

SADDLES.

The fact that three prominent cyclists within our own knowledge are at the present time laid up from the effects of faulty saddles, and are forbidden to ride for months, must be our excuse for calling attention to the article which appeared in *The Lancet* of the 20th ult. (Oct.), on the evil effects likely to result to riders who neglect to study the apparently simple matter of a suitable saddle. Just as men vary in height so they do in width, and it is as ridiculous to expect the saddle which suits A to be equally good for B as to expect a six-foot man to exchange "continuations" with one whose stature is but five feet. It would, of course, be too expensive for most men to have a saddle specially made in each separate case when purchasing a machine, but that saddles should be obtainable of varying width we unhesitatingly assert. It will, perhaps, be best to reproduce the main points of Dr. Strahan's article, which has caused so much stir, before commenting further on the subject. The Doctor is assistant medical superintendent of the County Asylum, Northampton, and says:

"Cycling is doubtless a very healthy and pleasant mode of exercise when used in moderation, but now that tens of thousands of our boys ride bicycles daily, and 'get up records' of thousands of miles in the year, it may not be out of place to point out some alarming evils which are likely to arise from this abuse of an otherwise healthy pastime. Some time ago it was pointed out that obscure nervous complaints would probably be developed by the continual jarring: the succession of shocks conveyed to the spinal column in bicycle riding; and this, I believe, has proved correct in many instances, notwithstanding 'Arab springs' and 'rubber-cushioned' machines. But it is to something much more serious than this that I would now call attention: it is to the amount of pressure brought to bear upon the perineum in growing boys, affecting directly the prostate, etc., and indirectly the whole generative system.

"The bicycle saddle is now reduced to the smallest possible limit. It is just wide enough at its posterior part to cover the ischial tuberosities, and it tapers off quickly to a long, narrow horn in front, upon which the perineum rests. Let us consider the position of the body and limbs when the rider is mounted, and we can then appreciate the amount of body weight which must be thrown upon the perineum. In bicycle-riding, the legs are, when extended, vertical, and the pelvis is flexed upon the thighs or rolled forward. This rolling forward of the pelvis is slight in easy riding, and very marked in fast riding and hill-climbing. Now, when the body and pelvis are bent forward, the ischial tuberosities are raised from the saddle, and the whole weight of the body, save what is transmitted to the pedal by the then extending leg, is thrown upon the perineum. It is not much of the body's weight that is conveyed to the pedals. In easy riding on the level the weight of the limb from the hip down is sufficient to move the machine; and in hard riding the extra pressure is gained not so much by throwing the body's weight upon the pedals as by pulling upward on the handle-bar, and so further increasing the pressure of the body upon the saddle. But even admitting that the pressure upon the perineum be only a few pounds, I hold that it must be injurious in the extreme, for were the pressure *nil* when riding upon a perfectly plane surface, it must at times be considerable when the machine is ridden over an unequal surface such as is afforded by our best country roads. Let those who talk of 'the beautiful gliding motion of the bicycle' try to play a game of billiards after a ride of twenty miles, and then explain where all their 'shakiness' comes from if their motion has been that of the skater. Now, this pressure on the perineum, whether it be continuous and increased at every jolt, or whether it be made up of jolts alone and be *nil* in the almost

imperceptible and irregular intervals, must be injurious, more especially to growing boys."

The Doctor then goes on to refer to the evil results from excessive exercise in the saddle, as evidenced in the case of the Tartars, and the Indians of North America, and says:

"If, then, these sad results are the outcome of immoderate equitation where there are an extensive seat and a stable foot-rest, and where the abductor muscles of the thighs are used, what are we to look for, where our boys of ten and upwards spend the greater part of their own time riding bicycles, and get over thousands of miles in the year, perched upon a saddle no bigger than the hand which conveys every jolt of the machine to the body; where the jolts are ten times more numerous than those experienced by the equestrian, and, occurring without any approach to rhythm, are conveyed unexpectedly to the person?"

"Some time ago, Dr. B. W. Richardson, when advocating cycling as a healthy exercise, said, if I remember rightly, 'that what made cycling so healthful an exercise was that in it you enjoyed all the muscular motion experienced in walking, with this advantage, that the bodily weight was taken off the feet and legs.' This, of course, would be an advantage if the bodily weight were better bestowed than it naturally is upon the feet; but as it is on the bicycle, the transference of weight from the feet to the perineum cannot but be for the worse.

"It must be understood that what is said in this article applies particularly to growing boys, who generally straddle the largest machine their length of leg permits. What cycling—for the saddle with the long, upturned horn is now almost universally used for the tricycle, too—will do towards the advance of those prostatic affections, which so often render the closing years of life miserable, time alone will tell."

Like everything which a layman reads in a medical journal, the above is calculated to inspire fear in the timid, and a feeling very much approaching to it in those who study their present and future health; and if such an article were permitted to pass without comment, great harm might accrue to the progress of cycling. We do not propose, as some writers have done, to contest the accuracy of Dr. Strahan's views, because we feel perfectly certain, as a practical rider, that, although his premises are not quite correct in every detail, they are otherwise perfectly well founded. The danger, however, does not arise from the act of cycling, but solely from using an unsuitable saddle; and it is greatly aggravated in the case of men, on bicycles, by their using machines too high for them, or, as regards tricyclists, in a desire for too much verticality of action. In the first case, vanity is the cause, and in the latter, inexperience, or a want of a rudimentary knowledge of the human anatomy. Just as men drink themselves to death, despite the warnings given to them, so, we suppose, men will be found to ride on, utterly regardless of nature's laws. With these, of course, we cannot deal; they must be left to their fate. If, however, we, by this article, guide any rider in the right way, we shall be satisfied as having done our duty. Under a mistaken idea that ventilation is the first desideratum in a saddle, and that it can be found by simply cutting a hole in the leather, such an aperture is invariably found in all modern saddles. The old saddles, however, were quite as cool and, surgically, quite as badly constructed, but had no hole.

What is required is that a man should select a saddle of sufficient width to enable the ischial tuberosities, referred to by Dr. Strahan, *i.e.*, the

bone ends on which one sits on a seat or chair, to be also, when in the saddle, the supporters of the entire weight of the body, so far as it rests on the saddle. Let as much weight as possible be put on the pedals, and as much as is required on the handles, but let no other part except the tuberosities above named bear any material weight at any time. Having got a saddle of sufficient width, that these bones can rest thereon without touching the hard iron edges to which the leather is rivetted, the next point is to deal with the saddle itself. Take a knife, and cut the saddle straight up the centre from the ventilating hole above-mentioned to the peak, and then cut off as much leather on each side as will prevent any part whatever touching the perineum, which, of course, is the fibrous skip knitting the two legs together. If this be done, every precaution will have been taken, and, provided too high a bicycle be not used, or a tricycle saddle put too high up, there will be no danger of either temporary or permanent injury to the urinary or other organs. The proper height of a saddle above the pedals is best gauged by placing it just so high as will allow the hollow of the foot to touch at the lowest point to which the pedal can go. Then, if the machine be ridden by the ball of the foot, as it ought to be, there will be ample muscular power in the leg at all times to prevent undue pressure of the body on the saddle, a result which must follow if too high a span be used. Nothing is gained by raising the saddle so high that at the lowest point of the pedal the ball of the foot just touches it. On the contrary, it is exceedingly ungainly; and power is absolutely lost when the foot cannot follow, and, so to speak, claw the pedal right round. These remarks apply equally to bicycles and tricycles; and, with regard to the former, we may say that nothing looks more absurd than to see a man riding a machine too big for him. Everyone sees this except the man; and he may find out to his cost that for the very dubious honor of standing 4ft. 6in. and riding a 56 inch he may have to pay a penalty hereafter, which, as Dr. Strahan puts it, may render the closing years of his life miserable. Instead of trying to refute Dr. Strahan's sound reasoning, men should set themselves to the task of improving their saddles, and when they have got what suits them, let them keep their saddles or sell their machines. There is a great deal of wear in a saddle. We have had our present one, on bicycle and tricycle, for four or five years. It is one of Lamplugh & Brown's early "Tricycle Saddles," torn across the back, and not an atom too narrow for us. Some men, no doubt, could do with less. Many, tricyclists at least, require more. In the centre of this saddle is cut a large hole extending from the peak to where the aperture is generally found in ordinary saddles, and, while it holds us up in front just as well as any other, there is no undue pressure on any material part of the body. We can only advise all who study health—not to speak of comfort—to suit themselves in a like manner.—*The Wheel World*, London (Eng.).

OVERHEARD.—First crack: "Is the course coarse?" Second crack: "No, not coarse, but fine, of course." And the funeral obsequies of those two men were impressive from the earnestness of the mourners.