J. W. BEARD.

SELVAGING DEVICE.

APPLICATION FILED JAN. 3, 1913.

1,124,261. Patented Jan. 12, 1915.

Fig. 1.

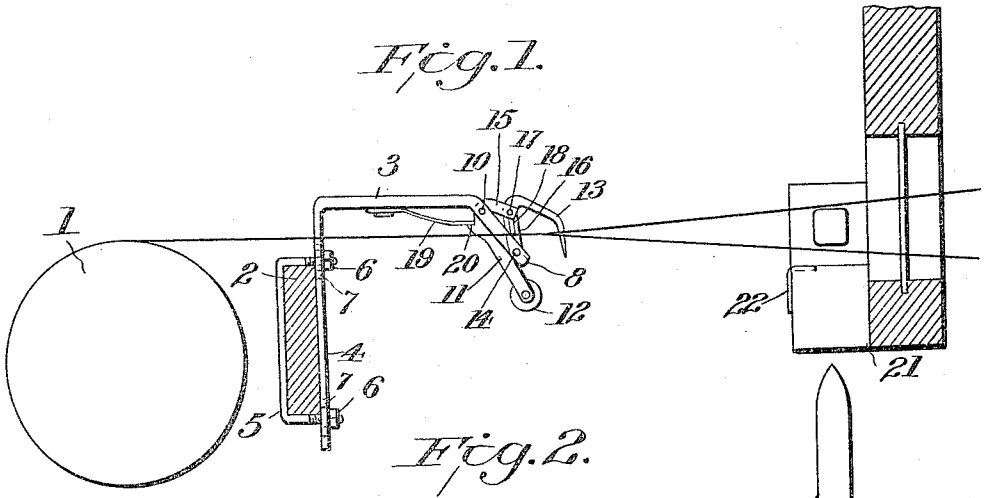


Fig. 2.

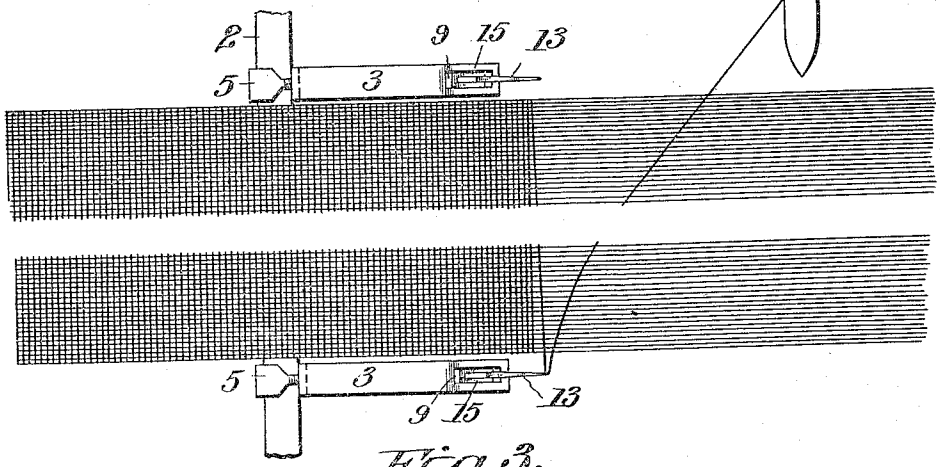
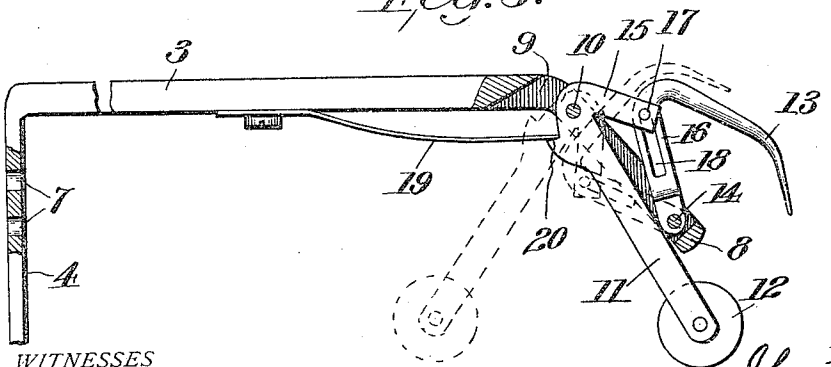


Fig. 3.



WITNESSES

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UNITED STATES PATENT OFFICE.

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SELVAGING DEVICE.

1,124,261. Specification of Letters Patent. Patented Jan. 12, 1915.

Application filed January 3, 1913. Serial No. 740,023.

To all whom it may concern:

Be it known that I, JOHN W. BEARD, a citizen of the United States, residing at Sunbury, in the county of Northumberland and State of Pennsylvania, have invented certain new and useful Improvements in Selvaging Devices, of which the following is a specification.

This invention relates to improvements in selvage forming devices for looms, more especially power looms for weaving any materials, particularly silks, and it is adapted to be placed on both sides of a loom and caused to be operated by the lay of a loom when said lay is moving forward to its beating up position. By the use of this device a perfect selvage is assured on the finished product.

The various features of the invention will be hereinafter more fully described in connection with the accompanying drawing, in which:—

Figure 1, is a side view of the front part of a loom showing a take up roll, breast beam, and the lay of a loom with the invention applied to the breast beam. Fig. 2, is a top plan view of a part of a loom with the invention mounted on two sides of the breast beam. Fig. 3, is a side elevation of the device.

Referring to the drawing, 1 indicates a take-up roll of a loom over which the finished product passes.

2 indicates the breast beam of a loom situated immediately in front of said take-up roll.

3 indicates the selvaging device having the downwardly projecting arm 4, being removably attached to the breast beam 2 by means of U-shaped fastening devices 5, and nuts 6. The arm 4 may have a series of openings 7 which admits the fastening device 5 for the purpose of adjusting the arm vertically.

8 indicates a downwardly projecting arm on the opposite end of the device having the opening or cut out part 9, in the upper end of which is pivoted at 10 the lever 11 having at its lower extremity a wheel 12 pivoted in the bi-furcated end of said lever. In the lower part of the opening or slot 9 of the arm 8 is a U-shaped needle like member for forming the gage support, around which the edge loop of the weft thread is drawn, and is adapted to reciprocate vertically, said member working on the axle pin or shaft 14. The bi-furcated end 15 of the lever 11 engages the arm 16 of the needle member 13, an axle pin or shaft 17 passing through the ends of the bi-furcated member 15 and also through the slot 18 in the arm 16 of the needle member 13, thus exerting a cam like motion upon the needle member when the lever 11 is operated. On the lower side of the device 3 is spring 19 removably attached thereto adapted to engage the shoulder 20 on the lever 11 and hold said lever normally in place. A lay 21 is provided with a metallic plate 22 which engages the wheel 12 of the lever 11 and operates the device when the lay is moved forward to the beating up position.

The operation of the device is as follows: When the device is in the position shown in Fig. 1, the bobbin in which is the filling or weft is caused to shoot across the loom between the warp threads, the weft thread forming a loop about the needle as shown in Fig. 2 and held in that position while the bobbin makes a return movement toward the opposite side of the machine to within a very short distance from said opposite side when the lay is caused to move forward to perform the beating up of the weft thread, and in its forward movement engages the wheel of the lever which in turn operates upon the needle causing it to be lifted up and releasing the weft thread, when the said weft thread is pulled in to the edge of the material being woven and forming a perfect selvage. This operation is repeated with each crossing of the bobbin the weft thread being held by the device when the bobbin is moved from it. By having a device of the type described on each side of the machine and operated as described a perfect selvage is assured on both edges of the fabric being woven. The lever and needle members assume the position shown by dotted lines in Fig. 3 when operated upon by the lay.

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

1. In a loom having the usual weft laying in and beating up devices, a device having one member attached to the stationary part at the front of the machine, a second member provided with a lever pivotally mounted therein, of a needle pivotally mounted therein adapted for a swinging movement in a vertical plane, said lever adapted to operate said needle when actuated by the lay of a loom.

2. A device of the character described adapted to be attached to a breast beam of a loom having a downwardly projecting member in which is pivoted a lever, a needle pivoted in said member, said lever adapted to operate said needle in a vertical plane when engaged by the lay of a loom.

3. A device of the character described adapted to be removably attached to the breast beam of a loom having a member in which is pivotally disposed a lever, a needle pivotally disposed in said member, said lever adapted to operate said needle in a vertical plane when engaged by the lay of a loom.

4. In a loom having the usual weft and laying in and beating up devices, a device removably attached to a stationary part at the front of the machine having one end slotted in which is pivotally mounted a needle, a lever pivotally mounted in said slotted member adapted to operate said needle when actuated by the lay of a loom.

5. A device of the character described adapted to be attached to a breast beam of a loom in which is pivoted a lever, a needle pivoted in said device, said lever adapted to operate said needle when engaged by the lay of the loom, means for holding said lever normally in place.

In testimony whereof I affix my signature in presence of two witnesses.

JOHN W. BEARD.

Witnesses:
JOHN WEISER BASSLER,
C. W. CLEMENT.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."