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STAND LATCH FOR MOTOR CYCLES.
APPLICATION FILED NOV. 1, 1912.

1,062,003.

Patented May 20, 1913.

Fig. 1.

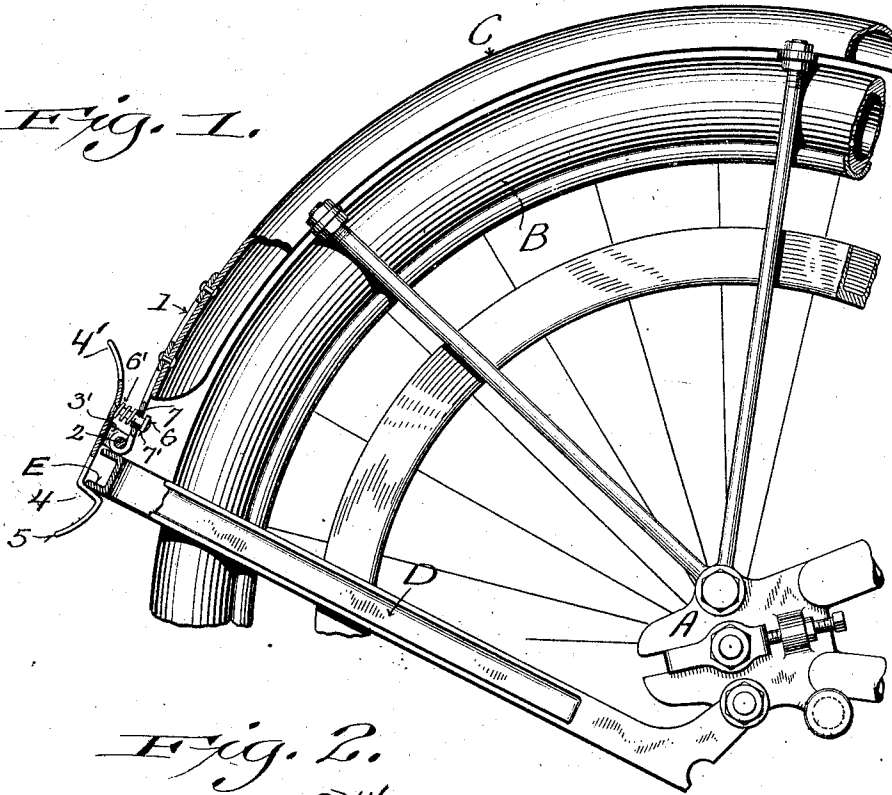
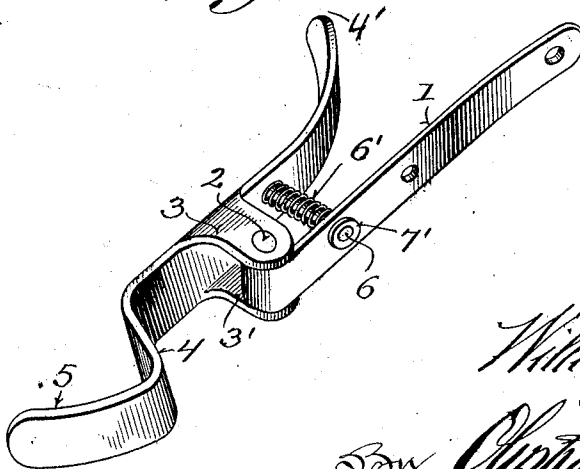


Fig. 2.



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UNITED STATES PATENT OFFICE.

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STAND-LATCH FOR MOTOR-CYCLES.

1,062,003.

Specification of Letters Patent.

Patented May 20, 1913.

Application filed November 1, 1912. Serial No. 729,050.

To all whom it may concern:

Be it known that I, WILLIAM S. HARLEY, a citizen of the United States, and resident of Milwaukee, in the county of Milwaukee and State of Wisconsin, have invented certain new and useful Improvements in Stand-Latches for Motor-Cycles; and I do hereby declare that the following is a full, clear, and exact description thereof.

The object of my invention is to provide simple, economical and effective latching means for swinging motorcycle stands, the invention consisting in certain peculiarities of construction and combination of parts as set forth hereinafter with reference to the accompanying illustrations and subsequently claimed.

Heretofore latching means for stands of this general type embodied a dog or latch formed from a single piece of spring metal that was rigidly secured to the rear end of a mud-guard, the nose end of said dog being adapted to spring over the cross-bar of the stand. This type of latch with its depending nose required a manual lift upon the end thereof whereby spring of the metal is had to free the stand and hence as the nose is exposed more or less to mud and the like, the operation is both laborious, inconvenient and uncleanly, such operation requiring the individual to grasp the dog in the hand and lift the same.

My improved latching means is designed to be operated by a pressure of the foot or hand upon a tail of the latch which is more or less protected, the entire mechanism being designed to overcome all of the before mentioned objectionable features.

In the drawings Figure 1 represents a side elevation of a fragment of the rear portion of a motorcycle with parts broken away and parts in section to more clearly illustrate details of construction, the said fragment being provided with an ordinary type of stand and a latch embodying the features of my invention, the said stand being shown in its swung up and locked position, and Fig. 2, an enlarged detail perspective view of the latch detached.

Referring by characters to the drawings, A represents an axle-head that is connected to the rear fork members of a motorcycle frame, B the rear drive wheel of such machine, and C the mud-guard, which mud-guard is supported by spokes which are suitably connected to the axle-head. Piv-

oted to the head A are the legs D of a stand, which legs are connected by a cross-bar E, all of said parts being of ordinary construction.

Riveted or otherwise secured to the lower end of the mud-guard is a stiff leaf member 1 that is turned at its projecting lower end to form a journal for a pintle 2, the said journal also serving as a stop for the cross-bar E of the stand when the same is swung up to its carrying position. A latch 3 is provided having downturned apertured ears 3' that straddle the journal of the leaf member and are connected thereto by the pintle, the backbone of said latch being extended rearwardly of the pintle to form an upwardly curved tail-piece 4', whereby said latch is actuated. The opposite end of the latch backbone is provided with a downturned obliquely disposed jaw-piece 4, whereby a throat is formed between the leaf journal and said jaw-piece with a wide mouth that is slightly contracted at its base to thus constitute a wedging seat for the stand cross-bar. The jaw-piece 4 in turn terminates with an upwardly curved nose 5, which nose in the operation of the device is engaged by the stand cross-bar when the latter is swung upwardly to thus lift the latch, enabling the cross-bar to enter its seat or throat, whereby a locking engagement is effected. The backbone of the latch has riveted or otherwise secured thereto a stud 6, which stud projects downwardly and through a slot 7 that is formed in the leaf member, the stud being provided with a head below said leaf-member to limit movement of the latch in one direction. Surrounding the stud and interposed between the tail end of the latch and leaf member is a coiled spring 6' that is arranged to hold the nose portion of said latch in its normal position of rest, this spring-control being opposed manually when it is desired to open the latch, that the stand may be released.

From the foregoing description it is apparent that the tail end of the latch is extended upwardly and more or less protected from mud or dirt that is thrown up by the wheel, as is also the spring connection which is interposed between said latch and leaf member. It is also apparent that the stand can be swung to its carrying position and automatically locked after it engages the nose portion of said latch and lifts the same so that its obliquely disposed jaw may

firmly grasp one edge of the stand cross-bar. Thus said cross-bar is securely locked between the jaw-piece and end journal of the leaf in such manner that the spring is free to apply constant pressure, whereby there is no liability of rattle of the stand due to vibration of the machine in its travel. It is also apparent that the latch can be opened either by pressing the tail portion thereof with the foot or hand, thus rendering the operation of releasing and locking the stand convenient and simple.

I claim:

1. In a motorcycle, its frame having a rear mud-guard, and a swinging stand; the combination of a latch for said stand comprising a rigid leaf member secured to and projecting beyond the lower end of the mud-guard, the leaf member being provided with a journal at its end, a pintle fitted within the journal, a latch having ears in engagement with said pintle, a stand engaging nose at one end of the latch having a jaw that in conjunction with the leaf-journal forms a stand-receiving throat, an actuating tail at the opposite end of the latch, and a spring interposed between said tail and leaf-member.

2. In a motorcycle, its frame having a mud-guard and swinging stand; the combination of a latch therefor comprising a leaf-member secured to and projecting beyond the lower end of the mud-guard, the leaf-member being provided with a journal at its end, a spring-controlled latch in pivotal

union with the journal having a tail portion extending in one direction, and a locking jaw extending in the opposite direction, the same in conjunction with the leaf-journal forming an engaging throat for the swinging stand.

3. In a motorcycle, its frame having a rear mud-guard and a swinging stand; the combination of a latch for the stand comprising an apertured leaf-member secured to and projecting beyond the lower end of the mud-guard, the leaf member being returned at its end to form a journal, a pintle fitted within the journal, a latch having ears engageable with the pintle, an actuating tail extending from one end of the latch, an obliquely disposed jaw-piece extending from the opposite end of the latch having a nose portion projecting therebeyond, a stud carried by the tail end of said latch and extending through the leaf aperture, a head upon the end of the stud arranged to engage the leaf-member to form a stop therefor, and a spring surrounding said stud interposed between the leaf and tail member of the aforesaid latch.

In testimony that I claim the foregoing I have hereunto set my hand at Milwaukee in the county of Milwaukee and State of Wisconsin in the presence of two witnesses.

WILLIAM S. HARLEY.

Witnesses:

E. J. MUELLER,
EDWIN F. CASPER.