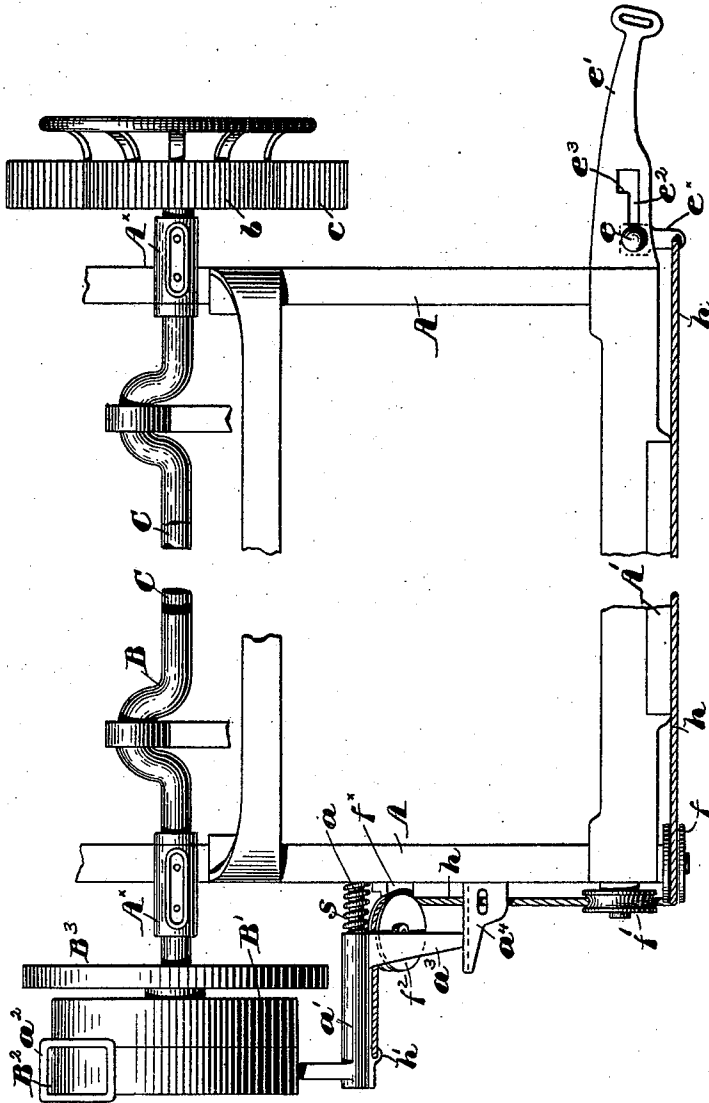


(No Model.)

E. S. & G. O. DRAPER.
LOOM.

No. 574,142.

Patented Dec. 29, 1896.



Witnesses
Walter C. Lombard.
A. C. Harmon

Inventors:
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attys.

UNITED STATES PATENT OFFICE.

EBEN S. DRAPER AND GEORGE O. DRAPER, OF HOPEDALE, MASSACHUSETTS,
ASSIGNORS TO GEORGE DRAPER & SONS, OF SAME PLACE.

LOOM.

SPECIFICATION forming part of Letters Patent No. 574,142, dated December 29, 1896.

Application filed September 27, 1895. Serial No. 563,919. (No model.)

To all whom it may concern:

Be it known that we, EBEN S. DRAPER and GEORGE O. DRAPER, of Hopedale, county of Worcester, State of Massachusetts, have invented an Improvement in Looms, of which the following description, in connection with the accompanying drawing, is a specification, like letters on the drawing representing like parts.

In looms as now most commonly used it is customary to locate the belt fork or shipper and shipper-handle at the same end of the loom, but at times it is desirable to locate the shipper-handle at one end of the loom and the belt fork or shipper at the other end, and it is to this latter class of looms that our present invention relates.

This invention has for its object the production of means whereby a loom having its belt-pulleys and belt-fork at one and the same end of the loom may have such belt-fork moved by or through a shipper-handle located at the opposite end of the loom, the connection between the shipper-handle and the belt-fork being a flexible one sustained by suitable sheaves.

The drawing in plan view shows a sufficient portion of a loom with our improvements added to enable our invention to be understood.

In the drawing, A is the loom-frame; A', the breast-beam; B, the crank-shaft for operating the lay, it being in bearings A^x. The shaft C carries at one end the fast pulley B', a loose pulley B², and a brake-pulley B³, and at its other end it has a pinion b, which engages a toothed gear c, supposed to be fast on the usual lower or cam shaft. (Not shown.)

Extended from one end of the loom is a plate e', having a notch e² and shoulder e³, said notch receiving the upper end of a shipper handle or lever e, of usual construction, as, for instance, as shown in United States Patent No. 554,605, dated February 11, 1896. The shipper-handle has, as shown, a projection e^x, to which is secured a flexible connection h, extended across to the opposite end of the loom and about suitable sheaves f' f², the opposite end of said flexible connection being attached to an ear h' of a sleeve a', fitted loosely over a stud a, projecting from the loom

side, a spring s being shown as interposed between the said sleeve and loom side, said spring normally acting to move the sleeve to the right on said stud, as shown in the drawing, and cause the belt-fork a² to put the usual belt controlled by it, but not shown, onto the loose pulley B². When the shipper-handle is moved so that it engages the shoulder e³, the flexible connection draws the sleeve in the direction to cause the belt-fork to put the belt on the fast pulley. When the weaver springs the shipper-handle out of engagement with the shoulder or when the handle is sprung out by means of any usual loom-stopping mechanism, the expansion of the cam, acting with the spring of the shipper-handle, effects the transfer of the belt to the loose pulley.

Having fully described our invention, what we claim as new, and desire to secure by Letters Patent, is—

1. In a loom, a driving-shaft having fast and loose pulleys thereon at one end of the loom, a shipper-handle located at the opposite end of the loom, a belt-fork located at the end of the loom where are located said fast and loose pulleys, and means to support said fork, combined with a flexible connection extended across the loom from said belt-fork to said shipper-handle, and sheaves to support said connection, substantially as described.

2. In a loom, a driving-shaft having fast and loose pulleys thereon at one end thereof, a belt-fork located at the same end of the loom, a guide for said belt-fork, and a spring to move the belt-fork in one direction, combined with a shipper-handle located at the opposite end of the loom, flexible connections extended across the loom between said shipper-handle and belt-fork, and sheaves to support the said flexible connection, to operate substantially as described.

In testimony whereof we have signed our names to this specification in the presence of two subscribing witnesses.

EBEN S. DRAPER.
GEORGE O. DRAPER.

Witnesses:

FRANK J. DUTCHER,
H. F. SEARLES.