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ON POSE AND ACTION.

HOW NOT TO RIDE YOUR "BIKE."

This fellow is suffering from kyphosis bicyclistarum,

or cyclists' hump.

HERE are so many people that one sees riding badly that, although it is an old story, the proper way of riding cannot be told too often. It seems, indeed, a duty to preach it until its principles are followed universally, and I am afraid that that time is still a long way off. One sees fellows, and, for that matter, sometimes girls, too, riding along in all sorts of ridiculous and wasteful postures—wasteful in the sense that

the amount of energy expended in so riding is far in excess of what is needful in order to spin along at the same pace when working properly.

I will deal with the commonest fault first. It is, without question, that of bending down over the handles. Now, in racing, especially in unpaced racing, it may be conceded that there is some advantage in this. For here wind resistance is a very important factor, and the racing man may gain more than he loses by adopting what, under other circumstances,

would be a wholly incorrect posture. I have little doubt that the pictures published of racing men, as "snapped" while circling the track or making records on the road, have had much to do with the spread of the belief, especially among boys, that this stooping position is the best to adopt. You may take it from me, as an old hand, that it is absolutely and utterly wrong for all-round riding.

Your best analogy for cycling is to be found

in walking. I say this well knowing that there are writers on the subject who combat this view. I hold it, however, very strongly, and I think that, if it were possible to make a short definition of cycling, about the nearest phrase one could invent to meet the case would be that it is "walking by machinery." Now, in walking, the posture is almost, but not quite, erect. So it should be in cycling, although the slight forward lean in walking may be just fractionally

increased on the cycle, owing to the higher pace. In both exercises it is essential that limbs and muscles shall be so adjusted that they can be worked to the best advantage—that is to say, with most economy of the vital energies that drive them—and this cannot be done when some of the internal organs are cramped and others stretched ridiculously and unnecessarily.

How is it possible for the lungs to fill and empty themselves properly and with vigour if those organs are cramped up by a stoop-

ing back, while the principal muscle that does the breathing work is doubled and cramped in a similarly unnatural way? You have only to stand near some well-known hill in your own district to watch the results of this waste of energy. I have numberless times seen the scorcher—who, mind you, is often a strong man—compelled to dismount at hills which a comparatively frail girl has mastered easily. This was because she had a reserve of energy to draw upon when emergency called for it, whereas he had not. The heart, for example, may go on strike, and begin thumping against the ribs, if it is not given sufficient room to do its work in, and without a sound heart, in quiet working order, hill-climbing becomes a laborious, and even a dangerous, undertaking.

The hump-backed posture is productive of all kinds of evils. I have seen accidents innumerable arise from it. Only the other day I witnessed a bad collision that would not have occurred if the cyclist had been riding properly. He was, however, a member of what I will call the chin-and-elbow contingent. He was riding between tram-lines, and on his wrong side of the road, his face bent down and apparently intent upon the setts just in front of his wheel. He was rapidly approaching a tramcar. The driver shouted, brought his car to a standstill, and drew the horses aside ; but our youth went pell mell into them, and was about as badly hurt as he deserved to be.

But more serious things may happen to a rider who persists in adopting such an unnatural attitude. About eight years ago the Medical Press gave a great deal

of attention to this subject, and a learned doctor wrote in one journal to the effect that he had discovered a new disorder peculiar to cyclists. He named it "kyphosis bicyclistarum," which may be passed as good Latin for "cyclists' hump." There is no doubt that many cyclists have permanently injured themselves by cultivating this

absurd deformity. I have again and again noticed that fellows who have complained to me that they do not sleep well after a long ride are guilty of this crouching habit, which cannot fail to do harm to the spinal cord and brain. It is not as in the old days before pneumatic tyres, when sleeplessness was often brought about by excessive vibration on the road. It was then discovered that the use of tobacco was a remedy, and I dare say many hundreds of young fellows took to smoking in consequence. But there is no need for that now. Those who cycle properly will sleep better, and not worse, after a good ride.

Now there is another fault, although not such a bad one as stooping, which I will mention now that I have disposed of the worst one. I am sorry to say that it is a fault to which girls are particularly prone. And that is the fault of sitting bolt upright, or even of leaning a little backward. The mistake was originally to a large extent the fault of cycle builders, who thought more about fashion than about useful and scientific form. They designed the up-branching handles, to which, in themselves, I have no sort of objection. But the makers made them branch up too much, so that girls were forced into what was, at a very early period, dubbed the "begging poodle" attitude. A backward lean, under such circumstances, was in a certain sense Nature's protest, the girl having a sort of ill-defined desire to get more away from her work.

The remedy for this fault is very simple. The handles should be so adjusted that when the rider is seated erect they are just within easy reach of the outstretched arms. That is to say that, when the rider is erect, the arms will have to be quite straight in order to grasp the grips. With the body bent almost imper-

> ceptibly forward, as it should be, the arms will be just a fraction short of their full stretch, which, again, is exactly as they should be. The precise rule for adjusting depends upon certain personal measurements; but, roughly speaking, it will be found that the handles are only a triffe higher than the seat.

> The position of the seat will, of course, be determined by the reach of the rider. This is so important that at the risk of repetition I will briefly explain it again. The proper reach

is such that when the rider is comfortably seated, and the pedal at its furthest point from the saddle—that is, just before it has come round to its lowest position—the straightened leg can just touch the pedal-pin with the heel, there being at the time no shoe upon the foot. This rule, will, if followed, place the rider at the very best possible distance from the work, where the work can be done with the greatest ease and advantage, and where a comfortable pose and graceful action will be naturally assumed.

There will be no swaying from side to side a practice to be condemned as bad style on every count. There will be neither push nor pull upon the handles, but the hands will simply rest on them, leaving the machine to steer its own straight line as the result of evenly balanced pedalling. And this evenness can only be truly attained by the ankle action I have previously spoken of. The secret of attaining it lies in

THE "BEGGING POODLE" ATTITUDE.

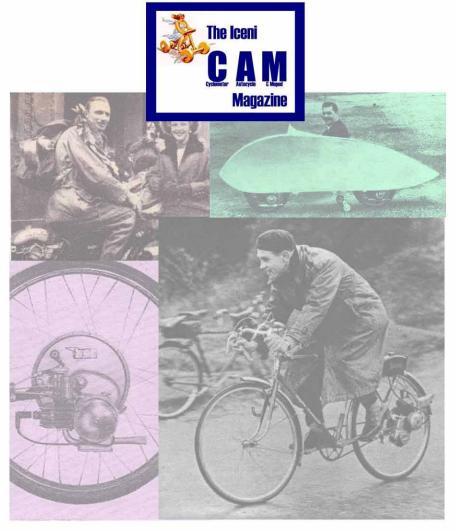
be. hay happen opting such eight years great deal striving to do as much as possible with the ankles, and as little as possible with the knees. When this art has been mastered the learner will discover that ankling has been slightly exaggerated, and that the most advantageous way of pedalling is to ply the ankles just a trifle less, and the knees just a trifle more. There is no exact rule about it, but the happy compromise will readily be found out in each individual case. When the art is once acquired the difference it makes is amazing. Up hills the labour seems to be halved, while running on the level, under ordinary circumstances, seems to be no work at all.

When the pose and action I have described have become instinctive, as they soon will, the rider who possesses them as his or her own, will have become one of the few whom it gives one real pleasure merely to see pass down a road. I know of nothing in all athletics that affords quite so charming a sight as the vision of a girl who really rides well, sits well, and is well dressed for the work. Her dress is neat, without too much hat or skirt, and it fits easily. Her head is erect, looking forward or about her, and she pedals gracefully along with lots of reserve energy with which to enjoy her There is about her then an surroundings. unconscious dignity-and mark that consciousness of it more than half destroys it-which carries with it a charm wherever she goes, and gives rise everywhere to the self-put question as to why some people look so-much better. on bicycles than others do. I wish all my readers of either sex the acquisition of this art of true style in riding. Some may possess it now, but I am convinced that the majority do not, or this article would never have been written. When those who do not have succeeded in acquiring it, as they so easily may, they will see the pastime that we love in a new light, and will derive from it a pleasure before undreamed of.

ANSWERS TO CORRESPONDENTS.

"Old Eccles" (EATON), "Timid" (UPPINGHAM), and others.—There is no tyre that gives immunity from side-slip. I like the Palmer, the Clincher, the Dunlop, and one or two other designs, as being instrumental in making it less likely to occur. But none of them will make it impossible. I have often heard riders say, after describing a bad fall, "And I had nonslipping tyres on, too." You cannot trust solely to the pattern of the tread, however good that may be. The only secret of avoiding side-slip is the keeping of the wheel in a plane, at right angles to the supporting surface. This means that you should pick out the flattest places in the road, and ride as good a straight line along them as you can. When making a curve, except at very slow paces, you perceptibly lean towards its centre, and that is why the wobbler is very liable to side-slip. It is also a reason why it is well to take the sloping part of the road-road makers call it the "haunch"-when going round corners, unless this, as in cases of side of the traffic. If the slope is right for you it acts as what the railway engineers call a cant, and so allows you, even when leaning over as you make the curve, to keep at right angles to the supporting surface-which is the only rule that will save you. Eva (LLANBERIS) .- The reason a bicycle in motion can be kept upright is not difficult to understand if you will think closely for a moment and try to follow me. It is true that it has puzzled many people besides yourself, and it is also true that many quite unsatisfactory (because incorrect) explanations of it have been given. Remember that every erect object tends to fall, and is only prevented from doing so so long as its centre of gravity remains in a vertical line directly over some part of the area of support. If you happen to know something of the structure of the human form, you know that our skeletons are clothed with an elaborate and beautiful system of muscles, designed with the object of maintaining the body in an erect posture. If you do not know this you may take it from me that it is so. We are never free from the tendency to fall, but by instinctively pulling the right muscle or set of muscles we are able to remain upright. That is, we are able to pull the centre of gravity of the body so that we can always keep it in such a position as to be directly over some part of the small area of support offered by the feet. Now for a moment I must ask you to consider the case of the tight-rope walker, which may at the first glance seem to you to have nothing to do with the question, but which is really a very good illustration. He commonly has a long pole which he carries in his hands crosswise as regards its relative position to the rope. The function of this pole is a very important one. The equilibrist is always falling either to the one side or the other, although he is clever enough to conceal that fact from you. The instant he feels himself falling to the right he makes a slight movement of the pole in a direction to his left, and so brings the centre of gravity of the "system," as it is called, of himself and the pole combined exactly over the line of the rope again. Note that he cannot alter the position of the rope, which is fixed at both ends. Remember that if he could, such alteration would do just as well, for he would then be able to move the rope to a position exactly under his centre of gravity-the only condition upon which his equilibrium really depends. The people who perform as wire walkers have precisely the same problem always before them. If they use no pole they must still be constantly correcting the ever present tendency to fall, and this they do by a movement of the arm, the hand, or even of a finger, shooting one out to the left, we will say, almost before they feel they are falling to the right. Now you may be surprised to know that in effect every cyclist is a rope walker. You must regard the rope as the sinuous track he makes along the road. But here note the difference. The cyclist carries no pole, nor does he by any motions of his body try to sway himself back from his incipient falls into a position such that his centre of gravity shall again be exactly over the rope. He simply moves the rope. That is, when he finds himself falling, we will say, to the right, he steers slightly to the right, thus bringing the line of his track, which I have likened to his rope, once more exactly under him. He is always falling, whether he knows it or not. That is why the learner wobbles so outrageously and sometimes actually and in fact does fall.

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