

she looked like an Indian squaw, and then she s—s—snipped off her eyelashes till there wasn't a hair left. She was sent to bed as w—well as me."

"They have grown again since then," said Norah, shutting one eye, and screwing up her face in a vain effort to prove the truth of her words. "I had been to see Lettice have her hair cut that day, and I was longing to try what it felt like. I knew it was naughty, but I couldn't stop, it was too fascinating. Oh, Lettice, do you remember when you sucked your thumb?"

Lettice threw up her hands with a little shriek of laughter. "Oh, how funny it was. I used to suck my thumb, Rex, until I was quite a big girl, six years old, I think, and one day mother spoke to me seriously, and said I really must give it up. If I didn't I was to be punished; if I did I was to get a prize—I forget what it was now. I said, 'Well, may I suck my thumb as long as ever I like to-day, for the very last time?' Mother said I might, so I sat on the stairs outside the nursery door and sucked my thumb all day long—hours, hours, and hours, and after that I was never seen to suck it again. I had had enough!"

"It must be awfully nice to belong to a large family," said Rex wistfully. "You can have such fun together. Edna and I were very quiet at home, but I had splendid times at school, and sometimes I used to bring some of the

fellows down to stay with me in the holidays. One night I remember—hallo, here's the Mouse! I thought you were having a nice little sleep on the schoolroom sofa, Mouse. Come here and sit by me."

Geraldine advanced to the fireplace in her usual deliberate fashion. She was quite calm and unruffled, and found time to smile at each member of the party before she spoke.

"So I was asleep, only they's a fire burning on the carpet of the schoolroom, and it waked me up."

"Wh—at?"

"They's a fire burning in the miggle of the carpet—a blue fire, jest like a plum pudding."

There was a simultaneous shriek of dismay, as work, scissors, chestnuts, were thrown wildly on the floor, and the Bertrand family rushed upstairs in a stampede of excitement. The schoolroom door stood open, the rug was thrown back from the couch on which the Mouse had been lying, and in the centre of the well-worn carpet, little blue flames were dancing up and down, exactly as they do on a Christmas pudding, which has been previously baptised with spirit. Bob cast a guilty look at his brother, who stuck his hands in his pockets and looked at the conflagration with smiling patronage.

"Phosphorus pentoxide P²O⁵," he remarked coolly. "What a lark!"

"It wouldn't have been a lark if the Mouse had been stifled by the nasty, horrid fumes," said Lettice angrily. "Get some water at once, and help us put it out, before the whole house is on fire."

"Water, indeed, don't do anything so foolish. You mustn't touch it with water. Here, it's only a square, pull the thing up and throw it through the window into the garden, that's the best thing we can do," said Raymond, dropping on his knees and setting himself to pull and tear with all his strength. Bob and the girls did their best to assist him, for the Bertrands were accustomed to help themselves, and in a very few minutes the carpet was lifted, folded hurriedly in two, and sent flying through the window to the garden beneath. After which the tired and begrimed labourers sank down on chairs, and panted for breath.

"This is what comes of chemical experiments," said Hilary, severely. "I shall ask father to forbid you to play with such dangerous things in the house. I wonder what on earth you will do next."

"Have some tea. This sort of work is tiring. I'm going downstairs to ring the bell and hurry Mary up," said Raymond, coolly. It was absolutely impossible to get that dreadful boy to realise his own enormities!

(To be continued.)

BICYCLING TO HEALTH AND FORTUNE.

By LAWRENCE LISTON, M.D.

PART I. THE MACHINE.



ERTAINLY one of the most remarkable and important additions to our lives during the past years has been the pneumatic bicycle. In town and in country alike go where we will, the

ever-present bicycle is to be seen in the roads, in the streets, at railway stations and even on board steamers. The large majority of present-day girls ride, and the object of these articles is to point out,

if possible, the way of getting the greatest benefit from the exercise, and of avoiding its pitfalls and dangers.

The bicycle was a closed book to any but hardy men until the introduction of the pneumatic tyre, which immediately rendered propulsion easy and stopped nearly all the old injurious and uncomfortable vibration; fortunately also at about the same time many

County Councils adopted the use of the steamroller on country roads, and nowadays it can only exceptionally be the case that a girl of ordinary physical endowments cannot ride a bicycle. That this exercise has exerted a favourable influence on the health of those who indulge in it, with discretion, there can be no shadow of doubt; the increased appetite, the ability to sleep soundly, the banishing of dyspepsia, the reddening of poor pale cheeks, the feeling of well-being and increased physical strength tell loudly the tale of restored and perfected health. It must be always remembered, however, that these much desired ends are only to be attained by care and discretion in riding, and that results the very reverse may be suffered through ill-directed over-exertion. So great are these benefits which the bicycle brings that the toy of fashion has become a necessary element in the life of most girls in the country, and a never-failing source of recreation to those who live in towns. Let us see then how we can best make use of this wonderful health-giving mechanism, and think over the points that have to be considered in its use.

First of all the machine; this thing which is going to be your *alter ego* must be chosen with care. Don't be in a hurry to buy any bicycle which the seller may first bring to your notice, but wait and think over the pros and cons quietly. You cannot go far wrong if you buy one of the high-grade standard manufactures of English renown, and if cost be a grave consideration, you will often do better to buy a second-hand last year's machine of well-known make, rather than a new one of unknown or inferior manufacture. Be sure that the machine is of the right

height for you; it is positively harmful to ride a machine, the pedals of which you can only just reach with effort, and it is absurd and may be dangerous to have the saddle pillar and handle-bars raised to a great height on a machine which is too small for you. In a machine which is of the right size, you should be able, with the saddle at its lowest, to ride comfortably, and there should never be any occasion for dangerous elevation of the handles on which the hands should rest comfortably, the elbows being only slightly bent. The weight of the machine should not exceed thirty pounds with all "extras" for ordinary girl riders up to nine stone; a heavy machine means greater fatigue in riding, though often a very light machine conveys vibration from inequalities of the road with greater intensity. No standard English maker is likely to supply a "ladie's safety" built so lightly as to be dangerous. It is of first importance that a suitable saddle should be fixed to the machine, one which gives rise to no sort of injurious pressure or sense of discomfort at the end of a long ride. Considerable ingenuity has been expended to meet this want, and it is an open question whether it has been thoroughly satisfied even yet. It is a pity that the word "saddle" was ever applied to this particular part of the bicycle, "seat" would be much better, and those forms of apparatus which are "seats" rather than "saddles" are as a rule to be preferred. As regards the position of the saddle, the point or most forward part of the saddle should be in the same vertical line with the hindmost pedal when the pedals are horizontal; the height should be such that the under

part of the lowest pedal can be just touched by the upper surface of the foot, the pedals being vertical.

The pedals themselves should be "rubber" pedals and not "rat-trap" as it is termed, and it is important that they should have a reliable fastening to the cranks.

The tyres must, of course, be pneumatic; in a really good bicycle the tyres are always of a standard make and quality; but especially for girls it is important to have tyres that are little liable to puncture, or those which, in the event of injury are repaired easily and without the use of any great force. Mud-guards are a necessity, as is a dress-guard and gear-case in a woman's machine; these three important adjuncts should be perfectly satisfactory in size and adjustment; the mud-guard should be sufficiently large to keep all mud off, and the dress-guard should efficiently protect the dress from the hind wheel; the gear-case which covers the chain and chain-wheels should allow of free movement of those parts, and be, as nearly as possible, dust and water-tight. In many machines, more especially the American varieties, absurd little useless mud-guards are fitted, and in lieu of a gear-case an open string-work is stretched over the chain and chain-wheels. As the splashing of a modern bicycle chain with mud tightens it, such machines are only of use in fine weather, and our English girls will very likely not be satisfied with that. Avoid such machines.

Now I come to speak of the most important piece of mechanism in the bicycle, and that, curiously enough, is the one which prevents it from running. I mean the anchor of your ship, the brake. No girl should ever, in any conceivable state of things, ride a machine unless it is fitted with a powerful and efficient brake in perfect working order and requiring but little force to apply it effectually. This important piece of machinery will be your mainstay in crowded thoroughfares, your salvation down steep hills, it is the only part of the machine that permits of your "altering your mind" in a moment, and it greatly helps you should you wish to dismount suddenly and safely. Very many indeed of the dreadful accidents of which we read are due either to the absence of a brake on a machine or temporary oblivion of its existence on the part of the rider.

The next point which will demand careful attention is the "gear" of the machine. It may be as well, perhaps, to have a clear understanding as to what is meant by a high or low gear. In the old days of high bicycles the front wheel of course made one revolution with each corresponding revolution of the pedals, and as the rider desired to obtain as much speed as possible in his machine, he invariably rode as high a bicycle as he could in comfort bestride, for it is evident that a wheel of a diameter of 63 inches would cover more ground in one revolution than one say of 56 inches diameter.

When the safety bicycle was invented, with its small (26 to 30-inch) wheels, it was of course necessary to attain a reasonable speed with the small wheels, and to do this the driving-wheel was made to revolve more than once to one stroke of the pedals. If, then, in pedalling once, the driving-wheel is forced round sufficiently frequently to cover the same ground as say a 56-inch wheel, that wheel is said to be "geared to 56." Nowadays 54 would be regarded as a low gear, and anything over 63 as a high one.

For girls, and particularly for those who are bicycling to regain health, the gear should never be high, because a high gear, though

implying greater speed, involves much harder work; for in gearing, what you gain in speed you lose in power. Many considerations have to be taken into account: the strength and physique of the rider, and the character of the roads which she will for the most part ride. A low-gear machine will mount hills more easily than a high one should the rider not be very strong. I do not think that a woman's machine should ever be geared above 56—this is a good average gear for a country with steam-rolled roads and moderate hills. Much pitiable nonsense is written about the graceful appearance of a girl on a high-gear machine, with the slow revolutions of the feet and the resulting high speed. People say that it looks so easy. It is not easy unless you are very strong, and the girl who rides a machine geared too high for her merely does herself a little harm every day, until at last there is a final collapse. Those who cycle to regain or maintain health will choose a low gear. These then are the main matters of importance which you should attend to in the purchase of your machine. All your wants can be satisfied, and you should not bring away from the shop any machine which does not absolutely fulfil all your requirements.

Having purchased your machine, the next thing is to learn to ride it, on another. Never mount your own new machine until you are proficient in riding, mounting and dismounting. It is idle to theorise about learning to ride a bicycle. I never met any one yet who, having tried, could not learn, and I have met very few indeed but those who, as the result of their first day's experience, thought it impossible ever to learn. It seems so hopeless and it comes so suddenly. Do not let your instructor tire you by taking you for too long a time; one hour's lesson a day is quite enough, and each lesson will involve frequent rests. When you have learnt all he can tell you, you will come home and ride your own machine. Now the good to be got out of bicycle-riding depends, as many other things do, on attention to what seem trivial details. How these "trivial details" affect our lives. What a dreadful thing a slight friction is anywhere in our bicycles; the whole harmony of the running is disturbed, and slight lack of attention to little details may mar the whole experience of cycling, and the incessant little annoyances do much more harm than the mere physical exercise does good.

Some people seem to take a sort of insane pride in loudly attesting the fact that they know nothing of the structure of their machines; this is a difficult mental attitude to appreciate, and the attainment of such profound ignorance is attended with undeniable experiences on the occurrence of accidents to the machine. Look well after your machine; attend to its wants and it will serve you faithfully, and by its beautiful smooth running will give you health and strength instead of incessantly annoying and irritating you. Let us now consider a few of the very easily understood things which make all the difference.

This steed of yours is not a very exacting creature, but certain things constitute your duty towards him, and if you fail in it you will suffer. All delicate machinery requires lubricating with oil to insure its smooth working, and the bicycle, as an excellent example of delicate mechanism, exhibits this same want. At various parts of the machine there are oil-holes or lubricators. When the machine is ridden regularly every day it will require oiling once in every hundred miles traversed. It is almost as harmful to use too much oil as to use none, so only give each hole a few drops

at a time. Always oil the machine when it is clean, and not during a dusty ride, or you will perhaps enable dust to work into the bearings with your oil. I don't think that anyone can thoroughly clean her bicycle in less than an hour; if you have been out in the mud it is best to clean the machine before the splashes are dry. If by any chance the cleaning has been put off until the mud is dry, you should wash it off by means of a sponge frequently dipped into warm water. If you do not thoroughly soften the mud before removing it you will injure the enamel. Remember that the source of that wonderful spontaneity of movement in a bicycle is the perfect state of its bearings; the bearings are the things which above all you must jealously guard from all enemies—more particularly web and dust. You will always know where bearings are in a good bicycle, for at each "bearing" there is an oiling-place. Be very careful, then, in cleaning the bicycle with a sponge and warm water that none of the water trickles over the bearings, and in cleaning the edge of any part containing bearings, be particularly careful not to wipe dust or damp into the bearing. I have known of an instance of a groom, who, regarding the cleaning of a bicycle as comparable with that of a carriage, turned on a hose over the machine, with the result that it was almost completely ruined.

In cleaning the spokes of the wheels, then, wipe from the hub to the rim always from above downwards, that is to say, always keeping the spokes you are cleaning with its distal end towards the ground. Carefully dry the enamelled parts with a soft dry cloth or wash-leather. The plated parts are best cleaned with whiting or any good plate-polish. Having cleaned the whole machine, see that it is stood in a dry place.

Whenever you oil your machine, if any drops remain outside the bearing wipe them carefully away, for they have a great affinity for dust and may take it into the bearings. If the machine is only ridden infrequently, it should be oiled on each occasion before starting out.

Though oil is a very good thing for the bearings, it is an uncommonly bad thing for the tyres of a modern bicycle. Oil acts harmfully on rubber, so you must be especially careful not to let any get on your tyres. Before riding, it will always be necessary to see that your pneumatic tyres are properly pumped up; they should be pumped so hard that, in the case of the back wheel, you can just dimple them with your thumbs, and in front a trifle less hard. If the tyres are pumped too hard you get no advantage as compared with a solid tyre; if they are pumped too soft they are much more liable to injury from stones or glass in the road or street, and the machine is more prone to slip sideways or "skid," as it is termed. For girls a very useful form of pump is the "stirrup" pump, as it entails very much less work on the user than the ordinary form of pump. The main points in the care of the machine are these: 1. Keep all parts clean. 2. Oil regularly all bearings. 3. Keep dust and water out of the bearings. 4. Keep oil away from the tyres. 5. Keep the tyres blown up. 6. Store the machine in a dry place.

Do all these things, and never lose sight of your bicycle for any lengthened period, and your steel steed will serve you swiftly and silently. Having thus run over the main points in the choice and care of the machine, it remains for us to speak in the future of the rider who would bicycle to health and fortune.

(To be continued.)



I always thought before, Guy, that pluck went with breeding, but it doesn't. Lizer has got more pluck in her little finger than I have in my whole body."

Needless to say, Lizer's "bits of things" speedily came home when Lady Warden discovered what "putting away" meant. Needless also to add that many comforts came into Lizer's hard life, undreamed of before by the "game little woman" as Guy called her. And when it was decreed that Jem's work must henceforth be confined to the very lightest labour, Lady Warden said to her husband—

"Oh, Guy, can't we have them somewhere on the estate? Those little white children and Lizer and poor Jem. Can't we, Guy?"

Guy smiled at his wife's eagerness, and his heart rejoiced over it. Had he not longed with all his soul that his dear little Grace should interest herself in something and somebody other than her butterfly life and her fashionable friends—with a longing that had well-nigh sickened into despair?

And it has come about that a certain tiny cottage on the edge of Sir Guy Warden's park is occupied by a most beaming and radiant family party, who feel that their dwelling is absolutely palatial after the one room in the Boro'.

Jem does odd jobs in and about the garden and park, and already looks a different man; and Lizer's anxious face has grown younger and less worn, whilst she seems to live in a state of one broad smile. She—indeed the

whole family—almost worship Guy and his wife, and the other poor people in the village find a curious difference in Lady Warden since her long sojourn in London.

"She do seem to have learnt summat as she didn't know afore," one old man said to another the other day.

"'Ees, so she do," his friend replied; "seems to me she've a-learnt as there's some things as is the same atween us and her, and she didn't use to think so afore. That's where it is, Joe; she've a-learnt as natur' is natur' all the world over."

Which lucid explanation perhaps conveyed to Joe's mind what a greater than Joe has conveyed to ours that—"One touch of Nature makes the whole world kin."

L. G. MOBERLY.

BICYCLING TO HEALTH AND FORTUNE.

By LAWRENCE LISTON, M.D.

PART II. THE RIDER.



HERE must be very few girls indeed, except those whose state of health prevents outdoor exercise of every kind, to whom bicycling is impossible or undesirable. It must be borne in mind, however, that to a beginner it is a new form of exercise, calling in to play muscles otherwise little used, easily inducing weariness of those muscles and of

the body generally, and demanding at first frequent periods of rest. Hence the exercise is not adapted for very young girls of imperfect muscle development and unstable frame. However light the machine may be, I do not think that girls under the age of fourteen or fifteen should cycle. It is positively painful to watch young girls striving with all their might to keep up with their seniors, straining every muscle that they should strengthen. No ordinarily intelligent person watching such a sad exhibition can for a moment doubt that harm is being done. Such a child never becomes a graceful rider, but rather perpetuates the ugly habit of evident over-exertion.

Assuming that there is no special reason why a girl should not cycle, it is well that while she is learning to ride she should go into a mild form of training. The cold morning bath in the summer, the tepid one in the winter, with plain, wholesome food and regular walking exercise (preferably up and down hill) will form admirable preparations for cycling.

This preliminary course of training is not of trivial import, especially to those who have, up to the time of learning to ride, led sedentary lives. How many people are yearly injured through rushing straight from their offices and studies to the Swiss mountains? A little of this mild preliminary training at home and the calamity of over-exertion is avoided.

One of the most important considerations for a girl cyclist is that of suitable dress. Perhaps the greatest danger to health in this exercise lies in the possibility of an over-heating of the body followed by a rapid cooling. Much can be done to avert this particular

danger by the choice of such materials for dress as maintain the body as nearly as possible at a constant temperature. The under-clothing, which must be made of wool or flannel, should completely cover the body from wrists to ankles, thus excluding draughts and absorbing perspiration. It is, however, important that this woollen or flannel under-clothing should not be too heavy, for if it be so the rider will incur the very danger she is seeking to avoid—that is overheating.

Nobody can ride a bicycle properly in boots. The action of the ankle, which, as we shall presently see, is the secret of graceful and easy riding, is almost annulled by any attempt to do so. The right things to be worn are shoes with gaiters. The stockings worn whilst riding should vary in thickness according to the period of the year, great care being taken that, in winter, they are not too thin.

The question of the skirt is one that demands careful attention on the part of the girl rider. What can be more annoying than a skirt which is at the mercy of every little puff of wind, or more dangerous than one which catches the pedals or any moving part of the machine, and so gets wound up? A skirt well cut and of proper material will not only look well but, by impeding the rider in the least possible degree, aid in the attainment of speed with small exertion and save her from the dreadful danger of becoming entangled in her machine.

The skirt that is to fulfil these requirements must not reach lower than the ankles, and should be of about sixty inches in circumference at the bottom. Many tailors, in order to ensure the proper hanging of the skirt, put in metal weights. This is a mistake; it often causes an incessant and most annoying knocking against some portion of the machine which it may tax the ingenuity of the rider to explain, and for which I have known a machine to be sent back to the agent who sold it, for the purpose of having it pulled to pieces to discover the cause. All such devices are quite unnecessary in a well-cut skirt.

The skirt should be of light cloth, brown holland or linen for summer wear, and a thicker cloth or serge for winter time; they should not be lined, and the best colours are brown and grey. All cycling skirts should, of course, be provided with elastic loops to go round the instep and so prevent the dress from being blown about. The ever useful blouse is of the greatest service to the girl who cycles, but she should exercise moderation in the width of the sleeves, as the wind catches them sometimes unpleasantly.

A matter which deserves a little careful attention is the question as to what is the right thing to wear if there is rain. In my opinion all forms of mackintosh or india-rubber coats or capes are not only inefficient, but actually harmful and dangerous. Even at the end of a short ride in an india-rubber cape the rider is simply wet with perspiration. The wet which you certainly keep in is worse than the wet which you may or may not keep out. Far better to ride through the rain, if the distance be short and a change of raiment await you at your destination. Assuming, however, that you must ride a considerable distance in the rain, it is best to have a cape made of a cloth treated so as to keep out all but the heaviest rain, and so cut as to extend well over the handle-bar; the edge of the cape which hangs over the bar should be weighted so as not to be easily blown up (loops are not usually satisfactory), and in this way not only the arms and trunk will be kept dry but the legs also.

Method, as in many other things, is of great service in riding a bicycle; the girl who does not use her bicycle for days together and then makes a sudden call on its resources is certainly doomed to discomfort and disappointment. Unless the weather should absolutely forbid the attempt it is a good rule to ride, if only a little every day; once you have "got into condition" it is a pity to be obliged to attain that state all over again every time you venture out. Besides this you will find that regular riders avoid occasional riders, as they are prone to be rather a nuisance to their better seasoned companions. Ride regularly and you will ride pleasurable, easily and without effort; in no other way can the joys of cycling be reached, and everyone must go through the necessary drudgery of getting into condition with its attendant weariness and muscle pains before she can ride without conscious effort.

At first the beginner should ride out on a straight country road, choosing one as free from hills and traffic as possible, and one having a good smooth surface; she should ride out for about two miles and then return to change her clothing at once and have a rub down with a good big bath-towel. First rides should not be taken except in company with some one experienced in riding, who should keep a short distance ahead during the whole time. The next venture should take the form of a circular ride of about six miles, the object of this sort of ride being that the cyclist should not stop anywhere and so suddenly cool down after becoming hot from



"BICYCLING TO HEALTH AND FORTUNE."

her exertions. Heat and damp are of comparatively little moment so that you keep moving, the danger lies in standing or sitting still.

Attention to certain details ensures the ride being a source of health; carelessness in little matters may convert a health-giving pastime into an injurious labour. This remark has especial application in the matter of posture when cycling for health. No leaning over the handle-bars can be for a moment tolerated; the rider should sit erect on her machine; should you find that you cannot get up an incline without stooping over the bar—get off. Some girls, though they sit in a very fairly upright position, repeatedly pull hard at the handles in order to get up a hill. If you do this you do two things, you strain your machine and you strain yourself. It is a wise rule to get off if you find yourself pulling at the handles. A discreet rider should never allow herself to be taxed to the limit of her powers but should always have some reserve force in hand.

Economy of strength is really one of the great secrets of success in pleasant and healthy cycling. It is one thing to merely sit on a bicycle seat and propel the machine, and altogether another to "ride" it.

Foremost among the ways of economising strength is the proper use of the ankles; the rider who "ankles" well will cover more ground in less time and with far less effort than her uninitiated companion. This anklng is by no means an instinctive action, it requires attentive and assiduous practice for its proper attainment, but it well repays the girl rider for all the trouble entailed. Briefly put, it means pushing the pedal at the earliest possible moment after it has attained its highest point and dropping the heel directly it arrives at the lowest point. Once get complete command of this knack, and the disparity between you, if you are a weak rider, and your strongest friends will be almost unnoticeable. Anklng is a great leveller of riders, and a wonderful remover of the terrors of hills. Limit as much as you can the action of the knees and hips and you will, to a certain extent, force your ankles to do their proper work; the gracefulness of the action is, of course, obvious and undeniable.

Moderation must be the key-note of all beneficial cycling for girls; there must be no feeling of being done up after a ride, and if after riding, there is disinclination for food, that ride has not done the rider much good. Riding at too great a pace is a fruitful source of discomfort and injury and it is a tendency which must be carefully repressed; when a rider is in training fatigue is but little noticed until the end of a long ride, then there may be

disinclination for food, and at night, restlessness with actual fever and inability to sleep. A girl who has gone through this experience during the night is not fit for much in the morning, and all the trouble might have been avoided by a little moderation in pace.

The distance ridden during each day is hardly of the same importance as the rate at which the miles are covered. I do not think that a girl of ordinary strength does herself much harm if she rides an average of a hundred miles a week at the average rate of nine miles an hour. I am, of course, speaking of fine weather riding on reasonably good roads. The three things which modify these averages are wind, rain and hills; most of the high roads of this country are kept in such a state of perfection that the question of surface may be ignored in this article.

The greatest enemy of all is wind; the resistance offered by a strong head-wind may be enormous, and great harm may be done by the rider attempting to face it. If you particularly wish to indulge in your exercise on a windy day and your purse will permit it, the best thing to be done is to take your machine by train some miles out against the wind and then to ride back in the direction in which it is blowing. Do not start off to ride from home with the wind and train back, for you may be over-heated when you enter the train and so easily catch cold.

Nervous tension completely negatives any possible benefit in a ride, and one should therefore strive in every way to avoid everything that may produce that condition. The unpleasant and sometimes disastrous manœuvre familiarly known as "side-slip" or "skidding," holds a foremost place among these things to be avoided. I know of nothing which will daunt a timid rider more than skidding. The chief factor in its production is a greasy or sticky road, the result of rain, and I do not recommend the girl who hears her brothers or friends say that the roads are causing this misery to take her machine out for that day. With reference to this topic of nerve-strain it may as well be stated now that town riding in dense traffic should be rigidly avoided; the worry, even though it be an unconscious worry, of steering through a crowded thoroughfare must be harmful, quite apart from the physical danger incurred. Such a performance must be classed with gymkhana or trick riding, with the added danger of the surrounding vehicles.

Though it is desirable to maintain as far as possible a level pace throughout your ride, some variation must be made in the ascent and descent of hills of varying gradients. Should you come to a short hill, a gradual acceleration of pace for some little distance before its

commencement will often enable you to climb it with ease. The acceleration, like all changes of pace, must be gradual; no sudden tugs or jerks can be recommended on a bicycle. It must be carefully remembered that this method of climbing is only applicable to short rises in the road. For longer hills zigzagging may be tried, but if the rider finds that she is stooping or pulling at her handles or in any way unduly taxing her strength, she had far better walk; the walking in such an instance is doubly beneficial in that it rests one set of muscles and exercises another.

"Coasting" or riding down hill with the feet on the foot-rests of the machine is best confined to male riders in a country with which they are thoroughly familiar. When a girl rider goes downhill she should see that her brake is well in hand and she should never allow the machine to get away from the control of the pedals on any hill. It is well to be more especially careful in an unfamiliar country and not to relax your attention until you see the bottom of the hill. Taking into consideration the possibility of entanglement of the skirt in the pedals, it is perhaps safer and wiser not to coast at all.

Touring is not dealt with in connection with health riding as it is only girls blessed with exceptional physique who can indulge in it. The large majority of girls will do better to make some place their headquarters and take rides in various directions. The necessity of getting to a certain place by a certain time and the possible fallacies in the transit of luggage are thus avoided.

Apart from considerations of health this modern cycle is of inestimable use to working girls; the teacher can get with ease to far distant pupils and extend the area of her labours whilst economising time. It is no unusual sight to see a district nurse in the country places visiting her widely-scattered patients on her machine. The seamstress, the girl clerk and the workers in shops are all the better fitted to be bread-winners by their brief but happy glimpses of the country, if it be but once a week that they escape from their enforced confinement.

Surely then every encouragement should be given to the rational use of this great outcome of clever minds, for who can doubt the benefit and profit to be obtained from the inspiring and exhilarating exercise which brings us to the sweet smells and sights and sounds of the country where the evidences of the working of the great Creator are least obscured by monuments to the effort of man.

Truly the girl who takes advantage of these opportunities and uses them will soon realise that she has bicycled to health and fortune.

VARIETIES.

IN SEARCH OF HEALTH.

We have boiled the hydrant water,
We have sterilised the milk;
We have strained the prowling microbe
Through the finest kind of silk;
We have bought and we have borrowed
Every patent health device;
And at last the doctor tells us
That we've got to boil the ice.

SEASONABLE.

Last summer a dealer in fuel in the West End of London, being unable to clear out his stock, posted the following notice on his door:—

"Good firewood for the summer season, giving out very little heat."

A TALE OF THE TELEPHONE.

An old farmer was in a merchant's office and asked if he could supply the merchant with some fresh butter.

The merchant told him that he would inquire if his wife needed any. So he stepped up to the telephone, called her up, and talked for a few seconds through the instrument. Then, turning to the countryman, who was standing with his hands in his pockets, his eyes dilated, and his face very red, he told him that his wife said she would not need any butter.

The indignant countryman blurted out, "Look here, mister, if you don't want any butter, why didn't you say so? I ain't such an idiot as to think that you've got your wife shut up in that little box."

CLAIMING KINDRED WITH THE KING.

A poor man presenting himself before Philip II. of Spain asked for charity, telling him he was his brother.

"How do you claim kindred?" said the King.

"Oh," replied the man, "we are all descended from one common father and mother—Adam and Eve."

On that the King gave him a small copper coin.

The poor man then began to grumble, saying, "Is it possible that your Majesty will give no more than this to your brother?"

"Away with you," replied the King; "if all the brothers you have in the world give you as much as I have done, you will be richer than I am."