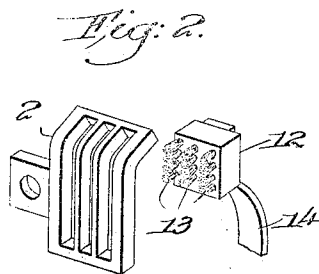
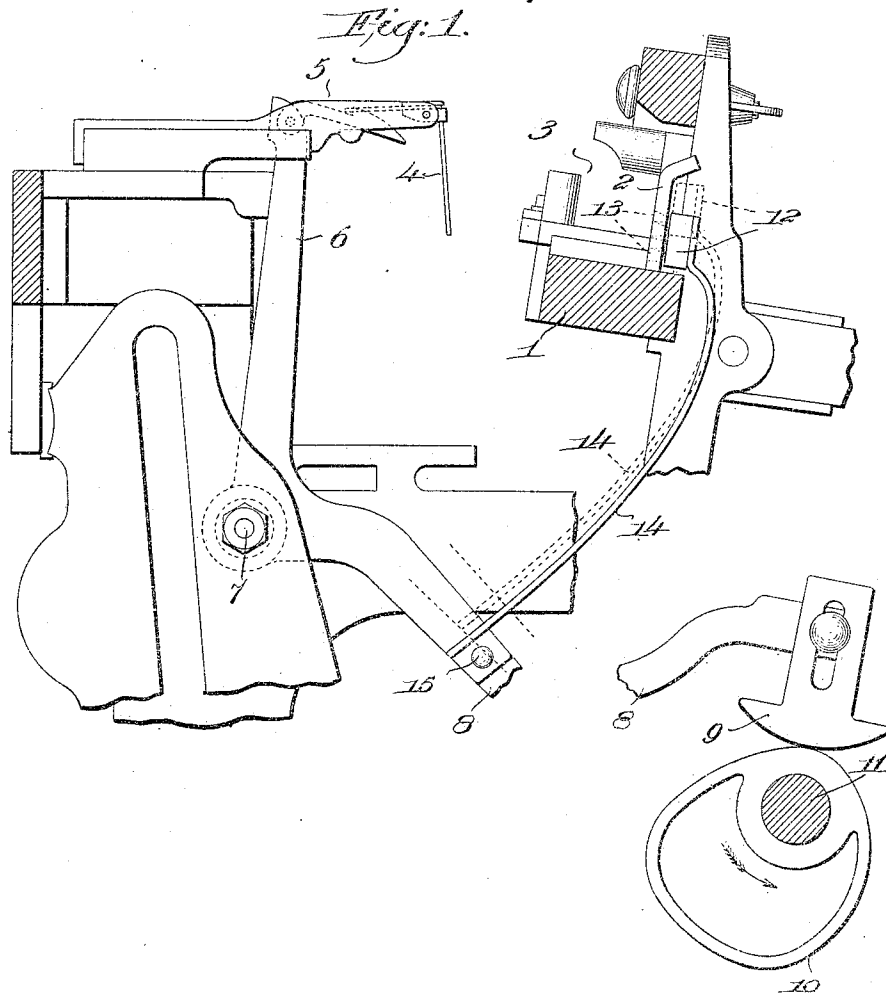


S. D. EUBANKS.
 FORK GRID CLEARER FOR LOOMS.
 APPLICATION FILED FEB. 2, 1911.

993,443.

Patented May 30, 1911.



Witnesses,
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UNITED STATES PATENT OFFICE.

SAYERS D. EUBANKS, OF WEST DURHAM, NORTH CAROLINA, ASSIGNOR TO DRAPER COMPANY, OF HOPEDALE, MASSACHUSETTS, A CORPORATION OF MAINE.

FORK-GRID CLEARER FOR LOOMS.

993,443.

Specification of Letters Patent.

Patented May 30, 1911.

Application filed February 2, 1911. Serial No. 606,099.

To all whom it may concern:

Be it known that I, SAYERS D. EUBANKS, a citizen of the United States, and resident of West Durham, county of Durham, State of North Carolina, have invented an Improvement in Fork-Grid Clearers for Looms, of which the following description, in connection with the accompanying drawing, is a specification, like characters on the drawing representing like parts.

This invention has for its object the production of novel, simple and efficient means for clearing automatically, the fork-grid of a loom of lint, waste or the like which tends to accumulate in the grid-openings and prevent the proper operation of the filling-fork.

In my present invention I mount the clearer behind the lay at the rear end of the path of the grid as the lay beats back, so that on each of such beats the clearer enters and clears the openings of the grid of any foreign matter which may have lodged therein, and I have provided a support for the clearer, mounted on a suitable moving part of the loom so that on successive beats the clearer coöperates with the grid at different points, relatively to its top and bottom. By this periodic change in the operative position of the clearer I effect a very thorough and complete clearing of the grid.

The various novel features of my invention will be fully described in the subjoined specification and particularly pointed out in the following claim.

Figure 1 is a transverse sectional view, partly broken out, of a sufficient portion of a loom, with one embodiment of my present invention applied thereto; Fig. 2 is a perspective view of the fork-grid and the clearer, showing the structure of the latter whereby it is enabled to clear the grid.

Referring to Fig. 1 the lay 1, the fork-grid or grating 2 adjacent the inner end of the shuttle-box 3, the filling-fork 4 and its slide 5, the vibrator or weft-hammer 6 fulcrumed at 7 and having an attached arm 8 provided with a follower 9, and the cam 10 coöperating with the follower, to vibrate the weft-hammer, are and may be all of well known or usual construction, the cam being mounted on the usual cam-shaft 11 of the loom.

As is well known the weft-hammer makes

one complete vibration or movement back and forth for every two picks of the shuttle, or in other words the weft-hammer moves forward on every alternate forward beat of the lay, and moves back on the intervening beats. The follower arm 8 of course has a correspondingly timed swinging movement, up and down, and herein I have utilized it for effecting a periodic change in the position of the fork-grid clearer.

I have herein shown the clearer as comprising a back 12, of wood or metal, having on its front face a plurality of upright and laterally spaced rows of bristles 13, Fig. 2, so arranged as to enter intermittently the openings between the upright bars of the grid 2. The back 12 is fixedly attached to the upper end of an elongated support 14, preferably a metal bar, which at its lower end is fixedly secured at 15 to the follower-arm 8. As shown in Fig. 1 the support 14 is upturned and bent to clear the lay and to position the clearer behind the lay in the path of the grid 2, so that as the lay completes its backward beat the bristles 13 will pass through the grid-openings from back to front and clear the same of lint or other foreign matter. When the follower-arm is depressed, as shown in full lines, Fig. 1, the clearer coöperates with the lower portions of the grid openings, but when the cam 10 elevates the follower-arm to dotted line position the support 14 will assume the dotted line position and the clearer will thereby be raised to coöperate with the upper portions of the grid openings. This periodic rise and fall of the clearer corresponds to successive backward beats of the lay, as will be manifest, so that on alternate backward beats of the lay the clearer will clear the lower portion of the grid openings and on the intervening backward beats the upper portions will be cleared.

The device is exceedingly simple, it can be applied to a loom at very small expense and without necessitating a change or remodeling of any of its parts, and in practice it is very efficient, keeping the grid clean and clear of foreign matter at all times, thereby insuring the proper action of the filling-fork.

Having fully described my invention,

what I claim as new and desire to secure by Letters Patent is:

In loom, a lay, a fork-grid thereon, a filling-fork, a vibrating weft-hammer, an arm
5 connected therewith to rise and fall on successive beats of the lay, the upper end of said arm being located behind the lay and adjacent the rear end of the path of the fork-grid, and a clearer mounted on said
10 arm and adapted to enter the grid-openings on every backward stroke of the lay, the

rise and fall of the clearer-arm causing the clearer to cooperate with the grid at different heights on successive beats of the lay.

In testimony whereof, I have signed my
15 name to this specification, in the presence of two subscribing witnesses.

SAYERS D. EUBANKS.

Witnesses:

CHAS. SCARLETT,
H. A. NEAL.