The Bicycling World & Archery Field

$3.00 a Year. 10 cents a copy.

A WEEKLY JOURNAL OF POLITE ATHLETICS

Volume II. Number 13.

Charles E. Pratt, Louis Harrison, } Editors.

BOSTON, 4 FEBRUARY, 1881.

Entered at the Post Office as second-class mail matter.

Vol. II] CONTENTS [No. 13

Currente Calamo 193
Editorial 195
The Fascination of Bicycling 195
A Comparative Study of the Bicycle . . . 195
A Bicycle Tour of England 198
Wheel Club Doings 199
Target Valuations 201
Personal 203
The League Meet 203
Mr. Bates sends his Regrets 203
A New Era 204
Mr. Cottrell and the B. T. C. 204
The League Badges 205
L. A. W. Applications 205
More about Cement for Tires 205
Bicycles for Business 205

E. C. HODGES & CO., *Publishers*,

Office, 40 Water Street . . . Boston, Mass.

CURRENTE CALAMO

It is a cold day.

The bicyclers *are* left.

It is cold enough to freeze out even an interest in future salvation.

A great deal of the general wickedness now prevailing must be ascribed to a hankering for the salubrious warmth of Hades.

The sagacious bicycler takes care of his health now, and reads the Best Literature relating to his favorite sport. Where the B. L. is to be found, modesty, of course, forbids us to mention.

The sagacious bicycle clubs are profiting by last year's experience, and are attending carefully to all their arrangements for the coming season. Some fine parade riding is in prospect.

The "too-sweet-to-live-a-minute" boys are very quiet. They are not given to cheap talk, but their many friends would be as pleased to hear from them as the ladies are to see their "muffin ring with a little moon on it."

There is a pleasant rivalry springing up among the clubs around Boston in the matter of handsome uniforms. Such rivalry is always productive of good results, and in this case will serve to bring about a better general appearance at club turnouts, and an increased interest from non-riders.

Louisville folks despise bicyclers. A man who will waste his time riding one when he can sit in the shade and play poker, is a fool, in their opinion. — *Boston Post*

We received four subscriptions from Louisville this morning.

The sleigh driver comes silently upon the unwary pedestrian, knocks him down and runs over him, and then swears at him for getting in the way. The sled-riders knock down passers-by in public park and street alike, filling the city hospitals with bruised heads and fractured limbs, and are upheld in their "sport" by the city fathers. The bicyclers, who are not allowed in the parks, who never knock down pedestrians, who have in no case ever injured a foot passenger, get some such notice as this: —

"A party of English bicyclists will visit this country next summer. We want them to understand that they can't have any more fun in this country than at home, as Americans object to being run over just as much as Englishmen do. They resent it vigorously, too." — *Boston Post.*

The *Post* evidently has a wooden head, and cannot realize how much more becoming it would be for it to stick to its legitimate field — political abuse.

The English bicyclers who intend visiting this country in the spring may be assured that they will be cordially welcomed by wheelmen everywhere, but it is questionable if they will find our roads in good condition after such a severe winter as the present one. Around Boston and other large cities they will probably meet with roadways quite equal to the average of their own, but elsewhere they will have their much-talked-of road-riding capabilities put to a thorough test.

These two came on the same day, — one in the *Wheel* and the other in a private note to the editor: —

"New York. 24 January, 1881.

"*My Dear Editor:* — I have been accused of giving more pen favors to the *World* than to the *Wheel*. It is only because I have no pity for the *World* and a great deal for the *Wheel*. You will see; it is but a question of time; the more I write for the *World* the less subscribers it will get, and gradually they will all go over to the *Wheel*. You will lose thirteen subscriptions by this squib, but I can't help it, I am itching so to ask a few questions which I dare not send to Boston. Can a tricycler belong to the League of American Wheelmen? If so, can a lady tricycler belong to the League of American Wheel*men?* If so, does Madeline ride a tricycle? And will she join the League? And when will she join? And how near will her number be to 767? If it is impossible for ladies

to join us, will you suggest a League of American Wheelwomen, with a male president, and nominate me for the office? Do like a good fellow.

"KNICK O'BOCKER."

Dear Mr. Editor:— . . . Will there ever come a time when a lady can ride a modest little tricycle without being stared out of countenance by everybody, and gazed at as if she were a circus procession? I know of a small army of girls who would ride if it were "the thing"; but it is not considered "good form, you know," and in consequence, there is one, at least, who, from the depths of her heart, is discontented.

MADELINE.

SOME of the railway companies around Boston labor under a mistaken impression that the general use of bicycles will reduce their passenger traffic. This does not appear probable when at present it is increasing it. Hundreds of Boston bicycles, during the riding season, make wheel excursions out into the surrounding country, and return by rail, thus saving time or avoiding a return over the same route. Many others take a train to some suburban place, from whence they desire to start; and the railroads receive no small patronage from the interchange of visits between bicycle clubs. The street-car companies will have to suffer the loss of some patronage, especially during the pleasant weather, but the loss is not considerable enough to give rise to an unreasoning prejudice against bicycles.

NOTICE TO CORRESPONDENTS.

ALL COMMUNICATIONS INTENDED TO REACH THE EDITOR'S ATTENTION SHOULD HEREAFTER BE ADDRESSED TO LOUIS HARRISON, EDITOR BICYCLING WORLD. BUSINESS LETTERS TO E. C. HODGES & CO.

THE BICYCLING WORLD AND ARCHERY FIELD MAY BE HAD OF:—

THE AMERICAN NEWS COMPANY,
39 Chambers street, New York,
THE NEW ENGLAND NEWS COMPANY,
Franklin street, Boston,

Will supply agents, newsdealers, and all othe s who desire the paper in quantities, at the regular trade rates.

It may also be found on sale at

BRENTANO'S EMPORIUM,
39 Union square, New York;
WILLIAM M. WRIGHT,
160 Fulton street, New York;
WILLIAM M. WRIGHT,
791 Fifth avenue, New York;
E. J. WARING,
Fifth avenue and Smithfield street, Pittsburg;
H. B. HART,
813 Arch street, Philadelphia;
THE POPE MANUFACTURING COMPANY,
597 Washington street, Boston;
C. R. PERCIVAL,
96 Worcester street, Boston;
CUNNINGHAM & CO.,
6 & 8 Berkeley street, Boston;
AND AT THE WORLD OFFICE,
40 Water street, Boston.

THE Bicycling World & ARCHERY FIELD

Is the official organ of the League of American Wheelmen, and of the Eastern Archery Association, and aims to be a fresh, full, impartial record and herald of all that relates to bicycling and archery in America,—clubs, races, excursions, tours, meets and runs, target competitions, sylvan shoots, hunting, personal items, inventions, manufacture, opinions, humors, ranges, paths, routes, and incidents, the best things from other journals, foreign notes,—and of all subjects of direct or collateral interest to bicyclers and archers and their friends. Communications, correspondence, news items, suggestions clippings, or other aids will be appreciated, and should be sent to EDITOR OF BICYCLING WORLD, ETC., 40 WATER STREET, BOSTON, MASS. *Contributors and correspondents are requested to give always their full name and address, to write on one side of the paper only, and to observe that our pages go to press at noon of Tuesday preceding date of publication. For our terms of subscription and rates for advertising, see announcement of Rates and Terms in another column.*

BOSTON, 4 FEBRUARY, 1881.

THE FASCINATION OF BICYCLING is hard to define even to one who has felt it, and utterly impossible to describe to one who has never sought it. The public—at least that portion of it which prefers to take its exercise without fine enjoyment, and chooses a way of travelling neither healthy nor refreshing—cannot or will not understand why men become enthusiasts on bicycling. There is nothing unreasonable in our finding in this inspiriting athletic exercise a source of pleasure; but the "shuffler" who tramps back and forth between home and business place, and on Sunday trudges a little way out in the country to get a breath of fresh air, will not believe in it. He realizes that it would bring him an equal amount of restorative muscular employment, with a far greater recompense of enjoyment; but spectres of bruised heads and broken bones are conjured up by his ever-ready imagination, and overcome with a terror that is the product of his own fancy, he resolves never to attempt to ride.

The man of energy, who loves every manifestation of power and muscular vigor, and who loves that great stimulus to health, a rapid motion in fresh air, finds a partial gratification for his tastes in driving a speedy horse; but it is *only* a partial gratification, as he himself must remain inert, often to the disadvantage of his own health and strength. He sees infinite possibilities of exciting speed and physical enjoyment in the steed of steel, but he overestimates the labor of propelling it, and believing his strength inadequate, he does not usually attempt to master it.

Occasionally, however, one of these men is induced by his own common-sense, or more often by that of some friend who has become a wheelman, to give the bicycle a trial. He approaches his first experiments with great caution, but conducts them with commendable persistence. For some time after the first lesson he does not understand the fascination; but some bright summer morning, when the sun, waking up in the best of humor, seems to infect all the world with a contagion of fine spirits, when the air is like some cool and refreshing drink, flavored with a delicate fragrance from spring flowers, when the silent wheel seems to glide "through byways green," without even the effort of direction from him,—he becomes conscious of a pleasure that embodies all others, along with its own peculiar, lasting charm.

The days that follow bring a renewal of such pleasure, along with many others that develop as his bicycling experience does; but from the time that he first feels the subtle attraction so well known to all riders of the wheel, he needs very little to spur his interest. The "shuffler" may, from the depths of his own experience, be sneeringly incredulous of the existence of any unusual fascination; but the bicycler, content in the consciousness of his own pleasure, is impervious alike to reasonable incredulity or unreasonable sneers.

For certain temperaments, there is a pleasure not only in overcoming the difficulties of riding, but also in acquiring a skill or speed that shall make them pre-eminent among wheelmen. There are no bounds to this part of the fascination. The possibilities of the bicycle, as hinted at in the marvellous trick riding done by some of the accomplished bicyclers of to-day, seem almost infinite. Any one who has watched some adept spinning along easily while touching no part of the machine except the handles and one pedal, or has, with some apprehension, watched him ride a short and steep inclined plane as easily and gracefully as he bowls along the cinder path, can realize this. And the possibilities of the bicycle, as hinted at in the gradually decreasing time for mile records, lead us to believe that those whose pleasure is in contests of skill will have ample opportunity, in the near future, to lower the present records.

But after all, one of the chiefest fascinations for racer and roadster alike is the "jolly fellowship." It is the sympathy of tastes among those who love the open air, the sensation of fine health, and the recreative exercise of mind and muscle, that give rise to such a freemasonry among bicyclers. With them it is the wheel that "makes all the world akin"

A COMPARATIVE STUDY OF THE BICYCLE. No. IV.

BY H.

(Continued from page 182.)

SADDLE SPRINGS.

EVOLUTION, in the case of the bicycle saddle spring, has not brought any development until quite recently. The old bow-fronted spring lived a rather valuable existence, giving us more comfort than any other, but it is now in a moribund condition. This is probably because it was ugly looking and heavy. The fact is indisputable that, in the long run, taste will govern in all bicycle construction. If any man has a good thing in this line, let him be diligent in putting it in graceful shape, if he wishes it to survive.

The survival of the fittest seems not to have obtained in the saddle springs, as the one almost universally used now is the flat steel plate, bolted to the neck, and sliding upon the backbone, at its rear end. It owes its existence to its good looks, and not to its excellence. It is of limited benefit to the rider, but heretofore we have had no choice. We were compelled to take what the manufacturers gave us. The jar given to the rider, through the front wheel, is a vertical one, and is but poorly met by the dominant spring, which is attached rigidly to the neck, so near to the saddle that there is but very little spring or elasticity to absorb the shock. It is unyielding just where it is most needed as a spring. The front wheel alone gives any perceptible vertical motion to the saddle. The rear-wheel motion is converted into horizontal when it gets to the saddle. The little wheel bobs up and down on rough ground, and the result is simply an intensely disagreeable vibration under the rider, and of the front fork and handle bar, so that sometimes his hands go to and fro like the shaker of a sieve in a thrashing-machine.

I beg, brother wheelmen, that you will not overlook this: *the up-and-down motion of the small wheel is converted into horizontal motion when it reaches the*

rider. Take your bicycle, raise the rear wheel two inches and then lower it; you will see what motion it gives to the saddle and handle bar. We want a spring to give horizontal play to the saddle. The common spring certainly does nothing of the kind.

The rear wheel needs some aid, because it is small and drops into many a depression which the front wheel, being so much larger, will bridge over. Moreover, the small wheel is not steered clear of ruts and stones so thoroughly as its big brother.

A certain amount of side motion is needed to give the rider ease and security on his steed. This is of great importance, but the assertion is, for most people, both novel and heretical. I will return to this matter hereafter.

The Arab cradle spring gives a variety of motions, while our common flat spring simply goes up and down in a poor way. The cradle spring has a free motion downwards to the front, another downwards behind, and a limited motion downwards to each side. It is anywhere the equal of the common spring, and generally superior, except for fancy riding, which demands a rigid seat. Going up hill the rider dips forward to his work in a very nice way, and in descending he tips back to the rear, as is very desirable on stiff grades. On long journeys it has a freedom of motion which relieves the rider very much from the constraint of a common spring.

In riding over a bad road, as, for example, an old, worn-out wooden pavement full of deep, short holes, the bicycle pitches and rises, the bows go down, and then the stern, like a ship battling a heavy head sea. No common spring meets this at all, but here the cradle is at its best. The rider moves ahead quite steadily, whilst the machine under him is rearing and plunging. Reader, did you ever ride a bronco given to bucking? If so, tell me, would n't a cradle-spring be a grand attachment to that exciting steed? Then no longer would the rider's head alternately bump the brute between the ears and then on the root of the tail, but peace would prevail above the saddle, whilst below deck there would be only a harmless war of the elements.

The above refers to a bronco mustang, not an infuriated bicycle.

SADDLE.

With the ordinary spring and saddle, the rider often becomes chafed, from the rubbing of the inside of the thigh against the saddle. The chafing proves that his thigh does go up and down somewhat. The labor of steering is greater because of this side motion. As the cranks go round and the body, hips, and legs rise and fall, the weight shifts from side to side. This tips the saddle, and of course the machine; and therefore the hands and feet must use extra exertion to preserve the balance.

If the saddle is allowed to rock from side to side, through a limited space, the leg and saddle will descend together: hence there will be no chafing, and the side motion of the whole body, or leg alone, will simply tip the saddle and leave the machine upright. This gives the rider great freedom of action while in the saddle. If his body does move, it does not tip the machine. This side motion is just as proper as the front and rear motions of the cradle spring. The latter does not give it sufficiently, as can be seen in watching the progress of a rider who has this spring. He moves forward over smooth ground with no more side motion apparent than on the ordinary flat spring; but a man mounted on a rocking saddle always rocks gently from side to side just as his pedals rise and descend. A curious fact about the rocking saddle is that the rider is generally unconscious of any rocking motion. This alone is answer enough to all questions about stability in the saddle. In turning corners, riding in ruts or across deep ditches, — in fact, anywhere that any unusual exertion is called for to keep going and keep from falling, the rocker adds decidedly to one's security and riding capacity. If the rider tries this saddle, it will not at once do as I say, and I expect criticism and contradiction; but if he will ride one hundred miles on this saddle, or ride it from day to day for a month, he will most thoroughly indorse all I say.

But this is not all: with a rocker one can ride a higher wheel or use a longer crank than he can without it. With a fixed saddle and thirty inches stretch of leg and foot, another inch can be added to the stretch, and of course two inches to the diameter of the wheel, if the saddle is freed and allowed to tip or rock an inch to each side. Not only does the descending leg reach farther, but it can command a longer crank: firstly, because it can reach it, as we have seen, and because the return stroke of the crank, in lifting the foot, does not raise the knees and thighs so as to make an awkward or disagreeable leg action, as at that time the saddle tips over to the other side and stretches out the leg while the body is moved away from it.

The suspension saddle is an excellent one, still many cannot ride it. I am one of those unfortunates whom it does not fit.

To quote my own words from the *Cyclist*, "an excellent substitute can be made by cutting, and bending to proper shape, a simple steel plate; then, at the points where the seat-bones come, cut out a hole on each side, about the size of an egg; cover with pigskin; and with proper attachment to the spring, this will make a saddle that can be ridden without any soreness whatever." Any rider who has a little ingenuity can get up such a saddle very cheaply; even sheet-iron will answer.

But the suspension is too good to abandon. I was determined to study it up, and sought out my friend Sawbones, who took me to a place in this city where I found a number of people ready to assist me. These obliging individuals had departed this life, it is true, and were sitting or rather hanging in their bones; but I got them to pose for me, and put them on a seat where I could see just where the shoe pinched, or rather, where the saddle would rub. I took several sizes, and, among them was one — well, never mind about the sex, reader. I made a tracing on paper of the outlines the bones would make on a saddle Some fitted a suspension perfectly, but one chap just came over far enough to the edge to make it certain that if, when he was in the flesh, he ever rode that style of saddle, and was given to profanity, he undoubtedly made everything smoke at the latter end of a hard day's ride.

I got a good deal of information from my departed acquaintances; and sum it up in saying that, for some people, the suspension saddle could be greatly improved by adding half an inch to its width at a point two inches from the cawtel, or in many cases by cutting it in two crosswise a little behind the middle and putting in a piece from one half to three quarters of an inch wide, so as to lengthen the saddle that much. I do not mean literally to cut a saddle in two, but illustrate in that way how I would have a new one constructed, with so much extra length of the rear half.

REAR-WHEEL SPRINGS.

As we have seen. the rear wheel, in motion, does not, like the large wheel, bridge over small ruts and depressions in the road, but drops into them. The angle of resistance of a given obstacle to the small wheel, as compared with the large one, is so great that the shock is excessive, and we in fact get much the most vibration from behind. Tires three inches thick would cure most of these ills; but, alas! we cannot have them. Springs, to give a maximum benefit, should be as near as possible to the point of concussion. The nearest we can get to the road is the centre of the wheel. I think it possible that springs may be attached hereafter to the front fork, just above the bearings, to give an inch, more or less, of play. This would be somewhat akin to adding an inch to the thickness of the front tire. But I do not wish to speculate, and will confine myself to established facts. The rear-wheel spring has been proved a success in two long-continued trials. Properly designed, it takes away nearly all of the vibration which the rear wheel sends up the backbone to the rider. This no spring has heretofore done. It is of great importance. Vibrating handles have been invented to obviate it, but have not answered the purpose. Moreover, the rear-wheel spring takes up much motion which ordinarily is conveyed to the saddle spring. This is a gain, because balancing must require less muscular exertion of arms and legs, if the rider's position remains more constant in relation to the pedals. This apparently contradicts what I said of the freedom of motion desired, and obtained by such devices as a cradle spring or rocking saddle; but that which must be preserved is the voluntary motion of the rider himself, and

that which we should avoid is the shock, or involuntary motion, given to the rider or saddle by inequalities or obstacles on the road. I repeat, the rear-wheel spring will take off a horizontal motion derived from the rear wheel, which the saddle spring does not alleviate. In addition to this, the rear spring must cause the bicycle to run materially easier in removing much of the drag of the rear wheel. Every obstacle holds the ordinary machine back, and if the rider goes over an impediment (be it rut, stone, hole, or anything else), there is a dead lift to be made by the leg muscles. If he runs over a brick, he actually lifts his small wheel with its load two inches high. This kind of resistance, in a day's journey, amounts to a large expenditure of force. The spring on the rear wheel does away with a major portion of this resistance, and removes much of the objection now existing to small rear wheels. The spring will yield upwards much quicker than gravity will work downwards, hence the gain. The velocity of a falling body during the first inch or two is very low.

Since writing the above, I have turned to the *American Bicycler*, and find there, page 89, very strong confirmation of what I say of the effect of springs and their value. The reader will do well to run over all of Chapter V. of this excellent work, if he desires to understand thoroughly the mechanics of the bicycle.

I have made, for this article, some calculations of the effects of springs in counteracting the resistance of various obstacles, under different conditions; but figures are dry, and I will omit them and quote from the *American Bicycler* in regard to springs, meaning the tires and saddle spring, and to some extent the elastic suspension wheel: —

"Taking together the countless small irregularities, pebbles, etc., in the ordinary road, or on the Belgian pavement, or the turnpike, this saving [caused by the springs] is immense."

Not only is the foregoing true, but it would have double force if the author had contemplated the use of springs to the rear wheel, from whence arise so much vibration and resistance, now feebly counteracted by a tire of very small diameter, generally not susceptible of compression, or spring action, beyond one eighth or one fourth of an inch. I predict confidently that within three years all bicycles will be built with rear-wheel springs, almost as much as with saddle springs.

REAR WHEELS.

The first bicycles had large rear wheels. I have seen them twenty-four inches in diameter. They came down as low as fourteen inches, and now are about sixteen inches on a fifty-inch machine. The large rear wheels passed more easily over obstacles, but they carried more of the load than rear wheels do now. Our smaller wheels are now brought up close, so that the load is somewhat more upon them than it would be with a larger rear wheel. This is decidedly correct, though I expect severe criticism for saying so.

DISTRIBUTION OF LOAD.

A recent writer in the *Cyclist* gives some excellent remarks upon the subject of distribution of load. This is in reference to the tricycle, but it applies as well to the bicycle. He says that the great fault in the modern machines is in the distribution of weight, altogether too much being put upon the driving wheel. No more should be put there than is absolutely necessary for adhesion. He asks, which is better, for a horse to carry two tons, or to draw it in a wagon? I will vary his illustration of the railroad, and say that a freight train runs into New York every two minutes in the day, drawing an average load of 700 tons, dead weight being included. What would be thought of the engineer who would, to avoid slipping the drivers, endeavor to carry all of the 700 tons' weight of his train upon the driving wheels? He would not succeed unless he increased enormuosly the power of his engine.

A little weight is sufficient for adhesion. Does a youth of 100 pounds' weight slip his wheel more than the man of 175 pounds? Certainly *not*.

In the "Indispensable Hand-Book" of 1878 is a queer looking bicycle called the "Sultan," and another very similar to it, the "Safety."

Their design was so awkward that they naturally died out before the quick advances of the Standard bicycle. They had long and awkward connecting rods, and awkward and unfavorable position of the rider in relation to his pedals and handle bar; but it is said of one by the inventor, that "it produces far less fatigue than any other machine," and of the other it is said that "it is decidedly easier to work up a hill."

With such decided disadvantages as mark each of these machines, how can such statements come anywhere near the truth? Where is the point of superiority which overcomes the drawbacks? As near as I can measure the designs with a scale, *I cannot find even twenty-five per cent of the rider's weight on the driving wheel of either machine.* These statements may be exaggerated, but there is a foundation of truth in them. Of this I have been assured, in private letters from England.

Take another machine, the 'Xtraordinary Challenge. There we find a decided success on the road and cinder path. This machine constantly grows in favor. Young men who are bold riders, and fear neither headers nor any of the other vicious tricks of the ordinary bicycle, are often found to be stanch supporters of the 'Xtra. I know such among my acquaintances. Not long since quite a noted rider, whose name is well known on both sides of the Atlantic, had to lower his colors to a "child on a Camel," in hill climbing; and yet the said Camel has its awkward side levers, and in my opinion awkward steering, both of which should make it harder to propel than the ordinary machine.

Why is it not so? There is just one way, I think, to account for it; and yet, strange to say, the makers do not in their circulars or pamphlets ever refer to this point. It is that, with its ten inches rake, *the weight is much more removed from the driving wheel than on the ordinary bicycle.* Here theory clearly points out the truth, and experimental test confirms it.

Many a rider will exclaim against all this, and ask me, "Why do you, when running fast or climbing a stiff hill, or fighting against a head wind, lean forward and hug up to the head of your machine, till you sometimes wonder why you do not overbalance and get a cropper? Why do you then put all your weight upon the driving wheel?"

To which I respond that I certainly do it, but it is because I cannot help it. My pedals are in front of me, unfortunately, and not directly underneath; and in order to put my weight upon them, I get as nearly over them as possible. As was asked for the benefit of poor Antonio, to do a great right I do a little wrong, or, in this case, considerable wrong. When our inventors will give us such a machine as will permit us to load our weight upon the pedals, without increasing it upon the driving wheel, we shall very soon see the evil of the latter practice.

I do not propose to jump at reform in an hour or a day. Our seat on the bicycle of to-day is where it should be for this machine, and this machine is a model of beauty, and of efficiency too, within certain limits. But when we finally arrive at the highest efficiency for all kinds of work, it will involve, among other things, a proper distribution of weight.

The illustration of the locomotive is a forcible one, but still not fully illustrative of the subject. It has a thoroughly smooth track to run upon; and when the engine, which can haul one thousand tons on a track, becomes derailed, it can do but little more, on soft or rough ground, or over the cross-ties, than draw itself along. This is plainly for want of steam power enough to overcome the great adhesion or resistance of the bad ground, occasioned by the immense weight upon the drivers. Our bicycle on rough roads is like the locomotive off the rails.

I think we could get more of the teachings of analogy by studying steam road locomotives, but I have already drawn out the matter quite long enough.

A BICYCLE TOUR OF ENGLAND.*

BY ALFRED D. CHANDLER.

III.

It will be remembered that at the end of the first part of our tour we were in London again, preparing to start off afresh. We arrived there on Friday evening, 29 August, and on Saturday afternoon following returned to Reading by rail, starting at once on our bicycles up the valley of the world-renowned Thames, then swollen by the heavy rains. Though ascending the valley, the grade was easy; still we rode along at our leisure, for the river views were too attractive to be passed with a mere glance. We dismounted occasionally; and in one place sauntered along the bank by a little inn, appreciating the full extent to which the people utilize the river, where boats of all kinds are kept in great numbers. Our ride was only fourteen miles before nightfall, but the weather was fine, and the short run protracted to enjoy the rural views. At tea-time we came to ancient Wallingford, in Berkshire, and stopped for the night at The Lamb.

The next day was clear and cool, and before night we had passed through a varied and instructive experience. After breakfast, riding on, we crossed the Thames at Shillingford bridge, entering Oxfordshire, when a fine run through Dorchester and Nuneham Courtney brought us to classical Oxford. In "Paterson's Roads" (which reached at least eighteen editions as far back as 1829, and which is still of value to the English tourist) I find at the conclusion of the account of Oxford this sentence: "Volumes written on this head would be unequal to do justice to the subject, and, in a few words, the powers of the pen are as inadequate to describe, as the creations of the pencil incompetent to delineate the resplendent beauties of the city of Oxford."

We stopped at the famous old Mitre Tavern, took lunch, and at once went on a tour of the town with a guide, who expressed his pride in the number of distinguished persons he had conducted through Oxford. I pass over details. We of course saw all that was open to us, including the several colleges, the gardens and grounds, the river, and the boat-houses. We hope, however, to visit Oxford again, and to study the city more thoroughly.

Of course on our route thence to the north we went to Woodstock, including Blenheim Park, the magnificent seat of the Duke of Marlborough, with its princely mansion, the gift of the nation to the Duke. Unfortunately the palace was not open to visitors on that day, and we lost the chance of seeing one of the most valuable collections of pictures in England. There were some fine specimens of the little Blenheim spaniel playing at the palace gate.

On approaching Woodstock we found the road very rough and fatiguing. I called for an explanation from some of the citizens, and asked why they allowed the road to remain in such a state. They admitted the bad condition of the roads in all directions from Woodstock, and said it was due to a difficulty in some of the local governing boards, and regretted our annoyance. The rough riding continued as we kept on through Oxfordshire, a county where I think we had harder work than in any other in England. We were on the highway to Banbury; and this I am sure of, — that in the summer of 1879 it was a very rough road to Banbury Cross. What with Oxford and Blenheim Park, and the bad road that day, we did not reach Banbury till after dark, and then stopped at The Red Lion.

In the morning we selected photographs, including some of the Banbury Cross — not the ancient one of nursery rhyme, which is destroyed, but the new one recently erected, and which, though fine, is small, and not to be compared, it seemed to me, with the grand old cross at Chichester, in Sussex.

When about a mile out of the town we overtook a pack of fox-hounds driven along the highway by the first and second whips, both mounted. The hounds obeyed the whips admirably, promptly moving from side to side of the road as directed. This was the second pack met, the first being in the South of England. The returns for 1877 showed in the United Kingdom about 340 packs of stag-hounds, fox-hounds, harriers, and beagles, having not far short of 10,000 couples. The expense of the hunting establishments is enormous, the stable being a far more onerous burden than that of a fashionable pack. The *Pall Mall Gazette* of 3 November, 1877, estimated the annual amount spent by the masters of hounds out of their own pockets, or out of the fund subscribed in the district for hunting establishments, including stables and kennels, at £547,000, or over $2,500,000 a year. To this is to be added the money spent by the people who hunt, from the owners of well-appointed studs to the modest proprietor of a steed called upon to do its three days' work in a fortnight.

The pack we overtook was at once ordered on to one side by the whips to let us pass, but I rode slowly behind a little while to watch the movements and discipline of the hounds. In this connection, it may be observed that I cannot recall an instance throughout our tour, where a dog of any kind gave us annoyance. Contrast this with bicycle riding in Massachusetts, where it is an art to know how to manage the various breeds, from a snapping mongrel to the more dangerous Newfoundland.

We now pressed on to enter Warwickshire, one of England's most charming counties; first riding along the ridge of Edge Hill, where Charles I. engaged in battle with the Earl of Essex in 1642, and where five thousand men are said to have been found dead in the field of battle. The descent down the hill on to the plain near Kineton was so steep that we had to dismount and hold our machines back with no small effort. It was one of the steepest hills on the highway that we met in England. Rapidly riding across Warwickshire, by the way of Kineton and Charlcote, we entered Stratford-upon-Avon about noon, and stopped at the Shakespeare Inn, which had by its door, on a well-painted sign, "Headquarters of the Bicycle Touring Club."

For a hundred and fifty miles or more, I had ridden my machine without having it washed, and as a consequence, it was in a shocking state, though in good running order. This had happened because, during the first week or more of our tour, when we scrupulously attended to the cleaning of the machines at an expense of a shilling a day for each, it either rained regularly the next morning, or the roads were so muddy that after a few minutes' use the machines were as dirty as before. At last I concluded not to have mine cleaned at all, whereupon fine weather set in, which, to our delight, continued all the way to Stratford; but as I rode over the bridge into that Shakespearian town, a little urchin actually cried out, "Just look at that bicycle, it is dirty *beyond description!*" That child's remark had its effect; and in spite of J.'s laughing protest, before another hour had passed, my machine was washed by the hostler at the inn, who called out as we entered the stable yard, "This way with yer 'oss, sir, 'ere 's a box stall for yer 'oss, sir."

It is said that more Americans make the pilgrimage to Stratford than any other people, and that they show more interest in the town and its associations. However this may be, we experienced the usual emotions and made the usual tour of the place, which, as a town, was by far the neatest and cleanest I had yet observed. We saw two other towns in England, and but two, noticeable for their neatness, — Leamington, also in Warwickshire, and Doncaster in Yorkshire.

From Stratford to Coventry, by Warwick and Kenilworth Castle, has been said to be the finest walk in England. We passed over the greater part of the way more than once. Leamington, England's fashionable Spa, is only two miles from Warwick. Thus, within a line of twenty miles up and down the valley of the Avon, are to be found what no traveller in England should neglect, — all the Shakespearian associations of Stratford, the extremely interesting studies of old Warwick and Kenilworth Castles, the comforts and repose of modern Leamington, and the churches as well as the important manufacturing interests of Coventry.

At Warwick we stopped at the Warwick Arms, and in the morning rode over to Kenilworth Castle, after which we made the short but pleasant run to Coventry, passing on the way great numbers of men and boys walking and riding to the Warwick races. We stopped at The Castle,

* Made in 1879, by the president, Alfred D. Chandler, and captain, John C. Sharp, Jr., of the Suffolk Bicycle Club, of Boston, Mass.

in Coventry, which is conveniently near the noble churches and other buildings of interest. My attention was called to the public library, but I was surprised to find, in this city of forty thousand inhabitants, a library inferior to some in New England towns of half or even a fourth that number of people. It brought to mind the speech of young Lord Hamilton on education, which we heard in the Commons in July, and which helped to impress the English people with the deficiencies and needs of popular education.

Now we were in the very home of bicycles. They were constantly seen in the streets, the bells attached giving notice of their approach. For bells, we used a small, neat affair, obtained in London, which jingled or not, as desired. This was necessary, for in some towns in England the local town councils make the use of bells compulsory; and not knowing how many such towns there were, we always let our bells ring while in town or city limits, and stopped the jingling when in the country. In this way we never had any trouble.

The bicycle manufacturers in Coventry were very obliging, and showed us through their works with pleasure. I mention particularly, Bayliss, Thomas & Co., Hillman & Herbert, Singer & Co., and the Coventry Machinist Company. To Americans, who do not know what an industry bicycle making now is, the extent of these manufactories is a revelation.

Tricycles, which are now called for more and more, were then attracting no little attention; and we were shown by each of two rival manufacturers, the tricycles they were privately making to be run in the fifty-mile road race out of London, and which I believe was won by Mr. Derkinderin, — a well-known rider, then with Hillman & Herbert. It was difficult to select from among these manufacturers; they were all worthy of patronage and had high reputations. I can myself vouch for the machines of at least three of them. Finally, J. concluded to order two 56-inch "Club" machines for home use, of the Coventry Machinist Company. For these he gave minute directions, which were carried out while we continued our tour; and on our way home from London to Liverpool, some time later, we stopped at Coventry, took a run out toward Kenilworth and back on the new machines, and then had them boxed for the voyage. The machines were the finest I have ever seen. Riding bicycles abroad does not make them free of duty at home; for the practice in United States custom-houses has of late been changed in this regard, and duties must be paid on bicycles whether they have been used or not. So when Mr. James Gordon Bennett brought home some vehicles used abroad by him, and which he supposed were thus free from duty, it seems that he was obliged to pay, because the old rule to the contrary had been abolished.

It was on one of our subsequent visits to Coventry that we sat down to a "commercial dinner" at The Castle. This, as explained by our host, was simply a dinner of commercial gentlemen, at about one o'clock, and of daily occurrence in England. There were, I believe, eight at the table where we were invited to sit. The dinner was substantial, though plain, — of fish, a roast, one or two vegetables, and a pudding or tart. The simplicity of the ordinary English fare is noticeable. There was, perhaps, a little insincerity on both sides when, after some experience in various counties of England, we would ask: "What can you give us for dinner?" and would be answered: "What would you like to have?" It was either beef or mutton, or mutton or beef, from one end of England to the other. Eggs, to be sure, were sometimes to be had, and occasionally fish, but the great variety to which Americans are accustomed is not ordinarily met with in England. I noticed this peculiarity in the bread: that in the southern half of the country the loaves were always circular, with a small twist or top-knot on the upper side; while in the northern half they were baked in the circular or rectangular form, without the upper story.

About noon of 3 September, a fine, clear day, we rode out of Coventry over the great highway toward Birmingham, and when eight miles off turned sharp to the north at the Stone Bridge, riding away toward Coleshill and Tamworth, stopping a few moments at the former for a glass of beer and a biscuit, and at the latter about two hours at The Castle Hotel, for a substantial dinner, when J. opened a bottle of champagne in honor of his brother's birthday. Our ride to Tamworth was at a very rapid rate, over a good road; and the run from there was through a level country to Burton-upon-Trent, in Staffordshire, where we arrived at 6 o'clock, and stopped at The Queens.

The entrance to the stable yards of public houses in England is often under an archway, over and on both sides of which the hotel is sometimes built. We rode under the archway at The Queens, as we supposed, and put our machines in charge of the hostler; but we were given such questionable apartments, and had such an unsatisfactory supper, that I was a little mortified, and strolled out to see where we were, when, to my amusement, I found we had entered the Saracen's Head instead of The Queens, — the two being side by side and the mistake easily made in the arch. In a few moments we were comfortably established at The Queens, whose landlord took us that evening to some amateur theatricals in a public hall, which were quite a novelty.

Mention of the "Saracen's Head" reminds me of the many odd names given to English inns. Much curious information is to be had in the large city and county directories found throughout England, and I usually examined the directory of each county we entered, for a better knowledge of the various sections. As to the names of inns, I had the curiosity to look through a long list of them in the Yorkshire directory, and jotted down as illustrations of English fancy in naming public-houses, the following: Cat i' th' Window (Halifax, Yorkshire); Flitch of Bacon; Jug; Hen and Chickens; Hole in the Wall; Hop Pole; Labour in Vain; Malt Shovel; Old Dusty Miller; One Tun; Ring of Bells; Shoulder of Mutton (common); Three Horseshoes. If there is anything in a name, which of these inns is the most suggestive of a good dinner, a carousal, or a sound night's rest?

Before leaving Burton, we of course visited the breweries where the renowned "India Pale" or "Bitter Beer" is manufactured, and which, it seems, owes its favor at home to an accident. It was first made about the year 1823 for the East, and for several years India was its only market. But a vessel carrying a number of hogsheads of India Pale was lost in the Channel; its cargo was sold; and in this way bitter beer first became known as a beverage in England, and so rapid was its popularity that since 1828 the pale-ale trade has taken the lead in Burton. The marvellous growth of the brewing trade has been more especially since 1862. At Burton nearly 3,000,000 barrels of ale, of 36 gallons each, are produced in a year, valued at $35,000,000. Bass & Co., and Allsopp & Sons, have the largest of the thirty breweries there. Bass & Co.'s business premises cover over 150 acres, with six miles of railway and six locomotives — their own exclusive property.

We were introduced by the attentive landlord of The Queens to one of the firm of Bass & Co., who kindly took us over the more interesting portion of their enormous breweries. Afterward we found our way into one of the vast receiving cellars or vaults, where an employé, appreciating our motives and coin, led us on through hidden recesses to a particular row of barrels, one of which he pierced with a gimlet, and drew into a tall beaker glass after glass of ale unsurpassed in quality and appearance. One learns here to appreciate all the more that in buying Bass's ale, care should be taken to find out *who bottled it.*

(To be continued.)

WHEEL CLUB DOINGS

The Waltham Bi. Club has adopted a new uniform, consisting of Canada-gray patrol jacket and knee-breeches, with stockings to match. The head covering has not been decided upon, but a very handsome badge has been designed and accepted.

Philadelphia Club Matters. — One of the late meetings of the Philadelphia Bi. Club was held at the new, cosey little home of the president, who from illness has been prevented from attending any of the club meetings for a long time. The attendance was a goodly one, and a great deal of important business was transacted, and that with the enthusiasm

and interest that become all riders who are in earnest. At this meeting Mr. John Fergusson was unanimously elected to fill the position of captain, made vacant by the resignation of Mr. Henry Longstreth, and Mr. John Gibson was appointed sub-captain in Mr. Fergusson's place. An opportunity was afforded the members of paying their respects to the good lady of the house, and of inspecting the many tasteful ornaments and attractions with which the little home is well supplied. Not the least interesting amongst these was the neat clock presented by the club as a wedding gift, and "Mrs. President" prizes this as an earnest of the kindly feelings and good wishes of Mr. P.'s fellow-wheelmen. The president's cosey, cheerful little study is most inviting, and I think would be just the place for him to get up a chatty letter to the WORLD; and if in need of inspiration, a glance into the yard at the "old stager" who is stabled there ought to be sufficient. Why not send a short history Mr. President, of your experiences as the pioneer here, and a log of the venerable "54"?

Some of the other clubs, I hear, take little interest in their meetings; and one, it is reported, has abandoned them for the winter. This may be only hearsay. It is only justice, however, to say that its members rank amongst the best "roadsters." At the last meeting of the first-mentioned club, the attendance was not as large as it should have been, considering the comfortable, cheerful quarters furnished, and the matters in hand. It was composed principally of the "old stand-bys," who always manage to spend a pleasant and interesting evening together, and who do not rush off as soon as adjournment is in order. Some of them say they will "hold the meetings if only three come"; but as they are generally sure of five times that number, they do not look for a three-cornered meeting very soon. They very wisely decided to have their annual club run early in the summer instead of late in the fall, as they are then likely to enjoy better weather and roads.

A MEETING of New York wheelmen was held at 791 5th avenue, Saturday evening, 15 January, 1881. In the absence of Captain Munroe, who was to take the chair, the place was filled by President Bates, of the Col. College Club, Mr. Thomas Brown, Jr., of the Mercury Bi. Club, acting as secretary. A letter was read from Mr. Wilcox, of the Brooklyn Bi. Club, the gist of which was that the commissioners be reasoned with quietly, and if they still persisted in keeping bicyclers from using the Park drives, to then make a test case of the matter in the courts. The meeting resulted in a committee of six being formed to wait on the commissioners and request the use of the Park drives from 90th to 110th streets; also of the Riverside drive. Capt. Monroe, who appeared later in the evening, was appointed chairman of the committee.

MR. FRED FARLEY, of the Short Hills Athletic Club, found a purse containing $150 in gold. No one has answered his advertisement for the owner, and he means to purchase a bicycle with the amount in the spring.

SIX of the Lenox Bi. Club played a game of polo on skates, against seven of the Red Caps, winning the game by 7 goals to the Red Caps' 5. Another game will be played next Saturday, at 3 P. M., at the Great Windsor Skating Rink, 56th street and 8th avenue.

KNICK O'BOCKER.

THE ROCKINGHAM BI. CLUB, of Portsmouth, N. H., has taken a decided stand. This is from one of their members:—

Editor Bicycling World:— Our club is doing pretty well with the "stand-still," for four out of our eight can do it. We have secured a hall, and are keeping up practice and starting others on the "uneven tenor of their way,"— to quote from "Madeline,"— that they may finally claim the proud title of bicycler. We are all devoted to wheeling, are working for the success of our club, and will probably double our membership in the spring.

We have many pleasant places to visit in the summer within a short distance. The Hotel Wentworth, at Newcastle, 2 1-2 miles (J. Braham's orchestra concerts every afternoon last summer); Rye Beach, 7 miles; Little Boar's Head, 9 miles; Great Boar's Head, and Hampton Beach, 11 miles; Exeter, 15 miles, where the Phillips Exeter Academy boys have a club of twenty-four members; Dover, 11 miles; and York Beach, 10 miles. There are good gravel roads to all these places, with the exception of the one to York Beach, which is cut up and made very dusty by the many stage-coaches which run in connection with the trains from this city to the beach houses.

We had many pleasant rides with visiting wheelmen last season, and shall be pleased to see more next season, and will give all a cordial welcome. WATCH.

WHEELING NEAR MONTREAL.—*Editor Bicycling World:*— The Montreal Bicycle Club turned out 43 times during the season of 1880, and covered a total distance of 500 miles. Thirty-nine fixtures were cancelled by that objectionable individual, "the clerk of the weather." The total attendance was 170, making an average of 4 to each meet. The largest attendance was 8, and the smallest 2; the largest possible 16. The following is a list of the names of those who attended the rides most frequently, with their number and mileage:—

H. S. Tibbs,	38	rides,	462 miles.
A. T. Lane,	27	"	285 "
C. J. Sidney,	21	"	309 "
C. A. Whitham,	20	"	251 "
I. D. Miller,	18	"	190 "

Of these and others several rode daily to and from business, and in addition covered considerable ground apart from the club. The first two each scored over 1000 miles. The longest club rides were, 1 July, 32 miles, 5 members attended; 31 July, 36 miles, 4 members attended, and I (D'Israeli the "Club Dog") covered the whole distance "like a man." The only races here were held under the auspices of the Montreal Lacrosse Club, and have already been recorded in your columns. The first was on 5 June, a two-mile handicap; first prize, G. M. Smith (1 minute, 45 seconds start). For second prize, H. S. Tibbs (scratch) and A. T. Lane (1 minute start) raced subseqnently (there having been a mistake in scoring the laps), and A. T. Lane won easily. The second was for the championship of Canada on 2 October, 3 miles, when Mr. L. H. Johnson showed us all a clean back wheel, and H. S. Tibbs came in a bad second for a good medal.

This year we hope to have a race meeting of our own, on a track on which Mr. Johnson has passed a 3-minute verdict; and we hope to see him and a good many more of our American cousins on that occasion. We have determined, in order to encourage a better attendance at club runs, to give a prize for the largest mileage, and another for best attendance at morning practice; also to establish a club championship medal (1 mile) for monthly competition, on the above-mentioned track (Blue Bonnets).

We are in treaty with the executive of the Montreal Lacrosse and Snow-Shoe Clubs' Gymnasium for the use of their club-rooms and grounds, having been fully convinced by the "Bossachusetts" of the necessity of a club-room.

I am glad to have this opportunity of adding my mite to the burden of well-earned praise your paper has lately received; and am sure that I echo the sentiments of a large number of your subscribers, when I say, that the more practical information about bicycles in general, and the various makes in particular, you give, the more valuable the WORLD will become.

I have been looking anxiously for a report of the proceedings at the last Directors' meeting of L. A. W., but suppose it has been crowded out; and I do want to see the "cut" of that badge. We have not put our wheels away for the winter, but have experimented with a "runner" on the back wheel (which saves considerable jolting), and have done some short distances with the thermometer at 10° below zero. We have not yet had our usual January thaw, so that the roads are still a little soft; but soon I expect we shall turn out every Saturday afternoon and astonish the natives.

Caninely yours,

THE CLUB DAWG.

MONTREAL, 20 January, 1880.

THE Massachusetts Club dinner served at the Bossachusetts headquarters, Tuesday evening, 1 February, was a success; but the lateness of the hour prevented us from publishing a complete report. Our next issue will contain a full account, and in the issue following that we will have a report of the Boston Club dinner.

THE Bicycling World & ARCHERY FIELD

Is the official organ of the League of American Wheelmen, and of the Eastern Archery Association, and aims to be a fresh, full, impartial record and herald of all that relates to bicycling and archery in America,—clubs, races, excursions, tours, meets and runs, target competitions, sylvan shoots, hunting, personal items, inventions, manufacture, opinions, humors ranges, paths, routes, and incidents, the best things from other journals, foreign notes,—and of all subjects of direct or collateral interest to bicyclers and archers and their friends. Communications, correspondence, news items, suggestions clippings, or other aids will be appreciated, and should be sent to EDITOR OF BICYCLING WORLD, ETC., 40 WATER STREET, BOSTON, MASS. *Contributors and correspondents are requested to give always their full name and address, to write on one side of the paper only, and to observe that our pages go to press at noon of Tuesday preceding date of publication. For our terms of subscription and rates for advertising, see announcement of Rates and Terms in another column.*

BOSTON, 4 FEBRUARY, 1881.

TARGET VALUATIONS.

IT is curious to note how seriously and earnestly an intelligent man will bestir himself in behalf of a favorite hobby, no matter how absurd that hobby may be. It is perhaps almost as weak a thing to combat publicly such a hobby of another, as to seemingly support it by silence. However, when friends are being led astray by the advocates of a false measure, it is pardonable to interfere; and I shall once more give my own ideas upon the question now being agitated, as to the propriety of changing the values of the several colors of our archery targets. It may sound harshly in the ears of the advocates of the "Creedmoor system" to say that *there has never been, and cannot possibly be offered* a single argument, however slight, in favor of the 1, 2, 3, 4, 5 system of counting! Such a statement, however, is strictly true. To put it a trifle less abstractly, I will say that if any gentleman will go out with an honest scorer and have him, on a full-sized cheap paper face, score accurately the position of each hit made, I will prove to him that out of *fifty* scores thus honestly recorded there will not be *one* in which the old system will be as far from the real truth as the new! I have used up forty-three paper faces in experiment, and in *every instance*, the advantage of honesty remained with the old system. I knew before I made the experiments, however, that there could possibly be but one result at any range ordinarily shot. In order to furnish a basis of argument, I will lay down five propositions which I know to be true, both in theory and practice, and I will then offer the proof of each:—

1. It is impossible to have a target which is a "fair" one, either in theory or practice, and peculiarly so if it is graduated in rings of the width given in ours.

2. If such a target could be fair for *one particular distance*, it would be unfair for all other distances.

3. If fair for one grade of skill in archery, it would be unfair for all other grades.

4. The 1, 2, 3, 4, 5 system is about the *worst* imaginable.

5. The old system is about the *best* imaginable.

Now, as to the first proposition. To prove this proposition, we might cite enough examples to fill this entire paper; a few will suffice for the intelligent archer. Suppose three gentlemen are shooting three arrows each at 60 yards. One scores three reds, almost touching the under margin of the gold; scoring 21 points. The second gets two golds, one on the extreme right just breaking the line, and one on the upper left margin, and his third arrow cuts the outer line of the blue; scoring 23 points. The third strikes one arrow in the centre of the gold, the second in the centre of the red, and the third upon the extreme inner edge of the blue; scoring 21 points. Now, by actual measurement, the three arrows of No. 1 average about 4.8 inches from the centre of the gold; the arrows of No. 2, by the same measurement, average about 7.8 inches from the centre; and those of No. 3 average about 2.3 inches. So that No. 3, who really shot worst of any, gets an average by *string measure* more than three times as high as No. 2, and twice as high as No. 1. This shows how grossly unfair string measure would be, both in theory and practice. It is true that No. 1 beats No. 2 by string measure, but he is beaten by our valuations two points in 23, and by the new system he would be beaten one point in 13. By our valuations, No. 3, who shot worst of the three, gets equal points with No. 1, and two points less than No. 2. By the new system, No. 3 would get just the same as No. 1.

This proves that the string measure would sometimes be outrageously unfair. By comparing the two systems of valuation throughout all the variations of the three scores given, there is little advantage in either. But I shall only discuss one proposition at a time.

It will appear from the example above given that our present valuation is unfair; for the man who scored the three reds at the margin of the gold was far the best archer of the three, and yet obtained two points less than No. 3. By the same example, the new system is shown to be unfair, because the best shot obtained a score less by one point in 13 than his less accurate adversary. From the nature of our nerves, our muscles, and our minds, conjoined to the variableness of wind and light, and the impossibility of making a *perfect* arrow or bow, it is *impossible* for an archer to ever attain *accuracy* in hitting. He can only *approximate*. The best archer is not the one who oftenest hits the centre of the gold, but the one who most regularly hits near that spot.

He would be a marvellous shot indeed who could always strike the target at 100 yards; and yet in a given score he might get very few golds, and no centre hit, while a mere muff might, with one tenth of the score, obtain a perfect pin-hole gold. Mr. Ford, with his matchless public record of 1251 at the Double York Round, only obtained twenty-eight golds, while the writer once recorded thirty-two golds. Did I beat Ford? The very thought provokes a smile! So it appears that he who strikes the gold most frequently is not the best archer. Suppose we have a target without rings: we have seen that string measure is unfair, and it would not do to use it, for the *misses* could not be measured. Mr. Brownell once advocated the honesty of the string measurement, and advised measuring each miss as a *certain number of inches outside of the target!*

Suppose one archer's misses really average within six inches of the edge of the target, and another's average ten feet wide, what would be the fairness of such a system?

But suppose we have a target without rings, and only use *hits* as the criterion of excellence; in such a case, shooting at 60 yards, two archers might tie on 24 straight hits, while one would almost double the other in real merit, and for this reason it has always been found that it is unfair to give the highest prizes for most hits. A hundred valid reasons might be added to show the truth of proposition No. 1, and I shall pass to No. 2.

Why is a target fair for *one* distance not fair for *all* distances? A moment's thought will show a multitude of reasons.

Take the new system of values, and suppose two archers shoot three arrows each at 100 yards. No. 1 makes three hits, getting a gold, a black, and a white; No. 2 gets three hits,—a black and two whites. Now there is very little advantage in point of *real merit* in the two performances, because neither of the archers could possibly tell, when aiming, whether they were aiming properly for the gold or for the white. Being each very fine archers, they were able to get their aim *near* the right point, and to loose *nearly* right, and thus to keep their arrows within the small circle of the target so far away, and one did about as well as the other. Yet one scored almost three times as well as the other. Was he three times as fine an archer? By string measure one would average about 14 inches, and the other about 22 inches from the centre, or less than 100.

Now let us go up to 60 yards, and suppose at this range the two archers should score just as above given. The one who only obtained three whites

would be considered an extremely poor shot, while the other, who averaged equal to 104 points with 24 arrows, would be considered a fair archer.

Let us put a stronger case and take the new system of scoring. Suppose two archers shoot 100 arrows each at 30 yards, and one has become so perfect as to be able to keep within the gold; the other about such an archer as the writer, who with practice at that range might be able to keep within the red. By the new system, one would score 500 points, the other 400, the higher score being only one fifth better than the lower. Will any archer doubt but that such a run of 100 golds would be ten times as fine a score as the other? A muff on such a target would score 400 points, because he would get some golds as well as some blues and blacks. Of course, such a target is too coarsely graduated for 30 yards, and experiment shows that for the average archer, say one who scores 250 points at the single York Round, the graduation is nearly right for 60 yards. For the archer who scores 400 at the York Round the graduation is about right at 75 to 85 yards. It is no doubt unprofitable to say anything more upon this proposition, as I think every one will see the truth without argument.

The third proposition is proved by the facts of the last statement; for by enlarging upon it we find that the archer who could always hit the gold at 30 yards would always tie with another of the same grade, and neither could ever win, so the graduation would be a foolish one for archers of such a grade. To the class of archers who could average their hits in the red ring, the graduation would also be unfair at 30 yards, because the gold would not sufficiently exceed the red in value. The perfect *theory* as to the proper valuation of the colors would of course be *according to the area of each color*.

As the areas of the colors on the regulation target are as follows: —

Gold = 72 square inches.
Red = 217 square inches.
Blue = 362 square inches.
Black = 506 square inches.
White = 651 square inches.

Therefore it would follow that the valuation of each color should be about thus: Gold = 9; Red = 3; Blue = 1.8; Black = 1.3; White = 1.

Now, even if this theory were as perfect in practice, it would be cumbersome scoring. But in practice it would be as far from the truth as the present system, for the clumsy fellow who sent two arrows 20 feet wide of the target, and luckily got one in the gold, would gain as much as the fine archer who put all three of his hits in the red. If one were depending upon *chance alone*, by shooting his arrows aimlessly in the general direction of the target, then the target should be graduated so as to give the colors an *area valuation*.

Now as to the fourth proposition, to the effect that the 1, 2, 3, 4, 5 system of scoring is about the worst imaginable, let us see some of the proofs: First, the greatest evil of the old system comes in here in an exaggerated form; that is, *the greater proportionate advantage given to the red ring*. Under the old system, while the red ring in area bore the proportion to the whole area of the target of about 12 to 100, yet the archer generally obtained about half his entire score at 60 yards in this color, and fully one third even at 100 yards. Yet this evil is vastly aggravated in the new; for whereas, in the old system the red bore the proportion of 7 to 25, in the new system the proportion would be as 4 to 15; each red is raised 5-28 of a point in proportion to the whole valuation.

Take the score of the American champion, Mr. L. L. Peddinghaus, at Buffalo, and by the new system it would be as follows: —

Golds, 10 . . . . . 50 points.
Reds, 35 . . . . . 140 "
Blues, blacks and whites . . 243 "
Total . . . . . 433 "

The red furnishes practically one third of the score, and nearly three times as much as the gold. Mr. Brownell himself at the same meeting, on the first day, at the York Round, obtained 56 points from the red, and nothing from the gold. He scored 168 points at the round, getting precisely one third of his score in the red ring! Yet he thinks this ring should be given greater advantages! Is it the old rule of "You scratch my back and I 'll scratch your back"? But this red ring has been the friend of others beside Mr. Brownell.

At the same meeting, on the first day, Mr. Granger Smith scored 216 points, 112 of which he owed to his hits in the red! Think of an area of 217 square inches out of 1,809, yielding more than half the score! By all means such a fruitful field should be enlarged. My friend Smith should push for the new system. The champion on the second day scored 360 points, and received 133 of these points from the red! Do I hear a faint hurrah for the new system from my conqueror at Buffalo? If he had been acting under the proposed *improved* system, he would have beaten me worse; for whereas I scored 162 points from golds, and 203 points from reds, he obtained only 90 points from golds, and 245 from reds. If his reds had the additional 6-28 of a point, he would have gained so much as not to have required his last arrow to win! Surely, it would be hard to find a worse system. The system of values according to *areas* works very nearly right at the ranges of the York Round, when shot as a whole; but is not right for 60 yards when shot alone.

Now as to the assertion that the old system is about the best imaginable.

The first proof is that it has worked satisfactorily for more than one hundred years. The second is that most archers who care to shoot in a match usually shoot at as long a range as 60 yards, and as the valuation (except the red ring) is about right for 75 yards, it is *nearly* so from 60 to 100.

Although the archer gets too much score in the red ring, yet *he should* get more in that ring than any other, for this reason: it being impossible to hold steadily, and the archer being able only to keep his arrows in a close circle about the gold, he *actually hits each square inch* of the red oftener than any other part of the target, at all ranges above 60 yards. So, while the red now really has too great a value, the excess is not so much as the score would indicate.

The greatest reason for maintaining the time-honored system of scoring is that it holds the annals of archery. Archery is an ancient game, and a great part of its attractiveness is because of the honor lent it by its age. Like a castle or a title, it gathers grandeur from years agone. Of course it is easy to formulate a rule by which a score of one system can be instantly converted into its equivalent in the other. From the very nature of the relation that the numbers 1, 2, 3, 4, 5, and 1, 3, 5, 7, and 9, bear to each other, if the *hits* and *score* of the old system be added together, and divided by two, the result will be the equivalent score in the new system, no matter how the score may have been made. Thus in the score given, 23–131, by adding hits and score together we have 154. One half of this is 77, which is the score by the new system. Or say we have the score recorded thus in the old system: 9–5–3, 7–7–7, 5–1–9, 5–7–3, 9–5–7, 5–5–5, 7–1–0, 5–9–7 = 23–133.

By the new system this would be thus: 5–3–2, 4–4–4, 3–1–5, 3–4–2, 5–3 4, 3–3–3, 4–1–0, 3–5–4 = 78. Or 23 + 133 = 156 ÷ 2 = 78.

I wonder that our friends of the new system have not examined this relation of the two series of numbers, with the times the numbers are used. But the opposition that I give to the innovation is not on account of the slight trouble necessary to interchange the values, but from the "confusion of tongues" necessarily following.

If there was an emergency, a pressing need for the new system, I would at once give in my adhesion but as the new system is much worse than the old, and no change is needed, I feel that the clamor for a change is a very foolish thing, however honestly made.

Just by way of conclusion I wish to call attention to the sentence in Mr. Brownell's late letter, in which he says: "Several of the archers here (California) were quite amused at a portion of Mr. Thompson's report of the Thanksgiving match in the last issue of the ARCHERY FIELD (24 December) received here. After his comparison by points, by which he shows himself beaten by some five archers having smaller scores, he says: 'Of course such a system would not be a good one.' If Mr. Thompson thinks so, why will he not drop the point system, and follow the example of the Pacific Coast archers, and adopt the 1 to 5 values?"

Now Mr. Brownell should remember that I have *never* advocated a system of counting by *points* as a fair one. I acquiesced in the English system, *so far as the medal is concerned*, only because it was so warmly urged upon me by Messrs. Caron, Weston, and other good archers and true, and because I thought that thus the medal would more likely pass from hand to hand, and because archers succeeding at only one range might gain some points toward the medal. The fact is, that where so many as 288 arrows are shot, the element of accident is measurably eliminated, and *score* should win.

So far as taking such a system of points as that of one point for hits and one for score, in each lot of twenty-four arrows at 60 yards, and two points for gross hits and two for gross score, I trust it would find no advocate among intelligent archers. I only used it in connection with the Thanksgiving-day scores to illustrate the *general* and *regular* superiority of Mr. Havens over the field. In order to get so many points he had to surpass the *entire field* at almost every stage. But I am not caring to defend myself. If the genial face of my friend Al. Havens, that looks down upon me from its frame upon the wall as I write, wrinkled into a smile because of anything in my letter, or if my friend Brownell joined in at my expense, I have not written wholly in vain. Now let us ask the old question, *Cui bono?* No *archer* surely cares a jot whether in the valuation of the target his brother archer may by accident gain a temporary advantage over him or not! If I thought a brother archer felt so toward me, I would never shoot at a target with him. I have always found archers generous and honest in the pastime, always insisting upon their adversary scoring the higher color when there was any sort of doubt, and always refusing to so allow their own arrows to count in doubtful cases! It is a *manly* sport. Who cares for the few accidental victories of his weaker brother? Who is going to go over his old scores and blame his *target* for his defeat?

WILL H. THOMPSON

PERSONAL

IT is with regret that we announce the death of Ethel, the elder daughter of Mr. Charles E. Pratt. Mr. Pratt has been in Washington for some time, in attendance upon his sick child, and from the anxiety he has from time to time shown, it may be inferred that the little girl's illness was severe. The kind-hearted League President has always shown so ready a sympathy for others, that this visitation upon him will awaken a responsive feeling in the hearts of his many friends here, and in the hearts of wheelmen all over the country, who have known him personally.

THE ARCHERY FIELD has, of necessity, been deprived of the customary editorials in the last two numbers, but the department will be edited as usual in our next number.

THE LEAGUE MEET.

Ed. Bicycling World:— I wish to make a suggestion which I hope you will not consign to your waste-basket. Be kind enough to make an exception for this once, and break the rule which I realize you have made in regard to my productions. By the way, how much is manuscript paper worth a pound? If enough to make it an object, I will hand my literary efforts to the rag-man myself, and not deputize you longer.

Your correspondent "Knick O'Bocker," to whom all readers of your paper must feel indebted, says in his last letter, that "in various interviews with prominent lights of New York clubs, they say that they will not visit Washington if the League decides on that city for the next meet." This seems to me to manifest a very porcine in the horse-feed receptacle sort of feeling, and I see with regret such a sentiment finding life and expression so early in the existence of the organization. It is too much to hope that an association of this size could live without rivalries and jealousy, but I did hope that we could have one anniversary without these feelings coming prominently to the front. I realize that my opinions or wishes do not amount to much, for I am a very small, wee, little light, and only glimmer a little occasionally.

My suggestion is that if Washington is decided upon, we have a meet in New York upon the following day. Of course this would not be an official meet of the American League, but I cannot see why there should not be as many bicyclers present as at Washington, and this is, I think, the principal point. Again: we should have the advantage of the notice given of our movements by the Washington correspondents of the metropolitan papers, and there could be no doubt in regard to the authenticity of any notice given of our New York meet. The additional expense may be considered an argument against my idea, but this in reality would be but trifling I am only adding twenty-four hours to the trip for the New England men, who must pass and repass. New York and Western men can, by joining forces, make about the same railway rate to New York *via* Washington that they can to Washington and return direct, they having the advantage of competing lines. Philadelphia and Baltimore would be obliged to dip into each pocket, but they are public-spirited, and would undoubtedly rejoice at the opportunity thus given them to show their manly forms to the denizens of the two great cities in the same week. I will volunteer now to take care of Clarke, of Baltimore, while in Washington I tried to in Newport, but business and the side room were too much for me. She was the prettiest girl in town, too, and that moonlight from the cliff walk was simply entrancing.

Personally I am in favor of New York, and hope the decision will be in its favor, because I can borrow the money to get there much more easily than I could a larger sum; but shall go to Washington, notwithstanding my preference for the city of rings (it is so near the city of churches, you know), even if I have to allow my father's brother to retain my linen duster with the sealskin collar, which I have used for an ulster this winter.

Dedicating this idea to the before-mentioned lights, I remain,

Suggestively yours,

COURT.

MR. BATES SENDS HIS REGRETS.

N. T. KIDDER: *Dear Sir,*— I have to thank the Boston Bicycle Club, through you, for their kindness in inviting me to attend their annual dinner, which is to occur Feb. 7, and to request you to convey to the club my regrets that I shall be unable to attend.

The truth is, I have been convinced, both by memory and mathematical calculation, that there are no such things as bicycles, anyhow. Now, while the deep snow would render bicycle navigation impossible, even if I should allow that there are, or ever were, any such things, I have been remembering and calculating; and I think I can expose the strange delusion.

I remember that I began riding on a Pope 48-inch wheel. I remember the first time I navigated it. Possibly this climate, where we are sometimes deceived by mirage, may account for some things I remember to have observed; and possibly things are different in Boston. But I remember that before I had ridden half a block on that machine, it became unmistakably ten feet high, if it was an inch; and I dropped down in the road, utterly astonished, and took out of the inside pocket of my vest a voucher from Pope, certifying that it was only a 48-inch high wheel and read it over to make sure. Then, after a good deal of effort, and some very natural suspicions, I mounted again; when, lo! the first time I struck a slightly rough place in the street, that wheel became at the very least 15 feet high! Sir, it stands to reason that a sober middle-aged man, of sound judgment and known sanity, could n't possibly be so greatly misled in so simple a matter by a mere mirage. It is much more reasonable to believe that there is n't and never was any such machine.

I remember further, while I was learning to ride, suddenly observing a brick lying in the street. Now, a brick is a common object,—a very plain object. A sane, sober, middle-aged gentleman, of sound judgment, everybody will admit, could not possibly be mistaken about the general appearance and proper dimensions of a brick; yet I solemnly assure you that that brick made a wall about two feet high, which so nearly blocked the entire width of the street—30 feet from curb to curb—that it was with the utmost difficulty that I found room to pass it with a wheel which Pope certifies is only one inch wide. Mirage will not account for such a phenomenon. As Bob Ingersoll says, "it won't do"; it is

much more sensible to believe that there never was any such machine.

Once more: I remember the first hill I rode down with feet over the handles. That hill is about 20 feet high and 100 feet long. I have walked over it and rode over it in carriages many times. I can obtain the city surveyor's certificate, if required. Well, sir, when I reached the brow of that hill, going fairly, and put my legs over the handles, as sure as I am a worm of the dust and a traveller with a through ticket in this vale of tears, that hill suddenly became a mountain, about a mile and a half long and not less thon 1,200 feet high. (If you require an affidavit, send nine postage stamps for notary's fee and postage.) I am willing to leave it to any intelligent audience if it is reasonable to believe there is, or ever was, in reality a machine capable of suddenly changing the face of the earth in that miraculous style. "It won't do."

Sir, I could relate many more experiences from memory, all confirmatory of the theory that there is no such machine, and that those who believe there is, are afflicted by a strange delusion. But enough of memory. Memory is so fallible that I mistrusted it myself. Therefore I applied to mathematics — the exact science which cannot be mistaken. Figures cannot lie, and figures prove conclusively that there can be no such thing as a bicycle.

Thus, a man who rides a bicycle 20 years, you will readily admit, will get not less than 1,320 falls. If he rides a 48 or 50 inch wheel, he will fall a distance of a mile or more! It is evidently entirely ridiculous to assert that a man can be 20 years falling a mile, or that a fall of a mile would not mash to a jelly the strongest man that ever breathed. It is also absurd to suppose that a man can fall a mile off a wheel that is only 4 feet high. You see "it won't do."

Again: My house and my office are a mile and a half apart, on a north-and-south line. I ride the distance six times each day, — nine miles a day. Suppose I do this only 333 days each year, it makes over 3,000 miles a year, or 30,000 miles north and 30,000 miles south, in 20 years. Now look at a map of the world, and you will see that it is utterly impossible for anybody to go 30,000 miles south or 30,000 miles north, starting in Detroit. I say nothing about what Boston riders can do, because I don't live there; but no man can ride 30,000 miles south or 30,000 miles north from Detroit on any kind of machine, and it is preposterous to pretend that he can. No sane person will set up any such pretence. "It won't do."

If a man rides an average of two hours a day for 20 years, then he rides more than one year and nine months. Now, it is physically possible to ride — as they do in the annual English championship long-distance races — for one week, but it is nonsense to talk of a man's riding a year and nine months! "It won't do."

For these reasons you will have to excuse me, as I have proved that there is n't any such machine. Of course I cannot consistently countenance the delusion that there is, by attending a dinner in its honor, especially when the dinner itself is so many hundreds of miles distant as to suggest serious doubts whether there is any such dinner, — whether that, also, is not a delusion.

But if there really is any such miraculous machine, I have no doubt that the Boston Club will furnish a miraculous dinner in its honor; and in the name of Michigan wheelmen I send you sincere fraternal greeting. All bicycle spokes in this country centre in Boston. We are the tire, you the hub, and when the Boston Club puts its feet to the pedals, the wheel moves all over the country.

Fraternally yours,

L. J. BATES,

President Detroit Bicycle Club.

DETROIT, 22 January, 1881.

A NEW ERA.

I HAVE the pleasure of announcing an action on the part of the city council of Chicago that will have quite an important bearing on the question of bicycling.

The matter of street-car accommodations in Chicago has in the past been scarcely abreast of the times. Reason for this state of things has been the lack of competition. In each division of the city a company has had the exclusive monopoly, and every effort to overcome this has been futile. The South-Side Company are now disposed to try something new in the way of propulsion for their cars, and to this end have obtained from the city council permission to put the innovation into practical effect. The plan proposed is now in successful operation in San Francisco, and consists of an endless cable running over a drum operated by five-hundred-horse-power engines located at both ends of the line. The cable is laid beneath the ground midway between the rails; and directly above it, through the entire length of the line, there is a narrow opening, through which a traction clamp clasps or lets go of the cable at will; and while the cars go up one way, they come down the other by attachment to the same cable.

This is in brief a description of the new system by which we are to be transported about the city in future, and I regard it of some significance to bicyclers in the fact that it is doing away, to a great extent, with horses. Mechanical writers and theorists have repeatedly urged that the horse is one of the connecting links between the present age of progress and that of ancient barbarism. Of course I do not take this extreme view of the case, but I do think that if people could only give up their idea that horse-flesh was absolutely indispensable to business, the field of invention for a mechanical substitute would be wider, and a greater stimulus offered for bringing out something that would be far superior as a motive power. As a means of intramural transportation there is certainly a great need for this substitute; horses block the passages and streets that are needed for other purposes; they are uncleanly, and are positively dangerous in a crowded thoroughfare. In saying this I do not at all disparage the splendid beast, for no one thinks more of the horse than I; but like everything else, it has its place, and while I do not question its utility as a beast of burden, I think it can be improved upon. You will never see a man with a particle of mechanical taste who will find fault with the bicycle for frightening horses. He knows too well the relation which one bears to the other; but people generally have based their standard on the horse as the only means for getting over the ground, and everything that interferes with this idea is immediately condemned. It is fortunate that this class of old fogies are not in the majority, or invention, science, and progress generally would receive a check. The great bulk of population of a city are dependent upon street cars as a means of getting to and from business. All classes of opinion are here represented, and when they are daily brought into contact with a means of locomotion that surpasses the old way in speed, comfort, and everything else that is essential to despatch of business and general utility, I think the spirit of prejudice will be turned aside, and a more liberal feeling inaugurated toward inventions of an anti-equine nature, and the bicycle will be the first to have a share in the benefits of a new era of thought.

STENO.

CHICAGO, 7 January, 1881

MR. COTTRELL AND THE B. T. C.

Editor Bicycling World: — Allow me to express my deep regret that the bright and vivacious pages of the BICYCLING WORLD should have been sullied by the communication signed "Stanley I. A. Cottrell," which appeared (in No. 7), under the heading "Notes from Abroad." The "maker-up" has surely made a mistake; its place was in the column denoted "Personal," for it imputes the most unworthy motives to some of the most earnest workers in our world of wheels.

Whether your correspondent displays *g od* taste in reopening a subject with such evident animus in an American paper, after it had already been fully considered and commented upon by English journals, I leave for the consideration of your readers. The value of his statements may be inferred from the fact that the annual he mentions is actually "compiled" and published by Mr. Welford, THE SECRETARY OF THE B. T. C., and is edited by Mr. H. T. Round, whom he so grossly libels by his insinuations. However, this is not the first time that Mr. C. has given vent to his feelings, or in his own polite words, "scrawled to a paper" *re* B. T. C. affairs; and I beg to add the summing up of the whole matter by an able and impartial writer; viz., the editor of the *Bicycling News*: —

"We have in one part of the official

organ of the club, a gentleman stating that the last annual meeting was 'a farce,' while in another periodical, the ex-president [*i. e.*, Mr. Cottrell, H. B., Jr.] published the very silliest letter which has appeared upon the subject. . . . If the statements of the malcontents be true, and the dissatisfied men are gentlemen who have had no interests to serve other than those of bicycling, the last general meeting of the Touring Club was so complete a farce as to be an insult to the common-sense of a large and influential body of riders, and such men as Hillier, Round, and others may be relied upon to originate or support no mere cliquish opposition. . . . There is doubtless much reform needed in the club; but as we have already intimated, a lot of earnest members on the one hand arguing for club improvement through the press, while on the other hand there comes from an ex-officer an audacious, flippant, and partially intelligible rejoinder, will neither improve the prospects of the club, the position of the intelligently earnest officers, nor the large influential and dissatisfied body of members."

This leader appeared Nov. 12; since then the council have considered and put forward a scheme which will no doubt meet with the approbation of all. The "bird gentlemen" are, and always have been, both in their writings and actions, ardent supporters of the B. T. C., but they certainly did oppose (and that successfully) the proposition of the council at the last general meeting, — proposed rule, No. 23: "The president and three of the vice-presidents *shall be chosen by the council, and shall hold office for life*, or until resignation." Mr. Cottrell was *then* president. Comment is needless.

H. Blackwell, Jr.,
Bicycle Touring Club.

6 December, 1881.

THE LEAGUE BADGES

Are out. Treasurer Willoughby has a limited supply of the silver ones ready for delivery. Early orders will receive prompt attention, when accompanied by $2.00 and the league number. The nickelled badges will come later.

The silver badges are *solid coin silver*, not silver-plate. It was never intended to have them any larger than as shown in the cut, but by a mistake the first die was made too large, and a new one had to be made, which has met with all sorts of misfortunes and delays.

It will be remembered that the badges remain the property of the League, the $2.00 for the silver and $1.00 for the nickel badges being a deposit for their safe keeping. Each badge will bear the number of the wearer in the centre of the handle bar.

Deposits should be sent to Hugh L. Willoughby, Treas. L. A. W., No. 538 N. Broadway, Saratoga Springs, N. Y.

A. S. Parsons,
Cor. Sec. L. A. W.

L. A. W

Amateur bicyclers everywhere are cordially invited to join the League of American Wheelmen.

Admission fee is $1.00 *for individuals;* 50c. *each for members of clubs when the entire active membership joins. Fees must accompany the application, and will be returned in case of rejection. Make checks, drafts, or postal money orders payable to Hugh L. Willoughby, treasurer, Saratoga Springs, N. Y.*

Applications accompanied by the fees, as above and other communications, should be addressed to Albert S. Parsons, Cor. Sec. L. A. W., Cambridgeport, Mass. Names of applicants should be written very plainly with first names in full, giving full address, and on one side only of separate sheet from letter of advice.

Applicants should notice names as published in the Bicycling World, *and notify the corresponding secretary if any error is made.*

Bicyclers generally are requested to notice the names also, and inform the corresponding secretary (confidentially) if any professional or otherwise objectionable person applies.

Every member should endeavor to extend the influence and benefits of the league by inviting desirable bicyclers to join.

Circulars, etc., regarding the league will be sent to any address on application to the corresponding secretary.

The rules of the league are given in full in the Bicycling World *of 2 October, and may be obtained by sending* 10c. *to the office of the* World *It is very important that every member should be familiar with these rules, and they will not be published in book form at present, as the organization is not yet perfected.*

Badges are to be obtained by any member on his forwarding his full name and address and membership number to the treasurer, with a deposit of $2 00 *for solid silver, or* $1.00 *for nickel-plated badge.*

APPLICATIONS.

Editor of the Bicycling World: — The following names have been proposed for membership in the League of American Wheelmen, and are sent you for publication, as required by the Constitution.

Albert S. Parsons,
Cor. Sec. L. A. W.

Essex Bi Club, of Newark, N J.: C. J. Wood, Jersey City; G. P. C. Smillie, Plainfield. N. J., and the following from Newark: H.C Douglas, Penningtonstreet; Howard Judson, 13 Tichenor street; Austin Booth, 517 Washington street; Louis Pennington, 2 W. Park street; Frederick Adams, 755 Broad street; Harry M. Darcy. 1098 Broad street; E. R. Bellman, 584 High street.

Mohawk Bi. Club, of Schenectady, N. Y.: E. Nott Schermerhorn; Samuel R. James; Lee W. Case; Emmett O'Neill.

Marlboro' Bi Club additional: Geo. E. Whittaker, and Harvey Smith, both of Hudson, Mass.

Crescent Bi. Club, additional: R. C. Goodwin, 19 Union Park. Boston.

Unattached: Geo. W. Bowers, Hillsboro', Ohio; Charles P. Hurd, Medina, N. Y.; John V. Barross, Utica. N. Y.

Corrections. — Wm. Weightman Walker, 301 W. 4th street, Williamsport, Pa. The names of Henry S. Harris, of Boston, and Wm. Weightman Walker, of Williamsport. Pa., published 21 January, under Mass. Bi. Club, should have been labelled "*Unattached.*"

MORE ABOUT CEMENT FOR TIRES.

Editor Bicycling World: — I have noticed, of late, many complaints in the World against cemented tires and cement in general. Let me give my experience. After I had thoroughly mastered my wheel, I took the tire off, filled up the bare spots in the felloe with the common cement used by the Pope Manufacturing Company, and put the tire on again; then, taking a small alcohol lamp, I heated the felloe underneath until the cement could he seen on the sides, stopping at each spoke to bind the tire down firmly to the felloe, and taking a half-hitch on the spoke. It took me five hours to do the job nicely; but when it was done it *was* done for good. I rode for six months, — three, in summer, over stones, sand, gravel, cobble-stone roads; and in winter over ice-frozen roads and through snow and slush: but that tire never started a hair's breadth, and when at last I had to take it off for repairs on the spokes, I could only get it off by melting the cement. I tried pulling it with pincers, but the rubber would part company with itself before it would with the cement. Afterwards I fixed two other wheels in the same way with equal success. An automatic blow-pipe will work faster than the alcohol lamp.

Little 'Un.

BICYCLES FOR BUSINESS.

Editor Bicycling World: — Have read with interest and hearty approval. a letter in your No. 8, by A. S. Parsons, on the use of the bicycle for business purposes. While I would not attempt to teach or advise any one on the subject, I would like to give, as our Methodist brethren say, "my experience." I became a happy wheelman in June, 1879, and in the eighteen succeeding months, saved by the use of the wheel — where without it I would have had to patronize railroad cars — something over seventy dollars. My riding has been done principally between residence and place of business, — three miles apart; and as in fine weather, two round trips per day is the rule, the wheel is bound to pay for itself. Ordinary cold or snow has no effect on its running, but a pouring rain or frozen slush drives it from the streets. As it was intended for work as well as pleasure, I had all painted black, except cranks and head, which has saved me an additional seventy dollars in elbow-grease, or say seventy cents, this being a difficult matter to figure out. Aside from this painting I have not expended a dollar for repairs, and altogether my D. H. F. Challenge has done excellently well, which is why I read the aforementioned letter with interest and hearty approval.

Respectfully, T. L. Owen.

Pittsburg, Pa., Hazelwood, 20 January, 1881.

ALFRED MUDGE & SON, PRINTERS, BOSTON.