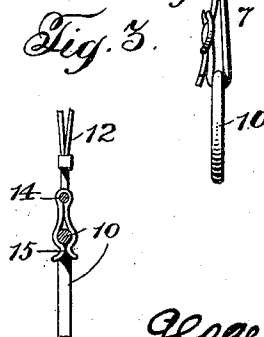
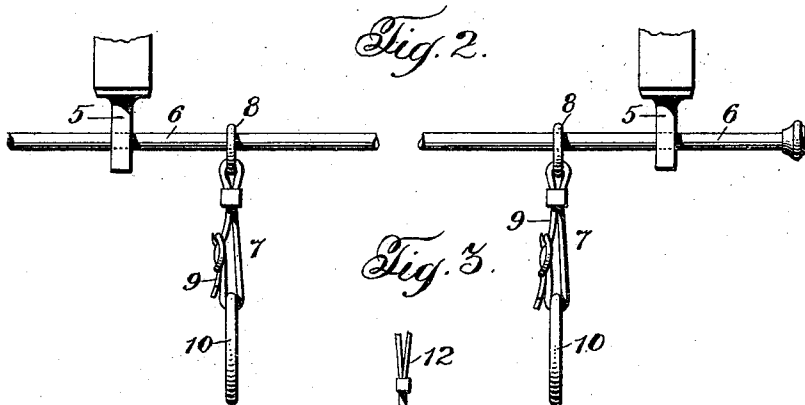
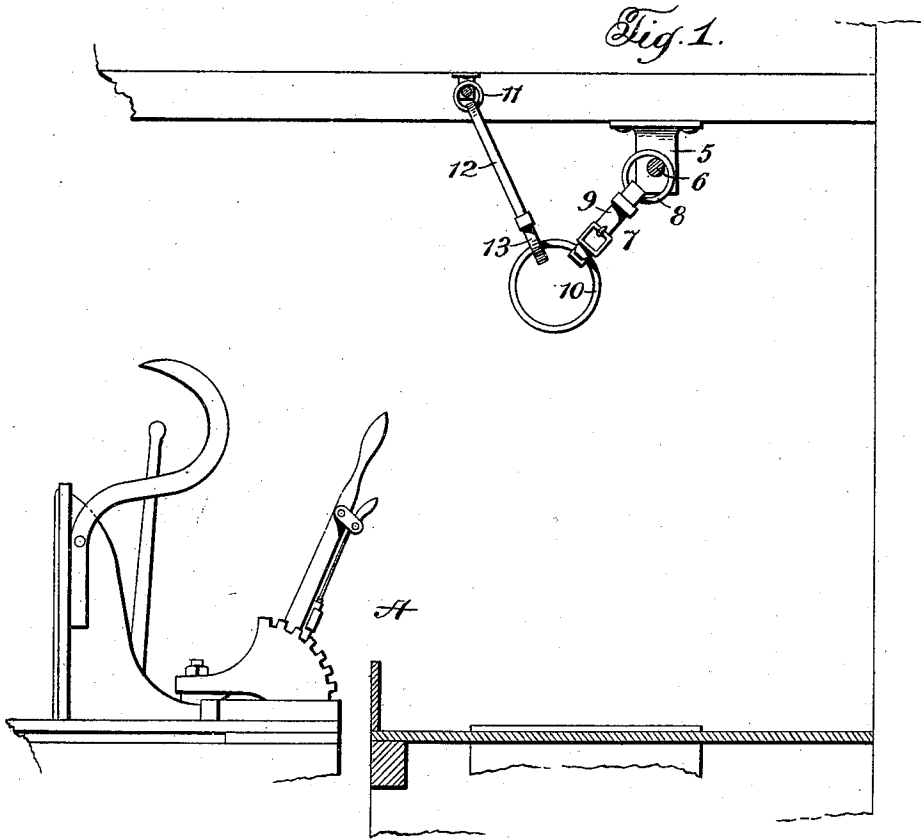


G. W. MARKLE.
SAFETY DEVICE.
APPLICATION FILED AUG. 24, 1909.

979,978.

Patented Dec. 27, 1910.



Witnesses:

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UNITED STATES PATENT OFFICE.

GEORGE W. MARKLE, OF CLOQUET, MINNESOTA.

SAFETY DEVICE.

979,978.

Specification of Letters Patent.

Patented Dec. 27, 1910.

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To all whom it may concern:

Be it known that I, GEORGE W. MARKLE, a citizen of the United States, residing at Cloquet, in the county of Carlton and State of Minnesota, have invented a certain new and useful Safety Device, of which the following is a specification.

In many saw-mills, the carriage is controlled by a sawyer by means of a lever, the sawyer standing near the saw, and one or more riders stand on the carriage to direct its work. Occasionally, the carriage is permitted to race because of some defect in the machinery or a premature release of the controlling-lever by the sawyer. The carriage travels at considerable speed, and, when control of its movement is lost, damage is likely to result to the equipment, and also to the carriage-riders unless they are able to quickly get off the carriage and out of the way of its movements.

This invention is a device intended to be arranged in proximity to saw-mill carriages or other movable parts of machinery upon which operators stand, in order to enable them to quickly swing free from dangerous positions in case of accident. For this purpose, a carrying-rod or runner is suspended over or about over the place of limit of the normal outward movement of the carriage, and at suitable intervals along this rod are suspended hangers of such construction that the riders are enabled to conveniently and quickly grasp them and swing to a safe place on the ground or floor.

The invention also contemplates the provision of effective means for releasably holding the free ends of the hangers nearer to position over the operators than the carrying-rod, whereby they are more easily grasped. The weight of an operator grasping a hanger will release it from its holding device and will cause a swing under and beyond the carrying-rod, when the operator can easily alight to a safe position.

While the embodiment of the invention shown in the drawings is preferred, as it has given satisfactory and reliable results in practice, it is to be understood that the parts may be otherwise organized and arranged without in the least departing from the nature and spirit of the invention, and that the invention is not limited to the precise construction and arrangement herein shown and described.

When read in connection with the descrip-

tion herein, the details of construction and arrangement of parts contemplated by this invention will be apparent from the accompanying drawings, forming part hereof, wherein an embodiment of the invention is disclosed, for purposes of illustration.

Like reference-characters refer to corresponding parts in the several views of the drawings, of which—

Figure 1 is a view of the device associated with a saw-mill carriage; Fig. 2 is an enlarged view of a portion of a carrying-rod and hangers thereon; Fig. 3 is a view of a holding-clip.

Referring more particularly to the drawings, A designates a saw-mill or other machine upon a movable part of which one or more operators stand while the machine is in operation. To the joists of the building in which such a machine is housed, or to any other suitable supports, are attached brackets 5. A rod or runner 6 is carried by these brackets. The rod may be continuous throughout the length of the machine with which it is associated, or it may be made in sections of suitable length. The rod is disposed usually parallel to the path of travel of the part of the machine upon which men stand and a little beyond the outer limit of movement of that part. Hangers 7 are arranged at suitable intervals along the rod and depend therefrom to a position sufficiently low for them to be reached by a person on the movable part of the machine. Each hanger is preferably formed of a metal ring 8 encircling the carrying-rod and from which is suspended a strap, chain, or other suitable member 9. On the lower or free end of this member is a ring 10 of a size sufficiently large to enable it to be grasped by both hands of a person. The hangers are capable of freely swinging toward and from the machine and also of sliding on the carrying-rod.

In order to hold the rings 10 out of their centers of gravity toward the machine in a position to enable them to be conveniently grasped by an operator and from which position the weight of the operator will swing under the center of gravity in the carrying-rod and beyond the rod to a place of safety, means are provided for normally holding the hand-rings nearer the machine than the rod. For this purpose, an auxiliary rod 11 is suspended parallel with rod 6 and nearer to position over the machine. From this rod

are depended straps 12 having on their free ends clips 13 which engage rings 10 and releasably hold them swung toward the machine. Each clip is formed of spring material, bent at or near the middle to form an opening 14 for attachment of the strap thereto and with ends brought nearly together, as shown at 15, and then bent outwardly to facilitate insertion of a ring between the two portions and into position between outwardly-curved parts 16 thereof.

From the above description, it will be apparent that, when an operator wishes to quickly leave the machine to avoid danger or for any other purpose, he grasps and hangs onto one of the rings 10. His weight will pull the ring loose from its holding-clip 13 and cause him to swing on the hanger under the carrying-rod and beyond to a place of safety, whence he may drop to the ground or floor before commencement of the return swing of the hanger. It will also be obvious that, if the movement of an operator in grasping a hand-ring is in a direction otherwise than at right angles to the

carrying-rod, the hanger will slide along the rod while the swing thereunder is occurring, thus removing the operator toward the side as well as directly away from the machine.

Having thus described my invention, what I claim as new, and desire to secure by Letters Patent, is—

A safety device comprising a fixed support; a freely-swingable hanger thereon comprising a ring encircling and slidable on said fixed support, a link attached to said ring, and a hand-ring on the free end of said link; an auxiliary fixed support and a link depending from said auxiliary support; and a clip on said link arranged to releasably engage said hanger and hold the free end thereof to one side of said fixed support.

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

GEORGE W. MARKLE.

Witnesses:

PETER MOODY,
J. A. FESENBECK.