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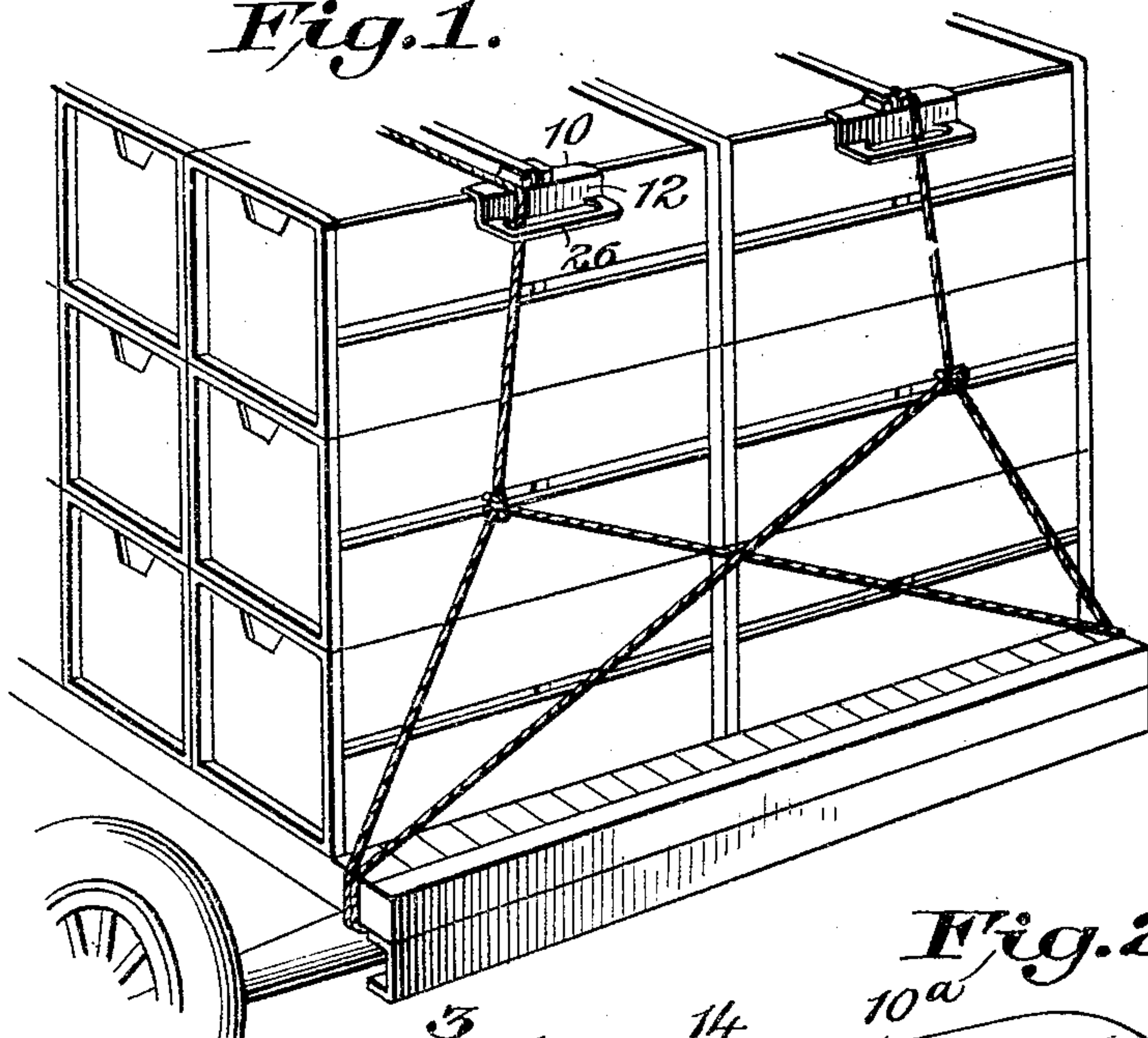
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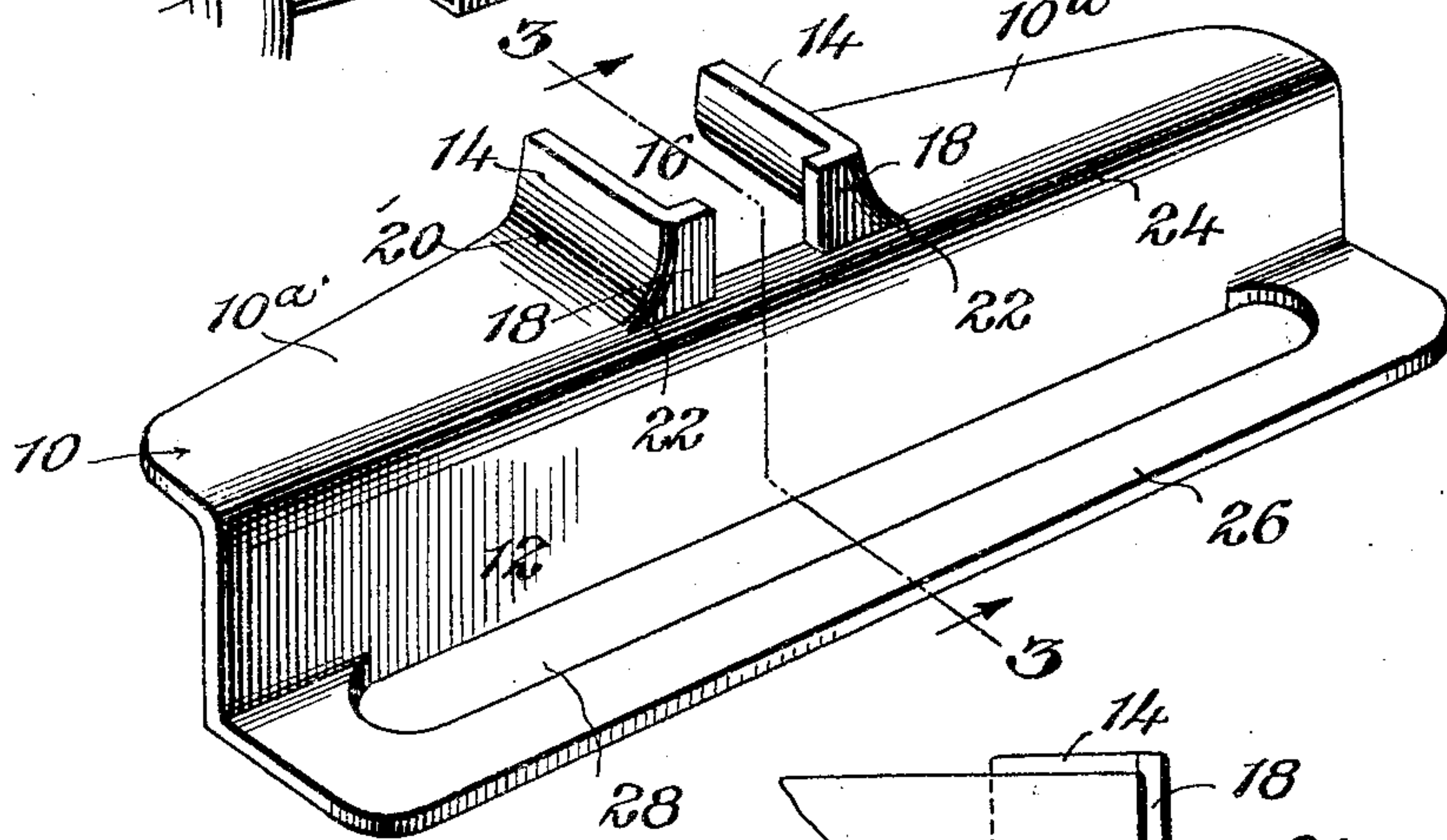
CONTAINER GUARD

Filed July 31, 1931

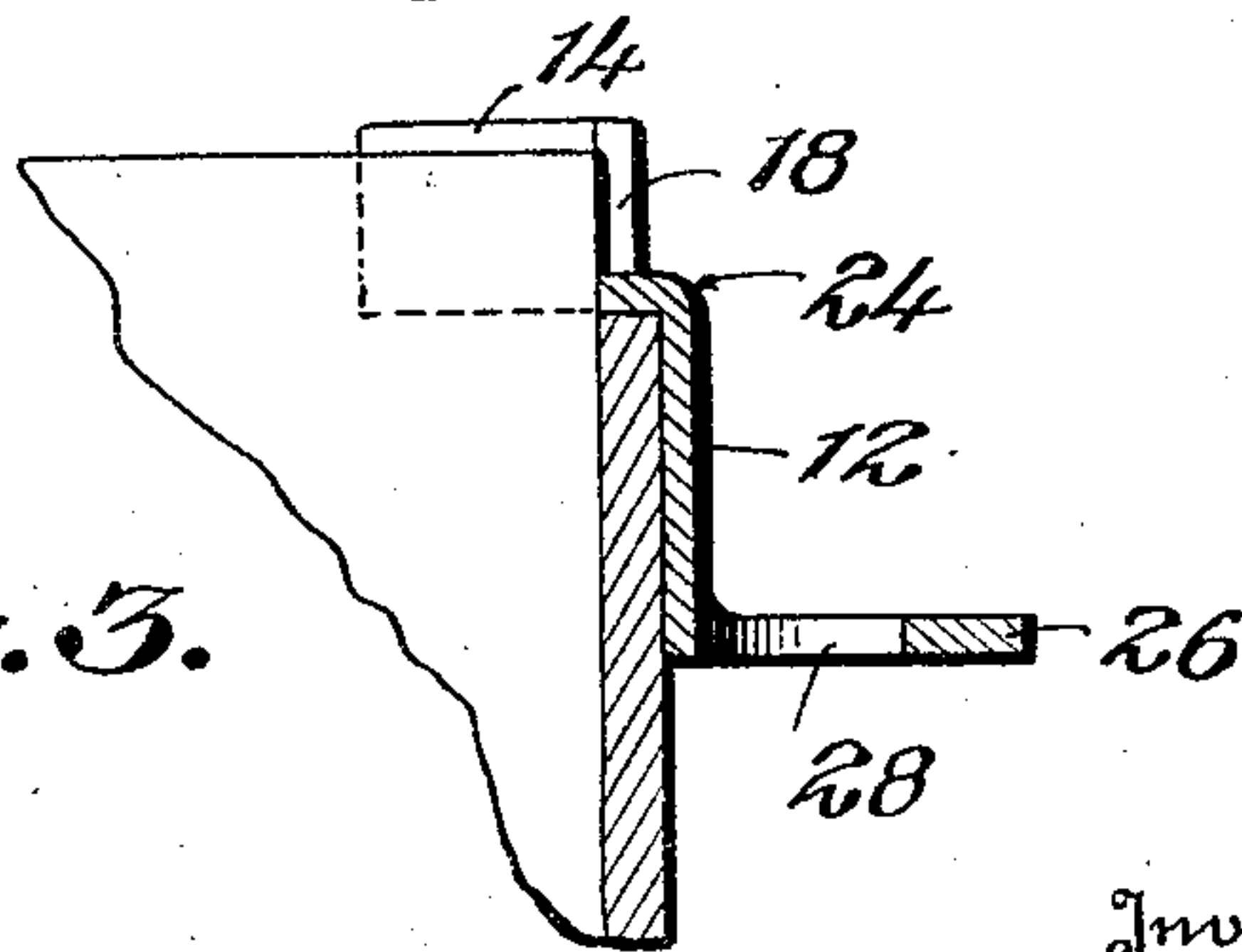
*Fig. 1.*



*Fig. 2.*



*Fig. 3.*



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## UNITED STATES PATENT OFFICE

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## CONTAINER GUARD

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This invention relates to a guard for field crates, packing crates, boxes and other containers to protect the same against being crushed or otherwise damaged by the ropes, chains or the like commonly employed to fasten a number of crates, boxes or the like in stacked relation on trucks, wagons or other vehicles, and has generally in view to provide a simple, inexpensive, practical device of this character which is strong and durable, highly efficient in use, and which may be advantageously used in connection with practically all ordinary types of crates, boxes and other containers.

With the foregoing general purpose in view, the invention consists in the novel features of construction, and their novel arrangement in a device of the present kind, as will be hereinafter more fully described, illustrated in the accompanying drawing and defined in the appended claims.

In the drawing, wherein like characters of reference denote corresponding parts in the different views:—

Figure 1 is a perspective view illustrating the utility of the invention.

Figure 2 is an enlarged perspective view of the guard; and

Figure 3 is a central cross section through the guard.

In the transportation of crates and boxes of fruit, vegetables and the like, it is common practice to stack the crates or boxes on vehicles such as wagons, trucks or cars, and to secure the crates or boxes in stacked relation by means of ropes or chains drawn tightly over the same. Ordinarily, the ropes or chains have direct contact with the crates or boxes, and while this is not particularly harmful to the intermediate crates or boxes, it frequently happens that where the ropes or chains extend across the outside crates or boxes the latter become seriously damaged due to the crushing effect of the ropes or chains thereagainst, particularly at the places along their corners which are engaged by the ropes or chains. This represents a material loss, not only in respect to damaged crates and boxes, but also in respect to the damage done the fruit or other goods contained in

the crates or boxes. Accordingly, the purpose of the present invention is to provide a guard which will permit securing of the crates or boxes by ropes, chains or the like in the usual manner, and which will serve effectively to protect the crates or boxes and their contents against damage by the securing elements.

To the foregoing end, the invention resides in the provision of either a cast guard, or a guard pressed or otherwise formed from relatively heavy sheet metal, comprising, as best illustrated in Fig. 2, a somewhat elongated body portion of angular cross section inclusive of a top horizontal flange, designated as 10, and a front vertical flange directed downwardly from the top flange and designated as 12.

In accordance with a preferred embodiment of the invention the top flange 10 is formed in two sections designated as 10<sup>a</sup>, 10<sup>b</sup>, respectively, which are spaced apart at their inner ends and flanged upwardly as at 14, 14, respectively, to form a flanged recess 16 medially of the top flange for a purpose which will presently appear.

Each upwardly directed flange 14 extends preferably from the rear edge of its related top flange section 10<sup>a</sup> to a point spaced rearwardly from the plane of the inner face of the vertical front flange 12 a distance approximating the thickness of the usual slats or boards from which field crates, packing crates and the like are formed, and from such point each flange is directed a limited distance inwardly towards the other flange 14 as indicated at 18.

Each top flange section 10<sup>a</sup> merges gradually into its related upwardly directed flange 14 through a rounded fillet-like formation 20, and, likewise, rounded outer corners 22 are provided at the junction of the flanges 14 with the flanges 18, these rounded corners merging gradually with the rounded outer corners 24 at the junction of the flange sections 10<sup>a</sup> with the front flange 12.

A flange 26, preferably coextensive in length with the front flange 12, extends outwardly from said flange 12 at or near the bottom thereof, and in said flange 26 is



formed an elongated slot 28 the inner side wall of which is constituted by the flange 12.

In the use of the guard the same is disposed with its front flange 12 against the side of the crate, box or other container and with its top flange 10 extending inwardly over the top of the container, and the ropes, chains or the like employed to secure the container are extended over the guard and through the slot or eye 28 in the flange 26. Thus, due to the inherent rigidity of the guard and to the relatively extensive bearing area of the same against the container, any cutting or crushing of the latter by the securing element or elements when the same is or are drawn tight, is effectively avoided.

By the provision of the flange 26 having the slot 28 therein, and by passing the securing element or elements through the slot in said flange, the securing element or elements is or are held effectively against sliding off of the guard onto the container, but at the same time the elongation of the slot permits all necessary movement of the securing element or elements along the guard during tightening of the securing element or elements. In this connection, it is apparent that, if desired, the securing element or elements may be knotted to either or both sides of the flange 26 in order to retain the guard in a given position along the securing element or elements. Furthermore, it is manifest that by reason of the gradual rounded merger of the different flanges of the guard with each other, any chafing or cutting of the securing element or elements by the guard is effectively avoided.

Most field and packing crates have a central transverse portion, and in many instances this partition extends upwardly above the top edges of the sides of the crates. Thus, the spacing apart of the inner ends of the flange sections 10<sup>a</sup> serves to accommodate the central partition of the crate when the guard is used on such crates, and the resulting interlock between the guard and the partition serves to hold the guard against sliding movement along the crate. Moreover, the upwardly directed flanges 14 by taking a relatively broad bearing against the sides of the partition, materially assist in preventing crushing of the crate by the guard, and, as is apparent, by reason of the disposition of the inner faces of the flanges 18 inwardly of the plane of the inner face of the flange 12, said flanges 18 are permitted to engage the edge of the crate partition while the flange 12 is engaged against the side of the crate, so that when the guard is placed operatively in engagement with a partitioned crate of the character mentioned and as illustrated in the drawing, substantially all of the bearing faces of the guard have firm bearing engagement with the related parts of the crate, thus

further assisting in the accomplishment of the purpose of the guard.

Without further description it is thought that the features and advantages of the invention will be readily apparent to those skilled in the art, and it will of course be understood that changes in the form, proportion and minor details of construction may be resorted to, without departing from the spirit of the invention and scope of the appended claims.

I claim:—

1. A container guard comprising an elongated member of angular cross section including a front vertical flange, top rearwardly directed flange sections spaced apart at their inner ends to provide a space to receive the partition of a container, and upwardly directed flanges at the inner ends of said top flange sections for engagement with the sides of the container partition.

2. A container guard comprising an elongated member of angular cross section including a front vertical flange, top rearwardly directed flange sections spaced apart at their inner ends to provide a space to receive the partition of a container, and upwardly directed flanges at the front of the space between said top flange sections for cooperation with the edge of the container partition, the rear faces of said upwardly directed flanges being spaced rearwardly from the plane of the rear face of the vertical flange a distance approximately equal to the thickness of the material from which the sides of the container are constructed.

3. A container guard comprising an elongated member of angular cross section including a front vertical flange, top rearwardly directed flange sections spaced apart at their inner ends medially of the guard, upwardly directed flanges at the inner ends of said top flange sections merging with said top flange sections through rounded fillet-like formations, upwardly directed flanges at the front of the space between said top flanges formed as integral extensions of said first mentioned upwardly directed flanges, the outside corners at the junction of the upwardly directed flanges being rounded and merging gradually in rounded formations with the top flange sections and the front flange, the rear faces of the second mentioned upwardly directed flanges being disposed rearwardly of the plane of the rear face of the front flange.

4. A container guard comprising an elongated body having top and bottom flanges offset in opposite directions, said top flange being adapted to engage and be supported by a container, and means formed with the top flange for interlocking engagement with a container partition to hold the guard against endwise movement relative to the container which supports the guard, and said bottom



flange being provided with a rope receiving eye.

5. A container guard adapted to shield the container from abrasion by a rope comprising a body adapted to assume a substantially vertical position in use when applied to a container and having top and bottom flanges offset in opposite directions, the bend between the body and the top flange constituting a rope chafing guard, a projection on the top flange constituting a rope abutment, and said lower flange being provided with an opening for receiving the rope.

In testimony whereof I hereunto affix my signature.

WILLIAM C. NORTH.

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