No. 817,915. PATENTED APR. 17, 1906.

T. HILTON.

WEFT FORK FOR LOOMS.

APPLICATION FILED JULY 11, 1905.

Fig. 1.

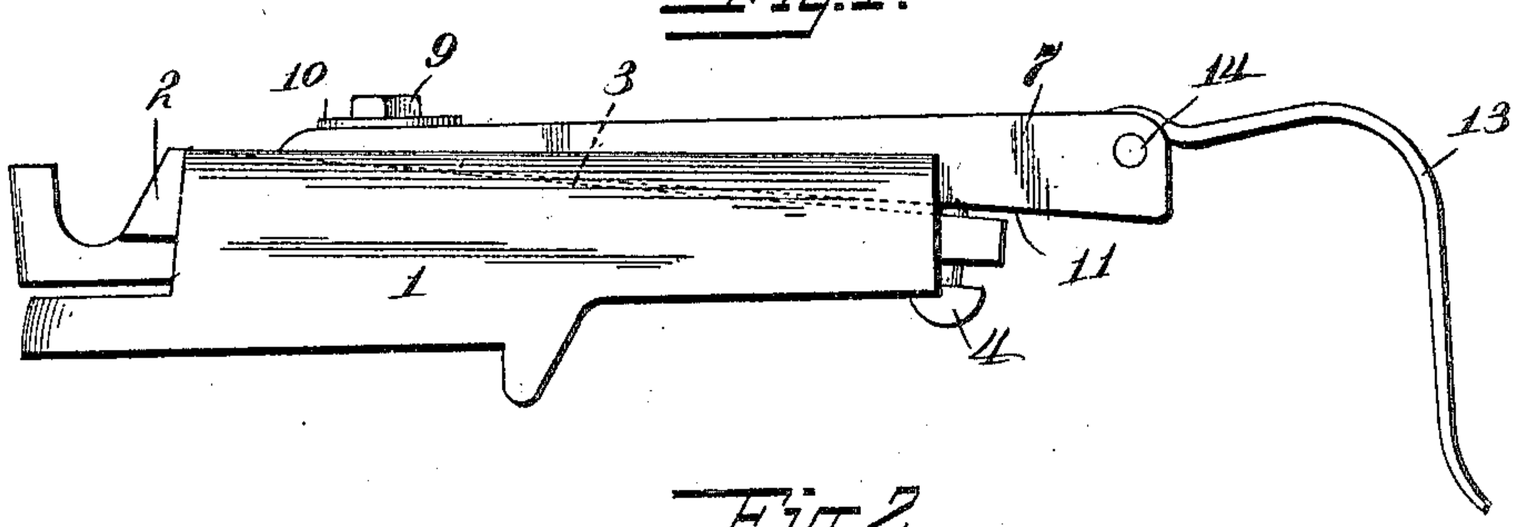

Fig. 2.

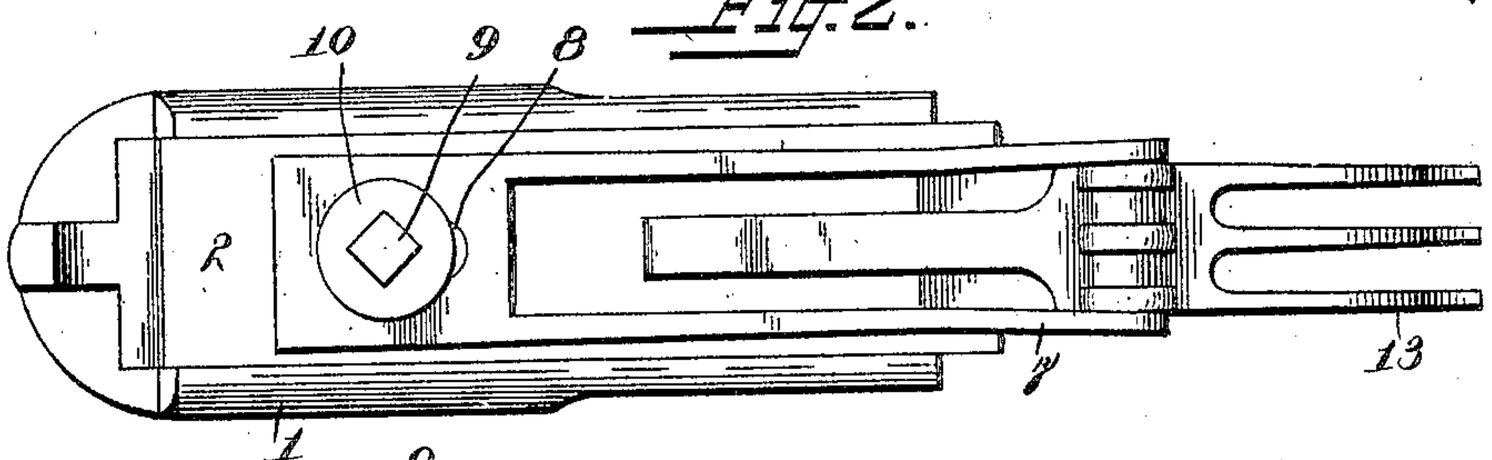

Fig. 3.

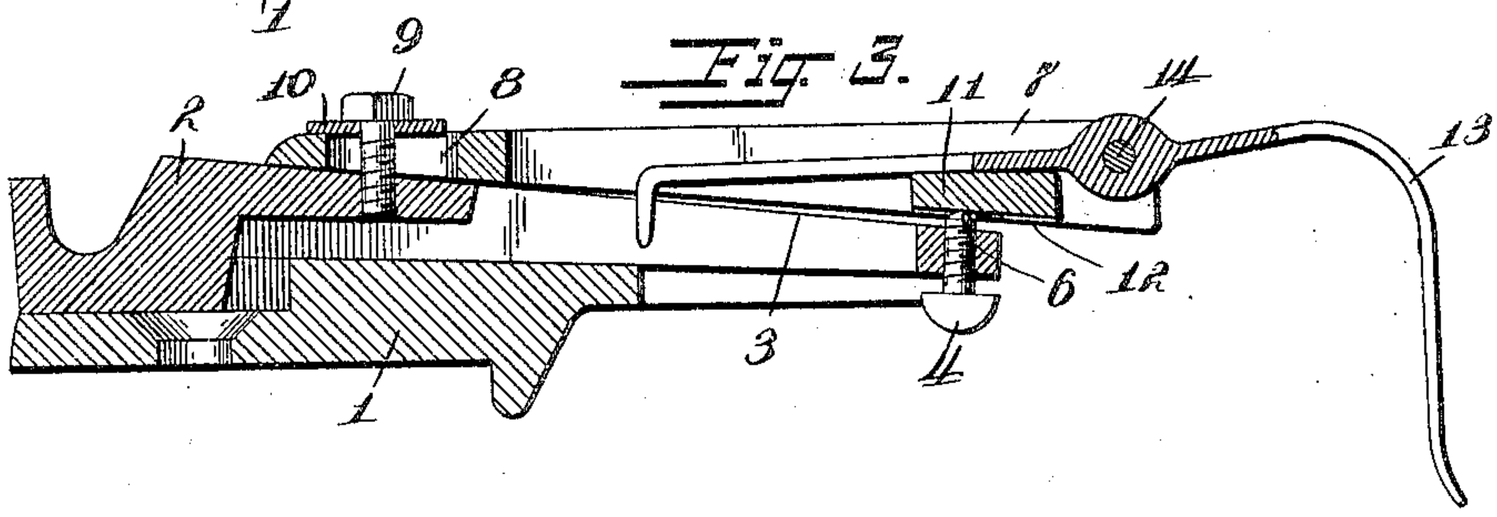

Fig. 4.

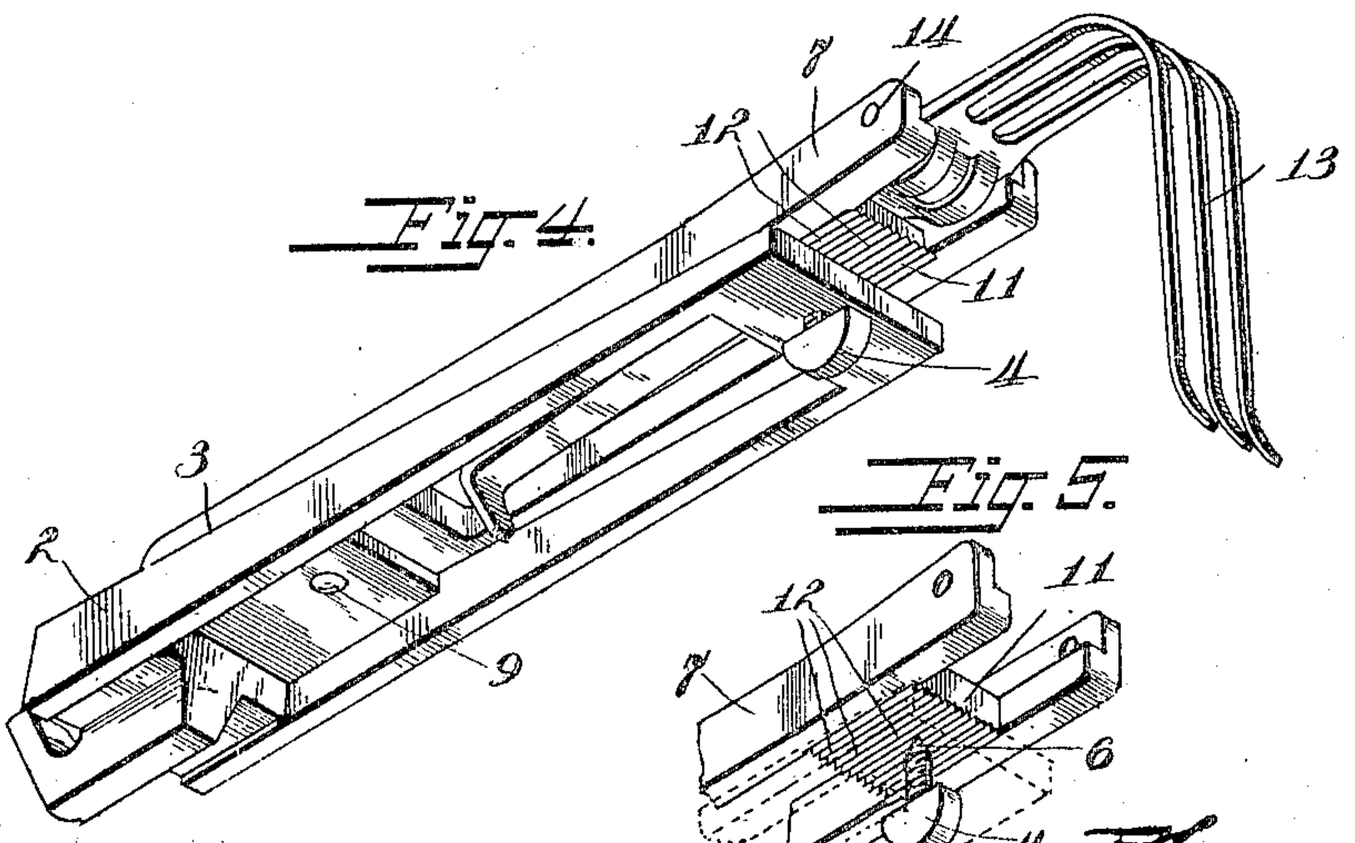

Fig. 5.

Witnesses

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Inventor

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UNITED STATES PATENT OFFICE.

THOMAS HILTON, OF FALL RIVER, MASSACHUSETTS.

WEFT-FORK FOR LOOMS.

No. 817,915. Specification of Letters Patent. Patented April 17, 1906.

Application filed July 11, 1905. Serial No. 269,150.

To all whom it may concern:

Be it known that I, THOMAS HILTON, a citizen of the United States, residing at Fall River, in the county of Bristol and State of Massachusetts, have invented new and useful Improvements in Weft-Forks for Looms, of which the following is a specification.

This invention relates to weft-forks for looms.

The object of the present invention is the provision of an improved adjustable carrier for weft-forks for looms whereby the weft-fork can be quickly and easily adjusted both laterally and up and down to the desired extent to insure the proper coöperation of the fork with the fork-grate, and thereby obviate damage to the fork by reason of its accidentally striking the grate because not relatively positioned to enter the grate, as well as to insure the desired operation of the fork on the work.

With the ordinary weft-fork used on looms the tines of the fork are very apt to get out of adjustment, and sometimes they will not pass through the fork-grate, resulting in the loss of material and much time spent in repairing broken threads and bending the tines of the fork.

The present invention aims to obviate the defects heretofore incident to weft-forks commonly used, and while I am aware that it has been proposed heretofore to make weft-forks adjustable it is believed that the present invention constitutes a practical and radical improvement over earlier attempts toward accomplishing this object.

The invention embraces certain improved features and novel combinations of parts set forth in detail hereinafter.

In the accompanying drawings, Figure 1 is a side elevation of a weft-fork constructed according to my present invention applied to the slide-box usually used on looms; Fig. 2, a plan view thereof; Fig. 3, a longitudinal section; Fig. 4, a perspective with the parts removed from the slide-box, and Fig. 5 a detail view illustrating the construction of the screw used for adjusting the weft-fork carrier up and down and the grooved coöperating parts on the weft-fork carrier.

The numeral 1 designates an ordinary slide-box, such as is commonly used on looms to receive the weft-fork slide, said box being secured to the loom-frame. Mounted to slide in this box is the weft-fork slide 2, which differs from those commonly used at the present time by being considerably thinner from top to bottom and having an inclined top 3. Threaded through the end of the slide is an adjusting-screw 4, (shown in detail in Fig. 5,) which has a conical tip 6. Superposed on the weft-fork slide is the weft-fork carrier 7, which has a slot 8, through which passes a screw 9, threaded into the slide 2, said screw having a washer 10. The under side of the weft-fork carrier 7 is provided at 11 with grooves or serrations 12, extending longitudinally thereof, which receive the tip 6 of screw 4.

A type of weft-fork 13 commonly known to the art is pivoted at 14 to the outer end of the weft-fork carrier 7. The slot 8 is longer and wider than the diameter of the screw 9, so that by loosening said screw the weft-fork carrier 7 may be moved longitudinally a limited distance and also laterally or sidewise and clamped in the desired adjusted position to bring the tines of the weft-fork in line with the openings in the weft-fork grate, so that there will be no interference between the fork and the fork-grate, while the weft-fork carrier can be adjusted up and down as desired by the screw 4, whose tip 6 by its engagement with the grooves or serrations 12 locks the weft-fork carrier securely against lateral displacement. By adjusting the screws 4 and 9 the operator can bring the fork to any position necessary to cause it to properly coöperate with the fork-grate to accomplish the work for which the fork is designed.

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

1. In a weft-fork for looms, the combination with a weft-fork slide, of a weft-fork carrier, a weft-fork pivoted to the carrier, and means adjustably connecting the weft-fork carrier to the weft-fork slide.

2. In a weft-fork for looms, the combination with a weft-fork slide, of a weft-fork carrier, a weft-fork pivoted to the carrier, and means adjustably connecting the weft-fork to the weft-fork slide so that the carrier can be adjusted laterally or sidewise in relation to said slide.

3. In a weft-fork for looms, the combination with a weft-fork slide, of a weft-fork carrier, a weft-fork pivoted to the carrier, and means for adjusting the weft-fork carrier up and down in relation to the weft-fork slide.

4. In a weft-fork for looms, the combination with a weft-fork slide, of a weft-fork car-

rier, a weft-fork pivoted to the carrier, means for adjusting the weft-fork carrier up and down in relation to the weft-fork slide, and means for adjusting the weft-fork carrier laterally or sidewise in relation to the weft-fork slide.

5. In a weft-fork for looms, the combination with a weft-fork slide, of a weft-fork carrier superposed on the weft-fork slide, a weft-fork pivoted to the carrier, means pivotally connecting the weft-fork carrier to the weft-fork slide, and a screw for adjusting the weft-fork carrier up and down in relation to the weft-fork slide.

6. In a weft-fork for looms, the combination with a weft-fork slide, of a weft-fork carrier superposed on the weft-fork slide, a weft-fork pivoted to the carrier, and means for adjusting the weft-fork carrier both up and down and laterally in relation to the weft-fork slide comprising a slotted pivotal connection between the carrier and slide to permit lateral or sidewise movement of the carrier and a screw for adjusting the carrier up and down.

7. In a weft-fork for looms, the combination with a weft-fork slide, of a weft-fork carrier superposed on the weft-fork slide, a weft-fork pivoted to the carrier, and means for adjusting the weft-fork carrier both up and down and laterally in relation to the weft-fork slide comprising a slotted pivotal connection between the carrier and slide to permit lateral or sidewise movement of the carrier and a screw for adjusting the carrier up and down, said screw being on one of said parts and having a pointed tip coöperating with serrations or recesses on the other of said parts.

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

THOMAS HILTON.

Witnesses:
ALFRED H. HOOD,
EDMUND DOMINGUE.