C. Kile.

Loom.

Patented Oct 11, 1836
To all whom it may concern:

Be it known that I, Conrad Kile, of the city of Philadelphia, State of Pennsylvania, have invented certain new and useful Improvements in Looms for Weaving Cloth for Stocks, (for which loom I obtained Letters Patent of the United States, dated September 18th, 1835;) and I do hereby declare that the following is a full and exact description thereof.

My improvement upon the loom above named consists principally in the means by which I adapt the common straight lathe to the concave breast beam used by me. For this purpose the breast, or strain beam is cut off, or made straight on that side which is toward the lathe, and is also on that side hollowed out lengthwise, so as to admit the lower rail, or piece of the frame of the lathe to pass within it, thereby allowing the reed to come in contact, or nearly so with the breast beam, at every beat thereof. The upper part, and that portion of the fixed breast beam, which is toward the workman over which the yarn or chain passes is hollowed out for the purpose fully set forth, and described in my former specification. At every beat the lathe passes up to the same point, the woven material being received on the cloth beam to an extent equal to that occupied by the bristle or other filling against which it strikes. On one end of the hollowed cloth beam there is a wheel or pulley around which a cord passes having a weight attached to it to operate the cloth beam as it receives the cloth, this wheel, or pulley is also furnished with a ratchet wheel and pawl to admit of the weight being wound up when necessary without disturbing the cloth beam. A wheel, or pulley similarly constructed are applied to the yarn beam by which the proper degree of strain is given thereto while the web is allowed to move forward readily at every beat of the lathe.

The yarn beam may be of any length which may be preferred taking care to make the concavity in it, and my cloth beam such as shall adapt them to the curvature which I wish to give to the woven material.

With my improved loom I can use such bobbins, lathe, and shutters as in ordinary use, either using them by hand, or operating them by power as I may see fit.

As regards the curvature given to the hollow of the yarn, and cloth beams I now find the girth of the middle of them should be about one fourth less than that of the ends, the curvature of the breast beam being also adapted thereto.

What I claim as my improvement is—

1. The manner in which I construct the breast beam as above described for the purpose of enabling me to use a straight lathe for weaving stock bodies, such lathe being made in the ordinary way.

2. I also claim those changes described as made in the arrangement of the other parts of the apparatus to adapt it to the carrying out of this improvement, the nature of which will be fully understood by comparing this description with that of my former loom, no part of which is intended to be claimed in this specification.

3. And I further claim the use of a loom constructed upon the principle set forth to the weaving of a variety of other articles to which a bias is given by having the chain longer in one part than in another, such for example as stock stiffeners, jackets, corsets or parts thereof.

CONRAD KILE.

Witnesses:

Daniel B. Lippard,
S. Badyn.