(No Model.)

R. H. LIVESEY & W. SQUIRE.

PITMAN FOR LOOMS.

No. 561,234. Patented June 2, 1896.

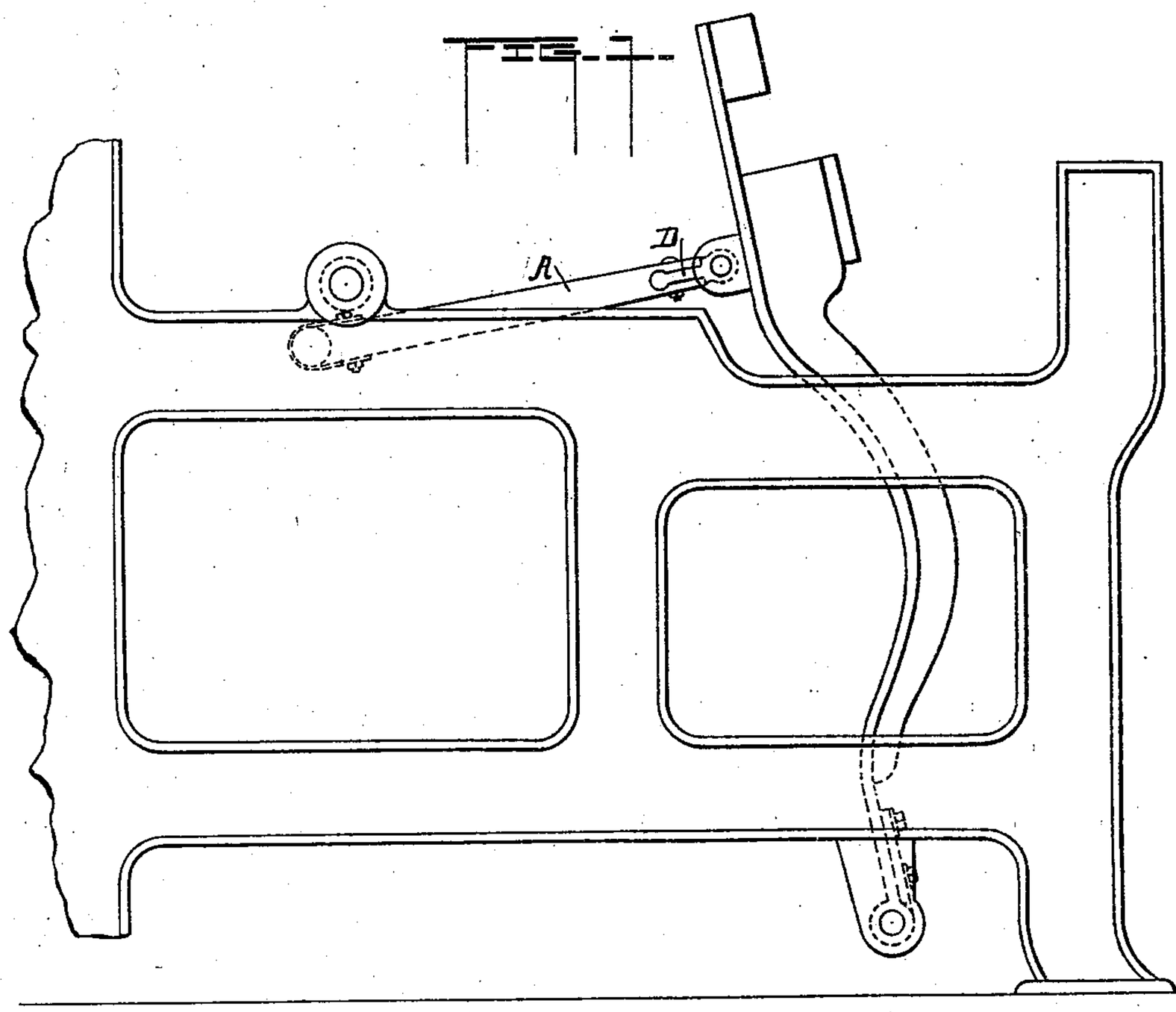


FIG. 2.

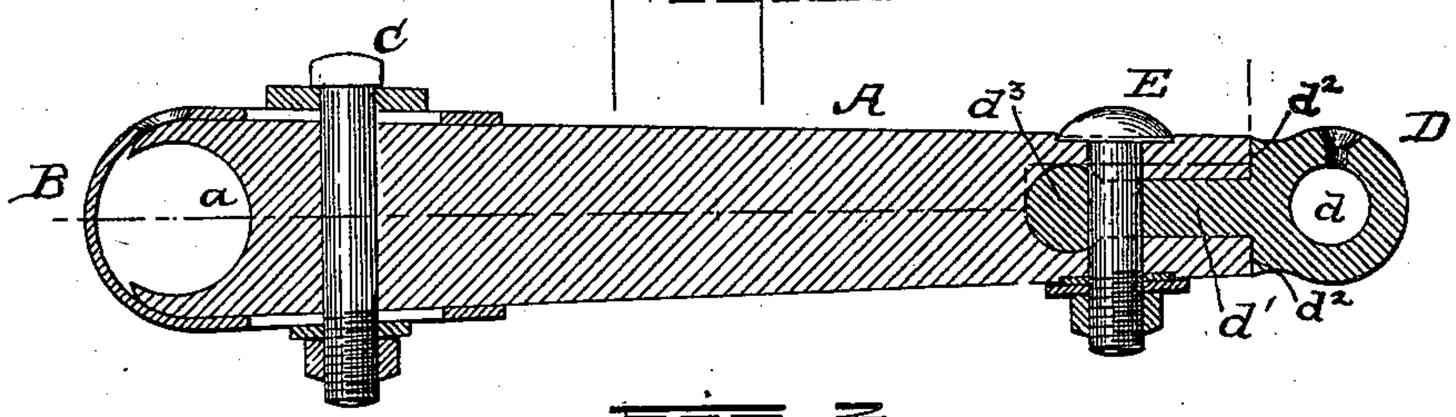
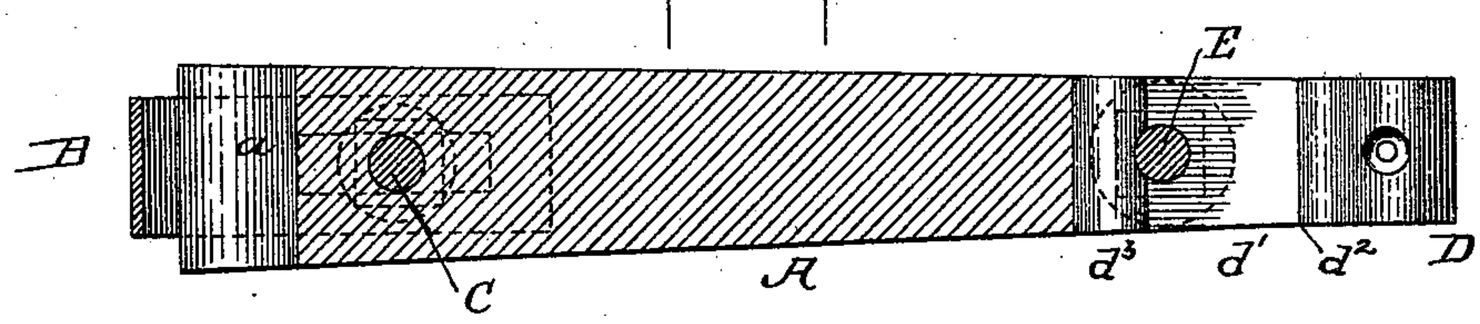


FIG. 3.



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UNITED STATES PATENT OFFICE.

ROBERT H. LIVESEY AND WILLIAM SQUIRE, OF FALL RIVER, MASSACHUSETTS.

PITMAN FOR LOOMS.

SPECIFICATION forming part of Letters Patent No. 561,234, dated June 2, 1896.

Application filed September 14, 1895. Serial No. 562,552. (No model.)

To all whom it may concern:

Be it known that we, ROBERT H. LIVESEY and WILLIAM SQUIRE, citizens of the United States, residing at Fall River, in the county of Bristol and State of Massachusetts, have invented certain new and useful Improvements in Pitmen for Looms; and we do 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, reference being had to the accompanying drawings, and to the letters of reference marked thereon, which form a part of this specification.

Our invention relates to looms; and its object is to improve the construction of the pitmen or connecting-rods which connect the crank-shaft with the lay. Heretofore these pitmen have been constructed of wood with a semicircular notch in each end to fit the crank-pin on the shaft and the wrist-pin on the lay, respectively, the pitmen being held to each pin by a U-shaped strap of leather or metal straddling the end of the pitman and fastened by a transverse bolt. The constant and severe shock produced by the successive thrust and pull tends to split the ends of the pitmen, necessitating frequent repairs. Our invention aims to overcome this difficulty and expense.

In the drawings, Figure 1 is an end view of so much of a loom as is necessary to illustrate the invention, showing one of our improved pitmen. Figs. 2 and 3 are side and top views of a pitman, partly in section.

We make use of a wooden body A, as usual, and, if desired, one end may have the customary notch *a*, strap B, and fastening-bolt C; but at the other end we provide a metallic knuckle D, having an eye *d* for the wrist-pin or crank-pin and a central flat shank *d'*, which is received in a slot or narrow gain cut in the end of the body A. The shoulders d^2 on each side of the shank abut against the end of the body A. The shank *d'* is preferably provided with an enlargement d^3, preferably at its end, as shown, which fits a corresponding enlargement of the gain in the body A. A bolt E passes transversely through the end of the body A and the shank *d'* and clamps these parts firmly together. A similar knuckle may be used at the other end of the pitman, if desired.

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

1. A pitman comprising a wooden body A having in one end a narrow slot, a metallic knuckle D having a comparatively thin, flat shank fitting into said slot, and means for fastening said shank in place, substantially as described.

2. A pitman comprising a wooden body, having a slot in its end provided with an enlargement, a metallic knuckle having a flat shank provided with an enlargement and fitting into said slot, and means for fastening said knuckle in place.

3. A pitman comprising a wooden body A, having in one end a slot provided with an enlargement, a metallic knuckle D having an eye *d*, a flat shank *d'* having an enlargement d^3 and received in said slot, shoulders d^2 abutting against the end of the body A, and a transverse bolt E passing through the body A and the shank *d'*, substantially as described.

In testimony whereof we affix our signatures in presence of two witnesses.

ROBERT H. LIVESEY.
WILLIAM SQUIRE.

Witnesses:
ARBA N. LINCOLN,
ARMEL L. ANDET.