

923,487.

P. BUHL.
SKID,
APPLICATION FILED OCT. 5, 1908.

Patented June 1, 1909.

Fig. 1.

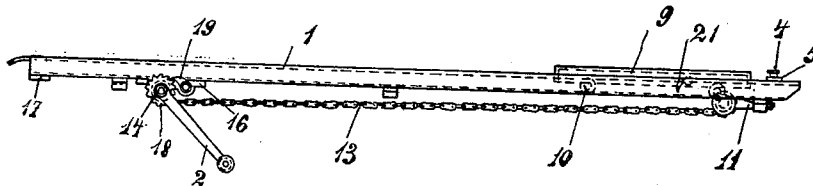


Fig. 2.

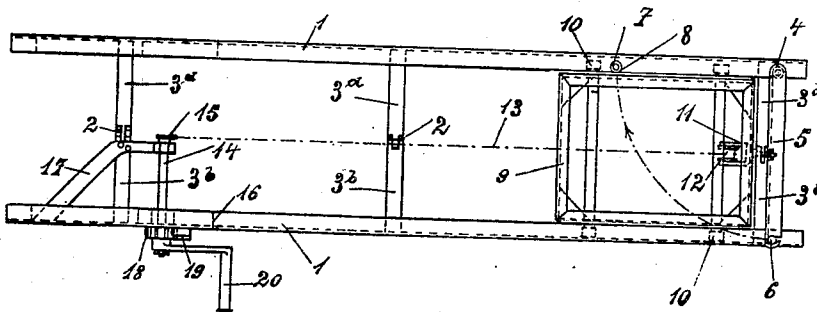


Fig. 3.

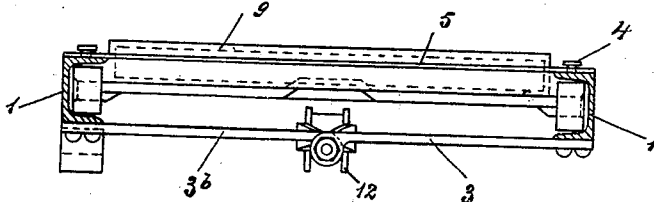
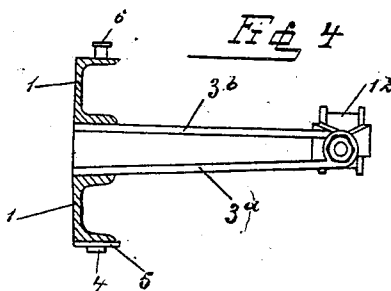


Fig. 4.



Witnesses:
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per
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UNITED STATES PATENT OFFICE.

PAUL BUHL, OF LUBECK, GERMANY.

SKID.

No. 923,487.

Specification of Letters Patent.

Patented June 1, 1909.

Application filed October 5, 1908. Serial No. 456,251.

To all whom it may concern:

Be it known that I, PAUL BUHL, a subject of the German Emperor, and resident of Lubeck, Germany, have invented an Improvement in Skids, of which the following is a specification.

The subject of the present invention relates to improvements in skids which can be used either horizontally or vertically, and are provided with an easily detachable slid or carriage.

Another advantage is that the skids can be folded together.

The accompanying drawing indicates a type of construction of the invention, in which,

Figure 1 is a side view. Fig. 2 is a plan on Fig. 1. Fig. 3 is a back view to a larger scale. Fig. 4 is a view of the skids folded together, with carriage removed.

The device consists of two pieces of U-iron (1), which form the runway and are connected by strips of iron (3^a and 3^b) hinged at (2) by which means it is made possible to fold the two pieces (1) together. At the back end of the U-iron, a connecting piece (5) is pivoted at (4). This connecting piece (5) engages by means of a slot with a bolt (6) fixed to the other U-iron, and serves to hold the skids open. This connecting piece, when the skids are to be folded together, is swung back to the point (7) and hooked onto the bolt (8). The carriage (9) consists of a frame constructed of U-iron, and mounted on four rollers (10), the latter being guided in the U-iron (1) in such a way that it is impossible for the carriage (9) to fall out, as the pulleys run in the channels of the U-iron. A fork (11) is firmly fixed to the lowest or rearmost hinge (3^a and 3^b), and carries a pulley (12), over which the endless chain (13) is guided. This chain is actuated by the chain wheel (15) on the axle (14). The chain wheel is mounted on the one hand in a support (16) on the U-iron (1), and also in an arm (17) which is also fixed to this U-iron (1). The axle (14) is fitted with ratchet wheel (18), pawl (19) and a crank (20). A hook (21) is fixed to the carriage and is put into engagement with the chain when it is desired to actuate the carriage. As soon as the carriage has been raised or moved forward, the hook (21) can be disengaged again and the carriage can be let down without turning back.

The advantage of this device over others

lies therein that one need no longer raise the pawl, as is necessary in other types. When using other kinds, it very often happens that the operator forgets to put the pawl in again and an accident is the result. Another advantage is that much time is saved by obviating the necessity for turning backward. The U-iron pieces (1) are hook shaped at their front end, so that the skids can be firmly attached to the wagon. When the skids are no longer required, the wagon is pushed out at the front end, the connecting strap (5) is swung around and the U-iron pieces (1) are folded together, (Fig. 4) and pushed under the truck. The slid or carriage can then be stored away on or under the latter.

Having fully described my invention, what I claim and desire to secure by Letters Patent is:—

1. Skids, comprising in combination, two U-iron pieces (1), iron bars (3^a and 3^b) connecting said U-irons, a connecting piece (5) pivoted to one of said pieces (1), a bolt (6) fixed to the second piece (1), said connecting piece (5) engaging by means of a slot with said bolt (6), a carriage (9), rollers (10) on which said carriage is mounted, said rollers running in the channels of said U-iron, a fork (11) fixed to the farthest of said hinges (3^a, 3^b) a pulley (12) in said fork, an endless chain (13) guided over said pulley, an axle (14) mounted in supports, a chain wheel (15) on said axle, over which said chain passes, a crank (20) on said axle for driving said chain wheel and chain, substantially as described and shown.

2. Skids, comprising in combination, two U-iron pieces (1) iron bars (3^a, 3^b) connecting said U-irons, said bars being hinged so that the two U-irons can be folded together, a connecting piece (5) pivoted to one of said pieces (1), a bolt (6) fixed to the second piece (1), said connecting piece (5) engaging by means of a slot with said bolt (6), a carriage (9), rollers (10) on which said carriage is mounted, said rollers running in the channels of said U-iron, a fork (11) fixed to the farthest of said hinges (3^a, 3^b) a pulley (12) in said fork, an endless chain (13) guided over said pulley, an axle (14) mounted in supports, a chain wheel (15) on said axle, over which said chain wheel passes, a crank (20) on said axle for driving said chain and chain wheel, substantially as described and shown.

3. Skids, comprising in combination, two

U-iron pieces (1) iron bars (3^a, 3^b) connecting
 said U-iron pieces, said bars being hinged so
 that the two U-irons can be folded together,
 a connecting piece (5) pivoted to one of said
 5 pieces (1), a bolt (6) fixed to the second piece
 (1) said connecting piece (5) engaging by
 means of a slot with said bolt (6), a carriage
 (9), rollers (10) on which said carriage is
 mounted, said rollers running in the chan-
 10 nels of the U-iron, a fork (11) fixed to the
 farthest of said hinges (3^a, 3^b) a pulley (12)
 in said fork, an endless chain (13) guided over
 said pulley, an axle (14) mounted in sup-
 ports, a chain wheel (15) on said axle, over
 15 which said chain wheel passes, a crank (20)
 on said axle for driving said chain wheel and
 chain, a hook (21) on said carriage which can
 be put into engagement with the moving
 chain whereby the carriage is moved, sub-
 20 stantially as described and shown.

4. Skids, comprising in combination, two
 U-iron pieces (1) iron bars (3^a, 3^b) connecting
 said U-iron pieces, said bars being hinged so
 that the two U-irons can be folded together,
 25 a connecting piece (5) pivoted to one of said
 pieces (1), a bolt (6) fixed to the second piece

(1) said connecting piece (5) engaging by
 means of a slot with said bolt (6), a carriage
 (9), rollers (10) on which said carriage is
 mounted, said rollers running in the chan- 30
 nels of the U-iron, a fork (11) fixed to the
 farthest of said hinges (3^a, 3^b) a pulley (12)
 in said fork, an endless chain (13) guided over
 said pulley, an axle (14) mounted in sup-
 ports, a chain wheel (15) on said axle, over 35
 which said chain wheel passes, a crank (20)
 on said carriage which can be put into engage-
 ment with the moving chain where by the
 carriage is moved, a ratchet wheel (18) on
 said shaft (14), a pawl (19) on said wheel, by 40
 which means the necessity of turning the
 crank backward is obviated, substantially as
 described and shown, and for the purpose set
 forth.

In testimony whereof I have hereunto set 45
 my hand in the presence of two subscribing
 witnesses.

PAUL BUHL.

Witnesses:

JOHN WULF,
 JACOB BICYELDS.