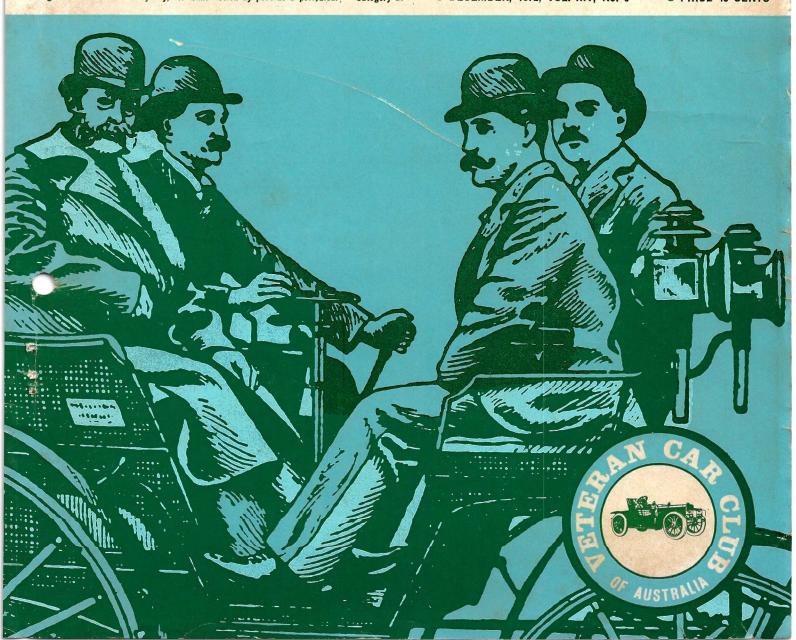


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VETERAN CAR CLUB OF AUSTRALIA (N.S.W.)

134 QUEENS ROAD, FIVE DOCK, 2046

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VICE PRESIDENTS: L. K. Sheen, Ph. 42-4198 (Home). R. C. Baxter, Ph. 522-9661 (Home)
HON. SECRETARY: J. Dance, Ph. 86-1432 (Home) HON. TREASURER: W. McCarthy, Ph. 798-6941 (Home)

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A. Foy

E. J. Lang

G. A. Roberts

M. Welch

J. Dance

R. A. Hill

W. McCarthy

L. K. Sheen

J. C. Wilson

EVENTS COMMITTEE:

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J. Bourke

E. Lang

J. Wilson

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CLUB MEETING DATES 1972-73

197	2		19	1973		
AUGUST	Thursda	y 24th	FEBRUARY	Thursday	22nc	
SEPTEMBER -	"	28th	MARCH	n	22nd	
OCTOBER	"	26th	APRIL	,,	26th	
NOVEMBER	"	23rd	MAY	,,	24th	
197:	3		JUNE	77	28th	
JANUARY	"	25th	JULY	111	26th	





PATRON:

His Excellency,
The Governor of NSW
Sir Roden Cutler.
VC, KCMG, KCVO, CBE

NEWSLETTER OF THE VETERAN CAR CLUB OF AUSTRALIA (NSW)

Vol. XIV No. 6

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COPY REQUIRED BY RST THUPSDAY OF ME

ADDRESS ALL CORRESPONDENCE TO

SPIT AND POLISH, 134 QUEENS RD, FIVE DOCK

2046.



When one looks carefully at the range of cars displayed at Warwick Farm it's very simple to subdivide into four basic categories - Veteran, Vintage, 30-40 and now "Post War Thoroughbred". Let's reduce this further to a common demoninator that brings us all together - an interest in old cars.

Catering for this single need are nearly 30 clubs, none of whom know what the other is doing. In every club is an Events Committee struggling to put on events for the small proportion of members who will attend and there are at least ten members filling the various offices in each club, working very hard to achieve the aims of their various clubs, which are all nearly the same - the appreciation of old cars.

Simple mathematics show that in Sydney we have at least 300 people working to satisfy the club needs of four groups of vehicles.

Experience has shown that a cocktail club finds it very hard to cater for all the needs of its members. Can a 1903 De Dion go on a rally designed for Vintage cars? And who would be bothered attending a rally in a 30-40 car designed for a Veteran De Dion? Why should any one member be persecuted because of the car he owns? Shouldn't he be catered for?

Single Make clubs have the same effect splitting up the active members into smaller splinter groups and still the same problem occurs with veteran cars trying to compete with 30-40 models. Remember what Ron Grant told us about our own club formed by members who were not catered for in the Vintage Sports Car Club.

Isn't it time for a bit of common sense? Four Big Clubs which can give members the service they could have if they would stop all trying to be chiefs, leaving no Indians. Vintage car clubs, 30-40 etc., should all get together now and try to work out a long-range plan to get the various Sydneysiders into the group of people with the same era of car as one another. They should then have a reciprocating arrangement with each group so that a member can attend any rally he desires. One-make clubs would give them a better roll-up and Fast Veteran or Slow Vintage could attend the appropriate rallies.

This could save the clashing of events. There aren't enough weekends in the month for 30 clubs but there are for four and don't forget the money side of it. You could pay one club fee and any of the four club mags. you would like and register your Veteran, Vintage and Post-War Thoroughbred in the various sections. There are a lot of clubs that would disappear but when it gets to the stage (as it has) where two clubs catering for the same era of car conduct rallies on the same day, leaving from the same point, to go in different directions, it's time to look at the situation.

PRESIDENT'S CHRISTMAS MESSAGE

Christmas is a time - by tradition - when we all take stock of ourselves, our actions and our relationships with our fellow men. We look back over the past year and ask ourselves if we could not have been a little less selfish, have worked a little harder or have been a little more tolerant.

From the Club's point of view, this year has been unprecedented in the generous ways in which members have given their time in either raising funds for the benefit of the Club, or for the numerous charities we are called upon to support. Yet others have been unstinting in their efforts in re-furbishing our hall, a truly great achievement. Have we all been as tolerant of each other, and of each other's efforts as we might? This is a personal question only you can answer. I can only comment that overall our Club has a team spirit second to none.

Christmas is also a time for Christmas Dinner Dance, one of the two major social events of the Club Year. A very convivial evening was enjoyed by all who attended, and our thanks are due to Glad King and her helpers for this successful occasion.

So during the Festive Season, spare a thought for yourself and fellows and the Club. Let us all resolve to make 1973 an even better year than 1972.

I wish you all a Merry Christmas and a Happy New Year of Veteran Motoring.

ALLAN FOY

REPORT OF NOVEMBER MEETING

The President was in the chair.

As Standing Orders had been suspended at the October Meeting, the Secretary read the minutes of the September Meeting as well as those of the October Meeting. The Treasurer, obviously, read his September and October reports, for the same reason.

The Treasurer reported in the Receipts that, during October and November, club funds were increased by \$300 and \$95 respectively, from the showing of members' vehicles. Some receipts were from collective efforts of 2 or 3 vehicles.

Two resignations were received, those of Edward Ison and Alva Macey.

A letter was received from one Climpson of Nedlands, W.A., stating that he has a 1909 Rover which has been restored, and which is for sale at \$5000.

November Meeting Report Continued:

Additional items were presented by various members to the Club for 'decoration' of the Club Rooms. These included a photograph, approximately 2½' x 2', of an assembly of cars at Sheen, England, presented by Ken Moss; a photograph of his Renault, by Bill Trollope. A good colour photograph of Larry Leresche in his Hupmobile was presented by George Roberts. George King took along two enamel number plates. John Robertson offered to the Club some bits and pieces of metal parts which are destined for the tip. He has a translation of a Clement Bayard workshop manual, which he will gladly make available to any members who would desire its use.

In his preparation of the Renault for the 1970 International Rally, Bill Trollope went to considerable expense in preparing the vehicle. This included, amongst other things, the gear box and housing, in addition to other odd parts, and he has volunteered to allow any members the use of drawings, core boxes etc. He has made his offer rather wider in scope by suggesting that members in other clubs, not necessarily in Australia only, might also have the use of them should they so desire.

Events Committee (Len Sheen) reminded the meeting that December and January would be without events.

The meeting learnt that Jim Weir had met with an accident recently, which laid him up, the expected period of idleness being about a week. For those whose interest cum curiosity leads them to ask questions on these occasions, we report that a voice with an aura of disgust about it was heard to say: "A VW with a woman driver!"

Investigations Officer (George Roberts) announced that three vehicles were being examined, but work was at a halt because with the 1918 Overland of Ross Hogan and the International of Daryl Swain, more information is required, while the two Hupmobiles of Andrew Douglas are "spread over Sydney". Incidentally, we were told the International goes by the name of I.H.C. (International Harvester Company).

The Social Secretary (Glad King) made a preliminary announcement that "No, No, Nanette" was to be put onto the entertainment list in the New Year.

The Registrar (Max Roberts) made it known that additions and alterations could still be accepted for the new Register, as some delay has occurred in the details to be supplied by interstate clubs.

Registration Officer (David Berthon) reported that on 12th November a total of 43 vehicles had been presented for inspection for road-worthiness. In the main, most were up to the required standard. Any necessary corrections were of only a minor nature. In passing, he mentioned that for those members with damaged or untidy number plates on their vehicles, they can have these returned to the 'status quo' for the cost of approximately \$5 per pair. Following further internal cogitation, it has been decided to keep with Law, Union and Rock for vehicle insurance. The Club finds itself in more or less of a cleft stick in this regard, as other companies would charge at approximately the same rate.

November Meeting Report Continued:

Eric Lang asked for views of the meeting on the magazine's present set-up and received not comments from the assembled company, but affirmation of points that he put to them.

Michael Bendeich has volunteered to assist Ray Hill in the conduct of the Library.

An article of mild interest and possible use - a plastic container holding First Aid items, and made by Johnson and Johnson - was given some publicity by Len Sheen, who took orders from various members in varying numbers per 'customer'.

CORRESPONDENCE

THE FINAL SAY?

Though Fronty Fords at speeds will go,
Though Stars may go a bit more slow,
Though Holdens make discomfort less,
Maybe those Jap cars cost you less,
I think with us you must agree,
Though mad you really have to be,
That Veterans really are the best,
To cross our Country East to West.

JAN C.

SOCIAL

Hear Jo and Frank Nissen are the proud grandparents of a beautiful granddaughter. Congratulations to you both.

Good to see Jim Weir on his feet again after his car accident (believe it was a lady driver, Jim).

Hope all who came along enjoyed our Christmas Dinner Dance. I would like to thank all who do come to our social outings. I only arrange them, but you make them the success.

For the New Year I have arranged a barbecue for Saturday, 24th February, 7 p.m., approx. \$2.50 per head (venue to be decided). Full details by January meeting.

Friday 30th March, a Theatre Party to see "No No Nanette". \$3.75 per head. Tickets to be picked up two weeks ahead.

Both George and I wish you all a very Happy, Healthy Christmas and New Year.

SOCIAL CONTINUED

Postscript:

An Inspection Tour of O.T.C. (Paddington) is to be held in late February or early March. This will be held on a week - night between 6.45 and 9.45. This Tour is a MUST. See colour T.V. direct from overseas via satellite. Speak directly to Europe. Limit 40 persons - more details January Meeting, or read SPIT AND POLISH.

EVENTS

V.C.C.A. (N.S.W.) SUGGESTED EVENTS CALENDAR 1973

February	18th	Concourse Judging
11	24th	Barbecue Night
March	24th & 25th	Blue Mountains Rally
11	30th	"No No Nanette"
April	20,21,22,23rd	Easter Bowral Rally with A.C.T. Club
May	5th	Presentation Night
11	20th	Oran Park "T" Ford Race Day
11	27th	Gymkhana
June	24th	History of Sydney Tour
July		Restoration Month
August	19th	Navigators' Rally
September	·	C.V.V.T.M.C.
	29,30;0ct. lst	Newcastle Tour
October	27th	Waratah Spring Festival Procession
November	llth	Inspection Day
**	25th	Lions Club Charity Tour
December	lst	Christmas Day
11	9th	Final Inspection Day

STOCKS & HOLDINGS MERRYLANDS TO GOSFORD TOUR

SATURDAY 25TH NOVEMBER, 1972. POINTS LOST

Car Number	Driver	Questions	Road Times	Total
1	W. Spraggon	30	111	141
2	J. Pickup	No Route Sheet		
3	W. Dudley	20	51	71
4	D. Pearse	No Route Sheet		
5	M. Pope	No Route Sheet		
6	D. Steer	No Route Sheet		
7	J. Heath	20	13	33
8	M. Chapman	10	49	59
9		No Route Sheet		
10	L. Sykes	30	175	205
11	R. Peterson	20	13	33
12	D. Kay	and the state of t	27	27
13	J. Wards		7	7

(Continued on Page 7.....

Merrylands to Gosford Tour Cont'd.

Car Number	Driver	Questions	Road Times	Total
14	P. Wards		15	15
15	J. Godfrey	10	23	33
16	F. Rossiter	20	47	67
17	M. Bendeich	20	31	51
18	Did not start			
19	W. East	20	19	39
20	A. Foy		6 <u>1</u>	61
21	R. Jones	10	79	89
22	J. Wilson	20	63	83

2 Unsigned sheets, points lost 49 and 131 respectively.

Correct answers to questions:

- Hornsby Court House
- 2 Caltex
- 34 740 Feet
- No through road
- 56 Mobil
- Mt. White

Correct Times (Road)

		Control					12 m	iles
	11	- 11	2	_	87	11	29	11
Lunch	11	11	3		671/2		221/2	

We wish to thank all officials who helped us on this tour; a special thanks to Gosford member L. Deimel and friend for the help at Gosford.

EVENTS COMMITTEE

L. Sheen, J. Wilson, J. Bourke

URGENT CANBERRA PLEASE COPY

Please notify Victor Jacobs on 69.6666 and tell his secretary if you are going to Bowral for the Easter weekend (20th - 23rd April).

We have fifty rooms booked, only 4 starters so far and the Motel people are getting anxious to take other forward bookings.

(V. JACOBS, 338 BOTANY ROAD, ALEXANDRIA).

GONE TO GOSFORD !!

Dijahavagoodweegend? Ordija forgetja mudgards?

The Star has lots its "twinkle" - it was overtaken by a two-cylinder Renault on Mooney Mooney Hill. Believe Laurie obtained a "dud" engine from the big auctioneer.

Wenya onagoodthing yashooda stuktooit.

John Pickup had the good fortune to plough a straight furough for 60 feet on the nature strip of the Gosford Highway by dropping tramp rod and tailshaft while travelling at 35 m.p.h. Believe a bit of fencing wire and initiative had the Studebaker mobile again within 30 minutes.

The D.M.R. normally use a "Victa" for trimming the nature strips.

Believe they were all nicely toasted going north and soaked to the skin on the way home. Forgetya skull?

Summary: Twenty cars - good run - good food - well organised - cost little - good weekend on our first "commercial" weekend for years. Thank you, Stocks and Holdings.

V.C.C.A.

The Epicyclic Gearbox

A further subject discussed by Carl Bliim, and which should go far towards helping the selective gearbox exponents (and subsequent adherents, we feel!) to understand why the T Model fans prefer to use their feet instead of their hands when selecting the gear ratio appropriate to the occasion.

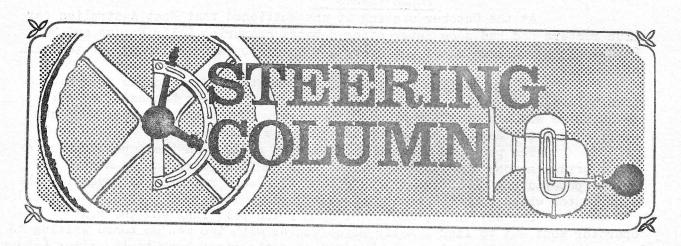
As previously, we quote him verbatim:

In the synchromesh transmission the gears slide into mesh with the assistance of synchronising cones which bring the rotating gears to the same speed before actual engagement takes place. Once the gears are engaged the ratio is always the same, that is, either a reduction in speed and increase in torque, or an increase in speed and a decrease in torque depending upon which is the driving member.

The epicyclic gearbox consists of one or more epicyclic gear trains which are always in constant mesh. A simple gear train consists of a sun gear, planetary gears, planetary carrier and an annulus (i.e. a controlling ring). If we provide a method of locking the individual components we can obtain a combination of seven ratios, consisting of two high forwards, two low forwards, two reverse and a neutral all without disengagement of the gears.

The compound epicyclic gear trains consist of more than one simple train coupled together. The planetary carrier on one train could be the sun gear on the second, and so on. From this we can see that there is an almost unlimited number of gear ratios available with compoind trains.

A second advantage of the epicyclic gear train is its compactness, and the fact that the load on the gear teeth is distributed over a greater area or number of teeth.



We were graced by the presence of "REVS. & BACKFIRES" Masser at the opening of the "new" clubhouse. He told us that he has been "backfiring" more than "revving" lately! Time you got out the old "stirring" stick Len and wrote us a few epistles to show the younger fry that you have not lost any of your old "spark".

###########################

A well-known "Jewish" gent recently "hired" an "Arab" secretary to open his mail.

Watching the "Concours D'Elegance" show on T.V. spotted "Roscoe" Marshall "elegantly" gowned (just loved that Borcellino hat) modelling with both his mark "time" Bentley and a delicious "Bird". We wondered how many points he scored ???

Saw Neil Martin of Guildford driving Ron Hodgson's Model "T" fire appliance at a recent Crippled Children's Xmas Party after "updating" from a 20 h.p. Rolls driving a fire engine should be a breeze!!!

Believe Jack Dance has a contract with the <u>Rotary</u> clubs to lecture on "Veteran Cars and their Place in our Modern Society". Next thing we'll know Jack will be driving a veteran "Mazda" ??

BOWLIN NEWS! Ron "Crazy" Craze is contemplating converting his tennis court into a bowling green. As he is such a SHY guy Ron will most likely deny it. But inside info has it that Ron is a real "Whiz" with a bowl and is a contender for Champion of Champions. STOP PRESS: Ron has just "volunteered" to be SPIT AND POLISH'S bowling correspondent.

张光光*****************************

NON-event of the year - the Kids' Xmas Tree !!!

ROLLS VERSUS "T"

At the October meeting it was mentioned that West Australian car club members had had some interesting debates comparing Rolls Royces and "T" Fords. This reminded me of one story I was told by an old farmer out the back of Bourke.

On the Darling River 50 miles downstream from Bourke is a little town called Louth (still only consists of a pub and a few houses). At this point there was a punt which crossed the river. The banks are very high and still very steep despite being cut away for the roadway.

The punt was manhandled across by pulling on the ropes (there is now a bridge across the river but up to four or five years ago an Austin A40 engine powered the punt, brakes and return trip were supplied by reversing the distributor which made the engine run backwards; it worked most of the time.)

One day in the middle of summer the bell rang and the punt operator went out to find a Rolls Royce Tourer with two men on board waiting to cross the river. The driver slowly descended the river bank to the river (about 20-25 ft. as the river was low) and drove onto the punt. All the locals were in town and naturally were fairly impressed with the car as they had not seen one before and the driver and passenger were giving glowing reports on their trouble-free run.

When they had left the bank everyone was convinced that the stories they had heard about the R.R. were indeed true. The punt reached the other bank the driver started the motor, engaged first gear and drove off the punt. He climbed up the bank quickly (obviously putting on a show for locals who were still drooling over the car from the opposite bank. The Rolls made about two-thirds the height of the bank when it gradually slowed to a stop the wheels were just spinning in the loose dirt. The driver restarted and finished up 6 ft. further down the bank.

He tried everything - zig-zagging, even went down to the punt to try and get an extra run but the punt kept coming away from the bank when he drove quickly off it. The townsfolk were beginning to chuckle to themselves; some thought the bank could be in bad shape as little traffic used the road, especially cars, as this was during or just after the first war and very few were around.

The townsfolk heard a sharp noise behind them and were startled to see a farmer from Bourke honking his "T" model for the punt to return to take him across. Although he could see that the car across the river was having trouble getting up, the farmer was in a hurry and was determined to get on his way as soon as possible. The locals hadn't had so much entertainment for years. Down the bank and onto the punt went to "T". At this stage the Rolls was 1/2-way up the bank and angled across the cutting. The a sience could see it all - a major traffic jam on the west bank of the Darling ever.

The farmer pressed his foot to the floor and off went the "T" up the bank, to the cheers of the onlookers. The Rolls' driver had given up trying at this stage to see what the Ford would do. Up the slope he went as he neared the Rolls the driver swung to the right up the edge of the cutting, with two wheels to get around the Rolls back onto the roadway and over the top of the bank. He didn't even slow down.

The crowd cheered wildly and the driver of the Rolls apologised and tried to think of excuses as the locals went to his aid and helped him get to the top.

They never saw him again but are quite sure that he took their advice to "get a Ford".



BRIGHTLY DECORATED VETERAN CARS.....

HAPPY CHILDREN COUNTING THE HOURS TILL

'SANTA' TIME....

TIRED DADDIES LOADED DOWN WITH PARCELS

OF CHRISTMAS CHEER....

EXCITED MOTHERS COOKING CHRISTMAS PUDDINGS....

FRIENDS CALLING AND BRIGHT CHRISTMAS TREES

GLITTERING.... - THAT'S CHRISTMAS!!

NEW YEAR JUST AROUND THE CORNER....

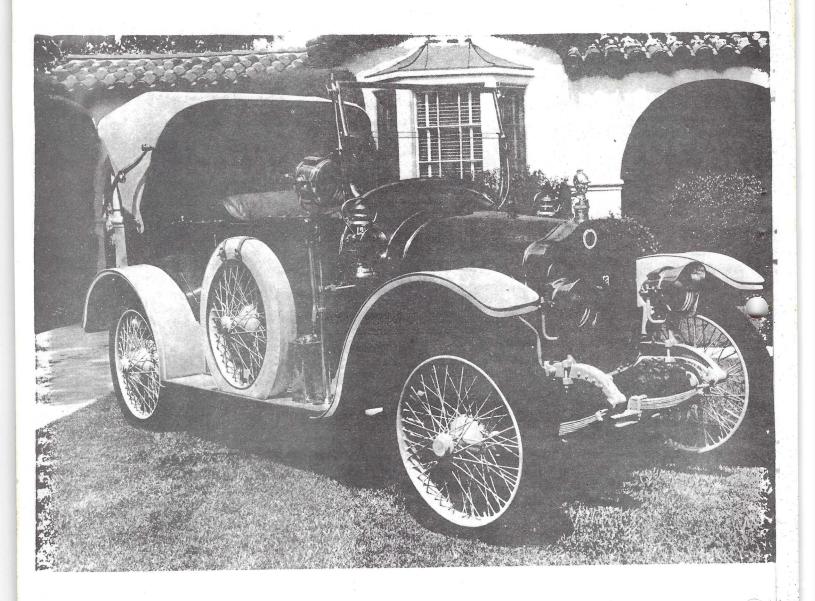
'73's RESOLUTIONS FORMULATED.

MAY THE NEW YEAR BE FULL OF WONDERFUL

SURPRISES.

SINCERELY,

SPIT and POLISH



My Romance With "MINERVA"

By Raymond E. Nelson

It all began by my answering an advertisement in one of the national Old Car Club magazines. The ad was placed by a young man from Australia who was residing temporarily in an eastern U.S. city while attending a dental school. It developed that he had a friend in that foreign country who owned a 26 HP 1913 MINERVA KNIGHT that he was desirous of selling — hence the ad in the car club magazine.

After a few letters I purchased the car and arranged for shipment from Sydney, Australia, to San Pedro, California.

Before the car arrived the dental student paid me a visit. He had delivered a paper on dentistry to a group in San Francisco. He was a delightful young fellow and stayed at my home for several days before returning to the eastern city to resume his studies.

"My Romance with 'Minerva'" Cont'd.

On May 7, 1959 the car arrived in San Pedro and I arranged to take delivery. Upon my arrival at the docks I was most disappointed as the MINERVA was, in my opinion, a great big beast of a car. Not at all like the small MINERVA that I had in mind. However, a friend of mine was interested and purchased the car from me. He drove it under its own power via the freeways from North Hollywood to his home in Orange County.

Some months later I received a letter from the former owner of this 26 h.p. MINERVA inquiring as to how I likedthe car. I told him of my disappointment and that a friend of mine had fallen in love with it and that I had sold it to him. I further explained that I was seeking a very small version of the MINERVA, one to match the one I owned some fifty five years previously while living in Illinois. What I really wanted was a 14 h.p. 1912 four passenger tourer. He replied that he knew of such a model belonging to a farmer living about 75 miles out of Sydney and volunteered to drive out to see if the farmer would sell. He made contact, took a lot of pictures for me, but he failed in the attempt to get the car for me. He sent the pictures to me and the name and address of the owner, who was in his eighties, and after considerable correspondence I failed to purchase the car. However, after quite a few months and letters had passed we did arrive at a price and I mailed him my personal check. Every three or four months I would write and inquire as to when he was going to ship the car, but no ward at all. Finally, after over a year had passed I received a letter from him stating that he decided not to sell the car but was going to continue to use it delivering his vegetables as long as he was able to obtain a driver's license. He returned my check uncashed!

I immediately wrote to him, enclosing a bank draft for more money and suggested that he cash the draft, use the money and use the car until he no longer could obtain a license. I thought that was a very fair proposition for him. I did not hear from him after writing many letters so just about gave up. But after fourteen months had passed I received a letter to the effect that his conscience would not allow him to sell the car to me as it was in such a terrible condition. He stated that he had sold the car to a neighbor and was returning my bank draft uncashed. He did, however, give me the name and address of his neighbor and I immediately started corresponding with that man in hopes that he would sell me the car at a profit to him. But after over a year of correspondence he said he could not sell the car out of his country as he would be ostracized from his old car club if he did. Later he sold the car to a man living closer to Sydney and subsequently gave me the name and address of that fellow. I then started corresponding with this new owner but he would not sell either. He tore the car down completely, rebuilding the engine and had a new worm and worm wheel made for the rear axle. He sent me a set of colored slides showing the mechanical restoration step by step. He also was able to obtain the authentic wire wheels (six of them) and tires, but he would not sell. However, after several years had passed he became involved in some kind of a real estate development and offered to sell the car. We arrived at a price and on December 2, 1964 the chassis was unloaded at the docks in San Pedro, California. He had thrown away the original body as it had deteriorated to a point where it was not worth shipping.

(Continued on Page 12.....

"My Romance with Minerva'" Cont'd.

I have been working on the new body in my hobby shop, off and on, up until February 1972, when I exhibited it for the first time at a car show held in the new Los Angeles Convention Center. The show was sponsored by Motor Trend. I am enclosing a set of photos showing the various steps in the building of the body and top. I designed and built all the wood frame work for the body as well as the frame work for the top. All wood used in the sills and ribs is of beautifully finished walnut. I had to obtain the services of an experienced metal man to assist me in the application of the sheet metal as that step in the body work was a little over my head. All I did to the engine was to replace the timing chains. After exhausting all sources for the chains (there are two of different lengths and widths) I was fortunate in locating a pair in England. Brand new and perfect, having the name "Coventry" stamped on the links - just like the original ones.

Now to digress a little and tell you more about the old gentleman with whom I originally negotiated for the car. After he had sold it to his neighbor he wrote many letters to me stating how sorry he was about not selling the car to me and at one time he sent me a twelve page finely hand written history of the car (and his life) from 1914 to 1960. His trials and tribulations were appalling - but he kept the car all through his health and financial troubles. He was in the lead mining business and contracted T.B. Due to this health problem he became a vegetable farmer and used the car a few miles a day to deliver his produce. Using the car for this purpose was what caused the body to deteriorate so badly. I was amused at a part of one of his letters in which he said that toward the end he had to place a copper penny between the splines on the hub and the splines on the wheel - otherwise the hub would turn in the wheel and he could not get the car to move. Almost every day, before starting the engine, he would have to clean the spark plugs.

During the war years this farmer was unable to obtain the size of tires needed. Also, he was unable to obtain new spokes for the wire wheels so that he could have the wheels cut down to accommodate modern balloon tires. He was forced to sacrifice the original wire wheels by having balloon tire wheels welded to the wire wheel hubs. He wound up with an assortment of disc, wire and artillery wheels - anything to keep the car on the road.

Another part of the history of the car was how a young pharmacist in London, just married, purchased this car new and then decided he would set up shop in Australia. So he and his bride and the new MINERVA shipped off to Australia where he went into business. After about a year his young wife died at child birth. The baby died too. The young man was heart broken. He sold his business and decided to return to London. He tried to sell the car but financial conditions in Australia at that time were at a low ebb so he consigned it to a used car dealer and left the country. This used car man used the car pretty hard for about ten months when along came the man with whom I first corresponded. He bought it in the year 1914 and owned it until 1960 - 46 years of continuous ownership.

My wife still remarks that my romance with MINERVA deprived her of many hours of companionship and that she was quite jealous throughout the entire restoration and I cannot blame her. However, the end result is most gratifying as I have a car that I am very proud of.

THE HISTORY OF THE DIESEL ENGINE

The invention of the Diesel engine was not the result of a flash of inspiration. It was the result of long and arduous study associated with an ideal. Rudolf Diesel, after whom the engine is named, was born in Paris of German parents in 1858. He received his engineering education at the Technical High School at Munich in Bavaria, and was the most outstanding scholar ever known at that institution. After the completion of his studies, Diesel's first engineering work took him back to Paris, where he spent ten years as Manager of the Linde Ice Machine Co. Dr. Carl von Linde had been one of Diesel's professors at the Technical High School, and had developed new refrigerating processes and methods for making ice. During the early part of his stay in Paris he was granted two patents in connection with methods of making ice, and later he concerned himself with attempts to develop an engine operating on ammonia gas. Although these efforts proved to be fruitless he accumulated a fund of knowledge which later proved to be of use in his theoretical approach to the Diesel engine. This work gave Diesel a practical insight into the theory and practice of thermodynamics. It also led him to a more intensive study of the performance of the existing types of gas, kerosene and steam engines built in those days.

About 1888 his mind appears to have revolved around the problem of realising in practice, the theoretical cycle of engine operations formulated by Sadi Carnot early in the nineteenth century. It was not until February, 1892, however, that his Patent No. 67207 "Working Processes for Internal Combustion Engines" was accepted by the German Patent Office. Patents of existing working processes were cited against Diesel's patent but they were finally over-ruled by the German Patent Office, and Diesel's process was declared to be novel. In later years, particularly when Diesel's enormous financial and technical successes became evident, the fact that these patents had been cited aroused the envy of those inventors who considered that they had prior claims to the patent rights.

Immediately after the granting of this patent, Diesel offered the invention to the Maschinenfabrik Augsburg in Germany. His proposal was rejected. Diesel then decided that it would be necessary to publish the theoretical basis of his invention and in 1893 a small booklet appeared under the title "The Theory and Construction of a Rational Heat Engine". The booklet was translated into English by the late Mr. Bryan Donkin and thus Diesel's ideas became known to the English-speaking world. The publication of this booklet brought a mixed stream of abuse and complaints from engineers everywhere. Diesel again submitted a proposal to the Maschinenfabrik Augsburg and also to Krupps at Essen. Finally the two organizations decided to enter into an agreement to bear jointly the cost of developing the engine.

In August, 1893, the first attempt was made to operate the experimental engine by the injection of petrol. The first engine was designed without a water jacket in an attempt practically to realise the Carnot cycle. These efforts proved to be unavailing and sections of the experimental engine were redesigned, an important modification being the provision of a water jacket around the cylinder. In November, 1893, Diesel lodged his second fundamental German Patent No. 82168, in which he sought protection for the idea of injecting the fuel with the aid of compressed air. An air compressor was attached to the reconstructed engine to provide air injection of the fuel

The History of the Diesel Engine (Cont'd.)

and on the 17th February, 1894, this engine ran for one minute. Countless new experiments followed and dozens of new mechanisms were designed, until in May, 1895, the engine began to run in a more encouraging manner. Lighting kerosene was used as the fuel. A new engine was built in 1896 but the fuel consumption was too high. In January, 1897, however, the engine was brought to a stage when it was considered that commercial production of engines could be commenced.

The period from August, 1893, to January, 1897, was one long succession of raised hopes and bitter disappointments. It was during this period that the engineers of the Hamburg office of the Vacuum Oil Co. were called upon to advise him in regard to lubrication. This led to the development of a new oil which assisted materially in the eventual successful operation of the engine.

Diesel had sold the German and Austro-Hungarian Patents on the 10th April, 1893, to a syndicate comprised of the Maschinenfabrik Augsburg (which later became known throughout the world as the M.A.N.) and Krupps of Essen. All the rights for the building of Diesel engines outside Germany were retained in Diesel's personal possession.

Diesel then commenced to make endeavours to sell the patents in other parts of the world. Late in 1897 the Glasgow engineering firm Mirrlees, Watson and Yaryan Company (the predecessors of the now well-known engineering company Mirrlees, Bickerton and Day Ltd.) sent representatives to Augsburg to inspect the engine and to examine the test results. The negotiations dragged on for some time and Diesel visited England in an endeavour to finalise the agreement. Eventually, the Mirrlees, Watson and Yaryan Company decided to purchase the English rights to manufacture the engine. The first English Diesel engine was built under these rights in November, 1897, but considerable difficulties were experienced in obtaining satisfactory operation, with the result that the exclusive English rights were sold back to Diesel in November, 1899, for a non-exclusive licence plus £8950 sterling. Later this first Diesel engine was brought into satisfactory operation and is still in service.

Nobel Bros., who had large interests in the Russian Petroleum fields and in the industrial activities of that country, purchased the Russian Patents for £40,000 sterling. A Company was organised in France to manufacture and sell Diesel engines. Sulzer Bros. purchased the Swiss patents, Carels Freres purchased the Belgian patents and thus the manufacture of Diesel engines rapidly spread throughout the world. On the 10th October, 1897, Diesel signed an agreement to sell the licence for the manufacture of Diesel engines in the United States to Adophus Busch. The purchase price was one million marks, at that time worth about £200,000 sterling. The first American Diesel engine was built in 1898.

From all these sales of Patents, Diesel accumulated a huge fortune. He was a millionaire at 40 years of age. Shortly afterwards, a period of reaction set in because it was found that the manufacture of the engines required greater precision than was obtainable in the workshops of many of the licencees. The result was that the engine acquired a bad reputation in some countries. It was not until the beginning of the 20th Century that the

The History of the Diesel Engine (Cont'd.)

reputation of the Diesel engine became firmly established.

During one of his frequent journeys across the English Channel Diesel disappeared mysteriously from a cross-channel steamer which left Antwerp on the 29th September, 1913, for Harwich in England. This strange disappearance gave rise to a crop of rumors, surmise and supposition. However, there appears to be little doubt that he committed suicide whilst in a state of intense nervous depression caused by poor health, the failure of a number of the companies in which he was financially interested and the almost entire loss of his huge fortune as the result of unfortunate speculations in land and buildings.

The surface-ignition or "hot bulb" engine was invented by Herbert Akroyd Stuart, an Englishman, in 1888. Akroyd Stuart lived for many years in Australia, and, in fact, died at Claremont, Western Australia, in 1927. Many of the high-speed engines which are known colloquially as Diesel engines operate upon a cycle which is very similar to that devised by Akroyd Stuart. In fact, many engineers today are of the opinion that Akroyd Stuart really anticipated Rudolf Diesel in the invention of what is now known all over the world as the "Diesel" engine.

(Our thanks go the 'The Vintagent" for this article).

TECHNICAL HINTS

Cleaning dirty and old brass. Paint or rub on Ferropro Rust Remover which will remove thick deposits of verdigris. A final clean up with Brasso will make your brass as new.

Coca Cola is also a very good cleaning agent for brass - simply immerse the object and presto! it's clean. You can't drink it after using it, so the decision is yours.

If you are replacing your tyre, liberally sprinkle the bead and the inside with talcum powder in lieue of french chalk.

Remember, if storing your car for long periods, drain the oil from your diff. if you are using hypoid oils as it tends to attack the metals. Drain your petrol and put blocks under your axles. Crank over the motor regularly and if possible start and run motor car in gear if you find draining diff. and tank difficult. Your car will be kept in running trim and problems which could hold you up in last-minute rushes will be found beforehand.

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