

What You Want to Know About Your Auto and How To Drive It and Keep It

Expert Advice How to Keep Automobiles Running Smoothly and the Best Way to Remedy Machine Troubles—Traffic Suggestions and Pleasure Routes for Evening World Readers.

By GEORGE H. ROBERTSON.

EVERY year about this time the average automobile owner, who has run his machine for two or three seasons, begins to get the "new car bug." It is certainly the right idea, from an economical viewpoint, for an owner to trade in his old car, which no doubt needs a thorough examination, for a new model. The owner will generally find, after repaired, the top fixed where it had worn shabby, and money spent for new tires, that he could have used this outlay, together with the old car, in getting a brand new, up-to-date model with starter, electric lights, etc.



GEORGE H. ROBERTSON.

Hence, I believe it to be good business to negotiate with the dealer who handles the make of your old car. The reliable dealer is only too pleased to retain his old customer from year to year and will thus take more interest than any one else in any exchange of machines.

ANSWERS TO LETTERS.

Automobile Editor:
I have driven a Chalmers model 25 car about 1,000 miles. There is a pound in the motor oil starting which gets till engine is warmed up. Neither retarding nor advancing spark will remedy it. After the car had done 1,000 miles it began to smoke at times, the smoke coming through the foot-boards and control from the direction of the flywheel. If speeded over twenty-five miles or level road she will smoke. The car is supposed to take an ordinary hill on "high," but will begin to smoke and drop back, making me shift to second and often to first when she approaches a hill. PAUL N. SKINNER.

The smoking of the car through the floor boards is no doubt due to oil being thrown off of the flywheel onto the exhaust pipe. This oil may come from the rear bearing of the water. Would advise you to look over this bearing, which, if worn, would not only leak oil but cause a power loss. Or it may be that the motor needs going over and saw piston rings put in where necessary. Poor piston rings are also a cause for the loss of power. GEORGE H. ROBERTSON.

Who manufactured the Warren automobile and where can I secure parts? JOSEPH P. HOPKINS.

These parts may be obtained from the Puritan Machine Company of Detroit. ARTHUR H. FLYNN.

Is there an agency for chauffeurs in New York City? There is an agency in West Fifty-eighth Street, this city. ARTHUR H. FLYNN.

Could a truck with solid tires be made to run as a comfortable passenger car? F. B. JONES.

I will write you regarding your other inquiry. This oil may be better for truck if the carrying capacity is over 1,500 pounds. H. T. EVANS.

What is the correct method for setting adjustments on this oil when getting adjustments on tires you are supposed to pay only for the change necessary from the driver's standpoint. If you only run 700 miles on a tire which is guaranteed for 2,500 miles you should get a new one for one-fifth the list price. H. T. EVANS.

I inclose a cut of a Ford unit spark. Do you know anything about them? The price is one-half the Atwater-Kent system. G. J. SNID.

There are quite a few of these used that seem to work satisfactorily, but would not advise you to buy anything like this unless it were backed by a positive guarantee by the people you bought it from. HERBERT REDDINGTON.

I have purchased a Stevens-Duryea 1908 model, with a carburetor of their own make. I do not understand the adjustment of it and can find no one who can give me information. The motor seems to run all right, but too much gas is consumed and I can find no leaks except when the motor has been running and is stopped; a large quantity rushes out of the air inlet where the heating pipe from the exhaust connects. The exhaust flame is a dazzling light purple. HERBERT REDDINGTON.

When your adjustment will believe that the level of the carburetor is wrong. Would advise you to have a good repair man adjust the float so that the gasoline comes just to the level of the pipe. If you cannot remedy the trouble would advise trying a new carburetor. W. L. DOUGLAS.

My 1913 model Marion roadster is broken down. It has a drive wheel and has one rear wheel more driving power than the other, and when car is jacked up, both wheels of ground, and speed is put on should wheels go in one direction?

What is the best way to clean the oil out of the engine and the best oil to use? F. W. Open the pet cocks on plugs in the bottom of the crank case. Run the motor for a few minutes slowly until the oil is about out. Would advise pouring about a quart of kerosene into the case after this is done and run the motor for a moment to insure getting all the old oil out. Be sure to refill the case after the pet cocks are closed with a proper amount of a good grade of oil. GEORGE H. ROBERTSON.

What is the best way to Nyack, N. Y., from Brooklyn? E. W. S. From Brooklyn to Broadway, New York, up Broadway through Yonkers, Hastings, Debba Ferry to Tarrytown. Then cross ferry to Nyack. The roads are in very good condition. GEORGE H. ROBERTSON.

Will you kindly let me know several good trips to take in the vicinity of New York where the roads are good and not to exceed 100 miles both ways? Is it necessary to have a license for a motorcycle in the adjacent States to New York while touring from one State to another? O. P. T. Bureau of Tours of the Automobile Club of America, or the best pocket touring guide company for these trips. They have them already made. If a State requires a license for a motorcycle, it is necessary that you be licensed in some State and carry the plates. GEORGE H. ROBERTSON.

Kindly let me know the best route from New York to Caldwell or Pine Brook, N. J. W. J. BORST. Cross Forty-second Street Ferry to Hudson County Boulevard, turn south to Newark Avenue, turn west and take Belleville Turnpike to Montclair. Then cut Stonefield Avenue to Caldwell. GEORGE H. ROBERTSON.

What is the best Northern route by automobile to California? I intend going there June 1. Where would I get a good guide? F. L. R. We would advise you to write to the Bureau of Tours of the Automobile Club of America, where you can secure the route in detail. I could not give you the small details you require in this space. GEORGE H. ROBERTSON.

I have just purchased a Ford and would like to know whether my wife can run it under my license. What is necessary for both to have the right to operate it? F. G. BURTELL. Your wife may operate the car regardless as to whether the license is taken in your name or jointly. The law states that a licensed operator is one who is paid or hired for the purpose of operating a motor vehicle, since your wife or family are not hired or employed by you for this purpose they are not supposed to be licensed. GEORGE H. ROBERTSON.

Will you please inform me whether anything has been invented and used to prevent automobiles from skidding outside of the usual familiar chain? And do you think it would be worth while to spend time and money in developing and patenting any device that would be more effective, although more expensive perhaps than the chain? I intend to buy a car this summer and lease my own services as chauffeur. What make and size of car would you advise for the purpose? Do you think my plan has any chance of success and would I be likely to get a proper engagement through advertising? M. BRADON. There is good money in any device which is practical for this purpose. Would advise you to pick out a standard make of car and advertise through the different mediums. If you can get a popular car in good condition it might pay you during the summer months. GEORGE H. ROBERTSON.

My father is about to get a passenger automobile which he wishes to use in business as well, putting a commercial body on it. Is it necessary to get a commercial and private license and are the two required to be obtained at the same time or just occasionally? Am I required to have a license to drive the machine, and what age do I have to be? R. LEONARD. The law states that a vehicle used for commercial purposes only shall bear a commercial license. I believe that since this car is used for pleasure also a pleasure license is the only one required. If the car is registered in your father's name and you are over eighteen, you will not require a chauffeur's license, although you must carry the owner's card. GEORGE H. ROBERTSON.

What is the best auto for the price of \$1,000 or thereabouts? THOMAS H. AMER. Will write you if you will forward your address to me. I cannot answer this sort of query through this column. Kindly let me know how many people you want to carry, where you want to use it, etc. GEORGE H. ROBERTSON.

What is the best route from Fifty-ninth Street to Springfield, Mass.? G. M. SCHWARTZ. Leave New York by Pelham Park, Stamford, Bridgeport, Milford, New Haven, Mount Carmel, Wallingford, Meriden, Berlin, Hartford, Windsor Locks, Springfield. GEORGE H. ROBERTSON.

I bought a Buick model D. I have overhauled the cylinders and bearings, which seem all right. I put in a storage battery and have the wiring on the outlet, as the magneto was no good, but there is not power enough to take this car up an incline on second gear without full gas on, and sometimes not at all. Do you think the car is worth putting in a new magneto and so doing will it get full power? K. L. PALMQUIST. You will gain a considerable increase of power if a magneto is used. Would advise you to look over the valve timing and carburetor adjustments to satisfy yourself that the trouble does not lie there. He car is too old if properly overhauled by competent men. GEORGE H. ROBERTSON.

If my partner owns an auto, am I allowed to drive it without a license? I am of age and receive no pay. MICHAEL HICKS. In order that you avoid all complications due to an uncertain law, I would advise you to have the car registered in the names of both of you as joint owners. This will overcome all difficulties. GEORGE H. ROBERTSON.

What is the best way to clean the oil out of the engine and the best oil to use? F. W. Open the pet cocks on plugs in the bottom of the crank case. Run the motor for a few minutes slowly until the oil is about out. Would advise pouring about a quart of kerosene into the case after this is done and run the motor for a moment to insure getting all the old oil out. Be sure to refill the case after the pet cocks are closed with a proper amount of a good grade of oil. GEORGE H. ROBERTSON.

What is the best way to Nyack, N. Y., from Brooklyn? E. W. S. From Brooklyn to Broadway, New York, up Broadway through Yonkers, Hastings, Debba Ferry to Tarrytown. Then cross ferry to Nyack. The roads are in very good condition. GEORGE H. ROBERTSON.

What is the best Northern route by automobile to California? I intend going there June 1. Where would I get a good guide? F. L. R. We would advise you to write to the Bureau of Tours of the Automobile Club of America, where you can secure the route in detail. I could not give you the small details you require in this space. GEORGE H. ROBERTSON.

I have just purchased a Ford and would like to know whether my wife can run it under my license. What is necessary for both to have the right to operate it? F. G. BURTELL. Your wife may operate the car regardless as to whether the license is taken in your name or jointly. The law states that a licensed operator is one who is paid or hired for the purpose of operating a motor vehicle, since your wife or family are not hired or employed by you for this purpose they are not supposed to be licensed. GEORGE H. ROBERTSON.

Will you please inform me whether anything has been invented and used to prevent automobiles from skidding outside of the usual familiar chain? And do you think it would be worth while to spend time and money in developing and patenting any device that would be more effective, although more expensive perhaps than the chain? I intend to buy a car this summer and lease my own services as chauffeur. What make and size of car would you advise for the purpose? Do you think my plan has any chance of success and would I be likely to get a proper engagement through advertising? M. BRADON. There is good money in any device which is practical for this purpose. Would advise you to pick out a standard make of car and advertise through the different mediums. If you can get a popular car in good condition it might pay you during the summer months. GEORGE H. ROBERTSON.

My father is about to get a passenger automobile which he wishes to use in business as well, putting a commercial body on it. Is it necessary to get a commercial and private license and are the two required to be obtained at the same time or just occasionally? Am I required to have a license to drive the machine, and what age do I have to be? R. LEONARD. The law states that a vehicle used for commercial purposes only shall bear a commercial license. I believe that since this car is used for pleasure also a pleasure license is the only one required. If the car is registered in your father's name and you are over eighteen, you will not require a chauffeur's license, although you must carry the owner's card. GEORGE H. ROBERTSON.

What is the best auto for the price of \$1,000 or thereabouts? THOMAS H. AMER. Will write you if you will forward your address to me. I cannot answer this sort of query through this column. Kindly let me know how many people you want to carry, where you want to use it, etc. GEORGE H. ROBERTSON.

What is the best route from Fifty-ninth Street to Springfield, Mass.? G. M. SCHWARTZ. Leave New York by Pelham Park, Stamford, Bridgeport, Milford, New Haven, Mount Carmel, Wallingford, Meriden, Berlin, Hartford, Windsor Locks, Springfield. GEORGE H. ROBERTSON.

I bought a Buick model D. I have overhauled the cylinders and bearings, which seem all right. I put in a storage battery and have the wiring on the outlet, as the magneto was no good, but there is not power enough to take this car up an incline on second gear without full gas on, and sometimes not at all. Do you think the car is worth putting in a new magneto and so doing will it get full power? K. L. PALMQUIST. You will gain a considerable increase of power if a magneto is used. Would advise you to look over the valve timing and carburetor adjustments to satisfy yourself that the trouble does not lie there. He car is too old if properly overhauled by competent men. GEORGE H. ROBERTSON.

If my partner owns an auto, am I allowed to drive it without a license? I am of age and receive no pay. MICHAEL HICKS. In order that you avoid all complications due to an uncertain law, I would advise you to have the car registered in the names of both of you as joint owners. This will overcome all difficulties. GEORGE H. ROBERTSON.

What is the best way to clean the oil out of the engine and the best oil to use? F. W. Open the pet cocks on plugs in the bottom of the crank case. Run the motor for a few minutes slowly until the oil is about out. Would advise pouring about a quart of kerosene into the case after this is done and run the motor for a moment to insure getting all the old oil out. Be sure to refill the case after the pet cocks are closed with a proper amount of a good grade of oil. GEORGE H. ROBERTSON.

What is the best way to Nyack, N. Y., from Brooklyn? E. W. S. From Brooklyn to Broadway, New York, up Broadway through Yonkers, Hastings, Debba Ferry to Tarrytown. Then cross ferry to Nyack. The roads are in very good condition. GEORGE H. ROBERTSON.

Will you kindly let me know several good trips to take in the vicinity of New York where the roads are good and not to exceed 100 miles both ways? Is it necessary to have a license for a motorcycle in the adjacent States to New York while touring from one State to another? O. P. T. Bureau of Tours of the Automobile Club of America, or the best pocket touring guide company for these trips. They have them already made. If a State requires a license for a motorcycle, it is necessary that you be licensed in some State and carry the plates. GEORGE H. ROBERTSON.

Kindly let me know the best route from New York to Caldwell or Pine Brook, N. J. W. J. BORST. Cross Forty-second Street Ferry to Hudson County Boulevard, turn south to Newark Avenue, turn west and take Belleville Turnpike to Montclair. Then cut Stonefield Avenue to Caldwell. GEORGE H. ROBERTSON.

What is the best Northern route by automobile to California? I intend going there June 1. Where would I get a good guide? F. L. R. We would advise you to write to the Bureau of Tours of the Automobile Club of America, where you can secure the route in detail. I could not give you the small details you require in this space. GEORGE H. ROBERTSON.

I have just purchased a Ford and would like to know whether my wife can run it under my license. What is necessary for both to have the right to operate it? F. G. BURTELL. Your wife may operate the car regardless as to whether the license is taken in your name or jointly. The law states that a licensed operator is one who is paid or hired for the purpose of operating a motor vehicle, since your wife or family are not hired or employed by you for this purpose they are not supposed to be licensed. GEORGE H. ROBERTSON.

Will you please inform me whether anything has been invented and used to prevent automobiles from skidding outside of the usual familiar chain? And do you think it would be worth while to spend time and money in developing and patenting any device that would be more effective, although more expensive perhaps than the chain? I intend to buy a car this summer and lease my own services as chauffeur. What make and size of car would you advise for the purpose? Do you think my plan has any chance of success and would I be likely to get a proper engagement through advertising? M. BRADON. There is good money in any device which is practical for this purpose. Would advise you to pick out a standard make of car and advertise through the different mediums. If you can get a popular car in good condition it might pay you during the summer months. GEORGE H. ROBERTSON.

My father is about to get a passenger automobile which he wishes to use in business as well, putting a commercial body on it. Is it necessary to get a commercial and private license and are the two required to be obtained at the same time or just occasionally? Am I required to have a license to drive the machine, and what age do I have to be? R. LEONARD. The law states that a vehicle used for commercial purposes only shall bear a commercial license. I believe that since this car is used for pleasure also a pleasure license is the only one required. If the car is registered in your father's name and you are over eighteen, you will not require a chauffeur's license, although you must carry the owner's card. GEORGE H. ROBERTSON.

What is the best auto for the price of \$1,000 or thereabouts? THOMAS H. AMER. Will write you if you will forward your address to me. I cannot answer this sort of query through this column. Kindly let me know how many people you want to carry, where you want to use it, etc. GEORGE H. ROBERTSON.

What is the best route from Fifty-ninth Street to Springfield, Mass.? G. M. SCHWARTZ. Leave New York by Pelham Park, Stamford, Bridgeport, Milford, New Haven, Mount Carmel, Wallingford, Meriden, Berlin, Hartford, Windsor Locks, Springfield. GEORGE H. ROBERTSON.

I bought a Buick model D. I have overhauled the cylinders and bearings, which seem all right. I put in a storage battery and have the wiring on the outlet, as the magneto was no good, but there is not power enough to take this car up an incline on second gear without full gas on, and sometimes not at all. Do you think the car is worth putting in a new magneto and so doing will it get full power? K. L. PALMQUIST. You will gain a considerable increase of power if a magneto is used. Would advise you to look over the valve timing and carburetor adjustments to satisfy yourself that the trouble does not lie there. He car is too old if properly overhauled by competent men. GEORGE H. ROBERTSON.

HISTORIAN C. F. ADAMS DIES IN WASHINGTON AFTER WEEK'S ILLNESS

Attack of Grip Fatal to Author Who Also Won National Fame as a Publicist.

LINCOLN, Mass., March 19.—Charles Francis Adams, publicist and historian, died at 2 A. M. to-day at his winter residence, No. 1701 Massachusetts Avenue, Washington. He had been ill with grip for a week. Word of his death was received at his home here this forenoon.

Mr. Adams was a great-grandson of President John Adams, a grandson of President John Quincy Adams and a son of Charles Francis Adams, minister to Great Britain in the Civil War period. Born in Boston May 21, 1854, and graduated from Harvard in 1876, he was admitted to the Massachusetts bar two years after leaving college. He served in the Union Army throughout the Civil War and later was identified with railroad affairs for many years, serving for six years as President of the Union Pacific Railroad and for ten years as a member of the Massachusetts State Board of Railroad Commissioners.

Never seeking public office, Mr. Adams took an active part as an independent in political affairs through his writings and speeches. He was the author of numerous books on railroad history and was a Fellow of the American Academy of Arts and Sciences and a member of the American Academy of Arts and Letters.

Chevrolet Buys a Maxwell Factory.
The Chevrolet Motor Company this week purchased the former Maxwell factory on Heckman Avenue, Tarrytown, N. Y. The price was not made public.

SIX OPPORTUNITIES
Each Automobile in This List a Bargain
1914 LOEHR, 7 Passenger Touring Car, Rebuilt, \$1,450.
WINTON, 5 Passenger Touring Car, Rebuilt, \$250.
1914 FORD, Full equipment, 1910, \$1,100.
1914 FORD, Full equipment, 1910, \$1,100.
1914 FORD, Full equipment, 1910, \$1,100.
1914 FORD, Full equipment, 1910, \$1,100.
1914 FORD, Full equipment, 1910, \$1,100.
The Locomobile Company of America, 110 N. WASHINGTON, MAR. 1915, 61st Street, Next to Broadway.

MOTORISTS' PROBLEMS SOLVED
George H. Robertson, America's foremost authority on automobile problems, prospective owners and drivers of automobiles should read this book. It will take a course in your pocket.
Day and Evening Classes also private instruction at home to suit convenience.
Special Classes for Ladies
Call or write for booklet.
Stewart Auto School
228 WEST 57th STREET (at Broadway).
Sunday World Wants
Work Monday Wonders.

WORLD LOST & FOUND
HAVE A VERY LONG REACH
YOU CAN PHONE THEM IN IF YOU PLEASE.
CALL 4000 BECKMAN.

General Bernhardt Professor Ferrero and Hilaire Belloc

These Three Greatest Living Military Authorities Have Written Notable Articles About the War Especially for Tomorrow's SUNDAY AMERICAN

SIX SEATS AT THE LOEW THEATRES FREE

Why There Are So Many Unhappy Marriages
What Earthly Use Is a Show Girl Anyway?

Why We Grow Thin Explained
by Dr. Woods Hutchinson

Words and Music of a Brand-New Song Hit
Elaine Caught by The Devil Worshipers

SEE THE NEW 1915 MAXWELL AT

FACTORY RETAIL BRANCH
MAXWELL MOTOR SALES CORP., 1808 Broadway at 59th St., N. Y. City

General Bernhardt Professor Ferrero and Hilaire Belloc

These Three Greatest Living Military Authorities Have Written Notable Articles About the War Especially for Tomorrow's SUNDAY AMERICAN

NEW HEARING GRANTED EXPRESS COMPANIES
Commerce Board Answers Petition for Reopening of Case—Present Schedule Stands.

WASHINGTON, March 19.—The Interstate Commerce Commission to-day ordered a reopening of the matter of express companies' rates and provision a petition for a few days ago by heads of the big corporations of the kind throughout the country.

The date of the next hearing was not fixed, however, and it was ordered that in the meantime, the schedule of rates and regulations, put into effect July 24, 1914, remain in force.

OLDFIELD BREAKS HOODOO, WINNING BIG ROAD RACE AT VENICE IN A MAXWELL

Barney Oldfield has been driving racing cars for nearly fifteen years and in all that time he has never been able to win a big road contest until his victory this week at Venice, Cal. Put the veteran on a track and he was perfectly at home. His track records and victories are almost beyond count. But every time Barney started a road race he always carried as an unenviable passenger a big "dix." Something generally went wrong. If it wasn't engine trouble it was a punctured tire or the sudden desire of his car to crash through a fence.

The veteran, unflinching by his many misfortunes, kept plugging away, and this week he had the satisfaction of leading his field home. The Venice race was 201 miles over roads. Oldfield drove his Maxwell at the rate of 68 1/2 miles an hour and won without being forced to make a single stop, a most remarkable performance. But Barney's luck nearly deserted him, for Bill Carlson, in another Maxwell, came within six seconds of beating out the veteran at the finish.

WANDERLUST LANDS GIRL IN HOSPITAL THREE TIME IN THREE MONTHS
Pretty Little Mabel Had Run Away From Home; Is Found a Victim of Amnesia.

Another attack of wanderlust landed Mabel Hall, fifteen years old, of No. 200 Rudolph Street, Brooklyn, in St. John's Hospital at 3 A. M. to-day, after she had walked the streets for four hours. She is an unusually pretty girl, living with her widowed mother and six brothers and sisters and reads and goes to the "movies" a great deal.

Three months ago she wandered over to Manhattan and was picked up by a policeman at Hudson and Gay Streets and taken to the Hudson Street Hospital. After returning home she seemed satisfied for a time, but two weeks ago suddenly vanished again. She was found apparently suffering from amnesia and taken to the Bushwick Hospital, where she remained five days.

Late yesterday she went to a moving picture show with her cousin, and wouldn't leave when the cousin was ready to go. Her brother was sent to watch her, and at 9 o'clock she returned home with him.

A little later she wrapped up some clothing and slipped out of the house. A neighbor saw her at Quincy Street and Throop Avenue and turned her over to the police at the 145th Avenue Station. All she could remember was that she was on her way to visit her grandmother at Massena.

W. L. DOUGLAS
W. L. Douglas shoes are always worth the price you pay for them.

W. L. DOUGLAS
W. L. Douglas shoes are always worth the price you pay for them.

W. L. DOUGLAS
W. L. Douglas shoes are always worth the price you pay for them.

W. L. DOUGLAS
W. L. Douglas shoes are always worth the price you pay for them.

W. L. DOUGLAS
W. L. Douglas shoes are always worth the price you pay for them.

W. L. DOUGLAS
W. L. Douglas shoes are always worth the price you pay for them.

W. L. DOUGLAS
W. L. Douglas shoes are always worth the price you pay for them.

W. L. DOUGLAS
W. L. Douglas shoes are always worth the price you pay for them.