combined silk machine, in which the reeling, spinning and skeining apparatus devised by me are connected with each other, as shown in the drawing accompanying the Letters Patent for a machine for skeining silk, granted to me on the twenty sixth day of November 1840.

A, A, is the reel, which may be made like those in general use.

B, B, B, are the basins, or vessels for

containing the cocoons, and warm water. These basins are placed upon spindles furnished with whirls C, C, C, which are caused to revolve by means of a band-wheel D, on the end of the reel, or in any other convenient mode. Fig. 2, shows one of these basins drawn upon a larger scale than in Fig. 1. In these basins, I place partitions in such manner as shall cause the water to receive the same revolving motion with the vessels themselves. This may be effected by a single partition crossing each of the basins from side to side, and dividing it into two equal parts, said partition not extending to the bottom, but leaving a free communication for water from one division to the other. The form given to these partitions as shown in the drawing, is, however, that which I prefer.

a, a, is a circular rim, divided into four compartments by the cross pieces b, b. Between the circular rim and the outside of the basin there is a free annular space in which cocoons may be kept preparatory to their being unwound, those which are being operated upon being contained within the circular rim; and as these become exhausted, fresh ones may be supplied without stopping the motion of the machine.

The other parts of this apparatus, not differing in any material point from those now in use, do not require to be described.

What I claim as my invention in the above described machine, and desire to secure by Letters Patent, is—

The giving to the threads of raw silk, in the operation of reeling the same from the cocoons, such a degree of twist as may be desired, by giving a revolving motion to the basins, or vessels in which said cocoons are contained, the same being effected by means of an apparatus constructed substantially in the manner herein fully set forth.

In testimony whereof, I hereunto set my hand this day of December, in the year 1840.

GEORGE HERITAGE.

Witnesses:

THOS. P. JONES,
GEORGE WEST.