No. 668,551. Patented Feb. 19, 1901.

M. L. AKERS.

SLAT FASTENER.

(Application filed Jan. 20, 1900. Renewed Jan. 21, 1901.

(No Model.)

Fig. 1.

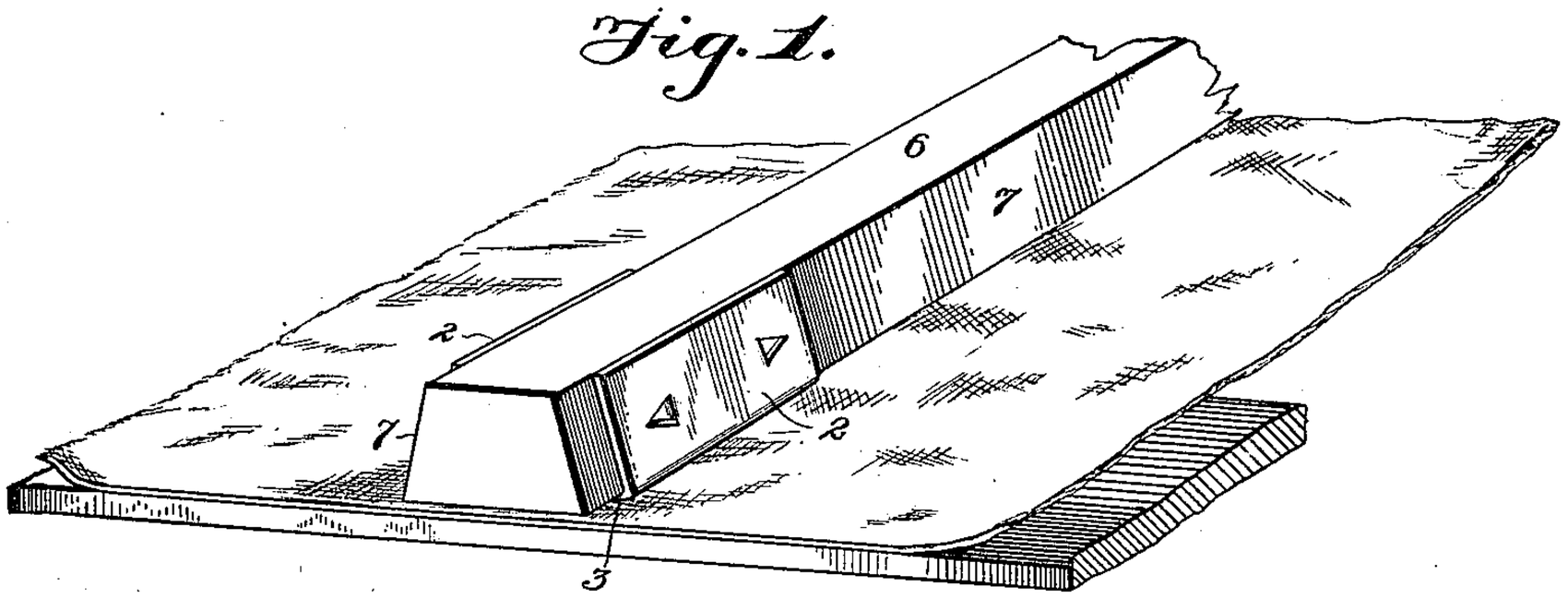


Fig. 2.

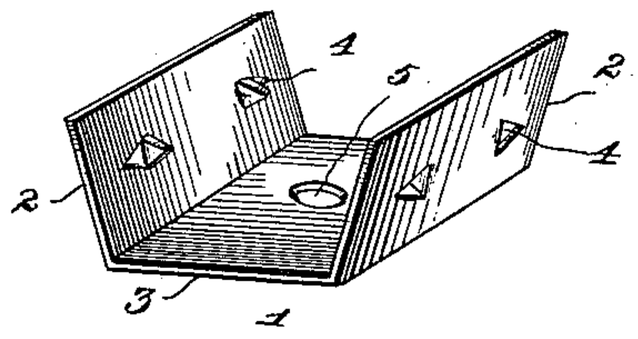


Fig. 3.

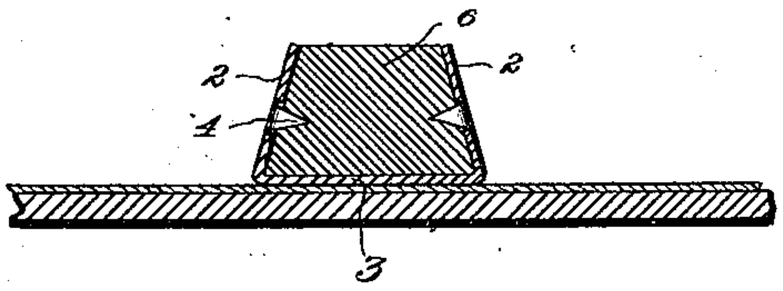
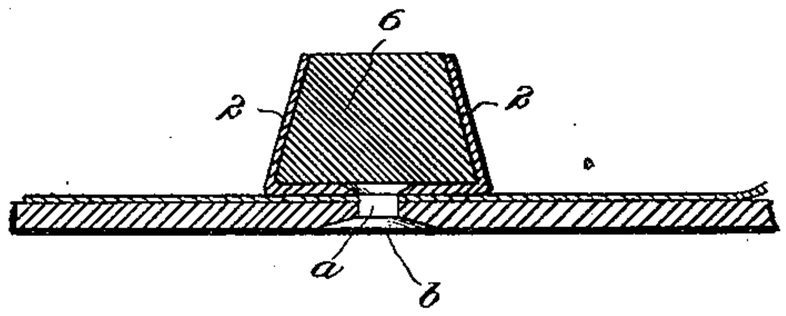


Fig. 4.



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UNITED STATES PATENT OFFICE.

MAURICE LEONARD AKERS, OF IONE, OREGON.

SLAT-FASTENER.

SPECIFICATION forming part of Letters Patent No. 668,551, dated February 19, 1901.

Application filed January 20, 1900. Renewed January 21, 1901. Serial No. 44,208. (No model.)

To all whom it may concern:

Be it known that I, MAURICE LEONARD AKERS, a citizen of the United States, residing at Ione, in the county of Morrow and State of Oregon, have invented a new and useful Slat-Fastener, of which the following is a specification.

My invention is an improvement in carrier-belts or drapers for harvesters, headers, self-binders, and the like; and the objects of my present improvements are, first, to devise a novel means for fastening the clamp to the belt and canvas, so that the clamp may be used in connection with a belt of any width or of a width less than that of the clamp, if desired.

A further object of my present invention is to effect an economy in the manufacture and weight of the clamp by dispensing with the downturned prongs heretofore formed with the clamp and constituting the means for fastening the clamp to the belt.

A further object of my invention is to provide a slat-clamp which is adapted to secure the end of the slat to the belt by means of a rivet, which does not extend through the slat.

To these ends my invention consists in the peculiar construction and combination of devices hereinafter fully set forth, and particularly pointed out in the claims.

In the accompanying drawings, Figure 1 is a perspective view of a portion of a carrier-belt or draper embodying my improvements, showing my improved slat and one of my improved clamps for securing the slat to said belt or draper. Fig. 2 is a detail perspective view of one of my improved slat-clamps in condition to be employed for fastening a slat to a carrier or draper. Fig. 3 is a sectional view on a plane near one end of the clamp and disclosing the prongs 4. Fig. 4 is a similar view on a plane through the center of the clamp and showing the rivet for securing the intermediate portion of the clamp to the carrier or draper.

The fastening-clamp constituting a feature of my present improvements is an improvement upon the fastening-clamp for which Letters Patent of the United States No. 592,578 were granted to me October 26, 1897.

My improved slat fastener or clamp 1 is formed from a single piece of sheet-steel of suitable length, breadth, and thickness and rectangular in form. The end portions 2 are bent or struck up from the intermediate portion 3 at an obtuse angle thereto and form clamping-jaws, which are adapted to be bent over and caused to bear against the sides of the slat, as hereinafter stated, and the said clamping-jaws are provided with inward-projecting prongs 4, which are preferably struck up therefrom.

In the center of the intermediate portion 3 of my improved slat fastener or clamp is an opening 5 for the reception of the shank *a* of a rivet *b*, said opening being countersunk on its inner side or not, as may be desirable.

My improved slat 6 has the inclined obtuse-angled oppositely-disposed sides 7, as shown, which inclined sides extend throughout the entire length of the slat.

The operation of my invention is as follows: The clamp or fastener is first secured on the draper or belt by the rivet *b*, which is inserted from the inner side of the draper or belt, and has its shank projecting through the central opening 5 in the clamp or slat fastener and upset or swaged, as shown in Fig. 4, thereby firmly riveting the intermediate portion of the clamp to the belt or draper and presenting no obstructions either on the belt or in the clamp. The end of the slat is then seated on the intermediate portion of the clamp, and the jaws or end portions 2 of the latter are bent inward and caused to bear upon the inclined sides of the slat, as shown in Figs. 1, 3, and 4, the inclination of the said clamping-jaws 2 when thus bent inward conforming to that of the sides of the slat, and the prongs 4 of the clamp being forced into and firmly embedded in the slat, as shown in Fig. 3.

In the belt and slat fastener shown and described in the Letters Patent hereinbefore referred to downturned prongs were formed at the corners and employed to fasten the clamp to the carrier or draper. An objection to this form of the clamp is that it necessarily increases the width of the clamp, thereby adding to the weight and cost of the clamp, and a further objection to this form of the clamp is that the same is not adapted to be used in connection with belts excepting such as considerably exceed the clamp in width. Both of these objections are obviated in my im-

proved clamp, hereinbefore described, which is adapted not only to be made from a smaller piece of metal without impairing its efficiency, but is also adapted to be riveted to the belt or draper and may hence be employed in connection with a belt of less width than the clamp.

A further advantage accruing from the use of my present improvement is that it enables the slat to be fastened to the belt or draper by means of rivets which do not enter or pass through the slat, and hence do not weaken the same nor protrude therefrom as the slat becomes worn.

It will be readily understood that should a slat become broken the same may be removed by first bending out the clamping-arms of my improved clamping devices, the latter being then adapted for the fastening of a slat substituted for the broken one.

A further advantage accruing from the use of my present improvement is that by securing the clamp to the belt by means of a rivet, as hereinbefore shown and described, the rivet forms a pivotal connection for the clamp, which enables the latter to turn and adjust itself to the slat in the event that one side of the draper should develop a tendency to travel faster than the other side thereof, resulting from a slipping of one of the belts, thus not only relieving the clamps from the strain which would otherwise be exerted upon them, but also relieving the slats of side strain and obviating any tendency of the clamps to cut the belts. Furthermore, the rivets which I employ to secure my clamp to the belt while allowing of the pivotal play or motion of the clamp on the belt also serve to effectually and permanently secure the clamp to the belt and in no wise tear or injure the belt, the latter being weakened only to the extent of the hole for the shank of the rivet.

Having thus described my invention, I claim—

1. In a carrier-belt or draper, the combination, with a slat-clamp having the intermediate portion and the inclined end portions, of a rivet to secure said intermediate portion to the belt, and a slat seated on the intermediate portion of the clamp and having its sides engaged by the inclined end portions thereof, substantially as described.

2. In a draper or carrier-belt for headers and the like, the combination, with a belt and a slat-clamp, the latter having the intermediate portion and the end portions bent to form jaws, and provided with the inward-projecting prongs, and a rivet to secure said intermediate portion to the belt, of a slat on the intermediate riveted portion of said clamp, and seated, but not riveted therein, said slat having its sides engaged by the end portions or clamping-jaws of the clamp and the prongs thereof, for the purpose set forth, substantially as described.

In testimony that I claim the foregoing as my own I have hereto affixed my signature in the presence of two witnesses.

MAURICE LEONARD AKERS.

Witnesses:

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