

(No Model.)

E. H. J. FIELDER.

PICKING SWEEP STRAP CONNECTION FOR LOOMS.

No. 382,600.

Patented May 8, 1888.

Fig. 1.

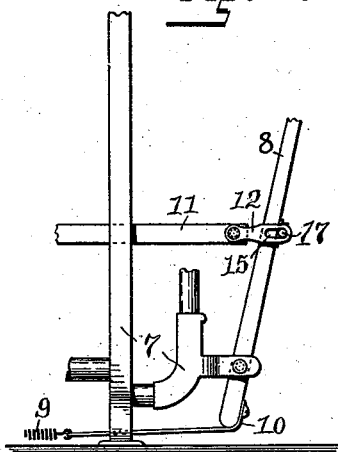


Fig. 2.

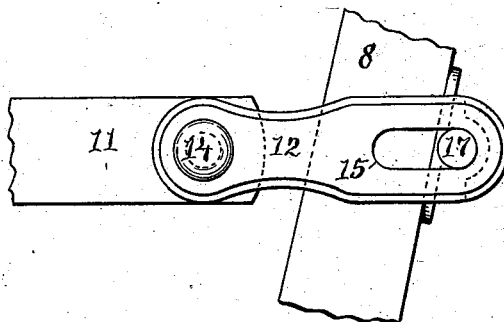


Fig. 4.

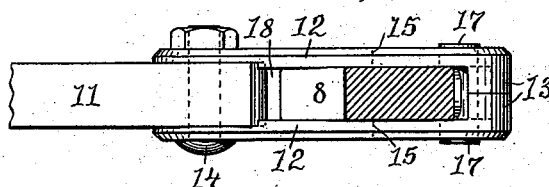


Fig. 3.

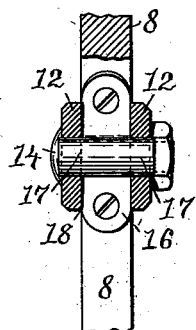
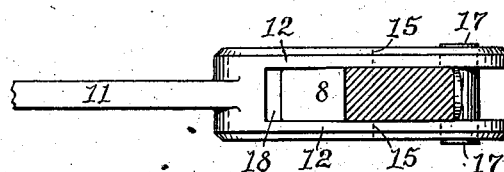


Fig. 5.



WITNESSES:

Chas. H. Luther
Willie Fowler

INVENTOR:

Edwin H. J. Fielder
by Joseph A. Miller & Co
Attys

UNITED STATES PATENT OFFICE.

EDWIN H. J. FIELDER, OF PROVIDENCE, RHODE ISLAND.

PICKING SWEEP-STRAP CONNECTION FOR LOOMS.

SPECIFICATION forming part of Letters Patent No. 382,600, dated May 8, 1888.

Application filed May 10, 1887. Serial No. 237,690. (No model.)

To all whom it may concern:

Be it known that I, EDWIN H. J. FIELDER, of the city and county of Providence, and State of Rhode Island, have invented certain new and useful Improvements in Picking Sweep-Strap Connections for Looms, of which the following is a full, clear, and exact description, reference being had to the accompanying drawings, forming part of this specification.

This invention relates to an attachment of a loom called a "sweep-strap connection," which is the device connecting the picker-staff with the sweep-strap, and by means of which the staff is drawn inwardly to drive the shuttle.

The old forms of leather sweep-strap connections are very perishable and the constant replacement of them becomes troublesome and expensive.

The objects of my invention are to provide a durable and efficient sweep-strap connection, which will form a permanent attachment of the loom.

To the above purposes my invention consists in the certain peculiar and novel parts of the device, all constructed and arranged as hereinafter described and claimed.

In the accompanying drawings, illustrating my invention, Figure 1 is a front view of a portion of the end of a loom upon which is mounted an ordinary picker-staff and sweep-strap, which are connected by my improved strap-connection. The picker-staff and sweep-strap are both shown in part. Fig. 2 is an enlarged side view of portions of the sweep-strap and staff with my sweep-strap connection attached. Fig. 3 is an end view of Fig. 2, with the outer end of the strap-connection broken off to show the guiding-lugs on the picker-staff. Fig. 4 is a top view of Fig. 2. Fig. 5 is a view similar to the view in Fig. 4 of another form of my sweep-strap connection.

In the said drawings like numbers of reference designate corresponding parts throughout.

Referring to the drawings, the number 7 designates the loom-frame, in which is pivoted near its lower end the ordinary picker-staff, 8, which is shown as broken off at the top. The

picker-staff is kept normally forced to the outward limit of its throw by means of the usual spring, 9, and connection 10 at its foot. The picker-staff is jerked inward by the inward movement of the sweep-strap 11, which may be operated in the usual manner.

My improvements comprise the connections between the picker-staff and sweep-strap, as will now be described.

The sweep-strap connection is composed of the two flat oblong members 12, which are each secured by their inner ends to the end of the sweep-strap 11 by means of the tie-bolt 14, and project in alignment with the sweep-strap and parallel to each other. At the outer ends the members are each provided with a spacing-piece, 13. The members are placed apart, so as to form the slot 18 for the staff to vibrate in. Each member 12 is formed with a horizontal guideway or opening, 15, the two openings 15 lying directly opposite each other.

The plate 16 is secured, by means of screws or otherwise, upon one face of the picker-staff 8, and is provided with the lateral guiding-lugs 17, which work in the guideways 15 of the strap-connection 12. As the picker-staff is drawn by the movement of the sweep-strap, the strap-connection pulls the picker-staff inwardly by virtue of the lugs 17, which remain in the same position as shown in the drawings during the inward movement. When the sweep-strap 11 is then moved suddenly outward, the guideways 15 slide over the lugs, since the action of the spring 9 does not move the picker-staff outwardly as quick as the sweep-strap 11 is thrust outward.

In Fig. 5 I have shown another form of the strap-connection 12, which may be cast integral with the sweep-strap 11, and the two members thereof are spaced so as to form the slot 18. In other respects the strap-connection is similar to the one described in the other figures.

The strap-connection 12 and the plate 16 and the guiding-lugs 17 may all be made out of metal, and the parts will be as durable as many other parts of the loom, and one strap will last during the life of the loom.

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

The combination, as hereinbefore set forth,
with the picker-staff 8, having secured thereto
the plate 16, provided with the lugs 17, of the
sweep-strap 11, having mounted thereon by
5 means of tie-bolt 14 the two-part sweep-strap
connection 12, provided with the spacing-
pieces 13, and having the opening 18, and

formed with the lateral guideways 15 for the
lugs 17, substantially as and for the purpose
herein described.

EDWIN H. J. FIELDER.

Witnesses:

M. F. BLIGH,

J. A. MILLER, Jr.