

(No Model.)

E. POEHNERT.
LOOM.

No. 571,956.

Patented Nov. 24, 1896.

Fig. 1

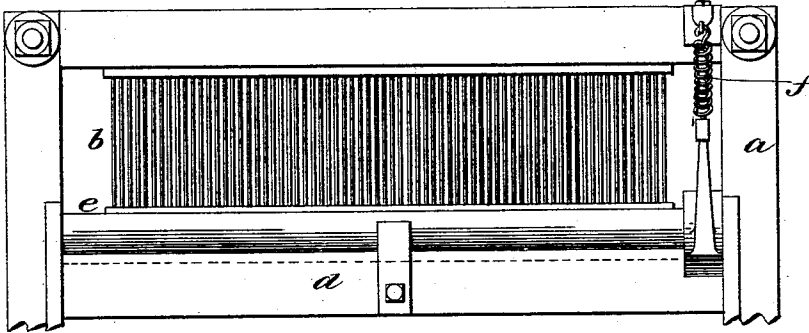


Fig. 2

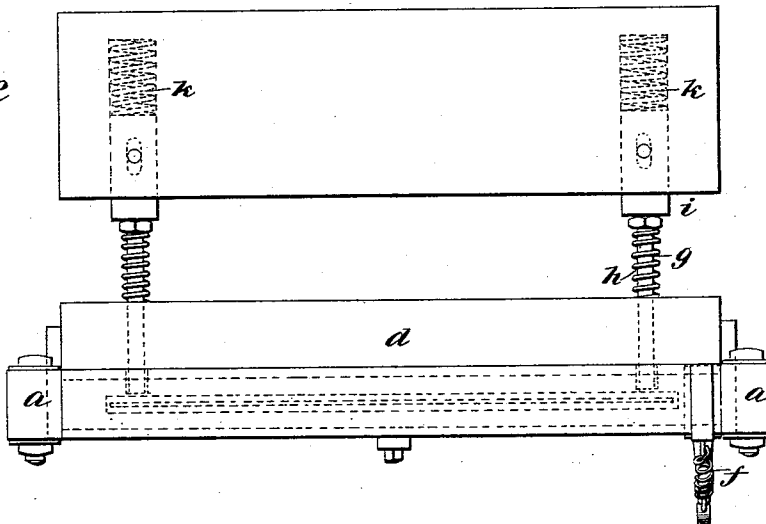
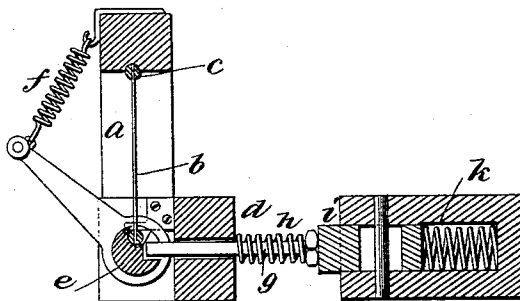


Fig. 3



Witnesses

Albert Popkine

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Inventor

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LOOM.

SPECIFICATION forming part of Letters Patent No. 571,956, dated November 24, 1896.

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To all whom it may concern:

Be it known that I, EDWARD POEHNERT, a citizen of the United States of America, residing at Rockville, in the county of Tolland and State of Connecticut, have invented a certain new and useful Improvement in Looms, of which the following is a description, reference being had to the accompanying drawings, wherein—

Figure 1 is a front view of those parts of a loom to which my improvement particularly pertains. Fig. 2 is a top view of such parts. Fig. 3 is a view of the same parts in vertical section on the plane *x x*.

The object and purpose of the improvement is the prevention of injury to the parts of the loom and to the cloth which is being woven therein if a shuttle or other obstacle is caught accidentally between the reed and the warp-shed in the beating-up motion of the lay.

The drawings show only the pertinent parts of the loom.

The letter *a* denotes the lay as a whole, which has in practice the ordinary reciprocating or vibratory motion, and *b* denotes the reed. The reed is not fast in the lay, as is the more common practice, but its upper edge is rather loosely seated in the groove *c*, formed in the under side of the cross-piece which connects the two vertical arms of the lay. The lower edge of the reed is held in place between the cross-piece *d* and the reed-confiner *e*. The reed-confiner *e* is in a general sense a roll with trunnions at the ends journaled in the upright arms of the lay and having some rotary motion. The reed-confiner is held in a position to confine the lower edge of the reed between it and the cross-piece *d* by means of the reed-confiner spring *f*; but, so far as the action of the spring *f* is concerned, if the reed in its beating-up motion strikes a shuttle or other obstacle in the warp-shed, the backward pressure thus put upon the reed readily overcomes the opposing pressure of this spring, the reed-confiner rolls backward, and the reed is wholly released from its seat, remaining hanging loosely upon the warp-shed; but if the reed properly seated in its place is carried by the beating-up motion of the lay substantially beyond the point where it must meet a shuttle, if one is accidentally lying in the warp-shed, then the

reed is locked in place in order that it may properly beat up the weft-thread by means which I will now describe.

The letters *g* denote reed-confiner locks which are simply pins having some back-and-forth motion, being loosely held in openings in the cross-piece *d*, prepared for their reception, and for the most of the time held out of contact with the reed-confiner by means of the springs *h*, the said pins being allowed play between the bunter *i* and the reed-confiner *e*, the spring *h* bearing against the cross-piece *d* at one end and the head of the pin at the other to retract the confiner-locks. Just as the reed is about to beat up a weft-thread into its place, as a part of the piece of cloth that is being woven, these reed-confiner locks strike the bunters *i* and are thereby forced forward into the sockets *e'* in the reed-confiner. In such position they lock the reed firmly in its place to accomplish its normal and proper beating-up function, the springs *k* permitting the necessary beating-up motion of the lay, but holding the reed locked in place nevertheless. When the reed retreats in the backward motion of the lay and the locks *g* cease to have contact with the bunters *i*, the reed-confiner is unlocked and remains unlocked until another beating-up motion of the lay again brings the locks *g* into contact with the bunters *i*.

The bunters *i* have just been spoken of as though they were practically rigid and stationary. As a matter of fact they rest against springs *k*, which are considerably stouter (that is, resist compression with greater degree) than the lock-springs *h*, so that the action so far described will take place if everything goes on as it should, but if for any reason the locks *g* should not properly enter the sockets *e'* in the beating-up motion of the lay, then these springs *k* will permit the bunters *i* to retreat and so prevent breakage of the parts of the loom.

It will be readily understood that the springs *f*, the locks *g*, the springs *h*, the bunters *i*, the sockets *e'*, and the bunter-springs *k* may be more or less in number as experience and judgment dictate.

I claim as my improvement—

In a loose-reed motion the combination of a lay having the lower and upper cross-pieces, a

reed, a rotatable reed-confiner having a socket and a spring for turning the confiner to hold the lower edge of the reed between the said confiner and lower cross-piece, a reed-confiner lock carried by the lay, a spring for normally holding the lock retracted from said socket, and a yielding bunter on a fixed part

of the loom with which the lock engages to force the same into the socket near the end of the beat-up, substantially as described.

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Witnesses:

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LEOPOLD KRAUSE.