

CAR LIFE CLASSIC LOCOMOBILE MODEL 48 "SPORTIF"

BY WARREN W. FITZGERALD

PHOTOS BY ALICE BIXLER

DAVID BUICK, Walter Chrysler and Louis Chevrolet have been immortalized by the cars which now carry their names. Harry Stutz and Fred Duesenberg have similar stature by virtue of the legendary nature of the cars which bore their names. Unless his name were applied to a well-known car, even the most worthy pioneer in this industry is forgotten by all but a few enthusiasts and historians with the passage of a few decades. Such seems to be the case with Andrew L. Riker, founding member and first president of the Society of Automotive Engineers. He made significant contributions to the electric motor, is thought to have won the first auto race held on a track anywhere, and for 18 years was the technical mind behind the

Locomobile, once one of America's most revered quality automobiles.

In the year 1884 the 16-year-old Andrew Riker built his first self-propelled vehicle. It was a tricycle, powered by two electric motors which derived their energy from primary, i.e., non-storage, batteries. He was to write of it later, "This was never photographed, and was simply a toy, although it 'ran'." He never considered the machine practical. Riker went on to college, and was graduated from the law school of Columbia University. At heart he was no barrister, however, and in 1888, at the age of 20, became president of the Riker Electric Motor Company, with headquarters in Brooklyn, New York. Two years later he put together his sec-

ond vehicle, also a 3-wheeler. This seems to have been a case of powering an existing machine, for he referred to it as a "Coventry Rotary." It was an unconventional cycle, with a large driving wheel of 48-in. diameter on one side, and two smaller steering wheels on the other. Power came from a 1/8 hp electric motor connected to the driving wheel by a friction pulley. Its energy was provided by four storage cells. Like his first trike, it, too, was impractical, as the pulley slipped on the wheel during wet weather.

Riker's third car, and his first 4-wheel vehicle, was documented as it appeared in the second issue of the magazine, *Horseless Age*, in the year 1895. The picture shows a youthful Riker, pipe in mouth, sitting in a seat at least 4 ft. above the ground! This "car" was built by joining together two bicycles with tubes, giving them a common rear axle. The seat was fastened to an upper cross tube. There were two motors, one for each rear wheel, and a Union Electric storage battery which provided current from 12 lead zinc cells. This vehicle weighed 350 lb.

These first machines were only experiments by a young man reaching out in an infant technology, groping for himself in an area where little or no prior art existed. Previous to Riker's explorations, armatures for electric motors were surface wound. He in-

vented the slotted core armature that is in common use today. By 1836 he had a practical electric vehicle designed and, in the following year, he sold his first electric motor car to one J. R. Whiting. Subsequently he formed the Riker Motor Vehicle Company to take over the patents, good will, and manufacturing business of the Riker Electric Motor Company. In 1899 he moved to a new plant in Elizabethport, N. J. From this factory rolled both passenger vehicles and trucks, the latter ranging up to 5 ton capacity. Riker's electric vehicles were characterized by sound design and excellent workmanship, and because they operated with low output and slow speeds, they became noted for longevity.

Like many of his fellow pioneers, Andrew Riker recognized the value of racing for putting his machines in the public eye. He was quick to enter competition and wasted no time in readying a car in his new Elizabethport plant. Auto races were being held in Narragansett Park, near Providence, in conjunction with the Rhode Island State Fair during the summer of 1899. Riker's car won a 3-heat race. Later, running on Merrick Road on Long Island, Riker won a 50-mile race at the average speed of just under 25 mph.

In the fall of 1901, the Long Island Automobile Club Races were held, on a course which included Coney Island

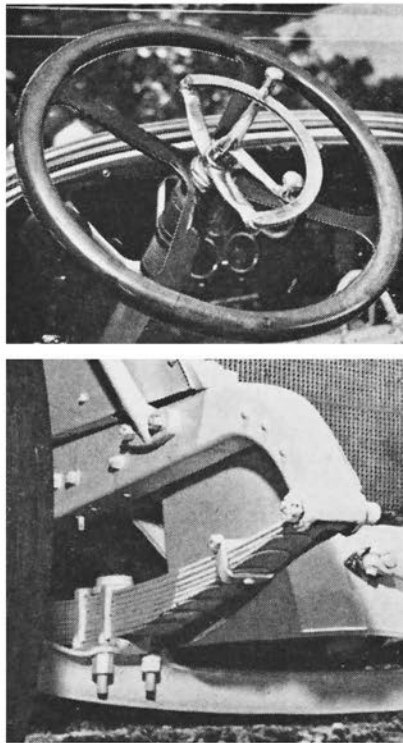


AUTHENTIC INSTRUMENT panel includes original Locomobile gas and oil gauges, speedo and odometer, push-switches and ignition switch.

Boulevard. Riker brought out a special electric racer, as well as a new gasoline car of his own design. The electric car was a skeleton vehicle, carrying no bodywork on its double tube side-rails. Tiller steered, it held Riker and an assistant. These two intrepid gentlemen sat on small flat seats and appear to have had a rough ride. There was a single transverse spring for suspension at the rear. The tires were wrapped with cloth, apparently to keep them from coming off at high speed. The car weighed 1850 lb., 900 lb. of which was in battery cells. The 130-v., 100-ampere system produced about 15-20 hp at 3300 rpm. This was sufficient to propel Riker's racer over a mile course in 63 sec. Though this was not the fastest

time of the day, it was in excess of the Winton's speed of 66.67 sec. for the mile, the former record. The battery charge in the racer was adequate to power one run only, and the car had to be recharged from another electric for the return.

At the same outing Riker displayed and ran his first gasoline-powered car, a 35-hp machine designed along the then current European lines. The *Horseless Age* (Nov. 20, 1901) correspondent had this to say of it, "... has a rather ill-proportioned appearance. It has an enormous bonnet covering the verticle motors (*sic*), and a seat for the operator in the rear. While in general it follows the French lines, the proportions seemed to be different, the driver's



LOCOMOBILE

seat being too far back." Among the other competitors at these Long Island Automobile Club Races was another auto builder, Samuel T. Davis Jr., who was soon to become an important associate of Andrew L. Riker.

Late in 1900 Riker's firm had been purchased by the Electric Vehicle Co., a firm with a rather checkered background. It had attempted to control the auto industry with its purchase of the Selden patent and for which An-

drew Riker did little good. During the convalescent absence of its president, Riker, who had become general superintendent, moved its offices and operational headquarters to his own Elizabethport plant, one of the two factories operated by the Electric Vehicle Company. This did nothing but shake up the company, and on the return of its president late in 1901, Riker left. He had been developing his gasoline automobile and had found a backer in Samuel T. Davis, Jr.

Davis was treasurer of the Locomobile Company of America, a firm

which had been founded by his father-in-law, Amzi L. Barber, an asphalt tycoon, and John Brisbane Walker, publisher of *Cosmopolitan* magazine. The Locomobile firm was established by the purchase of a going concern, that of the Stanley Brothers, of Newton, Mass., a steam car company. The new company was first incorporated in West Virginia as The Automobile Co., of America on June 17, 1899. The founders had somehow overlooked The Automobile Company of America doing business in New Jersey! About a month later the Locomobile name was adopted and yet a week later came another change. The individual personalities of Mr. Barber and Mr. Walker were admitted to be in conflict by the announcement that their interests would separate, with Barber retaining the Stanley's Newton factory and the Locomobile name. Walker and his associates formed the Mobile Company of America at Tarrytown, N. Y., and proceeded to build similar cars in a new factory erected at Kingsland Point on the Hudson. The founders even split the Stanley twins, for each remained with one of the new companies for a year as engineering advisor.

The *Automobile Trade Journal* in its Silver Anniversary Issue of Dec. 1, 1924, noted that the assumption of the vice presidency and position of chief engineer by Andrew Riker was "the most vital incident in the long career of this company." This was no exaggeration. Riker brought to the firm a solid technical background, based upon what must now seem rather precocious experience, plus a competitive enthusiasm which was matched by that of Samuel T. Davis Jr. Together they provided the driving force which pushed the Locomobile firm to the forefront of quality car manufacturers, and kept

AUTOMOTIVE FIRSTS ATTRIBUTED TO LOCOMOBILE

First American car builder to adopt the front, 4-cyl. vertical water-cooled engine; 1901-02.

First to use heat treated alloy steels in automobiles;

First to adopt I-beam forged front axle;
First to use an electric generator (gear driven) and storage battery equipment; 1901-02.

First to adopt cellular radiator;
First to use double spark ignition;
First to employ full floating rear axle among present high-grade car manufacturers; 1908-09.

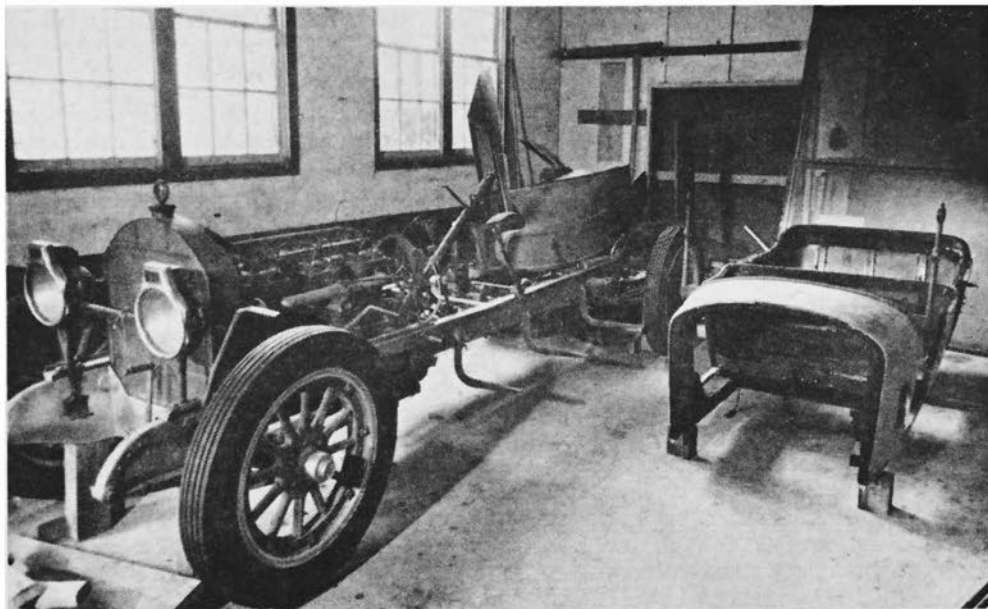
First to use locking device controlling light and ignition; 1915-16.

First to adopt 4-speed selective transmission; 1905.

First to mount brakes on distance rods and remove all stress from rear axles; 1908-09.

First to place spare tires on rear; 1911.
Automobile Trade Journal, Dec. 1, 1924

RESTORATION under way by William A. Baker. Car was a basket case when purchased, then completely rebuilt and restored, even to the original paint scheme.

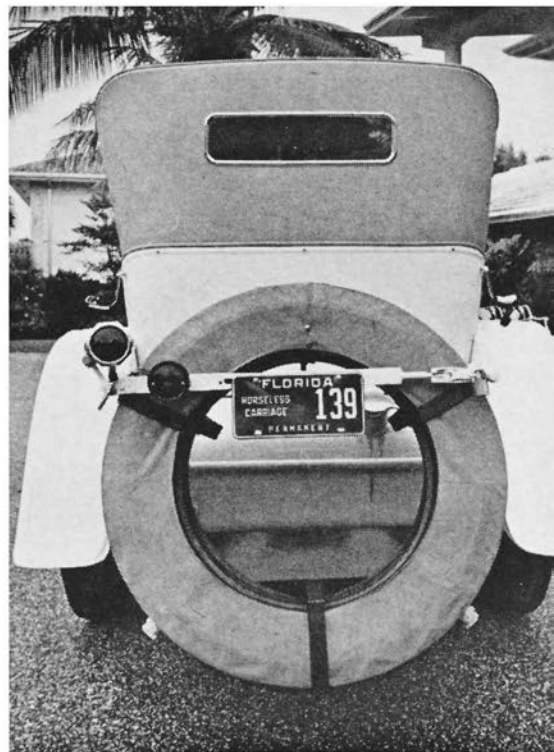
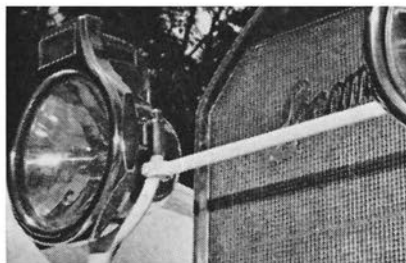


it there until the premature death of Davis in 1915 robbed the company of much of its vitality.

Under Riker, Locomobile became the first American car builder to adopt the forward located 4-cyl. vertical water-cooled engine. His car was developed during the year 1902 and was exhibited at the New York Auto Show in Madison Square Garden early in 1903. It was offered in either 2-cyl. or 4-cyl. versions of 9 or 16 bhp respectively, with similar chassis of 84-in. wheelbase.

Riker was not long in re-entering competition with a series of gasoline-powered Locomobiles. The millionaire sportsman, William K. Vanderbilt Jr., donated a cup to the AAA, some 40 lb. of wonderfully crafted sterling silver, which stood about 3 ft. high. The first road race, the cause for which the cup was established, was held in 1904. The following year Riker's entry finished third. In 1906 a Locomobile was first in the elimination race for the cup and during the actual race posted the fastest lap. Locomobile was the first American car to seriously challenge European machinery in the Vanderbilt Cup classics, and just two years later, driven by George Robertson, "Old 16," as it is now affectionately known, won for America its first Vanderbilt Cup at the record speed of 64.33 mph average. In the same year, running at Fairmont Park, a standard Locomobile 40 run-about won the stock car race. Two 24-hour races, one at Los Angeles and another at Milwaukee, were won by Locomobiles, making the year 1908 the standout year in its competitive history.

The Locomobile which was the highest expression of quality, and most characteristic of the firm's output was the Model 48. This design was pro-



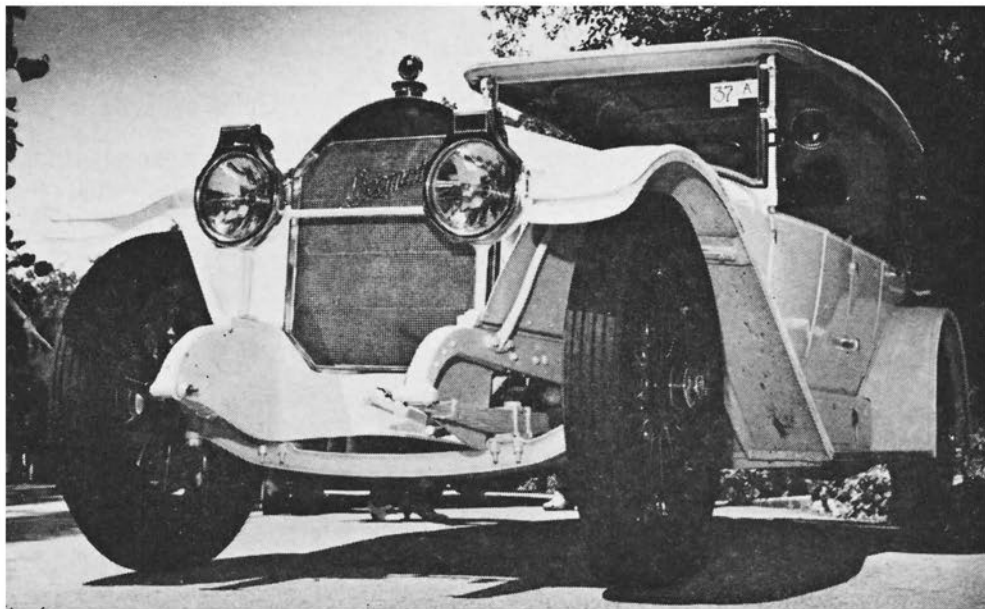
duced for almost 30 years, with little but detail changes. Our *Car Life* Classic is a Model 48 4-passenger "Sportif" of about 1915 vintage. We say "about," for the engine and body carry serial numbers which suggest the former dates to 1917 and the body to 1915. The owner, William A. Baker, of Boca Raton, Fla., has it registered as a 1915 and we will defer to his judgment.

The heart of the Locomobile Model 48, which was first marketed in 1910, was a large 475-cu. in. T-head 6-cyl. engine of 4.5 in. x 5.5 in. bore and stroke. It developed 90 bhp. Cylinders

were cast in pairs and rested upon a bronze crankcase of impressive proportions. The Locomobile catalog boasted that "No motor base has ever broken in service." The crankshaft was machined and ground on all surfaces and was then statically and dynamically balanced. It ran in seven main bearings. Connecting rods were forged from alloy steel and matched in sets with an allowable weight variation of no more than 1/16 oz. Considerable effort was made to insure silent operation of the engine, and some of the quieting features included special timing gears, fiber inserts in the pushrods and the complete enclosure of the valve train under aluminum covers bolted to the sides of the cylinders. A gear-type pump provided low pressure lubrication. Dual ignition was featured after several years of Model 48 production. The carburetor was a Locomobile-Ball design, built in Locomobile's plant, and featured both low and high speed jets.

Unlike current practice, the transmission was not attached directly to the bell housing at the rear of the engine, but was bolted between two frame crossmembers. This allowed the insertion of a universal joint between the clutch and transmission, a feature said by Locomobile to be, "... designed to absorb shocks and vibration, and to eliminate all noise or rattle." The clutch was of the dry-disc type. The gearbox itself was a massive casting of manganese bronze. The gears within provided four forward speeds with one reverse. Their shafts were made from heat-treated chrome-nickel steel and

REFURBISHED LOCOMOBILE is handsome indeed: The "Sportif" was one of the finest expressions of the old firm and its Model 48 chassis was produced for nearly 30 years.





LOCOMOBILE

were equipped with stuffing boxes to eliminate any leakage of grease.

From the transmission, a chrome-nickel steel propeller shaft carried the power rearward to the rugged live axle, the center section of which was encased in a cast-steel housing. Paralleling the driveshaft was a torque-resisting bar. The rear axle itself was located fore and aft by forged trailing links, called distance rods at the time, attached to the outsides of the frame rails. The springs, $\frac{3}{4}$ -elliptic in the rear, were shackled at both ends, an arrangement intended to let them act as springs rather than locating members. They were made from tungsten alloyed chrome-nickel steel, and had grease cups at their ends to lubricate the spring eyes and bushings.

As was the practice of the period, only rear wheel brakes were provided. This accounts for the difference in appearance between the front and rear wooden spoke wheels, seen in the photographs. The heavier spokes at the rear offer a strengthened section for bolting the drums to the wheel.

Our *Car Life* Classic was purchased by Baker as a "basket case." Each component of the Locomobile was dismantled and overhauled. There was no wood framing left in the aluminum

body, thus it had to be completely replaced. Baker was fortunate to obtain Locomobile painting specifications and they were followed to the letter. The body was hand-brushed and wet-sanded between each of the 26 coats of paint. The wooden wheels were stripped bare and refinished to the same specifications. The restoration progress was dealt a blow when the metal parts, carefully segregated in marked shoe boxes for plating were picked up on completion. The hapless plater was found to have dumped them all into one box for delivery. Six months of patient experiment got them into the proper places. Baker did the total restoration, save for the top and leather upholstery. The latter is hand buffed red cowhide of the finest grade. Viewed in its completed form, the Locomobile Sportif is a dashing and handsome expression of the best in automobile design of the Teens.

Locomobile came under the control of Hare's Motors early in March of 1920. This new firm, established by one Emlen S. Hare, a former sales vice president of Packard, was based upon a reasonable but ambitious principle. Hare intended to apply quantity methods to the engineering and production of quality automobiles. In putting together his combine, he selected Locomobile,

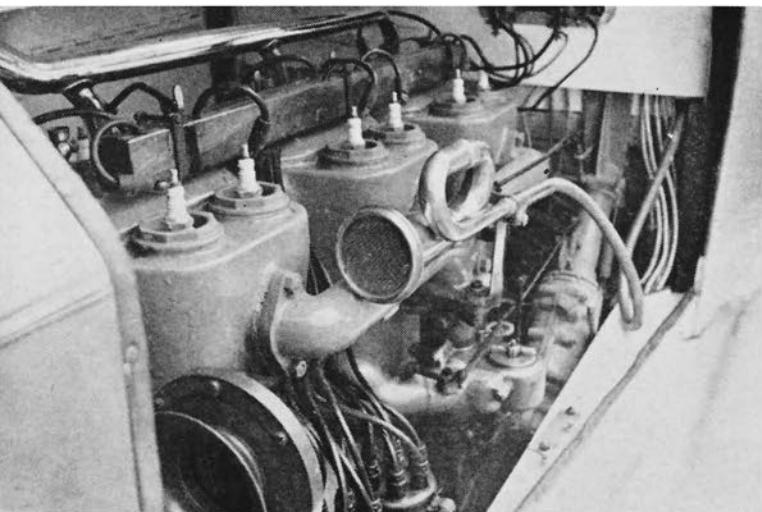
Mercer and Simplex, all good names with prestigious reputations. The engineering, maintenance, distribution, advertising and sales efforts were to be concentrated in Hare's New York offices, but the individual companies would retain their identities as corporations. It might have worked at another point in history. And certainly Hare had collected a number of talented and seasoned colleagues in the attempt. But he was running head on into the disastrous economic climate which followed in the wake of the first World War, and his combine collapsed just a year later. Mercer withdrew on April 1, 1921. Locomobile dissolved its contract Aug. 26. The following year an involuntary petition of bankruptcy was filed, Locomobile listing its assets as \$3,129,200 and liabilities of \$5,908,161. E. S. Havens, the trustee in bankruptcy, transferred the assets of the Locomobile to a new company named the Locomobile Corp. of America. It was headed by the man who founded General Motors, William C. Durant, who had been recently ousted from the presidency of that firm, and was building a new auto empire. Locomobile's creditors were partially satisfied but the stockholders of the old firm got nothing.

Locomobiles were produced in limited quantities under Durant for almost eight years and even the venerable Model 48 was marketed with few changes until 1929. A "Junior Eight" was introduced in 1925 and several models of Sixes and Eights were offered. But the acquisition of Locomobile by Durant was only a postponement of the inevitable for the whole structure of his operation was shaky and was crumbling even before the stock market crash of October, 1929. Early that year Locomobile ceased production and thus passed from the scene a once-great firm, a pioneering innovator in the automotive industry. ■

TECHNICAL SPECIFICATIONS

Engine.....	Locomobile, T-Head
Cylinders.....	6 in-line, cast in pairs
Bore & stroke.....	4.5 x 5.5 in.
Displacement.....	475 cu. in.
Brake horsepower.....	90
Carburetor.....	Locomobile-Ball updraft
Crankcase capacity.....	6.75 qt.
Coolant capacity.....	7.75 gal.
Fuel capacity.....	30 gal.
Front springs.....	Semi-elliptic, 40 x 2 in.
Rear springs.....	$\frac{3}{4}$ elliptic, 50 x 2.5 in.
Wheelbase.....	142 in.
Tread.....	56 in.
Battery.....	6 v., 120 amp./hour
Tires.....	5.00-35 (Sportif; others 5.00-37)
List price.....	Sportif, 1917 \$6050

CYLINDERS OF the Locomobile Six were cast in pairs, then bolted to a bronze crankcase of impressive size.



EXHAUST MANIFOLD side of the block: Generator and water pump drive off gears in block, fan by pulley and belt.

