

Notes for Bicyclists.

ADVICE TO BICYCLISTS. — Rocheblave gives to bicyclists the following good advice from a medical standpoint: (1) No one should ride until after an examination by a physician. This examination should be made both before and after a walk or run, for some cardiac lesions only manifest themselves after a state of fatigue. (2) Ride no faster than twelve kilometers an hour. (3) As far as possible, guard against the desire to ride any faster. It is very difficult not to give way to the "delirium of swiftness." With a light machine on a good road an amateur may easily make twenty-five kilometers an hour. This is too much, for the pulse is increased to 150, even at fourteen and sixteen kilometers per hour.—*Meyer Bros' Druggists*

CARE OF THE WHEEL.—Cyclists do not always seem to realize how much the durability of a bicycle depends upon the care which it receives. By this I mean not only keeping it clean, which is necessary for appearance sake, anyway, but the using of some judgment as to the way in which it is ridden. Just as on horseback, a heavy man, if he rides well, will not tire his mount so quickly as a lighter, inexperienced one, so an expert cyclist brings far less strain upon the machine than a careless rider, whose weight may not be nearly so great. If you have a rough piece of road to traverse, car tracks to cross, or come to any place where the riding is at all bad, do not rest your dead weight in the saddle, but rise a little and ease your machine, bearing harder than usual upon the pedals. Careful riding does not imply a slow pace. Those who make very fast time are often the most prudent and watchful cyclists. The outlook for obstacles becomes habitual, almost automatic, after a while, and saves much hard wear and many a breakdown.—*Weekly Siftings*.

CLEANING THE WHEEL.—To clean the bicycle chain, remove it from the machine and soak it in turpentine for several hours, then clean it with a brush, as an old tooth brush, link by link, and after this dip it in clean kerosene oil and dry thoroughly with cheesecloth. See that both sprocket wheels are thoroughly cleaned and then replace the chain. Do not use oil on the chain, as it produces a clicking sound. Use graphite or any of the various chain lubricators now on the market.

The best way to clean the bearings of a wheel is to take them out and then remove all dirt and rust from them. Kerosene may be used to remove the gritty substances from the bearings. The kerosene should be poured into the oil well, the wheel being kept revolving constantly. Old clothes should be worn at this job, as the kerosene is likely to splash them. The cleansing fluid can best be poured into the bearings by the aid of an ordinary oil can. Lubricating oil should be run in after the kerosene has been drained off.

BICYCLE INFIRMARIES.

Bicycle repairers are so numerous that startling advertisements are necessary to secure business. A handbill of this purport has been widely circulated in Chicago, according to the *Tribune*:

Bicycle Surgery.

Acute and chronic cases treated with assurance of success.

Languid tires restored to health and vigor.

Tires blown up without pain. Wind free.

We understand the anatomy, physiology, and hygiene of wheels, and give homeopathic or allopathic treatment as individual cases require.

Sure cure guaranteed.

Testimonials:

"My wheel had three ribs fractured, and you cured it in one treatment."

"My tires were suffering with a case of acute aneurism, which had been pronounced fatal by other bicycle doctors; but you cured the disorder, and I did not lose a day of my tour."

"I was troubled with varicose tires, involving frequent ruptures and incontinence of wind. You cured me."

Thousands of testimonials like the above sent on application.

HINTS FOR BICYCLISTS.*

A good bicyclist is careful of his roads; therefore, when taking a header, be careful not to hit the road too hard with your forehead. You might make a dent in the pavement.

In falling off your wheel, do not fall on both sides at once. Failure to observe this rule will result in dividing you against yourself.

Always be courteous. If a trolley-car has the right of way over the track, do not dispute with it. A boy in Massachusetts who broke this rule broke his right arm and his cyclometer at the same time.

Keep your lamp lit when riding at night. The boy who thought he was safe because he had a parlor-match in his pocket came home with a spoke in his wheel that didn't belong there.

A merciful rider is merciful to his wheel, so do not force a bicycle beyond the point of its endurance, unless you want to walk back with your wheel on your shoulders.

Keep cool. It, in the course of a ride, you find yourself in a tight place, with a skittish horse to the left and a steep ravine to the right, and a bull-dog directly to the fore, take the ravine. You'll go into it, anyhow, and if you take it along without dragging the dog or the horse after you your chances will be improved.

Never use spurs on the pneumatic tires of your wheel. The use of spurs in this manner is likely to leave your bicycle in a winded condition. Spurs are not comfortable, either, in case of a throw.

Do not be stubborn with a balky

wheel. If the front wheel gets in a rut going east, and the hind wheel in another going west, dismount and argue the matter standing, unless you are tired, and want to lie down by the roadside without making the effort to do so unassisted.—*Harper's Round Table*.

Substitutes for India Rubber.

For many years past it has been the dream of hundreds, and among them many chemists of eminence, to manufacture a real substitute for India rubber. Those sold to day, of course, are only partial substitutes, that is, when used alone, none of them can take the place of rubber. They are compounded with it, and give it a certain softness, and add cheapness, but that is about all.

As a rule, the investigators have made their experiments in the line of oxydized oils, perhaps because, chemically, a thoroughly oxydized oil is theoretically the same as caoutchouc, practically, however, it is woefully different. English chemists, by using certain costly oils, have produced a gum that would compound and vulcanize as well as genuine rubber, but its great cost made it worthless commercially. An artificial rubber of considerable strength was produced in France by dissolving four parts of nitro-cellulose in seven parts of bromo-nitro-toluol. By varying the proportions a variety of products were obtained varying from soft rubber to vulcanite. In some cases nitro-cumol and its homologues were used in place of the bromo-nitro-toluol.

Glue, glycerin, and bichromate of potash, made in a manner like printers rollers but with a fourth secret substance added, form the basis of a singularly rubber-like compound that French ingenuity has produced. It, however, has about as many defects as it has virtues, and is not largely in use, nor will it ever be while rubber is accessible.

In addition to these there have been hundreds of others that have been, in a measure, successful. One Connecticut inventor produced so good an artificial rubber that a large manufacturing concern had made all arrangements to purchase the secret, when it was found that the vulcanized product had a trick of shrinking after being made up into goods. Not a little, but a steady shrink that could not be stopped, until finally it wasted away and left only the fabric upon which it had been spread. At the same time, in the face of all these failures, disappointments, and successes that were of no commercial value, the rubber trade have ever felt that the day might come when, by accident, nature's secret might be stumbled upon. As a rule, the more thoughtful believe that if rubber ever is displaced it will be by a series of different products each of which will equal rubber in some particular field, rather than one compound that shall have all the varied qualities and excellencies of rubber itself.