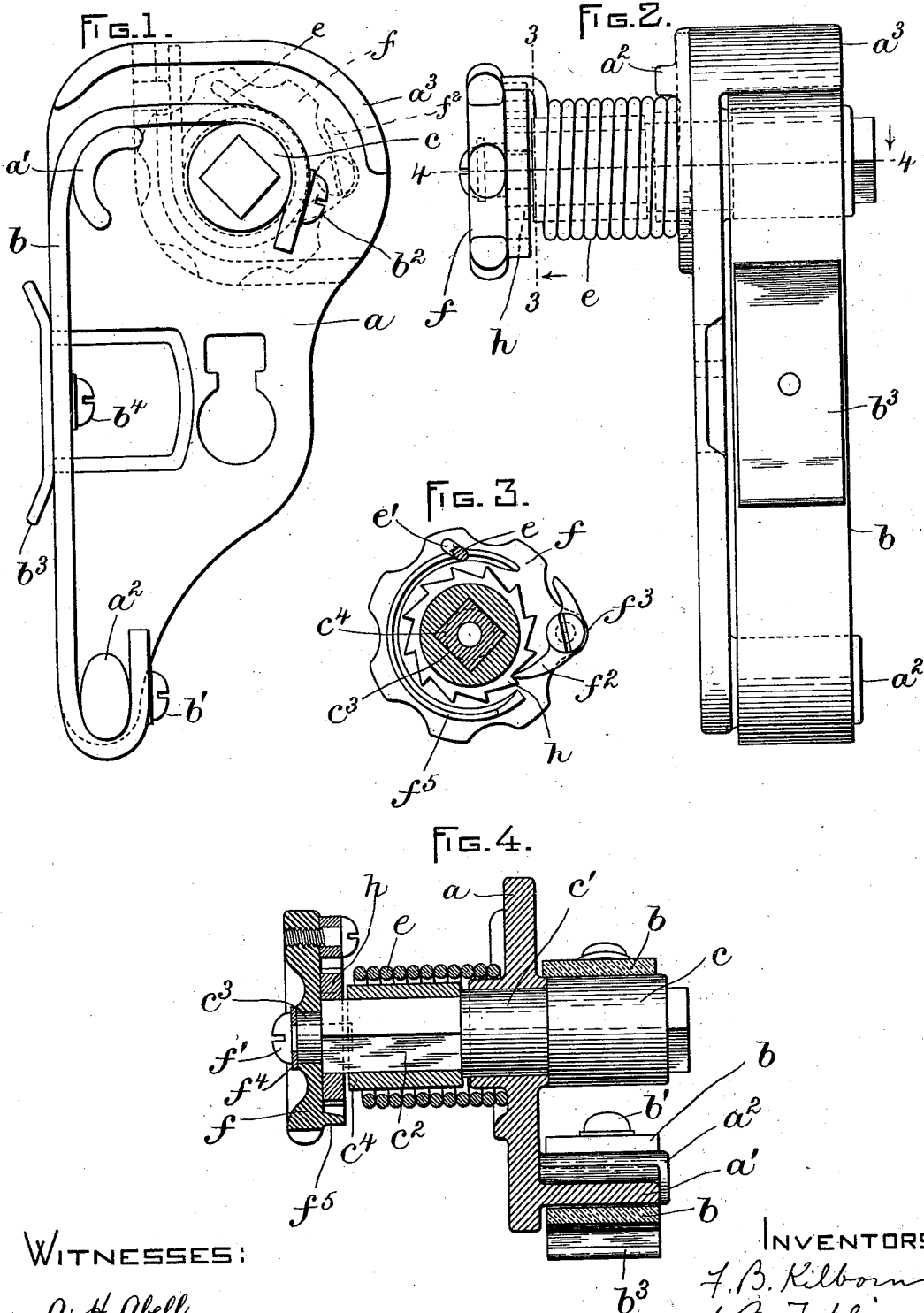


(No Model.)

F. B. KILBORN & A. B. TAPLIN.
PICKER CHECK FOR LOOMS.

No. 544,467.

Patented Aug. 13, 1895.



WITNESSES:

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UNITED STATES PATENT OFFICE.

FRANK B. KILBORN AND ALDEN B. TAPLIN, OF LAWRENCE, MASSACHUSETTS.

PICKER-CHECK FOR LOOMS.

SPECIFICATION forming part of Letters Patent No. 544,467, dated August 13, 1895.

Application filed April 1, 1895. Serial No. 543,995. (No model.)

To all whom it may concern:

Be it known that we, FRANK B. KILBORN and ALDEN B. TAPLIN, of Lawrence, in the county of Essex and State of Massachusetts, have invented certain new and useful Improvements in Picker-Checks for Looms, of which the following is a specification.

This invention relates to an improvement in picker-checks; and it consists in the novel features of construction and relative arrangement of parts hereinafter fully described in the specification, clearly illustrated in the drawings, and particularly pointed out in the claims.

Reference is to be had to the accompanying one sheet of drawings, in which like characters indicate like parts wherever they occur.

In the drawings, Figure 1 is a rear elevation of a picker-check made in accordance with our invention. Fig. 2 is a side elevation of a picker-check made in accordance with our invention. Fig. 3 is a cross-section taken on the line 3 3 of Fig. 2, looking in the direction of the arrow. Fig. 4 is a section taken on the line 4 4 of Fig. 2, looking in the direction of the arrow.

a represents a casting forming a suitable framework or support for the various parts of the device and constructed for ready attachment to the lay of the loom.

b represents a strap secured at one end by a screw b' to a lug a^2 , projecting from the framework. This strap passes over a shoe or friction-block a' and is secured at its other end by a screw b^2 to a member c , pivoted to the framework. This member is, as shown, a spindle, although any other pivoted construction may be employed. This member c has a hub c' , mounted in a suitable bearing in the framework a . This hub is preferably of less diameter than the part of the member to which the strap is attached, in order to prevent movement of the member to the left in Fig. 4. This member has also a squared portion c^2 , extending upon the opposite side of the framework from that where the strap is attached. Upon this squared portion c^2 there is mounted a sleeve c^4 , suitably apertured to fit said squared portion. A ratchet-wheel h is also mounted on the end of this squared portion c^2 . The end of this member has a reduced circular portion c^5 , upon which is mounted a

head f , and secured to said circular portion by a screw f' and a washer f^4 . A pawl f^2 is secured to this head by a screw f^3 and arranged to engage the teeth of the ratchet-wheel h . This pawl is preferably double, as shown, in order to have one member projecting in the vicinity of the periphery of the head for purposes of manipulation. A spiral spring e is mounted upon this sleeve, one end resting against a lug a^2 , projecting from the framework, and its other end secured to the head f by passing through an aperture e' in said head. This head is cast with a projecting flange f^5 to partially cover said ratchet-wheel, the flange being cut away for the portion occupied by the pawl. The framework is also cast with a flange a^3 , projecting over the strap at the part of the framework occupied by the member c and the shoe a' .

The strap b has affixed to its central portion a bearing-piece b^3 by means of a screw b^4 , or in any other well-known way. The attachment is applied to the loom in position to locate the bearing-piece directly behind the picker, so that when the shuttle strikes the picker the bearing piece or plate will be cushioned by the strap and the turning of the member c against the tension upon the spring. The bearing-piece b^3 is of sufficient extent to prevent the strap taking over or binding the corners of the picker, as it would do in the absence of some such provision. The tension upon the spring may be adjusted at will by turning the head f , thus carrying the pawl around behind the stationary ratchet-wheels. It will be observed that this spring tends to rotate the member c in a direction to hold the strap b taut.

The shoe or friction-piece a' over which the strap passes assists in maintaining the strap in proper position, and at the same time, by means of friction, tends to resist the inward movement of the strap b when struck by the picker. This is a valuable feature, since thereby we are enabled to dispense with a heavy spring. But for this shoe the spring e would have to be quite stiff, and consequently difficult of manipulation by means of the head. With a light spring and the shoe the blows delivered upon the strap are resisted much more efficiently than with a heavy spring and the shoe omitted.

Having thus explained the nature of our invention and described a way of constructing and using the same, though without attempting to set forth all of the forms in which it may be made or all of the modes of its use, what we claim, and desire to secure by Letters Patent, is—

1. A picker check for looms comprising in its construction a suitable framework or support, a strap fixed at one end to said support, a pivoted member to which the other end of said strap is attached, and a spring arranged to actuate said member in the direction to hold said strap taut, substantially as and for the purpose set forth.

2. A picker check for looms comprising in its construction a strap fixed at one end and having a bearing-piece to receive the impact of the picker, and a pivoted spring-actuated member supporting the other end of said strap, substantially as and for the purpose set forth.

3. A picker check for looms comprising in its construction a suitable framework or support, a member pivotally mounted in said framework, a strap fixed at one end to said member, and at its other end to said member, and a shoe over which said strap passes, a spring arranged to actuate said member in a direction to hold the strap taut, and means

for adjusting said spring, substantially as and for the purpose set forth.

4. A picker check for looms comprising in its construction a suitable framework, a member rotatively mounted in said framework provided with a squared portion (c^2) and a circular portion (c^3), a sleeve and a ratchet-wheel mounted upon said squared portion, a head loosely mounted on a circular portion of said member, adjacent to said ratchet-wheel a spiral spring mounted upon said sleeve, one end of said spring engaging a lug on said framework, the other end of said spring being secured to said head, a pawl on said head arranged to engage said ratchet-wheel a strap fixed at one end to said framework and secured at its other end to said member, and a shoe over which said strap passes, substantially as and for the purpose set forth.

In testimony whereof we have signed our names to this specification, in the presence of two subscribing witnesses, this 27th day of March, A. D. 1895.

FRANK B. KILBORN.
ALDEN B. TAPLIN.

Witnesses:

WALTER B. FOWLER,
HENRY F. HOPKINS.