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C. O. HUNTOON.

CHECK FOR PICKER MOTIONS OF LOOMS.

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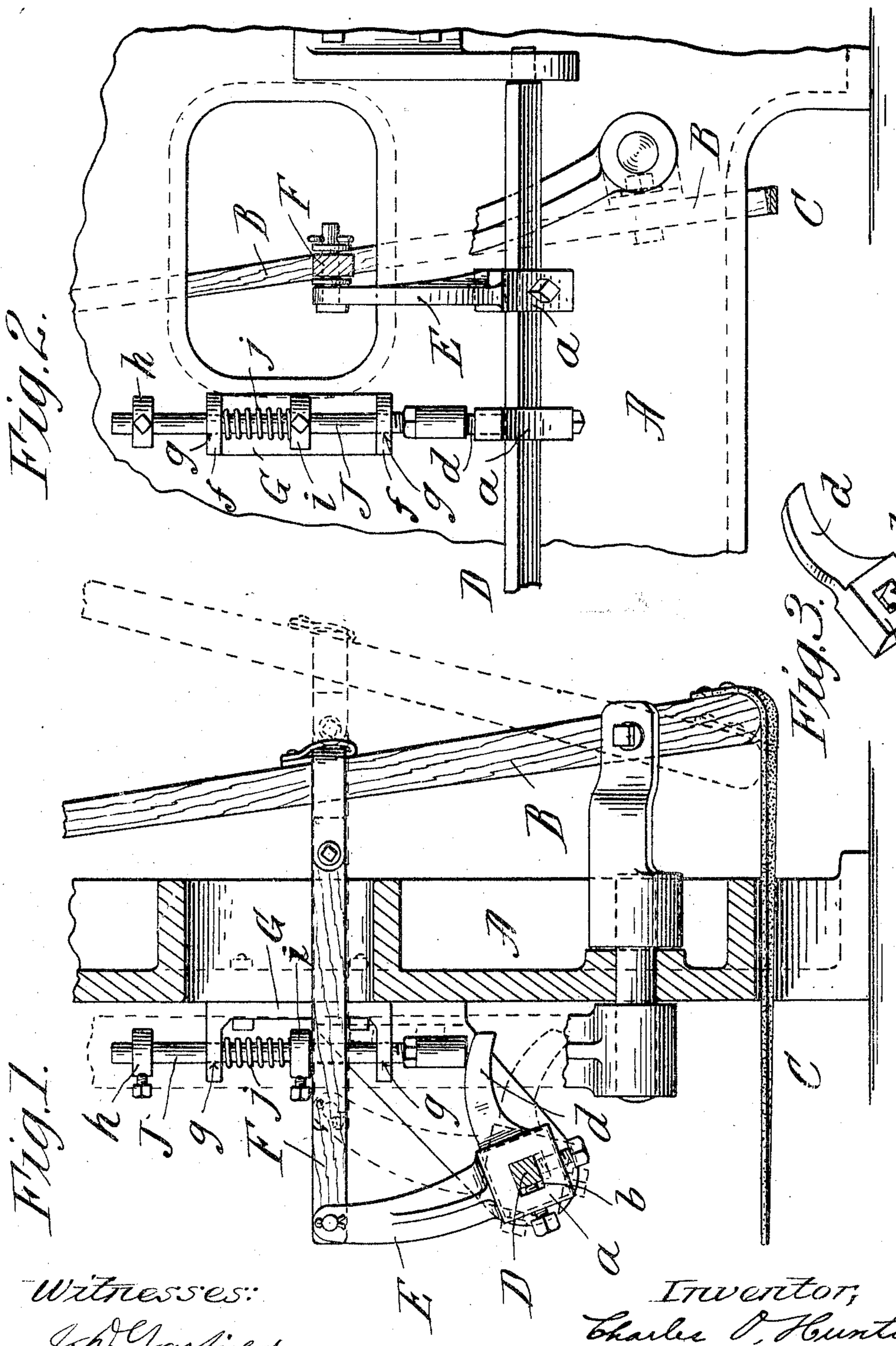
NO MODEL.



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UNITED STATES PATENT OFFICE.

CHARLES O. HUNTOON, OF SOMERS, CONNECTICUT.

CHECK FOR PICKER-MOTIONS OF LOOMS.

SPECIFICATION forming part of Letters Patent No. 776,399, dated November 29, 1904.

Application filed April 25, 1904. Serial No. 204,768. (No model.)

To all whom it may concern:

Be it known that I, CHARLES O. HUNTOON, a citizen of the United States of America, and a resident of Somers, in the county of Tolland and State of Connecticut, have invented certain new and useful Improvements in Checks for Picker-Motions of Looms, of which the following is a full, clear, and exact description.

This invention relates to a check device or appliance for the picker-motion of a loom, so that the means for making the "pick" will be without excessive violence, especially at the latter portion of its movement, whereby jolting is avoided and the strap connecting the picker-stick and sweepstake is relieved from wear, and consequently the latter will remain suitable for use for a greatly-increased time.

The invention consists, in part, in the combination with a rock-shaft having a lever-arm, in connection through the usual sweepstake with the picker-stick, having a lever-like abutment or horn, of a yielding buffer arranged in the line of movement of said abutment or horn and arranged to be contacted with by the latter at the final portion of its movement, said buffer having a spring appurtenant thereto and against which it yields.

The invention furthermore consists in the combination of parts of particular construction and arrangement, substantially as hereinafter fully described, and pointed out in connection with the accompanying drawings.

In the drawings, Figure 1 is a vertical sectional view through a portion of the end frame of a loom and showing substantially in elevation the present improvements in conjunction with the picker-stick. Fig. 2 is an elevation as seen looking facewise at the end frame of the loom and at right angles to the view, Fig. 1. Fig. 3 is a perspective view of a lever-like appliance hereinafter referred to.

In the drawings, A represents a portion of the end frame of the loom, inside of which the picker-stick B is mounted in the usual manner, the same having its throw or pick imparted thereto, as most commonly performed, and D represents a rock-shaft, preferably square, horizontally ranging across the end of the loom, journaled for its rocking movement in suitable bearings and having the lever-arm E upwardly extending and connected through the sweepstake F and lug-strap with the picker-stick. An oscillating or rocking motion is imparted to the said rock-shaft in a positive and forcible manner. The rock-shaft D is provided with a shoe or fitting comprising a hub *a*, having a squared aperture *b* therethrough and having a more or less horizontally and somewhat curved abutment or horn *d* extended toward the end frame. Above the said horn *d* a bracket-casting G is bolted to the loom-frame, the same having horizontally-extending lugs *f f*, which are understood as having alined vertical apertures *g* therein for the guidance of the vertical buffer rod or bar J, which may have a vertical play limited in the downward direction by the abutment-collar *h* above the top bracket-lug *f*, and between the bracket-lugs and sufficiently below the upper one is an abutment-collar *i*, between which and the upper bracket-lug is the spiral spring *j*, encircling the buffer-rod J and in more or less compression for downward reaction. Both collars *h* and *i* are adjustable, the upper one, *h*, being to vary the normal downward position of the buffer, while the collar *i* by being adjusted varies the compression of the spring, and consequently enables the buffer to be rendered sensitive or yielding only under considerable resistance.

The picker-stick having been retracted to the position of the dotted lines in Fig. 1 is swiftly drawn to its position shown in the full lines, Fig. 1, through the rocking movement of the shaft D and the leftward swinging movement of the lever E, and as the picker-stick approaches to the limit of its leftward position at the final portion of the picking action the horn *d* comes against the lower end of the buffer and checks or slows up the motion, preventing impact or violence, saving the picker connection from unnecessary strain thereon, and conducing to lessened noise of action.

Having thus described my invention, what I claim, and desire to secure by Letters Patent, is—

1. In a loom, the combination with a rock-shaft having a lever-arm in connection with

the picker-stick, having a lever-like abutment or horn, of a yielding buffer arranged in the line of movement of said horn, and arranged to be contacted with by the latter at the final portion of its movement, a spring appurtenant to said buffer, and against which it yields.

2. In a loom, in combination, a rock-shaft having a lever-arm in connection with the picker-stick and having a lever-like abutment or horn, of a bracket secured on the end frame of the loom having upper and lower lugs provided with alined holes, a buffer-rod guided through said alined holes, a spring against which the buffer may be yieldingly forced, and means for limiting the movement of the buffer in the direction of the spring stress thereagainst.

3. In a loom, in combination, a rock-shaft having a lever-arm in connection with the picker-stick and having a lever-like abutment or horn, of a bracket secured on the end frame of the loom having upper and lower lugs or members provided with alined holes, a buffer-rod guided through said alined holes, a spiral spring encircling the buffer-rod against which the buffer may be yieldingly forced, an adjustable collar on the buffer-rod for limiting the movement of the buffer in the direction of the spring stress thereagainst, and another adjustable collar on the buffer-rod against which one end of the spring is in bearing.

Signed by me at Springfield, Massachusetts, in presence of two subscribing witnesses.

CHARLES O. HUNTOON.

Witnesses:
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