

No. 705,528.

Patented July 22, 1902.

M. HEINEKE.

RADDLE FOR STRAW CARRIERS.

(Application filed Apr. 14, 1902.)

(No Model.)

Fig. 1.

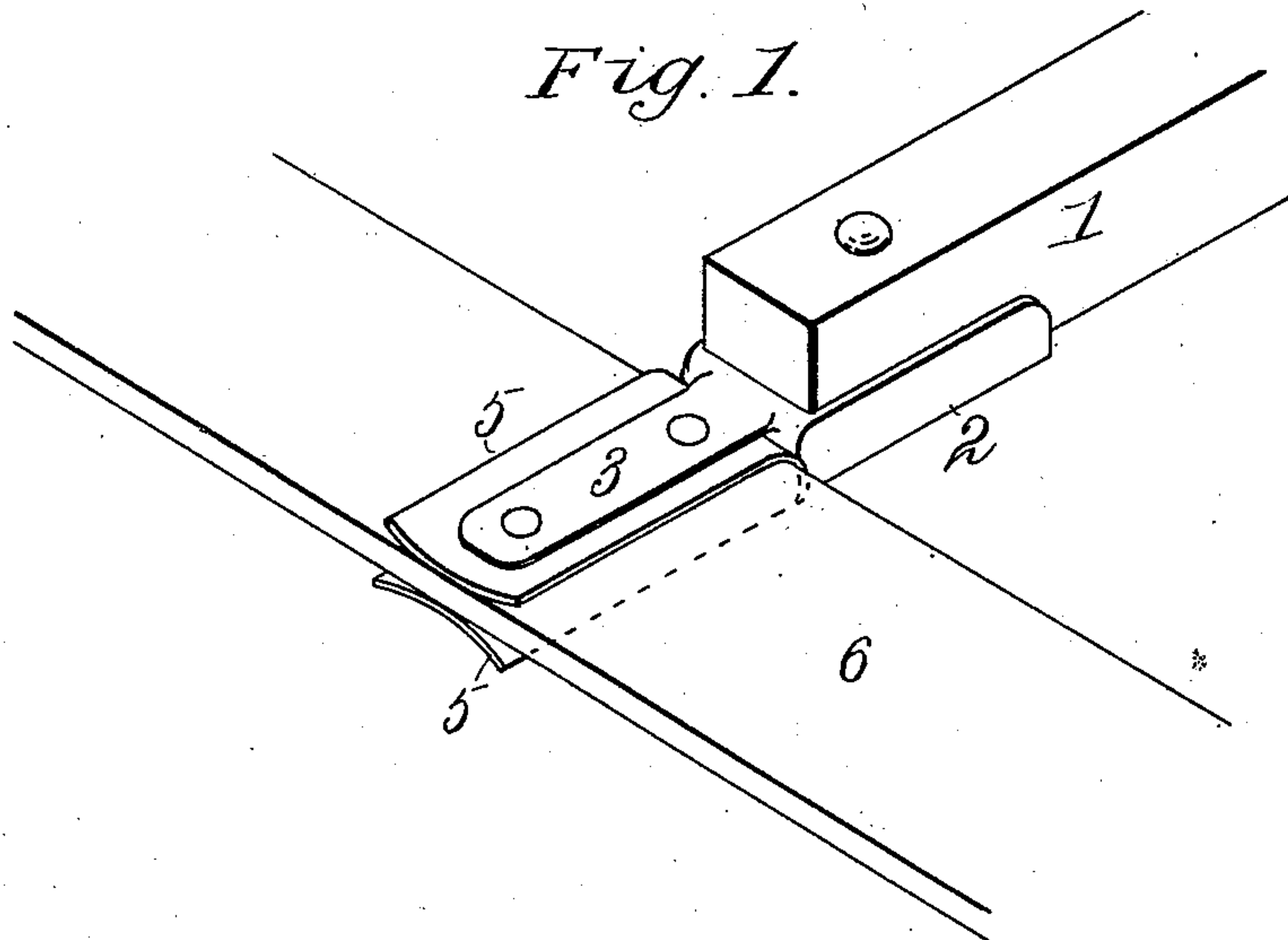


Fig. 2.

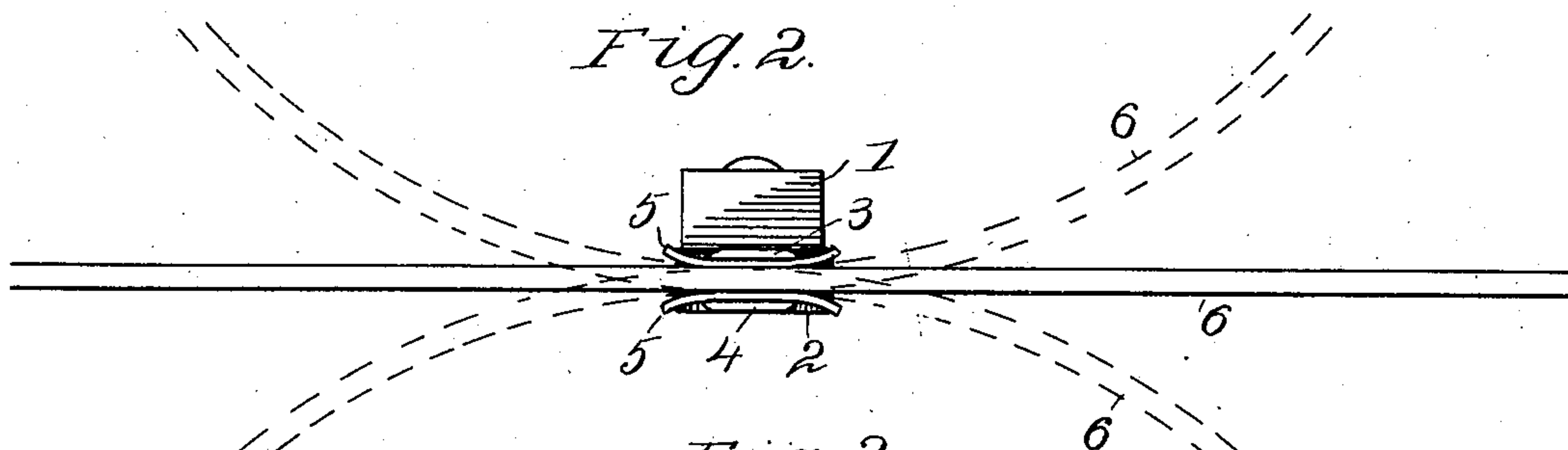


Fig. 3.

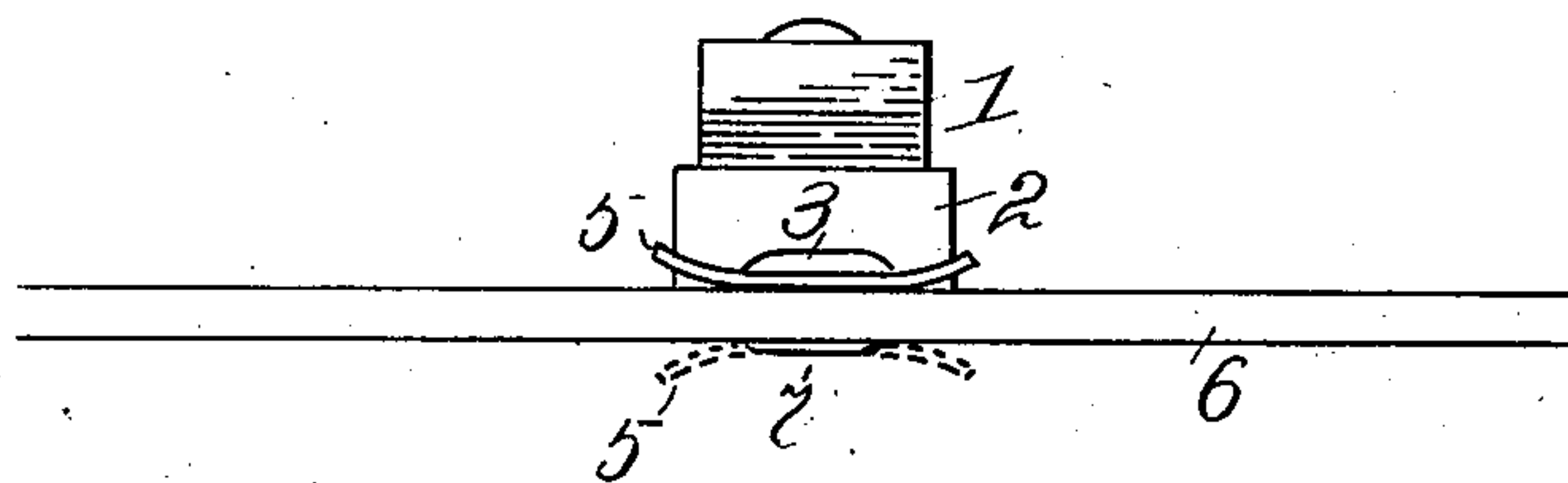
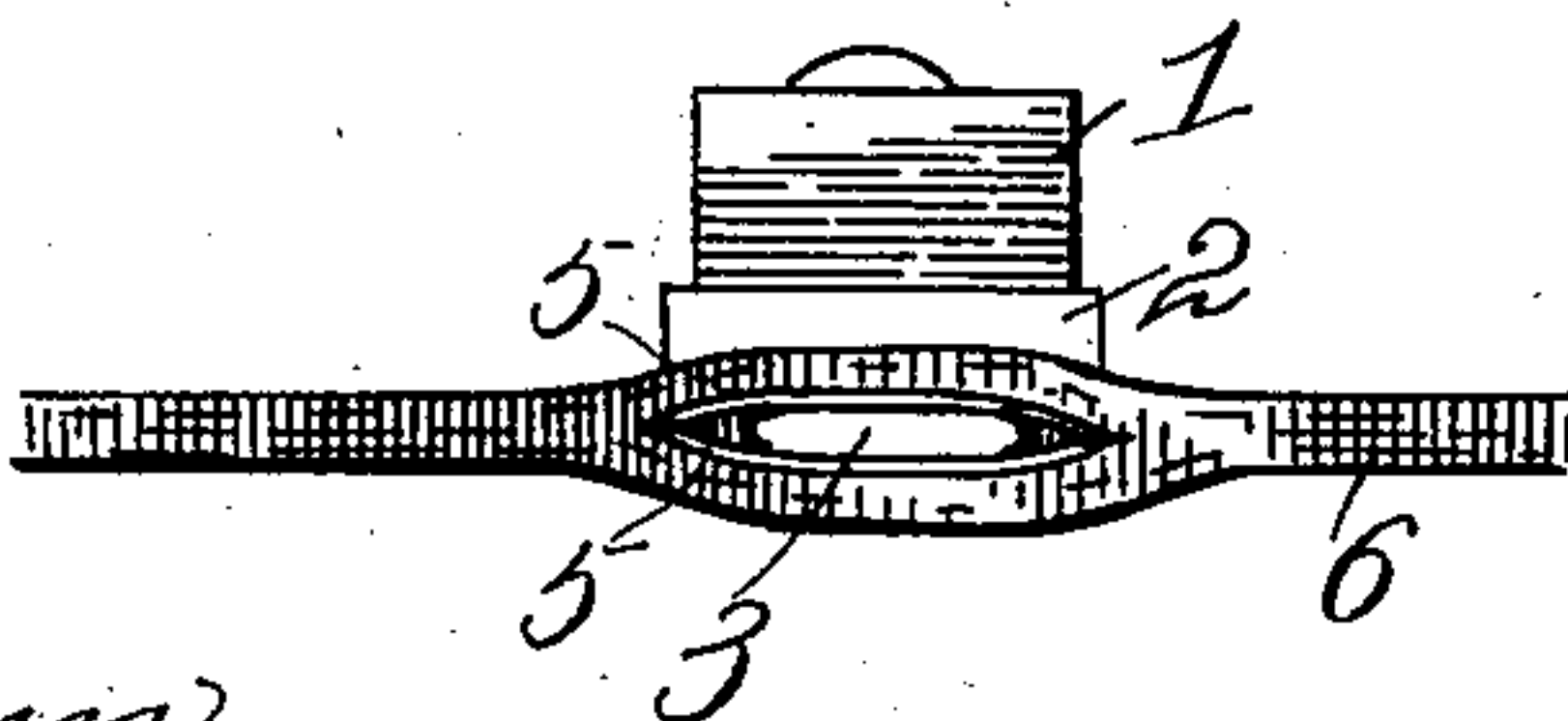


Fig. 4.



Witnesses.

Hora Graham

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UNITED STATES PATENT OFFICE.

MARTIN HEINEKE, OF SPRINGFIELD, ILLINOIS, ASSIGNOR TO SATTLEY MANUFACTURING COMPANY, OF SPRINGFIELD, ILLINOIS, A CORPORATION OF ILLINOIS.

RADDLE FOR STRAW-CARRIERS.

SPECIFICATION forming part of Letters Patent No. 705,528, dated July 22, 1902.

Application filed April 14, 1902. Serial No. 102,915. (No model.)

To all whom it may concern:

Be it known that I, MARTIN HEINEKE, of the city of Springfield, county of Sangamon, and State of Illinois, have invented certain new and useful Improvements in Raddles for Straw-Carriers, of which the following is a specification.

This invention relates to raddles in which the cross-slats are secured to the side belts by means of metal clips or strips; and the object is to prevent the metal from cutting the belts crosswise.

In the type of raddle to which my invention more particularly relates the belts run with both sides at times engaging pulleys, and the clips or strips that connect the cross-slats with the belts are made thin and comparatively narrow to permit the belts to travel around the pulleys. The turn of the belts around the pulleys brings the edges of the metal strips into contact with the belts, and when the strips are between the belts and the pulleys the pressure of the belts against the pulleys is exerted in part on the intervening strips of metal. These influences cause the metal strips to cut and wear the belts crosswise thereof and materially shorten the lives of the belts. To neutralize the wearing effect of the clips on the belts, I have devised the plan of making flexible strips somewhat wider than the parts of the clips that come in contact with the belts and securing such strips between the clips and the belts with the edges of the strips projecting beyond the edges of the belt-engaging parts of the clips. The material of the belt-protecting strips is preferably leather, as that combines flexibility, strength, and comparative softness to a desirable degree; but it is not improbable that other material may produce the desired effect more or less completely, and I do not restrict myself in that particular. The purpose of the protecting-strips is to yield to conform to the curvature of the belts while traveling around pulleys and to take the severe cutting and wearing pressure of the edges of the clips and transfer it to the belts in a diffused and softened condition. To accomplish this purpose, the strips need to be strong, somewhat flexi-

ble, softer than the metal of which the clips are composed, and wider than the belt-engaging parts of the clips. Any material having these characteristics may be used in place of leather.

The term "clip" is used herein to designate a piece of metal shaped to engage a cross-slat and be secured to a belt crosswise thereof, and the forms that such devices may take are numerous and varied. Some have two parallel extensions separated to embrace the belt, others have a single extension attachable to one side or the other of the belt, and still others have a single extension which is inserted between parts of the belt, so that the metal is held out of contact with the pulleys. With the single-extension clips separate metal strips may be used on the opposite side of the belt to take the stress of the rivets used to secure the clips to the belt, and it is possible that the forms are still further varied. In all cases, however, there is at least one narrow extension of the clip crossing the belt and secured thereto, and wherever that condition exists there is need for my improvement.

In the drawings forming part of this specification, Figure 1 is a perspective representation of a bifurcated or two-extension clip embracing a belt supplied with my belt-protecting strips. Fig. 2 is an elevation of the structure shown in Fig. 1. Fig. 3 is an elevation showing a single-extension clip secured to one side of a belt. Fig. 4 shows a single-extension clip inserted edgewise through a belt.

An end of a raddle-slat is shown at 1. The slat-embracing part of the clip is shown at 2, and at 3 and 4 are shown the thinned and narrowed clip extensions which are riveted to the belt crosswise thereof. A belt-protecting strip 5 of the strong, flexible, and not exceedingly hard material hereinbefore mentioned is secured between each clip extension and the belt with the edges of the strip conforming to the edges of the clip extension. When the clip has a pair of belt-embracing extensions, as shown in Figs. 1 and 2, the protecting-strip may be made long enough to

fold around the belt, as shown in Fig. 1, and this form of strip may also be used with clips having single extensions attached to one side of the belt. In Fig. 3 a metal plate 7 is shown in solid lines against the under side of the belt to take the stress of the securing-rivets; but a flexible strip 5 may be used as a substitute for the plate, as shown in broken lines. In the form shown in Fig. 4 there is a part of the belt exposed to the wearing and cutting action of the metal of the clip on each side of the clip extension, and protecting-strips 5 are placed in position to neutralize the tendency of the clip to injuriously affect the belt.

I claim—

1. In a raddle-clip the combination of a raddle-slat, a belt, a metal clip secured to the slat, an extension of the clip secured to the belt crosswise thereof, a separate metal plate secured to the belt crosswise thereof and on the opposite side from the clip, and a strip of flexible material secured between the belt and the clip extension and secured between the belt and the separate metal plate, substantially as described.

2. In a raddle, the combination of a raddle-

slat, a belt, a metal clip secured to the raddle-slat, an extension of the clip secured to the belt crosswise thereof, and a strip of flexible material, secured between the belt and the clip extension, substantially as described.

3. In a raddle, the combination of a raddle-slat, a belt, a metal clip secured to the raddle-slat, an extension of the clip secured to the belt crosswise thereof, and a strip of flexible material, wider than the clip extension, secured between the belt and the clip extension, substantially as described.

4. In a raddle, the combination of a raddle-slat, a belt, a metal clip secured to the raddle-slat, an extension of the clip secured to the belt crosswise thereof, and a strip of flexible and yielding material, wider than the clip extension, secured between the belt and the clip extension with its edges projecting beyond the edges of the clip extension, substantially as described.

In testimony whereof I sign my name in the presence of two subscribing witnesses.

MARTIN HEINEKE.

Witnesses:

JAMES H. MATHENY,
ROBERT MATHENY.