No. 648,109. Patented Apr. 24, 1900.

H. KELLY.

LEASE ROD.

(Application filed May 15, 1899.)

(No Model.)

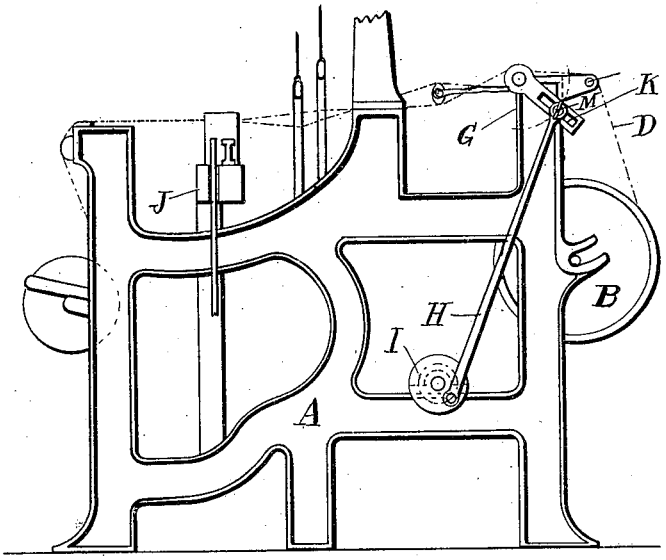


Fig. 1

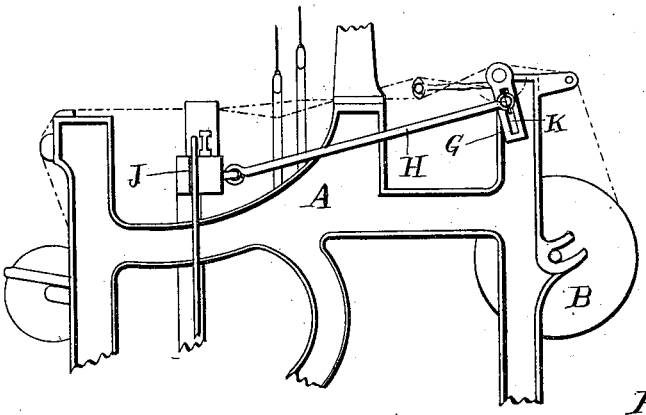
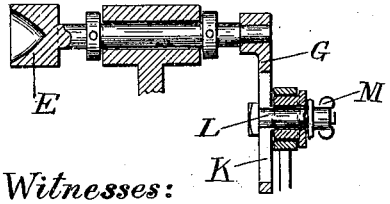


Fig. 2

Fig. 4



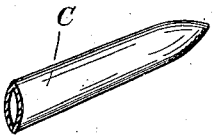
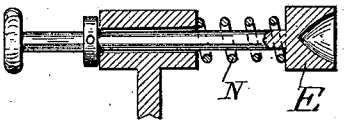


Fig. 3

Fig. 5



Witnesses:
Marion Richards.
S. E. Young.

Inventor.
Harold Kelley
per Venill Clifford
attorneys

UNITED STATES PATENT OFFICE.

HAROLD KELLY, OF BIDDEFORD, MAINE, ASSIGNOR TO THE JOHN P. KELLY MANUFACTURING COMPANY, OF SAME PLACE.

LEASE-ROD.

SPECIFICATION forming part of Letters Patent No. 648,109, dated April 24, 1900.

Application filed May 15, 1899. Serial No. 716,807. (No model.)

To all whom it may concern:

Be it known that I, HAROLD KELLY, a citizen of the United States, residing at Biddeford, in the county of York and State of Maine, have invented certain new and useful Improvements in Lease-Rods; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

My invention relates to improvements in lease-rods, and the same is illustrated in the accompanying drawings, in which—

Figure 1 is a side elevation of so much of a loom as is necessary to show the application of my improved rod thereto. Fig. 2 is a side elevation of the same, showing a different means for operating the rod. Fig. 3 is a perspective showing the transverse configuration of the rod. Fig. 4 is a detail view showing means of supporting the rod; and Fig. 5 is a sectional detail view of a lease-rod supporter having yielding adjustability, whereby the rod may be readily removed from and inserted in the holder.

Like letters refer to like parts.

The warp-threads when they leave the beam are frequently stuck together by reason of the sizing, interlocking of fibers, or knots in the thread, and when separated by the lease-rod the threads are in consequence often broken, causing much delay and imperfection in the woven goods.

The object of my invention is to obviate these difficulties.

In said drawings, A represents the frame of a loom, B the beam, and D the warp-threads.

My invention relates particularly to that one of the lease-rods nearest the beam; and it consists of a rod C, of unequal transverse diameters, and means for causing an alternate backward and forward quarter-rotation of said rod. To this end I support the lease-rod in any manner which renders it capable of receiving rotation backward and forward. I have shown one method of supporting the rod, which consists of holders E, mounted in suitable bearings in the loom-frame. One end of these holders projects beyond the bearing and has secured thereto a crank-arm G. The partial rotation of said holder and rod is caused by a connecting-rod H, having one end secured to said crank and the other secured eccentrically to a crank-disk I on some rotary portion of the loom-frame, as shown in Fig. 1, or the same result may be attained by the connecting-rod having one end secured to said crank, as aforesaid, and the other end to some oscillating part of the machine—as, for example, the lathe J, as seen in Fig. 2. It will be evident that the lease-rod itself may be mounted in suitable bearings and the crank G be applied directly to the end of the rod, if desired, which construction is still within the spirit of my invention.

Having thus described my invention and its use, I claim—

1. In a loom, lease-rods, the one nearest the warp-beam having unequal transverse diameters, stationary bearings supporting the ends of said last-mentioned rod and means for causing a partial rotation of said rod in its bearings.

2. In a loom, lease-rods, the one nearest the warp-beam having unequal transverse diameters, means for supporting the ends of said rod, a crank on the end of said rod and a connecting-rod having one end secured to said crank and the other to a movable part of the loom, whereby a partial rotation of said rod in its bearings is secured.

In testimony whereof I affix my signature, in presence of two witnesses, this 8th day of May, 1899.

HAROLD KELLY.

Witnesses:
M. H. KELLY,
CHAS. C. HODSDON.