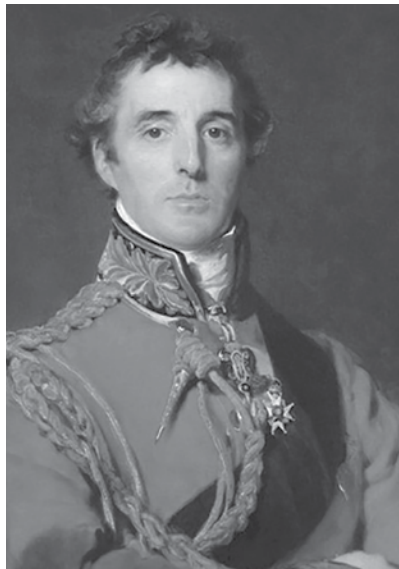


So, horses wear rubber boots over their hooves. Our Classic Cars run smoothly over any surface with their rubber tires. The Royal Family and construction workers alike owe their comfort and style to the Duke of Wellington, Hiram Hutchinson and Goodyear. The passengers in the 'pre-rubber tire' horse-drawn carriages would have given their rattled eye-teeth to be in any of our properly rubber-tire shod Classics.

Source material available on request. Bill Deibel's 1925 magazine, the 'Spur' has been invaluable. Also important - the magazine 'Octane' (for the Wellington connection.)



Duke of Wellington



'The Spur' 1927 Advertisement



HRH Queen Elizabeth

## Automotive Tires in the Classic Era

by Colin Gurnsey



Lee Noble changing tire on Colin Gurnsey's Lagonda

On the recent Northwest CARavan I experienced three tire failures. Surprisingly, all due to valve stem delamination. The first two failures were one day apart with the third three days later. These three tubes were all acquired at the same time and, I suspect, had the same manufacturing batch numbers. Fortunately I had brought two tubes on the caravan and was able to acquire a third from Roy Magnuson. This experience made me wonder about the forces at play with tube design and tire manufacturing during the Classic Era.

By 1924, there were more than 300 companies in the United States manufacturing tires and components. Tire standardization was unknown as new products and manufacturing methodologies were in a constant state of evolution.

The Classic era began with a new patent in 1923 for "balloon" tires with bias-ply sidewalls and ended with radial tires being patented in 1946 by Michelin. By the Classic Era most tires were black, due to the introduction of carbon black to the tire's rubber compound starting in the early 1900s.

Continued on Page 36

## Pacific Northwest Region - CCCA

Continued from Page 27

By the early 1930s car tires became much more reliable and had fewer flats, again due to the ongoing improvements in design and compound composition. An interesting video, available on the net, shows experiments by the Fisk Tire Company using a 1938 Ford as a test vehicle and an earlier Duesenberg as a control vehicle to demonstrate their latest non-skid tire. This tire utilized welts on the bias of the tire for the first time. Something we're quite used to today.

The work that tires had to perform was also changing. The Classic Era cars were heavier and faster than earlier cars. They could be driven longer distances, often out of built-up areas where roads were paved into areas with poorer roads and more difficult conditions. One can see in some of the Le Mans race pictures of the late 20s flying gravel from the tires on curves. Tires were often lumpy, due to poor tread design, and noisy at speed once one got onto paved roads. Companies like Dunlop in the UK, and Fisk in the United States spent a great deal of effort making their tires safer and quieter. Excerpted below is a partial table of principal changes in tire design during the 1930's.

\*\*taken from a 1958 lecture by Mr. L.J. Lambourn,  
chief tire designer at Dunlop.



Year	Tire Size	Pressure lbs sq/in	Rim Width	Section Width	Section Height
1929	6.00x20	35	3.12	6.0	6.1
1933	6.00x18	34	3.62	6.2	6.3
1935	6.00x17	32	4.00	6.7	6.8
1936	6.00x16	26	4.50	7.1	7.1

"There could be many articles written on just tire company advertisements and their promises of safety and smooth rides."

Laurel Gurnsey



When you draw up at the curb before Pierre's on Park Avenue, or find yourself idling at the wheel before The Breakers at Palm Beach . . . even the most insolent appraisal of your new car must soften to a look of admiration if the tires are Royal Masters. Their unstudied smartness . . . their faultless traction . . . their superb endurance, all bespeak the patrician. And among those who can afford to be extravagant . . . or not, as fancy dictates . . . it is rumored (and truly so) that the Royal Master is likewise a surprisingly economical purchase on a miles-per-dollar basis. Which is only logical, for the Royal Master is the world's finest tire, built by the world's largest producer of rubber.

UNITED STATES RUBBER COMPANY

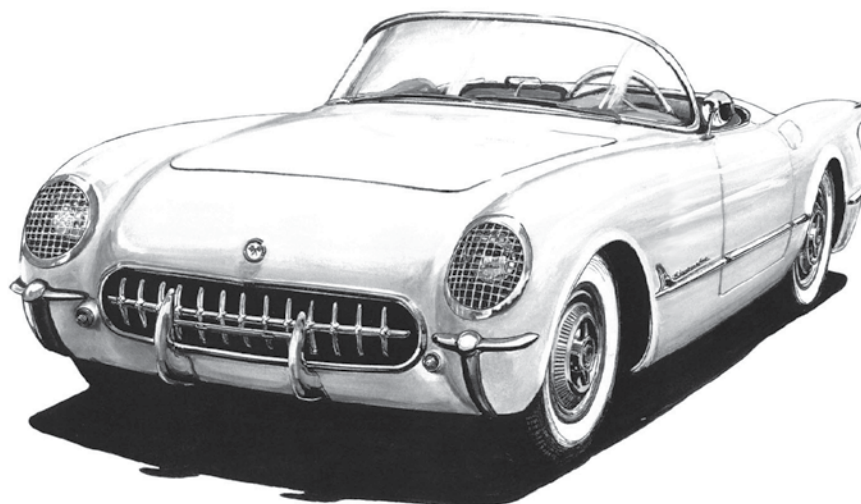


INSURING YOUR VEHICLES  
FOR OVER 50 YEARS

UNPARALLELED CLAIMS SERVICE

AGREED VALUE COVERAGE

EXCELLENT CUSTOMER SERVICE



facebook.com/jctaylorinsurance

1-888-ANTIQUE

jctaylor.com