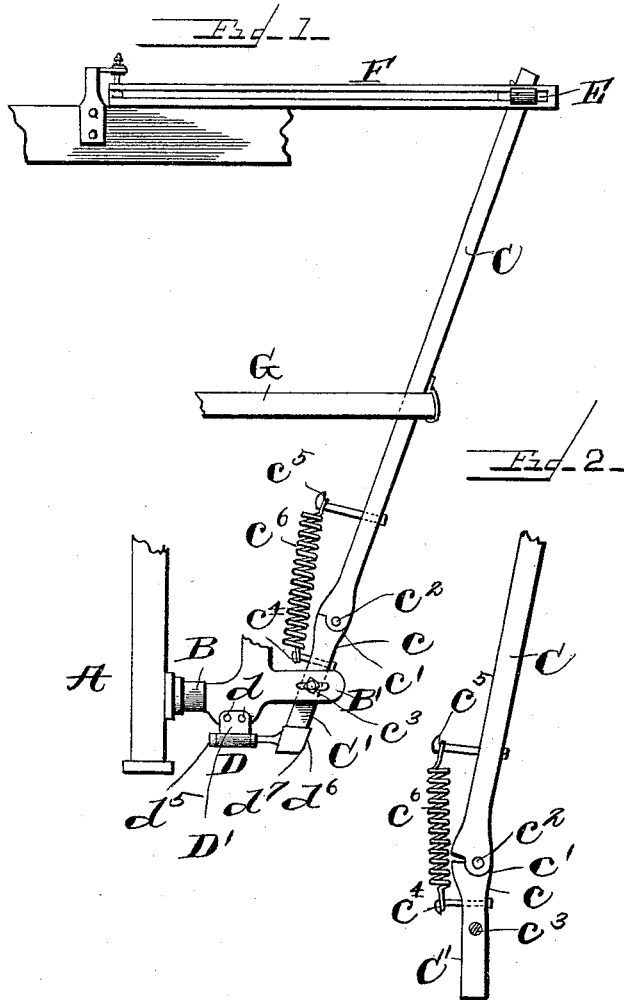


J. JOHNSON.
PICKER STICK FOR LOOMS.

Patented Mar. 14, 1893.



Lauberschmidt,
C. T. Beer

John Johnson Inventor
By Edmund S. Clarkson
his Attorney

UNITED STATES PATENT OFFICE.

JOHN JOHNSON, OF CHESTER, PENNSYLVANIA.

PICKER-STICK FOR LOOMS.

SPECIFICATION forming part of Letters Patent No. 493,331, dated March 14, 1893.

Application filed February 16, 1892. Serial No. 421,717. (No model.)

To all whom it may concern:

Be it known that I, JOHN JOHNSON, a citizen of the United States, residing at Chester, in the county of Delaware and State of Pennsylvania, have invented certain new and useful Improvements in Picker-Sticks for Looms; and I do 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, reference being had to the accompanying drawings, and to the letters of reference marked thereon, which form a part of this specification.

My invention relates to certain improvements in looms to be hereinafter described and claimed.

The object of my invention is to provide a picker stick of suitable material with a joint and means to keep said joint closed, except when the picker gets caught in the box when the joint opens, thus allowing the picker stick movement and obviating the breaking of said stick, said means automatically drawing the stick back to its normal condition after it is released.

The picker sticks now in general use are composed of one solid stick, and it has been found by experience that they frequently break by reason of the "box-motion" getting out of order and said stick catching in the box, the sticks being of one solid piece usually snap off. This breakage of picker sticks in mills where a large number of looms are employed is quite a loss to the manufacturer.

In the drawings; Figure 1 is a view in front elevation of my invention showing its attachment to the loom frame. Fig. 2 is a detail view of the stick when bent.

A represents a portion of the frame of a loom, B the lay rock shaft from which the piece B' extends.

C is the picker stick which may be of any material found most desirable, having a swelled portion *c* in which is formed a joint *c'* and the two pieces C and C' forming the

picker stick are joined by means of the pin *c*². The said stick is pivoted at *c*³ to the piece B'.

*c*⁴ and *c*⁵ are two pins extending respectively from the two pieces composing the picker stick. Any other suitable means may be used instead of these two pins.

*c*⁶ is a coiled spring extending from one pin *c*⁵ to the other *c*⁴.

G is a strap connected in a well known manner by which the picker stick is actuated. For instance we will suppose that the "box motion" is out of order and that the "stick" is "caught," the machine, continuing to move, pulls the strap G and the result is that the pulling of the strap causes the picker stick to bend at the joint *c'* against the pull of the spring *c*⁶. The machine can continue to run without breaking the stick whereas if it were a solid stick it would break under the pull of the strap G. As soon as the picker is released the spring *c*⁶ restores the picker stick to its normal position or rather straightens it. When the loom is working the stick is pulled in by the strap G while the end of the stick below the pivot *c*³ moves outward and is connected with a check D. As soon as the pull on strap G is released the check D pulls the picker stick back to the beginning of the stroke.

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

A picker stick composed of the two pieces C and C' having swelled portions *c* and pivoted together, the pins *c*⁴ and *c*⁵ projecting from the rear face of the stick, and the coiled spring *c*⁶, the ends of which are connected to said pins behind the stick and in direct line of its movement and pivot, substantially as described.

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

JOHN JOHNSON.

Witnesses:

JOSIAH SMITH,
W. R. WARD.