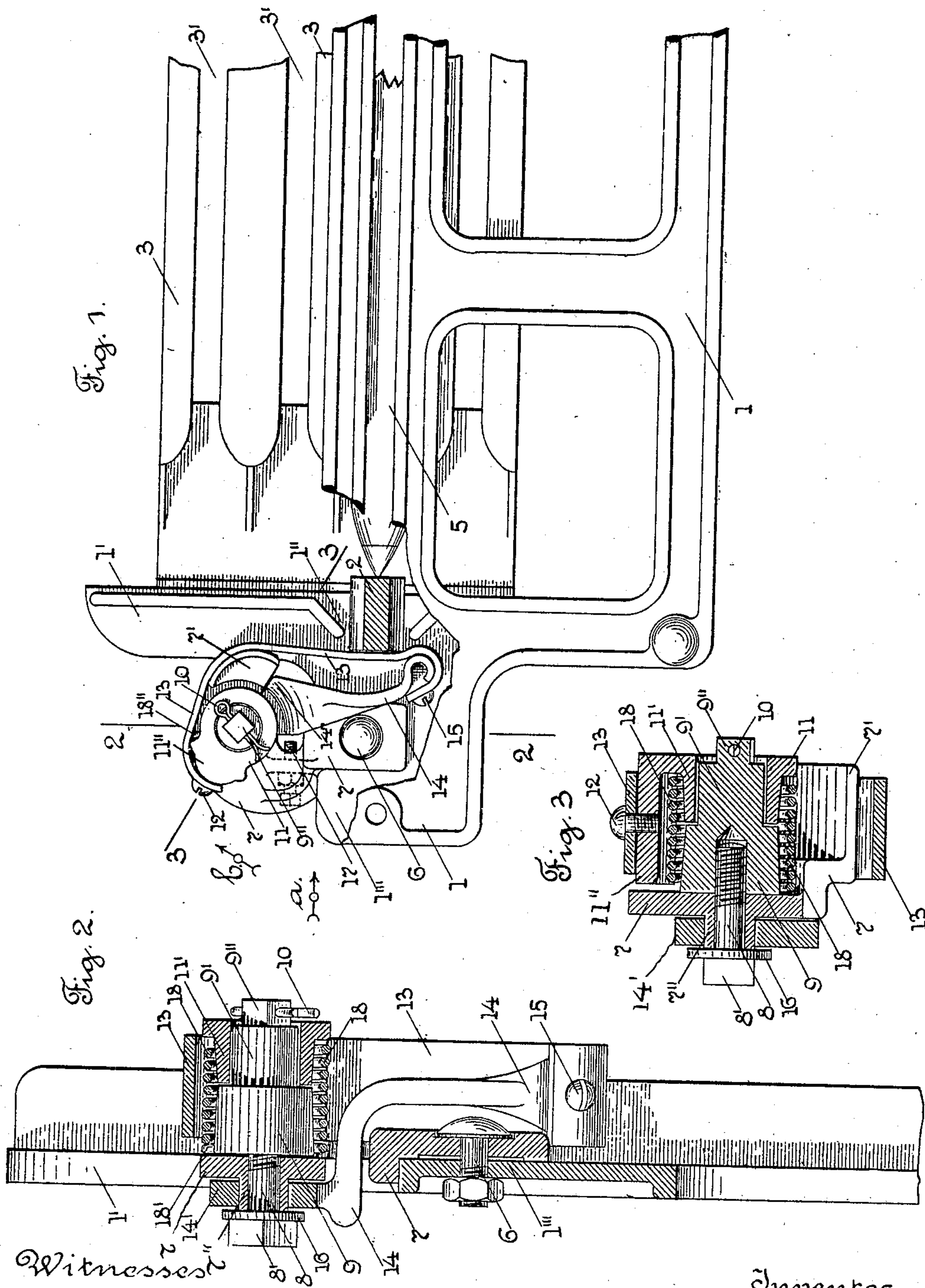


No. 886,952.

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A. S. COWAN.
PICKER CHECK FOR LOOMS.
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Witnessed
M. Bredt.
M. Haas

Inventor
Arthur S. Cowan.
By John C. Dewey
Attorney.

UNITED STATES PATENT OFFICE.

ARTHUR S. COWAN, OF WORCESTER, MASSACHUSETTS, ASSIGNOR TO CROMPTON & KNOWLES
LOOM WORKS, A CORPORATION OF MASSACHUSETTS.

PICKER-CHECK FOR LOOMS.

No. 886,952.

Specification of Letters Patent.

Patented May 5, 1908.

Application filed August 15, 1906. Serial No. 330,625.

To all whom it may concern:

Be it known that I, ARTHUR S. COWAN, a citizen of the United States, residing at Worcester, in the county of Worcester and State of Massachusetts, have invented certain new and useful Improvements in Picker-Checks for Looms, of which the following is a specification.

My invention relates to a picker check for a loom, and the object of my invention is to provide an improved picker check comprising a movable tension arm adapted to receive at its free end the impact of the picker, and means for yieldingly holding said arm, and returning it to its normal position, after it has been engaged by the picker.

I have only shown in the drawing a detached portion of the shuttle box end of a loom, with my improved picker check combined therewith, sufficient to enable those skilled in the art to understand the construction and operation thereof.

Referring to the drawings:—Figure 1 is a rear view of a drop shuttle box guide-frame partially broken away, at one end of a loom, and four drop shuttle boxes or cells, and my improved picker check combined therewith; the picker is shown in section. Fig. 2 is, on an enlarged scale, a section, on line 2, 2, Fig. 1, looking in the direction of arrow *a*, same figure, and, Fig. 3 is, on an enlarged scale, a section, on line 3, 3, Fig. 1, looking in the direction of arrow *b*, same figure.

In the accompanying drawing, 1 is a portion of the shuttle box guide-frame secured to the end of the lay, not shown, and having the upright guide-portion 1', with an opening 1'' therein for the entrance of the picker 2, shown in Fig. 1, in the ordinary way.

3 are the drop shuttle boxes, in this instance there are four cells 3' for the shuttles, only one shuttle, 5, is shown.

On the projecting end 1''' of the shuttle box guide-frame 1, is secured, by a bolt 6, the lower end of the picker check stand or bracket 7. The upper end of the bracket 7 has an opening therethrough to loosely receive a bolt 8, having in this instance an enlarged square shaped engaging end 8', and its inner end screw threaded, and screwed into a threaded hole in the boss 9, see Fig. 3. The boss 9 has in this instance a reduced portion 9', and a square shaped end 9'', through an opening in which a split pin 10 extends. Loosely mounted on the reduced portion 9'

of the boss 9, is the hub 11' of a collar 11, which has an extension 11'' thereon, see Fig. 3, of circular shape in cross section, to which is attached by a screw 12, in this instance one end of a strap or belt 13, of leather, or other suitable material. The strap 13 passes over the curved shaped guide-plate 7', see Fig. 1, on the stand 7, and in this instance extends around the curved shaped lower end of the movable tension arm 14, and is secured thereto by a screw 15, which in this instance extends into a central fin on said arm, as shown in Fig. 1. The strap 13 forms in this instance a facing or engaging surface for the arm 14, and also a connection between the spring actuated collar 11, and the end of the arm 14. The upper part of the tension arm 14 is in this instance offset, as shown in Fig. 2, and has the vertically extending upper end 14' which is loosely mounted on a boss 7'' on the stand 7, and held in place thereon by a washer 16 on the headed end of the bolt 8. An adjusting bolt or set screw 17, turning in a threaded hole in a lug on the stand 7, in this instance engages the arm 14, and acts as a stop to limit the outward movement thereof. A projection 14'' on the arm 14 in this instance engages the lower edge of the guide plate 7' on the stand 7, and acts as a stop to limit the inward movement of the arm 14. The tension arm 14, having in this instance the strap or belt 13 thereon, is so located relatively to the picker 2, that the lower free end of said arm 14 will be substantially in line with the picker 2.

Surrounding the enlarged portion of the boss 9, and the hub 11' of the sleeve or barrel 11, is in this instance a helically coiled tension spring 18, one end 18' of which is attached to the enlarged portion of the boss 9, and the other end is attached to the hub 11' of the collar 11. The spring 18 acts through the collar 11 and strap 13 to yieldingly hold the tension arm 14, and to return it to its normal position, after it has been moved outwardly by the impact of the picker.

The tension of the spring 18 may be varied by turning out the bolt 8, and rotating the boss 9 in either direction, and then turning in the bolt 8 to secure the boss 9 rigidly to the upper end of the stand 7.

It will be understood that the details of construction of my improvements may be varied if desired. Any suitable tension means may be used for yieldingly holding

the arm 14 to receive the impact of the picker, and for returning said arm to its normal position.

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

1. A picker check, comprising a movable arm, and a leather or flexible strap attached to said arm and forming a yielding surface for the picker, said arm and strap being so placed relative to the picker, that the picker will engage said strap near the end of said arm, and means for yieldingly holding said arm and returning it to its normal position.

2. A picker check, comprising a movable tension arm, and a leather or flexible strap forming a facing or engaging surface for said arm, said arm being so placed relatively to the picker, that the picker will engage said arm and the strap thereon at its lower end,

and means for yieldingly holding said arm, and returning it to its normal position, and a stop to limit the outward movement of said arm, and a stop to limit the inward movement of said arm.

3. A picker check, comprising a movable arm, and a leather or flexible strap attached to said arm and forming a facing or engaging surface for the picker, and said arm being so placed relative to the picker, that the picker will engage said arm and said strap near the end of said arm, and means for yieldingly holding said arm and returning it to its normal position, and a stop to limit the inward movement of said arm.

ARTHUR S. COWAN.

Witnesses:

J. C. DEWEY,
M. HAAS.