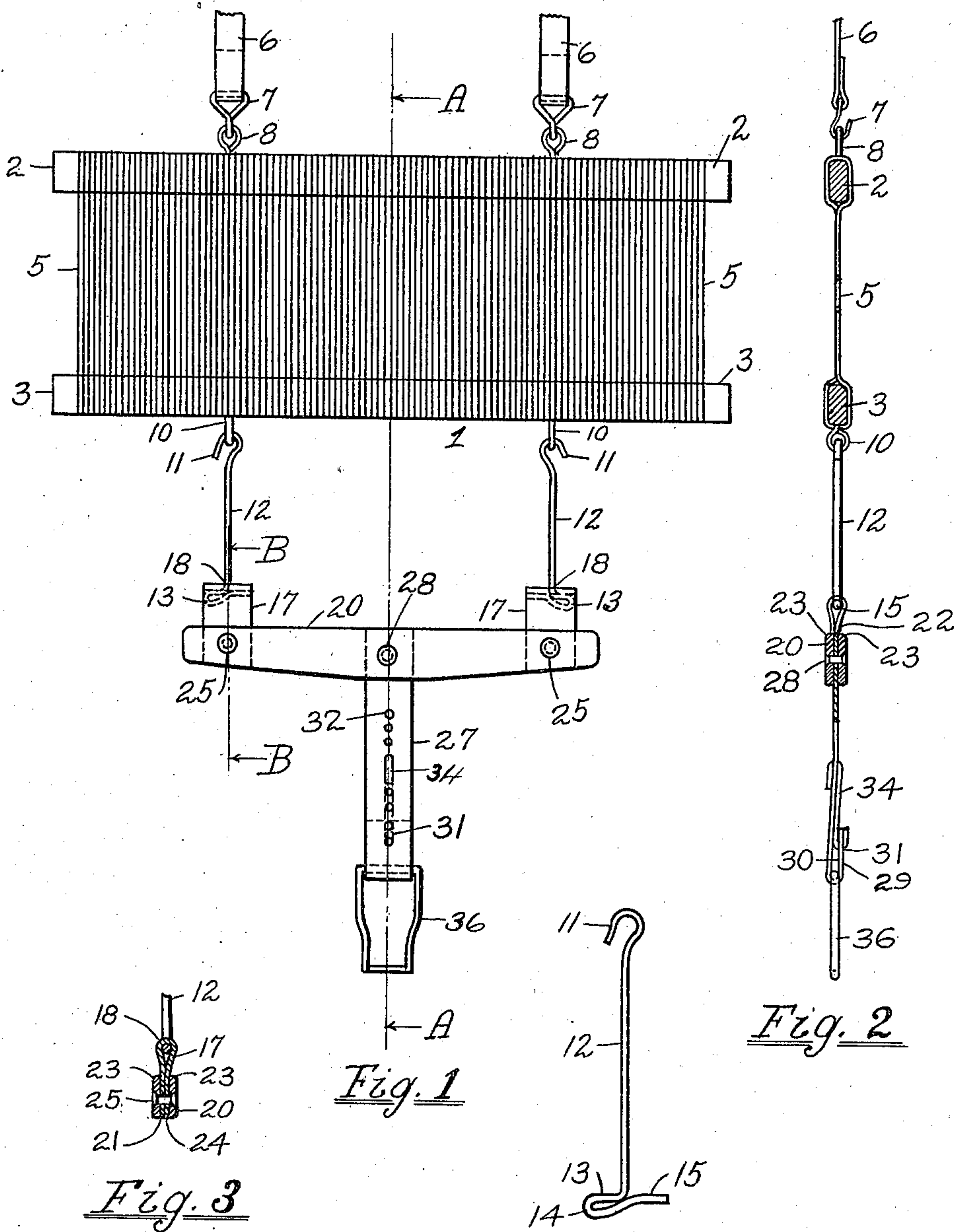


R. LEVEILLEE.
SHEDDING MECHANISM.
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964,034.

Patented July 12, 1910.



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RAPHAEL LEVEILLEE, OF SMITHFIELD, RHODE ISLAND.

SHEDDING MECHANISM.

964,034.

Specification of Letters Patent.

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To all whom it may concern:

Be it known that I, RAPHAEL LEVEILLEE, a citizen of the United States, residing at Smithfield, in the county of Providence and State of Rhode Island, have invented certain new and useful Improvements in Shedding Mechanisms, of which the following is a specification.

My invention relates to shedding mechanisms for looms, and has for its general object the prevention of interference between adjacent harness frames in their vertical reciprocation, whereby at present the harness threads are cut, the shed destroyed, and the operative portions of the loom deranged. This trouble has heretofore been particularly occasioned by the transversely projecting portions of the jack and of the other parts connected with the frame, and by the use of nuts upon the wires for retaining the same in engagement with the jack. This trouble is increased when numerous harness frames are employed in a single loom, since the planes of travel of the frames are necessarily very close to each other.

My invention consists in peculiarly formed suspension members for the jack; in a novel flexible means for connecting these members with the jack; in the novel means for fixing the flexible connections to the jack; and in the novel means for connecting the jack with the treadle.

Other objects will be hereinafter referred to and be made the subject matter of the appended claims.

In the accompanying drawings which constitute a part of this specification, Figure 1, is a front elevation of a loom harness frame and its treadle connections, Figs. 2 and 3, sections on lines A A and B B respectively of Fig. 1, and Fig. 4, a detail view of one of the hook members.

Like characters of reference indicate like parts throughout the views.

In the drawings 1 is an ordinary harness frame comprising the top and bottom bars 2 and 3 respectively, and the heddles or harness threads 5 wound over the top and bottom bars. Sheave straps 6 are connected by the hooks 7 and eyebolts 8 to the top bar 2 of the frame. Fixed in the bottom of bar 3 are eyebolts 10 through which loosely pass the hooked ends 11 of the wires or rods 12 provided with cross bars 13 formed by laterally bending into thin loops 14 the lower ends of said rods and extending their

free ends 15. The hooked portions 11 and the cross bars 13 lie in the same vertical planes. Flexible flat loops 17, preferably of leather, have each an opening 18 in its top through which passes the rod 12, and which rests upon and incloses the portions 14 and 15 of the rod 12. The harness jack 20 is thin throughout, and has near each end a vertical longitudinally disposed oblong opening 21; and, midway its length, a similar opening 22. All the openings are equidistant the front and back faces of the jack, and the upper edge of the latter is rounded as at 23. The ends 24 of the flat strip constituting each end loop are brought together face to face, and are inserted in the opening 21, where they are held by a countersunk rivet 25 passing transversely through the jack 20 and through the ends themselves.

In the central opening 22 of the jack is the upper end of a strap 27 retained by a countersunk rivet 28 passing transversely through the jack and the strap. The lower end 29 of the strap is upwardly turned to form a loop 30, and is provided with a hole 31. The strap has a vertical series of holes 32. An S shaped hook 34 passes through the hole 31 and one of the holes 32, thus retaining the loop in the usual ring 36 for engaging the treadle.

In its upward travel the firm but soft leather loops 17 will normally avoid the threads 5 of the adjacent harness, and in any instance cannot abrade the same, nor jam or fracture the next adjacent bar 3. This result is further assured by the use of the countersunk rivets 25, and by the rounded surface 23 of the jack. Noninterference between adjacent jacks also is insured by the loop and hook connection 30, 34, which is adapted for vertical adjustment.

What I claim is,—

1. In a shedding mechanism, the combination with a harness frame, of eyebolts in the frame, a jack, loops upon the jack, and suspension rods with the ends of the rods confined within said loops comprising hooked portions upon the upper ends adapted to engage the eyebolts, and horizontal portions upon the lower ends within the loops all of said parts being within the plane of the frame and jack.

2. In a shedding mechanism, the combination with a harness frame, of suspension rods connected to the frame and provided

with horizontal lower portions, flexible loops resting upon the horizontal portions and within which said portions are inclosed, a jack provided with longitudinally disposed slots into which the free ends of the loops extend, and rivets connecting the jack with the free ends of the loops said loops and rods being within the plane of the frame and jack.

10 3. In a shedding mechanism, the combination with a harness frame and suspension rods, of a jack provided with a rounded upper edge, flexible loops fixed in the

rounded portion of the jack and engaging the rods, said jack being provided with a longitudinal opening intermediate the loops, a take up strap fixed in said opening and provided with a looped lower portion, and a hook connecting the free end of the loop with the strap. 20

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

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