No. 887,948. PATENTED MAY 19, 1908.

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BELT FOR STACKERS, SELF FEEDERS, AND THE LIKE.

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Fig. 1.

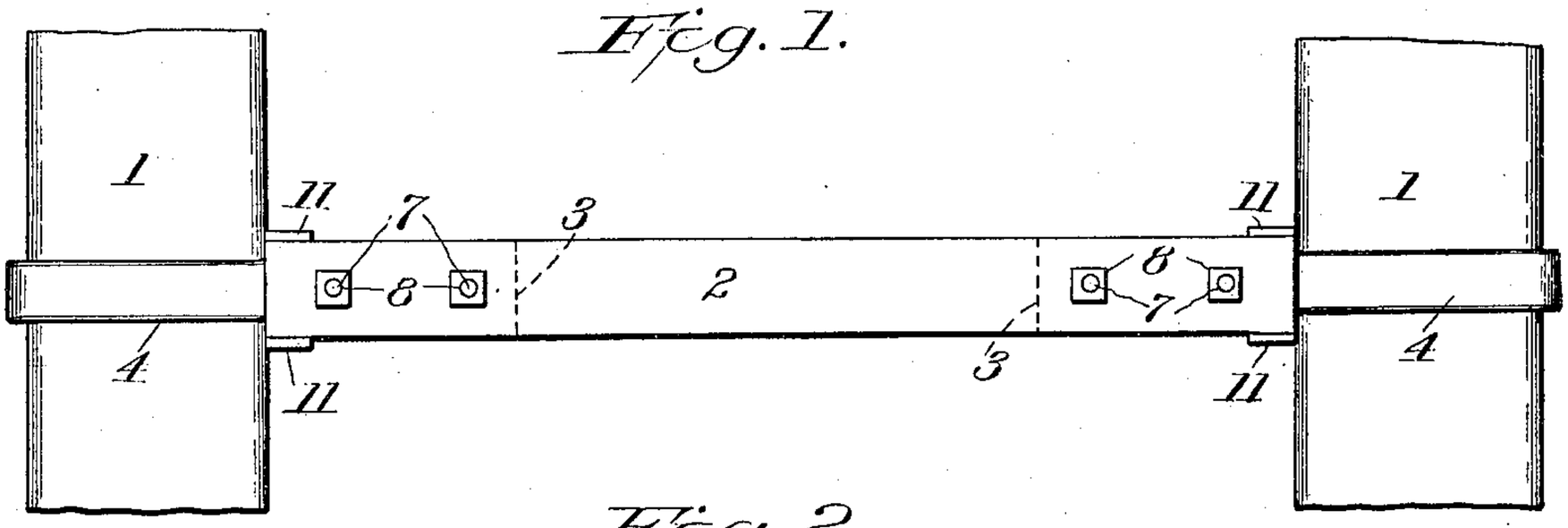

Fig. 2.

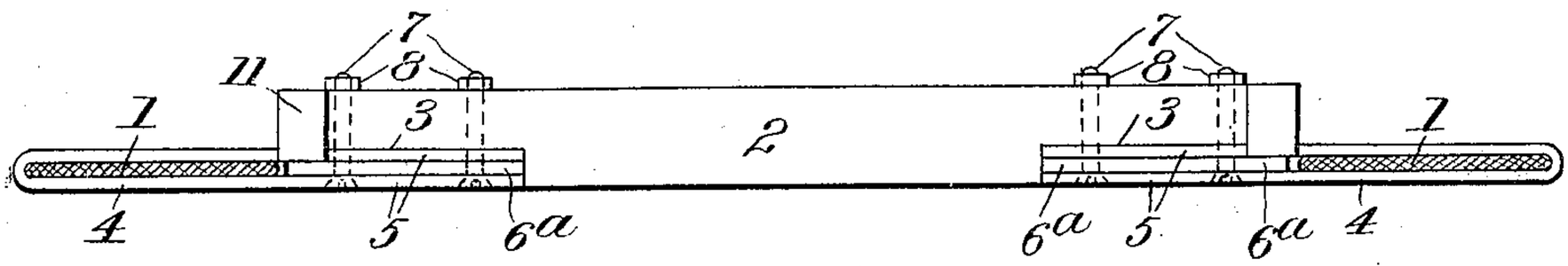

Fig. 3.

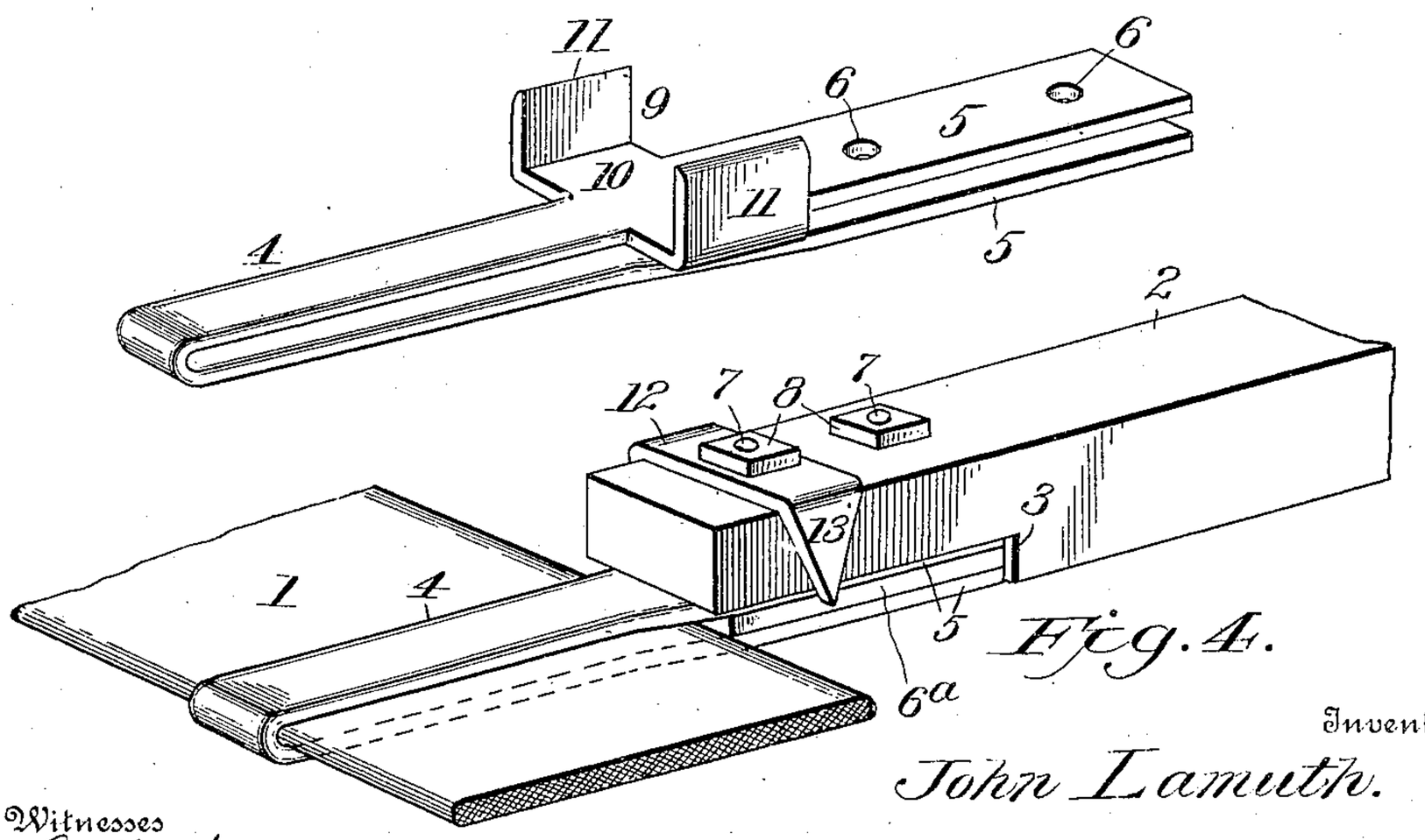

Fig. 4.

Witnesses

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BELT FOR STACKERS, SELF-FEEDERS, AND THE LIKE.

No. 887,948. Specification of Letters Patent. Patented May 19, 1908.

Application filed December 30, 1907. Serial No. 408,595.

To all whom it may concern:

Be it known that I, JOHN LAMUTH, a citizen of the United States, residing at Algona, in the county of Kossuth and State of Iowa, have invented certain new and useful Improvements in Belts for Stackers, Self-Feeders, and the Like, of which the following is a specification, reference being had therein to the accompanying drawing.

This invention relates to improvements in conveyers, and particularly to a peculiarly-constructed fastening means for attaching or connecting the slats to the drag-belts or webs.

The object of the invention is the provision of means for facilitating the attachment of slats to a belt or belts or webs, without injuring the belt or web, and obviating the necessity of forming an aperture or apertures in the belt or web for the attachment of a slat or slats thereto.

Another object of the invention is the provision of fastening means for connecting a slat to a belt or web, whereby the fastening means can be quickly moved longitudinally of the web or belt and secured in different positions thereon, without injuring or defacing the belt or weakening the same.

With these and other objects in view, the invention consists of certain novel constructions, combinations, and arrangements of parts, as will be hereinafter fully described and claimed.

In the drawings: Figure 1 is a top plan view, showing portions of belts or webs and a slat; the slat is attached to said belts or webs by my peculiar fastening means or web-clip. Fig. 2 is a view, in side elevation, of the structure depicted in Fig. 1. Fig. 3 is a perspective view of a device or web-clip constructed in accordance with the present invention. Fig. 4 is a fragmentary view of a web or belt and a slat, and showing another embodiment of the present invention.

Referring to the drawings by numerals, 1 designates, preferably, a pair of belts or webs employed in the construction of a conveyer, as is used in a stacker, and 2 is a slat used in the construction of a drag-belt of a stacker, and said slat 2 is provided on its under-face with longitudinally-extending cut-out portions 3, 3, formed at its ends.

My fastening or tightening device is employed, at both ends of the slat 2, and as these devices are similarly-constructed, it will only be necessary to specifically describe one of the same. The device or web-clip comprises a horizontal, substantially U-shaped body portion 4, formed by bending a single piece of metal for positioning parts thereof in parallel relation; the parallel sides of the U-shaped body 4 surround the belt or web 1. The ends 5 of the body 4 are provided with registering apertures 6. The ends 5 are positioned in the cut-out portions 3 of the slats. For preventing the sides of body 4 from clamping the web too much, I, preferably, interpose a yielding packing 6^a between the ends 5, although, this packing is not as firm or is not as thick as the belt or web 1, so that the sides of the U-shaped body will grip said belt or web sufficiently to prevent any longitudinal movement of the slat 2, relative to said belts. After the screws, or suitable detachable fastening means, 7 have been positioned in the registering apertures 6 and in registering apertures of the packing 6^a and apertures formed in the end of the slat 2, the nuts 8 are threaded upon the upper projecting ends of said screws or fastening means 7, for securing the web-clip or fastening device in a fixed position upon the belt or web 1, and, consequently, holding the slat against independent movement relative to said web. It is to be noted that the transverse fastening means, or screw 7 do not extend through the web, but through the slat, thereby materially increasing the strength of the web, as said web is not weakened by the aperturing of the same; besides, while the web-clip or fastening device surrounds and clamps the belt or web upon opposite sides, still it does not injure the same, thereby permitting the web-clip or device to be quickly moved to a new place upon the belt, if desired.

The web-clip or fastening device is provided with an integral, substantially U-shaped structure 9, Fig. 3, formed upon, preferably, the side of the body 4 contiguous to the slat 2. This U-shaped structure 9 constitutes an auxiliary fastening means, as well as a brace, as it has a comparatively large flat body 10 and upwardly-extending, integral sides 11, which sides bear snug against

the sides of the slat. The vertical, integral sides or lips 11, projecting from the body of the web-clip, not only acts as a fastening means, but also materially strengthens the end of the slat.

In Fig. 4, I have shown another embodiment of my invention, which is substantially the same as that illustrated in Figs. 1 to 3, except that I do not employ the integral, U-shaped, flanged structure 9 in this instance, but upon the upper portion of one of the fastening means or screws 7, preferably, the one nearest to the end of the slat, I secure a U-shaped, reinforcing fastening and strengthening device 12, which is provided with a flat bottom and with vertical sides or lips 13, which performs substantially the same function as the lips or vertical sides 11. Therefore, in both of the embodiments depicted in Figs. 3 and 4, I have provided a fastening device, comprising a clamp, preferably, surrounding the web or belt, said device also provided with primary and auxiliary fastening means for securing the same to the end of a slat; one of the fastening means being provided with lugs or reinforcing means for the sides of the slat.

From the foregoing description, it will be noted that my invention contemplates the fastening of a slat or slats to webs or belts by means of a clamping-device, comprising a plurality of portions engaging the belt upon opposite sides, and means carried by the slat for drawing the sides together for gripping or clamping the belt for holding the slat in an adjusted position upon the belt or belts and preventing independent movement of the belt and slat. By reason of the peculiar cut-out portions 3 at the ends of the slat, the lower face of the web-clips or fastening devices are placed in the same horizontal plane with the bottom of the slat for facilitating the operation of the drag-belt or conveyer.

What I claim is:

1. In an apparatus of the class described, the combination with a belt and a slat, of a clip provided with a body having a smooth inner face fitting over said belt, a portion of the ends of said body engaging said slat and both of the ends positioned at one side of the slat, and detachable fastening means extending through said slat and ends and adapted to draw one end of said body towards the other end for causing the smooth face of the body to be clamped upon the belt.

2. A fastening device for securing a slat and a belt together, comprising a U-shaped member having registering apertures formed therein near its outer end, and integral means formed intermediate the ends of said U-shaped member and adapted to engage opposite portions of a slat.

3. The combination with a pair of flat belts and a slat positioned between the belts, of clips each formed from a single-piece and provided with parallel sides, each clip surrounding a belt and having its ends overlapping portions of the slat, and transverse fastening means extending through the slat and the overlapping portions of said clips and securing said clips upon said slat and clamping the clips upon the belts.

4. The combination with a pair of flat belts or webs, of a slat positioned between said belts, said slat provided with cut-out portions near its ends, said belts having their inner longitudinal edges positioned contiguous to the cut-out portions, and fastening means positioned in the cut-out portions and extending beyond the outer ends of said slats and clamping or gripping said belts for securing said slat and belts against independent movement.

5. In an apparatus of the class described, the combination with a belt and a slat, of means secured to said slat and adapted to clamp or grip said belt for holding said slat against independent movement relative to said belt, and a yieldable packing or filling means interposed between portions of said clamping means for limiting the clamping action of said clamping means upon said belt.

6. The combination with a pair of belts or webs, a drag-slat positioned between said belts, of U-shaped web-clips positioned over said belts, each web-clip having its ends extending parallel with and positioned at one side of a slat, each clip provided intermediate its ends with vertical extensions engaging the sides of said slat, and fastening means extending through said clips and slat and clamping said clips upon said belt.

7. A fastening device for securing a slat and a belt together, comprising a U-shaped member formed by a pair of side portions substantially parallel throughout their entire length, said side portions provided with a plurality of registering apertures formed therein contiguous to one end, one of said side portions provided between one end and the apertures with outwardly-extending, reinforcing and bracing means adapted to engage opposite portions of a slat.

8. A fastening device for securing a slat and a belt or web together, comprising a substantially U-shaped member, formed from a single-piece of metal, and provided with a pair of side portions, the portions integrally connected at one end, the side portions contiguous to the integrally connected end constituting the belt or web-engaging portion, said side portions provided near their outer free end with apertures, and means integral with one of the side portions between the apertures and the

belt or web-engaging portion and extending outwardly therefrom for engaging the sides or opposite portions of a slat.

9. In an apparatus of the class described, the combination with a belt or web and a slat, of a U-shaped clip positioned upon said belt and having its free ends overlapping and positioned upon one side of said slat, and removable fastening means extending through the slat and free ends and adapted to clamp the clip upon the belt, whereby, by loosening the fastening means, the clip can be quickly adjusted upon the belt.

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

JOHN LAMUTH.

Witnesses:
S. E. McMahon,
J. W. Sullivan.