C. KUDERER.

MOTOR CYCLE BACK REST.

APPLICATION FILED AUG. 22, 1917.

1,255,539. Patented Feb. 5, 1918.

Fig. 1.

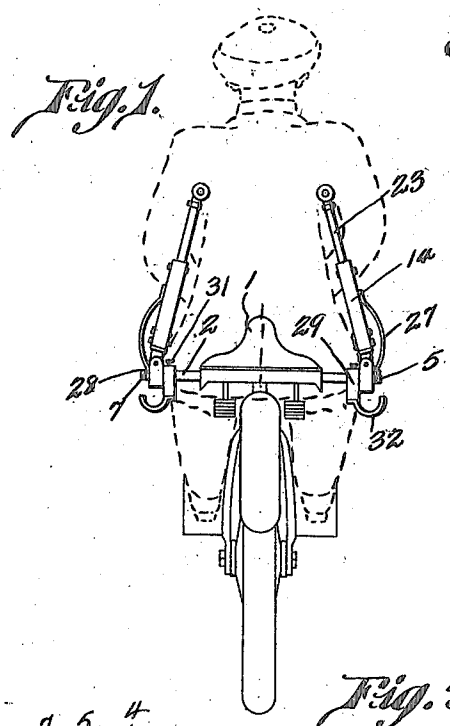


Fig. 6.

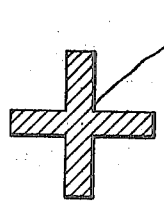


Fig. 2.

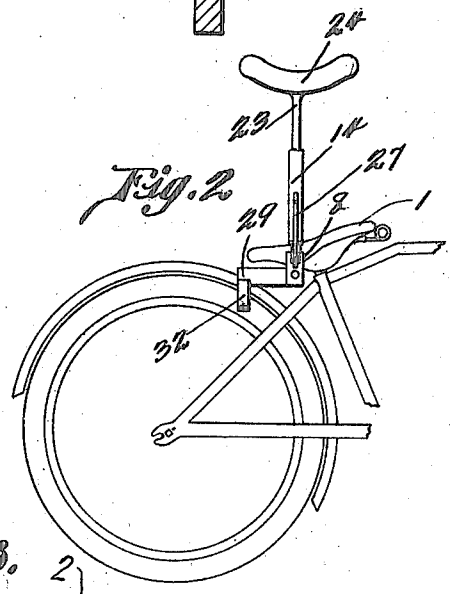


Fig. 3.

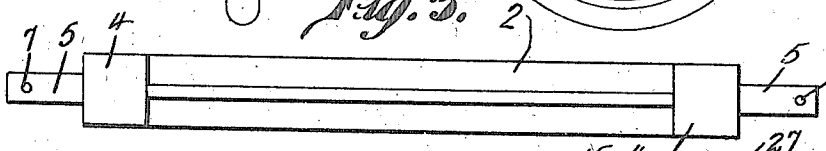


Fig. 4.

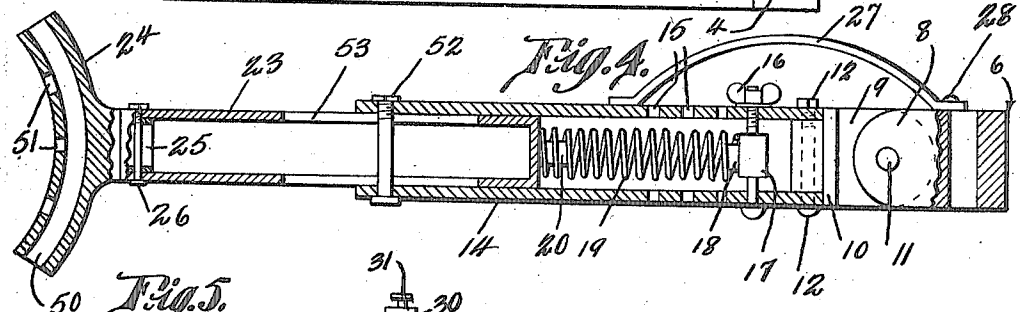
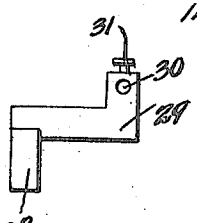


Fig. 5.



Witness

C. Kuderer

Inventor

by C. A. Snow & Co.

Attorneys

UNITED STATES PATENT OFFICE.

CHARLES KUDERER, OF PITTSBURGH, PENNSYLVANIA.

MOTOR-CYCLE BACK-REST.

1,255,539. Specification of Letters Patent. Patented Feb. 5, 1918.

Application filed August 22, 1917. Serial No. 187,684.

To all whom it may concern:

Be it known that I, CHARLES KUDERER, a citizen of the United States, residing at Pittsburgh, in the county of Allegheny and State of Pennsylvania, have invented a new and useful Motor-Cycle Back-Rest, of which the following is a specification.

The device forming the subject matter of this application is adapted to be applied to a cycle, to engage with the arm pits of the rider, thereby to take some of the weight off the spine.

The invention aims to provide novel means whereby the arm-engaging supports may be adjusted in length, whereby the arm-engaging supports may be permitted to have a longitudinal yielding movement, to provide novel means whereby the supports may be swung inwardly at their upper ends against the body of the wearer and be held in such position, and to provide novel means whereby the supports may be swung rearwardly into an out of the way position, when not in use.

It is within the province of the disclosure to improve generally and to enhance the utility of devices of that general type hereinafter described.

With the above and other objects in view which will appear as the description proceeds, the invention resides in the combination and arrangement of parts and in the details of construction hereinafter described and claimed, it being understood that changes in the precise embodiment of the invention herein disclosed can be made within the scope of what is claimed, without departing from the spirit of the invention.

In the accompanying drawings:—

Figure 1 shows in rear elevation, a cycle wherewith the device hereinafter described has been assembled;

Fig. 2 is a side elevation showing the invention applied to a cycle;

Fig. 3 is a plan of the base;

Fig. 4 is a longitudinal section of the support, parts appearing in elevation;

Fig. 5 is an elevation of the carrier;

Fig. 6 is a cross section of the base bar.

The numeral 1 denotes the seat of a motorcycle, bicycle or the like. Attached by any suitable means, (not shown), to the seat 1, is a base, in the form of a transverse bar 2 having circular heads 4 at its ends, there being spindles 5 projecting from the heads. Bearings 6 are mounted to rock on the spindles 5 parallel to the line of advance of the cycle, the bearings being held on the spindles by means of cotter pins 7 or the like. The bearings 6 have ears 8 between which are received fins 9 formed at the lower ends of blocks 10. Pivot elements 11 connect the fins 9 with the ears 8, the construction being such that the blocks 10 can rock on the pivot elements 11, transversely of the line of advance of the vehicle.

The blocks 10 are held by means of securing members 12 in the lower ends of outer tubes 14 having longitudinally spaced openings 15 adapted to receive a securing bolt 16 on which is mounted a block 17 having a boss 18 receiving the lower end of a compression spring 19 located in the outer tube 14.

Inner tubes 23 are mounted to move longitudinally in the outer tubes 14. The inner tubes 23 are prevented from rotating in the outer tubes 14 by means of bolts 52 terminally mounted in the outer tubes and received in elongated slots 53 in the inner tubes. On the lower ends of the inner tubes 23 are mounted plugs or depending bosses 20 which receive the upper ends of the compression springs 19. The invention comprises crutches 24 adapted to be received in the arm pits of the rider, the crutches having reduced ends 25 received in the upper ends of the tubes 23 and held therein by securing elements 26. The crutches 24 have longitudinal passages 50 and openings 51 in the tops of the crutches communicate with the passages and afford ventilation.

The lower ends of springs 27 are attached as shown at 28 to the bearings 6, the upper ends of the springs 27 engaging the outer tubes 14.

The numeral 29 denotes holders having openings 30 receiving the heads 4 on the bar or base 3. Set screws 31 are threaded into the holders 29 and engage the heads 4. Hook-shaped brackets 32 are attached to the holders 29.

When the device is not in use, the supports, comprising the tubes 23 and 14 and parts carried thereby, are swung rearwardly until the tubes 14 are received in the brackets 32. In this way, the supports may be upheld in a rearwardly extended and out of the way position.

When it is desired to use the supports, the same are swung upwardly, the bearings 6 pivoting on the spindles 5. In this way, the

crutches 24 may be disposed in the arm pits of the rider. Since the supports can swing forwardly and rearwardly, parallel to the line of advance of the vehicle, the supports will conform readily to the movements of the body of the rider, in the direction stated. Further, since the parts 9 are pivoted to the ears 8 for movement in a direction transverse to the line of advance of the vehicle, lateral movements of the body of the rider will be taken care of. The springs 27, bearing against the tubes 14, serve to swing the upper ends of the tubes and the crutches 24 against the body of the wearer. The springs 19, obviously, support the tubes 23 and the crutches 24, for vertical movement, yieldingly. The supports, comprising the tubes 23 and 14, may be adjusted in length by seating the bolts 16, which support the lower ends of the springs 19, in various sets of the openings 15 in the tubes 14. The holders 29 may be swung on the heads 4 of the bar or base 3, and may be held in adjusted positions by tightening up the set screws 31. In this way, the brackets 32 may be adjusted vertically, and the positions of the supports, with respect to the vertical, may be adjusted, when the supports are swung rearwardly, and are upheld by the brackets 32, in a manner hereinbefore set forth.

Having thus described the invention, what is claimed is:—

1. In a device of the class described, a cycle including a seat; a substantially vertical support located at one side of the seat and provided at its upper end with means for engaging in the arm pit of a rider; and means for connecting the lower end of the support with the cycle in such relation to the seat that the support will occupy a substantially vertical position when in use, thereby to take part of the weight of the rider off of the seat.

2. In a device of the class described, a bar; means for connecting the bar with the seat of a cycle; and supports adapted to engage the arm pits of a rider, the supports being carried by the ends of the bar.

3. In a device of the class described, a bar; means for assembling the bar with the seat of a cycle; supports adapted to engage in the arm pits of a rider; and means for connecting the supports with the ends of the bar for swinging movement.

4. The combination with a cycle having a seat, of a pair of substantial vertical supports adapted to engage in the arm pits of the rider; means for assembling the supports with the cycle at a point directly below the seat for swinging movement in a direction parallel to the line of advance of the cycle; and means extended rearwardly with respect to the seat for upholding the supports, when the supports are swung rearwardly and downwardly with respect to the seat in a direction parallel to the line of advance of the cycle.

In testimony that I claim the foregoing as my own, I have hereto affixed my signature in the presence of two witnesses.

CHARLES KUDERER.

Witnesses:

W. HERBERT WALTER,

F. H. WALTER.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."