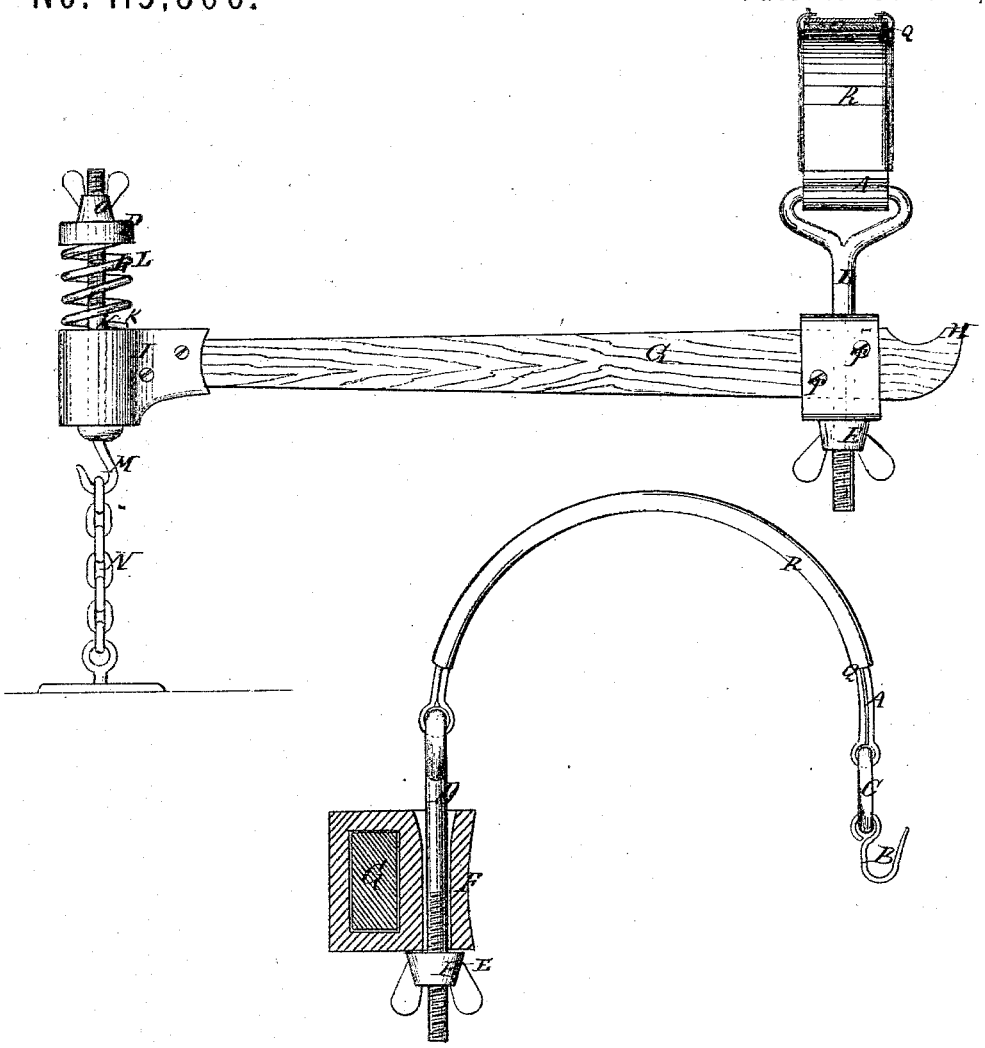
GEORGE BAILEY.

Improvement in Let-Off Mechanisms.

No. 115,806. Patented June 13, 1871.



Witnesses:

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UNITED STATES PATENT OFFICE.

GEORGE BAILEY, OF PUTNAM, CONNECTICUT.

IMPROVEMENT IN LET-OFF MECHANISMS.

Specification forming part of Letters Patent No. 115,806, dated June 13, 1871.

To all whom it may concern:

Be it known that I, GEORGE BAILEY, of Putnam, in the county of Windham and State of Connecticut, have invented a new and Improved Let-Off Apparatus; and I do hereby declare that the following is a full, clear, and exact description thereof, which will enable others skilled in the art to make and use the same, reference being had to the accompanying drawing forming part of this specification.

This invention relates to friction apparatus for the yarn-beams of looms, to regulate the letting off of the yarn; and it consists in improving the same, as hereinafter fully described, and subsequently pointed out in the claim.

Figure 1 is a side elevation of the lever and connecting apparatus, and a transverse section of the strap; and Fig. 2 is a side elevation of the strap and section of the lever.

Similar letters of reference indicate corre sponding parts.

A is a thin metal strap adapted to spring over the upper half of the yarn-beam, or a friction-collar or disk thereon, to one end of which strap a hook, B, is connected by a ring, C, said hook being to connect the strap with the loom-frame, or any other fixed support. The other end of said metal strap is connected by a bolt, D, and adjusting thumb-nut, E, with a block, F, fitted on the lever G, so that it can be adjusted toward or from the end. The end of the lever is to be placed under a stud, or any projection from the loom-frame; or it may be engaged with a chain or other device attached to and rising up from the floor. The end of the long arm of the lever is provided with a metal or other attachment, I, having a hole through it vertically for the adjusting-bolt K, and a socket in the upper side for the lower end of the coiled spring L to rest in. The bolt K passes loosely through the said attachment L, and has a hook, M, at the lower end, which engages with a chain, N, attached to the floor, and at the top the said bolt is provided with a thumb-nut, O, under which is an inverted cup, P, receiving the upper end of the spring L in it. The metal strap A has a leather strap, Q, attached to the inner side by riveting or otherwise, and this strap is covered by a woolen or other cloth, R, overlapping the edges of the leather and metal straps, and riveted or otherwise secured to the upper side of the metal strap. This leather and cloth lining imparts an elastic quality to the band, which is very serviceable in case the beam or collar thereon has any inequality in the rim, the said lining contracting or expanding to them, as the case may be.

By means of the adjusting-screws and nuts and the sliding block, the friction may be regulated with great exactness, and the adjustments, except the shifting of the block F, may be made while the loom is in operation.

The block F is prevented from sliding along the beam by set-screws T.

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

1. The strap A Q R, ring C, hook B, screw-bolt D, and nut E, combined with block F of the lever G, as and for the purpose specified.

2. The friction mechanism A Q R B C D E, the lever G, having hook H at one end and socket-piece I at the other, and the spring mechanism K L M N O P, when said instrumentalities are constructed and arranged together, substantially as and for the purpose specified.

GEORGE BAILEY.

Witnesses:
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