

Model M Light Touring Car, \$050, f.o.b. Detroit (not including lamps).

Sureness of Service

Of all the reasons why the Cadillac is the caryou should own, the greatest is this: Never-failing serviceableness at a minimum of operating expense. Whether runabout or touring car, it is an example of careful motor building—a car behind which stand

the name and experience of the largest automobile establishment in the world. Every detail of workmanship and material is wrought with that exactness

which accompanies superior skill

and up-to-date equipment. This is why the

stands
pre-eminent
for its dependability and
economy of maintenance. Whatever your requirements, there's a Cadillac to meet them perfectly. The single colling.

lac to meet them perfectly. The single-cylinder types are marvels of power and endurance; their performances are yet to be equaled by any other machines of their class. The four-cylinder cars, built upon the same rugged principles that have made the smaller types famous, combine all that could be desired for touring service.

In design the 1906 Cadillacs are strikingly beautiful; in finish they are truly works of art.

Send for Booklet A, and address of nearest dealer,

who by actual demonstration will convince you of the merits of the Cadillac.

Model K, 10 h. p. Runabout, \$750.

Model M, Light Touring Car, \$950.

Model H, 30 h. p. Touring Car, \$2,500.

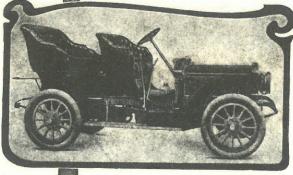
Model L, 40 h. p. Touring Car, \$3,750.

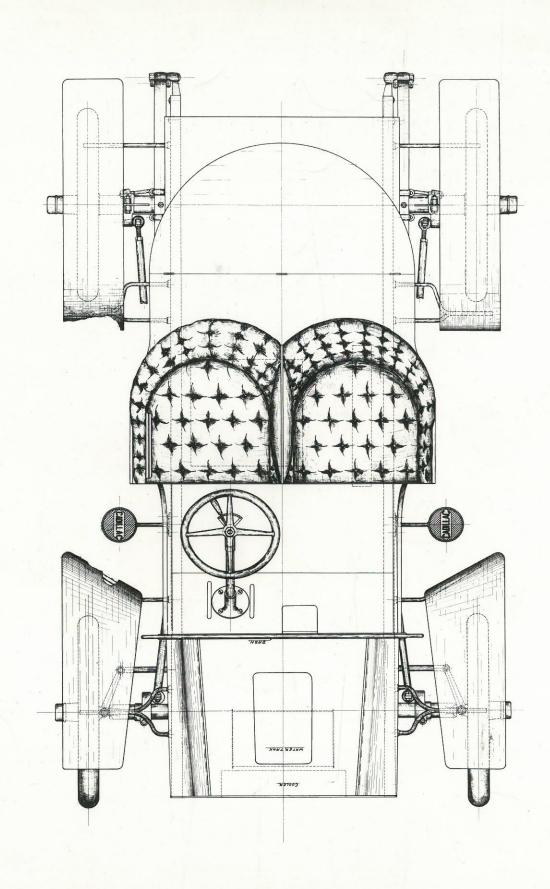
All prices L o. b. Detroit,

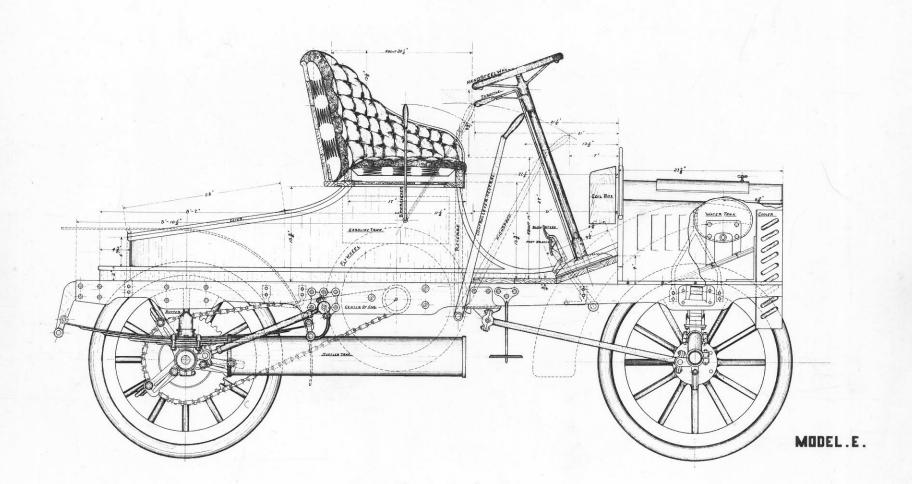
CADULAC MOTOR CAR CO.,
Detroit, Mich.

Member Assn. Licensed Auto. Mfrs.









CADILLAC MOTOR CAR COMPANY

CADILLAC AND LASALLE

DETROIT, MICHIGAN



October 23, 1936

PLEASE REFER TO FILE NUMBER

060 AU 80207

Automotive Service Bureau, 210 South Hanover Street, Baltimore, Maryland.

Gentlemen: Mr. C. Raymond Levis

This is in response to your letters of October 19, requesting information pertaining to the identification of early model Cadillac automobiles.

Enclosed is a copy of the model numbers, engine numbers, and years in which they were produced, ranging from 1902 through 1908, as you have requested.

From this information you will note that engine number A-739 would unquestionably be a 1902 product.

As we understand it, this is the information you desire.

Very truly yours,

CADILLAC MOTOR CAR COMPANY

HMRice:pm

Service Department

FIIG1.						
Model		Numbe	r		Year	MES
A	1	to	2500		1902-1	903
В	2500	to	3500		1904	
AB	3500	to	4018		1904	
BEF	4200	to	5000		1904	
EF	5000	to	6600		1905	
CEF	6600	to	8200		1905	
ACEF	8200	to	8350		1905	
KM	8350	to	10000		1906	
D	10001	to	10156	inc.	1905	
Н	10201	to	10709		1906	to 1908
ACEF	13501	to	13706		1906	- Special
F	13728	to	14200		1905	
KM	20001	to	21850		1906	
KM	21851	to	22150		1906	- 1907
KM	22151	to	24075		1907	
KMST	24075	to	24350		1907	
ST	24351	to	25832		1908	
G	30003	to	30425		1907	
G	30426	to	30500		1907	- 1908
Ğ	30501	to	31032	A X	1908	



November 11, 1953 Mr. Don Aherns, General Manager Cadillac Motor Car Division General Motors Corporation 2860 Clark Avenue Detroit 32, Michigan Dear Mr. Aherns:

Mr. Len Jones, who is another old time General Motors employe, and I have jointly purchased a 1905 Cadillac, Serial 1879, from an old friend of yours, Earl Adkins, who was a former Cadillac Dealer in Salisbury, Maryland.

The car is in running condition and Mr. Adkins has used it in parades over the past twenty years, but needs quite a bit of body work and some cleaning up which Len Jones and I plan to do ourselves.

We are very much interested in getting all the information available on this car and would certainly appreciate it if you would be kind enough to pass this letter on to someone in the Cadillac organization who can give us whatever information is available.

Incidentally, I started with General Motors at the Cadillac plant working in the axle department in 1933, and Len Jones worked on Cadillac bodies under Hugh Ellis at the Fisher plant in 1924.

As we both have had so many years contact with Cadillac you may be sure we will try to put this fine old automobile into its original condition so far as possible.

Sincerely yours,

H.D. Burnside Plant Manager

HDB/cm

ARLINGTON PLANT

BUICK-OLDSMOBILE-PONTIAC ASSEMBLY DIVISION

INTER-ORGANIZATION LETTERS ONLY

DATE NOVEMBER 17,

MR. H. D. BURNSIDE, MANAGER ADDRESS B.O.P. - WILMINGTON

SUBJECT

DEAR CAP:

Congratulations on your having purchased the 1905 CADILLAC! THERE IS NOT A GREAT DEAL I CAN TELL YOU ABOUT THE CAR AT THIS TIME. IT DOES SEEM TO ME YOU ARE ON THE RIGHT TRACK BY HAVING WRITTEN DON AHRENS. FOR IF THEY HAVE DONE AS WELL IN PRESERVING THEIR RECORDS AS BUICK, YOU SHOULD GET CONSIDERABLE INFORMA-TION FROM HIM.

ACCORDING TO MY RECORDS, IN THE YEAR 1905 CADILLAC PRODUCED A 1-CYLINDER MODEL F, 4-PASSENGER TOURING CAR WHICH SOLD FOR \$950.00. THEY ALSO PRODUCED A 4-CYLINDER MODEL B, 5-PASSENGER TOURING CAR WHICH SOLD FOR \$2,800.00. THE TOTAL SALES TO DEALERS FOR BOTH MODELS WERE 3,942 CARS. THIS IS THE YEAR CADILLAC AUTOMOBILE COMPANY AND LELAND & FALCONER CONSOLIDATED AS CADILLAC MOTOR CAR COMPANY WITH HENRY M. LELAND AS GENERAL MANAGER. THE 4-CYLINDER PRODUCTION STARTED IN APRIL, 1905.

CLARENCE G. MOYER, WHO LIVES IN DUBLIN, PENNSYLVANIA, HAS A 1904 CADILLAC TOURING CAR. I'M SURE IF YOU COULD HAVE LEN JONES STOP BY AND SEE HIM. HE WOULD HAVE SOME INFORMATION THAT WOULD BE OF INTEREST TO YOU. I KNOW OF A NUMBER OF OTHER CADILLACS IN THE RANGE OF 1903 TO 1906, BUT THEY ARE NOT LOCATED IN YOUR VICINITY.

NOW THAT YOU HAVE PURCHASED THIS CAR, IT MIGHT BE WORTH YOUR WHILE TO BECOME A MEMBER OF THE ANTIQUE AUTOMOBILE CLUB OF AMERICA. THE NATIONAL HEADQUARTERS OF THIS CLUB ARE LOCATED IN AND AROUND PHILADELPHIA. THE CHAIRMAN OF THE MEMBERSHIP COMMITTEE IS



W. HARRISON HALL, JR., 2189 OAKDALE AVENUE, GLENSIDE, PENNSYLVANIA. WRITE HIM FOR AN APPLICATION FORM IF YOU ARE INTERESTED. THE EXECUTIVE VICE PRESIDENT OF THE CLUB IS LESLIE R. HENRY, WHO LIVES AT 155 RIDGEFIELD ROAD, ST. ALBANS, NEWTON SQUARE, PENNSYLVANIA. I HAVE HAD THE PLEASURE OF MEETING MR. HENRY ON SEVERAL OC-CASIONS -- HE IS A GRAND FELLOW, ALWAYS WILLING TO HELP, SO SHOULD YOU HAVE THE OPPORTUNITY OF CONTACTING HIM, I FEEL VERY DEFINITELY HE COULD PUT YOU IN TOUCH WITH SEVERAL INDIVIDUALS IN YOUR VICINITY WHO COULD ANSWER ALMOST ANY QUESTION YOU MAY WISH TO ASK IN CONNECTION WITH YOUR CAR.

IF YOU HAVE AN OPPORTUNITY, DROP ME A NOTE AND TELL ME WHETHER IT IS A 1-CYLINDER OR 4-CYLINDER, TOGETHER WITH A LIST OF THE THINGS YOU ARE TRYING TO FIND OUT, AND I WILL RUMMAGE THROUGH MY LIBRARY FOR THE ANSWERS. DON'T GO TOO FAST ON THIS JOB AND BE SURE THAT YOU MAKE PLENTY OF NOTES AS YOU TAKE THE CAR APART. AN OCCASIONAL PHOTOGRAPH OR TWO WOULD NOT BE OUT OF ORDER. IF AS TIME GOES ON YOU NEED SOME PARTS SUCH AS LAMPS, COILS, AND THINGS OF THAT NATURE WHICH ARE DIFFICULT TO MAKE, I WOULD BE HAPPY TO GIVE YOU SOME LEADS AS TO WHERE YOU MAY FIND THEM.

WE SHOULD START PLANNING RIGHT NOW FOR A GET-TOGETHER AT THE DEVON MEET NEXT FALL, WHICH IS USUALLY HELD ABOUT THE MIDDLE OF OCTOBER. SEEING YOU CHUG ALONG U. S. 1 FROM WILMINGTON TO PHILADELPHIA IN YOUR 1905 CADILLAC WOULD COMPENSATE FOR MANY OF THE HEARTACHES AND PROBLEMS WE HAVE ENCOUNTERED IN THE PAST YEAR. BEST OF LUCK, AND DON'T AT ANY TIME GET DISCOURAGED.

LAOTZBURGER



CADILLAC MOTOR CAR DIVISION
GENERAL MOTORS CORPORATION



DETROIT 32, MICHIGAN

November 19, 1953

Mr. H. D. Burnside
Plant Manager
Buick-Oldsmobile-Pontiac Assembly Div.
General Motors Corporation
Wilmington 99, Delaware

Dear Mr. Burnside:

Mr. Ahrens talked to me about your recent letter in which you describe your purchase of a 1905 Cadillac. He asked me to make available any information that would be of assistance to you.

The Technical Data Section of our Engineering Division, and our Public Relations Department, do have files on these old models and I am asking them to get together anything that could be of some help. You will hear from them in the very near future.

It has been very good to hear from you and to know that you and Len Jones were associated with Cadillac. I know that you will do a very fine job with this old car and if at any time you should have any photographs of you and Len working on the car or with the completed job, I would be interested in seeing them for possible use in our plant or dealer publications, if this meets with your approval.

May I add my best wishes along with those of Mr. Ahrens for success in your antique car venture.

Very truly yours,

M. E. Fields

Merchandising Manager

MEF/kbs



December 7, 1953 Petrolt St. Michell Mr. Klare F. Covert Assistant to the General Manager Harrison Radiator Division General Motors Corporation Lockport, New York Dear Mr. Covert: I really appreciate the interest you are taking in the radiator for the old Cadillac. The suggestions, counsel, and advice of your experts are

what I need most of all and I appreciate your proceeding exactly as you think best.

I do not yet have specifications of the final lacquer coat but believe that if it is sprayed with a semi-dull black lacquer it will be close enough to the original finish to be in harmony with the idea of restoration.

Thanks again for your interest in our project.

Very truly yours,

H. D. Burnside Manager

WILMINGTON PLANT

Buick-Oldsmobile-Pontiac Assembly Division

GENERAL MOTORS CORPORATION
WILMINGTON 99, DELAWARE

December 14, 1953

Mr. M. E. Fields, Merchandising Manager Cadillac Motor Car Division General Motors Corporation Detroit 32, Michigan

Dear Mr. Fields:

Relative to the 1905 Cadillac we are reworking and about which you wrote me on November 19, we have not yet received the information from the Technical Data Section relative to its construction and need a little advance help. We realize it may take a little time to get the information together for us and perhaps it would not be too much trouble to give us some information about the cooling system.

On this cld car the radiator had been frozen and we are rebuilding the radiator and tank. Some previous owner had removed the cap off the auxiliary water tank and replaced it with an ordinary pipe cap. This is obviously not the original cap because it interferes with closing the gate on the hood.

Would it be too much trouble to send me such information as is available about the arrangement of the cooling system and if possible the diamensions and style of the cap so we can continue with the rebuilding of the radiator and tank and complete it as near as possible to original specifications.

Mr. Jones and I wish to thank you and Mr. Ahrens for your interest and when we get the technical information plan on checking the entire car over so we can do whatever possible to make it precisely as it was when originally built at Cadillac.

Another item that bothers us is the design of the box which originally held the dry batteries. The previous owner had installed a modern storage battery and while we may have some place to use a storage battery for driving the car, we plan to have a box for the batteries just the same as the original design.

With kindest regards, I am

Yours very truly

H. D. Burnside Manager

November 27, 1953

Mr. Clare Covert
Harrison Radiator Division
Plant No. 1
General Motors Corporation
Lockport, New York

Dear Mr. Covert:

It has not taken me long to take advantage of your willingness to give me a hand with the damaged radiator from the 1905 Cadillac I am trying to recondition.

I am expressing the radiator and tank to your personal attention at Plant No. 1 today or tomorrow and will appreciate whatever advise or help you can give me in getting it restored.

With kindest personal regards to you and Mr. Whitney, I

Sincerely yours,

H. D. Burnside

Manager

HARRISON RADIATOR DIVISION

GENERAL MOTORS CORPORATION

LOCKPORT, NEW YORK

December 4, 1953

Mr. H. D. Burnside, Manager Buick-Oldsmobile-Pontiac Assembly Division General Motors Corporation Wilmington 99, Delaware

Dear Mr. Burnside:

Your radiator and tank arrived yesterday, and have been delivered to our Sample Department. I have just seen them, and while there discussed with the department foreman the matter of restoring them to their original condition.

Apparently the radiator has been frozen at some time. Repairs were made by squeezing the fins to-gether, and then loading the split tube with Solder. This prevents proper re-spacing of the fins. In addition, the core as a whole is badly out of shape, and could not be straightened. It seems, therefore, that a repair job is not feasible.

We feel that it should be rebuilt, and here is what we propose to do:

Dismantle the radiator, replace the tubes, remove the fins, reform and reassemble with approximately the original spacing. Original end fittings and side plates can be used.

The water tank also is in rather tough shape, and is beyond repair. It is made of galvanized iron in two pieces; we can do a better job by using brass in one piece. Here again, the original fittings can be used.

I think the foregoing gives you a fair idea of what can be done. Our foreman assures me that both tank and radiator will look just as they did when new. However, I feel that before going ahead with the job we should have your approval of the methods we propose.

Mr. H. D. Burnside

- 2 -

December 4, 1953

One other thing - the finished jobs would be sprayed with black lacquer, either dull, semi-dull, or bright; as you prefer.

We shall be glad to proceed with the job as soon as we hear from you.

Very truly yours,

Clare F. Covert

Assistant to the General Manager

KFC:kdc



CADILLAC MOTOR CAR DIVISION

GENERAL MOTORS CORPORATION

DETROIT 32, MICHIGAN



December 17, 1953

Mr. H. D. Burnside Plant Manager Buick-Oldsmobile-Pontiac Assembly Div. General Motors Corporation Wilmington 99, Delaware

Dear Mr. Burnside:

Your letter of November 11th to Mr. Ahrens was turned over to me by Mr. Fields for reply.

I have searched every available source in an attempt to locate data pertaining to a 1905 Cadillac. Not knowing what body style, I tried to find data on the various bodies. The only information I found was on the four seater and two seater.

I am enclosing a copy photo of the two seater and a photo of the four seater.

This is all the data that I could find and as you know doubt know, information on these old vintage cars are practically nil. However, hoping this will help you, I remain

Very truly yours,

CADILIAC MOTOR CAR DIVISION General Motors Corporation

A. Hosking

Tech. Data Dept.

AH/em Encl. 3 photos HARRISON

HARRISON RADIATOR DIVISION

GENERAL MOTORS CORPORATION

LOCKPORT, NEW YORK

January 4, 1954

Mr. H. D. Burnside, Manager Buick-Oldsmobile-Pontiac Assembly Division General Motors Corporation Wilmington 99, Delaware

Dear Mr. Burnside:

The foreman of our Sample Department called me this morning, saying that the rejuvenated 1903 Cadillac radiator was on display. I looked at it, and I'd say he has done a most commendable job. I hope you will be pleased with it.

In all probability it will be shipped to-day; if not - Monday at the latest.

There is one thing I should mention: the original angles of the inlet and outlet pipes could not be determined accurately, because when the hoses were removed they disintegrated. If they should be a few degrees off - any good tinsmith could make the necessary correction.

Best wishes for a Happly New Year.

Cordially,

Klare F. Covert 'Assistant to the General Manager

KFC: kdc

P.S. Dictated 12-31-1953 - typed 1-4-1954.

WILMINGTON PLANT

BUICK-OLDSMOBILE-PONTIAC ASSEMBLY DIVISION

GENERAL MOTORS CORPORATION
WILMINGTON 99, DELAWARE

January 9, 1954

Mr. Klare F. Covert
Assistant to the General Manager
Harrison Radiator Division
General Motors Corporation
Lockport, New York

Dear Mr. Covert:

We have received and all have inspected the beautiful Cadillac radiator and tank and want to express our real appreciation of the workmanship done by your Sample Department. It is a beautiful job probably superior in workmanship to the original radiator.

We are getting well along with our mechanical work and have little left to do except trim and paint the body which will be a comparatively minor job. All of our sheet metal, fenders, hood and so on, is ready for paint and I think if you find it possible to make a tour of inspection to Wilmington in about 90 days, we may be able to give you a ride.

Again thanking you and the people in your organization who took an interest in this project, I am

Sincerely yours,

H. D. Burnside Manager

CADILLAC MOTOR CAR DIVISION

GENERAL MOTORS CORPORATION

DETROIT 32, MICHIGAN



January 19, 1954

Oriende de la companyon

Mr. H. D. Burnside Buick-Oldsmobile-Pontiac Assembly Div. General Motors Corporation Wilmington 99, Delaware

Dear Mr. Burnside:

With reference to your letter of December 14 relative to information on the cooling system and the box for the dry batteries. It has taken considerable searching but we were able to locate some old prints on the core. We could find nothing on the battery box.

Hoping this will help you, I remain

Very truly yours,

CADILLAC MOTOR CAR DIVISION General Motors Corporation

a. Thooking

A.Hosking Tech. Data Dept.

AH/em Encl.



THE FIRESTONE TIRE & RUBBER CO. AKRON Plant

SHIPPING DOCUMENT

N X WWW WE K	EXBXX	RXX	KE	XXSXQN)	
The state of the s	No. of Concession, Name of Street, or other party of the Concession, Name of Street, or other pa			TRRRXE	MRKS
		The second second	-	SWARTZ	The second second second
CHID TO			11		

B.O.P. DIVISION

GENERAL MOTORS CORP. WILMINGTON, DEL.

CUST. ASSY. NO.

CASING NO.

TUBE NO.

DATE OF ENTRY

232885 ENTRY NO.

CUSTOMER ORDER NO.

1-20-54 PREPAID DATE TO SHIP

PREPAID OR COLLECT

UNITS

GRP.NO.

WEIGHT (LBS.)

B/L NO. ASSEM.

CASINGS

44 CTN

YANKEE LINES, INC.

VALVE NO.

1-20-54

DATE SHIPPED

CAR OR TRUCK INIT. & NO.

TEM QUANTITY		YTITY	DESCRIPTION	CODE NO.	CODE SHIPPED & LOAD DETAIL
).	ORDERED	SHIPPED	DESCRIPTION	CODE NO.	CODE SHIPPED & LOAD DETAIL
	jt jt	14 14	30-3 ANTIQUE 4 PLY TIRES 30-3 ANTIQUE TUBES	Burnsiste	
				Mr. Gon	don lygslegins
				of Fines	Home Tire Co.
				akron &	This is
				0	assonsible
		*		for sendle	ing the tries
			2-7-11-11-11-11-11-11-11-11-11-11-11-11-1	to you	
					101

WILMINGTON PLANT BUICK-OLDSMOBILE-PONTIAC ASSEMBLY DIVISION GENERAL MOTORS CORPORATION WILMINGTON 99, DELAWARE February 1, 1954 Mr. Gordon Applequist The Firestone Tire and Rubber Company Akron, Ohio Dear Mr. Applequist: My antique car partner, Len Jones, and I wish to express our sincere appreciation for the interest of you and your company in the 1905 Cadillac we are rebuilding. We were unable to find any tires of the correct size and certainly appreciate your procuring them for us. When you come to Wilmington anytime after 60 days, we look forward to giving you a ride. You will be one of our honored guests. With kindest regards, I am Sincerely yours, H. D. Burnside HDB: jrw

February 26, 1954 Mr. Sidney M. Conn 45 E. End Avenue New York City, New York Dear Mr. Conn: Our good friend Miles Dahlen came across the street last night and with Mrs. Burnside's help we got our 1905 Cadillac oil headlights in operating condition. You have no idea what a time we had looking for the proper size wick and we surely appreciate the trouble you went to to find it for us. Miles told me of your safari to
Harlem to find the wick and we hope the next time you come to Wilmington we can get together with a highball or two and give you an opportunity to tell us the story first hand. Thank you again for your kindness in going to so much trouble in our behalf. Sincerely, H.D. Burnside

McCord and Company Chicago, Illinois

Gentlemen:

The writer is rehabilitating a 1905 Cadillac automobile which is equipped with an oiler made by your company. The name plate has lettering "Class F D" and the serial number is C-1879. This oiler looks just about like the McCord oiler we have on our 2000 CFM compressors in our powerhouse and I am writing to see if you can give me any information as to its construction and method of operation.

The old oiler has 4 sight feed cups and 4 tube outlets to the bearings. Between the sight feed cups and the outlets are 4 square pistons, the ends of which extend through the tube of the oiler.

I would appreciate knowing the purpose of the pistons and would like to know how we can be sure the oiler is actually delivering oil to the bearings; for example, is it necessary to loosen one of the oil tubes to make sure wil is being delivered or are the sight feed cups arranged so that when oil can be seen dripping thru them we are sure oil is on its way to the bearings.

Any information you can give me will be very much appreciated.

Yours very truly,

H. D. Burnside Manager

March 11, 1954

Mr. P. W. Rhame, General Manager New Departure Division General Motors Corporation Bristol, Connecticut

Dear Mr. Rhame:

Len Jones and I, who are both old Cadillac employes, are engaged in rehabilitating a 1905 Cadillac and have been enable to find 2 outer wheel bearings of the right size and wonder if you could help us out.

By checking the wheels, we find we need 2 ball bearings 3/4 of an inch wide, outside diameter 2.093 inches and inside diameter .813 inches.

I would appreciate it very much if you would take the trouble to have somebody check and see if you have anything close enough to this size so that we could use them.

Sincerely yours,

H. D. Burnside

Manager

March 2, 1954

The McCord Corporation Riopelle at East Grand Blvd. Detroit 11, Michigan

Gentlemen:

The writer is rehabilitating a 1905 Cadillac automobile which is equipped with an oiler made by your company. The name plate has lettering "Class F D" and the serial number is C-1879. This oiler looks just about like the McCord oiler we have on our 2000 CFM compressors in our powerhouse and I am writing to see if you can give me any information as to its construction and method of operation.

The old oiler has 4 sight feed cups and 4 tube outlets to the bearings. Between the sight feed cups and the outlets are 4 square pistons, the ends of which extend through the tube of the oiler.

I would appreciate knowing the purpose of the pistons and would like to know how we can be sure the oiler is actually delivering oil to the bearings; for example, is it necessary to loosen one of the oil tubes to make sure oil is being delivered or are the sight feed cups arranged so that when oil can be seen dripping thru them we are sure oil is on its way to the bearings.

Any information you can give me will be very much appreciated.

Yours very truly,

H. D. Burnside

Manager

McCORD CORPORATION

DETROIT 11, MICHIGAN

9.8 m

March 17, 1954

Buick-Oldsmobile-Pontiac Assembly Divn. General Motors Corporation Wilmington 99, Delaware

Attention: Mr. H.D. Burnside, Manager

Gentlemen:

Replying to your March 2nd letter you are correct in your assumption that the amount of oil received in the drip sight feed cup is the same amount of oil that is being pumped to the cylinders.

The oil is first drawn from the oil reservoir, pumped to the sight feed and then again drawn from the sight feed and forced to the point of application.

The four square pistons are for adjusting for amount of oil being pumped.

We might suggest that if you have time you forward the complete lubricator to our plant at Detroit, Michigan for our examination and reconditioning.

Yours very truly,

McCORD CORPORATION

E.J. Dundon Lubricator Division

EJD: mb





ADMINISTRATIVE OFFICES BRISTOL, CONNECTICUT MANUFACTURING PLANTS RISTOL & MERIDEN, CONN. SANDUSKY, OHIO

Division General Motors Corporation_

NEW DEPARTURE

BERKELEY • BOSTON • CHICAGO
CINCINNATI • CLEVELAND • DETROIT
INDIANAPOLIS • LOS ANGELES • MILWAUKEE
NEW YORK • PHILADELPHIA • SEATTLE

SALES & ENGINEERING BRANCHES

BRISTOL CONNECTICUT

March 17, 1954

Mr. H. D. Burnside, Manager Buick-Oldsmobile-Pontiac Assembly Division General Motors Corporation Wilmington 99, Delaware

Dear Mr. Burnside:

Ser War Jan. Mr. Rhame turned over to me your request of March 11, 1954 for two (2) outer front wheel bearings.

As per Mr. Rhame's phone conversation with you, we are furnishing two (2) #909001 Front Wheel Bearings. These bearings are being shipped no charge today from our Sandusky, Ohio plant.

I am enclosing print of this size bearing which might assist you in reworking for your installation.

Yours very truly,

DEPARTURE

Norman C. Branch

Assistant General Production Manager

NCB/hls Encl. 1



Mr. Clare Covert Harrison Radiator Division Plant No. 1 General Motors Corporation Lockport, New York

Dear Mr. Covert:

I am enclosing two photographs of a very fine radiator and tank unit mounted on our 1905 Cadillac. The car is now in running condition but the body is not quite ready for assembly.

The cooling setup is obvious I believe. The radiator and tank take up most of the hood area and the battery and tool box sit behind the radiator tank up against the dash. The radiator is connected to the copper water jacket of the engine with copper tubing and at the side of the engine is a piece of tubing running up in the air to a level higher than the water level in the tank so the air can be exhausted from the system.

When we finally get this job completed, we will send you a good picture but thought you might like to see the progress we are making and how well the radiator you rebuilt for me looks on the job.

Singerely yours,

H. D. Burnside

Manager

HDB:jrw Enc. Mr. E. C. Klotzburger, Manager B.O.P. Assembly Division General Motors Corporation Arlington, Texas

Dear Eddie:

You may be interested to see how the old Cadillac is shaping up. It is now in running condition but the body has to be finished.

I have written to Cadillac to see if they can get blueprints on the tonneau which I believe sold as an extra with this model and if I can get them I am almost in a frame of mind to tackle the job in my basement.

Everything I hear about Arlington is good and it ought to be with Peterson, Quill, Strubler and the rest of the Wilmington crew wearing cowboy hats.

With kindest regards, I am

Sincerely yours,

H. D. Burnside

twods stue ed of estal fating the was abit at

HDB:jrw Enc.

45: 800

, will

Mr. A. Hosking Technical Data Department Cadillac Motor Car Division General Motors Corporation Detroit 32, Michigan

Dear Mr. Hosking:

Last January you were good enough to send me some information on the cooling system for the Cadillac I am rebuilding for which I thank you very much. The Cadillac is now in operating condition and all that remains to be done is to get the body in shape. I am enclosing a photograph of the rebuilt cooling system which you may find interesting.

If it is not too much of an imposition, would you mind looking to see if you can find in your files any thing about the production of the Tonneau which I feel sure on this model was a detachable unit which could be purchased as an extra. The success we have had so far in getting this car in shape has encouraged us to believe we may have nerve enough to tackle complete construction of a tonneau unit.

Would you also be kind enough to check for me the production date of this car, Serial No. C-1879. We have been going on the assumption that this car was produced in 1905 but are not sure that it was not produced the latter part of 1904.

Some of the public relations people have expressed some interest in this car and I would like to be sure about the date.

Sincerely yours,

H. D. Burnside Manager

HDB: jrw Enc.

April 5, 1954

sinteppor mi ti sainte

Mr. P. W. Rhame, General Manager New Departure Division General Motors Corporation Bristol, Connecticut

Paramer 1350

C 1679

Dear Mr. Rhame:

The bearings you were good enough to send me worked just fine after we ground about .026 out of the inner race. To prove it, here is one of the front wheels in place and incidentally a portrait of myself in a characteristic reclining position.

at Milied most even bid to

Sincerely yours,

in . Secretary of the Periodical Bate ?

to cood analide to said ture this ear was built in 1905 as u

H. D. Burnside en tara Manager Manager & Manager & Manager

HDB: jrw Enc.

Mr. M. E. Fields, Merchandising Manager Cadillac Motor Car Division General Motors Corporation Detroit 32, Michigan

Dear Mr. Fields:

Mr. flosking of the Technical Data Section of your Engineering Division was good enough to send us some information about our 1905 Cadillac and we have written him again asking if he can find the engineering prints on the tonneau which I believe was sold at that time as an extra. I also asked if he would be good enough to make sure this car was built in 1905 as we are beginning to think it is possible this job could have been built in 1904.

The car is now in running condition but there is considerable body work to be completed and at that time I'll have some good photographs taken for you. In the meantime we have had a few snapshots taken which are not very good but I think you might get a kick out of them.

No. 1 shows Len Jones, with his back to the camera, and the writer turning the engine over while Earle Atkins, the man from whom we bought the car, looking on. Mr. Atkins was a Cadillac dealer for many years in Milford, Delaware and I believe he is well known to Mr. Ahrens.

No. 2 is a portrait of Mr. Atkins, who doesn't show up very well in the photo, and a portrait of the writer in a reclining position under the car.

No. 3 is another portrait of me in a reclining position. The only part of Mr. Atkins which shows are his hands. It is obvious these were all taken without our knowledge.

No. 4. shows the chassis ready to operate mechanically except for the front wheel bearings which took a little doing to replace.

With kindest regards, I am

Yours very truly,

H. D. Burnside Manager

HDB:jrw Enc. Deriae C 1879

Howgooth Delana

Mr. Gordon Applequist The Firestone Tire and Rubber Company Akron, Ohio

Dear Mr. Applequist:

Further to my letter of February 1, the old Cadillac for which you were kind enough to send some Firestone tires is now in running condition.

The body still has to be completed but perhaps you would be interested in the enclosed snapshots showing the rehabilitation team in action and a close up of the power plant.

Singerely yours,

H. D. Burnside Manager

HDB: jrw Enc.

PET 180

Made Muller houtel

Corporation Car Arbuitel April 5, 1954 Mr. Alvin Stevens Allied Steel Products Corporation P. O. Box 3157 Newport, Delaware Dear Mr. Stevens: I thought you might be interested in seeing a real high grade muffler assembly on an antique Cadillac automobile so I am enclosing a couple snapshots. We now have the engine in running condition and are ready to go as soon as we get our body finished up. When we finally get the job complete, you'll have to come and take a ride with us. Sincerely yours, H. D. Bum side Manager HDB: jrw Enc.

4 Junes

CADILLAC MOTOR CAR DIVISION

GENERAL MOTORS CORPORATION

DETROIT 32, MICHIGAN



April 16, 1954

Mr. H. D. Burnside, Manager Buick-Oldsmobile-Pontiac Assembly Division General Motors Corporation Wilmington 99, Delaware

Dear Mr. Burnside:

I wish to thank you for the photographs you sent along recently with your very interesting letter. I am sure that in the near future you will hear from Mr. Hosking regarding the questions you put to him in the letter you sent to our Technical Data section.

From the photos you included, it certainly appears you are doing a terrific job on the restoration of this older model automobile. We, at Cadillac, are looking forward to seeing photos of the car when it is completed.

Once again, thank you for your interest in the Cadillac automobile and the Cadillac organization.

Sincerely,

Wilfrid M. Collins cah

Wilfrid M. Collins
Department of Public Relations



April 30, 1954

Mr. Louis M. Millon, Manager Ternstedt Division General Motors Corporation Trenton 5, New Jersey

Dear Lou:

The enclosed clipping tells the story of the final completion of our antique Cadillac. Will you please convey our thanks to those of you who advised and helped in fixing up the brass.

With kindest regards and again many thanks.

Sincerely yours,

H. D. Burnside Manager

HDB:jrw Enc.

Mr. W. H. Collins

Mr. Gordon Applequist
The Firestone Tire and Rubber Company
Akron, Ohio

Dear Mr. Applequist:

You may be interested in the attached clipping.

H. B. Burnaidde

Len Jones drove the old Cadillac in the parade this week and stole the show. The Firestone tires did their expected perfect job.

Len and I want to thank you again for your interest and help in getting the car in operation.

went to in digging one polymention for up. I know it must have been

yada elevera entrava notaszkangro estletak anaman est

H. D. Burnside Manager

HDB: jrw Enc.

LE T BELL

Mr. W. M. Collins
Department of Public Relations
Cadillac Motor Car Division
General Motors Corporation
Detroit 32, Michigan

Dear Mr. Collins:

Perhaps you will be interested in the attached clipping from the Wilmington paper.

The old Cadillac was finally completed last Sunday and was teamed up in the parade with a very large bright red Cadillac convertible. This created a lot of interest.

We want to thank the Cadillac organization for the trouble they went to in digging out information for us. I know it must have been a tremendous job.

Sincerely yours,

H. D. Burnside Manager

HDB:jrw Enc. Mr. Klare F. Covert
Assistant to the General Manager
Harrison Radiator Division
General Notors Corporation
Lockport, New York

Dear Mr. Covert: and within on you seems and maintained aspires out

The old 1905 Cadillac about which I wrote you stole the show in the recent parade in Wilmington. So far as the operation is concerned, it runs about the same as any other automobile, certainly with no more trouble and is a beautiful job.

As witness to its good cooling capacity, it traveled in the parade behind a band for some little time and the radiator tank was warm enough to keep ones hand on it at the finish.

Here is a newspaper clipping I thought you might be interested in.

Sincerely yours,

H. D. Burnside Manager

HDB: jrw Enc.

April 30, 1954

Mr. Sidney M. Conn 45 E. End Avenue New York City, New York

Dear Mr. Conn:

The antique Cadillac for which you so kindly dug up the lamp wicking has been performing under the guidance of my partner, Len Jones, and so far has performed creditably including participation in a parade here last week.

We thought you might be interested in the enclosed clipping.

Thank you again for the interest and trouble you took in helping us complete the car.

Here is a newspaper elimping I thought you might be interested

Sincerely yours,

H. D. Burnside Manager

HDB: jrw

Mr. Alvin Stevens Allied Steel Products Corporation P.O. Box 3157 Newport, Delaware

Dear Mr. Stevens:

The attached clipping tells the story of the completion of the old Cadillac for which you were kind enough to rework the muffler.

It runs about as well as any automobile and in the parade gave no trouble whatever even though it was in operation for some distance in low speed.

Thanks again for your interest in our project.

The second and the second

H. D. Burnside Manager

HDB: jrw Enc.

Henages

P. S. Places once that to Mr. Beigns. I teld him about the one

and alternative

A 164 30, 235,24

DES S

Mr. M. E. Fields Cadillac Motor Car Division General Motors Corporation Detroit 32, Michigan

Dear Mr. Fields:

The 1905 Cadillac was completed last Sunday and successfully negotiated trips to the State Highway Inspection Department where a license was secured with no trouble and later entered a parade in Wilmington. It has not stopped yet without turning the key in the switch and so far as we know every item, with the exception of the front wheel bearings, is strictly according to the original design excepting final finish; for instance, chrome plate on the oil cups and crank and lacquer on the body instead of varnish.

This newspaper photograph was taken by publicity people for the Parade of Progress.

I would like to have you show this to Mr. Ahrens because I believe he is a personal friend of Mr. Adkins from whom we bought the car and who assisted us in putting it in shape.

We very much appreciate the interest and help of the Cadillac Motor Car Division.

Sincerely yours,

H. D. Burnside Manager

HDB:jrw Enc.

P. S. Please show this to Mr. Barber. I told him about the car a couple of weeks ago when I was in Detroit.

Mr. P. W. Rhame, General Manager New Departure Division General Motors Corporation Bristol, Connecticut

Dear Mr. Rhame:

The 1905 Cadillac with the special New Departure bearings in the front wheels acquitted itself nobly in the parade the other day and I thought you might be interested in a copy of the attached clipping.

Again, many thanks for your help.

Sincerely yours,

H. D. Burnside Manager

HDB:jrw Enc.

CADILLAC MOTOR CAR DIVISION

GENERAL MOTORS CORPORATION

DETROIT 32, MICHIGAN



August 17, 1954

Mr. E. J. Davis Capitol Cadillac-Oldsmobile Co. 1222-22nd St., N.W. Washington 7, D. C.

Dear Mr. Davis:

We have endeavored to locate the Engine No. C-1879, which you called Mr. Phillips about, in our records. This car was built and considered 1902-3. We failed to recognize the significance of the "C" prefixing the engine number.

We trust the above information will be helpful to you.

Very truly yours,

R. J. Milliman Service Engineer

-pb



CADILLAC MOTOR CAR DIVISION

GENERAL MOTORS CORPORATION

DETROIT 32, MICHIGAN

October 27, 1954.



Mr. Harlow D. Burnside B-O-P Assembly Division Boxwood Road Wilmington, Delaware.

Dear Mr. Burnside:

I realize that this letter is long overdue, but I trust that you understand and appreciate how easy it is for folks like me'to put off duties of this sort.

I am sure you will find the attached letter from Mr. Milliman, our Service Engineer at Cadillac, self-explanatory. You will doubtless be pleased to learn that the car apparently is a bit older than you thought.

Your kind offer to allow me to retain the Kodachrome print of the car, is going to be accepted - as I am planning to forward it to Mr. M. E. Fields, our Advertising and Merchandising Manager. I am quite sure that he will be very much interested in it, as well as feeling grateful to you for the assistance you may extend our Washington Distributor in setting up a suitable display for the Auto Show which is scheduled for Washington in January.

Kindest personal regards,

E. J. Davis
Washington District

Hong you

3726 "S" Street Northwest Washington 7, D. C.



CAPITOL CADILLAC - OLDSMOBILE CO.

1222 TWENTY-SECOND STREET NORTHWEST



WASHINGTON 7, D. C.



March 4. 1955

Mr. Len Jones, Factory Representative Buick-Oldsmobile-Pontiac Assembly Division General Motors Corporation Wilmington Plant Wilmington, Delaware

Dear Mr. Jones:

Enclosed herewith are pictures of that grand Cadillac you so willingly loaned us for the automobile show here in Washington. If Mr. Burnside would like one of these pictures Floyd and I would like him to have it.

The specifications sign which I had duplicated for you will be ready any time next week, so when you are in Washington if you would stop in and see Lou Delavigne he will be glad to turn it over to you.

Thanks again for your splendid cooperation and I trust the 1905 Cadillac attracted as much attention in the Wilmington show as it did in ours.

Very truly yours,

CAPITOL CADILLAC - OLDSMOBILE COMPANY

H. C. Hoskinson General Sales Manager

Encl. HCH: km CADILLAC MOTOR CAR DIVISION

GENERAL MOTORS CORPORATION

DETROIT 32, MICHIGAN

October 27, 1954.



Mr. Harlow D. Burnside B-O-P Assembly Division Boxwood Road Wilmington, Delaware.

Dear Mr. Burnside:

I realize that this letter is long overdue, but I trust that you understand and appreciate how easy it is for folks like me to put off duties of this sort.

I am sure you will find the attached letter from Mr. Milliman, our Service Engineer at Cadillac, self-explanatory. You will doubtless be pleased to learn that the car apparently is a bit older than you thought.

Your kind offer to allow me to retain the Kodachrome print of the car, is going to be accepted - as I am planning to forward it to Mr. M. E. Fields, our Advertising and Merchandising Manager. I am quite sure that he will be very much interested in it, as well as feeling grateful to you for the assistance you may extend our Washington Distributor in setting up a suitable display for the Auto Show which is scheduled for Washington in January.

Kindest personal regards,

E. J. Davis
Washington District

Hong was

3726 "S" Street Northwest Washington 7, D. C.



CAPITOL CADILLAC · OLDSMOBILE CO.

1222 TWENTY-SECOND STREET NORTHWEST



WASHINGTON 7, D. C.



March 4. 1955

Mr. Len Jones, Factory Representative Buick-Oldsmobile-Pontiac Assembly Division General Motors Corporation Wilmington Plant Wilmington, Delaware

Dear Mr. Jones:

Enclosed herewith are pictures of that grand Cadillac you so willingly loaned us for the automobile show here in Washington. If Mr. Burnside would like one of these pictures Floyd and I would like him to have it.

The specifications sign which I had duplicated for you will be ready any time next week, so when you are in Washington if you would stop in and see Lou Delavigne he will be glad to turn it over to you.

Thanks again for your splendid cooperation and I trust the 1905 Cadillac attracted as much attention in the Wilmington show as it did in ours.

Very truly yours.

CAPITOL CADILLAC - OLDSMOBILE COMPANY

H. C. Hoskinson

General Sales Manager

Encl. HCH: km

WILMINGTON PLANT BUICK-OLDSMOBILE-PONTIAC ASSEMBLY DIVISION GENERAL MOTORS CORPORATION WILMINGTON 99, DELAWARE March 12, 1955

Mr. Floyd Akers Capitol Cadillac-Oldsmobile Co. 1222 Twenty-Second Street, N. W. Washington 7, D. C.

Dear Mr. Akers:

Thank you very much for your thoughtfulness in sending us photographs of the old Cadillac taken at your dealership.

We're mighty glad that we could help in making your show such a great success.

Sincerely yours,

H. D. Burnside

Manager

HDB/jpm

WILMINGTON PLANT

BUICK-OLDSMOBILE-PONTIAC ASSEMBLY DIVISION

GENERAL MOTORS CORPORATION
WILMINGTON 99, DELAWARE

March 12, 1955

Mr. H. C. Hoskinson
General Sales Manager
Capitol Cadillac-Oldsmobile Co.
1222 Twenty-Second Street, N. W.
Washington 7, D. C.

Dear Mr. Hoskinson:

I certainly appreciate the picture of the old Cadillac signed by you and Mr. Akers.

Both Len and I are very happy that we could have the old car at your Washington show which I know was a great success.

Sincerely yours,

H. D. Burnside Manager

HDB/jpm



HARRAH'S AUTOMOBILE COLLECTION P. O. BOX 10, RENO, NEVADA 89504 (702) 322-6911

September 29, 1966

Mr. H. W. Bendall 6700 Beacon Lane Falls Church, Virginia 22043

Dear Mr. Bendall:

We are sending some of the items due you under separate cover today. Included in the package are 2 door handles, 4 door hinges, and a tail lamp bracket. The hinges are center punched in the appropriate position so that you can drill the correct size screw holes. Concerning the tail lamp bracket, our Cadillac does not have a tail lamp bracket nor are there any holes in the frame or body to indicate that it ever had one. In fact, in the catalog I have learned that the lamps were optional equipment. A xerox copy of that portion of the catalog is enclosed. We are therefore sending you a tail lamp bracket that we feel would be appropriate for your car.

In the near future we will send you an additional package containing the door latches. The latches that I had set aside for you would not have been appropriate. We have ordered a pair of latches to which we can make a minor alteration that will correctly locate both hasp and door handle for you. You will have to file down the steel portion of your door handle to fit them into the latch, and these pieces can be correctly located on the door with the pattern previously sent to you. We will send the latches as soon as they arrive.

We plan to attend the Hershey Meet. I hope to see you there.

Pogo Filis

RE/rfg Encl.

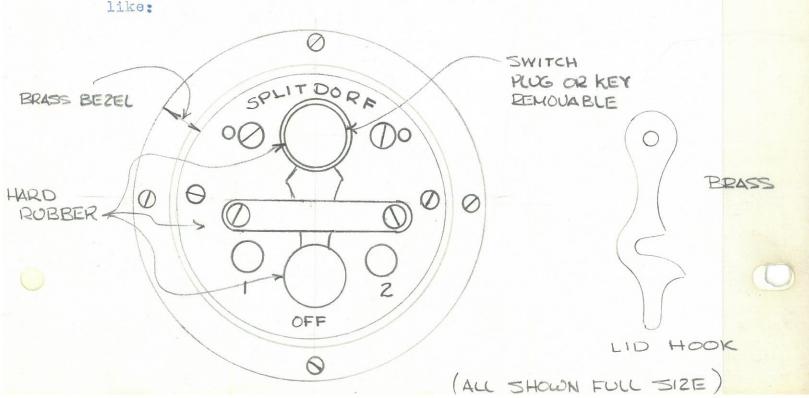
Clearview Acres Skillman, New Jersey 08558 February 15th, 1967

Dear Bill,

Thanks for your letter, It will be some time before I will be ordering top bows for the car, probably after I sell the Ford if I ever do. At any rate I will let you know. Ron Brown who makes them keeps sketches on file of each car he makes bows for and I think that his price is the same no matter how many he makes. The price he quoted me was \$72. This is for straight sockets like the Cadillacs had. Dog legged sockets are \$80. These don't include the wood for the bows which are obtainable from several sources as you probably know.

I'll send the step plates down as soon as they come. I guess one will be sufficient since they are the same for both sides.

Since I wrote to you I have a fellow who is suppose to be sending me a beat up 2 cylinder Splitdorf coilbox with a switch that is the same as the one on Wilkin's Cadillac. Also I found that the 1906 Buicks (2 cyl) have this Splitdorf box with the same switch as the Cadillac. A friend has 3 '06 Buicks and has lent me one of his boxes with switch and all hardware so I can copy what I want off it. The switch and all the hardware are fairly easy to duplicate if need be. I'll have to wait until I get this box the fellow is sending to see hew bad the switch is and what hardware is still intack. Meanwhile I got a 4 cyl Splitdorf lid with hooks and name plate from another guy so I do have this much for sure. I'll keep my eyes open and look for additional stuff in case you need switch or other parts. I would still like to find a good coil rather than use a Ford one in the box. Here is what the switch, hardware, etc look





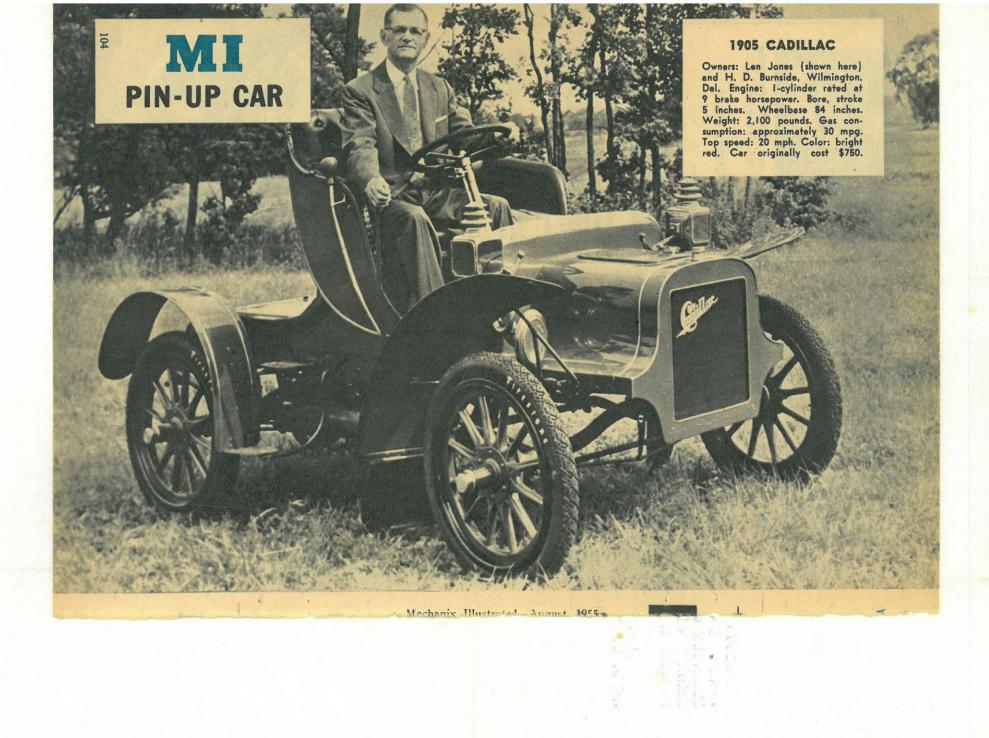
BRASS NAME PLATE ON FRONT OF LID.

I believe these parts to be correct, but am willing to be proven wrong. Is this what your parts look like? When I get all the dimensions from Wilkinss box and all the hardware together I think I will make up a complete set of drawings of everything to make a complete coilbox in case anyone needs them.

I've enclosed a card from Ron Brown in case you wish to write to him.

Sincerely,

Art Hart



WILKINSON & SHARP

Restorations

233 PHILMONT AVENUE

FEASTERVILLE, PA.

Dear Mr Sabo

The colors of the 1906 Cad are as

France - Petitles aerylie Lac.
DDL - 71558 - D TITIAU ROD Wheels.

ABove color in emaner

Body. Ditzlen LAC. 1M-12484 FORD MEDIUM MAROON TRIM - BLACK.

believe the dates you have for the can beeng un our shop are cerrent. It is my understanding that the cars were sold without head lamps. If so

this gives you considerable leeway, but it is always muce to have matching sets of Panishs & denerator lamps + generator. The Horseless Carriage from Lo west coast had a very good article some spass ago on Cadellar. I'm not surewhich issue but perhaps you have someone who you have many hours of pleasure with If I can be of further assistants please wit. Survey San Welkuser





Views of car in restoration shop of Wilkinson & Sharp. October 4, 1968.









































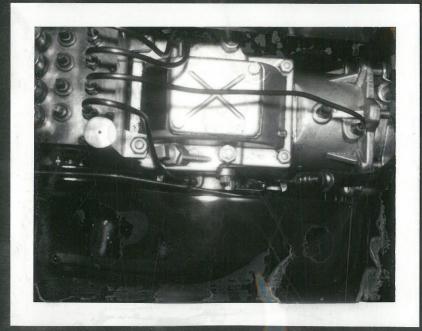










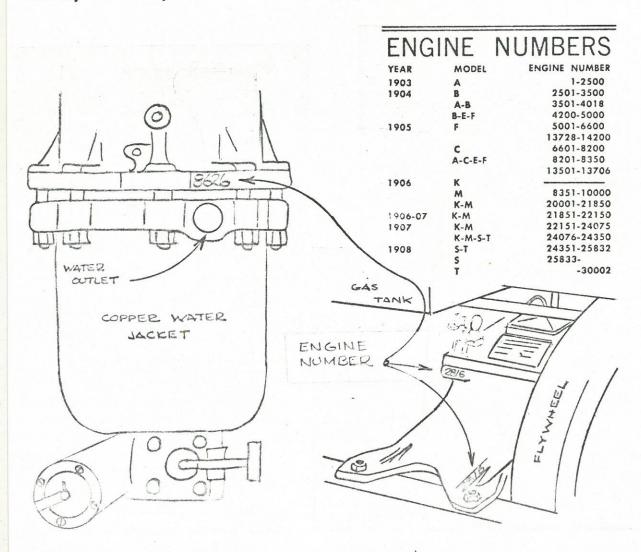


BULLETIN from THE REGISTER OF SINGLE CYLINDER CADILLACS

The Register of Single Cylinder Cadillacs now boasts over 250 cars. In an effort to make the register more complete and useful to owners of these fine automobiles, we would deeply appreciate it if you will complete the following form and send it to us, even if your car is already listed correctly in the register. Receipt of your registration form will insure that you will received updated copies of the register and other Cadillac information.

If you know of other single cylinder Cadillacs that may not be included in the register, please let us know about them on the back of your registration form.

The following information shows where engine numbers are usually found and may help to correctly date your Cadillac. Serial numbers when used, appear on a body plate located on the rear lower edge of the body or on the dashboærd. Many cars, however, did not have body plates.



MOTOR No. RECORD BOOK.			
No.	TO WHOM SHIPPED	Model	DATE SHIPPED
20476	Grand Farls - n.D.	·M	5-23-60
The state of the s	New York City	K	5-15-06
20477	Indianapolis Ind.	M	5-12-06 6
20478	Newark - Ohio.	M	5-23-06 [
20479	Stamford - Conn.	M	5-10-06
20480_	Rochester - n.y.	M	5-26-06
20481	Pettsbeerg - Pa.		5-16-06
20482	aberdeen - S.D.		5-29-06 6
20483	Providence - R. I.		5-4-001
20484	Philadelphia - Da.		5-17-06
20485			
20486	Partland - Maine		5-15-06 C
20487	Chicago - Ills	THE PLANTAGE TO PARTY	6-11-06 0
20488	Harrisburg Pu.		5-13-06 6
20489	Waterlos - Dowa	The second construction of the second	5-18-06 6
20490	Memphis - Zenn.		5-23-06 (
20491	Columbus - Ohio.	- A management with	5-12-06 (
20492	New Haven - Com	11	
20493	Marwich - Com.	T. Wallet Annatal Laboratories	5-14-06 0
20433	Allann - Theele	M	5 18 16 1

into hats, and, if they were for the women folk, even made flowers for their adorning. She raised geese and plucked them for pillows and feather beds, or used their skins for tippets. She made twine, and of the twine a harness. She kept her husband and children in handkerchiefs and stockings. She tended the bees, brewed beer, cleaned tripe, and manufactured sage cheese, sausage, candles, and soap. Her labors did not cease with the dark, but extended industriously to bedtime.

The daily entry was generally made up of about a dozen words, and closed with an item of news. William Cullen's birth is recorded in the earliest of the little books, the volume of 1794. Three entries in this book follow:

Nov. 3rd. Stormy; wind N. E.; churned; seven at night a son born.

Nov. 4. Clear; wind N. W.; got up; Hannah Cobb came; Mamma went home.

Nov. 5. Clear; wind N. W.; made Austin a coat. Sat up all day; went into the kitchen. Mr. Dawes died; buried at nine in the evening; washing done.

From this time on, William's appearance in the record, Miss Mathews tells us, is usually connected with some articles of clothing made for him.

Tricking a Famous Surgeon .- Sir Morel Mackenzie once received a wire from Antwerp asking him his charges for a certain operation, relates The Reader He replied £500, and was told to come at once. When he stepped upon the dock he was met by three men in mourning, who informed him sadly that he had come too late; the patient had died that morning.

"But," said the spokesman of the party, "we know that you did what you could, and we do not intend that you shall be out of pocket a shilling. We shall pay you your full fee." And they did. "And now." said the man, "since you are here, what do you say to visiting the city hospital and giving a clinic for the benefit of our local surgeons? It is not often they have an opportunity of benefiting by such science as

Sir Morel said he would gladly comply. He went to the hospital and performed many operations, among which were two of a similar nature to that for which he had been called over. When he had finished all thanked him profusely. On the steamer going home he met a friend who had a business house in Antwerp.

" Pretty scurvy trick they played on you, Sir Morel." "What do you mean?" asked the surgeon.

"Told you the patient died before you arrived, didn't they?"

" Tes "

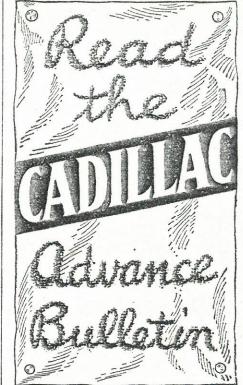
"Lied. You operated on him and a friend with the same trouble at the clinic. Got two operations for one price."

Edison's "Fake" Cigars .- Thomas A. Edison is said to be very fond of smoking, and it is claimed that sometimes he becomes so absorbed in his work that he even forgets that he has a cigar in his mouth. The Saturday Evening Post illustrates this in the following anecdote:

Mr. Edison once complained to a man in the tobac-

SECURITY

and PROFIT



If you are thinking of buying an automobile, there are a hundred reasons why you should get a Cadillac. Don't decide upon a machine until you have thoroughly investigated the remarkably fine and complete line offered for 1906. From it you can select a car to suit any requirements, whether a smart runabout at \$750, a 40 horse-power touring car at \$3,750 or one of the several intermediate types.

We want you-everybody-to compare point for point, the many advantageous features of the Cadillac. Then you will appreciate why it is the most easily operated, most economically maintained, most dependable of motor cars. In beauty of design and finish it is unsurpassed.

We can offer no greater argument of Cadillac superiority than the fact that in four years the Cadillac Motor Car Company has grown from a small beginning to the largest automobile manufacturing establishment in the world.

Don't fail to see the Cadillac at the New York and Chicago Automobile Shows.

> Illustrated booklet AD and address of nearest dealer sent upon request.

CADILLAC MOTOR CAR CO., Detroit, Mich. Member Asso. Licensed Auto. Mfrs.

An actual experience of two men living side by side in twin houses.

WITHOUT A POWERS REGULATOR

One man burned 10 tons of coal per year for 5 years at \$8 per ton. Cost \$400. His house was either too hot or too cold, never right. Had lots of sickness, doctors' bills, much annoyance tending dampers.

WITH A
POWERS REGULATOR

POWERS REQUESTOR
The other man burned 7
tons of coal per year for 5
years at \$8 per ton Cost
\$250. He has comfortable
heat all the time. You
annoyance. Wouldn't part
with his regulator for \$6 annoyance. Wouldn't pa with his regulator for times its cost.

Saves 25% of your coal and compels your furnace to give an even temperature in the house at all times. Attached to any kind of heater. Free trial for 60 days Write for our free booklet.

Powers Regulator Co. 113 5th AVE., NEW YORK CITY

2 ((O) () = (O) =

The Power and Energy of Steam, Water and Air

are often wasted, because the pressure is either too high or not properly regulated.



Mason Reducing Valves

reduce and mainreduce and maintain an even pressure of Steam, Air, or Water, regardless of changes in the initial pressure. These valves absolutely save the energy, hence increase the utility energy, hence morease the utility

and water appliances. The simple turning of a key gives any pressure desired.

Write Us for Information stating your needs. We will send our catalogue of many eco-nomical and convenient devices and answer any inquiries per-

MASON REGULATOR CO. Boston, Mass., U. S. A. For sale all over the world.



We send you, charges paid, 25 sheets of the best Carbon Paper made in the world, our "Bull Frog Brand," put up in our patented portfolio which preserves your carbon paper from crimpling, tearing or soiling. 136 impressions from a single sheet. Wears like cloth. Non-smutting, clean to handle. Send for free book and free samples. Agents wanted everywhere. THE NEWTON-ROTHERICK MFG.CO., 401 Superior Street, Toledo, O.



This corporation is subject to examination by the Superintendent of Banks of the State of New York.

AND LOAN

The immense proportions of the mail order side of the book publishing business is not so often brought to the attention of the public as the large sales through the book stores. Nevertheless it is one of the most important part of the publishing business. For example, on the Friday and Saturday preceding Christmas the Funk & Wagnalls (Established 1883)



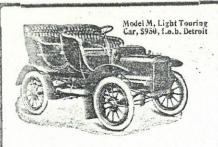
%

PERATING under conservative methods authorized by the New York Banking Department; and subject to its supervision, we pay 5 per cent. per anneum on sums of \$25.00 or more, and remit quarterly to our thousands of patrons throughout the United States. The money is not "tied up" but always subject to withdrawal, and earnings are calculated for every day it is in our possession.

Let us send you full particulars and etters of endorsement from patrons in our own State or immediate locality.

Assets . . . \$1,750,000 Surplus and Profits, \$150,000 INDUSTRIAL SAVINGS AND LOAN CO. No. 3 Times Bldz. New York City.

5%



The Car that Achieves

The Cadillac has always been the car that does things. Whether the test be that of endurance or power, or one of severity of road service, this wonderful machine has never been found wanting. It knows no balk, no hesitancy, no delay—always

It knows no bank, no nestancy, no detay—aways ready, with energy to spare.

By this dependability of service, coupled with tunusual economy of maintenance, the Cadillac has made such phenomenal advancement that its factory is now the largest of its kind in the world.

worth.

The qualities upon which this unparalled growth is based are more pronounced than ever in the magnificent new cars for 1906. Embodied in these are many unique and important improvements—improvements which

conspicuous for its individual merit.

conspicuous for its individual merit.

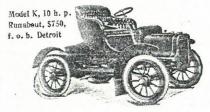
Among them is a wonderful mechanical feed lubricator which supplies oil to the motor in quantities which vary according to the speed of the engine, when properly adjusted, always feeding enough, never too much or too little. The new rocker joint on the front spring allows the car to pass over obstacles several inches in height without transmitting any material jar to the car, insuring a maximum of riding comfort and a minimum liability to breakage.

In outline and finish these new Cadillacs are truly art creations. Of the Victoria type, their grace and exquisite beauty, their tone of quiet rickness, appeal at once to fastidious motorists. We want to tell you more about the Cadillac by sending you a free copy of our interesting Booklet 1. A postal request brings it, together with address of nearest dealer. The 1906 models include:

Model K, 10 h. p. Runabout, \$750 Model M, Light Touring Car, \$950 Model H, 30 h. p. Touring Car, \$2,500 Model H, 40 h. p. Touring Car, \$3,750 All prices f. o. b. Detroit

CADILLAC MOTOR CAR CO. DETROIT, MICH.

Member Asso. Licensed Auto. Mfrs.



MONEY IS NOTHING

In Comparison with l'ealth. Patented



STORM PROOF BUGGY your equipage

and go in comfort. Ask for catalogue

Fours & Hunter Carriage Mfg. Co., Terre Haute, Ind. Poor motes of dust that scarce begrime The pale plains of eternity:

The last sun staggers down the dusk; The last wind moans around our walls, And on a planet's seedless husk The white, tremendous silence falls.

Is this your dark prophetic dream, Or does the murmur of the tide Recall another, holier stream? And where the ebon barges glide

Sharp-edged by sunset, do you see The swarthy galleys of dead queens Drift with their mournful threnody Of sullen drums and tambourines?

What melody of mingled flutes, From Thebes or Karnak thinly blown, Perturbs your peace? What Memphian lutes Wake sense in your insensate stone?

O, vain to you our shifts and turns, Our acts of evil, dreams of good, Within whose granite heart still burns Old Egypt's fierce, luxurious blood!

Your soul is Egypt's soul, and she Looks out from you across the tide! And dynasty by dynasty Her demigods and heroes glide

Like wraiths from some sepulchral frieze Across the scarlet arch of sky; Memnon and mighty Rameses, Psammetichus and Ptolemy;

Gigantic Lords, whose lips are wise Beyond desire and love and hate; Whose calm, insatiable eyes Not Death himself may desecrate.

They fade and pass, these kings of kings, To dream within their icy court; And tumults of ambiguous things, Abortions of the womb of thought,

Follow the pageant; from the stars Lamenting Isis leans to kiss The lotos-leaves, the nenuphars Of haughty Heliopolis;

Bull gods and hawk-faced deities Follow in obscene ritual; These were her work,-her children these! Osiris, Ammon, Apis; all

Begotten by the imperial Nile Of her majestic womb, and set In some stupendous peristyle For all the world to worship; -- yet

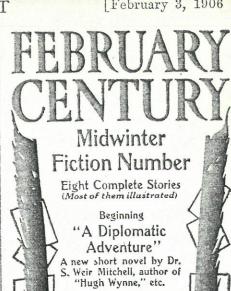
The sickle of oblivion reaps The stubble of their might and lust. She looks upon our world, and weeps; For these were Gods, and these are dust.

-From Blackwood's Magazine.

The Homesick Heart.

BY HARRIET PRESCOTT SPOFFORD.

To Skiddaw though Helvellyn call With many a singing waterfall, With forest sigh and stir of grass Where poets' feet were wont to pass-Though frore Cristallo hang in blue A hundred valleys deep with dew, And lift long scarps of snows thrice-drivea, Like ramparts of some distant heaven-Though Venice down her weed-washed ways Draw her dark tides of chrysoprase, Glassing her ivory palaces In sunny depths of dreaming seas-Though day perpetual beauty spill, Where, on the purple Pincian hill, Slumbers with ashes on her head The beggar of the splendid dead-Though down cathedral aisles his soul Swoon with great music's mighty roll, Where pencils loaded with the light Have caught swift color on its flight, And sculptured gods with awful eyes Stand like the guards of Paradise-In ruined places though the dust Of kings and queens with every gust Be blown about-though hour by hour The jasmine and pomegranate flower



Mrs. Humphry Ward's most successful work 'Fenwick's Career" continued.

Portraits of Keats The Government Side of the Railway Rate Question

Lincoln the Lawyer Saving California's Fruit Crops Exquisite Pictures

in Color Etc., Etc.

Stoddard-Dayton

(MODEL D)

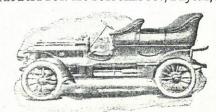
A Stripling in weight, a Giant in power. The car that best combines speed and dependable strength.

"An American Car for American Roads"

THE Stoddard-Dayton, Model D 5-passenger Touring Car has a special type of 4½ x 5 in. 4-cylinder motor; water-cooled; frame of hot-rolled, high-carbon, pressed steel; sliding gear transmission; three speeds and reverse -selective type, can change from high to intermediate, or vice versa, at speed of 25 miles, without clashing or noise, up hill or down; practically noiseless; entire transmission on roller bearings; mechanical lubrication; 30-35 horse power. Proportion of power to weight, one horse-power to every sixty pounds. \$230.

Send for our 1906 book L-It's FREE.

The DAYTON MOTOR CAR CO., Dayton, O.



AGAIN-"As good as it looks"

Readers of The LITERARY DIGEST are asked to mention the publication when writing to advertisers.

Fall lightly as the moonlight falls

"Manufacturer to Smoker" explains but partly the values that I give.

There are two ways of selling cigarsthrough jobber and retailer, or direct

from manufacturer to smoker. There are two kinds of selling expense-dealers' profits and advertising.

In selling cigars direct to the consumer the manufacturer cuts out the dealers' profits, but he must substitute advertising for the dealer in order to reach his buyers.

Now, if his advertising expense equals what the dealers' profit would be, nothing is gained for the smoker-that manufacturer cannot give the smoker any better value than the retailer does.

That is where so many "Factory to Fireside" dealers

And that is where the real secret of my way lies.

I not only save all dealers' profits, but I cut down my advertising expense per hundred cigars sold to almost nothing.

How do I do this?

Simply by selling such good cigars that my customers reorder again and again, so that eventually I usually sell THOUSANDS of cigars as a result of one reply to an advertisement.

Therefore, when I say that my plan enables me to cut out practically ALL selling expense and to sell direct to the smoker at wholesale prices, I mean just that.

Summed up, the whole success of my plan depends upon giving the extraordinary value that I claim to.

SHIVERS'

EXACT SIZE AND SHAPE

I am as ready to prove to you by evidence as by argument, and to that end I make at my own risk this offer:

MY OFFER IS: I will, upon request, send one hundred Shivers' Panatela Cigars on approval to a reader of THE LITERARY DIGEST, express prepaid. He may smoke ten cigars and return the remaining ninety at my expense if he is not pleased with them; if he is pleased, and keeps them, he agrees to remit the price, \$5.00, within ten days.

Enclose business card or give personal references, and state whether mild, medium or strong cigars are wanted.

HERBERT D. SHIVERS 913 Filbert Street, Philadelphia, Pa.

TABULATED DIGEST OF DIVORCE LAWS A folding chart showing in tabulated form the di-wage laws of every State in the United States. By HUGO HUSSI, Cloth cover, 31.50, FUNK & WAG-NALLS COMPANY, Publishers, New York.

Reader."-J. F. Chamberlain. (Macmillan Co., 40 cents.)

"Bryant's Poems."-(Macmillan Co., 25 cents.)

"Friendship's Fragrant Fancies."-Catherine Moriarty. (Dodge Pub. Co.)

"Leontine Stanfield's Book of Verse."-(J. S. Ogilvie Pub. Co., paper, 25 cents.)

"Tennyson's In Memoriam."-(Macmillan Co., \$1.)

"The Great Refusal."-Maxwell Gray. (D. Appleton & Co., \$1.50.)

"Who's Who in America, 1906-1907."-(A. N. Marquis & Co., Chicago, \$3.50.)

"The Eternal Spring."-Neith Boyce. (Fox, Duffield & Co., \$1.50.)

"The Lake."-George Moore. (D. Appleton & Co., \$1.50.)

CURRENT POETRY.

L'Amour Ambigueux.

BY HELEN HAY WHITNEY.

You are the dreams we do not dare to dream, The dim florescence of a mystic rose. In poverty or pride love comes and goes-We do not question what the deeps may seem, Launched on the steady current of the stream. Gaily and hardily we bear the prose: In youth, red sun; in age, the charnel snows, Nor see the banks where subtle flowers gleam In green sweet beds of moly and of thyme Wild as an errant fancy. All the while We know you, mystic rose, we know your smile, Your dry still eyes, your fragrant floating hair, The peacock purple of the gown you wear, O lyric alchemist of rune and rhyme.

-From The Metropolitan (March.)

Ad Thaliarchum.

BY CHARLES EDMUND MERRILL, JR. When mountain-tops are white with snow And on Soracte's crest you see The laden beecher bending low, And when the frost with icy key Locks tight each little rivulet, Come, Thaliarchus, and with me Old cares forget.

The fire invites us; take thine ease, Nor seek to fathom from afar The hearts of the Eumenides; Leave to the gods the unending war Of wind and wave; this, too, shall cease When they from whom all counsels are Shall counsel peace.

To-morrow? Shall the fleeting years Abide our questioning? They go All heedless of our hopes and fears.
To-morrow? 'Tis not ours to know That we again shall see the flowers. To-morrow is the gods'-but oh! To-day is ours. -From Scribner's Magazine (March.)

Winter Song.

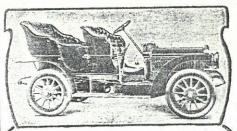
Translated from Alfred Perceval Graves from a very early Irish nature poem.

Cold, cold until Doom ! The storm goes gathering gloom; Each flashing furrow a stream; A full lake every ford in the coom.

Sea large are the scowling lakes; Thin sleet-speers swell to an host; Light rains clash as shields on the coast; Like a white wether's fleece fall the flakes.

The roadside pools are as ponds; Each moor like a forest uplifts; No shelter the bird-flock finds; Breech high the stark snow drifts.

Swift frost bath the ways in his hold, Keen the strife round Colt's standing stone! And the tempest so stretches her fold, That none can cry aught but "Cold!" -From The Athenaeum (London).



Model H. 30 h.p. Tauring Car, \$2,500 f. o. b. Detroit (not including lamps).

Four-Cylinder Perfection

It is concentration of effort that has made the Cadillac what it is. For five years its makers—the master designers and motor builders of America—have focused their endeavors upon a single object—to produce a faultless motor car. A consummation of these efforts is found in the magnificent line of 1906 cars, notable among which are the four-cylinder types. These models embody every point of excellence thus far found in any of the high-priced cars, either of American or foreign make. When you remember the remarkable efficiency of the famous Cadillac single-cylinder engine, and consider this same principle embodied in quadruple form, you will gain a slight idea of the serviceableness of these powerful

of these powerful four-cylinder models of the Among the

improvements is automatic governor which limits the speed automatic

of the engine when the latter is disconnected, eliminating vibration and saving much fuel and energy. Another is the mechanically operated energy. Another is the mechanically operated oil feed (found in all Cadillac models) which supplies oil to the engine in accordance with its speed, keeping it always in a state of perfect lubrication. Transmission is of the exclusive Cadillac planetary type, with specially cut and hardened gears. The bodies are of unusual elegance, and luxuriously appointed. Wheel base of Model H (30 h. p.), 100 inches; Model L (40 h. p.), 110 inches. Practically noiseless; comfortable and easy-riding as a Pullman coach. Let us send address of nearest dealer and our finely illustrated catalog A D, which will tell you more about the 1906 Cadillacs. A car to suit any purse, any requirement.

suit any purse, any requirement.

Model K, 10 h. p. Runabout, \$750 Model M, Light Touring Car, \$950 Model H, 30 h. p. Touring Car, \$2,500 Model L, 40 h. p. Touring Car, \$3,750 All prices f. o. b. Detroit

CADILLAC MOTOR CAR CO. DETROIT, MICH.

Member Asso. Licensed Auto. Mfrs.

MONEY IS NOTHING

In Comparison with Health. Patented

If you ride add a STORM PROOF BUGGY

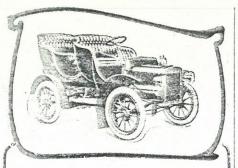
to your equipage and go in comfort. Ask for catalogue

Fouts & Hunter Carriage Mfg. Co., Terre Haute, Ind.



THE COZY BUGGY.

Open in an Instant.



Model M, Light Touring Car, \$950, f. o. b. Detroit (not including lamps)

Sureness of Service

Of all the reasons why the Cadillac is the car you should own, the greatest is this: Never-failing serviceableness at a minimum of operating expense. Whether runabout or touring car, it is an example of careful motor building-a car behind which stand the name and experience of the largest automobile establishment in the world. Every detail of workmanship and material is wrought with that exactness which accompanies superior

skill and up-to-date equipment. This is why the stands pre-eminent for its dependability and economy of mainten-

Whatever your requirements, there's a Cadillac to meet them perfectly. The single-cylinder types are marvels of power and endurance; their performances are yet to be equaled by any other machines of their class. The four-cylinder cars, built upon the same rugged principles that have made the smaller types famous, combine all that could be desired for touring service.

In design the 1906 Cadillacs are strikingly beautiful; in finish they are truly works of

Send for booklet A D, and address of nearest dealer, who by actual demonstration will convince you of the merits of the Cadillac.

Model K, 10 h. p. Runabout, \$750. Model M, Light Touring Car, \$950. Model H, 30 h. p. Touring Car, \$2,500. Model L, 40 h. p. Touring Car, \$3,750.

All prices f. o. b. Detroit.

CADILLAC MOTOR CAR CO. Detroit, Mich.

Member Assn. Licensed Auto. Mfrs.

ou Can Earn From 000 to\$ 0.000 a year in the lead Estate Busines

♥ We teach you the Real Estate, General Brokerage and Insurance Business by Mail, fitting you to success-fully establish yourself without interfering with your present employment. ♥ We appoint you special repre-sentative of leading real estate and brokerage companies smatter of leading real estate and prokerage companies who will co-operate with you and assist you to a quick success. Do not spend the best days of your life working for a pittance. Real Estate offers better opportunities than any other business without capital. ¶ Write for full particulars and Free Book. It will interest you.

THE CROSS CO., 311 Tacoma Bidg., CHICAGO

an even more practical service to his tribesmen. In [his own words, as quoted in the article previously

"Just now I am at work for the Government on a rather novel undertaking, only remotely connected with literature-the renaming of the Indians. The President has commissioned me to go to the various reservations of the Sioux Nation and give to each individual a name that will be of more practical use in the new conditions confronting him than the odd, unwieldy name that ordinarily distinguishes an Indian. In this work I have so far bestowed names on about 15,000 Sioux, and I am now on my way to six more reservations, after which the renaming of the individuals of my nation will be completed.

"Do I encounter much trouble in inducing the Indians to accept the new names that I give them? Not much. They see the practical necessity for it as an adjunct to the citizenship that is so evidently to be theirs in the near future, and, as I am an Indian and known to be loyal to my people, they trust me.

"What is my system in the giving of names? I have too keen an appreciation of the wonderful poetry back of most Indian names not to shrink from changing them where that can be avoided. Thus I strive to perpetuate in the new name some trace of the old. When the name is not too long in the original for our English tongue I retain it, as in the case of 'Matoska,' meaning White Bear. But 'Tateyohnakewastewin' is rather too long for the English tongue. Translated it means She-Who-Has-a-Beautiful-House. Hence I renamed the woman 'Goodhouse.' Rotten Pumpkin I changed to Robert Pumplan; Bob-tailed Coyote to Robert T. Wolf. Using this method there is generally some way open for the retention of something of the original name.

"But the Indians do not always want a family name for the reason, as they explained to me, that thus a good Indian would have to bear the same name as a bad brother. 'Me same name as Sleepy Dog!' exclaimed one young brave after hearing my proposition. 'Now some people not know he my brother-with same name all will know. Me like old name heap better.' There was a good deal of sound sense in that objection that would probably appeal to many a white man. Then I found that some of the Indians had been baptized more than once by overzealous Christian denominations, and hence were carrying more than their fair share of names, in which case my task was restricted to selecting what appeared to be the least cumbersome out of the list. You see, the missionaries generally give a banquet after a baptism, hence the Indians are not averse to partaking of the latter ceremony as often as possible. They were somewhat disappointed that my mission was not attended with any of the customary celebrations attending a baptism. 'How is it that you give us names and do not sprinkle our heads, like the father, or put us under the water, like the other missionary?' asked one old warrior. 'Because,' I answered, 'I am going to have a great shower at the end and do it altogether.' An Indian is quick to see the humorous side of anything, and my hearer at once acquiesced in my purpose and most obligingly changed his name at my request.

"It will take me about two years more to finish this strange mission. It is only one step in making my people realize the importance of hastening their absorption by the white race, and, as far as it goes, it is of value in making them appreciate the value of practical things in bearing the white man's burden.

A Veteran Chemist Dead .- Prof. Robert Ogden Doremus, who held for years chairs in the College of the City of New York, New York University, and several medical colleges, died on March 22 last at the age of 83 years. Prof. C. F. Chandler writes of him in Science (New York, March 30):

"Upon his retirement from the duties of instructor he had completed sixty years of continuous work as a teacher of chemistry and physics, and it is doubtful if any other instructor in this country has ever lectured to so many pupils. . . . Dr. Doremus was especially successful as a public lecturer; he was a man of commanding presence, most agreeable voice and eloquent and clear in his presentation of the facts and principles of science. He spared no trouble



By simply unhooking a gate at either end and dropping the back down as shown in picture, the Streit Davenport is changed to a comfortable double bed, full width for two persons. Pillows won't slip off, bed clothes won't pull out at feet. Best box mattress of fine steel springs, covered with curied hair and moss.



Consider the "Y and E" Copier simply as a cold-

blooded business proposition;—try it AT OUR
EXPENSE and decide for yourself whether it isn't Far Cheaper, Quicker, and Better than Carbon copying or Letter Press.

I PROVE to your own satisfaction that it will actually SAVE you at least \$1.00 of your press. actually SAVE you at least \$1.00 of your present expense for letter-copying materials on each roco copies!

QWon't you Write for Sample of Work, Complete "Y and E" Copier Catalog No. 347, and Special FREE TRIAL Offer?

New York Pittsburg Washington San Francisco St. Louis Boston Chicago Philadelphia Cleveland

The Office Specialty Mfg. Co. Ltd., Toronto-Montreal Main Factories and Executive Offices: Rochester, N. Y.



CHARLES A. SCOTT, 703 Mutual Life Bldg. , BUFFALO, N. Y.

Silver Door

Engraved silver name and number door plates have always been seen on the houses of the best families, and until now have cost from \$5.00 to \$10.00. We make to your order richer and better encraved silver door plates for \$2.00 your name engraved in any style. Write for photo reproductions (actual size) showing styles of plates and engravings and learn how to secure your own plate free of cost to you.

Exclusive territory to capable agents.

NEW METHOD CO., 5702 Prairie Avenue, Chicago

Something Better For You

As Poor Richard says, or might well have said: "A man does well to lose the 'job' that will ruin him if he keeps it."

The sales staff of The LADIES' HOME JOURNAL and THE SATURDAY EVENING POST numbers scores, even hundreds of men and women who joined it after disheartening experiences.

We co-operate with our helpers "to the limit." We even supply backbone until the latent determination to overcome all difficulties is fully brought out. And you can earn a large income from the beginning.

Write to us if you want something better.

THE CURTIS PUBLISHING COMPANY 2482-E Cherry St., Philadelphia, Pa.

A delightful feeling of exhilaration follows its use. A beautiful, convenient and effective instrument adapted to innumerable home and professional uses. It invigorates the entire system, banishes muscular soreness. mes the nerves, stimlates the scalp and beautifies the com-olexion. Your physiplexion. Your parcian will endorse it. Sold on Easy Terms. Send for our free book. JAMES BARKER 0-640 Cayuga St., Philadelphi

While not an enthusiast on the subject, Mr. Wellman is confident that he will succeed.

After the Earthquake.—The wonderful courage and cheerfulness with which the people of San Francisco are meeting their losses are illustrated by numerous stories which are now appearing in the press. "I should be satisfied if I lost everything but the climate," said a political friend of Mayor Schmitz. Rich and poor, united by the common calamity, work side by side to hasten the recovery of the city from the ruins of the earthquake and fire. One man, telling in the New York Tribune of his experiences, narrates:

"I saw a man and wife reunited under circumstances which show why San Francisco will emerge from this ordeal greater and more beautiful than before. I was working under the direction of a squad of soldiers digging graves for a great pile of corpses taken from the Latin Quarter. Alongside of me was a man in a dress-suit and silk hat. He swung his shovel with a vim, altho I could see he had blistered his tender hands so badly that the raw flesh was laid bare. He told me that he had a home on Nob Hill, and the night before he had been told to get out in a hurry, as the whole district was to be dynamited.

"The man had given away all of his clothes to refugees except those on his back and his best dress-suit. On being told to leave, he put his 'glad rags' in a suit-case, jumped into his automobile, and started for his summer home in Menlo Park, where his wife and family had already taken refuge. Menlo Park is about twenty-five miles from 'Frisco. He had hardly gone a block before his motor-car was stopped by a soldier, at the point of a gun. He was forced to surrender it, to be used as an ambulance, and was at once put to work digging graves. The soldier also told him to give the suit he wore to an old man who was in rags and to put on the dress-suit himself.

"A day later, while my Nob Hill friend was in the act of filling in a grave in which we had buried six men in one lot, a woman caught sight of him from across the street, and, with a scream rushed into his arms. Even the soldiers were astonished. Finally one of them shouted, "Here, here, get to work."

one of them shouted, "Here, here, get to work."
"Just let me kiss my wife again, said the gravedigger in the dress-suit. And they let him. The poor woman had come on from San Mateo in the fear that he was dead, and had been wandering around the city a day and a night searching for him. She had given away her rings and earrings and even her silk skirt and stockings for food. She looked more like a beggar woman of the slums than the one-time mistress of a Nob Hill house. At the second command from the soldier to 'get to work,' the man and woman separated, but, tho still in tears, they were smiling. The woman went over to a near-by saloon which had been turned into a dispensary, and went to work there, tearing up cloth for bandages. The man went back to his shovel, and, as he again began making the dirt fly, he said to me:

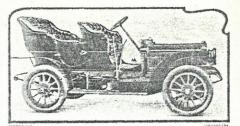
"'As long as a man has a sweet wife and sweet babies, he can be happy even when burying the dead.'"

In direct contrast to the prevailing spirit of mutual helpfulness there was an occasional exhibition of the fiendish work of ghouls. All such offenders were summarily shot by the militia when detected. This authority of the soldiery, while generally exercised with due care, occasionally resulted disastrously, as in the slaying of Major Tilden while engaged in relief work.

"Fear often drives men to ridiculous things," continues the *Tribune*, and illustrates by further quotations from an eye-witness:

"There were some sights which I did not think funny at the time. Yet I can not help-laughing at them. I saw one big fat man, with a nightgown covering his rounded form, calmly walking in upper Market street, carrying a huge bird-cage in his arms, and the cage was absolutely empty—not a bird in it. The man was as self-possessed as if he were completely dressed, and seemed to enjoy looking at the wrecked buildings.

"Another man was leading a huge Newfoundland dog and carrying a kitten in his arms; he kept talking



Model H, 30 h, p. Touring Car, \$2,500 (f.o.b. Detroit. (Lamps not included)

Thorough mechanical finish—so fine and minutely wrought as to bespeak more than ordinary pains and skill—is one of the many features that make the

notable
for its smoothness
of running and virtually
trouble-proof in its construction. This carefulness of
building, coupled with mechanical principles of proven
correctness, result in neverfailing dependability of service—in surprising economy

of maintenance.
Cadillac value is most apparent under the severer tests of travel. Ask your dealer to give you a demonstration. His address and illustrated Booklet AD sent on request.

Model K, 10 h. p. Runabout, \$750 Model M, Light Touring Car, \$950 Model H, 30 h. p. Touring Car, \$2,500 Model L, 40 h. p. Touring Car, \$3,750 All prices f. o. b. Detroit.

Cadillac Motor Car Co., Detroit, Mich.

Member Asso. Licensed Auto Mfrs.

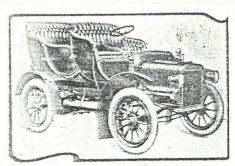


Motsinger Auto-Sparker STARTS AND RUNS

Gas Engines without Bstteries.
No other machine can do it suc essibility for lack of original patents owned by us. No twist motion in our trive. No helt or switch necessary. No batteries, whatever, for make and break of jump-spark. Water and dast-proof. Fully gaaranteed.
MOTSINGER DEVICE MFG. CO., 67 Main St. Pendleton. Ind., U.S.A.

Asthma.

Chinates wear out. Smokes, Sprays, or any single medicine relieve only temporarily. Our CONSTITUTIONAL treatment, founded 1883, is for permanently eliminating the CAUSE of Asthma and Hay Fever, so that the old symptoms or attacks will not return. Write for BOOK 25 A, containing reports of many districtive cases to prove this. Mailed FREE. P. HAHOLD HAYES, Huffalo, N.Y.



Model M Tonring Car, \$950, f.o. b. Detroit, (Lamps not included)

Value Motor

The Cadillac is undeniably the greatest automobile value ever offered-not alone in fairness of price, but in the satisfaction and everlasting service received for that price. In fact, there are few establishments, if any, sufficiently well equipped to produce

cars the equal of

actual factory cost

of less than our selling price. This is but one of the many benefits a Cadillac purchaser derives from the wonderful combination of equipment, skill and experience that backs up every car we build.

The Cadillac couldn't be better if you paid just twice the price. Your dealer will tell you why. His address-also our finely illustrated Booklet AD-will be sent upon request.

Model K, 10 h. p. Runabout, \$750 Model M, Light Touring Car, \$950 Model H, 30 h. p. Touring Car, \$2,500

All prices f. o. b. Detroit

Cadillac Motor Car Co.. Detroit, Mich.

Member Asso. Licensed Auto Mfrs.

AND SECURITION OF SECURITION O

THE CHILDREN'S HEALTH



You can build up their shoulders, lungs, back, legs, and arms with the "IRISH MAIL".

Same, healthy fun they

don't tire of.

The Geared CarMade of steel and hickory. Built low; can't upset nor wear out.

HILL-STANDARD MFG CO. 62 Irish Mail Avenue, Anderson, Indiana

WHEEL CHAIRS WEMAKE OVER 70 STYLES Catalogue "B"illustrates describes (free

SARGENT CO., 291 Fourth Ave., NEW YORK

part in few of them. They were not to his liking. But it will be remembered that at the very height of the craze, when the most bewildering "records" were being made by the young champions of those days, and when he was forgotten, or was thought of only as a "back number," he entered one of the greatest of the contests, and, tho the public scoffed at the idea of the " old man's" trying to keep pace with the others, he surpassed all competitors with almost laughable ease.

Now that he, at sixty-eight, has just beaten his own record at twenty-five, what has become of those other famous champions of the pedestrian ring? And if any of them are still living, who of them would now essay to beat their records of only twenty-five years back? In this contrast between Mr. Weston and his one-time competitors-or most of themthere is a salutary lesson. There is a radical difference between sober living and unsober living. There is a difference between straight heel-and-toe walking in the open air, across country, for the sake of the sport and the exercise, and "go-as-you-please" scrambling around a tanbark ring in a vitiated atmosphere for the sake of a share in the gate money. In Mr. Weston's pedestrian career there has been much of instruction, of inspiration, and of value to the world, and it is because of such a character that it has been so long maintained and is, now in a second generation, regarded with so much interest and admiration.

The Chicago Tribune recalls another "little jaunt" which Mr. Weston undertook nearly forty years ago:

There was great excitement in Chicago on November 28, 1867. Mr. Edward Payson Weston had arrived from Portland, Maine. He had made the journey on foot, 1,237% miles, within his time limit of twenty-six secular days, and during the little jaunt the country had been stirred with accounts of his progress. Now came the climax. The whole city and the suburb of Hyde Park were in a ferment. A body of police acted as escort to the hero. The streets were thronged. There was a blockade about the Sherman House, and great applause when he appeared on the balcony of the hotel. Later he spoke at Crosby's Opera House and made an indelible impression on the memories of the natives who heard him pronounce Chicago after the Maine or some other outlandish fashion.

MORE OR LESS PUNCENT.

Not There.-"Judge," said Mrs. Starvem to the magistrate who had recently come to board with her, "I'm particularly anxious to have you try this chicken soup."

'I have tried it," replied the magistrate, " and my decision is that the chicken has proved an alibi."-Philadelphia Press.

An Example.—" Papa, what is satire?"

"Well, for example, when your mother asks me how much I've won at prayer-meeting."-Life.

His Mistake. SHE (reading the fashion items)-"Small checks will be in favor for new spring silk suits.'

HE (with fervor)-" Thank goodness!"-Baltimore American.

English as She is Spelt.-"I am not a spelling reformer," said Senator La Follette, of Wisconsin, but a friend of mine named Turner nearly made one

"Turner and I were traveling together. We came to a certain hotel, and there, to my amazement, the man registered:

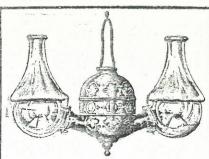
"H. C. Phtholognyrrh."

"'What is the matter with you?' I exclaimed. Why do you adopt that remarkable alias? Have you committed some crime?*

'No, indeed,' said Turner.

"'Then why don't you register your own name?'

"That is my own name,' he answered. 'Phtholognyrrh-Turner. That's my name.'



BETTER THAN GAS SAYS THIS NEW YORKER

"I have used The Angle Lamp far beyond the time set for trial and and that one cannot be too enthusiastic over it," writes Mr. Graaville Barnum, of Cold Springs, N. J. "It certainly gives the brightest and at the same time the softest illumination one could desire."

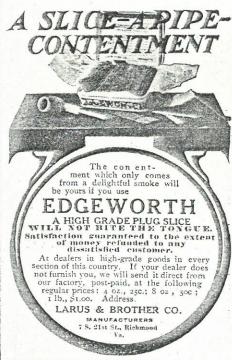
"We lived in New York City for some years and used all the latest and most approved appliances, devices, etc. in connection with gas or electricity and yet I must sincerely urge the superiority of this simple yet wonderful method of il, lumination. One can hardly say too much in its praise."

THE ANGLE LAMP

is entirely different from all other lamps. It makes common kerosene the best, the cheape stand most satisfactory of all lighting methods. Safer and more reliable than gasoline or actylene, yet as convenient to operate as gas or electricity. The Angle Lamp is lighted and extinguished like gas. May be turned high or low without odor. No smoke, no danger. Filled while lighted and without moving. Requires filling but once or twice a week. It floods a room with its beautiful, soft, mellow light that has no equal. Write for our catalog-"47" listing 32 varieties of The Angle Lamp from \$1.50 up, now-before you turn this leat-for it gives you the benefit of our text apars' experience with all lighting methods.

THE ANGLE MPS, CO, 73-80 MURRAY ST.. NEW YORK.

THE ANGLE MFG. CO., 78-80 MURRAY ST., NEW YORK.



Whitman Saddle

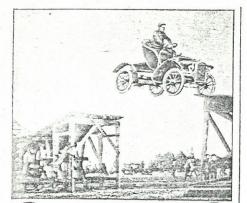
The one saddle always preferred by discriminating riders. It is the highest type of the saddler's art. Correct in every line—always comfortable for the horse and rider. Complete catalogue sent free, showing the Whitmen for men and women, and everything from "Saddle to Spur." Address

\$12

The Mehlbach Saddle Co., 104 Chambers St., New York Successors to THE WHITMAN SADDLE CO.



CENTRAL MANTEL CO., 1216 Olive St., ST. LOUIS, MO.



That the structural strength of the Cadillac is much greater than ordinary service requires is shown in the fact that this machine was the only one found to stand the strain of "Leaping the Gap," as pictured above. Either the axles or frame of all other machines tried bent under the heavy impact. With

Runabout shown (a regular stock car) the performer is making repeated trips without the slightest damage to his

While this proves nothing to the person who wants an automobile to meet ordinary conditions of road travel, it does show that the strength of the Cadillac is never found wanting, no matter what the test.

This and the many other sterling qualities of the Cadillac will be cheerfully demonstrated by your nearest dealer, whose address we will send upon request. Let us also send our Illustrated Booklet A D.

Model K. 10 h. p. Runabout (snown above), \$750. Model M. Light Touring Car \$950. Model H. 20 h. p. Touring Car \$2,500. All prices f. o. b. Detroit. Lamps not included,

Cadillac Motor Car Co., Detroit, Mich.

Member A. L. A. M. Westigh Walls after the

· North Dakota Investments

First Mortgage Farm Loans

Large or small amounts. Send for descriptive list of on-hand loans, as also our Investment Booklet, entitled

"We're Right On the Ground"

with full particulars relative to our business methods, etc. We have been selling these Mortgages for 23 years and have never lost a dollar for a customer or ourselves. We will be pleased to put you in the way of finding out all about us and our securities. We handle only High Grade Investments. Write for further and full information.

E. J. LANDER & CO.

Box S

Grand Forks, N. D.

CURRENT POETRY.

The Thrush.

BY WILLIAM ASPENWALL BRADLEY.

Spirit of summer silence and the sweet Still silver voice of sylvan solitudes. Who singst so well the wistful woodland moods Of forest glades where sun and shadow meet And dance and waver, mingle and retreat, The sound of sun-plashed waters at the rim Of dripping fountains, and the half-heard hymn Of earth at evening after noontide heat; Sweet seeker of the secret heart of things, Perplexed and pensive, poignant unto tears, Poet whose passions, tunéd to the flute. Are turned to sighing with the passing years, Maker of music on life's subtlest strings-Without thy song man's heart must still be mute! -From Appleton's Magazine (June).

Midsummer.

By L. M. MONTGOMERY.

The world is in its splendor of a lavish, fair outflower-

And in the idle valleys the dreams are thick and

While every wind from golden west and purple south is showering

The petals of the roses all about our gypsy feet.

In every glen and dingle, in every poppied meadow, Is upgathered all the ripeness and the sweetness of the year:

All the hills are drunk with sunshine, all the woodways pranked with shadow.

Oh, the best that ever artist limned or poet sung is here!

-From The Outing Magazine (July).

The Nereid.

By Madison Cawein

I saw one night a Nereid white Arise from her coral caves

Her sea-green curls were pale with pearls, And her limbs were veiled with the waves. Through the moonlit foam I saw her come Up the billow-haunted shore,

And faint and sweet I heard her feet, Foam-like, through the surf's long roar; While ever the wind and the rolling waves Kept time to her song of ocean caves, That she sang to her harp of mist and moon, Of moonbeam shell, this ocean tune:--

'Come follow, come follow, to caverns hollow, That sound with the sighing sea! Come follow me o'er the waters hoar!-

Come away, come away with me! Come follow, oh, follow, to grottoes hollow, And caves that are ocean-whist.

Where the sea-weeds twine and the star-fish shine, And the rosy corals twist.

'Come follow me home on the wandering foam, That rolls my world above!

My bosom shall bear thee safely where

40/0 Add 1% to the Dividend 50/0 Add 25% to the Income 50/0

IF your savings now yield 4 per cent., and we pay you 5 per cent., we increase your income 25 per cent. Before you deal with us we shall expect to satisfy you of our unquestioned reliability. Let us place the matter before you properly by correspondence.



Assets, \$1,750,000. Established 13 years. Banking Dept. Supervision. Earnings paid from day received to day withdrawn.
Letters of inquiry solicited
and promptly answered.

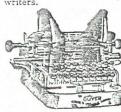
Industrial Savings and Loan Co. Times Bldg, Broadway, New York

We are in the Market for Young Men

T doesn't particularly matter to us whether you are twenty-one years old as a little whether you are twenty-one years old or sixty years young
-the vital thing is that you're thoroughly alive. You must be alive to a real opportunity for

making good money. We've got a business that's growing so fast it keeps us busy turning out the goods—Oliver Type-

writers.



In order to handle this great and rapidly growing business to the best possible advantage, we are building up a sales organization covering every section of the United States.

Now, here's our of-fer to you:

If you are properly qualified for this work, we will just draw a line around your territory, and make you the exclusive representative of the Oliver Typewriter in that field.

If you are already employed we will permit you to handle our business "on the side," in which case you ought to add at least \$300 a year to your present salary, and at the same time receive a free course in the Oliver School of Practical Sales-

-Or, if you are in a position to give us your whole time, you can, if you will, make \$300 a month or more-\$3600 a year or better.

That sounds good, doesn't it?
The proof that these figures are conservative is furnished by the experience of hundreds of those who are now selling Oliver Typewriters in exclusive territory.



The Standard Visible Writer

is compact, swift, durable, versatile. It is a visible writer. Its alignment is perfect. Its manifolding power is enormous.

It's the machine for speed, for accuracy, for beautiful, perfect work. It's a masterpiece of mechanical construction.

Applications for territory are pouring into our office rapidly from every section of the United States, and if you wish to become a local agent for the Oliver it is *imperative* that you write at

Decide quickly and get your application in by the first mail.

Every tick of the clock lessens your chances.

THE OLIVER TYPEWRITER CO. 130 Wabash Ave., Chicago

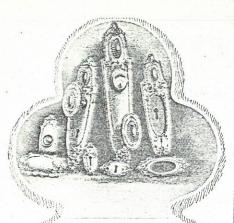


SECURED by first mortgage on New York City improved real estate, and a guarantee fund of 10% of the face value of all mortgages in force.

This corporation is subject to examination by the Superintendent of Banks of the State of New York.

(Established 183) New York City 38 Park Row

A char HOW ming and helpful book for girls by Frances E. WILLARD. "It breaties the best TO thoughts and the noblest emotions of the its gifted author." Hardsome's bound in cloth. WIN Price, \$1 cbnk & WAGNALLS CO., NEW



The Key to Artistic Home Building

When you build your new home select your hardware trimmings to suit your own taste.

Get "Sargent's Book of Designs." It will give you assistance. Fifty-eight beautiful reproductions of Artistic Hardware, covering every phase of hardware d'corations.

Sargent's ARTISTIC Hardware

represents the master creation of leading artists in every school of architecture, from severe Colonial to elaborate Renaissance.

Sargent's Easy Spring Locks have least friction and give longest wear.

But get our Book of Designs. It is of practical importance to all home builders. Free on application.

> SARGENT & CO., 160 Leonard St., New York.



Nearly everybody can wear "Shur-Ons." Enough shapes to fit almost may nose. Neat, comfortable, steady, and won't come off till you take them off. At all opticians "Shur-On" on the mounting. Any broken part of

mountings replaced free within one year by any optician in the United

States.
Violumble book free. "Eyeology" is full of information on the care of the eyes. Send vs your optician's name and get a copy free.
E Kirstein Sons Co., Dept. E.
Established 1864 Rochester, N.Y.

Section of the section of the section of

example will not be thrown away upon those who aspire to lead in politics." The following review of his successful campaign for the office of governor appears in the Cincinnati Enquirer:

"The last political campaign in Ohio was one of the most remarkable in the history of the State. Mr. Pattison was a regular party nominee for Governor, with his views on all public questions written in his career and achievements. They were not uniform in party alinement. He was elected by a majority which the opposition would have been glad to have accepted as equal to the average on their side. All the rest of his ticket fell by the usual arithmetic of disaster. The triumph was perspicuously personal,

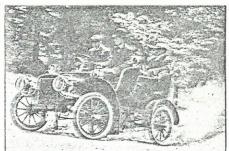


JOHN M. PATTISON.

tho at the same time a high testimonial to the electorate of the State, who knew they had found a man who could be relied on to cross the party lines at the right places and be responsible to the whole community at a time when independence seemed almost positively necessary. Mr. Pattison was a brave and direct man. He was skilled in the legitimate strategy of politics, but he was not a trickster or a dodger. He was a candidate for an emergency, and served the purpose faithfully and well. Whatever able and strong men may have had against the course of politics in 1905 ever, body knew that John M. Pattison had no secrets, and everybody knew where to find him. Nobody could spring a surprise upon him. His life was open for all to read, and he calmly but defiantly stood by the whole of it. Nobody will ever be able to tell now what the general outcome of his administration as Governor might have been had he lived out his term; but it may be set down with the certainty of a fixed star that it would have been approved by the conscience of John M. Pattison.'

The Coronation of an Elected King.—The coronation of King Haakon and Queen Maud of Norway was accomplished, we are told, upon an appropriation of about \$26,000. It was a very simple ceremony—almost democratic in its simplicity—and described as entirely in accord with the democratic tendencies of the new Norwegian kingdom. The Hartford Conrant thus writes of the coronation scene and the coming of the new sovereigns to the throne:

"It has been in every way appropriate for the young King and Queen, and their little three-year-old boy, to journey from Christiania to Trondhjem by sea, for the sea is about half of the possessions of Norway. Shore calls were made all along the picturesque route, with the winding fiords and great mountains on the right and the broad ocean on the left, and these brief stops have brought the new monarch and his people closer together than ever before. There have been some dinners, we believe, on the way up, but no ornate banquets or costly fêtes—nothing



Making Dust on a Hill

Every motorist knows that to "spurt" up a long hill requires a tremendous amount of reserve energy; that to reach and sustain high speed under such conditions an engine must be capable of developing great power. These qualifications have made the

not only as a hill-climber but as a car always to be depended upon, no matter how severe the service.

And with it all the cost of maintenance is so low that a small allowance for fuel and lubrication practically covers the season's outlay.

Your nearest dealer (his address will be furnished upon application) is waiting for an opportunity to tell you more about the Cadillac. See him. Also let us send our Illustrated Booklet A D

Model K, 10 h. p. Runabout, \$750. Model M, LightTouring Car (shown above), \$950. Model H, 30 h. p. Touring Car, \$2,500. All prices f. o. b. Detroit. Lamps not included.

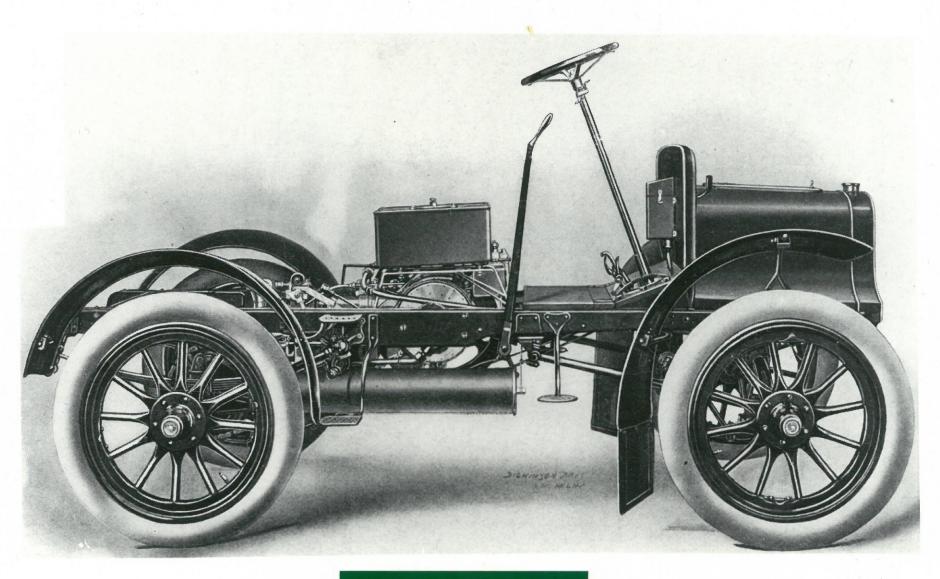
Cadillac Motor Car Co., Detroit, Mich.

Member A. L. A. M.

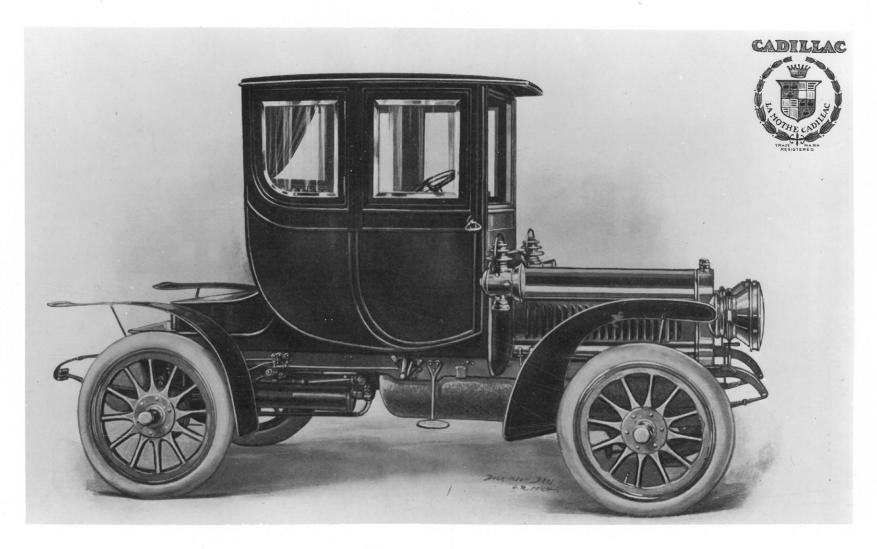


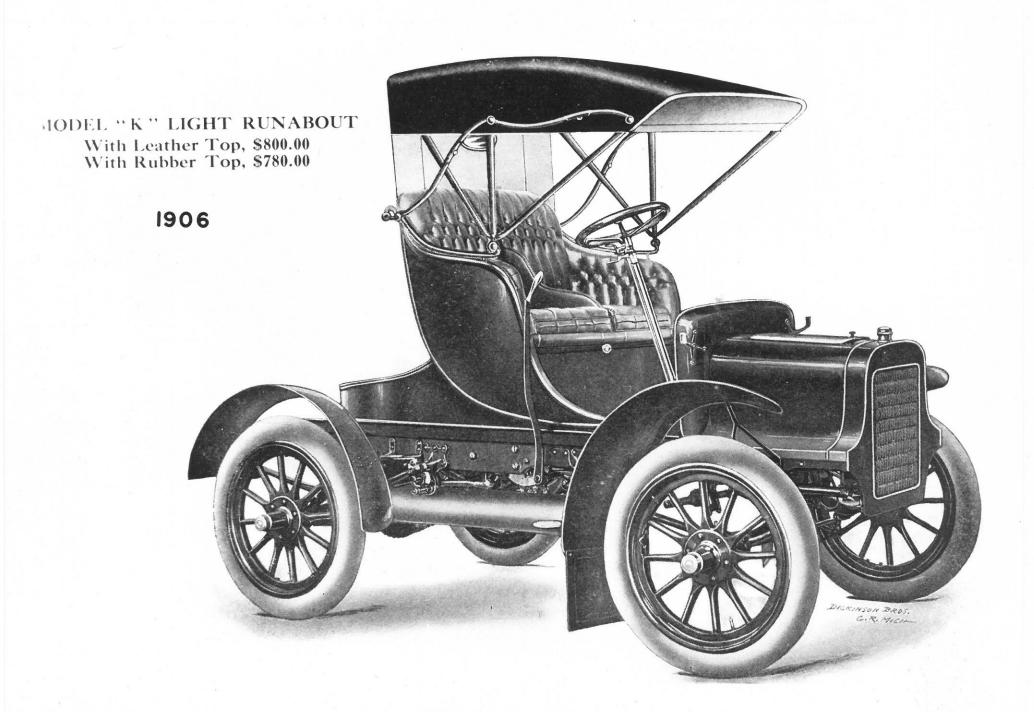
THE HAYES DEVOTED TO ASTHMA
BULLETIN and Hay-Fever. Mailed free on request.
Address Dr. Hayes, Dept. J, Buffalo, N.Y.

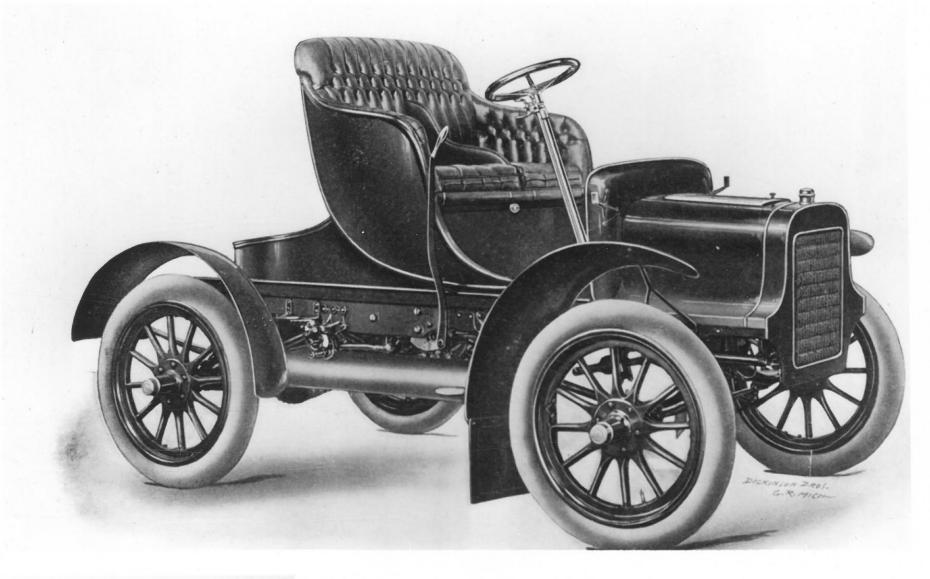
PARSIFAL. The story and analysis of Wagner's great opera, by H. R. HAWRIS. Small 12mo, cloth, 68 pages, 40c. (Hour-Glass Series.) Funk & Wagnalls Company, Pubs., New York.



1906 MODEL M

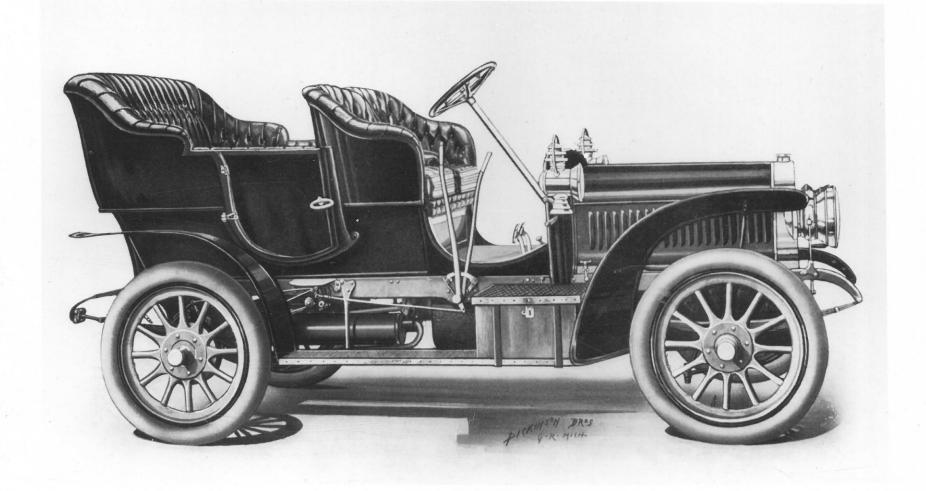






MODEL "K" LIGHTRUNABOUT Price \$750.00 F. O. B. Detroit

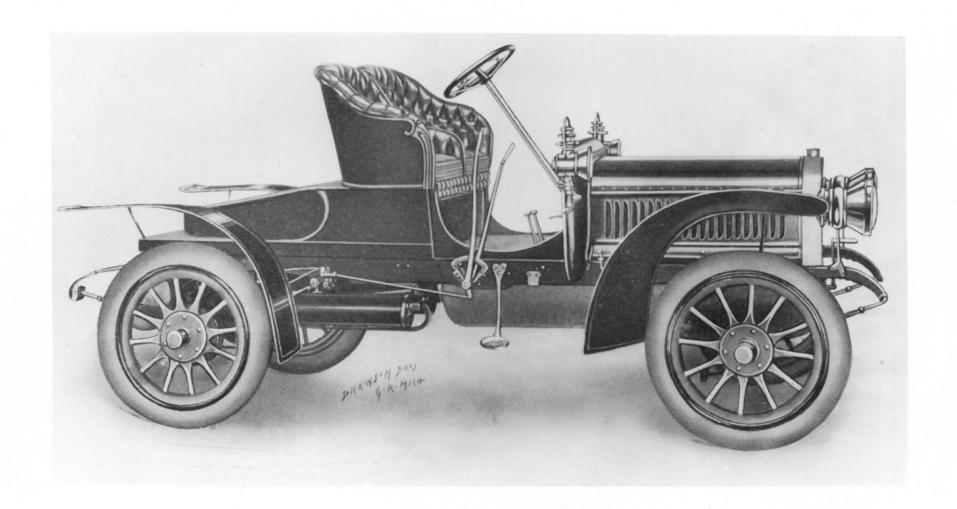
1906



1906

CADILLAC "MODEL H" TOURING CAR

PRICE \$2500.00, F. O. B. DETROIT
(LAMPS NOT INCLUDED
SEE DESCRIPTION PAGE 20.
CADILLAC MODEL H.WITH RUNABOUT BODY \$2400.00.



CADILLAC "MODEL H" RUNABOUT
PRICE \$2400.00 F.O.B. DETROIT
(LAMPS NOT INCLUDED)

1906

CADILLAC SINGLE CYLINDER MOTOR

O better evidence of the 'unparalleled success of the Cadillac Single Cylinder Motor can be afforded than the fact that we shall continue its use for 1906. As it stands today, it is in all essential features the same as used in the first Cadillac built. If there is any other motor of which a similar statement can be truthfully made we do not know of it. It was years in advance of the times and up to the present, nothing has been made to equal it, much less excel. It has been imitated but the imitations lack its power and reliability, either because their makers cannot solve the secrets, can not successfully apply the principles, or are not disposed to incur the necessary expense. Recent

examinations of several of our motors which have seen three years of

active service, have shown them to be practically as good as when new and in some respects even better than new, developing slightly more power than when they first left the factory. With proper general care and lubrication there is no reason why they will not remain serviceable for many years to come. But even granting that through neglect and abuse the replacement of some parts become necessary, it can be done at less expense and with less trouble than on any motor we know of. For example, suppose that through lack of attention to lubrication the piston or cylinder becomes badly cut. These are the most expensive parts liable to be affected by such negligence but the price of a new cylinder is only \$4.50 and the piston only \$3.50. The main bearings of the crank shaft are perhaps the most susceptible to wear from lack of lubrication. In the Cadillac motor, these bearings consist of the highest grade of babbit facing backed by a finished bronze bushing. If replacement should become necessary it may be done in a few moments, it

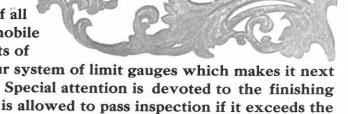
being not even essential to remove the crank shaft.

The cheap method, the one usually adopted, is to cast the babbit into the frame of the motor.

With such construction, when renewal is necessary, the motor must almost invariably be sent

to the factory for repairs to secure proper alignment. By the special methods

which we employ, our bearings are rendered much more durable tha those which are simply cast into the crank case. Interchangeability of all parts and especially those of the motor, is of utmost importance to the automobile buyer as the cost of maintenance should always be reckoned with. All parts of



the Cadillac motor as well as those of the chassis, are made according to our system of limit gauges which makes it next to impossible for an imperfectly made part to enter into their construction. Special attention is devoted to the finishing of the piston and cylinder bore which are smooth as glass and neither one is allowed to pass inspection if it exceeds the prescribed limits of measurement which are specified to the one-thousandth part of an inch. While this method and the refinement which it secures is expensive for us, it is the only correct method and contributes largely to Cadillac success.

The horse power of the Cadillac motor has always been under-rated rather than over-rated. This action on our part has been criticised by some who say we have done an injustice not only to ourselves but to the public in not making the full truth known. The fact of the matter is, this motor develops a little more than 10 horse power by actual test. We have heretofore been deterred from making the claims to which we were entitled, knowing that those who are not so fortunate as to be fully acquainted with the capabilities of the Cadillac would be inclined to disbelieve that a motor with five inch cylinder bore and five inch stroke could develop any such power, especially when general rules of mechanical calculation do not uphold such claims. But it is no longer a question for argument. IT DOES DEVELOP TEN HORSE POWER.

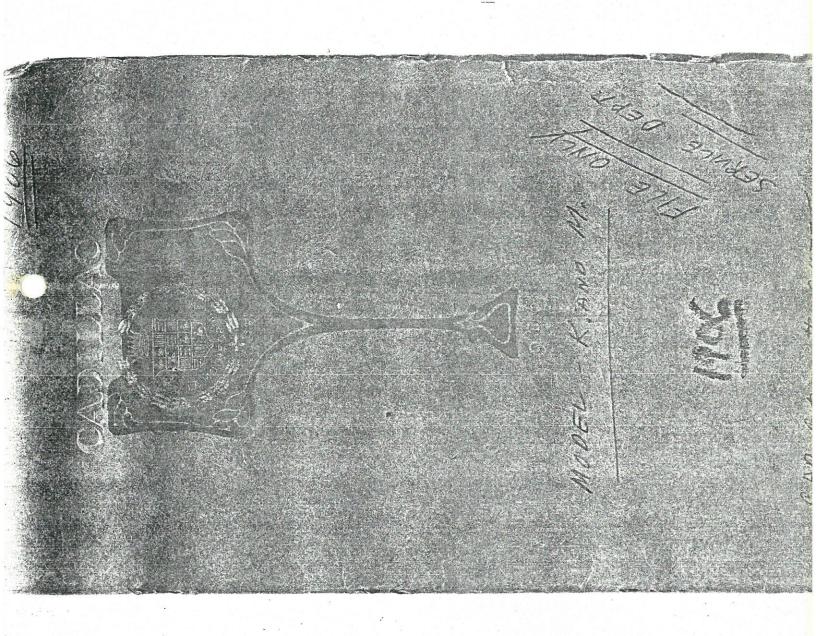
Several exclusive features contribute to this result.

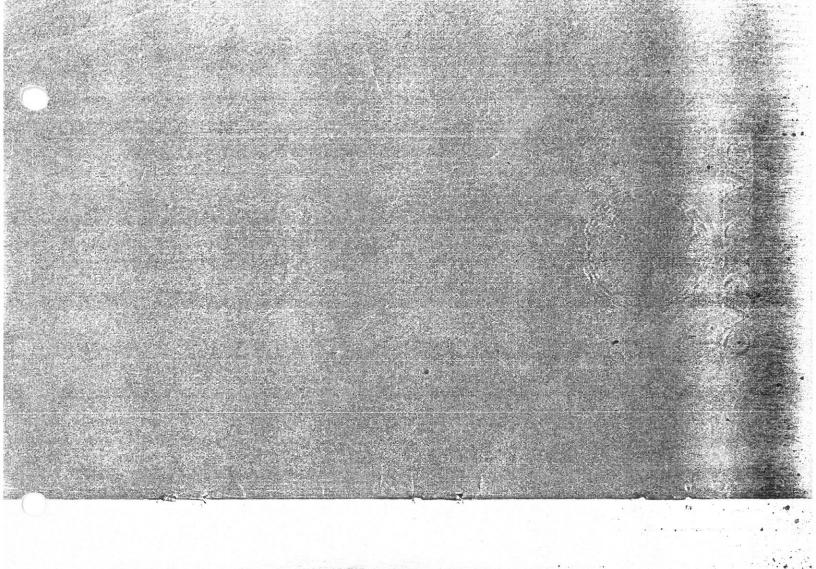
The Cadillac motor marked the beginning of a new era in the principles of gasoline engine construction and the introduction of entirely new methods in the matter of valve timing. The inlet and exhaust valves are operated independently. The inlet valve remains open longer, thereby drawing in a heavier charge and the exhaust valve is opened earlier to expel the burned charge. The Cadillac Carburetor has proven itself efficient, economical and satisfactory.

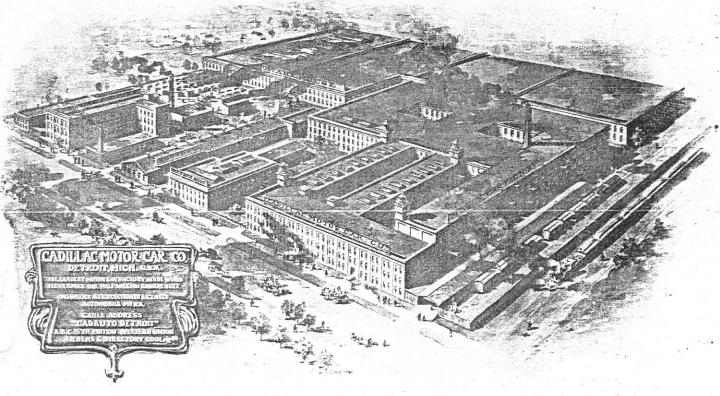
The system of water cooling is positive, reliable and adequate.

The merits of the Cadillac spark plug have been fully demonstrated.

The valves are accurately ground that no gas may escape. All finished parts are correctly fitted that no power may be lost and proper provision is made for the adjustment of all wear







The Story of the Cadillac

THE SEASON of 1905

demonstrated the unquestioned position of the CADILLAC as AMERICA'S

LEADING MOTOR CAR, a position which would have been impossible of attainment excepting as the result of "MERIT," "DEPENDABILITY" and "SATISFACTION."

The popularity of the Cadillac is evidenced by the fact, that during the past year the Cadillac Company made and sold more automobiles than any other one maker in the world, in fact nearly as many as any other two manufacturers combined.

For 1906 the already immense capacity of our plant has been greatly enlarged. The Cadillac Motor Car Company is a consolidation of the Cadillac Automobile Company and the Leland & Faulconer Manufacturing Company. The reputation of the latter for the highest grade of machine work and for excellence in motor construction is world-wide. During the past decade this Company has made more gasoline motors for automobiles and other purposes than any other factory in existence. Its product, including gasoline

motors, transmission gears, and other parts requiring the high-

est grade of material and the most skilled workmanship, had for several years been almost entirely absorbed by the Cadillac Automobile Company and the uniting of the two establishments into one Company, under one management, brings into existence the largest and most complete organization in the world for the production of high grade motor cars.

While this concentration has enabled us to lessen the cost of production, we are utilizing this saving by embodying it in the construction of the cars themselves, making improvements at every possible point and providing better and more costly equipment, with the result that in our entire line the purchaser receives the utmost possible value for his investment. We do this because we believe it is wise, because we believe it to be good business policy and because we believe it will be the most profitable in the end by reason of the increased business it will bring us.

There are few, if any, establishments sufficiently well equipped to produce cars the equal of

The Story of the Cadillac

(Continued

Cadillacs at an actual FAC-TORY COST of less than our selling prices, much less to retail them at Cadillac prices. It is only by our improved methods of manufacture and by building in the enormous quantities we do that we are enabled to offer our cars at the prices at which they are listed.

We have never been disposed to take advantage of public confidence nor to sacrifice our reputation for mere temporary gain. It always has been and it always will be our policy to offer only that which, by our own experience and at our own expense, has been demonstrated to be right rather than to formulate theories, embody them in our product, and expect the public to bear the expense of trying them out.

At times extreme pressure has been brought to bear upon us to meet passing fancies by building cars in accordance with designs which many had been misguided to THINKING were what they needed, but nich judgment, knowledge and practical experimenting had proven to be wrong in principle

or undesirable and unsatisfactory in service.

There is nothing artificial about Cadillac success. It has been acquired by genuine merit and legitimate business methods. Specially constructed cars, driven by highly paid experts prove nothing, but simply entail an enormous expense which the purchasers of such makes of cars must help to pay. We have never been compelled to engage experts to make a showing for the Cadillac, and the expense thus saved has been utilized to contribute toward selling the Cadillac at the lowest price consistent with quality.

Hundreds of wonderful performances have, however, been made by owners of single cylinder Cadillacs for their own gratification. These cars have been made to accomplish seemingly impossible feats. A mile in 1 minute 7°_{5} seconds. Five miles in 7 minutes 14 seconds. One hundred and forty-four miles over California mountains in 5 hours and

38 minutes on one seven-gallon tank of gasoline. From New York to Boston in 12 hours. From New York to St. Louis in the World's Fair Tour,

The Story of the Cadillac

(Continued)

nning a first-class certificate
and first place at the finish in competition with cars ranging in price from one to six
thousand dollars and rated at from ten to eighty horsepower.

In July, 1905, a single cylinder Cadillac was driven from Toledo to Cleveland and return, covering 244 miles actual travel, without stopping except for gasoline. The entire run consumed only 14 gallons and was made in 11 hours and 40 minutes. This was in competition with a well-known car of the two cylinder type. At the start, the two cylinder led out for some few miles, then the single cylinder Cadillac passed it and the "double opposed" was not seen again on the trip. It had not met with an accident, but owing to faults characteristic of its class, it simply did not have the STAYING QUALITIES, hence was compelled to give up the contest and return to Toledo.

The secret of Cadillac success and efficiency lies largely in the design and workmanship of our motors, and their careful installation in the chassis. We build carefully and well. No cheap or unworthy material finds its way into Cadillac motors or Cadillac cars.

We ask nothing of any buyer but an unprejudiced consideration

and comparison, piece by piece and inch by inch; then a fair trial in the hands of a competent operator, and we shall be satisfied with the decision which good judgment will render. We know there is no automobile the equal of a Cadillac at the price of a Cadillac.

Our single cylinder model is THE IDEAL CAR for the man who desires a motor vehicle from which he will derive the maximum of pleasure with the minimum of trouble and expense. In its entire design, special attention has been devoted to the importance of ready accessibility of all parts which may require attention, and the mechanical construction in general is so simple that a comprehensive understanding of the principles embodied may very easily be acquired, thereby enabling its possessor to take care of the car himself if he desires to do so, and save the necessity of incurring a heavy outlay for maintaining it in perfect running condition.

When you buy a Cadillac, you obtain the product of the largest, best equipped and most com

The Story of the Cadillac

(Continued)

plete automobile factory in the world, an organization that is permanent and from which you will be able at all times to obtain parts for replacing those which may become worn by long and continued service or damaged by accident, and not be obliged to either discard your car because of inability to procure some important part, or to have such part made specially at heavy expense.

A general feature characteristic of the Cadillac, the value of which will immediately impress itself upon the careful buyer, is the provision made for adjustments of wearing surfaces, thereby obviating the necessity for frequent renewals of parts subject to wear.

The Cadillac single cylinder cars enjoy the reputation, among those who by their experience are qualified to judge, of being the most economical to operate and the least expensive to maintain. The low cost of maintenance is in no small measure attributable to our comparatively low prices on parts, it being our aim only to make this department pay for the actual cost of the parts themselves and the expense incidental to handling them. It is due also largely to the fact that all parts are made accurately to gauge and

e absoluely interchangeable, which means that all parts of a kind are exactly alike and that when a new part is needed, it can be ordered with the assurance that it will not require altering to fit.

We have records of many instances in which these cars have been run an entire season without the necessary outlay of a single dollar for repairs or for operating, beyond the cost of gasoline and oil.

The Cadillac single cylinder cars are capable of meeting every reasonable requirement. For the business man, for the the physician or other professional man, for any man who values his time, they will soon save their cost.

They will afford more pleasure and more exhilirating recreation than the amount involved in their purchase would secure if expended for any other purpose.

They can be relied upon for service every day of the year.

They will climb any hill that any automobile will climb.

They will travel any road that any automobile will travel.

They will travel as fast as anybody ought to ride.

The Cadillac is an harmonious unit, a car upon which the public has set its seal of approval.

CADILLAC SINGLE CYLINDER MOTOR

O better evidence of the unparalleled success of the Cadillac Single Cylinder Motor can be afforded than the fact that we shall continue its use for 1906. [] As it

stands today, it is in all essential features the same as used in the first Cadillac built. If there is any other motor of which a similar statement can be truthfully made we do not know of it. It was years in advance of the times and up to the present, nothing has been made to equal it, much less excel. It has

been imitated but the imitations lack its power and reliability, either because their makers cannot solve the secrets, can not successfully apply the principles,

or are not disposed to incur the necessary expense. Recent

examinations of several of our motors which have seen three years of active service, have shown them to be practically as good as when new and in some respects even better than new, developing slightly more power than when they first left the factory. With proper general care and lubrication there is no reason why they will not remain serviceable for many years to come. But even granting that through neglect and abuse the replacement of some parts become necessary, it can be done at less expense and with less trouble than on any motor we know of. For example, suppose that through lack of attention to lubrication the piston or cylinder becomes badly cut. These are the most expensive parts liable to be affected by such negligence but the price of a new cylinder is only \$4.50 and the piston only \$3.50. The main bearings of the crank shaff are perhaps the most susceptible to wear from lack of lubrication. In the Cadillac motor, these bearings consist of the highest grade of babbit facing backed by a finished

bronze bushing. If replacement should become necessary it may be done in a few moments, it

being not even essential to remove the crank shaft.

The cheap method, the one usually adopted, is to cast the babbit into the frame of the motor. With such construction, when renewal is necessary, the motor must almost invariably be sent

to the factory for repairs to secure proper alignment. By the special methods

which we employ, our bearings are rendered much more durable tha those which are simply cast into the crank case. Interchangeability of all parts and especially those of the motor, is of utmost importance to the automobile buyer as the cost of maintenance should always be reckoned with. All parts of

the Cadillac motor as well as those of the chassis, are made according to our system of limit gauges which makes it next to impossible for an imperfectly made part to enter into their construction. Special attention is devoted to the finishing of the piston and cylinder bore which are smooth as glass and neither one is allowed to pass inspection if it exceeds the prescribed limits of measurement which are specified to the one-thousandth part of an inch. While this method and the refinement which it secures is expensive for us, it is the only correct method and contributes largely to Cadillac success.

The horse power of the Cadillac motor has always been under-rated rather than over-rated. This action on our part has been criticised by some who say we have done an injustice not only to ourselves but to the public in not making the full truth known. The fact of the matter is, this motor develops a little more than 10 horse power by actual test. We have heretofore been deterred from making the claims to which we were entitled, knowing that those who are not so fortunate as to be fully acquainted with the capabilities of the Cadillac would be inclined to disbelieve that a motor with five inch cylinder bore and five inch stroke could develop any such power, especially when general rules of mechanical calculation do not uphold such claims. But it is no longer a question for argument. IT DOES DEVELOP TEN HORSE POWER.

Several exclusive features contribute to this result.

The Cadillac motor marked the beginning of a new era in the principles of gasoline engine construction and the introduction of entirely new methods in the matter of valve timing. The inlet and exhaust valves are operated independently. The inlet valve remains open longer, thereby drawing in a heavier charge and the exhaust valve is opened earlier to expel the burned charge. The Cadillac Carburetor has proven itself efficient, economical and satisfactory.

The system of water cooling is positive, reliable and adequate.

The merits of the Cadillac spark plug have been fully demonstrated.

The valves are accurately ground that no gas may escape. All finished parts are correctly fitted that no power may be lost and proper provision is made for the adjustment of all wear Further details of these several features will be found on the following pages.



CADILLAC COPPER WATER JACKET



The Cadillac Copper water Jacket is original with us and the superiority of the system is so thoroughly recognized by other makers that a number of them are willing to pay a royalty for the privilege of embodying it in their cars. With no gaskets to burn, soak or blow out; no leaded joints to melt; no cracking of cylinder in case of a freeze up,

and but little expense in replacing cylinder if cut or worn, it is quite natural that other makers want it. These details mean little or nothing to the novice or the driver of a Cadillac, but they do mean something to the user of some other form of construction, who may have left his machine far from home and sent a mechanic to put in a

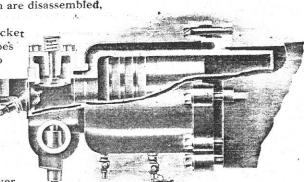
new gasket. They mean something also to the chauffeur who may have tried to start his motor with a defective gasket leaking water into the combustion chamber; or to those who have been troubled with overheated horizontal cylinders; they mean much to those who have been obliged to pay almost the price of an engine for

a new cylinder. When the parts shown in the accompanying illustration are disassembled, the list price of the most expensive piece is but \$4.50.

The cheap method ordinarily used, is to cast the cylinder and jacket together, coring to make the space between them. This usually does not produce a combination with a uniform space between the two for water circulation. The maker cannot detect the fault because of inaccessibility but it will not be long until the innocent purchaser awakens to the results of its imperfection. It will be readily understood that with the thickness of the cylinder wall not uniform, it cannot be cooled evenly throughout its entire surface, the result being that the motor cannot develop the power

which it otherwise might. The Cadillac method is the only practical and correct system of jacketing; one reason why the Cadillac Motor develops more power

than any other of equal dimensions.





CADILLAC CARBURETOR OR MIXER

ITHOUT an efficient Carburetor, no motor can develop its full power, although it may be

For the benefit of the novice it is perhaps well to explain that the Carburetor (or perfect in every other particular. mixer) is the instrument by means of which the gasoline is transformed into a vapor or gas and mixed with air. As this

gas would not ignite if drawn into the cylinder of the motor in its pure state, it must be mixed with air in order that the charge may be exploded. If the proportion of gas is either insufficient or too great, the result is an explosion of less than maximum force, in consequence of which the full capability of the motor is not developed.

The gasoline from the storage tank enters the mixer through the valve "M" (see illustration) and drops into the wire mesh "K." Air is drawn in through the intake tube and evaporates the liquid and the mixture is then drawn up and through the inletovalve at "A," thence into the combustion chamber of the motor where it is ignited by the electric spark emanating from the spark plug.

In the Cadillac Carburetor, we have a device radically different from any other, so simple that it is easily understood, yet capable of adjustment so precise as to give the exact mixture required. In addition to its advantages of accessibility

and durability, its operation is not affected by steep grades. It can be taken apart and cleaned when necessary without in the least affecting its adjustment, a most desirable feature, and as there is but one moving part, it has no delicate mechanism to get out of order. Three years of continued use has

proven its superiority as a mixer for a single cylinder motor.

It is one of the exclusive features which have helped to make the Cadillac famous.

CADILLAC SPARK PLUG

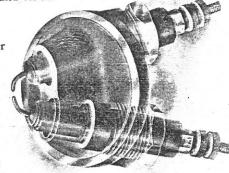
UR double insulated spark plug here illustrated is so simple that it needs no extended explanation and its advantages are so well known that it

requires no special recommendation.

It permits the secondary current to be kept separate from the other mechanism and the expense of replacing its mica cores is almost insignificant.

While we can provide for the use of ANY plug, we have not in a single instance furnished any other type. We have known many cases where this plug had been used for months until it had been befouled by carbon deposits to an extent that would have rendered an ordinary plug utterly useless, yet notwithstanding these disadvantages it continued to give reasonably good results. This plug is another of our special features and is one more reason for the constancy of the Cadillac motor.

The ease of accessibility to this spark plug is a worthy feature. It may be removed for examination in only a few seconds.



THE CADILLAC LUBRICATOR

FEATURE which will at once commend itself to everyone who has had any automobile experience is the Cadillac Mechanical Lubricator. To make a motor right, is one thing. To make provision for keeping it right is quite another. We have accomplished both. No one thing

is more essential to the life and efficiency of a motor than proper lubrication. Proper lubrication means not too little and not too much, but exactly enough.

Too much means a fouled spark plug, sticky valves and carbon deposits on piston and cylinder.

Too little means destruction to wearing surfaces.

A worn cylinder and piston means loss of compression, hence loss of power. Worn bearings mean annoying pounding and destructive vibration.

It does not require a genius to realize that the more rapidly a motor is running, the more oil it requires. The Cadillac Mechanical lubricator provides for this. It is equipped with four individual feeds, one for each of the four vital points, viz.: one to the piston,

one to the connecting rod and crank shaft bearing and one to each of the



THE CADILLAC LUBRICATOR-Continued

two main bearings. The last two mentioned requiring quantities of oil different from the first two, each of the four feeds are adjusted separately.

The simple raising of a cut-off plunger stops the oil running to the bearings and forces it up through the sight feeds so that the supplies may be regulated. When this has been done, the plunger should be pushed down and the oil will again be forced to the bearings.

An arm extends from the Lubricator and rests on the hub of the fly-wheel where it is actuated by a cam. Every revolution of the fly-wheel causes this arm to act on the lubricator pump which positively FORCES a small quantity of oil through the tubes leading to the several bearings. Consequently when each sight feed is adjusted for a given quantity of oil per minute when the motor is running at say five hundred revolutions, it must force twice the quantity when running one thousand revolutions per minute, or only half the quantity when running two hundred and fifty revolutions per minute. In other words, the motor gets no more nor no less but exactly the quantity of oil required to produce the best results.

Another feature—one of vital importance. A lubricator whose feeds and passages are small, is easily clogged with dirt, lint or "gummed" oil, rendering it but little if any better than no lubricator at all. In the Cadillac Lubricator such troubles are almost impossible as the passages are all large, hence not easily obstructed, yet it can be adjusted with unering accuracy. It is readily accessible, being located under the front seat, directly back of the heel board.



CADILLAC TRANSMISSION

HE CADILLAC transmission combines strength, durability, quietness, and requires the least possible attention. These are virtues not possessed by any other gear.



The driving gear "D" is the only part attached to the engine shaft. When assembled, the cover "C" and case "H" form an oil reservoir enclosing all the working parts, thus insuring the best possible lubrication with the least attention. It has been ONE oil hole instead of the usual ten or twelve, and will hold enough oil for several days of the hardest use.

The Cadillac Transmission is provided with two friction bands. One of these, operated by a foot lever applies the slow speed; the other, operated by the control lever, reverses the movement of the car.

By moving the rod (a) in the direction indicated by the arrow, the band (c) is closed upon the transmission gear drum, the rod (b) is fastend to the rear engine support and balances the pull on (a) so that no matter how much strain is applied through (a) there is no side pull on the transmission drum and consequently no possibility of heating the transmission drum bearings or of undue strain on the crank shaft. This of course reduces friction losses and adds correspondingly to the efficiency of the car.

If the case "H" be held by its brake band when the driving gear is rotating, all the gears in the case, except "B," run at the same speed as the engine shaft, but no

8

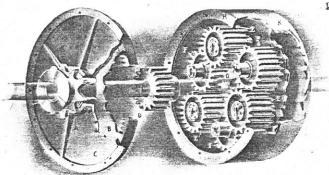
faster. The gear "B" and with it the driving sprocket "A" runs at a lower speed but in the opposite direction, thus producing the reverse. If the case be allowed to revolve, and the drum "K" be held by its brake, all the gears run at much lower speed than the engine shaft, driving internal gear "B" around slowly forward, producing the slow speed. If brake

CADILLAC TRANSMISSION-Continued

drum "K" be locked to shaft by the high speed clutch, the whole gear revolves and acts as an additional fly wheel.

By driving through gear "B" and engaging at three points, the lowest possible tooth strains are secured. All the gears are large; none of them can ever run as fast as the engine except in backing.

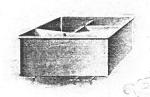
These strong points of advantage form a combination of virtues never before secured in any transmission and make the Cadillac transmission the IDEAL GEAR for its duty. By Cadillac construction the entire transmission can be removed without disturbing crank shaft. In plain words, the Cadillac gear is RIGHT. Another of the reasons why a 5x5 single cylinder engine rated at 10 h. p. has been able to do the same work as some multiple cylinder engines rated at 16 h. p.



GASOLINE TANK

HE Cadillac gasoline tank, shown in cut with top removed is easy of access, being placed directly underneath the front seat and carries

about seven gallons. It is provided with partitions at A which prevent undue splashing. The partition B forms a compartment holding about one gallon. When the gasoline in the main compartment has been consumed, the motor will of course stop, which serves notice to the driver that but one gallon remains (in the compartment) and that it will be necessary soon to renew the supply. The reserve may then be transferred to the main tank by simply opening the valve (C).

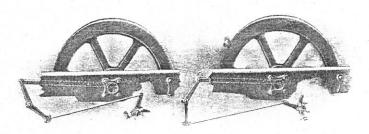


14

1 39 39 m

SAFETY STARTING DEVICE

F when starting a motor, the spark be advanced, it effects an early ignition of the charge. This causes the motor to start backwards or "kick back," which is liable to injure the operator by the starting crank striking him.



The Safety Device on the Cadillac makes this impossible.

Attached to and operating in conjunction with the spark advance mechanism, we have a safety slide. In advancing the spark lever it also moves the satety slide into a position where it obstructs the entrance of the crank, (See Fig. 2), making it impossible to start the motor until the spark lever is moved to its normal position. (See Fig. 1.)

Fig. 1

Fig. 2

COOLING SYSTEM

The efficiency of the Cadillac motor cooling system is well known. You do not see Cadillacs "hung up" on the road waiting for the motor to "cool off."

In the first place, our method of water jacketing, previously explained, facilitates a uniform cooling of the cylinders. Secondly, our radiator has ample radiating surface, and thirdly our centrifugal pump keeps the water in rapid circulation.

The pump is attached to the frame of the chassis. Being operated by the motor, the rapidity of its action is governed by the speed of the latter, which is the only practical method.

The water tank is accessible for filling by simply removing the cap from the top of the hood.

The water circulating pipes are of copper.

MUFFLER. The Cadillac muffler is an effectual "silencer" and is equipped with a cut-out which acts as a safety valve. This can also, when desired, be used as a warning signal by simply pressing with the foot on a trigger which extends up through the floor of the car.

ELECTRICAL SYSTEM. The ignition is by the jump spark system with coil and switch on the dash of the car and two sets of dry cell batteries, one for use and the other for reserve, located where they are readily accessible. The secondary wires are strung in the channel of chassis frame where they are out of the way of dirt and dampness, hence no liability of short circuiting.

CONTROL. The slow speed is applied by a foot lever and the high speed and reverse by a hand lever at the side of the car. (See explanation of action under Transmission.)

THE BRAKE mechanism consists of two friction bands which contract on the drums of the rear axle differential and are applied by a foot lever. The latter is equipped with pawl and rachet so that the brake can be held at any tension desired. Our differential drums are extra large, being nine inches in diameter thereby affording great friction surface and brake efficiency.

STEERING MECHANISM is of the rack and pinion type and is operated by means of the steering wheel.

THROTTLE and SPARK levers are placed conveniently underneath the steering wheel.

FRAMES. Our frames are of the channel pattern, pressed from a special grade of steel and tested to withstand strains much greater than they will be called upon to bear.

16

AXLES. Our rear axles are of steel tubing with high grade steel live axles, keyed to differential drums, the bearings being of the roller type. Rear wheels are keyed to the live axles sections. The Differentials are of the Brown-Lipe spur gear pattern. Front axles are of steel tubing with drop forged front wheel spindles, the front wheels be-

SPRINGS. Our springs are of the highest grade it is possible to obtain.

ing fitted with ball bearings.

We wish to direct special attention to our front spring suspension, the advantages of which will be readily understood by referring to the accompanying illustration.

On the front axle at the point of the spring suspension, a rocker joint is provided.

This joint fully doubles the efficiency of the spring and permits one wheel to pass over obstacles several inches in height or into depressions of equal depth without disturbing the "level" of the body or transmitting any material jar to the

occupants of the car. By relieving the strain on the spring it reduces breakage to a minimum. The extreme ease and comfort characteristic of the Cadillac will meet with hearty approval.

DRIVE. Hardened steel roller chain with detachable links, each link pin secured by a cotter pin. In case of accident, the replacement of a link requires but a few minutes time.









BODIES. Special attention is directed to the designs of the Cadillac bodies which are of the Victoria type and the latest conception of our builder's art. Illustrations fail to convey an adequate conception of their exquisite grace and beauty, which would be a credit to cars selling at several times our price.

The dash is of pressed steel, hollow, and substantially re-enforced.

The seats are luxuriously upholstered in genuine hand buffed leather of a color to harmonize with the panels All upholstering is tufted over coil springs and first quality genuine curled hair.

FENDERS. Our fenders are special Cadillac pattern, formed from sheet metal and so designed that they will be found very effectual in protecting both the car and its occupants.

WHEELS are of the artillery type made from specially selected second growth hickory. Rear wheels are keyed to live axle shafts and doubly secured thereto by slotted hex nuts and cotter pins. Front wheels are ball bearing with tool steel cups and cones.

FINISH. The finish of the lower part of the bodies is black while the upper parts including seat panels and doors is purple lake with light carmine striping.

The frame, axles, wheels, etc., are finished in a dark shade of carmine, striped in a lighter shade of carmine and black.

The purple lake, (a deep wine color) gives a finish of the very latest style and taste which for quiet richness and beauty will not be excelled.

EQUIPMENT. Each Cadillac is furnished with a set of tools for ordinary adjustments including a pump and repair outfit for tires.

Our prices do not include lamps, horn or other such accessories. If we were to furnish these we would simply be obliged to increase the selling price of our cars to cover the extra cost. Different persons have different tastes and requirements, therefore by our policy, each purchaser is free to choose and purchase such accessories in accordance with his individual preferences.

18



TIRES

N order to offer Cadillac purchasers the choice of a number of different tires which can be furnished without the delay usually entailed by such options, we have at heavy expense, had perfected for us a Universal Rim to which may be fitted either of the six following styles of tires.

DUNLOP TYPE
HARTFORD
MORGAN & WRIGHT
INDIANAPOLIS G & J

CLINCHER TYPE
HARTFORD
MORGAN & WRIGHT
INDIANAPOLIS G & J

Unless otherwise ordered, we will equip to this Universal Rim, the Hartford Dunlop tires on all cars listed in this catalogue. We will, however, when so ordered, equip cars with any other make of tire ABOVE MENTIONED without extra charge.

TIRE GUARANTY

All Tires and Rims used on Cadillac Automobiles are guaranteed by their makers and should be sent to them (not to us), transportation charges prepaid.

SEND HARTFORD TIRES TO HARTFORD RUBBER WORKS COMPANY AT ANY OF THE FOLLOWING ADDRESSES

Hartford, Conn.									Cleveland, Ohio Detroit, Mich.			٠				. 256 Jefferson Avenue
New York City	4		•		٠			. 88 Chambers Street 1769 Broadway	Chicago, Ill.							83 Michigan Avenue
New York City Boston, Mass.				•		•		. 494 Atlantic Avenue	Denver, Colo							. 1564 Broadway
Philadelphia, Pa.	•	,	8					138 North Tenth Street	San Francisco, Cal.	17						501 Golden Gate Avenue 380 South Los Angeles Street
Buffalo, N.Y.								. 686 Main Street	Los Angeles, Cal.		•		*	,	•	360 Bouth Los Migeles offeet

SEND MORGAN & WRIGHT TIRES TO MORGAN & WRIGHT AT ANY OF THE FOLLOWING ADDRESSES

New York City Boston, Mass. Cleveland, Ohio Dayton, Ohio	•			٠.	. 214 W. 47th Street 8 Columbus Avenue 347 Huron Street 417 E. 5th. Street 08 Hennepin Avenue	Chicago, Ill. Syracuse, N. Y. Philadelphia, Pa. Atlanta, Ga. Denver, Colo.	: .		: :	•	212-14 So. C Broad an 35 Edgew	igan Avenue Clinton Street d Vine Street rood Avenue 662 Broadway	
Minneapolis, Minn Detroit, Mich St. Louis, Mo San Francisco, Cal			•		265 Jefferson Avenue Vandeventer Avenue 1067 Mission Street	Los Angeles, Cal. Portland, Oregon						6 Sixth Street	

SEND G & J TIRES TO G & J TIRE COMPANY AT ANY OF THE FOLLOWING ADDRESSES

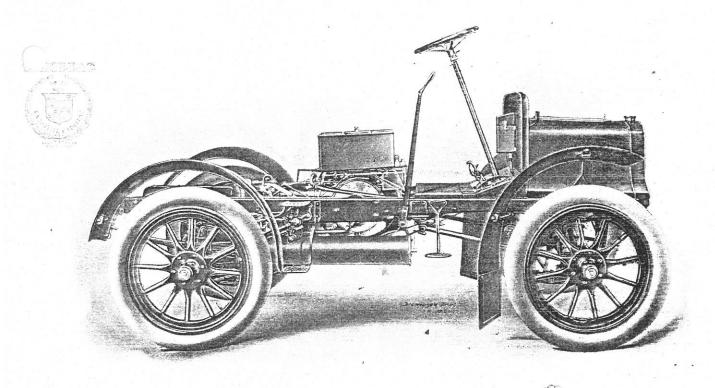
Indianapolis, Ind.
Cleveland, Ohio
Boston, Mass.
Chicago, Ill.
Detroit, Mich.
Detroit, Mich.

San Francisco, Cal.
Denver, Colo.
Buffalo, N. Y.
Philadelphia, Pa.

San Francisco, Cal.
Denver, Colo.
Buffalo, N. Y.
Philadelphia, Pa.

San Francisco, Cal.
Denver, Colo.
Buffalo, N. Y.
Philadelphia, Pa.

711 No. Broad Street



CHASSIS

70

CAD COPY \$ 26099

CHASSIS

A Summary of Points Found in All Cadillac Cars

Single cylinder 5 inches x 5 inches, 10 h. p.; water cooled horizontal motor.

Copper water jacket. (Pat. pending.)

Mechanically operated vertical valves.

Variable inlet control. (Pat.)

Two speed planetary gear. (Pat.)

Mechanical force feed lubricator.

Interchangeable adjustable motor bearings.

Safety starting device.

Pressed steel frames.

Tubular radiator.

Jump spark ignition.

Spark Coil on dash.

Brown-Lipe spur differentials.

Balanced double acting clutch bands.

Two double acting brakes, with drums keyed direct to axle sections.

Steel hubs. Rear hubs taper fitted and keyed to axle sections.

Three spring suspension with rocker joint on front spring.

Adjustable ball jointed radius rods.

Rachet foot pedal brake action.

Automatic elastic stop diaphram carburetor. (Pat.)

Rack and pinion steering gear.

Gasoline capacity, 7 gal. Water capacity. 3 gal.

Foot pedal, low-speed control.

High gear and reverse on hand lever.

PRICES ON INCOMPLETE CARS

Subject to Same Terms and Conditions as Complete Cars

MODEL "M" CHASSIS

INCLUDING DASH AND HOOD

With wheels and 30 x 3½ inch tires. \$800.00. The tires included in above prices are either the Dunlop or Clincher types made by either the Hartford,

Rubber Works Co., of Hartford, Conn., Morgan & Wright, of Chicago, or G. & J. Tire Co., of Indianapolis Ind.

BODIES

NOT INCLUDING DASH OR HOOD

MODEL K RUNABOUT BODY

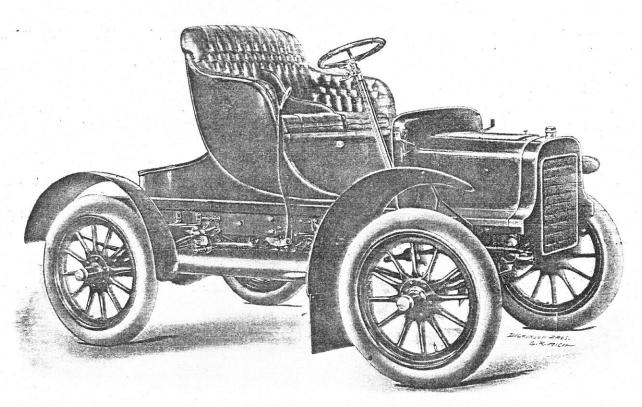
Bodies, Divided seat, standard finish, including upholstery and spring seat cushion \$75.00

MODEL M BODY

Double side door entrance, divided front seat standard color, including upholstering and spring seat cushions,

175.00

All quotations are f. o. b. Detroit.



MODEL "K" LIGHTRUNABOUT Price \$750.00 F. O. B. Detroit



CAD COPY# 19230

CADILLAC, MODEL "K" Light Runabout



HE splendid success of our last year's runabout, which proved by far the most popular car of its type, warrants us in predicting for its worthy successor, the Model K, an even greater demand.

This model includes all of the special Cadillac features described in detail on preceding pages.

The ease with which it may be controlled and handled, and the fact that it may always be depended upon makes it particularly well adapted for all around business purposes.

As a pleasure car for two persons it has never been equaled. Its light weight admits of its being geared to run at the rate of 30 to 35 miles per hour which is faster than most people care to ride over average roads.

We gear this car with 10 tooth sprocket on the motor shaft and 38 tooth on the rear axle. This gear is considered best adapted for general use on erage roads and hills. For localities where very steep grades predominate, a 10-41 combination is of some advantage while a 10-34 combination affords the maximum speed in localities where the roads are smooth and level.

MODEL "K" Light Runabout Not Convertible

Standard Specifications

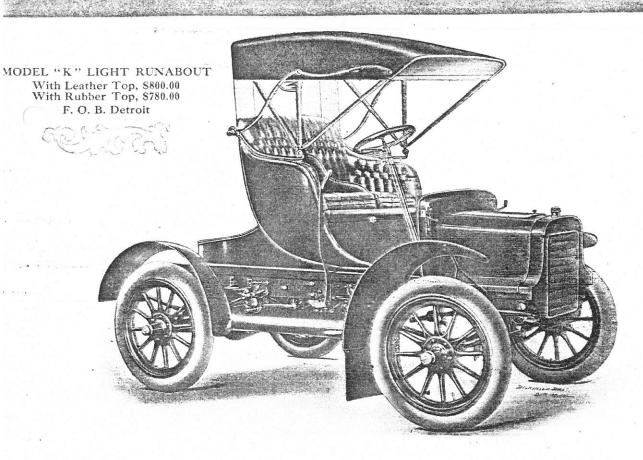
Axles .		Tu	bu	lar	Bal	1 F:	on	ıt, F	Iya	tt R	lolle	er I	Rear
Tread, .										٠	56	in	ches
Wheels,											28	in	ches
Wheel Base,											74	l in	ches
*Tires,										2	8 x 3	3 in	ches
Body-Divid	led	se	at,	trin	nm	ed	in	ha	nd	buf	fed	lea	ather
Color,													ge 18
Gear,													10-38
Weight,						Ap	pro	oxio	nat	ely :	1100	po	unds
Length over	all	1								9 f	eet :	2 in	ches
Width over	all	,								5 f	eet l	3 in	ches
Height over	all									4 10	eet (5 in	ches

Price, \$750.00, F. O. B., Detroit Equipped as above.

The following options can be furnished, subject, of course, to possible delay:

Tread, 61 inches
Gear, 10-41 or 10-34

*Unless otherwise specified, the Hartford Perfected Dunlop Tires will be furnished as regular equipment. For tire options, see page 19.





24

CAO COPY 1923

MODEL "K"
Light Runabout
With Top



UR Light Runabout, equipped with top, has in the past met with marked favor. The protection afforded in inclement weather, the ease with which the car may be handled and its general reliability, has given it a decided preference among physicians and business men whose calling necessitates their being out under all conditions.

The top is not an ordinary stock pattern but is made especially substantial to enable it to withstand the hard use to which it may be subjected.

This car will be equipped with either Rubber or Leather Top. Prices include sides and storm apron of same material.

We gear this car with 10 tooth sprocket on the motor shaft and 38 tooth on the rear axle. This combination is best adapted for general use on average roads and hills. For localities where steep grades predominate a 10-41 gear is preferable.

MODEL "K"
Light Runabout
With Top

Standard Specifications

Axles			Т	ıbı	lar	Ba	li F	го	nt,	Hy	att l	Roll	er Rear	
Tread.													inches	
Wheels												28	inches	
Wheel	Base	,										74	inches	
*Tires,											2	8 x 3	3 inches	
Body-	Divid	led	se	ea:	tri	mm	ed	in	ha	nd	buf	fed	leather	
Color,									Sta	nd	ard,	see	page 18	
Gear,											:		10-38	

Price, Leather Top, Complete with Sides and Apron, \$800.00

Price, Rubber Top, Complete with Sides and Storm Apron, \$780.00

F. O. B., Detroit

Equipped as above.

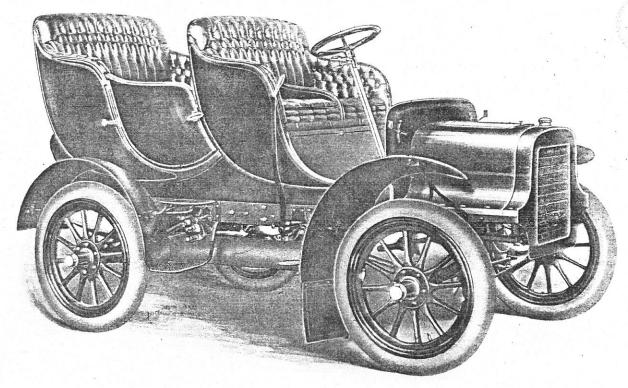
The following options can be furnished, subject, of course, to possible delay:

Tread,

61 inches

Georg 10-41

*Unless otherwise specified, the Hartford Perfected Dunlop Tires will be furnished as regular equipment. For tire options, see page 19.



MODEL "M" TOURING CAR Price \$950.00 F. O. B. Detroit With Cape Cart Top, \$1025.00

26

CAO. COPY#19228

CADILLAC MODEL "M"

Light Touring Car



N THIS model we offer a car which for general utility will not suffer in comparison with any automobile regardless of cost. No effort or expense consistent with its price, has been spared to make it all that could be wished for in a light family car easily capable of a speed of 25 to 30 miles per hour. In it are embodied all of the Cadillac special features, and we do not hesitate to assure our friends that it positively offers better value than any car selling at from 50 to 100 per cent. higher, while with the advantages it offers of economy in fuel and oil and low cost of maintenance generally, it has no competitor at any price.

The Model M is geared for maximum power and reasonable speed, the 10-41 sprocket combination being considered best for average roads and hills while for specially hilly localities a 10-45 gear may be advantageous.

It will be found a constant car, ready for service at any and all

The seats are luxuriously upholstered and the tonneau is large and

The general design is of surpassing beauty and with our superb finish, gives it a tone of quiet richness which will not be excelled.

The owner of a Cadillac Model M will never be ashamed of his car.

MODEL "M" TOURING CAR

Width over all,

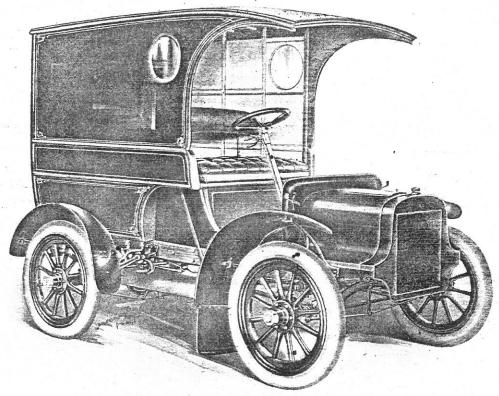
Height over all,

Not Convertible Standard Specifications

Axles	. т	ubul	ar Ba	II Fron	t-Hy	att Roller Rear	
Tread,						56 inches	
Wheels,						. 30 inches	
Wheels F *Tires,						30 x 3½ inches	
Color,						ard, see page 18	
Body-D	ouble t	side vith o	door livid	entra ed fron	nce, 1 t seat.	8 inches wide,	
Gear,						. 10-41	
Weight,				Appro	ximat	tely 1350 pounds	
Length o	ver all,					9 feet 7 inches	

Price \$950.00 F. O. B. Detroit. Equipped as above.

*Unless otherwise specified, the Hartfor Perfected
Dunlop Tires will be furnished as regular
equipment. For tire options, see page 19.



CADILLAC MODEL "M"

Delivery Car

Price \$950.00 F. O. B. Detroit

28

CDO. GOPY # 19229

CADILLAC MODEL "M" DELIVERY



N THIS car we offer a thoroughly practical vehicle for light delivery and commercial service. For the past two years we have had five of these cars in constant use at our factory, doing the work of fifteen horses. We have also supplied a large number of them to numerous prominent establishments throughout the country who require an absolutely dependable vehicle for use all the year round.

Among the various lines of business in which these cars are utilized may be mentioned, Grocery, Dry Goods, Clothing, Shoes, Men's Furnishings, Milliners, Florists, Bakers, Electrical Goods, and many others.

The experiences of those who have adopted them have been so satisfactory that we have yet to hear of the first concern who would entertain the idea of reverting to horse drawn vehicles.

For commercial service, the matters of economy in operation and maintenance are prime requisites, and the marked success which has attended our cars of this type is due in a considerable degree to these generally acknowledged Cadillas features.

MODEL "M" DELIVERY

Standard Specifications

Axles			Τι	ıbı	lar	Ba	11 F	ro	nt,	Hy	att F	Coller	Rear
Tread,											*	56 in	iches
Wheels,			٠,									30 iı	nches
Wheel B	ase.	•										76 in	nches
*Tires,			٠								30 ;	€ 3½ i	nches
Color,					12.				Sta	nd	arđ.	see pa	de 18
Gear,			,										9-45
Weight,							Ap	pro	xir	nat	ely	1400 pc	ounds

Top not Detachable.

Inside I)im	ens	ion	S	2				
Length,	-5								42 inches
Width,						,			40 inches
Height,									50 inches
Capacity,								500 to	600 pounds

Price, \$950.00, F. O. B. Detroit. Equipped as above.

*Unless otherwise specified, the Hartford Perfected Dunlop Tires will be furnished as regular equipment. For tire options, see page 19.

PRICES, TERMS AND CONDITIONS

PRICES on Automobiles and parts are positively net F. O. B. Detroit.

DISCOUNTS. We do not allow discounts excepting to bona fide automobile dealers who are properly equipped to conduct their business successfully and serve the best inter-

ests of Cadillac owners.

TERMS. Our terms on parts are strictly cash with order excepting to our regularly appointed representatives with whom we have accounts. We do not open accounts with others.

Orders accompanied by remittances will receive prompt attention, otherwise we will be obliged to hold them and write for the money.

When parts are desired by mail, the remittance must be sufficient to also cover postage. If remittance is more than sufficient, we will refund the amount overpaid.

REMITTANCES should be made by New York or Chicago exchange, Post Office money order or Express money order. When checks on local banks are sent, we hold the order until we receive returns from the check.

WHEN ORDERING, state definitely what is wanted. Do not leave anything to be inferred. Write and sign your order plainly, on a separate sheet from your letter. When ordering ANY part, always give the number of motor in your car. This is imperative. Also state the model and year's make of your automobile. A Price List of Parts will be sent to Cadillac purchasers upon receipt of request stating the Model of Car for which same is desired.

WHEN RETURNING GOODS to us for any reason, charges must be prepaid or they will not be accepted from the Railroad or Express company. They must also be tagged with YOUR name and address (or we cannot identify them) and accompanied by a letter of instructions.

CORRESPONDENCE. Our executive force is large, the finance, sales agency, order, repair and shipping departments being under separate heads. It is therefore important that correspondence bearing on different subjects should be written on separate sheets, dated and signed so that each may be sent immediately to the department to which it belongs, thereby making it unnecessary for one letter to go the rounds of several departments, which causes delay.

Address all correspondence to the Company, not to individuals.

EXTRAS. When automobiles are to be shipped long distances, singly, it is sometimes advisable to have them crated. The cost of crating is \$10.00 extra, NET.

IMPORTANT NOTICE

This book is a reprint of the general instructions covering single cylinder Cadillacs prior to 1906 but will serve for 1906 and 1907 Models K and M cars also by observing the changes explained on this sheet.

TO FILL WATER TANK

To fill the water tank in the 1906 Models K and M cars, unscrew the brass cap from the top of the hood direct y above the radiator and fill the tank from there. On 1907 Models K and M raise the cover on top of hood and remove cap from top of water tank.

THROTTLE AND SPARK LEVERS

In the 1905 cars the throttle lever was underneath the steering wheel and the spark lever was located at the right side of the front seat. In Models K and M, both the throttle lever and spark lever are directly underneath the steering wheel. The upper one is the spark lever. To advance the spark, pull this lever toward you. To retard the spark, push the lever from you.

The lower lever is to open and close the throttle. To open the throttle, pull this lever toward you. To close it, push the lever from you.

When starting the car always see that the throttle is wide open—that is, with the lever as far toward you as possible. Also be sure that the spark lever is as far from you as possible.

When operating these levers, move them straight forward or back. Do not pull up or push down on them.

THE GASOLINE TANK

The K and M gasoline tank is divided into two compartments, the large one holding about six gallons and the small one about one gallon. The latter is for reserve.

When filling the tank, be sure to open the valve which has the short stem, so that the gasoline will enter both compartments, then close the valve again so that the gasoline in the reserve compartment will be held there.

Before starting the car, see that the valve which supplies the carburetor is open; this is the valve with the long stem.

When the gasoline from the large compartment has been exhausted, the motor will of course stop, which is a notification to the driver that but one gallon remains and that the supply must soon be renewed.

The gasoline from the small compartment may then be transferred to the large one by opening the valve which has the short stem.

THE SWITCH

The switch which turns the electric current "on" and "off" is now located on the front of the coil box, which is attached to the dash of the car. When the switch is perpendicular the current is "off." To turn it "on" swing the switch to the right or left so that it contacts with one of the brass contact points. At the top end of the switch arm is a cut-out plug. This may be pulled out if desired when the car is to be left standing, for without this plug in position, the car cannot be started.

Read instructions in this book relative to use of batteries.

Instructions for Adjusting 1906 Force Feed Lubricators

On 1906 single cylinder Cadillacs, two styles of Force Feed Lubricators are in use. While the general mechanical principles of the internal mechanism are much the same in both, the connections from the motor and the method of procedure for adjusting is slightly different. In the illustrations herewith we designate these lubricators as "Style F.J." and "Style F.D."

"Style F.J." is operated by means of a roller ratchet which is connected with and operated by the motor by means of the arm (A.)

"Style F.D." is operated by means of a sun and planet gear which is operated by the motor by means of the belt which connects the pulley on the lubricator with one on the motor.

These lubricators supply oil to the motor bearings and to the piston in the quantities required according to the speed of the motor.

To fill the lubricator, unscrew the cap (C). Care should be exercised to use only a good quality of oil especially prepared for gasoline motors, and of about 600 or 700 fire test. There are many kinds of oil offered for the purpose; some good, but many bad. Get the best. It is cheapest in the end.

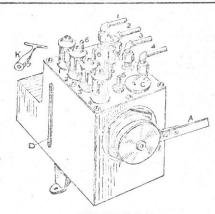
All lubricating oil should be strained through cheese cloth before placing in the reservoir, to eliminate dirt or lint. Dirty oil is sure to cause trouble.

The gauge (D) indicates the quantity of oil contained in the reservoir.

On the top of the lubricator are four sight glasses, and inside of each there is a small tube. Directly back of each glass is a square-headed adjusting stem (6, 6, 6, 6). These stems are for the purpose of regulating the supplies of oil. Back of the stems are four feed pipes (1, 2, 3, 4) which convey the oil to the bearings.

(OVER)

INSTRUCTIONS FOR ADJUSTING 1906 FORCE FEED LUBRICATOR.—Continued.

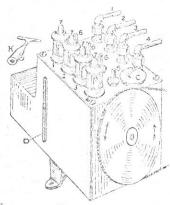


"STYLE F.J."

When it is desired to ascertain the quantity of oil supplied, or to regulate it: First raise the cut-off plunger (5). This cuts off the oil from the bearings and causes it to be forced up through the tubes (inside the glasses), where it drops down and back into the reservoir.

CAUTION

Remember that when the cut-off plunger is raised and the oil running through and dropping from the tubes (in the glasses) that the oil is not feeding to the bearings, but is running back into the lubricator reservoir. Therefore, after having adjusted the feed be sure to see that the cut-off plunger is replaced into its extreme downward position. The oil will then be forced to the several bearings.



"STYLE F.D."

Above each sight glass there is a small plunger (7, 7, 7, 7). When it is desired to ascertain the quantity of oil supplied, or to regulate it, hold down one of the plungers. This will cut off the oil from the bearing which is supplied by that particular feed and force it up through the tube (inside the glass) where it drops down and back into the reservoir. Releasing the pressure from the plunger causes the oil to resume its flow to the bearing.

Bear in mind, that when the oil is running through the tube (in the glasses) that it is not supplying the bearing but is dropping back into the reservoir.

THE FOLLOWING APPLIES TO BOTH STYES

As the quantity of oil required is different for these several bearings, each must be adjusted separately. When regulating the supply of oil, it is advisable to have the motor running at about 400 to 500 revolutions of the fly-wheel per minute. This can be determined by the impulses or exhausts. As the motor exhausts at every alternate revolution of the fly-wheel, there would be 250 impulses or exhausts per minute, with the motor running at 500 revolutions per minute, or about 42 impulses or exhausts in 10 seconds (Ten seconds timing of the motor is sufficient to determine the speed at which it is running.)

To regulate the supply of oil, attach the Key (K) to the adjusting stem (6) (back of the glass). To decrease the supply of oil, turn the stem to the left (unscrew it.) To increase the supply of oil, turn the stem to the right (screw it down).

Feed No. 1 supplies the connecting rod bearing, and should be adjusted to feed from 6 to 8 drops per minute.

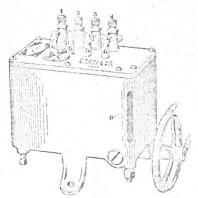
Feed No. 2 supplies the right hand main crank shaft bearing, and should be adjusted to feed 3 to 4 drops per minute.

Feed No. 3 supplies the piston, and should be adjusted to feed 3 to 4 drops per minute.

Feed No. 4 supplies the left hand main crank shaft bearing and should be adjusted to feed 3 to 4 drops per minute.

Proper lubrication of the motor is one of the most essential requisites to its life and satisfactory service, hence the importance of careful attention to the lubricator to see that at all times it is properly performing its functions.

INSTRUCTIONS FOR ADJUSTING 1907 FORCE FEED LUBRICATOR.



USED ON 1907 MODELS "K" AND "M."

This lubricator supplies oil to the motor bearings and to the piston in the quantities required according to the speed of the motor.

To fill the lubricator, unserew the cap (C). Be sure to use only a good quality of oil especially prepared for gasoline motors and of about 600 or 700 fire test. There are many kinds of oil offered for the purpose, some good, but many bad; get the best. It is cheapest in the end. All lubricating oil should be strained through cheese-cloth before placing in the reservoir, to eliminate dirt or lint. Dirty oil is sure to cause trouble.

The gauge (D) indicates the quantity of oil contained in the reservoir.

When it is desired to ascertain the quantity of oil supplied to the bearing or to regulate it, press down the knurled cap (1-2-3-4) on top of the bleeder valve body as far as possible and hold it down until the plunger (6) has completed one downward movement. This will cause the oil to stop flowing to the bearing and cause it to drop out of the bleeder valve. Directly underneath each bleeder valve there is a hole in the top

of the reservoir. When testing the supply, slide the cover of the hole around so that the oil from the bleeder valve will drop through it back into the reservoir. As soon as the pressure on the knurled cap (1-2-3-4) is released, the oil resumes its flow to the bearing.

On top of the lubricator there are four plungers (6-6-6-6), each having a sleeve on which the wrench supplied fits.

As the quantity of oil required is different for the several bearings, each must be adjusted separately. To regulate the supply of oil, attach the wrench to the sleeve of the plunger. To decrease the supply of oil, turn the sleeve to the left (unscrew it). To increase the supply of oil, turn the sleeve to the right (screw it down).

Feed No. 1 supplies the connecting rod bearing and should be adjusted to feed from 5 to 6 drops while the plunger is making one complete downward movement.

Feed No. 2 supplies the right hand main crank shaft bearing and should be adjusted to feed 2 to 3 drops while the plunger is making one complete downward movement.

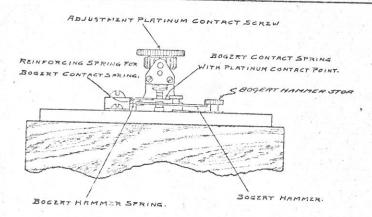
Feed No. 3 supplies the piston and should be adjusted to feed 2 to 3 drops while the plunger is making one complete downward movement.

Feed No. 4 supplies the left hand main crank shait bearing and should be adjusted to feed 2 to 3 drops while the plunger is making one complete downward movement.

Proper lubrication of the motor is one of the most essential requisites to its life and satisfactory service, hence the importance of careful attention to the lubricator to see that at all times it is properly performing its functions.

IMPORTANT

Regarding Adjustment of Coils



There is a tendency on the part of both single and multiple cylinder car owners to attempt to make frequent adjustments of the spark coil, thinking by so doing that the running condition of the engine will be improved. This, in general, is an error, as the coil is properly adjusted when it leaves this factory, and should not be readjusted until every other part of the electrical system has been inspected and tested relative to the trouble present.

Having made sure that the trouble is in the coil, proceed according to the following directions:

To adjust a standard Splitdorf coil, as used on the Cadillac single and Model H four-cylinder cars, proceed as follows: First, remove the knurled adjusting screw (adjustment platinum contact screw) and remove any little "bunches" or knobs which may have formed on its platinum point or on the platinum contact point of the Bogert contact spring or ribbon. These knobs may be removed with a very fine file or with a sharp knife.

Next, close the throttle and open the cylinder relief cock; then turn the engine until the commutator is in contact so that the primary circuit through the induction coil will be closed. Then, replacing the knurled adjusting screw, screw it down until the vibrator commences to buzz; then stop. After the vibrator commences to work, the knurled adjusting screw should be turned from three to six notches further down, stopping at the point which gives the best action of coil, spark and engine.

Do not, at any time, try to adjust the coil until you are sure that there are no knobs on the platinum contact points.

The hammer and ribbon are set at the coil factory, and should not be changed unless they have met with an accident or been tampered with. The position of the hammer and ribbon should be as follows: When the influence of the ribbon and ribbon spring has been entirely eliminated, which can be done by holding the ribbon down until it does not contact with the hammer, or the button on the hammer, there should be just opening enough between the top of the hammer and the lower side of the hammer stop to see the daylight through, or possibly 1-64 of an inch. This can only be altered by bending the hammer spring slightly and carefully. When the knurled adjusting screw has been backed out far enough so that the platinum contacts have separated, the ribbon spring should lift the hammer so that it will contact lightly with the under side of the hammer stop. When the ribbon and hammer are once set in their proper positions, they should not change for a long time.

CADILLAC MOTOR CAR COMPANY.

CADILLAC AUTOMOBILES

THEIR USE AND CARE

25

A Book of Instructions useful to drivers and caretakers of CADILLAC Automobiles. Containing also some information intended especially for the repair man and for owners who are mechanically inclined. The contents of this book have been arranged so that the illustrations and instructions necessary to the successful operation of a CADILLAC may be easily understood of the successful operation of a CADILLAC

CONTENTS CO

M

Comment Fording Cat. Cat.	~ * *											_				_		PAGE
General Explanation of the CAL	DII	لمملم	AC	ar	nd	Sug	gge	sti	ons	s fo	r	Op	era	Atii) g	San	m e	5
What to do to a New Engine																		7
How to Start the Engine .																2		9
A Few Don'ts															₩.			11
How to Inspect a CADILLAC																		13
Common Sources of Trouble																		13
Electrical Explanation																		17
Explanation of Motor .																		20
Subject of Bearings																		23
Parts and Repairs																		25
Ball-bearing Running Gears																	2	5=27
Roller-bearing Running Gears																	28	3=29

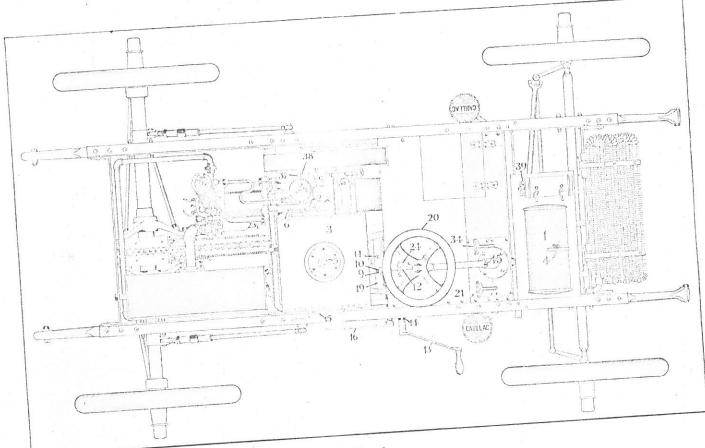


Fig. 1

WHAT TO DO TO A NEW MACHINE.

AKE out cushion in front seat, lift the seat panel and fill the water tank I (Fig. 1) through stand pipe (2) beside the gasoline tank (3). To do this, remove the plug from the top of the stand pipe (2) and insert the funnel, then pour in water until it overflows through the vent (4) in the top of the water tank (1). In extremely cold weather use a solution consisting of one part glycerine to three parts water.

Remove the plug (5) in the top of the gasoline tank (3), insert the funnel and fill with clean gasoline to within an inch of the top, straining the gasoline through a screen, or preferably, a chamois skin in the funnel, and then replace the gasoline and water filling plugs (5 and 2, Fig. 1), screwing them in firmly, but not too tight. See that the gasoline valve (6) is open and that gasoline flows freely to Carbureter (7) by lifting with the finger the priming rod (17, Fig. 3) projecting from the bottom of the Carbureter (7) until the gasoline flows out of the bottom of the Carbureter.

After an engine has stood some hours, or long enough to have entirely cooled down, the priming rod may be held up until the gasoline flows out of the intake tube before trying to start. However, if an engine has just been stopped or has stood only a short time it will usually start without priming. If it does not it should be primed, but only for a few seconds. Holding up the rod and Carbureter valve until the gasoline flows out would on a warm engine make it necessary to turn the engine over the compression possibly three or four times, as the first charges would be too rich in gasoline vapor to be explosive.

See that oil cup (8, Fig. 1) is full and feeds about 12 to 15 drops per minute. This cup and the main bearing grease cups are the most important oiling points.

Oil the transmission (49, Fig. 4) through the oil hole in the flange between it and the small driving sprocket (33). This once filled with heavy oil should last one week of ordinary usage.

The steering gear should be oiled occasionally at the top (44, Fig. 2) and bottom (45, Fig. 1) of the steering post, also on the rack (46, Fig. 3).

The wheel knuckles are oiled at 47 and 48, Fig. 4.

See that all grease cups (39, 40, 41 and 42, Fig. 4, and 43, Fig. 3) are filled. The cups 41 and 42 should be given a turn say every 50 miles and the others a turn every two or three days. A small amount of powdered graphite mixed with the grease adds materially to its lubricating qualities and to the life of the lubricant, and also gives it more body for resisting the heat.

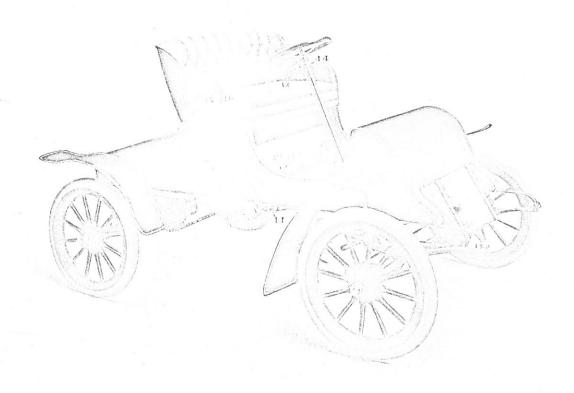


Fig. 2

HOW TO START THE ENGINE.

NSERT switch plug in either hole (10 or 11, Fig. 2) and push the throttle lever (12) under steering wheel to extreme left. Insert starting crank in either end of starting shaft (14). See that the spark lever (15) is pushed toward back of seat as far as possible. See that controller lever (16) is in neutral position so that the engine turns easily. Turn starting crank without haste in the direction indicated by arrow (Fig. 3) until the compression is felt to resist further motion, then turn the engine quickly over the compression once. If the engine does not start, lift the priming rod (17, Fig. 3) projecting from the bottom of the carbureter (7, Fig. 1), hold it up as far as it will go for a few seconds, and then turn the engine over as before.

It will be necessary to prime the engine only after standing some time.

If any doubt as to the gasoline supply is felt, the priming rod (17, Fig. 3) may be held up until the gasoline flows from the bottom of the carbureter, as it will do if the tank is filled and the gasoline valve unless there is dirt or some other obstruction in the gasoline pipe.

"A FEW DONT'S."

Don't try to start without the switch plug in place.

Don't try to start without seeing that the spark lever (15, Fig. 2) is way back.

Don't try to run without water, gasoline or oil.

Don't crank an engine, that is, don't turn it over the compression more than three or four times after priming. If it does not start at once there is something wrong. See page 13 on common sources of trouble.

Don't drive fast nor attempt to stop quickly on a wet, slippery road, or pavement.

Don't allow an automobile to stand in cold weather with pure water in the circulating system. It will freeze and burst something. In cold weather a 25% solution of glycerine is very satisfactory.

Don't run an engine fast when the automobile is standing still.

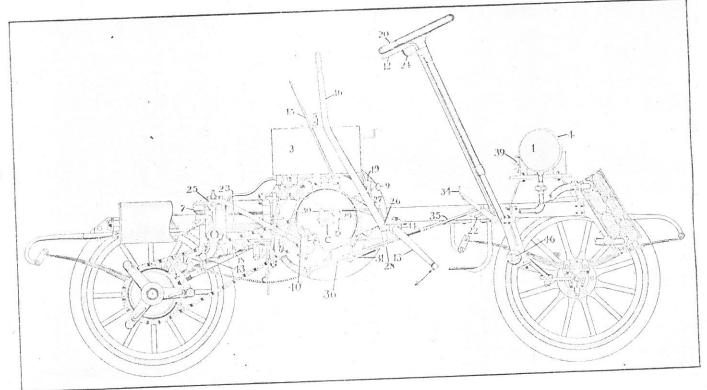


Fig. 3

HOW TO INSPECT THE "CADILLAC."

LL parts of the motor must work easily. Valves must be tight when closed, giving good compression. The spark must be good and timed to give the explosion at the proper point. The carbureter must allow a flow of gasoline when the priming rod is held up (17, Fig. 3) and must stop the flow when it is released. The carbureter valve must have the proper amount of lift to give the right mixture when running. (See L, Fig. 10.) This may be obtained by adjusting the screw N.

To see that the parts are working properly as outlined above, proceed as follows:

Open the cylinder drain valve (18, Fig. 3) so as to release the compression, then put the controller lever (16) in its neutral position, about half way between the ends of its travel. Now, by inserting the starting crank in the end of starting shaft (14) the engine should turn without any noticeable resistance. Close the valve (18); the engine should turn as easily as before, except on the compression stroke, which should give a considerable resistance to the turning of the starting crank. When the switch plug is inserted into either hole (10 or 11, Figs. 1 and 2) of the switch block (19) and the spark lever (15) is moved toward the back of the seat, the spark should occur just after the end of the compression stroke of the piston. That is, just as the resistance of the compression on the starting crank has stopped, the sound of the vibrator (39, Fig. 3) on the coil should commence. If no sound of the vibrator can be heard when turning the engine over slowly by hand at the end of each compression stroke, the electrical outfit should be inspected separately. See electrical explanation (Fig. 5).

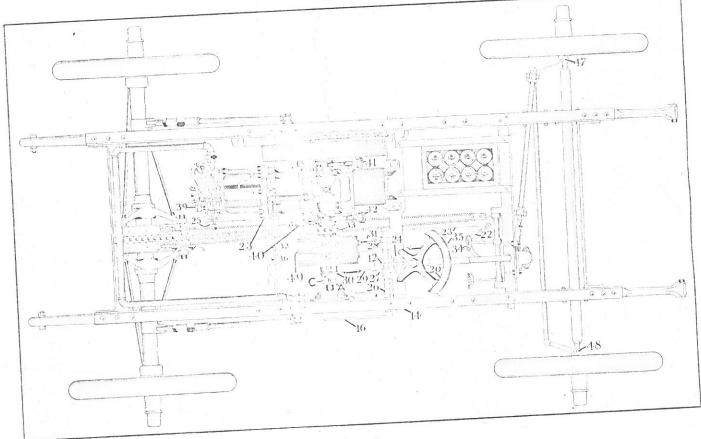


Fig. 4

General Explanation and Suggestions for Operating.

HIS is not an explanation of the working of the motor (see page 20), but an explanation of the way in which an operator should handle the automobile with the motor.

The speed of the motor is controlled by either or both of two methods. An examination of cuts (Figs. 1, 3 and 4) will show how the throttle lever (12) just under the steering wheel (20) extends down below the floor (21) and ends in an arm (22) which is connected to the rod (23, Fig. 4) so as to move the rod (23) endways as the lever (12) is shifted in its quadrant (24). Trace the rod (23) back and it will be seen to engage endways as the lever (12) at its rear end in such a manner that the throttle cam (25) is shifted by any endwise movement of the rod (23).

The shifting of the cam (25, Fig. 3) increases or decreases the size of the opening into the cylinder through which the explosive mixture of air and gasoline must pass, thereby increasing or decreasing the amount of the charge which, of course, has a corresponding effect on the speed and power of the engine.

The other method of controlling the speed and power of the motor is to change the time of igniting the compressed charge of gasoline and air. Three simple facts should be remembered in connection with this timing of ignition.

First: The lever (15) must be as far back as possible in starting the engine to give a late spark and avoid an explosion that will throw the crank in a reverse direction.

Second: The faster the engine runs the farther forward the lever (15) may be placed, giving an earlier spark.

Third: When the engine is slowed down on a hill or bad road it will pull better and is less liable to be stopped by an overload if the lever (15) is kept farther back than at high speed. To keep this lever as far forward as possible without making the engine pound or jerk means a greater amount of power for a given amount of gasoline.

Figs. 3 and 4 show the method of engaging the different gears. The controlling lever (16) is attached to the controller shaft (26), which has attached to it two arms (27 and 28). Arm 27 has attached to its end a rod (29) which engages and controls the high speed clutch (30). Arm 28 has attached to its end a rod (31) which engages and controls the reverse brake band (32). If the controlling lever be moved forward, the arm (27) and rod (29) cause the high speed clutch to lock the transmission gearing all together so that it revolves with the engine shaft and acts as an additional fly wheel, carrying with it the driving sprocket (33).

It will thus be seen that when the automobile is being driven with the high speed gear in operation, there are no gears running and no loss of power between the motor and the ground except the friction of the chain and rear

If the controlling lever (16) be moved back, the high speed clutch releases, leaving the engine free to run without driving the automobile. This is the neutral position. If the controlling lever be moved still further back it is evident that the rod (31) attached to the arm (28) will be drawn forward and by its engagement with the reverse brake band (32) will close the band upon its part of the transmission gearing. When that part of the transmission gear within the reverse brake band (32) is prevented from turning, the sprocket (33) must turn in the opposite direction from that of the motor, but at a slower speed. It is apparent that the band (32) may be made to clasp its part of the transmission gearing more or less closely, allowing more or less slip. This, with the abundant strength of the gears, makes it possible and safe to use the reverse as a brake for ordinary needs.

A slow speed or hill-climbing gear is provided and works as follows (shown in Figs. 3 and 4):

If the controlling lever (16) be in the neutral position, that is, with both the high speed clutch and reverse brake band released, and the slow speed foot pedal (34) be pushed forward it moves with it the attached rod (35), the other end of which engages the slow speed brake band (36) which, when moved forward by the pedal (34), closes the slow speed brake band (36) upon its part of the transmission gearing. When the part of the transmission gearing clasped by the brake band (36) is prevented from turning, the driving sprocket (33) must revolve in the same direction as the engine shaft, but at a slower speed.

COMMON SOURCES OF TROUBLE.

- Inadequate lubrication.
- Imperfect vibrator action. The vibrator (39) can be seen by opening door of tool box.
- Worn out batteries.
- Loose or broken wires.
- A weak commutator spring.
- Tight brake bands or any imperfect adjustment.
- Dirty gasoline.
- Water in the gasoline.
- 10. Frozen circulating water.
- 11. Lack of circulation of water.
- 12. Charred or sticky valve stems.

OMMON sources of troubles do not include accidents, possible defective material and such things as may be termed occasional or accidental troubles, so that in dealing with common sources, remember that the difference between a comprehensive understanding of your automobile and the superficial knowledge possessed by many owners and drivers is the difference between having troubles and annoyances and not having them. Familiarity with a machine does not call for special mechanical ability, only a careful study of the directions and explanations contained in this book, and a common sense application of them to your automobile.

Of the common sources outlined above, the first, inadequate lubrication, is by far the most detrimental, as it may ruin all of the most important wearing surfaces of the engine. Use the utmost care and vigilance to see that the sight feed oil cup (8, Fig. 1) is turned on when running and is feeding about 15 drops per minute on a new machine. This feed may be reduced to about ten drops after a few weeks use.

Of equal importance are the two grease cups (41 and 42, Fig. 4) which lubricate the main shaft bearings. These should be kept with a good quality of light grease (not oil) and should be given a half turn every fifty

Next in importance is the transmission gear which should have about half a pint of heavy oil every three or

four hundred miles of use. This rule applies to average conditions. If a car were used in a level, well paved city, oiling every thousand miles would be sufficient. If used on hilly, muddy or sandy roads where the hill-climbing gear is used much, one hundred miles might be far enough on one oiling, although that would mean exceptionally severe conditions.

After these come the minor oiling points that need attention occasionally, say from two days to a week, depending on conditions of use.

Referring to Fig. 4, the most important would be the high speed clutch (30). There are two cam rings here that do not revolve, and that bear against the clutch disc on one side, and against the adjusting nut on the other, having a race of balls at each side which should have a little oil occasionally.

The three grease cups (39, 40 and 43, Figs. 3 and 4) and the rolls which operate the inlet valve at (25) should have occasional attention. This makes a total of only nine places to oil on both the engine and the transmission gears. Remember that a properly oiled and adjusted engine may be turned by one finger against a spoke of the fly-wheel.

Troubles Nos. 2, 3, 4, 5 and 6 will all give the same symptoms: uncertainty in starting, skipping of explosions and irregular action when running.

The least liable to occur and the easiest to discover is (6) a weak or broken commutator spring. Stand on the left side of the car and look under the side of the body through the fly-wheel and the commutator and its actions can be plainly seen and easily reached.

Spark plugs that have become sooty from excess of oil and long use, or that have the sparking points too far apart, must be removed, and if dirty, replaced by clean ones; or if the gap is too wide, the wires (1 and 2, Fig. 5) should be bent until there is a space between them of from 1/64" to 1/32", or a little more than the thickness of an ordinary card.

The vibrator on the coil should be adjusted to give a rather low musical note. The lighter the tension on the vibrator spring, the lower the note and the less current will be used, giving correspondingly longer life to the batteries. Sufficient tension, however, must be used to give a regular action.

When the contact points on the vibrator become worn until the surfaces become large and the action uncertain, the contact screw should be removed and the platinum on its end ovaled to give a smaller contact surface.

Troubles Nos. 4 and 5 must be discovered by inspection. In an engine well cared for and properly adjusted so as to turn easily, nearly all failures to start promptly and run regularly are electrical, easily found and quickly remedied.

Do not waste time and patience cranking an engine, for if in proper condition it will start as surely and run as regularly as a locomotive. The conditions necessary are easily understood and quickly attainable.

No. 7. An engine which when turned over for starting shows good compression, gives one explosion and fails to go far enough to get a second explosion, is out of adjustment. That is, there is too much friction somewhere, usually in the adjustment of the clutch or brake bands.

No. 8. The engine is provided with a settling chamber or dirt trap in the gasoline pipe just before it reaches the carbureter. This will arrest a limited amount of fine sediment, but should too much dirt find its way into the gasoline tank it may either stop up the pipe or carbueter valve.

The cover of the carbureter may be removed by taking out the four screws that hold it in place and the dirt washed out. By removing the settling chamber also, gasoline may be poured through the carbureter backward to make sure of absolute cleansing. This trouble, with ordinary care, ought never to be met with, but is easily discoverable either by a continuous flow of gasoline from the bottom of the carbureter when the engine is not running, or a failure to flow when the priming rod projecting from the bottom of the carbureter is held up as far as it will go. Do not readjust the carbureter after it has been right until you are sure it is clean. The adjustment will not be altered by the removal of the cover.

No. 9. Water in gasoline. This should never happen, but to remedy this fault, remove the settling chamber at the carbureter, also plug from the bottom of the gasoline tank and completely empty the pipe and tank and then fill with clean gasoline.

Nos. 10 and 11. Always be sure that you have water in the circulating system, and if the weather is cold see that the pump is not frozen, by trying the pump driver (A, Fig. 4) and see that the pump spindle turns freely before starting the engine. Otherwise, if you have no anti-freezing mixture, and the pump has frozen, you may break the blades inside loose from the shaft. Of course some mixture to prevent freezing must be used in cold weather.

No. 12. One of the most annoying troubles, and sometimes the most difficult for an amateur to locate, is a sticky exhaust valve stem, causing the valve to stay off the seat and thus lose all the compression, or seat so slowly that the engine will start but not run up to speed. This seldom occurs unless a great excess of oil has been used in the large cup, causing it to work back through the combustion chamber and burn on the exhaust valve stem. This trouble can be quickly and easily remedied by taking off the spark plug cap and working the valve by hand, using kerosene or gasoline to wash the thick oil off the stem.

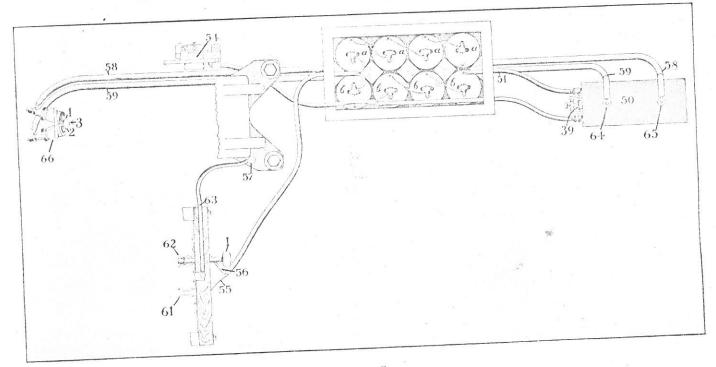


Fig. 5

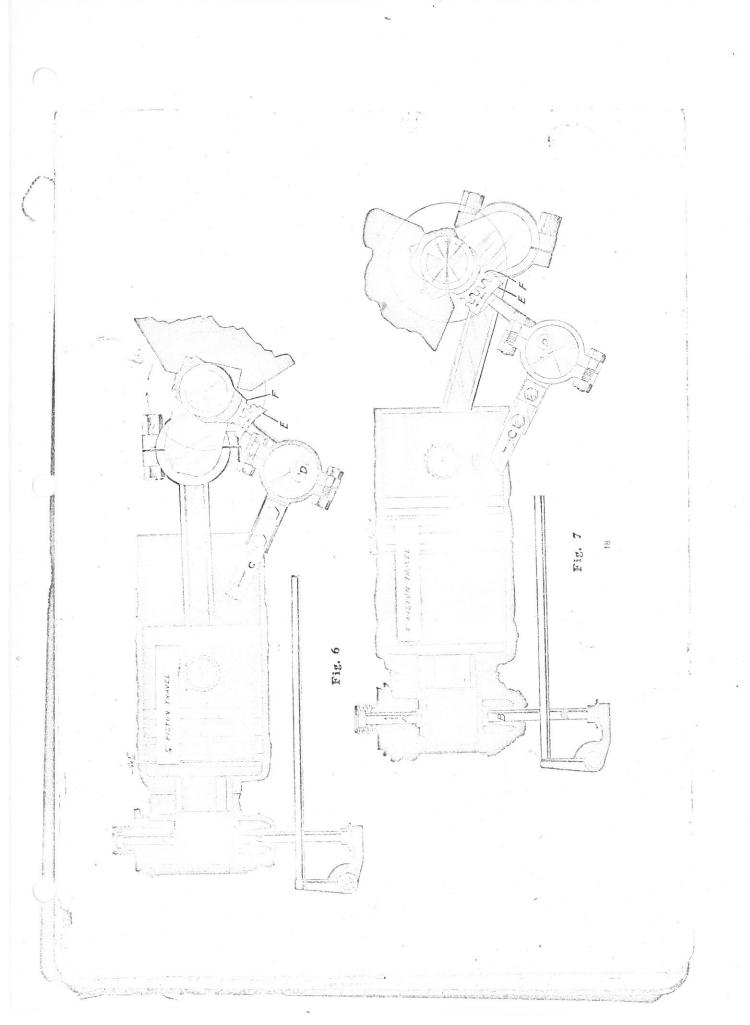
ELECTRICAL EXPLANATION

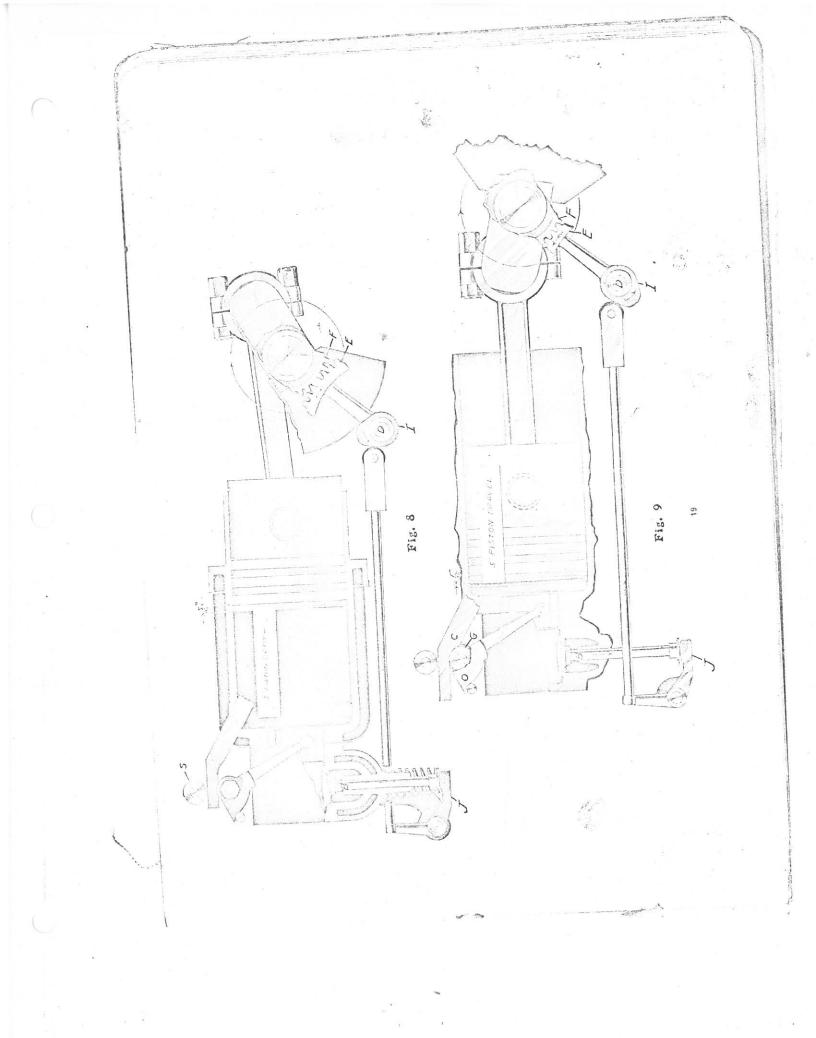
→ 1GHT cells are used, wired as shown in cut, giving two separate and independent batteries, each consisting of four cells in series. The cells of each battery are lettered aaaa and bbbb respectively, and care must be taken in re-wiring new batteries so that the current will flow in the same direction in each battery; that is, connect the wire (51) to two similar binding screws as shown, and to the two separate wires in the single insulation (55-56) connect the two opposite terminals of the batteries. These two wires (55 and 56) are connected to the two outer leaves or fingers of the double switch (61-62), the two inner leaves being connected to the wire (63) which is in turn connected to the engine at (57). When the plug (1) is inserted in either hole of the switch block, it completes an electrical connection between one terminal of one battery and the frame of the engine; now when the shaft of the engine is revolved, either by hand or by the power of the engine itself, the commutator (54) completes at every other revolution of the engine shaft, an electrical connection through the spark coil (50) and one terminal of both batteries. However, since there is a plug in only one hole of the switch

At the point (39) on the coil there is a magnetic circuit breaker called the vibrator, which, when properly block, only one battery has a complete electrical circuit. adjusted, makes and brakes the circuit through the primary winding of the coil, so long as the primary or battery

These pulsations of the battery or primary current through the primary winding of the coil cause an electrical current to pulsate through the secondary winding, if the circuit of the secondary be completed by connecting the circuit is complete everywhere else. binding posts (64 and 65) together. This secondary current is so powerful that a small gap may be left in the circuit and still the electric current will pulsate through the secondary winding, causing a spark to occur at the break. By the use of the heavily insulated wires (58-59) and the insulated plugs in the sparking device (66) this gap in the secondary circuit is placed inside the cylinder so that when the commutator (54) completes the primary electrical circuit through one battery and the primary winding of the coil, the action of the vibrator causes electrical pulsations in the secondary circuit which produces a series of sparks at the gap (3) which, being inside the cylinder or combustion chamber, sets fire to the compressed mixture of gasoline vapor and air.

The time of this lighting or igniting process is controlled by shifting the position of the commutator (54) so that it completes the primary or battery circuit at different times. For example, when turning the engine by hand to start it, the spark lever at the left of the seat must be pushed completely back, shifting the commutator so that the spark will occur at (3) just after the end of the compression stroke firing the charge, so as to give the engine a forward start. After the engine has started the lever may be brought forward so as to light the charge earlier, which gives more power and speed (provided it is not overdone) which is always indicated by the pounding of the engine.





THE following is an explanation of our four cycle motor. The cuts; (Figs. 6, 7, 8 and 9) show the correct timing of the valves. The same letters refer to the same parts in the different cuts. The piston travel indicated by the white space shown on cylinder i's five inches.

Fig. 6 shows the beginning of the first or suction stroke of the cycle. At 1/16 inch past the center the inlet valve (A) commences to open, which allows the vapor supplied by the carbureter (Fig. 10) to be drawn into the cylinder, the motor running as indicated by arrows. During this stroke the exhaust valve (B, Fig. 6) is closed. The inlet valve (A) is opened by the eccentric rod (C), its movement being controlled by the eccentric on the secondary shaft (D). This shaft is driven one half the speed of the motor by the two to one gear (E) and pinion (F).

The way this inlet valve (A) controls the spectage bower of the motor is taken up in Fig. 10 and the

accompanying explanation.

-Fig. Z illustrates the beginning of the second or compression stroke at the closing point of the inlet valve,

The piston, traveling as indicated by the arrow, compresses the charge, which is ignited at or before the end both valves being closed during this stroke. of this stroke by the spark plug (see electrical explanation), and drives the piston forward to the position as in Fig. 8. During these two compression and working strokes both valves (A and B) should be closed.

Fig. 8 illustrates the end of the third or working stroke of the cycle where the exhaust valve commences to open 5/16 inch before the center. During the fourth or exhaust stroke the gases are expelled from the cylinder through the valve (B). The exhaust valve (B) is operated by the cam (I) which pushes the exhaust rocker arm (J) and lifts the exhaust valve (B).

Fig. 9 shows the position when the exhaust valve (B) has just closed just 1/32 inch past the dead center. The inlet valve (A) will open 1/32 inch later, admitting new vapor as in Fig. 1.

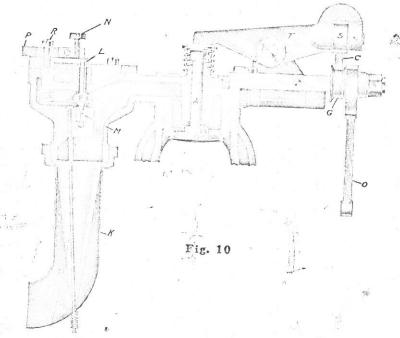


Fig. 10 is a sectional view of the carbureter and inlet valve mechanism. The air is taken in at the lower end of the carbureter pipe (K). The intake of the air caused by the suction of the piston lifts the valve (L) and the valve (L) to lift from its seat just far enough to admit the proper amount of gasoline to form with the in-going air a proper mixture.

Any variation of the speed of the engine varies the velocity of the in-going air, which correspondingly varies the suction at point (M), thus automatically increasing or decreasing the gasoline flow as the amount of air adjusted only in case of improper mixture.

As shown in Fig. 10, turning down this screw (N) dimishes the size of the opening of the carbureter valve (L), and screwing it increases the size of this opening, the first reducing and the second increasing the amount of

To use the least possible amount of gasoline that will explode properly means the greatest possible power for gasoline fed.

Just how the spark is advanced or retarded in the CADILLAC has already been taken up (see page 17). the least possible fuel.

The time of the spark should always be regulated according to the speed of the motor.

When the ignition occurs before the end of the compression stroke it is called "lead," and should be just sufficient to bring the point of the maximum pressure at the beginning of the working stroke.

"Lead" or advancing of the spark is required because of a delay in the process of ignition which takes time to fully burn the charge. Thus it will be seen that the faster the motor speeds the earlier the ignition should take place and the spark lever should be gradually advanced as the motor speed is increased. Too much "lead" decreases the power of the motor and is disastrous by causing pounding on the bearings. In hill climbing, where the motor speed is slower under the increased load, the "lead" should be retarded gradually to the proper point so as not to

The speed of the motor is controlled by the cam lever (O), which throws the roller (G, Figs. 9 and 10) farther under, the lever (C) giving the roller (S) on lever (T, Fig. 10) more or less throw, thus giving valve (A) more or cause pounding.

To get the best results, the speed and power of the engine should be controlled by the throttling of the less opening, admitting a greater or less amount of gasoline and air.

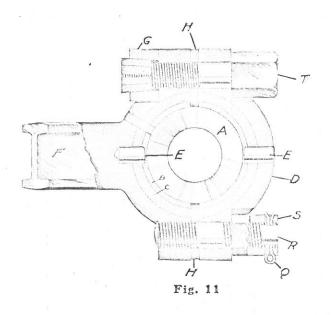
In getting a car under way, have the throttle wide open and the spark rather late, start the car on the low charge and by changing the time of igniting it. gear, then release the low gear pedal and throw in the high speed clutch (not all at once), letting it slip a little

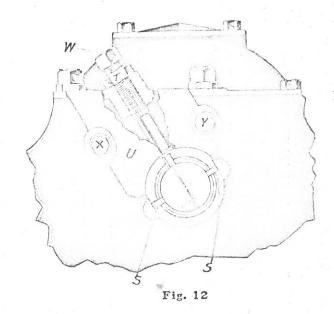
After the car is fairly going obtain the desired speed by varying the position of the throttle lever under the so as not to throw too sudden a load on the engine.

To get the greatest efficiency, keep the throttle as nearly closed and the spark as early as will get the desired steering wheel.

An engine will do its heaviest pulling with the throttle wide open and the spark advanced a trifle. speed without making the engine pound or jerk.

However, do not set the spark early enough or close the throttle enough to make an engine pound: it injures the engine.





BEARINGS.

Fig. 11 shows the crank pin of the connecting rod in section.

A is the hollow crank pin, B and C are the babbitt facing and bronze backing of the removable bearings.

D is the cap of the rod F.

EE are the dowels that keep the bearings in place.

T and R represent a cap screw and stud respectively which hold the cap to the rod.

Q is a cotter pin for locking the nut S on the stud R, which passes through a hole in the end of the stud and engages the slots in the end of the nut to prevent its turning.

The cap serew (T) is kept from turning by the lock nut (G).

In the engine the cap screw (T) and its lock nut (G) are readily accessible by simply removing the small

Quite a wide arrangement may be made by loosening the lock nut (G), tightening up the cap screw (T) and hand hole cover on the top of the engine frame.

When greater adjustment is required than can be obtained by the method described in the last preceding paragraph it may be accomplished as follows: First loosen up the cap screw and remove the cotter (Q) from the stud (R), then take up part of the necessary adjustment with the nut (S) and insert a new cotter through the

Be sure to spread the open end of the cotter so that it cannot work out. Then take up the bearing properly hole in the stud, engaging a different slot in the nut.

By removing the nut (S) and cap screw (T), the cap (D) may be removed and new bearings fitted to the with the cap screw and lock nut.

Fig. 12 illustrates a side view of the crank bearings with part broken away, showing the adjusting screw (W). To remove the cap (U) loosen the set screw (W) and take out cap screws (X and Y). To adjust this box, loosen jamb nut (T), screw down the screw (W), or if worn very loose, use thinner liners at SS.

All bearings must have a very slight amount of freedom to give oil room. If you are not accustomed to

The tension of the high speed clutch is regulated by the adjusting nut (C, Figs. 3 and 4). This nut screws making such adjustments, have some one of experience make them for you. on the end of the engine shaft and is locked by the set screw (D, Fig. 3), which is pointed and is screwed down

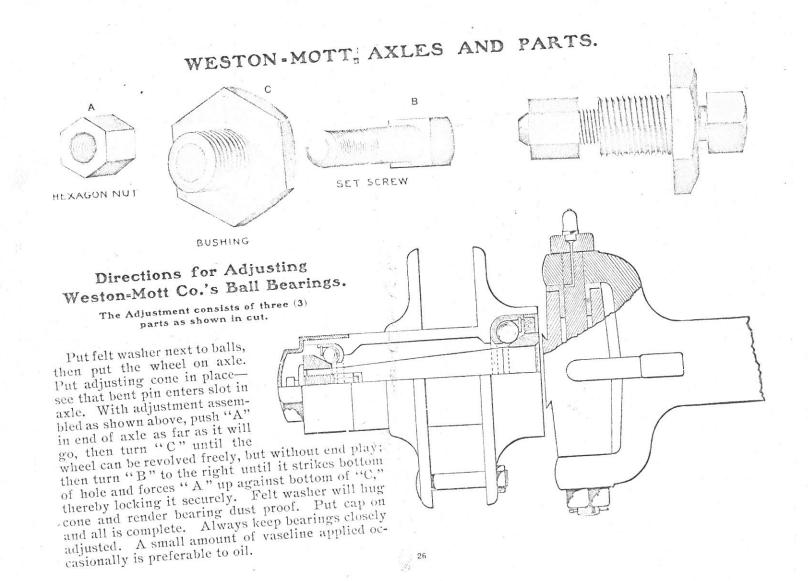
When, by reason of the wear of the leather friction surfacing on the clutch, it will not hold the full power of into one of four grooves cut in the threaded end of the crank shaft. the engine, the set screw (D) should be screwed out of the slot and the nut turned one-quarter of a turn in the same direction as that in which the engine runs, so that the set screw will go into the next slot, then screw it in

Do not screw the set screw in against the thread; it will spoil it and will not hold. tight and lock firmly with the lock nut.

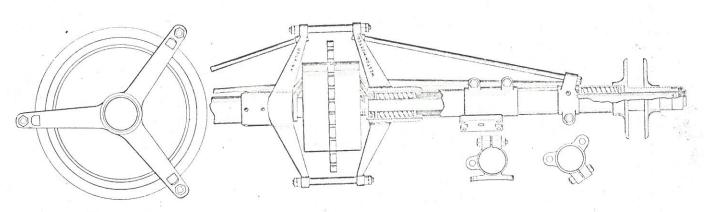
Be sure that the point enters a slot.

PARTS AND REPAIRS.

F you should need extra parts for the CADILLAC be sure to order them through the Agent from whom you have purchased the automobile, and at the same time give him the number stamped on the top of the engine. By so doing you will get quick delivery, as we can in no case send out parts to owners unless they come through the agents' hands. Make the order for all parts possible by number or, when not numbered, by description, so as to avoid any misunderstanding as to what is wanted. We often receive orders from people whom we do not know, and for this reason owners of CADILLACS are sometimes disappointed in not receiving goods ordered from us and not through the agent.



REAR AXLE.



To Take Down:

Remove brass caps from rear hubs and drive out 3/8" pins through threaded part.

Unscrew nuts from studs, holding gear case together, then either case may be drawn off shaft.

If the wheels stick fast to the shafts, then by first taking the nuts off studs, as above mentioned, the shafts may be drawn out of compensating gear.

The compensating gear is keyed to shaft by 1/4" key.

The thrust is taken up by a ball bearing device against a thrust washer, which is pinned to shaft next to the gear.

To Assemble:

Assemble in reverse manner, being sure to put pins and keys in their proper places.

A felt washer is placed in recess at rear end of hub, making bearing dust proof.

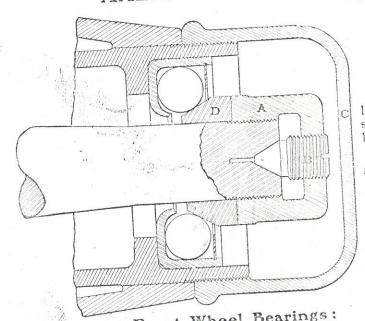
There are 12 3/8" rollers in each bearing, those at end of axle being 31/4" long and those next to compensator 21/8" long.

Each thrust contains 22 1/4" balls.

Care of Bearings:

All bearings in wheels and axles should be packed with vaseline or similar grease, still it is well to oil them occasionally.

AMERICAN BALL-BEARING AXLES AND PARTS.



INSTRUCTIONS FOR ADJUSTING AMERICAN BALL BEARING CO'S FRONT HUB.

The nut "A," which adjusts the cone "D" on right hand axle, is provided with a right hand thread, and the set screw "B" has a left hand thread. The dust cap "C" has a left hand thread.

All of these parts on left hand axle are reversely threaded.

To Remove Front Wheels:

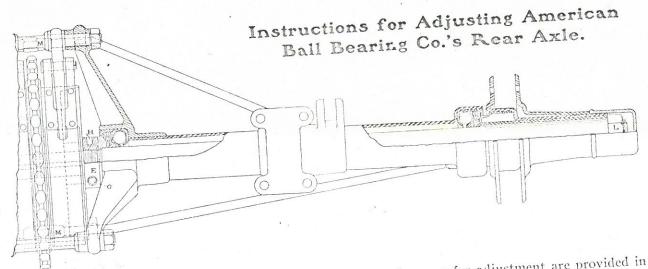
Unscrew brass cap "C," and by means of a hexagon wrench unscrew adjusting nut "A," but do not alter the position of set-screw "B."

When replacing wheels be sure that ground angular surface on cone "D" is in contact with balls. The nut "A" should be set firmly.

Proceed as above, withdraw the set screw (B) with a screw driver, screw on the adjusting nut (A) until To Adjust Front Wheel Bearings: the adjustment is right. Now turn off the nut (Λ) about one-half revolution and tighten the set screw (B). If there is lost motion in the bearing, loosen nut (A) and back out screw (B) a little and tighten nut (A) again. Remember, a bearing is properly adjusted only when screw (B) makes it impossible to force nut (A) on any further and all lost motion is out of the bearing but without being tight. Remember that you can easily put tons of pressure on the bearings with careless use of wrench and nut. When adjustment is right the wheel will revolve back and forth.

A slight looseness is better than a cramped bearing.

Bearings should be examined and greased every six months, but the owner should avoid all unnecessary adjusting.



THIS car is equipped with a Ball-Bearing Rear Axle, and means for adjustment are provided in adjustment

To remove inner axles, loosen set screw (G), place a metal pin to fit hole (H), or use the front axle spanner wrench, when the wheel may be revolved and the inner axle ends withdrawn. It is not necessary or advisable to remove wheel from axle ends. When the inner axles have been removed all bearings are convenient for examination or greasing. Avoid all unnecessary adjusting. Examine and grease bearings with Standard Oil Company's No. 2 Cup Grease about semi-annually.

In reassembling be sure that ground angular bearing surface of cones (F) are in contact with balls. Proceed carefully in turning on the adjusting collar (E). Do not jam the balls. When adjustment is correctly made tighten the clamp screw (G) firmly by means of large screw driver, or special socket wrench, which is furnished.

Do not alter the adjustment of truss rod supporting the divided rear axle.

If it is necessary for any reason to remove wheel from axle, be sure to put wheel on axle tightly before assembling axle into place.