

Although the season is barely half over, the question of models for 1897 are already large sum. But if one-half of the draught animals being discusses. It is likely there will be a few changes from this year's style, but of such roads, there would be an annual they will not be radical. Little if any saving of \$785,000,000 in the feed bill. This change will be made in weight.

16

The demand for brakes this year, it is said, will compel the manufacturers to fit their '97 wheels out with this accessory, leaving it to the option of the purchaser whether he wishes a brake or not. The aversion of some riders to the present style of brake seems likely to result in the intraduction of some new attachments which will be effective in bringing a bicycle to a stop and at the same time not mar the outlines of the wheel. The demand for gear cases on wheels is also likely to compel recognition from the manufacturer. It is expected that some of the big manufacturers will provide light-weight gear cases for riders similar to those in use in England. Gear covering is a great convenience

and help to riders, and while it possibly adds from one-half to one pound weight to a bleycle, its value overcomes the draw-"The price of wheels in 1897 is something

I don't like to talk about before this season is over," said a manufacturer to a Chicago Times-Herald reporter. "I would like to finish selling '96 wheels before I begin to talk about '97. Still, I must admlt that I have given the question of prices for next year a great deal of thought. I would like to see the makers of high grades keep up to \$100, for that would give a guarantee with every wheel sold that the makers would be willing to spend more money in defendbe willing to spend more money in detend-ing. But I fear they won't be able to keep the price up. The public seems to expect that, with all these failures and talk of failures, bicycles ought to be much cheaper next season. It is funny, isn't it, that any reduction should be expected from a price that is breaking so many manufacturers now, but it is expected, nevertheless. And I suppose it will come. Yes, there will prob-ably be two kinds of 'high grade' wheels. There are people who want the best and are willing to pay for it. They had rather pay \$100 for a bicycle they know to be good than to save a few dollars and run chances. own

Some riders, especially women, complain of having their feet "go asleep" after traversing three or four miles. In most cases the probable explanation is that the soles of the shoes are too thin. With rattrap pedals there should be a good thickness of leather between the foot and the sharp points of steel, otherwise the pressure will cause the numbness which is described as the feet being asleep. It is a common device to have two strips of leather fastened across the sole of the shoe, to prevent slipping, but with toe clips these are not so necessary as without them. A firm grip on the pedal is so to be desired, however, that some riders use both appliances. An English authority of the highest standing ut-terly condemns toe clips as tending to nullify the free use of the ankle joint and conducing to "digging." This ankle motion, or "ankling," has been dubbed the most important part of a cycling education, but it is a mystery to many riders. Even the experienced ones who use it do not all know just wherein lies its efficacy. C. W. Brown, the expert of "The Cyclists' Touring Club Monthly Gazette" of England, describes its Reuben Jones to have one of the most ex-object to be to get the padal past the deal citing experiences incident to the storm. centers. At these two points, downward pressure on the pedals exerts no propulsory adaptability of the wheel to this new use.

volve an outlay of \$4,000,000,000, a prett is 3 per cent interest on \$36,000,000,000 Consequently, if road bonds were issued bearing 3 per cent interest, more than 6,000,000 miles of macadamized road could be built without increasing the annual expenses \$1. The people are actually paying 3 per cent on \$26,000,000,000 in orde

to keep up the present bad roads, while it would not cost them one-sixth of that sum annually to build the 1,000,000 miles needed in order to put this country on a par with France in the matter of good roads.

## BICYCLES AS LIFESAVERS.

How Renben Jones Demonstrated Their Availability in a Cyclone. In many places and under various circum

stances the blevele had been used as a lifesaving device before, says a correspondent of the New York Sun, but it devolved upon Sherman, Tex., to demonstrate its practicability as a device for getting people out f the way of a tornado.

It may, perhaps, be necessary to remind the reader that on May 15, 1896, Sherman was struck by an awful tornado, which de-of \$50 each. dished a great number of houses, wounded hundreds of people and killed eighty-nine outright. Sherman people themselves have such a vivid recollection of this event that it will be many long years before it will be necessary to remind them of it. It was nearly 5 clock on a Friday aftermoon when necessary to remind them of it. It was nearly 5 o'clock on a Friday afternoon when the storm struck. It had been raining hard just before, and many people in town were watching the clouds. The average Texan watching the clouds. The average Texan believes that his weather needs just a little bicycle-making. They say that formerly watching, and hence during a hard rain he usually keeps at least one eye open for susbiclous actions on the part of the clouds. The first suspicious action on this afternoon was a sudden tendency to clear up. All at once you could see blue sky behind the big cloud. Then the cloud began to roll itself up into a big ball all in one place, and before one could realize what had happened a fully deeloped tornado was bearing down upon the

At first glance it appeared to be making traight for the court house and the main business part of the town, and a wild rush to get away was made by those who watching. Many of the clerks and other business men had ridden down town on their wheels that morning as usual, and it so happened that several of these were among the number of cloud gazers. Hardly had the storm cloud gotten under full headway, when down the street dashed a num ber of these riders. East Jones street seemed to be the one most sought as a way of escape. Down this street the little pro cession scorched, each man earnestly be lieving that he was riding for dear life. This race down East Jones street was interesting enough, but it failed to estab-lish anything as to the availability of the bleycle as a lifesaver in cyclone time. It gone forever." is true that the riders all escaped injury but it is also true that they would have escaped injury even had they remained where they were. They had ridden east but the storm passed further west than

the square. It remained for a young wheelman named power. When the pedal approaches the top dead center the heel should be lowered. Reuben miscalculated the direction of the storm even more than the others did. He Thus the force applied at the dead center started west. The fact that a certain very counted for his miscalculation. Down West rectly into the pathway of the approaching storm. The only thing to do was to keep Bicyclists who indulge in club "runs" or who travel along country roads, where the gotten 200 yards beyond the bridge when s of the party may at times be separated, are interested in an creek bottom struck the bridge, tore it from through. It was afterward found that three of the spokes were cut in two as neatly and cleanly as if it had been done with a knife. Reuben says that he has no recollection whatever as to when this was done. He had so much to shake him up that the jar which the timber must have caused was never noticed. By starting in on one side of the tor-nado, riding clear across its track ahead of it, and escaping unhurt, he clearly established a new use for the bicycle and is ac-cordingly entitled to the thanks of the whole eveling fraternity of Texas. Before leaving the subject of the bicycle in its relation to tornadoes, it might be well and introduce a similar code of signals in knows. All that is left of it is the remnant this country. and frame are still there. They are about twelve feet from the ground and are gro-tesquely twisted around the maimed but storm define tree trends the storm-defying tree trunk.

## THE OMAHA DAILY BEE: SUNDAY, AUGUST 2, 1896.

tistics, the Touring club has published inst report recommended the organization some interesting figures. There are 8,000 a regiment of bicycle infantry. "I have just completed the organization of the whole number, and the proportion of a bicycle corps of ten men at the post, of women is increasing. The professions which will make extensive experiments during the transformer which will make extensive experiments during the transformer will probably. tistics, the Touring club has published that take to bicycling are, first, clerks, then merchants and persons living on their that take to bicycling are, first, clerks, then merchants and persons living on their income, followed by doctors, civil servants, to be done in this line, and as the experilawyers, engineers, etc., deputies and sen-ators winding up the list. ments are the most extensive that have ever been made in this section of the country and the nature of the region here is such

Rion

The

made by wheelmen and others.

have the same removed.

for such things.

the rest.

these things are found in the street.

NOT A "CRAZE."

Social and Economic Influences of the Bievele. It is an error to call bleyeling a "craze,"

says a writer in the Forum. It is something very different from that. The simple be able to demonstrate that the wheels can fact is that the human race has discovered a new power for its own uso. From the a new power for its own use. From the earliest dawn of civilization man has been have been considered impassable to wheels. experimenting with the wheel, which he On this account the experimental work will cented to increase his powers of loco-tion. Finally he has hit upon a device otion. which makes his own body the source of power. He has placed wheels upon his

feet, and as a result finds his powers of locomotion multiplied by five and even ten. Instead of walking five or ten miles, with instead of walking hve or ten miles, with more or less effort and fatigue, he finds himself traveling ten, tewenty, fifty, and even a hundred miles, according to his physicial vigor and experience, with little rifles, rations and shelter tents." perceptible fatigue and with a most de-lightful sense of animation. He has be-come master of his new power—the most valuable he has acquired since he learned to walk-and it is henceforth a part of his need some training for this work. equipment for his struggle with life. Is it

probable that having once become possessor of a power like this the human race is going to abandon it? As well might we expect it to abandon railways, and gas, and electricity! \* \* \*

The economic effects of this new force in human affairs afford much material for curious and even amusing study. It is estimated that since the passion got under full headway, less than five years ago, fully \$100,000,000 have been spent in purchasing bicycles in this country alone. The output for this year is estimated at from 750,000 1,000,000 machines, at an average price Of course, a new branch valuess of such dimensions as this must first to feel the effects. The loudest outcries come from the makers of watches an jewelry. Many of them have abandoned the when a son came of age, or Christmas day came around, a favorite family present was a watch; now it is a bicycle. The girls used the sons and daughters have them, but the parents as well, so that all the family savings go in one direction. The daughter who has been ambitious for a piano con-

cludes that she will not walt longer but will get a bicycle instead, since it costs less. There are many other complaints of intury to trade which might be enumerated must content myself with the mention of only one other, which is, perhaps the most moving of all. It was made by a barber in New York City. "There is nothing in my business any longer," he said, "the bicycle has ruined it. Before the bicycle craze struck us the men used to me in on Saturday afternoons and get a shave, and a hair cut, and maybe a sham poo, in order to take their girls to the theater, or go out somewhere else in the vening. Now they go off on a bicycle and do not care whether they are shaved or not. You see where it hurts our business is that when a man skips a shave today, we can't sell him two shaves tomorrow; that shave is

PRESSING THE PEDAL.

Power Exerted in Propelling the Bicycle at Different Speeds.

In a recent communication to the Paris Academie des Sciences M. Bouny gives particulars of a series of experiments made to determine the power exerted in propelling a bicycle at different speeds, says Engineering. The method adopted was to take an autographic record of the total

last report recommended the organization of the election or rejection of local candidates but also with those who have to do with the national affairs of the United States.

Want the Hero's Picter. The following pithy epistle was mailed

Thursday to the town marshal of Florence: OMAHA, July 30,-Mr. Green: Referring to the recent arrest of a couple of Omaha wheelmen and the manner in which said personal work while away.

arrest or "hold-up" was accomplished, in which yourself and "deputies" played a star engagement, permit me to say that I have that the work is the pioneer experiment in this respect. The wheel has never been used in such a country as this, and it has been assumed that the wheel is not adapted had several requests from the publishers of eastern newspapers for your photo. Be-lieving that your conduct upon this occato the country in which our operations are to be carried on. I think that we will ion was due to a desire for notoriety sion was due to a desire for hotoricty and to show a number of strangers that the Omaha boys could not run the town of Florence, especially while you held your present position, I furnished these papers is to be held at the Old Fair Grounds track next Saturday, and the '98 meet club's trip to be used to advantage on all the roads of this state, and that the men on wheels can Louisville, Ky., where it will take in the with an account of the "hold-up" and now-I'll be hanged if they don't want your photo. be of deep interest to the military profes-If you have one which I would be allowed to use for this purpose I would be allowed to use for this purpose I would be glad to have it, but would prefer one which would show yourself and "deputies" drawn up in line, with revolvers and bowie knives ready for action, and if the photographer could pos-'The work that has been laid out includes the gapid conveying of messages from Fort Missoula to other posts several hundred

miles distant, the rapid establishment of signal stations, route sketching, scouting, sibly do it I would like to have the language which you used upon this occasion engraved or photographed beneath the picture. I do road patrolling, and reconnoisance and prac tice rides over long distances with blankets, not believe that you will ever have a better chance to place yourself in a position where experiment outlined by Leutenant you will gain notoriety and draw attention

Moss, under the existing conditions will be a severe test of men and wheels. It is to the town of Florence, and would again request that the photo be taken and mailed to my address. If your extreme modesty would prevent you from having such a photo proposed to make forced rides of sevents to ninety miles a day, and the men will taken, and you will notify me what time

you will have your "deputies" in line I will be glad to furnish the picture. Register for Reporting Glass Located The matter of obstructions in the way of Hoping that you will not deny thousands glass, tin cans and other things which would easily puncture a cyclist's tire has

of people the privilege of looking upon the face of "the hero of Florence," and assuring you that the language used upon this occa-sion will not be copyrighted without your permission. I am. JOHN D. HOWE been the source of much annoyance for some time past, and after considerable dispermission, I am, JOHN D. HOWE. Tourist Wheel Notes.

cussion it was finally decided to have a register printed with blank spaces for giv-For some unknown reason the Tourists ing the location, nature of obstruction or appear to be losing all interest in road riding. The club house register shows the omplaint, time discovered and time re ported, and by whom the report is made combers as having registered for several and have the same placed at some conlaces, some to Glenwood, Blair, Carson, Ia. venient place, where these entries could b nd other points were visited last Sunday One or two centurians made their weekly Such a book has been gotten up and placed at Kuhn's drug store, corner Fif-100-mile spin.

It was suggested early in the season that teenth and Douglas streets, where it will be found, and all wheelmen are requested the country tours be made not over fifty miles in length, that the captain be accomto make a note of any obstructions of this panled by the balance of the road officers, as well as the president and the other club kind and enter it on the register at once. Chief Sigwart of the police department officials. The Papillion joint run, we believe has very kindly consented to have the officer who may be on this beat inspect the is the only instance where this has been done and the absence of the club bearers register hourly just before making his re-

as well as the larger number of the mem-bers on the regular weekly runs elicits this port, and any complaint which may be entered therein will be immediately rebit of information. ported to headquarters and a special officer A trial by Captain Spencer of the short will be detailed to look into the matter and

runs was attended with such poor results that longer rides were scheduled, but apparently without any material change in The larger majority of the property own ers know, or should know, that there is an attendance Many of the boys are brimfull ordinance in effect that if such things are of enthusiasm at the regular meetings, but left in front of their premises they lay themselves liable to arrest and imprisontheir premises they they are conspicuous only by their absence

when the hour arrives for a "called run." Speaking of the national meet we desire ment or fine for each and every time that to give the local consuls a pointer at this time. We are just in receipt of the follow-ing letter from Michael G. Heintz of Cincin-It quite frequently happens that some mis-chievous boy will place these things in the nati, O. "Shall not be able to spend more than one day at the Louisville meet, if I way of a wheelman to see him get his wheel unctured, and again, many people thoughtgo at all. It would give me much pleasurlessly throw old bottles out into the street knowing that it is not just the proper place meet you. I am sure of one thing, the tranger always has a good time in Louis-

I toured to that city last year in a It is to be hoped that the plan adopted ville. und-about way, covering more than 500 will in time do away with this state of affairs and that wheelmen may ride along niles, and had much enjoyment in Louis-rille. If Omaha does not want the meet the street without watching every inch of ground for fear of munning into a lot of broken up glass. Nor is this true of wheelintil 1898, it is too early to make pledges now. My preference, all things else being considered, would be to give it to a city which shows its faith by its good works. You will recall men alone, but the glass is just as liable to injure or lame horses, and it is earnestly You will recall requested that any one who may chance to observe any kind of obstruction whatever hat Toledo last year, while a candidate for the '96 meet, made tremendous growth in membership. She gathered in more recruits will see that it is properly reported by hav-ing a full and complete description entered n two months than Louisville did in the in the register and the police will see to

past five years, and has now a membership lmost equal to the Kentucky division. Let Perhaps you may pass the place in day-Nebraska come forward with recruits and light without running into it, but the next man is liable to come along after night and suffer injuries to his wheel or horshe will gain favor. Trusting to see you at outsville, I am yours," etc. This means we must get out and bustle, nemberships must not be allowed to go by whereas, if it is by this new plan made known to the officials, it will be removed without delay and you will be doing an act without delay and you will b whereas, if it is by this new plan made

are hundreds of wheelmen within the boundaries of Omaha who should join the McCall, Proulx, Gustaverson, Hall, Lafferty Every citizen should be interested in this and many others will compete. A rate of

Wednesday evening, August 5, at which club will leave Omaha for Chicago on Saturday evening, August 8. They will remain in Chicago all day Sunday, leaving there in the evening for Louisville. A large delega-tion of eastern wheelmen will join them in everything should be in readiness, and it is requested that every member of the '96 Mcet club will attend. Also those who are inclub will attend. Also those who are in-terested in Omaha securing the pational meet in 1898. Let this meeting be one full of enthusiasm and it is safe to say that the the World's Fair city and accompany them the balance of the distance. Omaha delegation will be able to retain great deal of the push and energy which is manifested at that time to assist it in its

Whisperings of the Wheel.

The principal topic of conversation among

local wheelmen during the past week has

Wheelmen the second week in August. The

state circuit meet bids fair to eclipse any-

thing of the kind ever attempted here before

W. L. Mardis, manager of Charles Street park, went to Chicago Tuesday evening last and returned Tuesday. He will soon put on another professional six-day race, and several of Chicago's speedy riders have romised to be present and compete. been the coming state circuit meet, which

Local clubs have been doing very little riding during July, and nearly all of the club captains have declared all July and August runs off on account of the hot weather. The beginning of September will national meet at the League of American again see the clubman taking his regular Sunday country tour and as the fruit season is at its height in September watermelon and grape runs will be in order.

It has been nearly three years since Omaha A new style of bicycle thief has made his A new sive of bicycle thicl has made his appearance in many of the large eastern citles, but has not yet reached Omaha. However, it may be well to warn local cyclists in advance and describe the smooth game he plays. He generally works has had a good out-door meet and local enthusiasts will undoubtedly appreciate the fact that it will afford them an opportunity to witness better races than have ever been held here before. Up to date over forty entries have been received, and among them with women. He accosts a rider and tells her that her tire is flat, or that a spoke is are the best riders of the west. There being such a large number of entries it will be loose, or that her chain is too tight. apparently fixes up these defects and then says, "now just let me see if it runs all right," and with that he jumps into the sad-dle and starts off. The spectacle of bloomer necessary to run trial heats Saturday morning, while the finals will occur in the after-noon. Below will be found a short sketch of some of the most prominent professional woman standing disconsolately in a street or park road, a great distance from home, watching a bicycle thief scorching off in the distance would bring tears to eyes inused to weeping.

> (Cut this out. It will not appear again.) \$25.00 GIVEN IN

reel sure, and if you do you will receive a good reward. Do not use any letter more times than it appears in the word. Here is an exam-ple of the way to work it out: Con. cost, coat, coats, on, test, tests, to, eat, etc. The publish-ers of WOMAN'S WORLD AND JENNESS MILLER MONTHLY will pay \$10 in gold to the person able to make the largest list of words from the letters in the word CONTENTANTS; \$5 for the second largest; \$5 for the third; \$3 for the fourth, and \$1 to the fifth, and a lady's handsome American movement which for each of the seven next largest lists. The above re-wards are given free and without consideration for the published in the words. The above re-wards are given free and without consideration for the published in the seven hext largest handsome and valuable ladies' magazine, twenty-four pages ninety-six long columns, finctly illus-trated and all original matter, long and short stories by the best authors; price \$1 per year. It is necessary for you to send 12 two-cent dange took. "Bedde the Bonnel it in the or more is guaranteed an exits present by return mail (in addition to the masgazine) of a large books of the age. Satisfaction guaranteed in every case or your money retunded. Lists should be sent at once, and not later than August 20 (time extended, positively closes August 20) so that the names of successful con-testants may be published in the Seitenber issue. Our publication has been established in angust 20 (time extended, positively closes August 20) so that the names of successful con-testants may be published to successful con-testants may be published in the Seitenber issue. Our publication has been established angency for our standing. Write new. Address I, H.L.TMRER, Publisher, 205 Temple Court building, New York City.

BICYCLE SPRING SEAT POST. Fits any Wheel. Any Saddle flade Comfortable. PATENTED MAY 12.1898) NO JAR. NO JOLT. CAN RIDE TWICE AS AVOIDS PUNCTURED TIRES. FAVER 75 FER CEST WEAR OF RICYCLE, PHYSICIANS SAV IT REMOVES ALL OBJEC-TION TO RICYCLE RIDING. DJUSTABLE TO WEIGHT OF RIDER "A NEEDED PRICE HYGIENIC IMPROVEMENT." ordering give exact size of sont

AWAY GOLD

Reddy Maxwell of Winfield, Kas., has been on the path for the past three years, during which time he has ridden with and won from some of the fastest men in this country He is at present the holder of the world's hree mile amateur competition record. - 114 has been showing excellent form on the Nebraska circuit and is looked upon as the probable winner of most of the open professional events at next Saturday's neet

entered:

E. Mockett of Lincoln, Neb., is one

of Nebraska's fastest riders, and also one of the fastest in the west. He has been riding for the past six years and is a thorough track general. He is showing greater speed this year than ever, and wil ndoubtedly give Maxwell a hard race for

first honors E. Fredrickson of this city is another of Nebraska's fast men and has probably competed in and won more races than any other rider in this vicinity. He is improv-

ing daily in his riding, and some fine work may be expected of him here. H. C. Gadke, also of Omaha, has but rejoined the professional ranks, havitly ing made his debut at the Fremont circuit meet on July 22. This is Gadke's third year in the game and he has a long string of victories to his credit, among which are one mile Nebraska state championship in 1895, and the one-quarter, one-half, one and two mile state championships for 1896. He has been training hard for the coming

races and will undoubtedly give a good acnt of himself. John Lawson of Chicago, known as the 'Terrible Swede," is one of Illinois' best iders, and, while he has not been winning with great regularity on the Nebraska circuit, at the same time he is showing good speed and on Omaha's large track should

show up well. Homer Fairman, also of Chicago, is practically a new man in the racing game as this is, you might say, his first year at real racing. He won the Chicago road race in 1895, and is looked upon as a very fast man. "Dad" Holton is one of Omaha's oldtime racing men, having followed the game since the early days of Jack Prince and the

old exposition building. He has not been following the circuit, but has remained at home and trained faithfully for the coming His trainer says that he is in fine form than ever, and will make somebody ride to win. C. K. Denman of Omaha was a shining

light in western racing circles in the day of the good old ordinary, and in 1890 captured the Nebraska state champlonship captured the Nebraska state on this type of machine. He has decided to try his luck at modern cycle racing and has entered in all of the professional events. He has been training for, the past three weeks and is showing a remarkable burst of speed. Besides the above such professionals as

Who can form the greatest number of words rom the letters in CONTESTANTS? You are mart enough to make fifteen or more words, we eel sure, and if you do you will receive a good eward. Do not use any letter more times than it appears in the word. Here is an exam-tion it appears in the word. Here is an exam-



is not downward but forward, so that there pretty young woman lived in the western is in reality no dead center. When the part of the town may or may not have ac pedal is at the lowest point the heel should counted for his miscalculation. Down West be raised, and then the pressure is exerted Houston street he darted like a flash, then backward. Doubtless many people use this ankle motion who never heard of it. It is out of the question, however, with the pedal resting against the heel, an awkward, he soon realized that he was running diwasteful mode of riding which many women employ.

members of the party idea which has been introduced in the bi-cycle clubs of France. In that country the whistle is much preferred to the bell as a means of alarm and for club "runs" or tangled ruins. As the track of the storm use when more than two cyclists go tour-ing. The wheelman has established a per-Reuben was by this time away from its fect code of signals, in which he uses short and long sounds on his whistle. Some of these signals are: these signals are:

Ordinary alarm, three short notes. Halt, one long-drawn note.

'Come ahead" or "Follow me," two long notes.

"Where are you?" or "We are here." three half-long notes.

"Turn to the right," one long-drawn note, one short.

"Turn to the left," one long-drawn note. two short. 'Look out; there's danger ahead," ten

sharp notes in quick succession. Call for help, three short and one long

note several times in succession. These signals are now pretty well under-These signals are now pretty well under-stood among the clubs. It might benefit American cyclists to take the matter up

Wheelmen insist upon causing ceaseless annoyance to themselves and their brethren Both wheels are gone, but the handle bars by failing to comply with the comm rules laid down for all riders. So many accidents have happened on the road, which might have been avoided with a little caution that it is necessary for them to observe the following hints:

Keep to the right of the road. Never neglect this.

Request permission of pedestrians for the right of way.

Turn to one side for a heavy load, even If you are on the right side. Be ever ready to assist a female rider in distress on the road, without the for-mality of an introduction.

Don't scorch. This means you Ride no faster than an eight-mile-anhour gait in passing through villages where

you are unfamiliar with the ordinances. It will save you money. And don't say: "Get out of the way," to any chance pedestrian who may appear in your path. Increase of 11.000, in 1894 to 149.080, an increase of 17.000, and in 1895 to just under 160.000, an increase of 11.000, it seems clear that so ibng as the fashion lasts the number of bleyclists will increase from 10.000 to 15.000 THE BICYCLE IN THE ARMY.

"The secret of hill climbing," says Frank Dampman, an expert cyclist of Philadel-phia. "Is the continual application of power. If the rider jumps in hi, work, using great force for a time, he tires himself, and does not secure as good results as when cutching the pedal at the very top of the stroke, with lowered heel and using the ankle motion, he follows it almost the complete revolution. By this method he secures not only power of the thigh muscles in the push, but the calf muscle as well. It is a well known fact that the majority of the Sciue-et-Marne, 925; for the Aube, 873; for Sciue-et-Marne, 860; for Scine-et-Oise, 845. hill-climbing contexts have been won in The Seine has 728, the Eure 71, the Oise the past on Starr machines. These worked 635, the Eure-et-Loire 654, the Loiret 640. style

The following, compiled by Colouci Al-bert A. Pope, is a good thing for county commissioners to study over, and the tax-the other departments the suburban district commissioners to study over, and the tax payer can learn some things also: The united States about 15,000,000 horses, over 2,000,000 mules and 49,000 asses. The suburd cest of feed for these animals is about \$1,575,000,000. On fine stene roads one horse can haul over the average dirt road of this country. It is estimated that it would be necessary to build about 1,000,000 mules of macadamized road in the United States in bighways as is found in several European places. At \$4,000 per mile this would in-

BICYCLING IN FRANCE.

The Valley of the Scine the Paradise

of Cyclers.

It is four years now since the French government has levied a direct tax on bicycles. This has made it possible to procure trustworthy statistics as to the number and distribution of bicycles throughout the country In 1892 the number of velocipedes that paid the government tax was 119,000. This had in overcoming atmospheric resistance, and increased in 1893 to 132,276, an increase of the run of the figures might be changed the government tax was 119,000. This had in

a year in France. At present it is calcula-ted that there are 400 bicycles in the country to every 100,000 inhabitants, but that is general mean; bloycles are not spread evenly over the whole territory. It might be sup-posed that the place where bicycles are densest is Paris, where there are 25,000 velocipides, a number exactly equal to that of the wina shops. But there are other de-

partments which surpass the Seine in the proportion of machines to population. The proportion to 100.000 inhabitants is, with a lever and ratchet motion, and a in these departments the proportion of ma-killed rider was able to keep his entire power concentrated on the machine, to propel it forward all the time, and thereby gain a distinct advantage over the lever of the Seine, the district in which the roads are the castest, the landscape most pleas-ant and best known, and the hotels the

force exerted on the pedal throughout complete revolution. To this end a disk was mounted on the bicycle crank concentric with the pedal pin. The pedal itself was mounted on stiff springs, and points fixed to it traced curves on the disk al-ready mentioned. If no pressure was exerted on the pedal, these latter curves were inple concentric circles; when, however, he rider began to work, the springs or which the pedal was mounted yielded proportionately to the pressure applied and he curves then drawn showed, by their deviation from the circular form, the value of the force applied at any part of a revolution. One of the pointers in question measured the force applied in a direction perpendicular to the plane of the pedal while the other showed the pressure ap-plied parallel to this plane. The latter is by no means an insignificant quantity, as all good riders shove their pedal forward as well as down. The angle the pedal made at any moment with the crank was also utomatically recorded.

An examination of the diagrams thus ob-tained showed, in the first place, that there was no absolute dead point, such as occurs with an ordinary connecting rod and crank motion, and secondly, that there is always some pressure on the pedal during the rise, the negative work due to which has to be subtracted from that done during the down stroke to obtain the net amount in propulsion. The experiments made at speeds ranging from used in were 10% to 21¼ miles per hour, the machine be-ing run on a wooden racing track. The re-sults, reduced to even English measures by means of a formula of interpolation, were as

OWS:	
Speed.	Work done Semi-revolut
illes per Hour.	Ft1b.
10	18.58
10%	20.96
12.5	36.98
15.0	47.50
17.5	56.75
20.0	63.62
494 3 4	00.00

It will be seen from the above figures that the average pressure of the foot required on the pedal increases rapidly with the speed being at twenty miles an hour nearly three and one-half times as much as at ten miles per hour. Unfortunately, the gear used is not noted by M. Bouny, and so it is im-possible to deduce from the above figures the average tractive resistance of the machine at the different speeds. Probably at the higher speeds named a large proportion of the total work done was expended

Extensive Experiments to be Made with It in Montana.

Some time ago a manufacturer opened up negotiations with Lieutenant James A. Moss in relation to putting a company of his men on bicycles. Lieutenant Moss made an investigation, and decided to make the experiment. Ten wheels are now in possession of the soldiers at Fort Missoula, Montana, and some severe experiments are to be made. Lieutenant Moss, who is in command of the corps, is getting his part of the work in the corps, is getting his part of the work in shape, and will be ready for the real work this month. In the meantime, the men will be in training for the long rides they are to make when their field service begins. In speaking of their work to a reporter for The Anaconda Standard, Lieutenant Moss said: "During the past four or five years the bicycle, as a practical machine for military purposes, has been attracting the attention of military men both in this country and abroad. In foreign armies, however, the matter has been brought to a more practical stage than in this country. As early as 1870 the bicycle was used in the Italian army. In France, Austria, Switzerland, and

any kind of a vehicle, and whould thus aid and assist the Associated Cycling clubs to do away with what has for a long time been a menace to them, and the property owners will in all events seek to catch the guilty parties if they come to a realization of the fact that the ordinance is about to be very fact that the ordinance is about yours, rigidly enforced. Respectfully yours, W. C. BOUK,

Secretary the Associated Cycling Clubs of Omaha.

Mckinley Favors Good Roads, In reply to a letter addressed to Hon. William McKinley at his home at Canton. O., asking for his standing toward the good roads movement, Mr. James Boyle, his private secretary, sends the following comunication My Dear Sir: Major McKinley is now absent from the city and it devolves upon me to make acknowledgment of yours of the 20th inst. Enclosed I send extracts from Governor McKinley's message to the

egislature in 1892 and 1893 Pursuant to his recommendation made in 1893 the legislature created a good roads commission and the appointments were duly made by the governor, and the commission investigated the subject and made a report to the legislature. I regret that I have not got a copy on hand, but I will write to Hon. Martin Dodge, Cleveland, O., who was a member of the commission, and ask him to forward you a report. Yours very truly, JAMES BOYLE, Private Secretary.

Following is the extract from Governor McKinley's message of 1892: "The great "The great need in many sections of Ohio is good country roads. This is a subject of importance not only to agriculturists, but affects every

material interest of the state, and is receiving very general attention throughout other states of the union. I invite the at-tention of the legislature to it with the object that some plan may be devised which, with the concurrence of the people, will lead to the improvement of our public highso that they will be serviceable in winter as well as in summer. Many of our

country roads are almost impassable during several months of the year. They should be good the year round for the safety and convenience of travel and transportation. The consideration of this subject by the legislature would lead to discussion among the farmers of the state, which would furnish valuable suggestions to the legislature It is evident from the poor and ill-constructed roads which we find in many por tions of Ohio, that the laws relating to the subject require attention, and possibly, re

Extract from meanage of Governor Mc-Kinley, 1893:

"Without reproducing what I said a year ago upon the subject of good roads, I beg most earnestly to ask the consideration of to submit a report, with recommendations, in time for the mosting of the first session of the next general assembly, the commis-

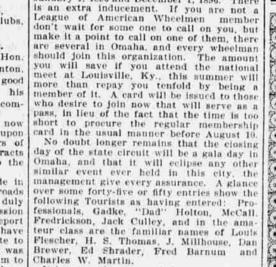
that he has already made a step in the right direction.

It is noted with pleasure that he in favor of thus joining hands with the League of American Wheelmen in this matter and lending his co-operation and aid in the establishing and maintenance of better roads and improving our public highways. As intimated in this article, the wheelmen are not only benefited, but every citizen of the United States may share in reaping benefits from an effort in this lirection

The local wheelmen have for a long time been agitating the building of several cycle paths out of Omaha and the various clubs of this city represented in the Associated wheelmen.

wheelmen. The voters thus represented run up into be thousands, and their support this fall will be our turn next. will figure very materially not only with A meeting has been called for next

American Wheelmen, and probably and one-third fare for the round trip would if the matter was broatched properly to them, and they were brought to realize has been secured on all roads leading into the benefits which they derived from becoming members. The editors of the Western Cyclist offered, some time ago, a \$10 gold badge to the Nebraska local consul who secures the most new members between January 1, 1896 and December 1, 1896. There



It is earnestly requested that every Tourist who can possibly attend the races meet at the club rooms, corner Fifteenth and Douglas, and go out in uniform. Mr. William Lyle Dickey and Charlie Thomas have been laboring zealously for the success of the meet, and now it is but just to them, as well as the contestants, that we attend the races and aid in making the event a credit to Omaha.

The prize list is a large one, and the program is replete with a large number of races aside from which several special events are booked which will make in all a day's sport worth going many miles to witness. Many records will probably be lowered, and the track will be in the pink of condition Tickets will be distributed out among the various clubs of the city, and the members

the attendance up into the hundreds, terest thus created will very materially procuring for us the national meet in 1898. Put up good races, and see that they are liberally patronized, the results that follow are very apparent to every wheelman

Another rousing meeting was held last Wednesday evening by the '96 Meet club and several matters of importance discussed

and committees reported progress in the several duties assigned them: fidently expected that a large delegation most earnestly to sak the consideration of the general assembly to that subject. It is attracting attention in all parts of the country, and in no state is there greater necessity for good reads than in our own. I suggest that the general assembly author-ize the appointment of a commission to in-vestigate and carefully consider all plans proposed and experiments being made, and which it boasts so much, viz.: Beautiful will leave Omaha on August 8 for Louisville which it boasts so much, viz.: Beautiful women, fast horses, fine liquor and tobacco. It is earnestly requested that all those who desire to join the Omaha '96 Meet club will advise Mr. O'Brien in person or by letter at 120 North Fifteenth street of their intentions at the earliest possible moment. Each person should place their orders for suits at once in order to insure their being ready when the time comes to start. This matter should not be neglected.

matter should not be neglected. Several members came forward at the last meeting and deposited \$5 cash as a guaranty of good faith and to show that 'hey fully intend to go. The same is placed to their credit as that much paid on their transportation and this gives the committee some thing to show just who are going and who are not. Let every member of the club are not. Let every included of the rids come forward immediately and do likewise. Accommodations must be provided now for the party and if you are going kindly make

the party and if you are going kindly make it known in order that proper arrangements may be made. A sample of Nebraska's hospitality was indulged in by the members at the meeting Wednessay night through the kindness of F. W. Fitch, and, while several of the loys Cycling Clubs of Omaha recently organized a political committee whose duties will be to recommend those men for office who thus favor the "Good Roads" " movement as well as other matters of vital importance to



o6 National	95 Lady Fenton \$45
96 Union \$60	95 Duchess-Ladies' \$35
95 Victor \$45	95 Crescent-Ladies \$17
95 National	95 Gendron\$20
95 Union\$45	93 Rambler\$25
We will sell for a few days at a discount of 20	95 Unions, ladies' or gents',

A. L. DEANE & COMPANY, 116 FARNAM STREET. J. J. Deright, Mg