

L. LEIGH.

Guides for Spooling-Machines.

No. 150,247.

Patented April 28, 1874.

Fig. 1.

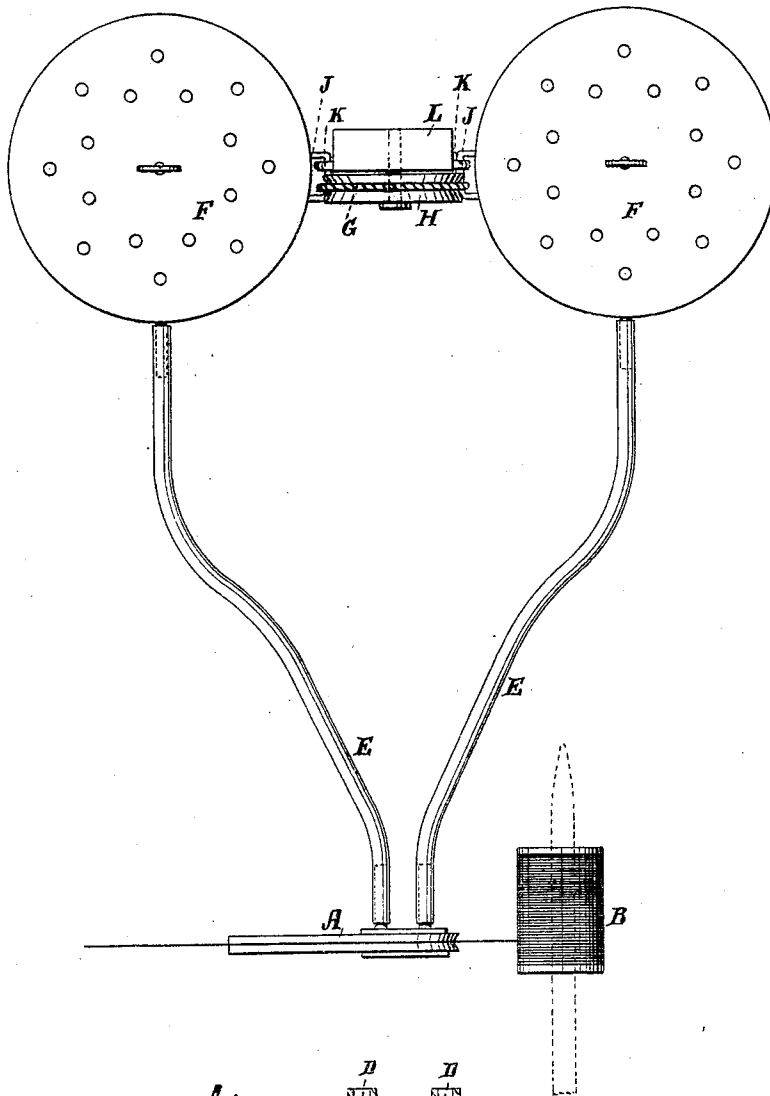
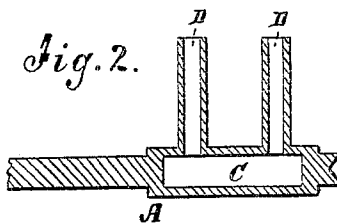


Fig. 2.



WITNESSES.

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LEWIS LEIGH, OF MANSFIELD CENTRE, CONNECTICUT.

IMPROVEMENT IN GUIDES FOR SPOOLING-MACHINES.

Specification forming part of Letters Patent No. **150,247**, dated April 28, 1874; application filed March 21, 1874.

To all whom it may concern:

Be it known that I, LEWIS LEIGH, of Mansfield Centre, in the county of Tolland and State of Connecticut, have invented a new and Improved Thread-Spooler Guide, of which the following is a specification:

My invention consists of a water-circulating attachment for spooler-guides for maintaining a circulation to prevent the heating of the guide by friction, so as to burn the thread. My invention also consists of a contrivance of buckets for utilizing a small quantity of water for cooling the guide, by shifting the buckets relatively to each other in respect of their height, so that whenever one bucket has emptied into the other the water will be returned again from the full to the empty one, and thus a continuous current will be maintained through the guide.

In the drawing, Figure 1 is a plan view of my improved cooling attachment to spooler-guides, and Fig. 2 is a horizontal section of the guide.

Similar letters of reference indicate corresponding parts.

A is the guide which may be of any approved kind, and be operated in any approved way to lay the thread on the spool B. This guide I provide with a hollow chamber, C, and two pipe-connections connecting with it, and to these pipes I connect flexible pipes, E, connecting with any convenient supply and exhaust tanks, or other means of maintaining a circulation of water through the hollow guide

for keeping it cool, and thus preventing the damage frequently caused to the thread by the heat generated by friction of the thread on the guide. In cases where an ample supply of water is not readily to be obtained, I propose to connect these conducting-pipes with a couple of buckets, F, suspended by a cord, G, from a pulley, H, so that they can be shifted up and down readily to elevate the full bucket and lower the empty one as often as the water runs from one into the other, and thus maintain a constant current. For convenience in fastening and unfastening the full buckets, they may have a cramping-hook or clip, J, running between a rod, K, and the post L, or other support of the pulley. But when a sufficient supply can be obtained without using the water over, this contrivance will not be needed.

Having thus described my invention, I claim as new and desire to secure by Letters Patent—

1. A thread-guide for spooling-machines, having a chamber, C, and water-pipe connections for cooling the guide by a circulation of water, substantially as specified.

2. The combination of the vertically-shifting buckets F, water-pipes D E, and a spooling-guide having a chamber, C, substantially as specified.

LEWIS LEIGH.

Witnesses:

GEO. G. CROSS,
HYZER E. SIMONDS.