



# Spit and Polish

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

Hon Editor and Editorial Address—

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January, 1964.

Vol. V No. 8

## EDITORIAL

SPIT AND POLISH is a short issue this month, but the Events Committee have provided plenty of additional reading.

- EDITOR.

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### MONTHLY MEETING NOTICE

POLISH. This month your Meeting Notice is included in SPIT AND

It will be held on 23RD JANUARY, 1964 at H.C. Sleigh's Amenities Rooms, 190a Clarence Street, Sydney, at 8 p.m.

This will be an open night for general discussion.

- EDITOR.

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### WALTER BAKER & THE BAKER ELECTRIC

- John Jones

The following is a brief account of the man behind a company which started selling cars in 1898, and, although they ceased the manufacture of cars over forty-five years ago (unlike many of the pioneers) are still in business today.

Walter C. Baker was born in Hinsdale, New York, on June 27th, 1868, and came to Cleveland before reaching school age. He was educated in Cleveland public schools, and graduated from Case School of Applied Science in 1891. He was the son of George Wells Baker, and a member of a family whose first member, Francis Baker, arrived in the U.S. 15 years after the Puritans landed at Plymouth Rock. Francis Baker settled at Yarmouth on Cape Cod in 1641.

Shortly after his graduation from Case, Baker was employed in several engineering capacities. In 1893 he joined the Cleveland Screw Machine Co., which manufactured steel balls used in the first bearings in the world.

In 1894, Baker organised, with Rollin C. White, Fred Dorn and John J. Grant, the American Ball Bearing Company. Grant, Baker's former supervisor at Cleveland Screw Machine Co., held the basic patents of a machine to produce bearings, and in a few months the new company was mass-producing small bearings for bicycles, and axles for horse-drawn vehicles. The venture was a huge success, and soon occupied over 100,000 square feet of manufacturing space.

Despite the success of the bearing company, Baker and Fred Dorn, a close friend, began experimenting with electric vehicles in a small workshop in 1897. The shop was directly above a cluttered basement workshop where another friend of Baker's, Elmer Sperry, was experimenting. He was later to become famous for the development of the Sperry Gyro-compass and aviation beacon.



The year that the first American gasoline car manufacturer started in business, (the Duryea Motor Wagon Co.) Dorn drove Baker's electrically propelled runabout through the streets of Cleveland. It weighed only 550 pounds, and carried a ten cell battery under the seat, together with a  $\frac{3}{4}$  horsepower motor, and chain-drive. A speed of 20 m.p.h. was claimed. It had wire wheels with 28 inch tyres, and was the first American vehicle to use left-hand drive.

With Fred White, Baker organised the Baker Motor Vehicle Co. in 1898. The first commercial Baker was made the same year. In 1900, Baker electrics were exhibited at the first automobile show in Madison Square Garden in New York City. The Bakers on display featured rear axle bevel gears, and became the first shaft-driven automobiles in America.

The very nature of a battery-propelled vehicle with its limited power supply demanded that stronger materials and lighter parts be used throughout. Walter Baker had a Cleveland metallurgist, J.C. Scott, develop several samples of steel containing chrome and vanadium, which possessed very desirable properties for forged axles and steering parts. The strength-to-weight ratio of these axles was so high, that in 1909 Baker obtained an order from Ford for the first 10,000 axles to be used in the Model "T".

By 1899 twenty new makers of petrol cars had appeared, to one steam and three electric; yet only 936 petrol cars had been built, compared with 1875 electrics and 1681 steam vehicles. At this stage of development the temperamental "gas-buggy" was hard pressed to compete with the more reliable steam and electric cars - to quote a Baker advertisement in part: "... always ready for the most exacting service, without balk or bother, without smoke or grease, and without "cranking"."

Although Baker produced over one thousand cars in 1911, the peak of his prestige seemed to be before 1910, when many famous people owned Baker electrics. One such person, Mrs. Hamilton Fish, purchased a Baker in New York, although she could not drive at the time.

The vehicle was controlled by a single lever; push it forward, and the car went forward, pull it back and the car reversed.

Mrs. Fish went for a drive shortly after purchasing the car, and turned into a side street at low speed. A man crossed her path and instead of raising the lever to stop, she pushed it further forward, knocking him down. Desperately trying to stop, Mrs. Fish then pulled the lever right back, and backed over the scrambling pedestrian.

As she frantically pushed the lever again, the victim jumped up screaming: "For God's sakes, Ma'am, before you get through you sure is goin' to run me over." He disappeared, and Mrs. Fish stalked away from the car. She refused to drive ever again.

Due no doubt to their kindred interests, Baker and Thomas Edison became firm friends. When Edison bought his first car, it was a Baker electric. On one occasion Edison wired Baker that he had produced a battery "that could ruin the infant gas-buggy industry". He was referring to the nickle-iron cell, (commonly called the Edison cell) which had a greatly increased electrical capacity over the lead-acid cell, and a life perhaps ten times greater.

In November, 1910 a Baker Victoria equipped with forty type A-6 Edison cells was driven 244 miles on a single charge, at an average speed of  $12\frac{1}{2}$  m.p.h. The previous record was in July, 1907 when a stock Baker was driven 160 miles on a single charge of standard lead-acid batteries, at an average speed of  $13\frac{1}{2}$  m.p.h.

It is interesting to note that the basic patents for the nickle-cadmium cell, (which is very similar to the Edison) were taken out in 1899, by Jungner, a Swedish engineer.

By 1912 the Baker Motor Vehicle Company was the oldest and largest manufacturer in the electric car industry. If their advertising programme could be taken as a guide, they were most successful. Twenty-three of the top U.S. magazines carried Baker advertisements. A copy of "LIFE", October 3, 1912, which I have, has four full pages on the current Baker models.



Eleven thousand dollars were spent on theatre programme advertising alone. In all cases stressing its silence, efficiency, and luxury - "The Aristocrat of Motordom".

One Baker owner could not break the habit of driving on the left side of the street. After several warnings from the patrolman, he was caught one day and threatened with arrest, whereupon the inventive owner denied he was on the wrong side of the street, got into the front seat (which faced the rear) and drove off backwards. This feat was not so difficult as it might appear, since the visibility was about the same in both directions, and the steering lever projected into the centre of the car from the door pillar.

In June, 1915, the merger of Baker and Rauch and Lang was announced. The name of the new company was The Baker R. & L. Co. Capital stock was increased to \$2,500,000.

In 1915, the new Baker R. & L. Co. bought the Owen Company, and Owen became a vice-president of Baker.

Quite an investment was made in Baker by the General Electric Company, which had an interest in making the electrical components for the new car. Capital was increased from \$2,500,000 to \$5,000,000, and three new directors representing General Electric were put on the board of directors.

Owen Magnetics were built in nine models. Four were on a 125-inch wheelbase, and five on a 136-inch wheelbase. Prices ranged from \$3,100 to \$5,700. As well as being clutch-less and gear-less, spiral bevel gear drive was employed, which is said to be a Baker invention.

As a result of the First World War, Baker went into large-scale production of industrial trucks. By the mid-Thirties, they were making fork-lift trucks with a capacity of 6,000 pounds, and "sit down control".

Mr. Baker died in Cleveland on April 26, 1955; a real pioneer of the automobile.

Today, Baker is a division of Otis Elevator Co. at 8000 Baker Avenue, Cleveland 2, Ohio. Their post-mark states, "BAKER, Leaders in hands-off handling".

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#### INTERNATIONAL RALLY - N.Z.

A preliminary copy of the Regulations has been received from the organisers and a brief summary follows. No indication has been given as to when the complete regulations and entry forms will be available, but they should not be long now.

1. The event is a compromise between the Herkomer and Prince Henry Trails and the Glidden Tour.
2. Organisers are the Vintage Car Club of New Zealand, P.O. Box 2546, Christchurch.
3. Competitors must be members of a recognised Club or One Make Register. A current driving licence of his country or origin must be produced. The more passengers the better.
4. Cars eligible must have been made before the end of 1930 and capable of reliable alpine touring. Fittings etc. must be in accordance with the period of construction. Cars will be scrutineered before the start. Concurrently there will be an event for motor-cycles and three wheelers.
5. Start: 8.00 a.m., Saturday, 6th March, 1965.  
Finish: End of Final Dinner, Saturday night 20th March.  
Total Distance: 1300 miles approx.
6. Entries close with the Secretary of the Organising Club on 30th September, 1964. Entry Fee is £5 N.Z. (£6.5.s. Aust.). Deposits on hotel bookings at £1 per hotel is £9 N.Z. (£11.5.s. Aust.).
7. Maximum number of vehicles that can be accepted is 300.
8. Any passenger may be nominated as the co-driver.
9. Classes: 1 to 5. Motor-Cycles and three wheelers.
  6. Cars under 750 c.c.
  7. 750 to 1100 c.c.
  8. 1100 to 1500 c.c.
  9. 1500 to 2000 c.c.
  10. 2000 to 3000 c.c.
  11. 3000 to 4500 c.c.
  12. 4500 c.c. and over.



10. Premier award is the Herr School Memorial Trophy of the International Federation of Veteran Car Clubs for the entrant gaining the highest aggregate of points in Classes 6 to 10 inclusive over the entire event. Then Gold awards to winners of classes with over 10 entries, and entrants gaining highest points in:
1. Concours d'Elegance.
  2. The Track Events.
  3. The Timed Trial Section.
  4. The Driving Test Section.
  5. The Hill-climb Section.
- Silver awards to winners of classes with under 10 entries and 2nd and 3rd places in all classes. Bronze awards to all finishers under their own power.
11. The Concours will be held en route and will follow Veteran Car Club of Great Britain procedure. Regularity Trials and a standing Quarter Mile (on formula) will be held on the Teretonga Road, Circuit, Invercargill. The Timed Trial Section comprises keeping the route and a time schedule on each day's motoring. There will be a loss of points for breaches of traffic laws. Driving tests will be conducted at various points en route, and also three hill-climbs, to a formula.
12. Entrants will indicate on their entry forms which class of accommodation they require:
- (a) Licensed Hotels and Tourist Motels.
  - (b) Accommodation Houses, Bed & Breakfast House, Private Hotels, Guest Houses etc.
  - (c) Motor Camps, Cabins, Tents etc.
- A field kitchen-canteen service will be provided for Group (c).
13. & 14. The route is as follows: Christchurch - Mt. Cook Hermitage (2 nights) - Lake Wanaka (2 nights and a visit to Haast) - Queenstown (2 nights) - Lake Te Anau - Invercargill - Dunedin - Timaru (via Dansey's Pass) - Christchurch.
15. The Organisers will make a contribution, from money collected from the public at main centres en route, towards fuel costs by the issue of petrol coupons. The Rally will not be commercialised.
16. No advertising to be carried on cars.
17. Organisers may exclude anyone whose behaviour, costume etc. is likely to bring discredit on the event.
18. Mr. A.A. Anderson is Chief Marshal, with a committee of three Stewards. Written protests will be accepted and dealt with by the Stewards.
19. The organising club has arranged Public Risk Insurance for the Event, but all entrants should be fully insured.
20. Further details about the Rally will be mailed to entrants from time to time.
21. English is the official language.
22. Entrants are responsible for all formalities necessary for getting their car to the start.
23. A baggage truck will accompany the Rally, along with mobile repair trucks and a tyre service van. Minor repairs and services will be free of charge. The Automobile Association (Canterbury) Inc. has extended full membership facilities to all entrants for the duration of the Rally.

The P. & O. Line is able to offer accommodation for car and crew from Australian ports to Auckland on the "Iberia" or "Orcades", leaving Sydney between 5th and 10th February. If this schedule is followed, it would be possible to have a look at the North Island on the way down to Christchurch. Tourist Class, single fare, from Sydney is £41, £74 return. Travelling to N.Z. this way, and returning by plane, leaving the car to follow later, may be the most satisfactory way for some people. Transport costs would be about the same as by plane each way. Tourist class the cost will be about £550 for two people, i.e. for the whole trip.

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DATES TO REMEMBER - 1964.

Saturday	18th January	Rotary Club of Cronulla.
	25th January	Anniversary Weekend, Mid-Coast Rally Gosford.
	26th "	
	27th "	
	22nd February	Ninth Annual Katoomba Invitation Rally.
	23rd "	

27th, 28th, 29th, 30th March Easter Weekend Canberra Tour

EVENTS COMMITTEE - L. Sheen, R. Farrell, J. Tulloch