

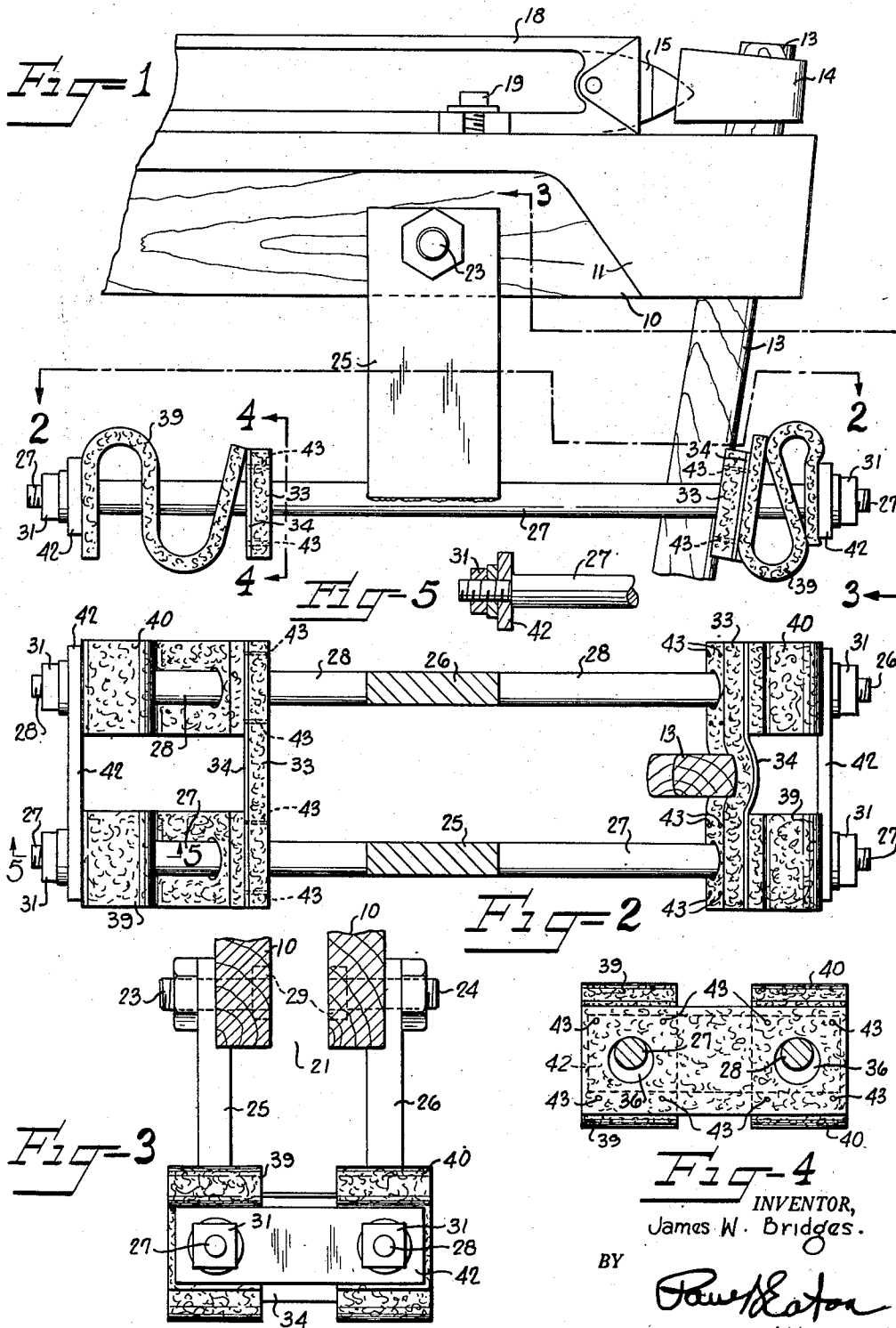
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PICKER STICK CHECK FOR LOOMS

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PICKER STICK CHECK FOR LOOMS

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This invention relates to an improved picker stick check for looms comprising a pair of parallel rods disposed one on each side of the lay of the loom below the shuttle box and between which the picker stick may have oscillatory motion, said rods being adapted to be secured to suitable brackets on each side of the lay of the loom and the rods at each end having slidably mounted buffer members thereon which are additionally assisted by coiled strips of suitable material, such as leather, so as to arrest the picker stick at each end of its throw in impelling a shuttle out of the shuttle box and in receiving a shuttle into the shuttle box.

Heretofore various types of picker stick checks have been employed, the usual one being an endless leather strap mounted between friction fingers on at least one side of the lay and encircling the picker stick and adapted to be engaged at its ends by the picker stick to arrest the same.

It is an object of this invention to provide an improved picker stick check eliminating the endless strap and eliminating the friction fingers on the lay of the loom and having a pair of rods with arresting members slidably mounted thereon.

Some of the objects of the invention having been stated, other objects will appear as the description proceeds, when taken in connection with the accompanying drawings, in which

Figure 1 is an elevation of one side of one end of the lay of the loom and showing a portion of the shuttle box and showing the invention attached to the lay;

Figure 2 is a sectional plan view taken along the line 2—2 in Figure 1;

Figure 3 is an end view taken along the line 3—3 in Figure 1;

Figure 4 is a vertical sectional view taken along the line 4—4 in Figure 1;

Figure 5 is a sectional view taken along the line 5—5 in Figure 2 omitting the member 39.

Referring more specifically to the drawings, the numeral 10 indicates the lay of the loom which has a suitable reinforcing plate 11. The loom also has a conventional picker stick 13 driven by a suitable lug strap, not shown, and which has a picker 14 secured on its upper end for receiving the nose of a shuttle 15 when it is boxed in the shuttle box.

A suitable box front 18 is shown secured to the top of the lay of the loom by any suitable means such as a plurality of screws 19. The lay has a suitable slot 21 in which the picker stick has movement from one end of the shuttle box to the other.

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The two side portions of the lay 10 are penetrated by suitable bolts 23 and 24 which penetrate suitable brackets 25 and 26 which depend downwardly and are welded to rods 27 and 28, respectively. These bolts 23 and 24 may have threaded nuts 29 on their inner ends instead of heads, if desired. These rods 27 and 28, respectively, have reduced end portions which are threaded as shown in Figure 5 for the reception of suitable nuts 31.

Adapted to be slid over the outer ends of the rods 27 and 28 are suitable members 33 made of any suitable material such as leather. Since both ends of the mechanism are identical, like reference characters will apply.

The members 33 each have a reinforcing metallic plate 34 of bendable material, such as about 16 gauge sheet steel. These members 33 have suitable openings 36 therein for reception of the rods 27 and 28. Of course, the sheet metal members 34 likewise have coinciding holes to loosely fit over the rods 27 and 28.

Disposed on each end of the rods 27 and 28 are cushioning members 39 and 40, respectively, each having a plurality of holes therethrough and adapted to be doubled upon themselves and slid onto the outer ends of the rods 27 and 28, respectively. When these are in position, a suitable plate 42 is slid over the outer ends of the rods 27 and 28 and bears against the shoulders formed by the reduced ends of the rods, and the nuts 31 are then installed to hold the assembled mechanism from being driven off the ends of the rods 27 and 28 by the impacts of the picker stick. The metallic plates 34 are secured to the members 33 by any suitable means such as a plurality of rivets 43.

It is thus seen that when this mechanism is assembled on a loom, the buffer members 33 reinforced by the metallic members 34, and additionally retarded by the S-shaped cushioning members 39 and 40 will serve to arrest the travel of the picker stick in both directions during operation of the loom.

It is also quite evident that in the event any of the members 33, 34, 39 and 40 should become worn and need replacement, it is an easy matter to remove the nuts 31 from the ends of the rods 27 and 28 and thus permit a new assembly, or parts thereof, to be quickly installed on the loom.

In the drawings and specification there has been set forth a preferred form of the invention, and although specific terms are employed, they are used in a generic and descriptive sense only,

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and not for purposes of limitation, the scope of the invention being defined in the claims.

I claim:

1. A picker stick check for looms having a lay and an oscillatable picker stick associated therewith, a bracket secured on each side of the lay and extending downwardly in spaced relation to each other and on opposed sides of the path traveled by the picker stick, each of the brackets having secured to the lower end thereof a rod whose longitudinal axis is parallel to the longitudinal axis of the lay and between which rods the picker stick is adapted to have oscillation, a pair of buffer members slideably mounted on the rods and against which the picker stick is adapted to strike as it approaches the ends of its oscillation, each of the rods having also slideably mounted thereon doubled pieces of material such as leather, one end of which is adapted to engage a buffer member and the other end of which is adapted to extend near the outer end of the rods and a strap member removably secured on the ends of the rods for preventing the buffer and the leather members from being pushed off the ends of the rods by the impact of a picker stick.

2. In a loom having a lay and a picker stick oscillatably associated therewith, a pair of brackets secured to the lay and extending downwardly in spaced relation to each other and between which the picker stick is adapted to have oscillation, each of the brackets having an elongated rod secured to the lower end thereof, the two rods being disposed on opposed sides of the path of travel of the picker stick, a strap member secured near each end of the rods and bridging the space therebetween, a curled flexible member having a plurality of holes therein and being folded into substantial S formation and being penetrated by the rods, a buffer member slideably mounted on the rods and bridging the distance between the rods and adapted to be impacted by the picker stick as it approaches the ends of its oscillatory motion to arrest the picker stick by the action of the buffer members sliding on the rods and by the substantially S-shaped members also being slideably mounted on the rods.

3. A picker stick check for picker sticks in looms having a lay, a pair of parallel rods disposed below the lay and being secured to the lay and between which the picker stick is adapted to have oscillatory motion, a strap member secured

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on each end of the rods and bridging the distance therebetween, buffer members slidably mounted on the rods and bridging the distance therebetween for receiving the impact of the picker stick near each end of its oscillatory motions, and a plurality of additional impact receiving members slidably mounted on the rods and disposed between the buffer members and the plate members secured near the ends of the rods.

4. A picker stick check for looms comprising a rod disposed on each side of the picker stick, each rod having a bracket welded thereto and secured to the lay of the loom, said rods having buffer members slideably mounted thereon and bridging the distance between the rods and adapted to be engaged by the picker stick as it approaches the ends of its oscillatory motions, fixed means on the ends of the rods and resilient means disposed between the fixed means and the buffer members for assisting the buffer members in absorbing the impact of the picker stick when the picker stick strikes the buffer members.

5. A picker stick check for arresting motion of a picker stick in a loom having a lay, a pair of brackets secured to opposed sides of the lay and extending downwardly and a longitudinally extending rod secured to the lower end of each of the brackets, said rods being on opposed sides of the picker stick and parallel to the line of travel of the picker stick, buffer members slideably mounted on the rods and shock absorbing members also mounted on the rods and disposed between the buffer members and the ends of the rods and means on the ends of the rods for confining the buffer members and the shock absorbing members on the rods.

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