

(No Model.)

W. KERSHAW.
PICKER CHECK FOR LOOMS.

No. 498,515.

Patented May 30, 1893.

Fig. 1

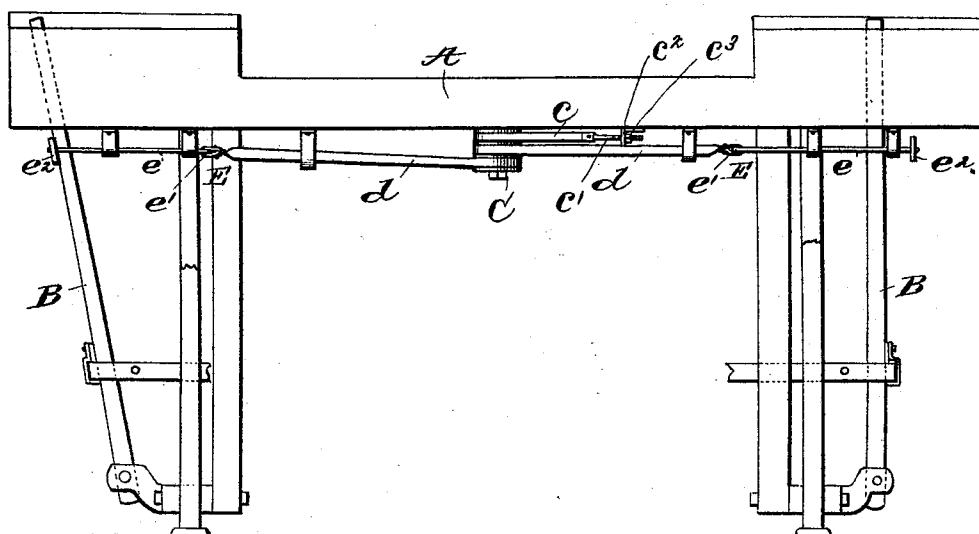


Fig. 2

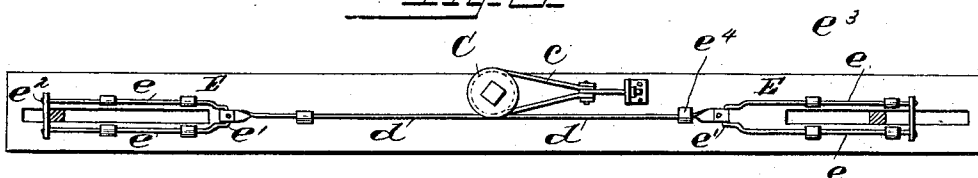


Fig. 3

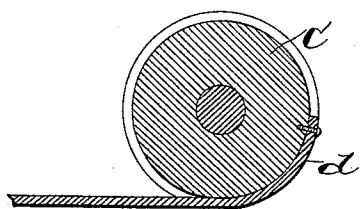


Fig. 4

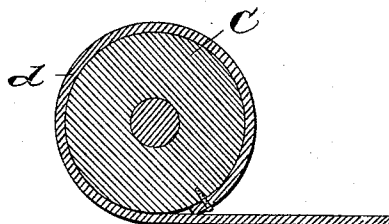
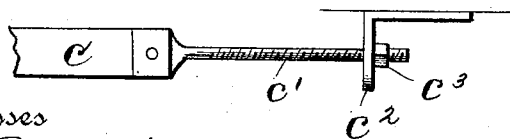


Fig. 5



Witnesses
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UNITED STATES PATENT OFFICE.

WILLIAM KERSHAW, OF FALL RIVER, MASSACHUSETTS.

PICKER-CHECK FOR LOOMS.

SPECIFICATION forming part of Letters Patent No. 498,515, dated May 30, 1893.

Application filed January 19, 1893. Serial No. 458,942. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM KERSHAW, a citizen 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 Picker-Checks for Looms; and I do hereby 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.

This invention has for its object to provide a loom with an improved picker check by which the picker sticks are gradually arrested as they are carried back by the momentum of the shuttle.

My invention consists of improved constructions and combinations of parts illustrated in the accompanying drawings and disclosed in the following description and claims.

Figure 1 is a front elevation of a sufficient portion of a loom and lay to enable any one to understand my invention. Fig. 2 is an underside view of the lay. Figs. 3 and 4 are detailed sections showing how the check straps of the two sides of the loom are secured to the friction pulley. Fig. 5 is an enlarged view of a means for securing the strap *c* and its adjustment.

In the drawings A is the lay.

B B are the picker sticks. The retardation of the picker sticks at the time specified is secured through the following instrumentalities: Beneath the bed of the lay I place a friction pulley C preferably provided on its periphery with three grooves each extending entirely around the pulley. A friction strap *c* is placed in the upper groove of the pulley and its ends secured to the lay in such way as to secure the necessary friction. I have shown a means whereby this strap is secured so that the same can be adjusted to produce the friction desired. The ends of the strap *c* are secured to a rod or bolt *c'* in any desired way as by riveting and the said rod or bolt passes through a bracket or lug *c²* secured to the underside of the lay. The rod or bolt *c'* is provided with screw threads and a nut *c³*, and by turning this nut the tension of the strap may be regulated to secure the desired friction upon the pulley. This con-

struction is shown in detail in Fig. 5. In the lower grooves of the pulley are the check straps *d d*, which pass around the pulley in different directions the ends being secured to the pulley. By this arrangement as one strap is unwound the other is wound up on the pulley in its appropriate groove. To the outer end of each strap *d d* is secured a frame E which consists of the sides *e e* and the connections *e' e²* at the opposite ends of the frame. The connection *e²* is a piece of stiff leather or of wood and leather and the ends of the sides *e e* pass through the end piece *e²* and are clinched or otherwise secured at that point. The sides *e e* may be formed from a single rod or bar by bending the same at the end *e'* so as to afford a means for the ready attachment of the strap *d* thereto, or the sides *e e* may be of separate pieces united at the end *e²* as before described and also united at their opposite ends so as to provide for the attachment of the strap *d*. This frame E is supported in guides *e³* beneath the lay with its sides *e e* on opposite sides of the picker stick. The straps *d* may have their outer ends supported by a guide *e⁴* as shown in the drawings if desired. Such guide will not always be necessary and may be dispensed with.

I prefer to arrange the parts beneath the lay as shown in Fig. 2, so that the pulley C shall have one portion of its periphery tangential to a straight line from the center of one frame E to the center of the other, but this is not essential to the successful working of the device.

The operation of my improved picker check will be readily understood by those skilled in the art. When the shuttle strikes the picker stick it will be forced against the part *e²* of the frame E and the frame moved outwardly the strap *d* connected therewith turning the pulley C under the friction of the strap *c* which friction gradually retards the movement of the picker stick and shuttle. The movement of the pulley C under the strain upon one of the straps *d* winds the other strap up and places the frame E at the opposite end of the lay in proper position to arrest the shuttle and picker stick at that end of the lay on the return movement of the shuttle.

What I claim, and desire to secure by Letters Patent, is—

1. The combination with the lay and picker sticks, of the friction pulley, the straps reversely wound upon said pulley, the frames in
5 prolongation of said straps and adapted to be directly engaged by said picker sticks, substantially as described.

2. The combination with the lay and picker
10 sticks of the friction pulley and its friction strap, the straps reversely wound upon said

pulley, and the frames in prolongation of said straps and adapted to be directly engaged by the picker sticks, substantially as described.

In testimony whereof I affix my signature in
15 presence of two witnesses.

WILLIAM KERSHAW.

Witnesses:

JAMES H. WINSTANLEY,
ARTHUR S. PHILLIPS.