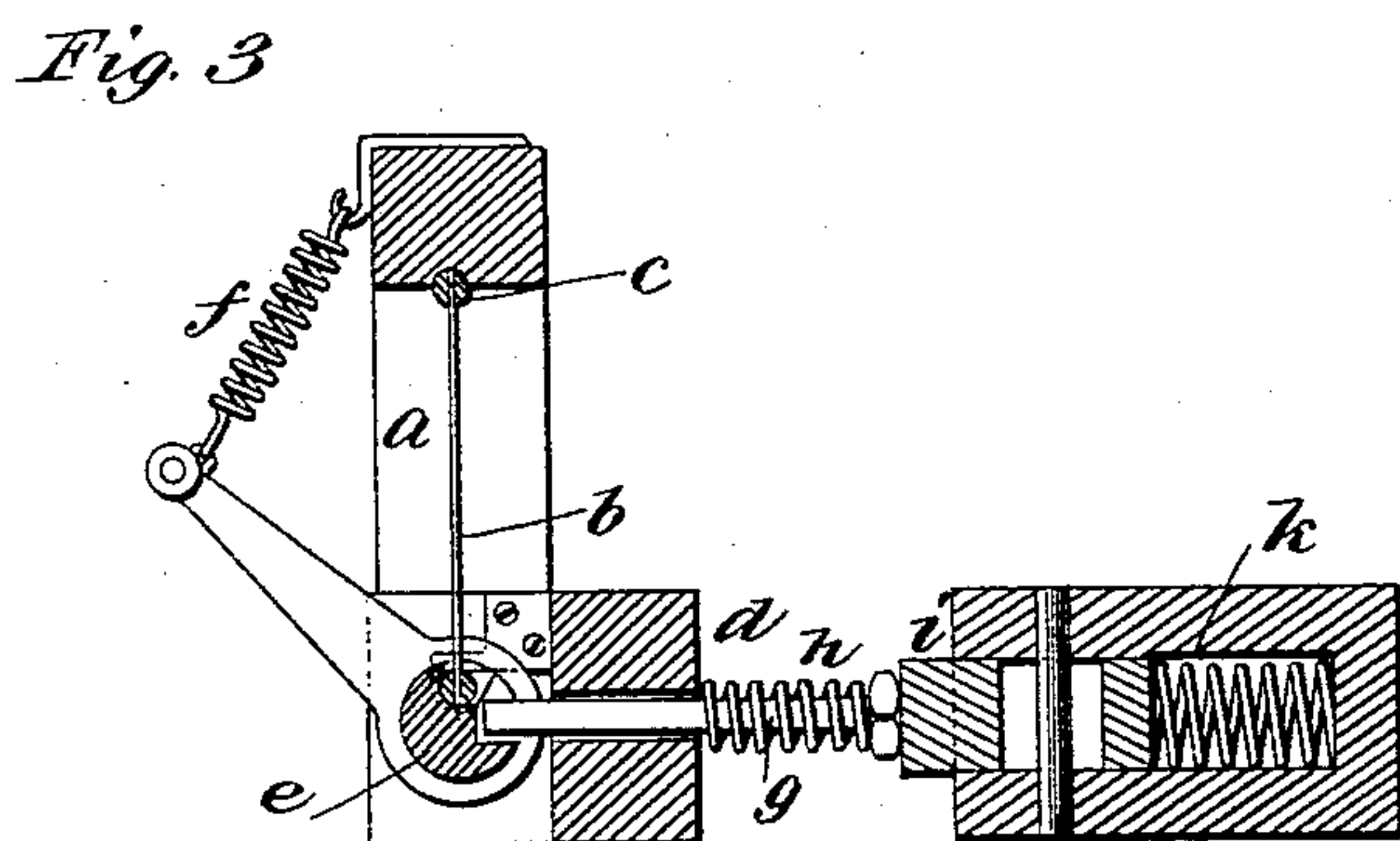
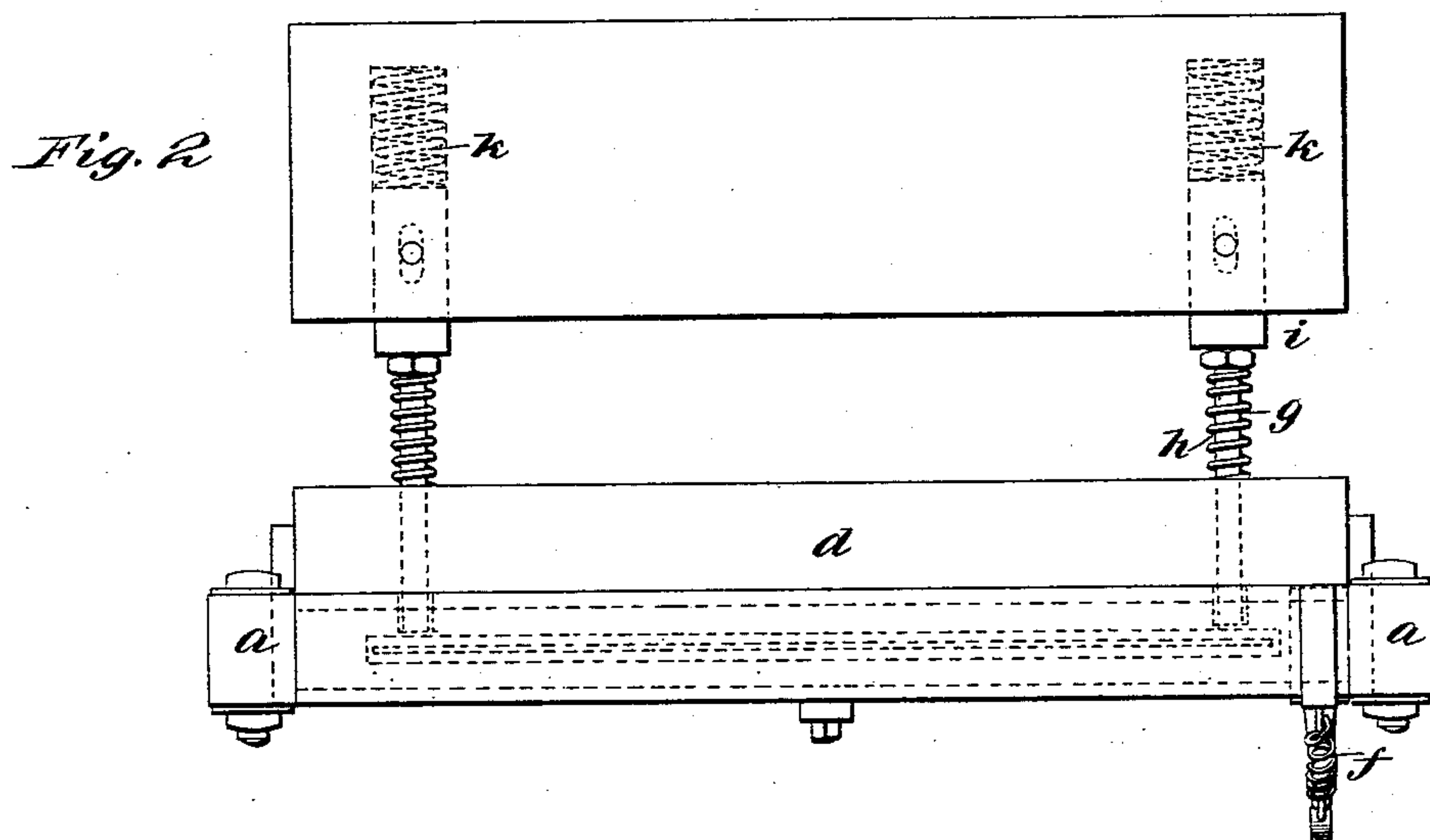
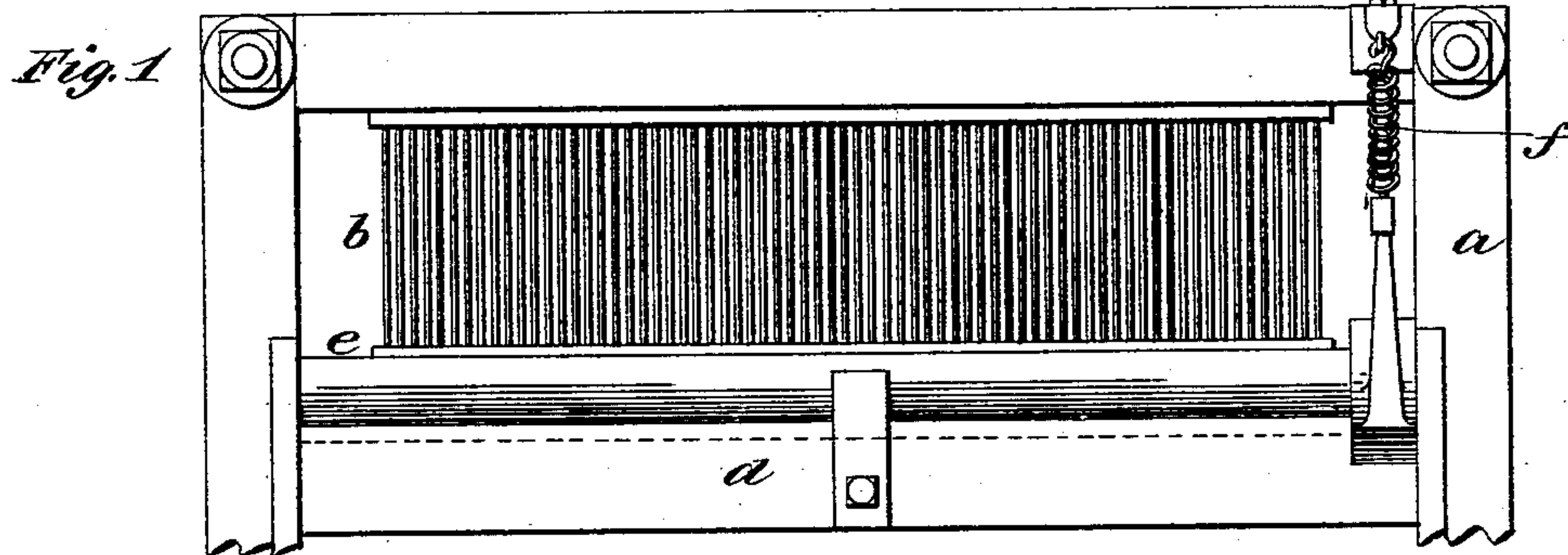


(No Model.)

E. POEHNERT.  
LOOM.

No. 571,956.

Patented Nov. 24, 1896.



Witnesses  
*Albert Popkine*  
*Carrie L. Acker.*

Inventor  
*Edward Poehnert.*  
By *W. C. Simonds,*  
Atty.



# UNITED STATES PATENT OFFICE.

EDWARD POEHNERT, OF ROCKVILLE, CONNECTICUT.

## LOOM.

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

Application filed January 31, 1895. Serial No. 536,810. (No model.)

*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—

10 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  $x x$ .

15 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.

20 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.

55 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-con-  
5 finer lock carried by the lay, a spring for nor-  
mally 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.

EDWARD POEHNERT.

Witnesses:

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