J. M. PECKHAM.

PICKER FASTENER.

APPLICATION FILED OCT. 22, 1910.

996,670. Patented July 4, 1911.

Fig. 1.

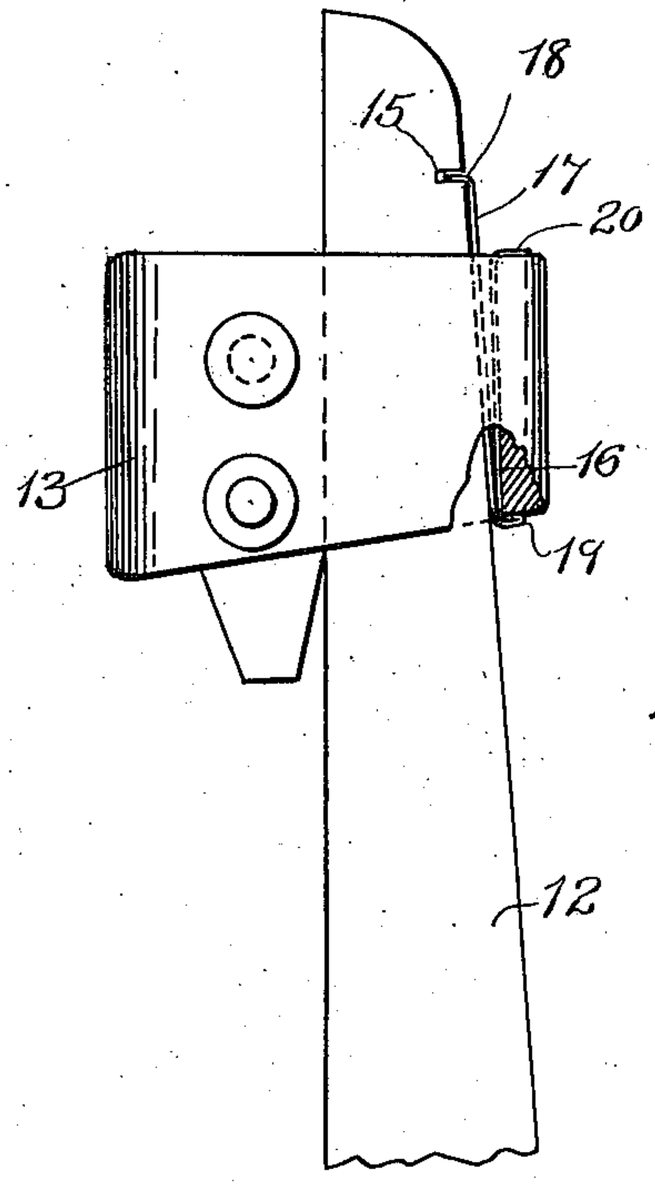


Fig. 2.

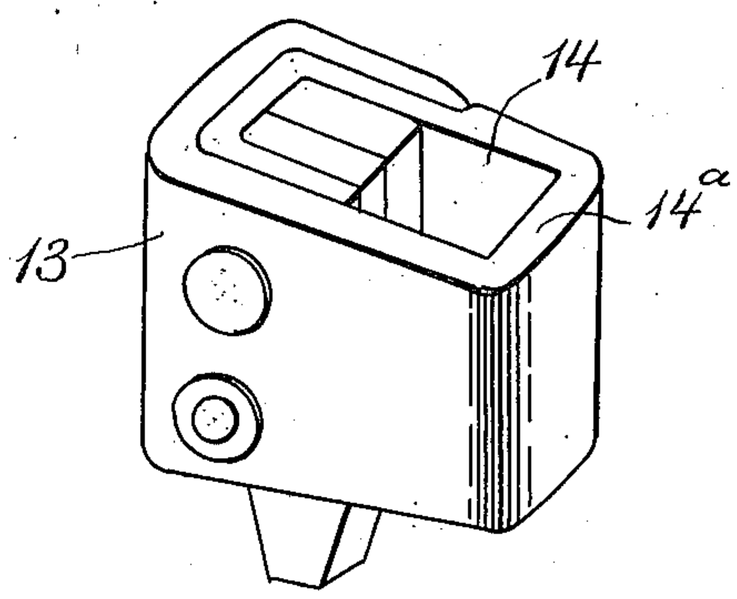


Fig. 4

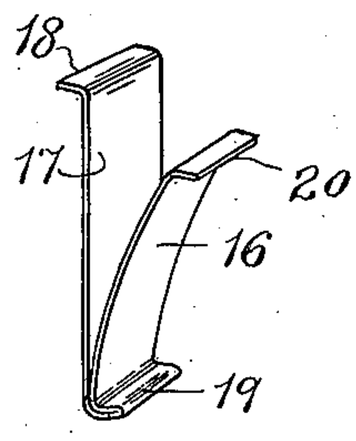


Fig. 5.

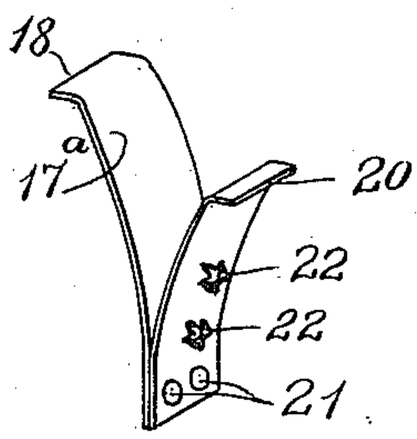


Fig. 3.

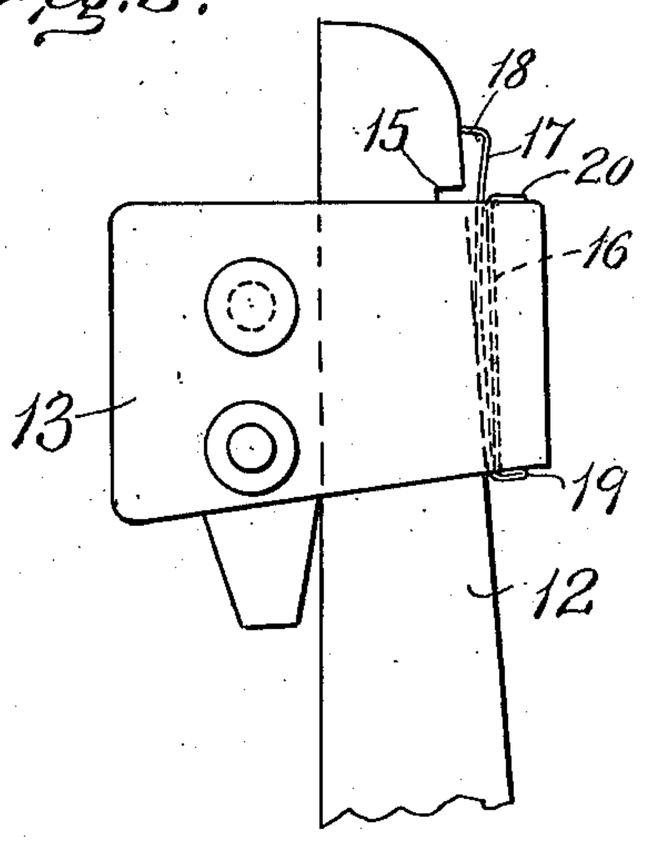
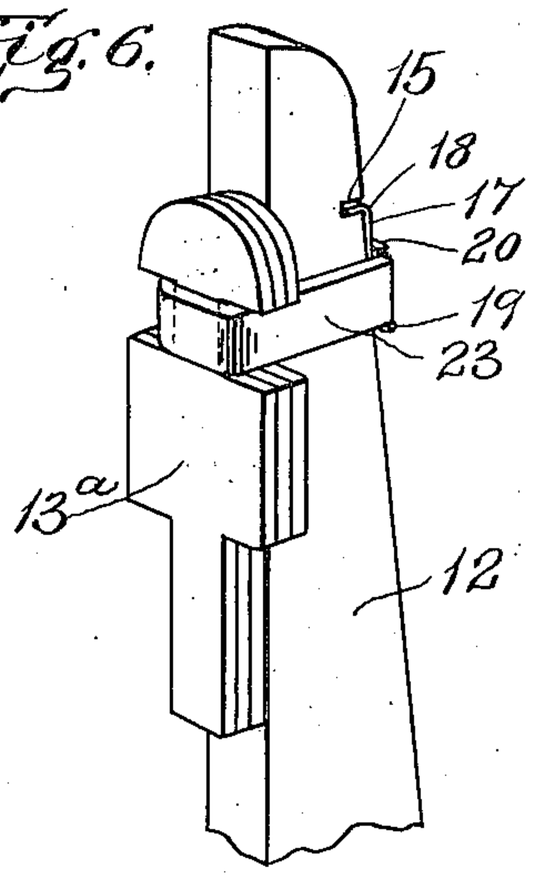


Fig. 6.



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UNITED STATES PATENT OFFICE.

JAMES M. PECKHAM, OF FALL RIVER, MASSACHUSETTS.

PICKER-FASTENER.

996,670. Specification of Letters Patent. Patented July 4, 1911.

Application filed October 22, 1910. Serial No. 588,479.

To all whom it may concern:

Be it known that I, JAMES M. PECKHAM, of Fall River, in the county of Bristol and State of Massachusetts, have invented certain new and useful Improvements in Picker-Fasteners, of which the following is a specification.

This invention relates to means for fastening to a loom picker staff the picker which strikes the shuttle during the forward movement of the staff.

The invention has for its object to provide a simple, durable and effective device for fastening the picker in its predetermined position without weakening the staff, and capable of application to pickers and staffs already in use.

The invention consists in the improvements which I will now proceed to describe and claim.

Of the accompanying drawings which form a part of this specification,—Figure 1 represents a side view of a portion of a picker staff and of a picker thereon secured by a fastener embodying my invention, a portion of the picker being shown in section; Fig. 2 represents a perspective view of the picker shown in Fig. 1, removed from the staff; Fig. 3 represents a view similar to Fig. 1 illustrating the mode of applying the picker to the staff; Fig. 4 represents a perspective view of the fastener shown by Figs. 1 and 3; Fig. 5 represents a perspective view showing a modified form of the fastener; and Fig. 6 represents a perspective view of a picker staff having a different form of picker fastened to the staff in accordance with my invention.

Similar reference characters indicate the same or similar parts in all the figures.

In the drawings, 12 represents a picker staff and 13 a picker having a socket 14, adapted to receive the staff, the staff and picker here shown being of a well known construction and, with the exception of the recess hereinafter referred to in the back of the staff, involving nothing new.

In carrying out my invention, I form in the back of the staff 12, and near its outer end, a recess 15, which is preferably a shallow saw kerf extending across the back and located above the upper end of the picker when the latter is located in its predetermined position on the staff. I also apply to the picker a spring latch which is formed to bear on the inner side of the outer wall 14ª of the socket 14. One end of the latch projects outwardly from the picker and is provided with a locking tongue adapted to spring into the recess 15. The latch is provided with means for engaging the picker to prevent endwise movement of the latch relatively to the picker, the engaging means being preferably of such nature that the latch is detachably engaged with the picker.

In the embodiment of my invention, shown by Figs. 1, 3 and 4, the latch is bifurcated and is composed of an outer member 16 formed to bear on the socket wall 14ª, and an inner member 17 connected at one end with one end of the outer member 16, its other end being formed to project outwardly from the picker and provided with a locking tongue 18, adapted to spring into engagement with the recess 15. The outer member 16 is provided at its ends with stop ears 19 and 20, formed to bear on the ends of the socket wall 14ª. The members 16 and 17 are, in this embodiment of the invention, made from a single strip of resilient metal, the stop ear 19 being formed by bending the strip at the junction of the two members, as indicated by Fig. 4. The members 16 and 17 normally diverge so that when pressed together each will have a tendency to spring outwardly from the other.

Before the picker is applied to the staff the described latch is inserted in the socket 14, its member 16 bearing on the inner side of the socket wall, and the stop ears 19 and 20 bearing on the ends of said wall. The picker is then applied to the staff 12, the locking tongue 18 bearing at first on the back of the staff above the recess 15 and being sprung outwardly by the back of the staff, as indicated by Fig. 3, until the downward movement of the picker on the staff brings the locking tongue 18 to the recess 15, when the tongue is caused by the tension of the member 17 to spring into said recess and thus lock the picker to the staff. The members 16 and 17 are at the same time pressed together so that they lie closely in the crevice between the back of the staff and the rear wall of the socket.

The engagement of the locking tongue 18 with the staff, prevents endwise movement of the latch relatively to the staff, and the engagement of the stop ears 19 and 20 with the picker, prevents movement of the picker relatively to the staff. Owing to the compactness of the latch when its members are

pressed together, the socket 14 does not require enlargement to adapt it to be fastened as described, hence, the invention may be applied to pickers and staffs of ordinary construction without adaptation other than the formation of the recess 15 in the back of the staff. The picker may be removed at any time by inserting a screw driver or other tool between the back of the staff and the projecting portion of the latch, thus springing the tongue 18 out of the recess 15.

Fig. 5 shows a modified construction of the fastening device, the same being composed of an outer member 16ª and an inner member 17ª, said members being made in separate parts and united by rivets 21. The member 16ª has a step ear 20 at one end, and instead of being provided with a corresponding stop ear at the opposite end, is provided between its ends with spurs 22, adapted to indent the socket wall 14ª, said spurs being preferably burs formed by penetrating the member 16ª and forcing a part of the material outwardly.

Fig. 6 represents an ordinary "doll" picker, having a strap or sleeve 23 which surrounds the picker and staff, the rear portion of the strap constituting an equivalent of the socket wall 14ª, and being engaged by the above-described fastener. In this case the socket is formed by the inner side of the picker 13ª and the side and rear portions of the sleeve 23.

It will now be seen that my invention enables a picker to be readily secured to and removed from a staff, without requiring the formation of an orifice or orifices between the edges of the staff, and therefore without impairing the strength of the staff, and that a fastener embodying my invention may be supplied as an article of manufacture and applied to ordinary staffs and pickers without any adaptation other than the simple operation of forming the recess 15 in the back of the staff.

I claim:

1. A loom picker having a staff-receiving socket and a spring latch bearing on the rear wall of the socket and projecting outwardly therefrom, the projecting portion of said latch being provided with a locking tongue overhanging the socket and adapted to be displaced by the back of the picker staff when the picker is being moved to place thereon, and to spring into engagement with a recess formed for its reception in the back of the staff when the picker reaches its predetermined position, the tongue being held under tension and in yielding engagement with the staff by the rear wall of the socket.

2. In combination, a picker staff having a recess in its back, a picker having a staff-receiving socket, and a spring latch bearing on the rear wall of the socket and projecting outwardly therefrom, the latch being engaged with the picker to prevent relative endwise movement, and provided with a tongue on its projecting end portion adapted to be displaced by the back of the staff when the picker is being applied, and to spring into said recess when the picker reaches its predetermined position.

3. In combination, a picker staff having a recess in its back, a picker having a staff-receiving socket, and a spring latch bearing on the rear wall of the socket and projecting outwardly therefrom, the latch being engaged with the picker to prevent relative endwise movement, and provided with stop ears detachably engaging the ends of the rear wall of the socket to prevent relative endwise movement, and with a tongue on its projecting end portion adapted to be displaced by the back of the staff when the picker is being applied, and to spring into said recess when the picker is located.

4. In combination, a picker staff having a recess in its back, a picker having a staff-receiving socket, and a bifurcated spring latch, having an outer member bearing on the rear wall of the socket, and provided with means for detachably engaging the picker to prevent relative endwise movement, and an inner member projecting from the socket and provided on its projecting end portion with a locking tongue adapted to spring into said recess.

5. As an article of manufacture a picker-fastening latch, adapted to be interposed between the back of a picker staff and the rear wall of the staff-receiving socket in a picker, and composed of two resilient sheet metal arms connected at one end of the latch and having free ends normally standing apart and adapted to be pressed together by the insertion of the latch between the staff and socket, the free end of one of the arms being provided with a locking tongue adapted to spring into a slot in the back of the picker staff and prevent endwise movement of the latch on the staff, while the free end of the other arm is provided with a locking tongue adapted to spring into engagement with one of the surfaces of the picker and prevent movement of the picker on the staff in one direction, the latch being provided with means for preventing movement of the picker on the staff in the opposite direction.

6. As an article of manufacture a picker-fastening latch, adapted to be interposed between the back of a picker staff and the rear wall of the staff-receiving socket in a picker, and composed of two resilient sheet metal arms connected at one end of the latch and having free ends normally standing apart and adapted to be pressed together by the insertion of the latch between the staff and socket, the free end of one of the arms being provided with a locking tongue

adapted to spring into a slot in the back of the picker staff and prevent endwise movement of the latch on the staff, while the free end of the other arm is provided with a locking tongue adapted to spring into engagement with one of the surfaces of the picker and prevent movement of the picker on the staff in one direction, the latch being provided with a locking tongue adapted to engage another surface of the picker and prevent movement thereof on the staff in the opposite direction.

In testimony whereof I have affixed my signature, in presence of two witnesses.

JAMES M. PECKHAM.

Witnesses:

JAMES SHAW,

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