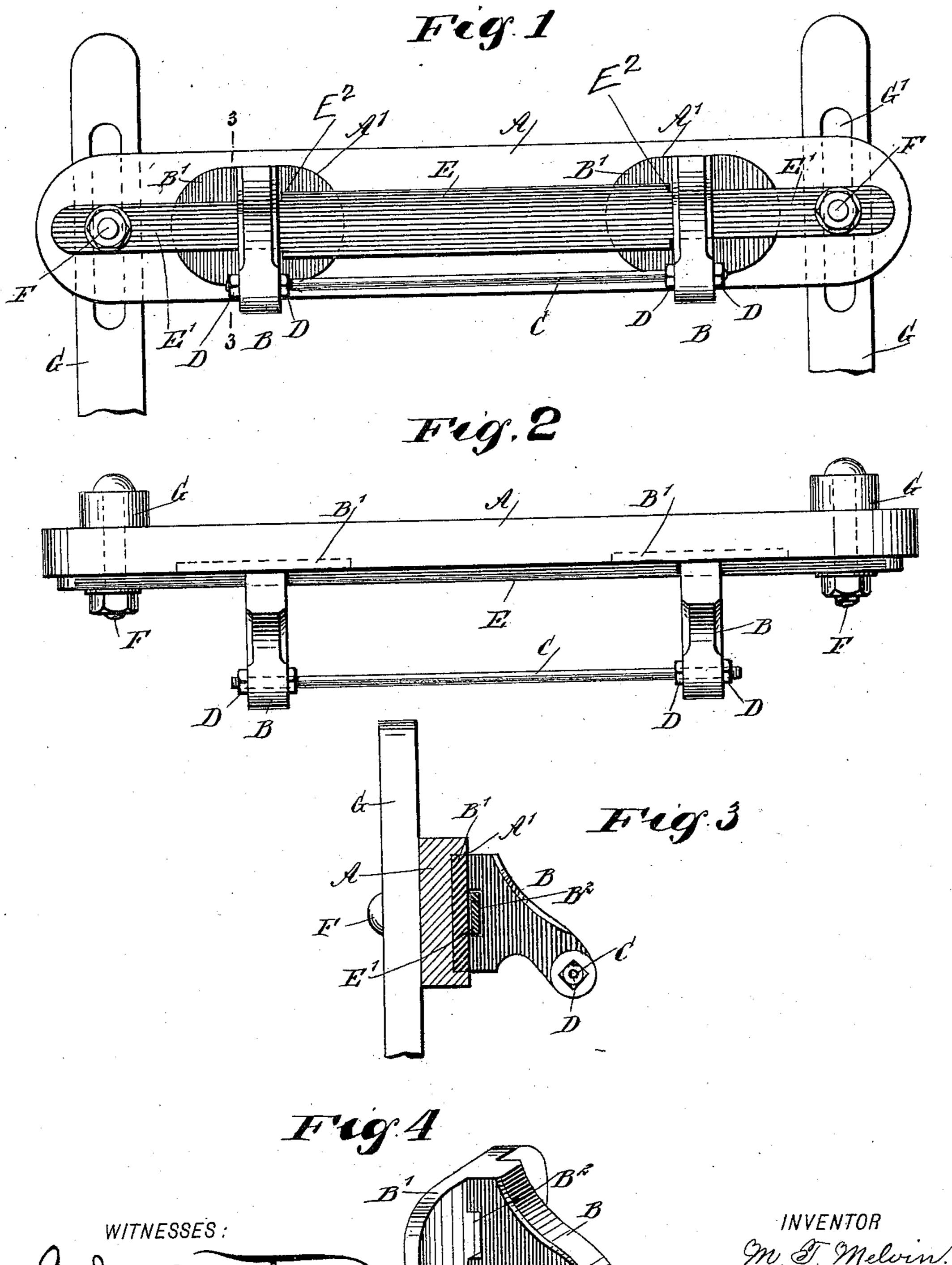
## M. T. MELVIN. SHUTTLE GUARD FOR LOOMS.

(Application filed May 6, 1898.)

(No Model.)



## United States Patent Office.

MAJOR T. MELVIN, OF FALL RIVER, MASSACHUSETTS.

## SHUTTLE-GUARD FOR LOOMS.

SPECIFICATION forming part of Letters Patent No. 617,590, dated January 10, 1899.

Application filed May 6, 1898. Serial No. 679,937. (No model.)

To all whom it may concern:

Be it known that I, MAJOR T. MELVIN, of Fall River, in the county of Bristol and State of Massachusetts, have invented a new and 5 Improved Shuttle-Guard for Looms, of which the following is a full, clear, and exact description.

The invention relates to looms; and its object is to provide a new and improved shutro tle-guard designed for preventing the shuttle from leaving the loom in case it flies out of the shed, the guard being simple and durable in construction and arranged for convenient attachment to any rail, no matter how 15 worn, and in case of injury to any one of the parts such part can be readily replaced by a new one at a small cost.

The invention consists of novel features and parts and combinations of the same, as 20 will be described hereinafter and then pointed out in the claims.

Reference is to be had to the accompanying drawings, forming a part of this specification, in which similar characters of reference indi-25 cate corresponding parts in all the figures.

Figure 1 is a front elevation of the improvement as applied. Fig. 2 is a plan view of the same. Fig. 3 is a transverse section of the same on the line 33 of Fig. 1, and Fig. 4 is a 30 perspective view of one of the brackets.

The hand-rail A, which carries the shuttleguard, is provided with spaced recesses A', adapted to receive the bases B' of brackets B, extending forwardly from said rail to carry 35 at their outer ends a rod C, secured in place by nuts D, screwing on the ends of the rod against the sides of the brackets B both at the inside and outside thereof. The rod C extends a suitable distance from and parallel 40 with the rail A, as is plainly indicated in Fig. 2, so that in case the shuttle leaves the shed and strikes the rod it is prevented from leaving the loom. A connecting-piece E in the form of a flat bar extends between the brack-45 ets at the bases B' thereof, said connectingpiece being formed at its ends with a reduced extension E', passing through apertures B<sup>2</sup>, formed in the brackets, so that the shoulders E<sup>2</sup>, formed at the reduced ends, abut against 50 the inner sides of the brackets and hold the same the desired distance apart. The outer ends of the extensions E' are engaged by bolts F for fastening the piece E to the rail A and the latter to the usual uprights G, attached to 55 the loom. The uprights Gare provided with l

the usual slots G', through which extend the bolts F for adjusting the rail A up or down to bring the rod C into the proper position for acting as a shuttle-guard.

From the foregoing it will be seen that the 60 device is very simple and durable in construction and can be readily attached to any rail now in use, no matter how much worn, and in case any of the parts of the shuttle-guard break they can be readily replaced by new 65 ones at a comparatively small cost.

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

1. A shuttle-guard comprising brackets hav- 70 ing apertures, a rod secured at its ends by the brackets, and a connecting-piece for the brackets formed at its ends with reduced extensions passing through the apertures in the brackets, substantially as shown and de- 75 scribed.

2. A shuttle-guard comprising brackets having apertures, a hand-rail carrying said brackets, a rod secured at its ends by the brackets, and extending approximately par- 80 allel to the hand-rail and in front thereof, a connecting-piece for the brackets and formed with reduced extensions passing through the apertures in the brackets, uprights attached to the loom and bolts engaging said exten- 85 sions of the connecting-piece, for fastening the latter to the hand-rail and the rail to the uprights, substantially as shown and described.

3. The combination with the uprights at- 90 tached to the loom, and a hand-rail provided with spaced recesses, of the brackets having apertures and provided with bases fitting the said recesses, a rod secured at its ends in the said brackets, a connecting-piece for the 95 brackets comprising a flat bar extending between the brackets at the bases thereof and reduced at its ends forming shoulders, the reduced extensions passing through apertures formed in the brackets and the shoulders en- 100 gaging the inner sides of the brackets, and means for securing the connecting-piece to the rail and the latter to the uprights attached to the loom, substantially as shown and described.

MAJOR T. MELVIN.

Witnesses:

GEORGE NYCOCK, ALEXR. J. WILCOX.