

C. H. HEIDEL.
SHUTTLE PROTECTOR.
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1,048,070.

Patented Dec. 24, 1912.

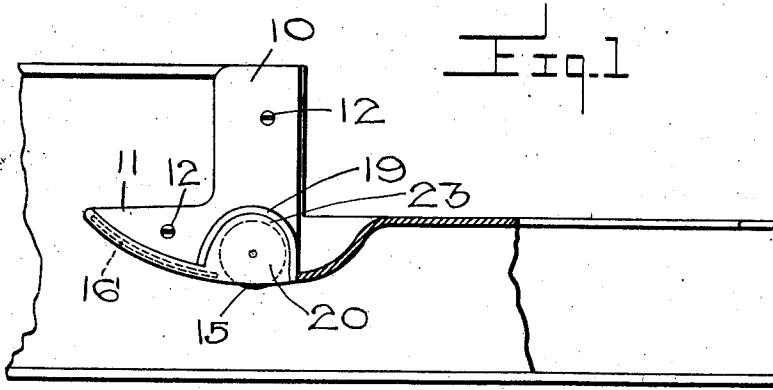


Fig. 2

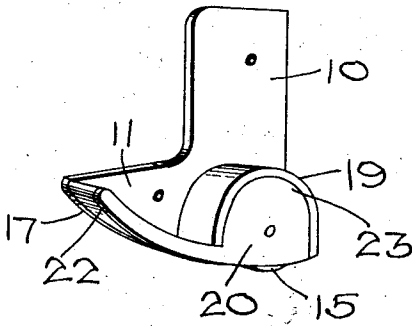


Fig. 3

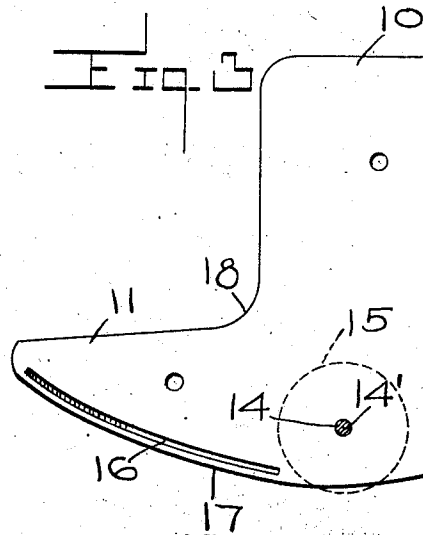
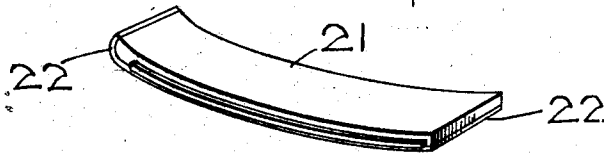


Fig. 4



Inventor

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Witnesses

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UNITED STATES PATENT OFFICE

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SHUTTLE-PROTECTOR.

1,048,070.

Specification of Letters Patent. Patented Dec. 24, 1912.

Application filed November 23, 1910. Serial No. 594,638.

To all whom it may concern:

Be it known that I, CHARLES H. HEIDEL, a citizen of the United States, residing at Bethlehem, in the county of Northampton and State of Pennsylvania, have invented certain new and useful Improvements in Shuttle-Protectors, of which the following is a specification.

This invention relates to an improvement in shuttle protectors, the object of said invention being to provide a shuttle box with a resilient shoe which will form an effectual buffer.

A further object is to so position and arrange the buffing members that the same may be readily replaced should they become worn.

Other objects and advantages will be apparent from the following description, and it will be understood that changes in the specific structure shown and described may be made within the scope of the claim without departing from the spirit of the invention.

In the drawings: Figure 1 is a sectional view of a shuttle box with the buffing member in position, Fig. 2 is a perspective view of the member removed, Fig. 3 is a detail view of the supporting bracket, Fig. 4 is a detail view of the detachable wear plate.

In the drawings, 10 designates the bracket which is provided with a shoe portion 11, said bracket being secured to the loom box by means of screws 12. The shoe 11 is provided with an aperture 14 to receive the trunnion 14' of a roller 15 which is formed of rubber or other resilient material. The shoe is also provided with a slot 16 which follows the curved portion 17 of the shoe and which terminates in a line with the angle 18 of the bracket at a point adjacent a curved housing 19 which is secured to the bracket and to the edge portion of a plate 20 which is substantially of the same configuration as the lower edge of the shoe. This plate supports the resilient roller 15 in the same manner as does the bracket, the plate 20 is also provided with a slot 16' which is in alinement with the slot 16.

These slots are adapted to accommodate the curved wear plate 21 which may be covered with rubber or other resilient material 22. It will be noted that this wear plate may be readily replaced should the same become damaged or worn. The housing is secured to the portion 23 of the plate 20 in such a manner that said plate may be readily detached in order to position the roller 15.

The many advantages of a construction of this sort may be clearly apparent as the same forms an effective cushion which will prevent injury to both the box and the shuttle. It will also be noted that the wear plate which is in the nature of a resilient deflector, will act as a guide for the shuttle, the resilient roller preventing the shuttle from leaving the box until the picker stick is actuated. It will also be noted that the various parts may be readily assembled, the entire structure being one which may be manufactured economically.

What is claimed is:

A shuttle protector, comprising a bracket having an elongated shoe portion with a curved lower end, a housing secured to and laterally projecting from the bracket and the shoe portion thereof, a plate having a portion curved to correspond to the curvature of the bottom of the shoe and having an enlargement fitting within and secured to the outer portion of the housing, a trunnion having its ends secured in the bracket and plate, a roller mounted upon its intermediate portion, said roller projecting slightly from the edge of the shoe and plate, the curved portions of the shoe and plate having slots formed in their inner faces, and a resiliently coated wear plate having laterally projecting uncoated portions fitting into the slots of the shoe and plate and removably held in position by its engagement in the said slots.

In testimony whereof I affix my signature, in the presence of two witnesses.

CHARLES H. HEIDEL.

Witnesses:

JOS. F. METZGER,
HOWARD E. MOHN.