Nov. 4, 1958 E. MINICK 2,858,906

CHOCK BLOCK

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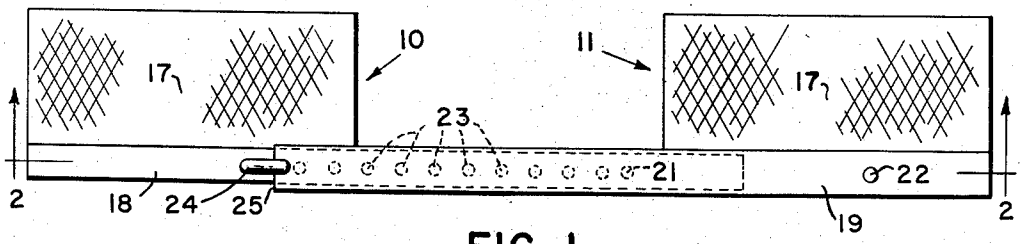


FIG. 1

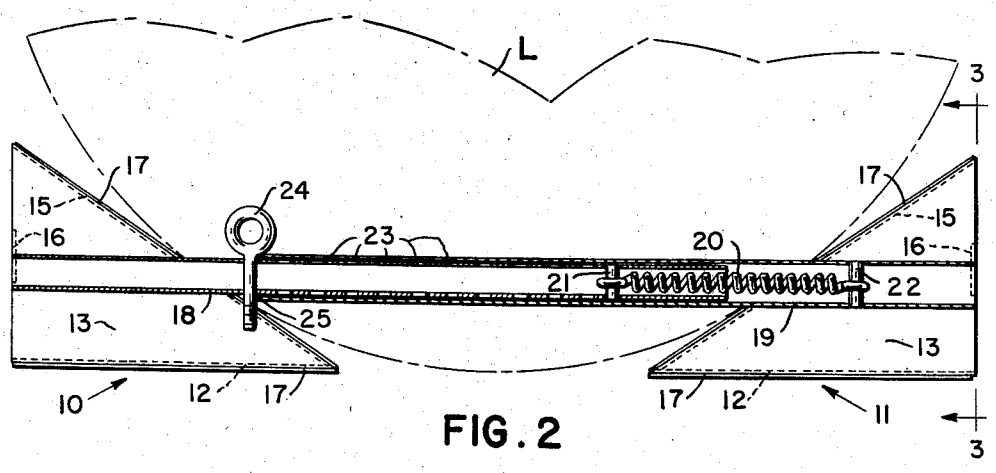


FIG. 2

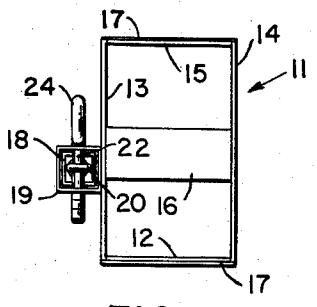


FIG. 3

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CHOCK BLOCK

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2 Claims. (Cl. 188—32)

The present invention relates to choke blocks, and particularly to a new and improved chock block designed especially for use on metallic floored carriers.

In recent years, common freight carriers have been provided with metal floors to which it is impossible to nail wedges as was customarily the practice when it was desired to provide a chock block arrangement to prevent movement of rolling loads in transit.

While different types of chock block constructions have been suggested which do not require nailing to the floor of the carrier, they leave much to be desired in the way of efficiency and dependability of operation. For example, it often occurs in transporting rolling loads that unevenness in the roadbed causes bouncing of the load. With prior-known chock block arrangements, the blocks themselves have a tendency to move together when the bouncing load is up off the floor of the transport. This causes the chock blocks to creep together and the gradual raising of the rolling load to a point where, when the blocks move into contact with each other, the chock block arrangement is no longer effective. This results in the rolling load no longer remaining in its intended position, often causing damage to itself as well as to other objects on the transport floor, or even rolling off the transport if no side walls are provided to prevent it.

The principal object of this invention is to provide a chock block construction that will overcome the deficiencies of prior-known chock blocks designed for repeated use with freight carriers.

Other objects of the invention include the provision of a chock block arrangement in which the distance between the blocks can be readily adjusted to effectively serve varying diameter rolling loads; the provision of such a chock block arrangement wherein the blocks are resiliently urged toward each other to remain in snug engagement with the periphery of the rolling load being transported; the provision of such a chock block arrangement wherein during the bouncing of the transported load, the blocks remain the adjusted distance apart and do not creep toward each other; and the provision of such a chock block construction wherein the floor-engaging surfaces of the blocks are at all times maintained in a single plane.

The above, as well as other objects and novel features of the invention will become apparent from the following specification and accompanying drawings, in which:

Figure 1 is a top plan view of a chock block construction to which the principles of the invention have been applied;

Fig. 2 is a sectional elevational view taken substantially along line 2—2 of Fig. 1; and

Fig. 3 is an end view looking in the direction of the arrows and along line 3—3 of Fig. 2.

Referring to the drawings, the principles of the invention are shown as applied to a chock block arrangement including two identical wedge-shaped constructions

10 and 11. Each of the wedge-shaped constructions is shown as made up of a sheet metal weldment including a base plate 12 welded to two vertically-disposed side plates 13 and 14 of triangular form. A load-engaging plate 15 is welded to the inclined edges of the vertical side plates 13 and 14, and a reinforcing strap 16 is welded to each side plate at its end adjacent the altitude of the triangle formed by said side plates, thus completing a rigid triangular box-shaped wedge.

In order to provide friction-developing surfaces on the bottom plates 12 and the inclined load-engaging plates 15, a thin layer 17 of corrugated rubber or the like is intimately and permanently attached to these plates.

The primary reason for nailing chock blocks to the bed of a carrier was to maintain them in fixed relation relatively to each other under all conditions and circumstances encountered in transporting the rolling load. In the present embodiment of the invention, adjusted relation between the opposed wedges 10 and 11 of the chock block arrangement is maintained by employing a pair of telescoping tubular members 18 and 19. These telescoping members are of a non-circular cross-sectional construction for a purpose to be described later, and in the embodiment shown take the form of rectangular or square cross-sectional tubular members of such dimensions that the member 18 is telescopingly received within the member 19.

A spring 20 has its one end attached to a pin 21 anchored in and extending across the opening within the tubular member 18, while the other end of spring 20 is connected to a pin 22 that is anchored in and extends across the opening within the tubular member 19. The location of the pins 21 and 22 is such that when the wedges 10 and 11 are at their nearest location to each other for the minimum diameter rolling load to be accommodated, the spring 20 will still act to urge the wedges 10 and 11 into engagement with the periphery of the rolling load.

In order to maintain the spacing of the wedges 10 and 11 even when the rolling load bounces clear of its engagement with the wedges, means is provided in the present invention including a plurality of spaced holes 23 only within the inner tubular member 18, through which an abutment pin 24 is adapted to pass.

In operation, the wedges 10 and 11 are separated against the action of spring 20 a distance sufficient to accommodate the diameter of the particular rolling load in question, and the pin 24 is passed through an exposed hole 23 nearest the end 25 of the tubular member 19. Accordingly, the spring 20 maintains this abutting relationship at all times while the frictional layer 17 acts to prevent relative movement between the carrier bed, the wedges 10, 11; and between the load L and the inclined plates 15. Furthermore, the non-circular cross-sectional construction of the telescoping tubular members 18 and 19 prevents any relative angular motion between the wedges 10 and 11, thereby maintaining their floor-engaging plates 12 at all times in a single plane.

Although the various features of the new and improved chock block have been shown and described in detail to fully disclose one embodiment of the invention, it will be evident that numerous changes may be made in such details, and certain features may be used without others without departing from the principles of the invention.

What is claimed is:

1. In a chock block construction having a pair of oppositely-disposed wedges, a tubular member of non-circular cross-section integrally connected to one side wall of each wedge, the non-circular cross-sectional con-

struction of said members being such that the one is adapted to telescope within the other; a tension spring within said telescoping members and having its opposite ends connected to separate of said telescoping members; a plurality of axially-spaced holes extending through the inner telescoping member; and a pin adapted to be inserted within any of said holes thereby to cooperate with the one end of the outer tubular member and limit the extent to which said spring moves said wedges toward each other.

2. The chock block construction of claim 1, and a layer of friction-producing material on the bottom and inclined surfaces of said wedges.

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