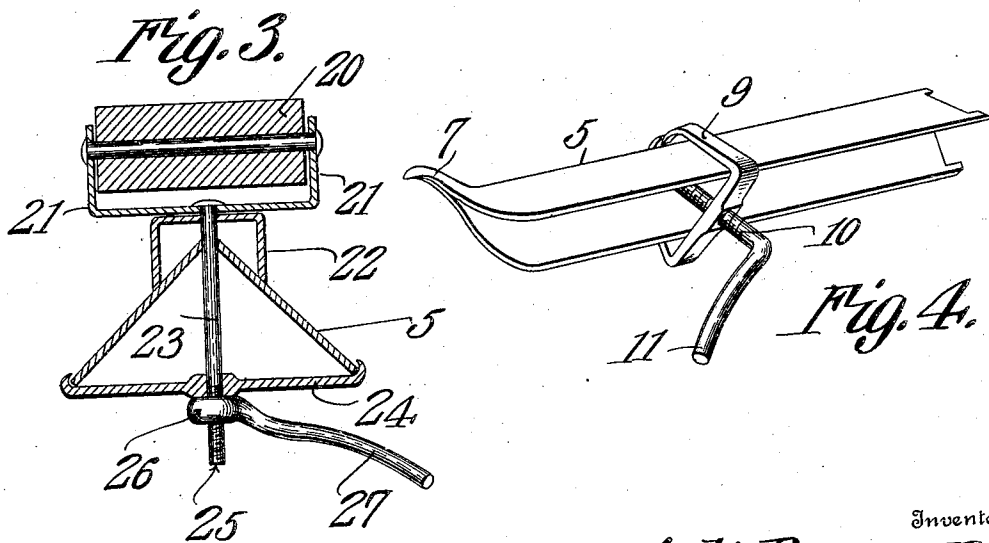
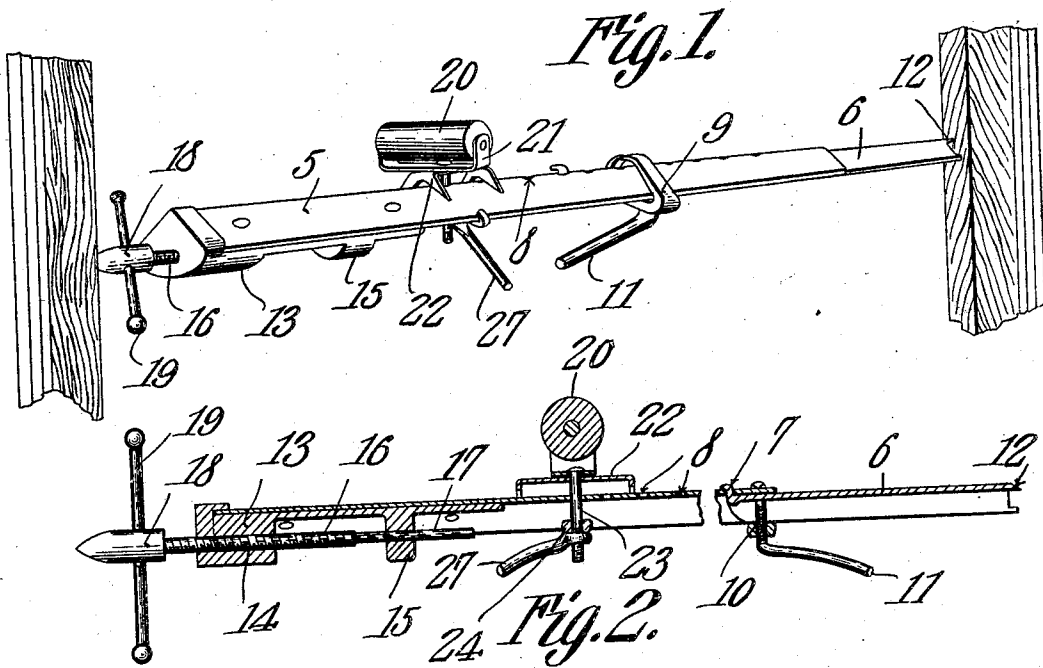


F. PEARSON.
LUMBER LOADING MECHANISM.
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937,954.



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LUMBER-LOADING MECHANISM.

937,954.

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To all whom it may concern:

Be it known that I, FREDERICK PEARSON, a citizen of the United States, residing at Mason, in the county of Bayfield and State of Wisconsin, have invented a new and useful Lumber-Loading Mechanism, of which the following is a specification.

It is the object of the present invention to provide an improved lumber loading mechanism such as is employed in the doorways of freight cars.

Such devices usually consist of a support having telescopic members which are engaged at their ends with the sides of stiles of the doorway, and a roller which is mounted upon the support and over which the boards and other kinds of lumber are passed when loading the same onto the car or when unloading the car. Ordinarily such telescopic members are held at adjustment whereby their ends will bite firmly into the sides of the doorway, by some friction means but the vibration caused by boards being shoved over the roller of the device and the other strains placed upon the device incident to its use, are liable to loosen the means for holding the device in position in the doorway and consequently such means as is purely frictional in character is not desirable.

It is therefore one aim of the present invention to provide a means for holding the members of the support rigidly at the desired adjustment and yet to provide for firmly clamping the support in place.

A further object of the invention is to provide in a mechanism or device of this character, a support the members of which will be so connected that they will not sag when heavy lumber is being passed over the roller of the device.

It is a further object of the invention to provide for a quick adjustment of the members of the support of the device.

In the accompanying drawings, Figure 1 is a perspective view of the device positioned in the doorway of a car. Fig. 2 is a vertical longitudinal sectional view thereof. Fig. 3 is a transverse sectional view taken in a plane extending through the axis of the roller of the device, and Fig. 4 is a detail perspective view of the inner end of one of the members of the support.

In the drawings, the device is illustrated as comprised in part of a support consisting

of two channel iron sections one section being indicated by the numeral 5 and the other by the numeral 6. Both of the sections 5 and 6, as stated, are of channel iron and are preferably of that form of channel iron having two angularly disposed wings and when the sections are properly assembled, the section 6 is disposed beneath the section 5 and partly received in the concavity thereof. In order to hold these two sections 5 and 6 in connected relation and at the proper adjustment, the section 6 is formed at its inner end with an upwardly off-set stud indicated by the numeral 7 and the section 5 is formed at the junction of its wings with a longitudinally extending series of openings indicated by the numeral 8. In connecting the two sections 5 and 6, the stud 7 at the end of the section 6 is engaged with one of the openings 8 as is clearly shown in Fig. 2 of the drawings and the section 6 is then swung to lie directly beneath the section 5 and in the concavity thereof. A substantially triangular frame 9 is slidably disposed upon the section 5 and embraces not only this section but also the lower edges of the section 6 and threaded through the base of this frame and bearing at its upper end against the under side of the section 6 at the apex thereof is a securing screw indicated by the numeral 10 and having a lateral handle 11 which may be grasped for the purpose of rotating it. The outer end of the member 6 of the support is formed at each lower corner and at the apex with a spur 12 and these spurs are designed to bite into the material of the door frame stiles of the car in the doorway of which the device is to be mounted.

Disposed within the concavity of the section 5 at the outer end thereof and secured in place in said concavity is a casting which is indicated by the numeral 13 and is formed through one portion with a threaded bore 14 and has an apertured guide portion 15. A screw rod 16 is threaded through the bore 14 and has an unthreaded portion 17 which is slidably received through the opening in the guide portion 15 of the casting. At its outer end, the screw rod 16 carries a conoidal head 18 the apex of which is designed for engagement with the material of the door frame stile and this head further carries an operating handle 19 by means of which it may be rotated whereby to adjust the screw rod longitudinally in the bore of the casting

and thereby increase or shorten the length of the support.

It will be understood from the foregoing that in positioning the device in a doorway, the members are first separated to the desired degree and are adjusted as near as is possible to a length equal to the width of the doorway and that the outer spurred end of the member 6 is then disposed in one side of the doorway and the handle 19 is grasped and turned until the apex of the head 18 comes in biting engagement with the other stile of the doorway whereupon such turning of the handle is continued until the support is very firmly clamped in place.

As heretofore stated, there is provided, in connection with the support, a roller over which the lumber is to be shoved in loading the same onto and unloading the same from the car in the doorway of which the device is positioned and this roller, which is indicated by the numeral 20, is rotatably mounted in a suitable bearing bracket 21 which is swiveled upon a supporting base 22 by a bolt 23 engaged through the intermediate portion of the bearing bracket and the corresponding portion of the supporting base. The bolt 23 furthermore passes through one of the several openings 8 in the member 5 and through the intermediate portion of a cross-bar which is indicated by the numeral 24 and engages at its end with the lower edges of the wings of the member 5 of the support as is clearly shown in Fig. 3 of the drawings. The lower portion of this bolt 23 is threaded as is indicated by the numeral 25 and threaded upon the said portion 25 is a hand nut 26 having a lateral handle 27 which may be grasped for the purpose of rotating the nut and thereby drawing down upon the bolt 23. Prior to such tightening of the nut upon the bolt, the bearing bracket 21 in which the roller is mounted is positioned at whatever angle is desired and then the handle 27 is grasped and the bearing bracket is firmly clamped in the adjusted position.

In the use of the device, the boards being loaded or unloaded are shoved over the roller 20 and inasmuch as the roller may be readily adjusted to any desired angle, the fact will be appreciated that lumber can be very conveniently unloaded or loaded regardless of the relative position of a wagon or other conveyance with respect to the car in the doorway of which the device is mounted.

It will further be understood that the means for holding the two sections of the

support of the device at the proper adjustment is a positively acting one and that consequently the vibrations to which the device is subjected will not affect such adjustment and furthermore the adjustment may be very quickly had.

What is claimed is:—

1. In a device of the class described, a support comprising channel sections disposed one within the other, one of said sections being formed with a plurality of openings, the other section being formed at one end with an off-set stud engageable in the openings interchangeably, and a clamp holding the sections in connected relation.

2. In a device of the class described, a support comprising channel sections disposed one within the other, one of said sections being formed with a plurality of openings, the other section being formed at one end with an off-set stud engageable in the openings interchangeably, and a clamp adjustable upon and embracing both sections for holding the same in connected relation.

3. In a device of the class described, a support formed with a plurality of openings, a bearing bracket, a roller journaled in said bracket, a support for said bracket, a bolt passed through the bracket and support and interchangeably through the openings, said bolt serving to swivel said bracket to its support, a cross-bar through which the said bolt also passes, said bar being disposed at the ends against the support, and a nut threaded upon the bolt and bearing against the cross-bar between the ends thereof.

4. In a device of the class described, a support comprising channel sections, one of said sections being formed with a plurality of openings, the other section being provided at one end with an off-set stud engaging in said openings interchangeably, a clamp for holding the sections in connected relation, a rod threaded through the end portion of one section, a guide carried by the section inwardly of its end, the said rod having an unthreaded portion working in said guide, means upon the rod for rotating the same, and a head upon the rod having a structure engaging point.

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

FREDERICK PEARSON.

Witnesses:

O. M. AXNESS,
H. J. AXNESS.