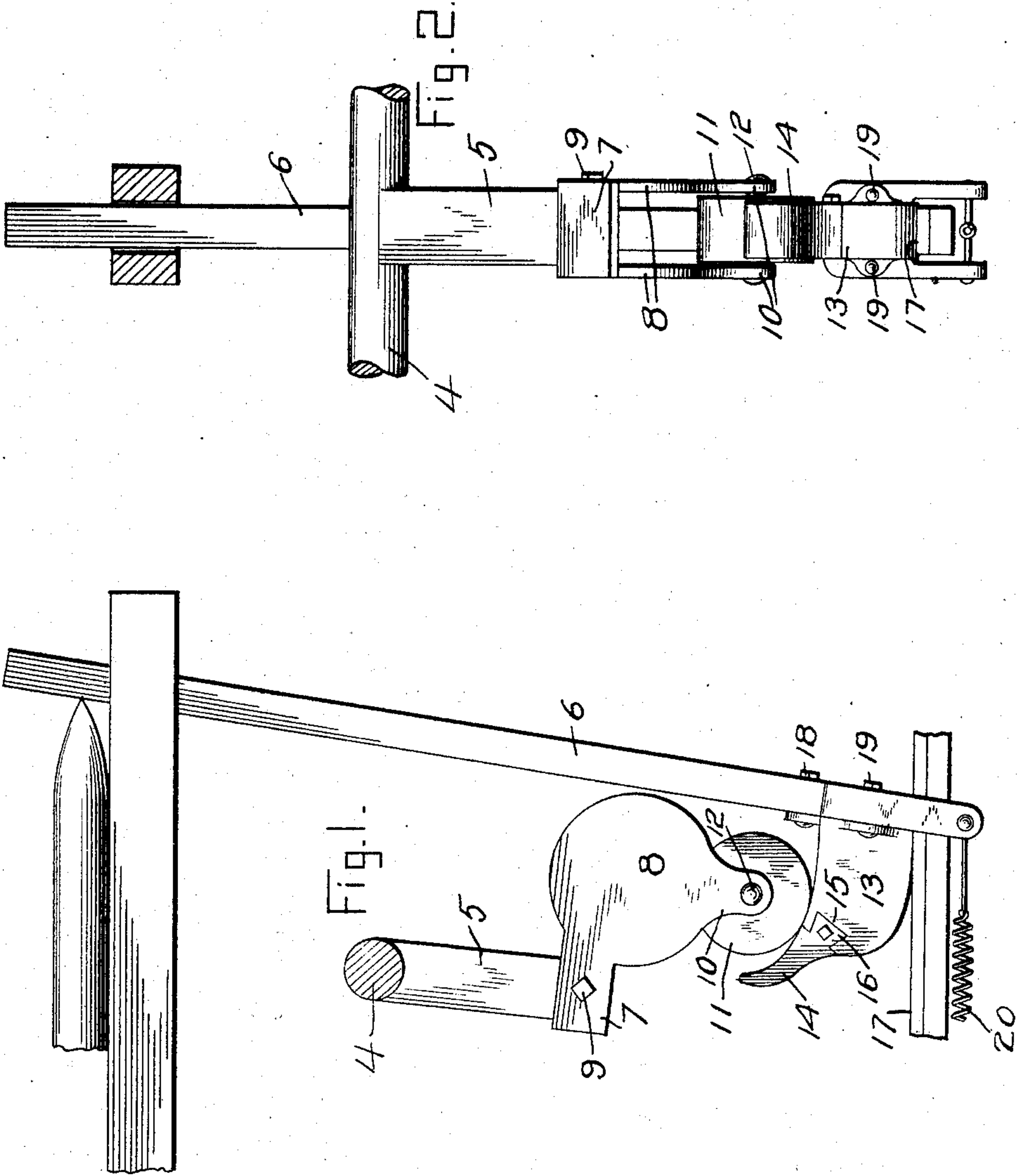


No. 864,213.

PATENTED AUG. 27, 1907.

R. TAYLOR.
PICKER STICK MOTION FOR LOOMS.
APPLICATION FILED AUG. 16, 1906.



Witnesses

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UNITED STATES PATENT OFFICE.

ROBERT TAYLOR, OF NEW BEDFORD, MASSACHUSETTS.

PICKER-STICK MOTION FOR LOOMS.

No. 864,213.

Specification of Letters Patent.

Patented Aug. 27, 1907.

Application filed August 16, 1906. Serial No. 330,863.

To all whom it may concern:

Be it known that I, ROBERT TAYLOR, a citizen of the United States, residing at New Bedford, in the county of Bristol, State of Massachusetts, have invented certain new and useful Improvements in Picker-Stick Motions for Looms; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

10 This invention has relation to means for actuating the picker stick to pick the shuttle through the shed in a loom in the operation of weaving.

It is the object of the invention to actuate the picker-stick directly by the shoe, doing away with the employment of lug-straps and all other loops and straps that are liable to effect breakages and cause loss of time in the holding up of the loom while repairs are being made, as well, also, as avoiding the great expense involved in making repairs. Besides this, it is the purpose of my improvements to simplify the construction of the means for effecting the picking movement of the stick securing a smoother and more regular action, and hence the production of better work.

25 The nature of my improvements has been so clearly indicated in the foregoing statements as not to require further elaboration at this point and time.

The improvements will first be described in view of the annexed drawings forming a part thereof, and then be pointed out in the subjoined claims.

30 The same figures of reference designate the same parts or features, as the case may be, wherever they occur.

Of the said drawings, Figure 1 is a side view of the base of the picker-stick, the shoe, and their equipments, together with my improvements and the lower end of the picking arm. Fig. 2 is an end elevation of the same.

40 As indicated in the drawings, my invention is readily applicable to a power-loom in which the picker-stick is secured at its base to a shoe or rocker that rocks on a supporting stand to assist in securing a right-line motion of the upper end of the stick while in engagement with the shuttle in the act of picking it through the shed. Instead of employing straps connected with the picker motion to effect the quick forward movement of the stick, I do away with them entirely and effect the picking by the shoe, adding this office to the latter device.

In the drawings, 5 designates the picker-arm connected with the cam-shaft 4 of the usual picking-motion and actuated by it as heretofore when operating the lug-strap to effect a pick by the stick 6. The lower end of the picker arm is tenoned in a projection 7 extending laterally from a rounded and partially split or divided bracket 8. A set screw 9 secures the lower end of the picker-arm to the projection of the bracket. The latter has depending from its lower part rounded ears 10, these being formed on the so-called split-part, and the wheel or roller 11 above its journal pin 12 extends between the said split or slotted part of the bracket with an ear 10 on each side.

Instead of forming the shoe 13 as heretofore, I provide it with an upwardly curved extension or nose 14 by making a dovetail notch 15 on the inner end of the shoe and providing the nose piece with a dovetail extension 16 adapted to fit and be bolted in the said notch. The upper surface of the shoe from the end of the nose back to the picker stick is made smooth so as to form a track, as it were, for the roller or wheel 11 to ride on. The said wheel may be three-quarters of an inch wide and is arranged directly above the shoe or rocker, which latter is wide enough to reach the track 17 and rock thereon, as usual. The shoe or rocker 13 is flanged at its rear end and through the said medium is bolted to the picker stick, as shown at 18 and 19.

In operation, when the picker motion, (not shown), actuates the lower end of the picker-arm quickly in the direction of the arrow marked below the picker-arm, the roller or wheel 11 will move as quickly in the same direction, striking the nose 14 with the effect of depressing it and rocking the shoe 13 on the track 17 and causing the shoe connected with the picker-stick, as stated, to move the said stick and effect a pick. The picker-stick will be pulled back and return the shoe to its former position by the action of the spring 20, as is usual.

By making the nose 14 detachable from the shoe 13 it is obvious that the former is rendered interchangeable with another or others having different forms of upper faces on which the roller 11 runs so as to give a quicker or more gradual motion to the picker-stick.

By the construction shown and explained it will be seen that the picker-stick will be moved with a smooth regular motion and be deprived of the jerky, unsteady motion produced by the action of the lug strap heretofore employed.

What is claimed is:—

1. The combination with the picking-arm, the picker-stick and its attached shoe having an upwardly curved extension or nose, of a bracket secured to the picking-arm, a
5 roller journaled in said bracket directly above said shoe and movable thereon, and a spring connected with the picker stick to move it and the shoe back, after the stick may have been operated to effect a pick by reason of the roller acting on the extended upturned nose of the shoe.
- 10 2. The combination with the picking arm, the picker

stick and its attached shoe having an upwardly curved extension or nose, of a bracket secured to the picking arm, and a roller eccentrically journaled in the said bracket directly above the said shoe and movable thereon.

In testimony whereof, I affix my signature, in presence 15 of two witnesses.

ROBERT TAYLOR.

Witnesses:

JOHN W. ETCHIELLS,
THOMAS HENDERSON.