DEVICES FOR WHEELS

Great Things Are Expected from the Unicycle, Which Is Now Being Perfected.

RUBBER CUSHIONED WHEEL.

A Foreign Invention Which Will Lessen Jars and Strains and Make Riding Smoother.

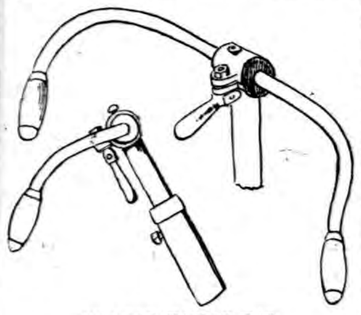
NEW ADJUSTABLE HANDLE BAR.

Some Timely Suggestions About the Care of a Wheel and Why It Pays.

THERE are many bicycle experts who believe the unicycle will ultimately supersede the present wheel. Inventors are turning their attention to perfecting this kind of machine. A Southern man has just built a unicycle which, it is said, is a great improvement on previous wheels of the same character. It consists of a single wheel, with pneumatic tire, surrounded by a saddle, which is adjusted to an upright forked rod from the axle; a peripheral frame, extending from near the ground at the back to a short distance in front of the saddle, and two small flanged friction wheels, adjustable by thumb screws.

The rear flanged wheel is adjustably adherent to the tire, to furnish a sustaining point of contact with the main wheel and to prevent the backward rotation of the peripheral frame.

The front flanged wheel is free—first, acting as a brake in connection with the lever;



MOVABLE HANDLE BAR.

second, acting as a flange guide wheel, and third, acting as an adjunct to the steering gear.

The handle bar is firmly attached to a curved rod, which passes through a groove in the peripheral rod in front of the saddle to the upright forked rod, where it is secured by a bolt. It extends some distance beyond, making a connection with a lateral rod and serves to depress the forward lateral friction rod, causing the flanged wheel to press upon the tire surface as a brake.

INCREASED SPEED PROMISED.

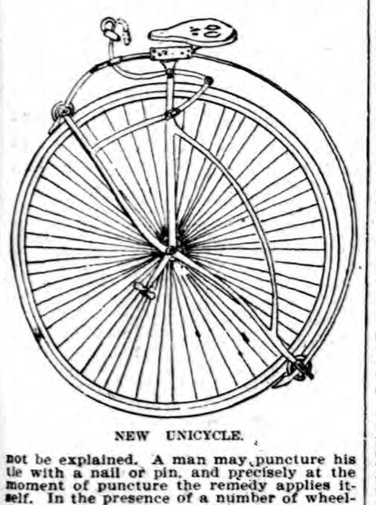
The unicycle is operated both by pedals attached to an axle and by sprocket wheel and chain. Its weight—eighteen pounds—is due to an increase of twelve inches in the diameter of the wheel, and to the additional sprocket wheel and chain.

With the increased diameter and the sprocket attachment it is predicted that a revolution will be inaugurated in present racing records and extraordinary feats in fancy riding will be accomplished.

A "liquid plug" for pneumatic bicycle tires has been invented, by which a puncture is said to repair itself. It is a liquid substance that is pumped into the tire with an ordinary air pump. What this liquid substance is is not disclosed. It adds two and a half ounces to the weight of the tire, and will last, it is said, as long as the tire.

In cases of puncture this liquid is forced into the hole by the air in the tube and almost immediately solidifies, stopping the puncture while the rider is on his wheel.

The virtue of such an arrangement need



NEW UNICYCLE.

not be explained. A man may puncture his tie with a nail or pin, and precisely at the moment of puncture the remedy applies itself. In the presence of a number of wheelmen the tire of a carrier bicycle was punctured over one hundred times with a large hat pin, and imediately the holes were filled without disfiguring the tire.

Manufacturers are giving much time to reducing the jar and strain to the bicycle and its rider in wheeling over rough roads and obstructions. A bicycle of foreign make has been placed on the market which, it is claimed, reduces the jar to a minimum.

The device consists of inflated rubber cushions, one of which is placed against the bar supporting the saddle. Its other end is attached to an additional bar, which forms a triangle with the bar supported by the hub of the rear wheel. The second rubber cushion is placed in a like manner between two bars that form the front part of the frame.

The fork of the handle bar describes a slight curve over the rim of the front wheel, and at its two lower ends is attached to a spring of triangular construction.

The advantage of this appliance is readily apparent. The rubber cushions form a soft, springy seat for the bars on which the saddle rests, and any jar is quickly dissipated by the action of the spring on the fork of the handle bar.

It is claimed that by this device riding is rendered smoother and easier. The rubber cushions easily respond to every movement of the wheel and the rider, thus not alone rendering the wheel less liable to injury, but also lessening the jars and strains to the wheelman.

NEW SMALL PARTS.

A handle bar that can be placed in any desirable position is a very desirable improvement. It consists of a head, a standard rotatively mounted in the head, means for securing the standard and head together, a handle bar bent or curved in different planes and rotatively mounted on the standard, and means for adjusting the handle bar to any desired position.

The latest device for indicating speed comprises a tube containing liquid, and means for indicating the position of the liquid as affected by centrifugal force. Heads are placed on the ends of the tube having recesses therein.

The indicator is pivoted to the hub of the front wheel and rotates therewith. A spring is interposed between the base and the frame for holding the rotatable tube in yielding contact with the driving wheel.

HOW TO CARE FOR A CYCLE.

Some Timely Advice by Mr. G. Lacy Hillier, the Well Known Authority.

[From the European Edition of the Herald.]

THE price of a first class cycle is steadily rising for reasons which need not be dilated upon at length; in any case, the purchase of a good mount is not a cheap operation, to put it mildly, and some remarks as to the care of the cycle when acquired will not be out of place. The care necessary may be divided into two sections—the care when in use and that necessary when the machine is laid by.

When in use it is highly inadvisable to permit any part of the cycle to remain loose, apart altogether from the danger of accident necessarily involved. Thus, should the pedal come loose in the crank end, or the pedal nut come loose, where these are used, it is most unwise to neglect it while riding even a short distance, and for this reason—that there is a big leverage on the pedal end, and the threads of the screw, which hold firmly when the nut is screwed up or the pedal end is well gripped by the lock nut, will very soon be broken and rubbed when those points are loose in the crank end, the consequence being great difficulty in screwing the pedal up satisfactorily, and in due season the thread will strip and cause much trouble before it is recut.

It may, indeed, be laid down as an axiom that all nuts should be kept tight, and should any particular nut be found to be constantly coming loose it will be well to have it looked to by the nearest repairer, lest it should give a great deal more trouble later on.

BALL BEARINGS.

The same thing applies very emphatically to the ball bearings of the machine wherever they are fitted. These bearings are delicate pieces of mechanism, in which, as will subsequently be explained, the hardened steel balls run on coned surfaces, which admit of the adjustment of, or the taking up of, wear by closer approximation, whether as part of a threaded nut or actuated by it, and it is very necessary to keep ball bearings adjusted within a reasonable range.

Of course, the bearing must not be too tight, or broken balls are sure to be the result, but a very loose bearing permits of irregular running, which, of course, means irregular wear; and in due season, when the bearing is properly adjusted, the irregularly worn cones cause it to be tight at one point and loose at another, with the result that the balls are broken, the internal faces of the cones scratched and worn, and these roughened faces again react upon the new balls put in to replace the old ones.

Every rider of a cycle should make himself conversant with the construction of the bearings and the methods of adjustment used in the machine he rides, as in nothing is the wise saw about "a stitch in time" so fully justified as in the care of the bearings of the modern cycle.

The same remarks, of course, apply to the ball bearings fitted to the pedals, bracket and other parts of the cycle, and in a general way it may be said that care of the bearings is care of the cycle, for if the bearings are all right and in good running order the machine, unless some radical fault exists in its construction, cannot be far wrong.

The bearings sometimes get clogged up with oil and dust, and if the machine is only occasionally used they may get absolutely stuck. This state of things can be remedied by injecting a little paraffine, which liquefies the thickened oil, and causes it to run out if the wheels are vigorously rotated for a short time.

When, after repeated doses, the bearings appear to be clean, they should be carefullly reoiled with some suitable oil, and will, of course, be found much the better for the operation.

THE CHAIN.

Some care of the chain will also be found of service, though the almost universal fitting of the gear case has much simplified the task of the chain user of late years. In earlier days the dust-clogged chain required frequent cleaning. If oiled, it caught and held the dust; if not oiled, it was a terrible thing in wet weather, rusting up into a rigid bar, holding the mud, getting gritty, jumping, and so on.

The cures adopted were various. Blackleading was a favorite method, as it is to-day in America among the fine weather riders over the boulevards of the big cities—the riders who never require a gear-case or mudguards. The chain was soaked in oil, in lard, and so on, and many other devices were tried, but nowadays the real work of taking care of the chain falls on the gear case, and those cases which contain an oil bath are much to be preferred.

Of course, the fine weather riders and the mere promenaders do not need anything more than a pretence at a gear case, but many of the flimsy things now made are of no service at all to the real rider; they shake loose, get crooked, fail to keep out the dust or keep in the oil, and, in short, are mere travesties of the real thing, which takes all the care of the chain that that most important part of the cycle's anatomy requires.

Careful adjustment is, of course, very necessary; a too loose or a too tight chain is bound to cause trouble anyhow, and, of course, when the chain mounts the cogs, or through being too tight throws too great a strain on the frame and bearings, the results are certain to be more or less disastrous.

The chain, then, should be kept properly adjusted, which, in effect, means just short of tight.

WHEN LYING BY.

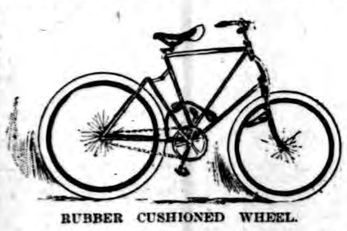
These few hints will indicate what is needed for the care of the cycle when in use, but it is well, also, to bear in mind that the best cycle will rapidly deteriorate in appearance and in value when lying by if it be not properly looked after, and this remark applies in a greater or less degree to any length of time.

After a ride, especially if the roads have been muddy or rain has fallen, all the bright work should be cleaned and gone over with an oily cloth, otherwise the polish will rapidly vanish for good, and great care is needed in removing mud from the enamel, which scratches if the adherent mud is removed too roughly. In a dry state it is best washed off with a sponge, and it will be found useful to run the oily rag over the enamelled as well as over the plated parts of the machine.

All nuts should be looked at and tested in regular order, so that none may be missed, and this is the right time to look for any fault, because should anything have broken during the ride there will be plenty of time to procure another fitting to replace it before the next time of riding. Very often, in articles giving advice as to tours and the like, the writers will be found recommending a careful look over the machine just before starting, which is an obvious absurdity, unless repair and fitting shops are just round the corner.

ANOTHER WISE PRECAUTION.

Another wise thing is to refill the lamp at once after any ride where it has been used, because it is possible that a hurried departure on some future occasion may cause the rider to find himself ten miles from anywhere with an oilless lamp.



RUBBER CUSHIONED WHEEL.

As regards the tires, there is much divergence of opinion. I am myself a believer, when it is possible to do so, in slinging the machine, or turning it over on the handlebars and saddle, removing the lamp of course, and deflating the tires, if it is not likely to be used for some time. It must be an advantage to take the strain off them, and it seems to me likely to cause them to last longer.

When machines are being laid by for weeks it is advisable to remove the tires altogether, and while putting the machine itself in the dryest place to be found in the house, an attic for example, the inner tubes and covers of the tires may with advantage be put in a relatively damp place, as nothing so soon causes rubber to perish as absolute dryness of the atmosphere.

Before a machine is thus stored away for the winter, the procedure recommended above for cleaning out the bearings should be adopted, and the bearings freshly oiled before the machine is stowed away; the oil should be removed in the same way before the machine is again taken into use.

To sum up:—

The care of the cycle may be put this way:—A machine with delicately adjusted parts must be kept delicately adjusted to do its work properly; proper adjustment insures that the work shall fall as it was intended by the machine's designer it should fall, and this gives it the best chance of meeting the calculated strains, and at the same time prolongs its life as an effective instrument. When laid by, all the delicate parts should be protected from the action of the atmosphere by a coating of oil, and the tires should be relieved of strain by being deflated.

To some of the old hands all these precautions will appear absurd, but then the old hands rode velocipedes of a type and construction which did not require the delicate handling and careful consideration which the modern cycle calls for. The earlier velocipede weighed sixty pounds; the modern safety weighs twenty-five pounds, and it requires, at any rate, proportionately careful handling.

G. LACY HILLIER,
Author of the Badminton "Cycling."

COLUMBIA'S GREAT TEAM.

Ruppert, Fearing, Underhill and Budd Are Bicycle Riders Who Are Able to Hold Their Own.

THE superiority of the cycle racing team of Columbia College was clearly demonstrated at the Harvard University races last week, when the wearers of the blue and white swept all before them. The present Columbia team is the best ever turned out by a college, and includes riders who should, with experience, develop into record breakers. Fearing, Ruppert, Underhill and Budd make a team that, for pluck and speed, appear to be able to more than hold their own with the best amateurs in the country. The boys will follow the New York State circuit, and great things are expected of them The professional riders of the better class will also be very much in evidence on the State circuit. Among the well known cash prize flyers who will compete in the races named will be Walter Sanger, E. C. Bald, Butler, Allen and Cooper. They will all help make the meets attractive and may also create new figures for the several distances.

More than $1,600 in prizes will be offered at the Galveston race meet next month. Many of the crack riders will compete.

The wheelmen of Company E of the Eighth regiment will enjoy a run to Albany to-day. About fifty riders will be in line.

The New Jersey wheelmen and horsemen have joined hands and are going to pull together for road improvements in that State.

The Williamsburg Wheelmen have the following men in training for the local race meets:—J. K. Briggs, R. Gamble and E. H. Goldman.

Yorkville Wheelmen will ride to Morristown on June 14, on June 21 they will ride to New Brunswick, and on June 28 they will wheel to Newburg.

Road runs will be held by the Manhattan Bicycle Club on the following dates:—June 14, to Bayonne, N. J.; June 21, to Amityville; June 28, to Long Branch.

The Paramount Wheelmen have the following men in training for the local race meets:—L. D. Funck, H. D. Hesser, Jr.; B. Tompkinson, E. H. Gargen, B. Johnson and C. Hall.

An important meeting of the New York Consulate of the League of American Wheelmen will be held at the residence of Senior Consul Townsend, in East Thirty-second street, to-morrow night.

The Palm Wheelmen have organized in Jersey City, with the following officers:—President, Frederick C. Wolfart; Captain, John F. Rich; First Lieutenant, George K. Coley; Second Lieutenant, William M. Bubier.

There will be a bicycle parade in Freeport, L. I., on June 18. A silver bicycle will be given to the club making the best appearance. Wheelmen desiring to participate in the event should communicate with E. Bartlette Helland, Freeport.

A cycling organization has been started at South Amboy, N. J., with a membership of sixty. The officers are as follows:—F. M. Littles, president; J. F. Fulton, vice president; H. R. Chatton, treasurer; H. Berrian, secretary; John Conover, captain.

Moonlight runs will be held by the Knickerbocker Wheelmen on every Tuesday evening. In addition, road runs will take place on the following dates:—To-day, to Bath Beach; June 14, to City Island; June 21, to Tarrytown, N. Y.; June 28, to Bergen Point.

Elkes, the fast Southern rider, will come East next month. He will probably compete in the races at the Herald Free Ice Fund tournament, to be held at Manhattan Beach on July 25. Elkes' work on the Southern circuit has been of the gilt edge variety.

Captain John Burke, of the Excelsior Bicycle Club, has prepared the following schedule of club runs:—To-day, to Freeport, L. I.; June 14, to Nyack, N. Y.; June 20, to Asbury Park; June 28, to Roslyn; July 4, to White Plains; July 12, to Rye; July 19, to Plainfield, N. J.; July 26, to Totteville, S. I.

The Fox Cyclers have organized at Bay Ridge with the following officers:—President, A. J. Eiseman; Vice President, H. M. Bryce; Secretary, Ernest R. Franks; Treasurer, S. T. Hatch; Captain, P. E. Morse; First Lieutenant, Charles O. Lindroth; Second Lieutenant, Martin De Broft; Color Bearer, M. Pietschmann.

Hadfield, the Newark cyclist who finished first in the Irvington-Milburn road race and was subsequently disqualified, is making a determined fight to secure first prize. It is doubtful, however, if he will succeed, as Will R. Pittman, the referee of the contest, has refused to alter his decision under any circumstances.

The Race Committee of the Associated Cycling Clubs of New Jersey say that the century run of the organization on June 20 will be the biggest event of its kind of the year. Entries are being received from all parts of the country. The committee consists of Messrs. Norwood, Colburn, Roehlers, Bates, Budd and Kimball.

The route selected for the century run of the Hudson County Wheelmen on June 14 will include the following points of interest:—Passaic, Paterson, Little Falls, Leonia, Montclair, Orange, South Orange, Milburn, Springfield, Scotch Plains, Plainfield, New Brunswick, Elizabeth and Newark. The club having the greatest number of riders to finish will receive a silk banner.

Philadelphia is making a strong bid for the next cycle show of the National Cycle Board of Trade. Whether the efforts of the Quakers to secure the prize will be successful or not remains to be seen. New York's chances of getting the exhibition do not appear very rosy, and all on account of the failure of the manufacturers and management of Madison Square Garden to agree on the price for the rental of the amphitheatre.

The '96 Meet Club has come to an agreement with Fountain Ferry Cycle and Athletic Association in regard to a lease of the bicycle track for the week of the national meet in Louisville, August 10 to 15, and work on the additional seats will begin at once. The present grand stand will seat about 2,000. Seats 4,000 more will be erected, and in addition an enclosure will be made in the centre of the track to accommodate three or four thousand more.

The Connecticut Division of the League of American Wheelmen announces an interesting programme of attractions for its annual championship race meet, on July 4. The list of events is as follows:—One mile race for novices, scratch; one mile professional race, scratch; one mile professional race, handicap; one-third of a mile professional race, scratch; two-thirds of a mile, amateur, scratch; one mile State championship, scratch; two mile tandem.

The programme arranged for the New York State Division of the League of American Wheelmen race meet, to be held at Utica on June 15 and 16, is as follows:—June 15—Amateur one mile race for novices, scratch; one mile race, scratch; half mile race for the State championship, scratch; two mile race, handicap. Professional—One mile race, scratch; five mile race, scratch. June 16, Amateur—One mile and a half race, scratch; one mile race for the State championship, scratch. Professional—One mile race, handicap; two mile race, handicap.

AMONG THE OARSMEN.

Notwithstanding reports to the contrary, the outlook, in point of entries, for the annual regatta of the Harlem Regatta Association, is exceedingly bright. Had the weather during the last month or six weeks been at all favorable for rowing, it is safe to say that the approaching Decoration Day regatta would have proven one of the most successful ones in the history of the Harlem Regatta Association.

"Count" Giannini, the New York Athletic Club coach, came down from Travers Island early in the week to see the Bohemians at work. He was not impressed very much with the form displayed by the junior eight-oared crew.

It looks now as if the Middle States Regatta would be held on the Harlem River again this year. At a meeting held at the Marlborough Hotel Wednesday evening a large number of the delegates favored holding the regatta on the Harlem River on Labor Day.

Strange to say, the Dauntless Boat Club will not have a single entry in the regatta. It is the first time that such a thing has occurred to the club in a number of years. Captain Anderson made a heroic effort to organize a junior eight early in the season, and later a four-oared gig crew. His efforts proved fruitless, however.

Leon Mayer, of the Union Boat Club, is a very persistent and tireless worker in the interest of rowing. Three times his junior four-oared shell crew, in which he is pulling the bow oar, disbanded. Now, however, he has the crew rowing together again. It is doing very commendable work, and unless some "crackajack" should come from an outside quarter, it should cross the line an easy winner.

The junior four-oared gig race should prove a very interesting event. The crews entered are all good ones, and a close and exciting race should ensue. Of the number the Unions show the best form. Their body work is unusually good, and they shoot their hands from their bodies after the manner of more experienced oarsmen. The Atalantas will have a fair crew in this event. They are being coached by Villaverdie, and are fast developing form and speed.

Much regret is felt on the river over the disbanding of the junior eight-oared shell crew of the Nassau Boat Club. The crew for a brand new one was doing remarkably well and rowing with much more snap and in far better form than the Bohemian juniors, who expect to capture the Koch cup on Decoration Day. Notwithstanding the fact that they have been working on the rowing machine during the winter and have been at work on the water long before the crews from the other clubs, the Bohemian eights continue to show poor form.

The champion senior eight is still far behind its splendid form of last year. The catch continues poor, and the blade work is not of the very best. Again, the men continue much too fast on the slides, and in several cases the body work is very poor. The junior Bohemian eight, judging from the news that continues to come from Travers Island, will not have matters all their own way in the race for the Koch cup. The wearers of the Mercury foot have, report says, an unusually fast crew this time and feel sanguine of wiping out the defeat which they suffered last year at the hands of the cigarmakers.

BETWEEN TWO WHEELS.

THE O. H. I. O. MACHINE.

The Cleveland Plain Dealer has attracted attention by inveighing against the bicycle as a detracting agent in its effect upon baseball, and by its pessimistic attitude in regard to the national sport. But it gives a clever instance of how thoroughly cycling has permeated politics in the following:—

Here is the bicycle that leads on the free-for-all Presidential track. One glance at its framework will convince you of its eminent superiority:—
In style, in make, in paces,
It's the darling of the track;
'Twill win the St. Louis races—
It's a winner from 'way back.
—Chicago Evening Post.

THE SCORCHER AS HE THINKS.

I am the scorcher!
Please observe
The curve
That appertains unto my spine!
With head ducked low,
I go
O'er man and beast, and woe
Unto the thing
That fails to scamper when I ting-a-ling!
Let people jaw
And go to law
To try to check my gait,
If that's their game!
I hate
To kill folks, but I'll do it, just the same,
I guess,
Unless
They clear the track for me;
Because, you see,
I am the scorcher, full of zeal,
And just the thing I look like on the wheel!
—Cleveland Leader.

THE BICYCLE ICICLE.

The professor is very punctilious about the use of language. His youngest daughter has learned to ride a wheel, and the fact is very apparent in her conversation. Now and then he moved uneasily in his chair, but he made no comment. After a time he said:—

"Lucia, would you mind closing that door? I am getting as cold as an ike."

She arose to obey and then turned with a puzzled look and inquired:—

"As cold as a what?"

"As cold as an ike."

"I don't understand you."

"That is very strange. It seems to accord with your theory of verbal expression. If a bicycle can consistently be called a 'bike,' I see no possible objection to my alluding to an icicle as an ike."—Detroit Free Press.

OUR RACERS IN ENGLAND.

A Look Around Mr. Richard Croker's Training Establishment in Berkshire.

SOME OF HIS FINE HORSES.

Coming Cracks for the English Turf and Promising Transatlantic Bred Youngsters.

CROKER AND HIS WHITE BULLDOG

[From the European Edition of the Herald.]

LONDON, May 19, 1896.

SITTING in the comfortable breakfast room at the Bear, at Wantage, a few mornings ago, and looking down on its clean little market place, with its imposing, mail clad statue of Alfred the Great, who was born within a stone's throw of the monument, I could not help my thoughts running back over the flight of ages since he whom Green, in his "History of the English People," calls "the noblest and the most complete embodiment of all that is great and lovable in the English temper" let the cakes burn—and had his ears boxed for so doing—invented the keeping of time by candles, encouraged religion, literature and arts, and yet was one of the greatest warrior kings whose deeds are recorded in modern history, a man whose last words were, "I desire to leave to the men that come after me a remembrance of me in good works." Truly, I thought, the good people of Wantage are justified in perpetuating the name of such a ruler and one of the principal founders of the English nation.

AN IMPOSING OLD MANOR.

"The trap is ready, sir!" cried the waiter, bursting into the room.

My day dream was over. Stern reality stared me in the face. I had travelled to the little town in question to obtain an interview if possible with Mr. Richard Croker and to visit his racing stables and stud farm, situated at Letcombe Regis, about four miles distant.

A pleasant drive through some of the prettiest country in Berkshire, amid hawthorn blossomed hedges and buttercup bedecked fields, brought us to an imposing old ivy covered manor known through its water surroundings as the Moat House. Here, under the care of Mr. Morton, who is an Englishman, the American horses which were imported last autumn are trained, and here it was that I found their owner, who had just come in from a drive.

Explaining my mission, I cannot say that I was received courteously.

"I can tell you nothing;" said Mr. Croker; "and I don't see of what interest my doings are to other people!"

I pressed my case, said that I had travelled all the way from Paris to see him, et cetera, et cetera. It was useless.

"Have some lunch. Have a soda and whiskey and a cigar with Morton," said he, calling his trainer and introducing him; "but," he continued, "don't you tell him anything about the horses. These reporters do tell such lies."

I had had a mauvais quart d'heure, but I thought that if the master would not melt the man might, and such was the case. We were two Englishmen together and understood each other, so I accepted the invitation.

"Come with me," said Mr. Morton, "I have to go up to the top paddock, which we are railing in so as to be able to do work there during the winter months when the weather prevents our going on the Downs. You know," he continued, "that we found this place already made for us, as we took it over from Fred Lynham, who used to train for Baron de Rothschild at Chantilly, in November last. Lynham, who has moved some twenty miles away, thoroughly knew his business, and we are as comfortable as one could wish to be."

BREEDING FROM AMERICAN STOCK.

"But," I remarked, looking round me and seeing a number of brood mares and their foals, "this has the appearance of a stud farm rather than training quarters."

"At present it has. Mr. Croker's great idea is to breed from American produce in England. Here we have only about sixty acres, but a few miles away we have a breeding establishment of some two hundred, and there it is that the famous Dobbins, who won so many great races in 1894, is located. Although a four-year-old and having important engagements here in England, he has already served several mares. This is an experiment the result of which time will only show.

"Look at that dam with her filly foal over there," said Mr. Morton, pointing to a handsome chestnut mare. "That is My Favorite, the dam of that sensational horse Handspring. Mr. Croker gave over $20,000 for her; the youngster is by Hanover, and she is presumably in foal again to Dobbins. The mare near her is Stethoscope. Her foal colt is by St. Serf. That chestnut mare near the rails is Libonia (by Marden), with a foal by Buchanan, and the fourth one is Mabel, with a nice filly foal by Dobbins, to whom she has been sent again. Stethoscope and Libonia are also in foal to him.

"Dobbins, you doubtless know, is by Mr. Pickwick, out of Thora, by Longfellow—Susan Ann, a great race mare and in stud the producer of Yorkville Belle and other good performers. Up at the stud farm we have some eight or nine good American three-year-old fillies from which we intend to breed.

"In the adjoining paddock are three yearlings—Clinton, a bay-brown colt, by Fitz Simon, who cost Mr. Croker $5,000 as a foal; Madison, a chestnut colt, by Hampton, out of Democracy, by St. Simon, and a brown filly, Ayrshire, by Hanover and Marjorine. All these are well, and we hope that, seeing that they are all fashionably bred, they will from next year forward give good accounts of themselves."

HORSES IN TRAINING.

Our next move was to the training stables, which are spacious, lighted by electricity throughout and have a plentiful supply of water. Anent the qualities of the occupants of the various boxes Mr. Morton was extremely reticent, so I had to be thankful for the slightest information gleaned.

"This one," said my conductor, "is Americus, a four-year-old, bred in California by Emperor of Norfolk and Clara D. He caused no small amount of disappointment last Saturday week, as he ran unplaced in the Kempton Park Jubilee Stakes. We have, however, not lost confidence in him yet.

"Here is Eau Gallie, a four-year-old gelding by Iroquois and Duchesse. He has also run here unsuccessfully, but he is not quite up to his best form yet. This box contains Santa Anita, by Cheviot and Alaho, who although good in America has not been seen in public on this side of the Atlantic. The same may be said of the five-year-old Sir Excess, by Sir Modred out of Dixie Ann, and Prince George II., a six-year-old by Sensation and Louisette.

"Those which come next have never faced the starter. They are the three-year-olds Nashville (Iroquois—Boulotte) and Tennessee (Iroquois—Tullahoma) and the five-year-old gelding Armitage, by Surinam and Paloma.

PROMISING TWO-YEAR-OLDS.

"Now we come to the two-year-olds, of which we have a nice lot," remarked Mr. Morton, and a real nice lot they are. They consist of a well promising English bred bay filly, by Minting, out of Democracy, dam by St. Simon, who rejoices in the name of Georgiana; a big, strong chestnut colt, Lexington, by Strathmore and Helvetia; another well shaped chestnut colt by Hanover and Golden Reel, dam by Rayon d'Or, Comte Lagrange's once famous stallion; Albany, by Hanover and Burletta; Princeton, a chestnut colt, by Hanover and Marjorine; a handsome chestnut colt, Westchester, by Hanover and Cyrilla; and another promising colt, a bay, named Yale, by Strathmore and Bonnie Lee.

ALL IN COMFORTABLE QUARTERS.

"There," said Mr. Morton, "you know as much about the stable as I dare tell you. Sorry I can't let you into any stable secrets. The fact is, we don't know ourselves how half our racers will turn out. One thing, however, is certain, that Mr. Croker has thrown the whole of his soul and energy into this enterprise and is saving neither expense nor trouble to make it a success. But come over to my office and have some refreshment."

Mr. Morton's office is on the ground floor of the Moat House, which Mr. Croker has fitted up with every modern comfort. It is a lovely place, surrounded by flower gardens and a clear running stream, in which big speckled trout dart from time to time from under the weeds. It is here that Mr. Croker spends most of his time and receives his friends, but his most constant companion is a heavy white bulldog, with such a set of prominent teeth and bandy legs as would excite the envy of any London publican or Parisian butcher.

Just as I was leaving Mr. Croker came to the door.

"Had all you want?" said he. "Mind, no lies!"

I laughed, thanked him, shook hands with Mr. Morton and was soon bowling through the lanes again toward the station. I had had a pleasant outing, my only regret being that I could not draw from Mr. Croker his opinions of racing and training in England as compared with the American systems. But this was impossible.

GREATEST BATHS IN THE WORLD

Beautiful and Stupendous Work Adolph Sutro Has Built in Golden Gate Park.

EASTERN people who have not had the good fortune to visit tropical or semi-tropical countries can form little conception of the beauties of the conservatories in the Golden Gate Park of San Francisco. As the climate itself is semi-tropical, in this conservatory all of the tropical plants reach the fullest perfection without the aid of artificial heat, even in the coldest of the winter months. In fact, the coldest of the winter months in San Francisco are but little different from the summer months, the average temperature the year round being seventy degrees. The old Cliff House, which has been visited by every celebrity who ever went to the Pacific coast, could only be reached years ago by private conveyance. In those days the hack drivers charged $4 to take one out there. On its register were the names of General Grant, former Presidents Hayes and Harrison, Princess Louise and a host of others. The old Cliff House was destroyed by fire in the winter of 1894, and a new Cliff House was built by Adolph Sutro, present Mayor of San Francisco, after the model of a French chateau of the seventeenth century. This structure was finished last January.

Just a little north of the new Cliff House stand the Sutro baths, built by the same man, and given by him to the city of San Francisco.

IN THE MUSEUM GALLERY.

The entrance, from Point Lobos avenue, is a small classic temple. From this, by broad stairways, flanked with shrubs and flowers, the museum gallery is reached. Here are placed the archaeological and other collections of Mr. Sutro. Mummies and innumerable other curiosities from Egypt, a large number of specimens of Aztec pottery and art, that show a curious resemblance to the work from the land of the Nile; beautiful fans from various countries, Damascened plates, Chinese and Japanese swords, wooden ware used by the North American Indians, totems from Alaska, and a long and seemingly endless array of other things. In the bath galleries proper will be found a superb collection of birds and animals, scenes from Japanese life, portfolios of photographs and valuable state papers, oil paintings and hundreds of other works of art and curios. From the museum gallery the visitor can reach the baths either by the stairways or by the elevator. Striking as is the first view, familiarity only makes it the more striking. Its size captures the imagination, yet it is not oppressive, owing to the lightness and airiness of the structure.

Sitting on a rock, watching the waves of the Pacific, and dreaming of a way to utilize the gigantic power of the sea, Sutro conceived the idea which he has here turned into reality. Tier upon tier rise the seats, while at their base, visible to every one, are the swimming tanks. Of these there are six in all. The largest contains the sea water in its normal state. The others are heated to different temperatures to suit the varying requirements of the visitors. The sea water is supplied by an ingenious use of the ocean waves. Should, however, there be tides so low as to necessitate pumping, preparations therefor have been made, and the water can be forced in at the rate of six thousand gallons a minute.

CLEAN SEA WATER ALWAYS.

The mere emptying of the tanks entails no difficulty, but the emptying of them in such a way as to prevent the return of the once used water requires ingenuity. The refuse water in the main outlet, into which all the tanks ultimately empty, is piped hundreds of feet to the other side of the headlands, thence passed into the tidal current and then carried away from the baths.

Sight alone can give a comprehensive idea of the Sutro baths. Some approximation may be reached by the following figures:—

Length of baths, 499.5 feet.
Width of baths, 254.1 feet.
Amount of glass used, 100,000 superficial feet.
Iron in roof and columns, 600 tons.
Lumber, 3,500,000 feet.
Concrete, 270,000 cubic feet.
Seating capacity—Amphitheatre, 3,700; promenade, 3,700; total, 7,400.
Holding capacity, 25,000.
Tanks, 6.
Capacity of tanks, 1,804,962 gallons.
Fresh water plunge tank, 1.
Toboggan slides in baths, 7.
Springboards, 9.
Trapezes, 3.
High dive, 1.
Swinging rings, 30.
Dressing rooms, private, 517.
Club rooms, 9; capacity, 1,110.
Total capacity dressing and club rooms, 1,627.
Shower baths in all club rooms, 37.
Shower baths in private dressing rooms, 29.
Time required to fill tanks by waves, 1 hour.
Time required to fill tanks by pumping, 5 hours.

EVERY WANT SUPPLIED.

Attached to the baths is a laundry, with washers, driers, wringers and ironers. The limit of its capacity is 20,000 suits and 40,000 towels a day.

Furthermore, that the inner man may not be neglected, there is a restaurant inside the baths. It consists of three floors, thirty by seventy-five feet each, with a capacity at one time of one thousand persons.

The kitchen, thirty by fifty feet, contains four large ranges, boilers, stock kettles, warmers, and every modern appliance, and can provide easily for the wants of six thousand visitors.

The baths are lighted by electricity, two 800 candle power arc lights and a large number of twenty-five candle power incandescents.

All the bath buildings are protected on the west side by an enormous breakwater, 400 feet long, twenty feet deep, twenty-five feet wide at the top, and seventy-five feet wide at the base, which contains 450,000 cubic feet of rock. There is also another breakwater running east and west 300 feet long, twenty-five feet wide at the top, seventy-five feet wide at the base, and twenty feet deep, which contains 300,000 cubic feet of rock. These two breakwaters furnish security against any possible contingency of a stormy sea. Indeed, there has been nothing omitted in the construction of the vast buildings or in the thousand details that could give security or add comfort to the visitor within its gates.

The visitor to San Francisco can now make the journey to this spot, which only a few years ago cost $4, on Mr. Sutro's electric road for five cents.

The baths are the most magnificent thing of the kind in the world. Wonderful as they are, they bring no astonishment to those who remember that they were constructed by the man who, in the face of the most gigantic opposition one man ever conquered, built the Sutro tunnel.

ON THE UP GRADE.

"Well, what's your kick now?" asked the manager sharply, as the soubrette entered his office.

"Six feet nine inches," she replied promptly.

"Consider yourself engaged for my summer extravaganza," he returned quickly. "That's two inches better than last year."—Chicago Evening Post.

SYMPATHY.

He—I feel like a fool to-night.

She—So glad you've recovered.—Cleveland News and Herald.