F. SIMON.

ROPE JOCKEY.

APPLICATION FILED MAR. 1, 1910.

962,475. Patented June 28, 1910.

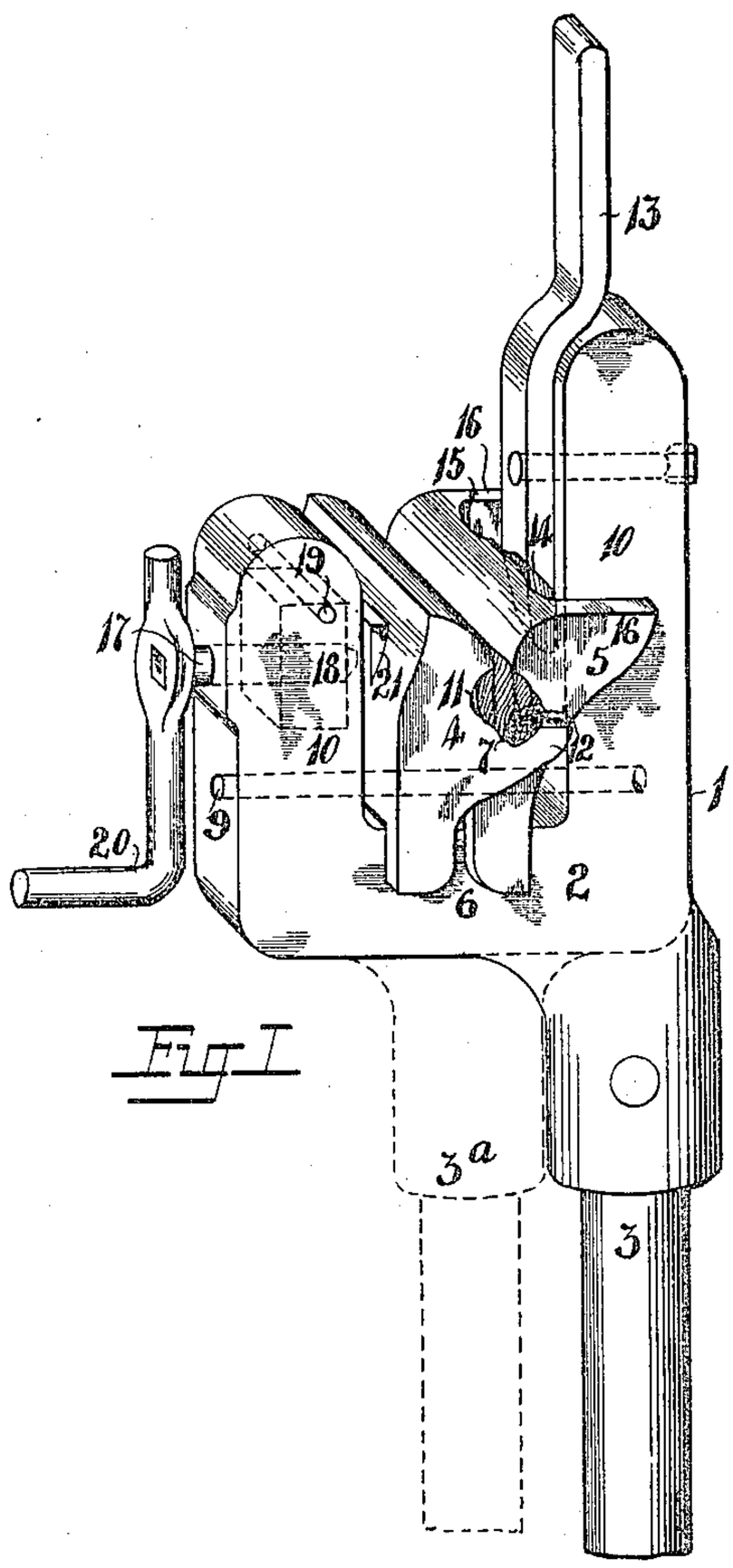

Fig I

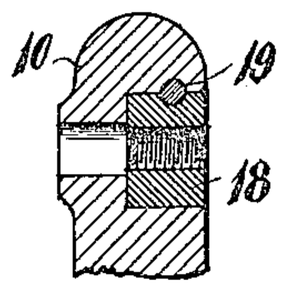

Fig II

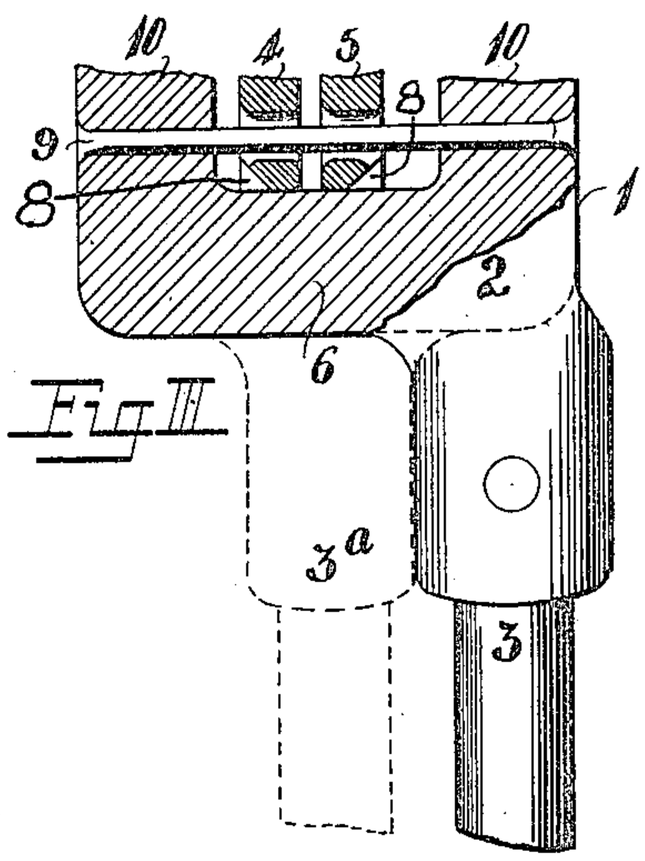

Fig III

WITNESSES.,

W. A. Berrigan.

Alfred R. Anderson

INVENTOR,

FRANK SIMON,

by Evans Adamson

Attorney

UNITED STATES PATENT OFFICE.

FRANK SIMON, OF MINNAAR, TRANSVAAL.

ROPE-JOCKEY.

962,475. Specification of Letters Patent. **Patented June 28, 1910.**

Application filed March 1, 1910. Serial No. 546,726.

To all whom it may concern:

Be it known that I, FRANK SIMON, mining engineer, a British subject, residing at the Tweefontein Collieries Limited, Minnaar, Transvaal, have invented new and useful Improvements in Rope-Jockeys, of which the following is a specification.

The present invention relates to jockeys such as are mounted upon trucks in a mechanical haulage system for attaching said trucks to the hauling rope. It is of the type in which there is a pair of jaws between which the rope is gripped and an outstanding rotatable lever controlling one of the jaws, by turning which lever the rope is at once released.

The invention consists of an improved rope jockey comprising a forked frame, a pair of loose jaws mounted between the forks of the frame and adapted to receive the rope from above, an upstanding rotatable releasing lever adapted to be passed behind one of the jaws to support the same and means such as a screw engaging the second jaw to force it toward the first named jaw.

It also comprises various detail improvements as hereafter set forth.

In the accompanying drawings which illustrate the invention, Figure I is a perspective view of the device, and Figs. II and III sectional detail views.

1 represents a suitable frame which consists of a fork 2 mounted upon a spindle 3 which is adapted to be dropped into sockets provided for that purpose upon the truck. The loose gripping jaws 4 and 5 are bifurcated at their lower ends to embrace the transverse member 6 of the frame closely, whereby they are adapted to resist the pull of the rope 7. The surfaces 8 in contact with said member 6 are beveled off as shown in order to impart to the jaws a tendency to fall freely from the rope when released. A stay 9 is riveted between the two arms 10 of the frame to strengthen them against spreading and also passing loosely through the jaws 4 and 5 serves to lock them in place. In the adjacent faces of the jaws are formed grooves 11 for receiving the rope.

12 indicates a pair of lugs extending from the inner face of one of the jaws, for example jaw 4, to prevent the rope from slipping down between and fouling the jaws while it is being put into position or being released.

The rotatable lever 13 is so pivoted to one arm of the frame 1 that its lower end 14 can be swung in behind jaw 5. Said lower end may be beveled off at one or both sides and also at the extremity if desired, so as to facilitate its passing behind jaw 5; which latter may also be beveled off at its upper edge 15 as shown with the same object. 16 indicates stops which may conveniently be formed upon jaw 5 and which serve to prevent the long outstanding arm of the lever 13 from falling behind said jaw. In the opposite arm of the frame 1 a screw 17 is carried by means of a nut 18 which is detachably held in place, for example by a pin 19 seating partially in the arm and partially in the nut, and being lightly riveted over at the ends. Said screw is provided with a crank handle 20 or the like for turning, and it engages a lug 21 upon the jaw 4.

In use, before attaching a truck to the rope, the lever 13 is brought into an upright position behind jaw 5 to form a support therefor. The rope is then placed between the jaws and gripping effected by forcing in jaw 4 by means of screw 17. At the releasing point, lever 13 is turned down and disengaged from jaw 5 which thereupon falls back from the rope and causes the truck to be disengaged. Before again engaging the rope the screw 17 is run back to permit the lever 13 to be returned to its running position.

It is to be noted that the combination of the screw and the lever permits the latter to be carried always in the same running position, in spite of inequalities in the rope, which is an important advantage when release is effected automatically, as by contact with a trip bar.

When the frame 1 is carried upon a spindle 3 mounted for rotation upon the truck, as in the example described, and especially when the jockey is employed on a haulage of steep grade, said spindle is preferably eccentric with the frame as shown. In other cases, however, the spindle may be located centrally of the frame as indicated by the dotted lines 3^a in Fig. III; or again the frame may be rigidly secured to the truck.

When the thread of the nut 18 becomes so worn as to be unserviceable, said nut is taken out and replaced by a fresh one, thus obviating the provision of an entirely fresh frame or the expense of reforming the thread *in situ*.

I am aware that in screw grips for ropes

it is well known to employ a pair of jaws pivotally connected together at one end and adapted to embrace a rope at the other end, these jaws being held together about the rope by means of a stirrup between which and one of the jaws a wedge is inserted, the other jaw being hinged intermediate of its length and having an arm between which and the portion of the jaw above the hinge, a pivoted lever or pawl may be wedged; this grip is opened as soon as the pivoted lever is lifted. I wish it to be understood that I make no claim to such arrangement.

What I claim, and desire to secure by Letters Patent is:—

1. A rope jockey consisting of a forked frame, a pair of loose jaws mounted between the forks of the frame and adapted to receive the rope from above, an upstanding rotatable releasing lever adapted to be passed behind one of the jaws to support the same and means engaging the second jaw to force it toward the first named jaw.

2. A rope jockey consisting of a forked frame, a pair of loose jaws mounted between the forks of the frame and adapted to receive the rope from above, an upstanding rotatable releasing lever adapted to be passed behind one of the jaws to support the same, and a crank handled screw seating in the frame and engaging the second jaw to force it toward the first named jaw.

3. In a rope jockey, the combination of a frame, a pair of loose jaws mounted thereon and adapted to receive the rope from above, one of said jaws being formed with lugs directed toward the other jaw to prevent the rope from falling out of place between them, and devices for operating the jaws to secure and release the rope.

4. In a rope jockey, the combination of a frame, a pair of loose jaws mounted thereon and adapted to receive the rope from above, an upstanding rotatable releasing lever adapted to be passed behind one of the jaws to support the same, means upon said jaw to limit movement of the releasing lever in the releasing direction, and a forcing means for the other jaw.

5. In a rope jockey, the combination of a forked frame, a pair of loose jaws mounted between the forks thereof, said jaws being formed with bifurcated feet engaging the transverse part of the forked frame to resist the pull of the rope, and devices for operating the jaws to secure and release the rope.

6. In a rope jockey, the combination of a forked frame, a pair of loose jaws mounted between the forks thereof and adapted to receive the rope from above, their lower edges resting upon the transverse member of the frame and being beveled to cause said jaws to fall freely from the rope when released, and devices for operating the jaws to secure and release the rope.

7. In a rope jockey, the combination of a frame, a pair of jaws loosely mounted thereon, a screw acting on one of said jaws to force it toward the other jaw, and a nut through which said screw works, and which is detachably secured to the frame.

8. A rope jockey comprising a frame, loose jaws mounted thereon, means for forcing said jaws together to grip the haulage rope, said frame being carried by an eccentrically positioned spindle adapted to be rotatably held in sockets on the truck.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

FRANK SIMON.

Witnesses:
LILIAN F. HELLIER,
J. W. VENNING.