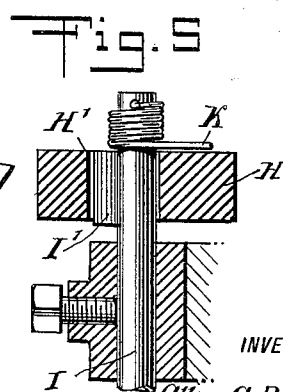
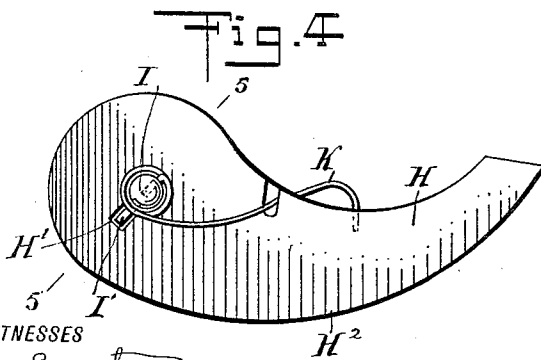
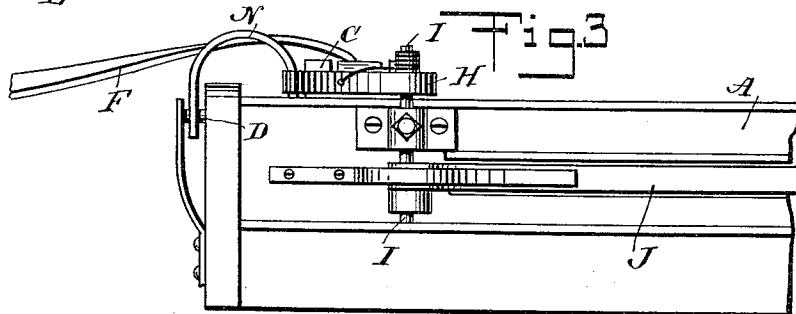
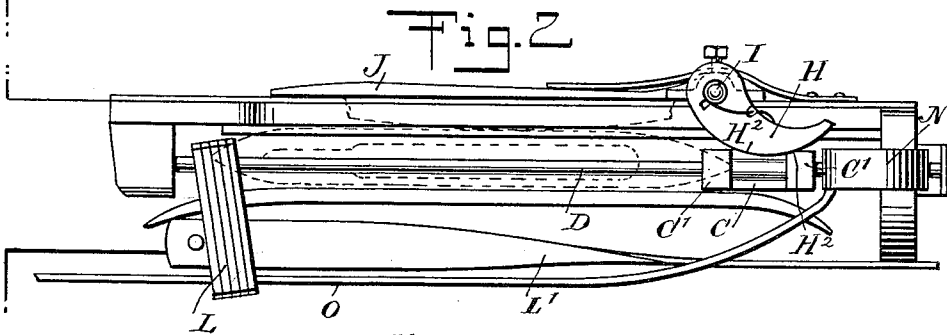
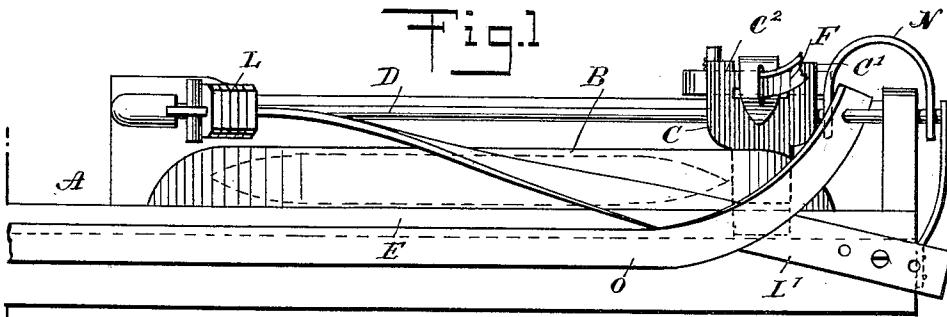


1,057,977.

Patented Apr. 1, 1913.



WITNESSES
John Perkins
Rev. H. H. H.

INVENTOR
Altan A. Perkins
 BY *M. M. Co.*
 ATTORNEYS

UNITED STATES PATENT OFFICE.

ALLAN ANDREW PERKINS, OF SANFORD, MAINE.

PICKER-HEAD CHECK.

1,057,977.

Specification of Letters Patent.

Patented Apr. 1, 1913.

Application filed September 7, 1911. Serial No. 648,030.

To all whom it may concern:

Be it known that I, ALLAN A. PERKINS, a citizen of the United States, and a resident of Sanford, in the county of York and State of Maine, have invented a new and Improved Picker-Head Check, of which the following is a full, clear, and exact description.

The invention relates to looms, and its object is to provide a new and improved picker head check arranged to stop the picker head and hold it in proper place for receiving the impact of the returning shuttle. For the purpose mentioned, use is made of a spring-pressed cam mounted on the shuttle box and adapted to be engaged by the picker head to hold the latter in an outermost or receiving position for the shuttle.

A practical embodiment of the invention is represented in the accompanying drawings forming a part of this specification, in which similar characters of reference indicate corresponding parts in all the views.

Figure 1 is a front elevation of the shuttle box on the right-hand side of the loom and provided with the picker head check; Fig. 2 is a plan view of the same with the strap connecting the picker stick with the picker head omitted; Fig. 3 is a rear elevation of the same; Fig. 4 is an enlarged plan view of the cam for engagement by the picker head; and Fig. 5 is a cross section of the same on the line 5-5 of Fig. 4.

It is well known that when the shuttle is thrown from the box and the picker stick springs back quickly then the picker head is thrown back by the picker strap connecting the picker stick with the picker head, and as no device has heretofore been provided to hold the picker head in the return position it frequently rebounds and meets the shuttle, thus preventing the shuttle from entering the box as far as it should. It is evident that when the shuttle does not enter the box as fully as it should then the next throw of the shuttle is not sufficient to project it through the open shed to the box on the opposite side. It also happens at times that the picker head works forward on account of the vibration of the lay, with the result the same as above described relative to the rebounding of the picker head. With my improvement presently to be described in detail, the picker head is held in the return position for the shuttle to abut against

and without danger of the picker head rebounding on the return stroke or accidentally moving out of the proper receiving position for the shuttle.

The shuttle box A for the reception of the shuttle B is provided with the picker head C mounted to slide on a suitable guide rod D and in a groove E formed in the bottom of the shuttle box A. The picker head C is connected by the usual picker strap F with the outer end of the picker stick not shown employed for moving the picker head C with a view to throw the shuttle from one side to the other and for returning the picker head C to the position of rest indicated in Figs. 1, 2 and 3, it being understood that the picker stick is, in practical operation, mounted to swing in a horizontal plane above that of the shuttle box. A cam H is arranged on the top of the box A and is fulcrumed loosely on a pin I attached to the back of the shuttle box A, the pin forming the fulcrum for the shuttle box binder J employed for checking the shuttle B in the usual manner. The pin I is provided with a key or a lug I' extending into recesses H' formed in the cam H so as to limit the swinging movement of the said cam on the pin I. A spring K is attached at one end to the pin I and bears with its other end on the cam H so as to hold the latter normally in an innermost position with the curved edge H² of the cam H in the path of the picker head C for engagement by the two upright arms C' of the picker head on the return movement thereof to hold the picker head against accidental inward movement either by rebounding or by vibrations of the loom. It is understood that the cam H is so located relative to the shuttle box as to hold the picker head C in the proper receiving position for the shuttle B to allow the shuttle to fully enter the shuttle box and to engage the picker head C so that on the next action of the picker stick the shuttle B is properly propelled by the action of the said picker stick, its strap F and the picker head C. The inward movement of the picker head C is limited by the usual buffer L held on the inner end of the guide rod D and connected with a buffer strap L' attached to the shuttle box A at the outer end thereof, as plainly indicated in the drawings. A bent strap N engages the outer end of the guide rod D, and a strap O also engages the said guide rod on one side of the strap N,

and this strap O extends to the left end of the lay and connects with the guide rod D on the other side of the loom. Thus straps N and O form a buffer at the limit of outward movement of the picker head. The buffer L, straps N and O form no part of my invention, which consists essentially in the cam H mounted and arranged as above described.

10 It is understood that the cam H is sufficiently spring-pressed to retain the picker head C in receiving position for the shuttle, but readily allows the picker head C to be moved inward out of engagement with the cam H when acted on by the picker stick and its strap F.

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

20 1. The combination of a shuttle box, a picker head having a guided movement in the shuttle box, and provided with spaced outstanding portions, and a device for positively holding said picker head against accidental displacement and comprising a

member which is mounted on the shuttle box and has movement in a direction substantially at right angles to that of said picker head, said member having a portion adapted to seat between said outstanding portions of the picker head. 30

2. The combination of a shuttle box, a picker head having a guided movement in the shuttle box and provided with spaced outstanding end portions, a cam member 35 pivoted on the shuttle box and arranged to swing in a direction at right angles to that of the movement of said picker head, said cam member having a cam face engageable between said outstanding end portions of 40 the picker head whereby to prevent accidental displacement thereof, and a spring for resisting movement of said cam member.

In testimony whereof I have signed my name to this specification in the presence of 45 two subscribing witnesses.

ALLAN ANDREW PERKINS.

Witnesses:

WALTER J. WEST,

HOWARD E. PERKINS.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."