

BILLS

MOTOR ROAD IS IN VOCE

Wagon Roads Are Giving Way to Highways for Automobiles.

AUTOS HARD ON WAGON ROADS

A Hard Tire on a Smooth Road is the Ideal and Soft Tires Will Give Way as the Roads Improve.

In a recent paper before the Incorporated Institution of Automobile Engineers of England, Douglas McKenzie has endeavored to analyze the effect of motor cars on roads. This paper treats the subject from a point of view of the automobilist, but with the idea that while the automobilist for better roads they should themselves remedy certain defects in automobiles which tend to injure road surfaces. The author begins by stating that the ideal contact would be that of an unyielding wheel on an unyielding surface, the nearest approach to which is a railway car on a track. If this is true, soft tires should give place to hard ones, and, as the roads are made smoother and harder, pneumatic tires should give way to solid ones. Any variation from the ideal contact means loss of energy and injury to both road and tire.

I have never had the pleasure of meeting Mr. Douglas McKenzie or of having any communication with him. But as a man who has studied the motor road for many years I want to subscribe to the fidelity with which he has defined it," said F. J. Nash. "This, however, will not help generally in building it. To get at a clear comprehension of that we will want to go over in detail the horse road (with which we all have now for many years been familiar) and let that help us to understand the motor road, which is simply an evolution of the horse road, the place of which in highway transportation, is now about to take. We will commence at the dirt road which lies in the march of human progress bang up against the trail in the forest. The farmers gave the ground through which the road was to pass and then either hired help or else turned out on many days each year and dug the ditches on either side of the road and heaped up the dirt in the middle, which made all the road dirt well made.

After this came Macadam, who dumped onto the soil any kind of crushed stone which has slight cementitious properties, but full enough to pack down into a compactly smooth surface by being traveled over. So much of this road has been made ever since, and his name is so generally known in connection with this form of road that we fail to realize that the great thing that Macadam really did was not this. The thing that Macadam did was to use his thinking powers in the most was his discovery that the highway must have an elastic base, and as he did not have one to present he went over and made the great error of saying that the highway did not need any base at all.

"In some evidence before a Parliamentary commission upon the subject of roads, Macadam said that he would prefer a soft foundation to a hard one, going so far as to say that he would prefer a bog if it were sufficiently hard to allow a man to walk over it," said C. C. Tillson, chief engineer of highways, Manhattan, New York City. "He worked on very different principles from Telford, in that he not only did not require the foundation course, but stated that he considered it positively injurious. He put his road surface directly on the ground which, when it was wet, came poking up through the surface (as if the tie of the railroad should poke up through the rail and break it) and when it was dry, was not elastic. Macadam discovered the correct principle, but having failed to provide any correct mechanical application of that principle, the engineers commenced disputing him and finally laid down a rigid foundation, not only for the Macadam road, but for every other form of road ever since. The Telford foundation, consisting of heavy stones (they are laying them in Cuba now, ten inches thick) was the first form of the rigid foundation. Then came the asphalt, wooden block, brick block and any other kind of block all with a rigid foundation in concrete. The concrete was uneven at the top, so they put some sand on it, which transmitted this unevenness to the surface, and raked it out of one-half of its life. This sand either was or got dry, the concrete being impervious, and not letting the ground water up to it. The wooden block was condemned and utterly thrown out from this cause twenty-five years ago. In this country, but has since partly regained its reputation in the heaviest traveled over spots in London and Paris by smoothing off the top of the concrete with neat cement mortar doubling the former life of the concrete treated wood paving block, from eight years, up to sixteen or seventeen years. This was possible because while the base remained rigid the block itself was resilient.

"We are today able to carry out Macadam's ideal of having an elastic resting place for the surface of the road, and yet have the strongest kind of a foundation, instead of as he had, having none at all. It can be done in this way: By furnishing a die (after the right to do so has been acquired) by any brick yard making defricted paving brick, or block, without any other change in their yard, we can make a block twelve inches square, varying from four inches up in depth. In this block at regular intervals are run holes, say one and a quarter inches in diameter. These blocks after draining, and thoroughly compacting the subgrade, and thus making it just as hard as we possibly can, are laid upon this subgrade, each car pitch is poured into the space between the blocks, then the holes are filled with wet, sharp sand, and enough more sand is put upon the blocks to make an inch of sand evenly laid over them. Upon this is laid the defricted block as a surface; the spaces between the surface blocks are filled with groat, with the usual expansion joint of asphalt or any similar substance.

The moisture in the sand gives elasticity to the surface, just as Macadam said wet ground would do. Were Macadam with us today, this form of road construction would have him full and hearty endorsement. It furnished the missing link in his conception. This is the evolution of the motor from the horse road.

Our engineers are going to Europe to see how their horse roads compare with our horse roads, and their engineers are coming here to see how our horse roads compare with the horse roads of Europe.

Along Auto Row

Show Committee Makes Its Report to Dealers with a Splendid Record of Success for 1909 Exhibition.

The committee, composed of J. J. De-Right, C. G. Powell and W. D. Hoferd, having in charge the February automobile show, held a meeting last week and made a report to the dealers interested. So satisfactory was the outcome for the show that the dealers will hold another next year, and already plans of a very elaborate nature are being discussed. The report of Treasurer Powell showed the affairs of the dealers in a much more prosperous condition than ever before. A permanent organization was formed, and a committee was appointed to draft bylaws and constitution for the association. At present the membership is twenty-five. The present officers, President DeRight and Treasurer Powell, will serve the association until their successors are appointed.

Henry H. Van Brunt of Council Bluffs is erecting a large garage, which will be the home of the Overland Pope Hartford.

The new garage on Farnam for Guy L. Smith, in process of erection, will be ready for occupancy within thirty days. This will be one of the largest garages in Omaha.

The Atlantic Automobile company has a garage now in both Council Bluffs and Atlantic, Ia. This company, of which C. W. Herrling is president, handles the Reo and Ford cars.

The Coit Automobile company in a short time will move into its new building on Farnam, a few doors west of the present offices, where the Mitchell and Rambler will be shown.

The Hartman Motor Car company, of which F. G. Hartman is general manager, will start business in Omaha within a short time. The new concern will handle the Marion Flyer.

Last week W. D. Hoferd exhibited the Veie at the Lincoln show. W. L. Huffman, the Regal, J. L. Freland, the Muffin, J. S. Stewart, the Rambler, through his agency there, and Ole Hibner the Firestone Tire.

Among the dealers of Omaha who went down to Kansas City to attend the show in that city last week were C. F. Corfield of the Oldsmobile company, C. F. Louk of the Maxwell and Al Hallberg of the Drummond Carriage company.

R. R. Sandham of the Kimball company spent last week in western Nebraska.

The White Steamers new home on Farnam street, in Automobile row, as well as that of the Woods Electric, erected by the Drummond Carriage company, is completed. It is done, inside and out, in white, and attracts a great deal of attention.

The Drummond Carriage company has added a top department to its automobile plant and will hereafter compete with foreign manufacturers in tops for vehicles. It is understood that several of the agencies in Omaha will place all of their orders for car tops with Drummond.

The new garage of the Pioneer Implement company has been completed and the Jackson is shown there hereafter.

William H. Wallace, who formerly carried on an automobile repair shop and who dealt in second-hand automobiles on Twenty-second near Farnam street, has formed a partnership with J. A. McIntyre, a commission merchant of South Omaha, and the new concern will handle the Oakland, of which the latter company is distributor. The garage of the Oakland will be on Twenty-second street near Farnam.

R. R. Kimball is spending the winter in Ormond, Fla.

A year ago this month the Thomas Flyer which was awarded the cup over the French, Italian and German cars was in Omaha. At that time a banquet was held, to which the friends of the American car were invited, and a justification followed not to be forgotten by those who participated in the revelry. Adorning the walls of the Fredrickson Automobile company's office is a large photograph of the banquet table and a picture showing a fine body of men. The photograph was made before the speechmaking began.

LUSH PICKS BASKET BALL TEAM

Thinks Entire Five of Columbia Best

NEW YORK, March 12.—William L. Lush, former coach of basket ball at Yale university and instructor of the game during the season of 1908 at the United States Naval academy, has picked the entire Columbia university quintet as his choice for an all-eastern intercollegiate basket ball team. He says that he does not know of any way whereby the players from other teams would be combined and a five of the ability of the Blue and White be gained. He believes that each member of the Moravian variety was the best at his respective position. There is little question that Mr. Lush is fully qualified to pick such a team. He has witnessed the majority of the important eastern basket ball games during the winter and while he says there was no dearth of good material to be found among the colleges and universities, still he thinks that the local players are entitled to places on the banner team. The lineup of the Columbia team follows: Hiltner, right forward; Kienel, left forward; Ryan, center; Conant, right guard, and Kimble, left guard.

HORSE SHOWS AND HORSEMEN

Atlantic City to Open Circuit on Ocean Pier.

PLANS FOR A GREAT CAMPAIGN

Some Exhibitors from London and Others Swing Around Home Dates—Americans Among International Judges.

NEW YORK, March 12.—This year to open the horse shows the nags, drivers and riders will go on to sea. When this initial show of the circuit is in progress should a spectator raise his eyes from the judging ring or a driver shift his gaze from the equine between the shafts the wide, surging ocean dotted with ships or steamers will be before him. No, it is not to be shown afloat, but on a promontory of steel and concrete jutting out from the Boardwalk at Atlantic City. Against the three sides the waves may roll or splash as fiercely as they may, but the pier will be as dry as a Kansas pasture in a drought.

Tanbark, ring seats, boxes and stalls for the horses will be duplicates of any show inland, or rather in a city riding academy or club. The \$1,000,000 pier is what they call the showing place in Atlantic City. Losers at horse shows are often said to have sold feet. By taking a running jump from the pier they can easily gain west.

It will be the eleventh annual fixture of the Atlantic City Horse Show association, but before this it has been held in the open air at Inlet park during July, Philadelphia and New York horse owners are so widely scattered in midsummer, or else preparing for the coming season, that it has been thought wisest to have the Atlantic City function this time on April 8, 9 and 10. The pier, which holds a theater, skating rink, concert hall and other attractions besides the show quarters, will be a fine place for the horses and horsemen to inaugurate the campaign from a summer to a spring date. After Atlantic City there will be a constant succession of horse shows until that of the National Horse show association in November, which, rumor to the contrary notwithstanding, will for this year at least be held in Madison Square, New York.

To consider only the shows to which New Yorkers will send their driving and riding horses after Atlantic City, on April 14-18, the home-like and well-managed fixture is on at the Durland Riding academy. Three generations of New Yorkers have been taught to ride under the watchful eye of William Durland, who at this show reveal that they can also drive. Next comes

Timely Tips for Automobile Drivers

The usual annual automobile exhibition in Vienna will not be held this year.

A tight running and noiseless car is taken the sign of a good driver, who takes pride in his work.

Motor cars fully equipped for camping tours are becoming regular features of sportsmen's shows throughout the country.

The Automobile club of Canada recently made arrangements for the holding of an automobile show in Montreal some time in April.

The Norristown (Pa.) Automobile club has decided to inaugurate an endurance run in May.

The New York Automobile Trade association has announced a hill-climbing contest to be held on Fort George hill Saturday, April 10.

The new motor car used by President Taft is dark green in color with the coat of arms of the United States painted on each of the doors.

In the correction of all automobile faults the greatest and most common error is in improperly locating the trouble before trying to correct it.

About \$10,000 has been pledged by the Oklahoma City Automobile association for the construction of a twenty-five-mile speedway around the city.

A motor truck recently tested at Worcester, Mass., hauled 300,000 pounds of steel wire in five days. Another hauled four tons 148 miles in thirteen hours.

The fastest time recorded as having been made upon a motorcycle is that of a mile in 14 1/2 seconds, a speed of 54.05 miles an hour, made by William Wray on the Florida beach.

It is estimated that 14,000 men are employed in the manufacture of automobiles in the United States and that more than 1,500 are employed in garages. There are about 20,000 chauffeurs in the state.

Encouraged by the success achieved at their second annual show, members of the Detroit Automobile Dealers' association are already planning for their third event. It has been decided to make it a two-week affair.

Harbert Lytle, the well-known racing driver, has just recovered from a fortnight's siege of typhoid fever. Following his recovery, he expects to be in shape to participate in the Florida beach races.

The motor chassis wagon, costing \$150, has been ordered by the Pioneer Fire company of Jenkintown, Pa., a small, but extremely wealthy Philadelphia suburb. The members are often referred to as the "millionaire firemen."

Two parallel roads, built of the same material, one for the use of horse-drawn vehicles and the other for automobiles, have just been built near Philadelphia to test the general effect of the two classes of vehicles on the surface.

Notwithstanding the fact that many of the prominent French makers have been declaring for some time that there would be no 1909 Paris season, it is now announced that December, 1909, will see another automobile exhibition in Paris. An automobile ambulance service has been installed at the Flower hospital in New York city. As the territory covered by the hospital has been increased thereby, the trustees of Flower hospital have appropriated \$50,000 for sixty additional beds.

A good highway, stretching in a generally direct line of 700 miles from Atlanta to Washington, D. C., kept up by the several counties in the various states through which the road would pass, is now the subject of promotion on the part of the Good Roads club of Georgia.

The Automobile club of America will erect another addition costing \$400,000 to its already extensive club house in New York. A large part of the space in the new building will be devoted to storage purposes, as there are more than 20 names on the waiting list of the present garage.

Spate asbestos washers should always be treated before being placed among the spare on the car. A six hours soaking in olive oil, followed by a draining and brief drying, and a final rubbing in of fine black lead, will give a good tight washer that will come apart cleanly at any time.

INTERNATIONAL ASPECT OF RACE

Auto Contest from New York to Seattle Excites Interest.

NEW YORK, March 12.—The transcontinental automobile race from New York to Seattle, which will be started from this city about May 15, has taken on an international aspect, due to the promoters of the event applying to the Automobile Club of America for a sanction, and that body in turn granting the desired privilege. Interest in the event, in which the cars will speed from coast to coast in the race for the Guggenheim trophy, has increased wonderfully, the announcement of the contest having been made but recently. Many prospective entries are in sight and the event promises to be one of the motor car racing classics of 1909.

In granting the sanction two conditions were imposed by the club: one that all prize money and trophies should be absolutely guaranteed, and the other that the rules should be submitted to the contest.

AUTO CARNIVAL PROGRAM READY

Five Days of Sport Planned for the Metropolis.

NEW YORK, March 12.—The full program for the automobile carnival to be held in this city during the week of April 5 has been decided on at a meeting of the committee at the Automobile Club of America. The carnival will begin with a hill climb up Fort George hill on Monday, April 5. Colonel K. C. Pardee, who acted as chairman of the hill climb committee last year, was named trustee. On Tuesday, April 6, straightaway races and speed trials will be held on the Ocean Parkway or on the Motor Parkway, the scene of the recent Vanderbilt cup race. C. R. Teabolt will serve as chairman of the committee having these races in charge.

Wednesday, April 7, has been set aside as souvenir day, when the members of the trade will hold open houses along automobile row and distribute such souvenirs, banners or catalogue as may be deemed suitable. In the evening a trade banquet

will be held, with Alex Howell as chairman of the dinner committee. On Thursday, April 8, a field day will be held at Morris Park or some other suitable spot. Orrel Parker was named as chairman of the committee to arrange a program of races and other sports for that day.

On Friday no features are planned, but on Saturday, April 10, the big parade, which will be held in the day time, is scheduled. General Cutting announced that General George Moore Smith would act as grand marshal, with authority to choose his own aids. The arrangements for the parade are in the hands of a committee of which R. G. Howell is chairman.

The Brooklyn Riding and Driving club, April 27-30; Pittsburgh show, May 12-15; Philadelphia at Wissinick Heights, May 21-June 1; Plainfield, June 10-12; Tuxedo, June 15-19; Long Branch, July 27-31; Bay Shore, during August; Newport, September 1-10; Haverhill, in connection with the Grand circuit meeting, September 9-11; Stratford, together with the state fair and grand circuit, September 13-18; Dutchess county at Poughkeepsie, September 20-23; Bryn Mawr, Sewickley and Westchester in September; Brockton, Mass., October 2-5; Piping Rock, N. Y., also in October, and the National Horse show in November. Each show has its special charm. Atlantic City and Long Branch are the gayest. Wisnaminikon and Tuxedo attract the prettiest girls; Durland's and Piping Rock are famed for children clever with the reins, and so on. The Syracuse show which is managed by S. W. Taylor, is noted for the encouragement it gives to breeders of high class heavy harness and saddle horses, and also for speed tests on the mile track under novel conditions, such as for four-in-hand and tandem pairs to heavy rigs at the trot.

Besides going to sea to start their circuit, in June some of the leading American exhibitors will be across the Atlantic to participate in the third international horse show at the London, Olympia, in 1907 and last year our chief exhibitors abroad were C. W. Watson, A. G. Vanderbilt, Frederick Palst and R. P. McGrann, while this season, W. H. Moore will be the principal American contender. While his best harness horses are hackneys, it will not be "carrying coals to Newcastle" for Judge Moore's best, such as Fred's Prides and King of Kings had not been shown in England before being sent to New York. The cash premiums at the London show amount to \$60,000 and there are also countless special cups.

The state legislature, and there is fair prospect that the project may be begun this year. The city of New York has bought and now owns and operates about 100 motor vehicles, valued at present at about \$50,000. It conducts a model garage and outside of the most efficient chauffeurs, which averages some \$1,200 a year, the cost of upkeep, including tires, gasoline, lubricating oil, repairs, etc., does not average \$200 per machine.

The new ordinance for controlling vehicles on the San Francisco streets is one that has decided the most important ever enacted by the authorities of that city. No wagon or motor car can be stopped and left standing, except on the street, and the street cleaners, all vehicles, going slowly, have to pull to the curb in order to allow the passing of a faster vehicle.

Springs too weak to hold the valves on the cams will make the engine weak at high speeds, and will produce clattering owing to belated seating of the valves. On the other hand, an excessively stiff spring cannot do its duty, and will cause the valves to be constantly hammering the seat, thus consuming power which could be better expended in driving the car.

It is annoying to have the car rattle and squeak whenever it goes over a little irregularity in the road, and it is also bad for the car. Each squeak means friction in the spring hangers, radius rods or brake connections, or between the spring leaves. If it does not rattle on the street, it is a permanent looseness. Liberal use of the oil can is the obvious remedy.

It is possible that the Motor club of Philadelphia will be granted a sanction from the American Automobile association as a result of a clash between the Motor club and the contest board of the association. The annual contest is scheduled to be held from May 1 to 6, inclusive, and is to be covered by the competing cars is to be about 700 miles.

The basis of the French highway system is the belief of Bridges and Roads, one of the finest technical colleges in the world, where engineers are trained for positions abroad in the construction of roads. These engineers co-operate with the local authorities, and the result is that there is available for the work of road construction an effective body of competent administrators whose influence extends throughout the whole country.

The dashing driver who starts with a jump, throws on the high gear within a short distance and when stopping drives abruptly to the desired spot, often slams on the brakes, will find that his tires will last as long as those of his more careful neighbor. To cut a high rate of speed suddenly, on a slippery pavement or on a road, so that the wheels fly around while the car is barely moving, is not conducive to long lived tires.

The time is coming when the automobile will be used for practically all purposes where a speedy method of transportation over roads of all kinds is desired. A hint of the coming of this time is afforded by the action of the Indianapolis base ball club in purchasing a twenty-four passenger motor bus, which will be used to transport the players to and from the ball grounds and to and from trains. Its adaptability for other purposes, such as making runs to nearby towns, for example, is obvious.

Civilization first heard of rubber in Herodotus' account of the second voyage of Columbus in the year 1492, where he speaks of elastic balls made by the natives from the gum of a tree which he then described in account of its practical use was recorded in 1763 by the leader of a French government expedition returning from Brazil. America, who reported that the natives secured from the juice of a tree a certain gum which was very elastic, impervious to water and used in making bottles, shoes and quilt guns.

It is curious that the action of the contest committee of the Automobile Club of America in suggesting that the race from New York to Seattle, be put forward to avoid any conflict with the 1909 Chicago tour, which is likely to be started about the first week in July, will put an end to the talk of opposition against the tour from the American Automobile association and the recently organized Manufacturers' Protective association, which has agreed to co-operate with the American Automobile club in the contest. The control of all contests that are of strictly national character. Arrangements have been made for the contest to be started by President Taft, who will press a bivouac at 1 o'clock on June 1, at the White House, which will open the Alaska Yukon-Pacific exposition, and at the same time ring a bell in New York City, which will be the signal for the start of the contest.

CORNELL ROWING AFFAIRS IN AIR

Lack of Spirit of Former Years is Shown by Students.

ITHACA, N. Y., March 12.—Cornell undergraduates are evidencing signs of alarm at the present condition of rowing affairs at Ithaca. There does not appear to be the same spirit prevailing among the candidates that years ago built up a rowing tradition at Cornell and eventually resulted in the Red and White occupying the position that it now does in the realm of the shell and sweep. Many candidates appear to take it for granted that Cornell victories on the water are a foregone conclusion, and an alarming tendency to sit back complacently and take things easy promises to spell disaster to the Ithaca crew success in rowing if radical changes are not effected.

"Coach Courtney, the 'Old Man,'" as Cornell students fondly call him, who has done more than any other man in placing the Ithicans in the foremost rank of American collegiate rowing affairs, is greatly displeased at the attitude of the undergraduates. No less than fifteen men cut recent crew practice, and to say that Courtney was displeased would be putting it mildly. The men gave as an excuse that they did not know whether to report at the boat house or the crew room. When crew practice is held the boat house an American flag is raised over that structure,

which may be seen from the campus. The excuse was certainly a lame one and reflects the rowing spirit that appears to pervade the Cornell crew camp at the present time.

BIG CASH PRIZES FOR AUTO RACE

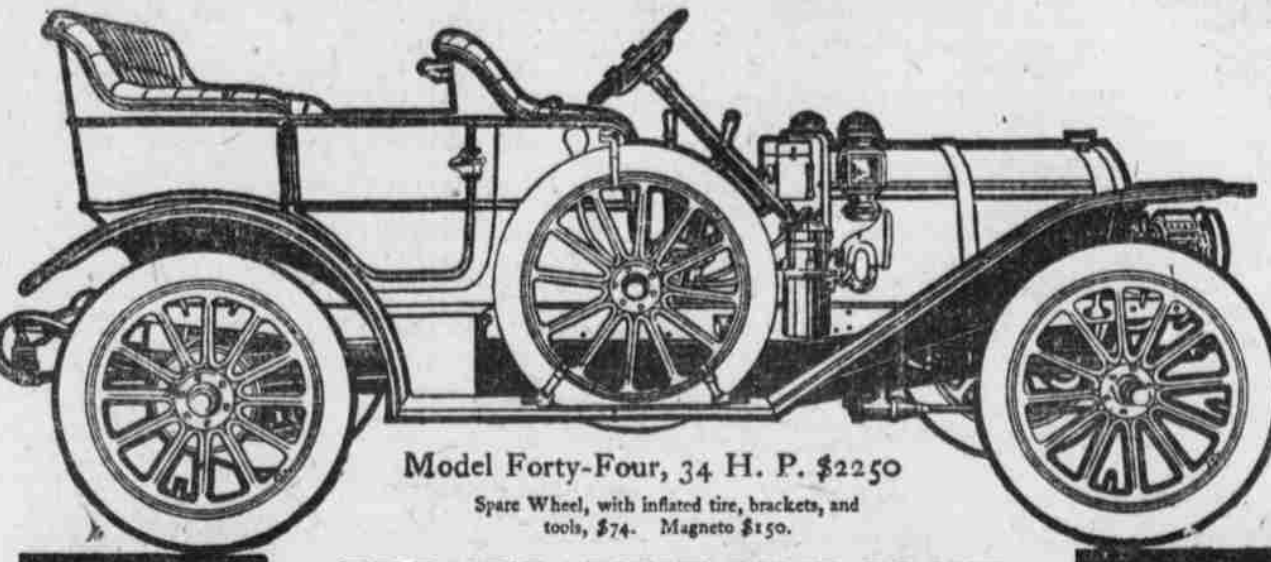
Money Deposited and Everything Done to Make Race Successful.

NEW YORK, March 12.—The Florida beach automobile races will be held this month according to the original schedule. The \$1,500 in cash prizes has been deposited in the Merchants bank at Daytona, according to the new rules, and everything possible will be done at Daytona to make the meet a grand success.

In order to pay expenses and get a race meet of worth, there was just at least twenty entries, and it is thought that this number will be received.

Annual Meet at Harvard Stadium

BOSTON, March 12.—Harvard's stadium will be the scene of the intercollegiate track and field championships on May 28 and 29. The Intercollegiate association having decided the place at the annual meeting. Virginia Woodwin and Massachusetts "Tech" were elected to membership.



Model Forty-Four, 34 H. P. \$2250

Spare Wheel, with inflated tire, brackets, and tools, \$74. Magneto \$150.

THE STRAIGHT-LINE-DRIVE

Power cannot be carried around a corner without great loss, due to friction. In the ordinary automobile much energy is wasted in transmitting the power from the engine to the rear axle through universal joints, or, in other words, around corners.

In the Rambler the driving shaft, when the load is in the car, is in direct line with the crank shaft and the angle found at one of the universal joints in most other driving systems is eliminated. The drive is thus accomplished in a direct line.

The Rambler straight-line-drive delivers the maximum power—saves energy—prevents wear—reduces cost of upkeep.

Rambler

The Car with the Offset Crank Shaft



The great economy and efficiency of this car is due to such exclusive Rambler features as the Offset Crank Shaft, Straight-line-drive, Safety Spark Retarder, Rambler Spare Wheel, etc. Let us prove this to you. Call and we will explain these Rambler features in detail, and by actual demonstration; no obligation on your part whatever.

Seven Passenger Model, forty-five horse power with offset crank shaft, \$2500. Other models, \$1150 to \$2500.

The Car of Steady Service

Coit Automobile Co. 2025 Farnam Street OMAHA, NEB.

What does it cost you to haul your merchandise?



RAPID COMBINATION—TWO TONS \$2,250

Is not this subject worthy of serious consideration? Thousands of firms have studied this subject carefully and adopted motor truck, much to their profit. Why not you?

We have just received two carloads of Rapidos and will demonstrate these cars to you in your every day work.

Let us show you where you can effect a large saving.

H. E. Fredrickson Automobile Co. 2044-46-48 FARNAM STREET

The Bee for All the Sporting News

Table listing various automobile models and their prices, including Buick, Ford, and other brands.

Advertisement for H. E. Fredrickson Automobile Co. featuring a coupon for a free tailor suit and overcoat, valid until March 15th.