

*But who is this... That so
bedeck'd ornate and gay,
Comes this way sailing
Like a stately ship...*

John Milton, Samson Agonistes

THOMAS!

by Maurice D. Hendry

Erwin Ross Thomas was a small, peppery, energetic gentleman with a white mustache. Like so many of his contemporaries, he came into automobiles via the bicycle. Prior to this he had been a railroad man. During the 1890's he and his partner, H. J. Hass, had manufactured the famous Cleveland bicycle in Ohio and in Toronto, Canada, as well—Thomas being manager and Hass working as general superintendent of the shops.

In the spring of 1896 Thomas had become enthusiastic about automobiles, and Hass began some experiments which culminated in large scale production of high-speed gas engines. The first of these was built in 1897, and from 1898 to 1900 the Thomas interests built gasoline tricycles and air cooled engines. In 1899 Thomas engines won a medal at the Toronto Exposition, and by 1901 they were advertising themselves as producing "Motors for bicycles, tandems, runabouts, automobiles and launches; nonfouling spark plugs, vaporizers, induction coils, castings, bicycle fittings and Motor and motorcycle accessories."

The first Thomas motor-bicycle was built in Buffalo in 1900. Thomas himself designed it, but to build it he obtained the services of F. P. Nehrbas, a Buffalo-trained cycle mechanic. Nehrbas joined Thomas on July 16, 1900, and three months later, on October 24th, he tested a completed prototype. Thomas organized the Thomas Auto-Bi Company, bringing Hass back from the Canadian plant and appointing him superintendent. Nehrbas took charge of the tool room and made jigs, dies and tools for the manufacture of the Auto-Bi. This was claimed to be the first commercially practicable motorcycle built in America.

The activity took place in an 80 by 40-foot building at 110 Broadway, at the corner of Elm Street in Buffalo. By November, 1900—less than a month after the first Auto-Bi had run—the company was advertising that "The Thomas Auto-Bi at \$200 will yield more enjoyment than \$2000 in the most expensive automobile."

This was an understandable statement to plug, since the payroll totalled all of sixteen workmen. But while thumbing their noses at it, Thomas and

his staff were already planning their entry into the automobile field. They were following the pattern discernible today as transient but important—the same path that Col. Pope, George N. Pierce, the Peerless concern and many others were tracing. First, the manufacture of household items, then introduction to transportation and more sophisticated manufacture via the bicycle during the boom of the Nineties, then expansion into motive power with European-inspired or licensed gasoline engines, finally the logical culmination in the complete automobile. Local capitalists assisted Thomas in his automobile venture, and some two million dollars was invested. Among Thomas' backers was his friend E. M. Statler, founder of the famous hotel chain.

Buffalo was a powerful force during this period, and eventually spawned thirty different makes of truck and car. It had always been strategically located (particularly as it was at the eastern terminal of the Erie Canal), had developed into one of the leading industrial centers in the United States, and had plentiful electric power from the new installations at Niagara Falls. Its importance was shown by its hosting the Pan American Exposition at this time.

Thomas engines were featured at the Exposition, and here in 1901 they won another medal. By March of 1902 they claimed to be the largest manufacturers of motorcycles in the world, having sold more than a thousand machines. More importantly they were offering their first automobiles, the Buffalo Junior at 3½ hp, priced at \$650, and the Buffalo Senior of 6 hp, priced at \$800. Both were light runabouts on the familiar American pattern, having midship-mounted, horizontal single-cylinder engines with chain drive, although Thomas stood out by using a sliding gear transmission with three speeds forward at a time when most American makers were content with two-speed planetary drive that was simple to operate but which limited performance. Another advanced Thomas feature was the use of roller-bearing axles, in contrast to the plain-bearing type in general use. The earliest models used a tiller, but in 1903 wheel steering was adopted, folding too, "for easy ingress and egress."



1903 Model 18 Tonneau Harrah's Automobile Collection

The first Thomas car, the Model 16, was built in 1901 under the direction of George Salzman, who had made a successful steam runabout in 1899. He had then built a two-cylinder opposed air cooled phaeton for the Ball Bearing Company of Boston, later modifying it to a water-cooled single cylinder. Thomas, impressed with his ability, secured him to supervise construction of the prototype Thomas automobile.

The original factory had now expanded to 80 by 100 feet and during 1902 S. H. Woodruff supervised construction of a large modern plant in reinforced concrete, three stories high. This building, "Plant No. 2," fronted on Niagara Street near Ferry, and backed out to the original "No. 1" buildings. In their first full year of production, 100 automobiles were built. Agencies were set up in Boston, New York, Chicago and Philadelphia.

Specially built for car production, the Thomas plant was well equipped. Electric grinders were used for grinding piston rings, a process claimed exclusive to Thomas. Compressed air equipment tested cylinders and valves for leaks at 100 lb. pressure. Drilling and riveting were also done pneumatically. There was a complete line of automatic gear cutters, automatic tapping machines, Jones and Samson screw machines, key slotters, flexible and radial drills, shapers, lathes and the concomitant tools, fixtures and gauges for standardized production.

The plant was lavish, but the product remained modest. Thomas literature extolled the efforts of their "large corps of experts" in developing the 1903 models, but emphasized that "the sole object was to produce an automobile thoroughly suited to families and business and professional men who required safety, reliability, efficiency, durability, economy, simplicity and general utility . . . and speed sufficient for touring and hill climbing." They aimed, they said, to fill the gap that existed between the small runabout, barely comfortable for two, and the multi-cylinder car constructed for "excessive" speed.

Thus from an initial pricing of \$650-\$800, Thomas cars moved into the \$1250-\$1400 range. From runabouts they became four- to five-passenger tonneaus, more luxuriously equipped, but retaining the single-cylinder 8 hp engine giving a modest twenty-five miles an hour maximum, with speeds in the two lower gears of eight and sixteen miles an hour.

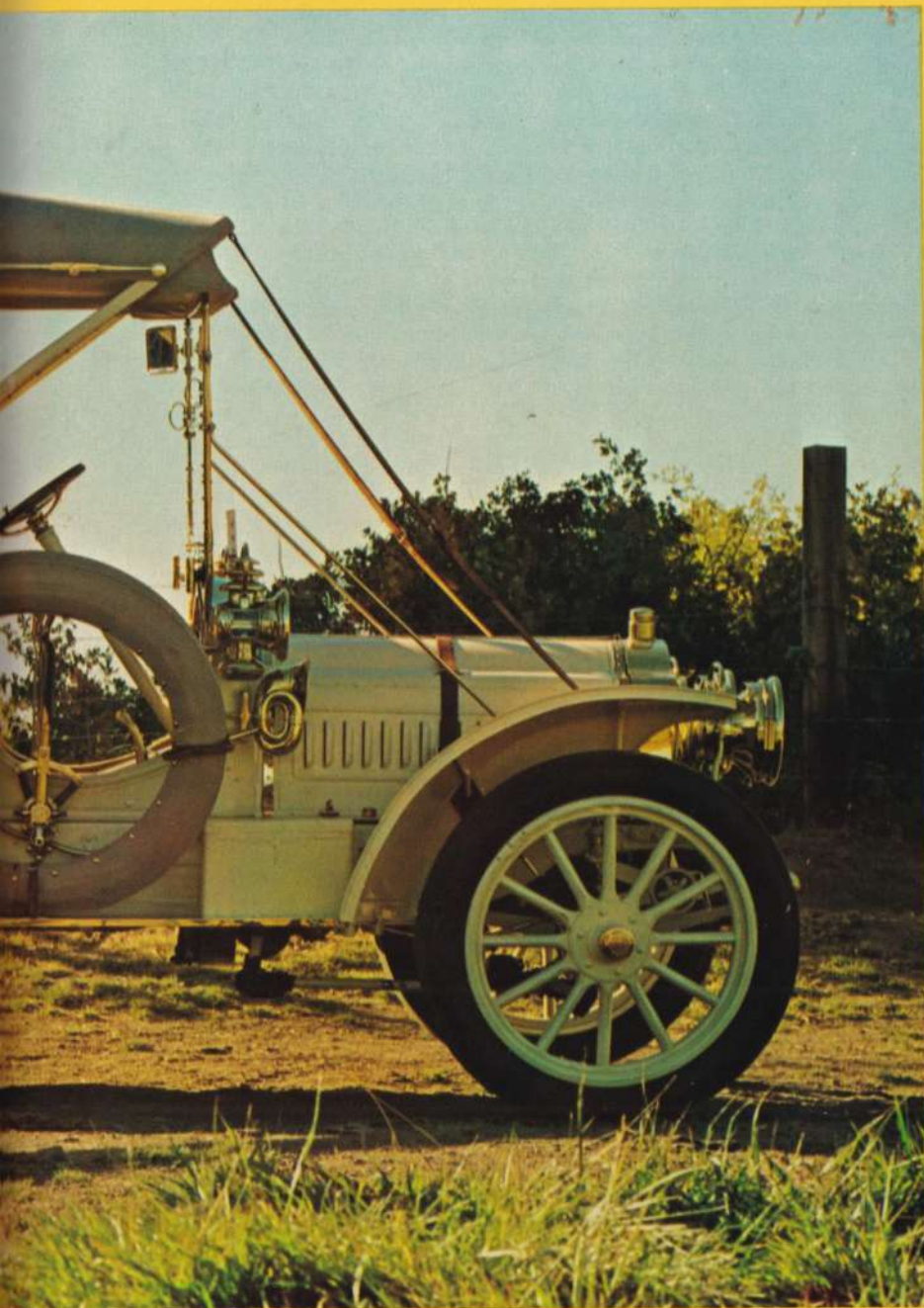
In developing rural America this type car filled a definite need, and Thomas advertising copy made the most of its frontier virtues—high ground clearance, economy and simplicity. Their advertising blew with the prevailing wind of the day. It was truculent, cocky and dogmatic. While confined to motorcycles they had derided automobiles. After committing themselves to automobiles, they found excuse in the fact that theirs were single cylinder only. They ridiculed multi-cylinders as bringing troubles in proportion. "We attain all speed, touring and hill climbing requirements with *one engine*," they crowed, implying that others were forced to use several *engines* to match Thomas performance. Of course, by "engine" they really meant "cylinder."

They had to eat their words fairly often, because for the 1904 season, they found themselves announcing the Thomas *three-cylinder* car.

Speaking frankly enough to make his ad men wince, E. R. Thomas said, "with horizontal motors I found we were on the wrong track, and at a



1907 Model 36 Touring



Harrah's Automobile Collection

sacrifice of many thousands, I have scrapped our tooling for the single-cylinder model. Two-cylinder motors were the vogue in 1903. We are going one better with a three-cylinder vertical motor, better than any two-cylinder car made at home or abroad, and built at a lower price."

With gymnastic agility Thomas and men made a 180° alteration in course and began to write lyrics for the three. Reflecting the growing sophistication in design, their copy became technical. They admitted that popular demand required they produce a touring car of great speed and hill climbing power, coupled with lightness and strength. This platitude was followed by more interesting explanations as to how they arrived at a three cylinder. Conceding that the "multi" was the only way to achieve the performance desired, they investigated the possibilities of twos, threes and fours. The vertical twin was dismissed because if used with 180° cranks it had a poor firing pattern and a twisting couple, while with 360° cranks the balance was no better than a single cylinder. As for the four, while it had good balance and firing, the familiar Thomas dirge against complication was aired—"it would mean just one-third more working parts to look after." So, they concluded, the three was the least number of cylinders that gave the minimum weight, steady torque, balance and compactness. Their reasoning in fact was remarkably similar to that given quite recently for B.S.A.'s adoption of the "three" in the motorcycle field.

To buttress their argument, the Thomas Company remarked that in addition to their own research costing thousands of dollars, they made a thorough inquiry among domestic and foreign makers of automobiles, marine and electric lighting plants, where they found plenty of confirmation of their opinion. Westinghouse, Leeds Equipment of Bridgeport, Connecticut, and Wolverine Motor Works of Grand Rapids, Michigan, used three-cylinder engines for similar reasons, as did Duryea, Panhard, Maudslay, Brooks and Argyll among automobile manufacturers.

*A*lthough the new three was an in-line front-mounted engine, Thomas remained faithful to chain final drive. From the clutch a short shaft took the drive to a transmission mounted amidships in the frame. The differential unit was bolted to the rear of the transmission housing, and transverse driveshafts with end-mounted sprockets transmitted power to the chains. Reasons for this layout were the lower unsprung weight of the rear axle, flexibility in the drive, the complexity and (as alleged by Thomas) lower reliability of the divided rear axle, simplicity of repair and replacement, and the ease with which sprockets could be changed for racing and hill climbing. The car was well engineered in detail. The engine had four main bearings, the steering gear was an expensive Hindley worm. The patented Thomas "chain pull" placed the transmission sprockets between Timken roller tapered bearings and the half shafts ran in Hyatt roller bearings. To ease shifting there was an interlock to prevent gear stripping, and a backstop on the pawl-ratchet principle that prevented the car rolling backwards on hills.

The new 24 hp three cylinder weighed 2000 pounds with five-passenger body and was priced at \$2500. Fancy names were as popular then as they are now. A neighboring maker in Buffalo had named his latest product the "Arrow," and Thomas, not to be outdone, accepted the suggestion of his enthusiastic Chicago agent, C. A. Coey, and called the new model the

"Thomas Flyer." Looking back, these names are redolent of the Brass age—and Edison movie dramatics.

Thomas' copywriters had barely finished their unfavorable comparisons between three and four cylinders when the company pulled the rug on them again and announced in November, 1904, the Model 25, 40 hp. four cylinder. Priced at \$3000 and advertised as capable of four to sixty miles an hour in high gear, this car made an interesting contrast with the advertised virtues of moderate power and price of a few years earlier.

Concurrently with the four cylinder, the firm announced a patented "dustproof" body with curved sides and rears which "eliminated all dust suction." Taking a leaf from the Erie, Lackawanna Railroad's publicity book, Thomas named the body the "Phoebe Snow," after a contemporary stage star who dressed completely in white, travelled by the Erie Lackawanna and arrived at her destination spotless.

During the 1904-05 season Thomas sold and shipped 400 cars, grossing about a million dollars in sales, plus a further \$300,000 in their still active motorcycle department. The trade press in 1904 also mentioned a 60 hp six-cylinder Thomas for 1905, priced at \$6000, but it is doubtful whether sixes were put into production this early, although one or two racing or prototype sixes were built and run at Palm Beach and in the 1905 Vanderbilt Cup.

The big news at Thomas for 1905 was the "50 horse" model. A four-cylinder T-head with square bore and stroke (5½ inches), it had luxurious bodywork on a 118-inch wheelbase and was priced at \$3500. Each car was guaranteed to do 60 mph—which in 1905 was like a guarantee of 100 mph in the Thirties or 150 today. It seems too that the standard cars actually were capable of that speed. The factory published an affidavit dated November 10, 1905, signed by six witnesses and sworn before a notary public. This certified that "We, the undersigned, this day, rode at the rate of 60 miles per hour, with five passengers over average roads, maintaining the speed continuously in a regular stock model 1906 Thomas touring car, and went up a 14 percent grade, with five people, on the high speed, and on very bad roads, increasing the speed all the way up the hill until we reached 40 miles per hour at the top."

"The car is exceedingly smooth and quiet in operation and the clutch is extraordinarily sweet and effective."

The clutch was a three-plate steel disc type matched to a four-speed transmission—both features being well in advance of the time. The whole car, in fact, was as far from the original Thomas conception of an automobile as it was possible to get, and again the ad men turned somersaults. They landed upright, however, and the car really justified most of the superlatives they used. This model was, in fact, the car everyone has in mind when they talk of the celebrated Thomas Flyer.

E. R. himself stated, "My friends have long known that it has been my cherished ambition to build the best car in the world, or at the very least, one of the greatest." (An ambition that his ad men had been careful not to mention in earlier years.) "I do not mean the fleeting reputation gained by enormous outlays for advertising and the performance of road and racing stunts by highly paid employees in special cars," Thomas went on, with characteristic directness, "but I do mean the permanent reputation

founded on actual performance in the hands of the general public."

To achieve this aim had taken several years, even though, he claimed "with us it was only a question of design and material. It was not a question of experience in fine workmanship—we had that."

By "material" Thomas presumably meant the improved alloys that were appearing because of the rapid advance in metallurgical knowledge. By "design" he meant the adaptation of French practice to American manufacture and conditions of use. The brief reign of the all-American runabout was nearly over. The "new" paths that American designers were following at this time—not without some growing pains—were in fact old trails already well trod by the French. France was far and away the leading motoring nation in the world. In design, manufacture and application they had far outstripped the Germans and had become mentors to the whole world. A great sales point for makers in other countries was to say that this or that feature of their cars was "in accordance with the best French practice." There was already a French "brain drain," and French engineers were hired by various companies in Italy, Britain and the U.S.A. In producing the 50 hp Flyer, Thomas and his engineers had a good deal of assistance from a number of French engineers and workmen. They came to the U.S.A. under contract to Thomas—not without some embarrassing objections from E.R.'s own foreman and workmen, who quoted American citizenship and contract laws and allegedly tipped off the U.S. immigration authorities. The latter read the riot act to the Thomas Company and arrested some of the second contingent of Frenchmen to come over, as they stepped off the ship in New York! Eventually the incident was ironed out, presumably by the Frenchmen taking out U.S. citizenship.

The key men in the factory organization charts were as follows: E. R. Thomas himself was president and general manager. "His is the mastermind of the Thomas," commented a factory booklet. E.R.'s longtime partner, H. J. Hass, was chief engineer, with F. P. Nehrbas as factory superintendent. George Salzman was assistant superintendent, while Ralph Morgan was works engineer and metallurgist. Morgan (son of Charles H. Morgan, an internationally famous steel works engineer) had worldwide experience, was a member of the American Society of Mechanical Engineers and was probably the first professional engineer to join the Thomas forces. The others were actually mechanics who had gained their engineering degrees in the University of Hard Knocks.

The above were Americans. Heading the French contingent was Michael Amide Longeron, who had worked at Mors from 1895 to 1902 and Richard Brasier from 1902 to 1905, before joining Thomas. Chief of the design staff was Gustave Chedru, who already had experience with American methods through his association with the Edison Company's subsidiaries in Europe. Chedru had successively worked at de Dion-Bouton, Richard Brasier, Clément-Bayard and Théry. A third ex-Brasier man was Charles Muller (a German) who had earlier worked with Mors and other French companies.

Far from hiding the cosmopolitan nature of their engineering force, Thomas publicity openly proclaimed it: "Perfection in all parts will produce perfection in the whole. That is the Thomas idea of automobile construction. Where the acknowledged leader is an American he has been

secured. Where a Frenchman or a German is conceded the honors, he has been added to the Thomas staff."

In 1906 Thomas cars were entered in two premier automobile events in America, the Glidden Trophy and the Vanderbilt Cup. In neither case did they win, but much was made of the Glidden Trophy car's perfect score and completion of the 2000-mile Glidden course without mechanical adjustment, and the Vanderbilt entry's performance in "defeating all other American cars." Actually the Thomas finished eighth—and was driven by a Frenchman anyway—LeBlon. But it was a creditable showing, for the car, barely completed on the eve of the race, finished "a lap ahead of all other American cars"—in fact only one other was left in the contest, Tracy's Locomobile—outdistanced six European cars in the event, and went through "without mechanical adjustment." The latter was a familiar and not always strictly-to-the-letter Thomas claim. The company said that the car had been "kept back alone by the enforced use of touring car non-skid tires"—a comment that may not have been popular at Firestone.

Thomas were able to list some impressive sounding records in racing during 1906, claiming, like everyone else, that all were made by owners with regular stock cars, without the aid of professional racing men or factory employees, and without special tuning up. The truth of these and other claims is very hard to determine today. What is certain is that the Thomas Company was vigorous, progressive, expanding, optimistic—and building an outstanding high quality car that was (making due allowance for its foreign inspiration) a credit to the burgeoning American automobile industry.

Buyers of the day certainly thought so. By November, 1906, Thomas had built 1018 cars of 40 hp and upwards. They had orders for 1514 more at a value of \$5,329,750, actually making them the world's largest producers of high-powered cars! Factory floor space totalled 300,000 square feet, with 1500 employees. In Buffalo alone during 1906 they had sold more high-powered cars than all other manufacturers combined.

For the 1906 model year the company had marketed one basic chassis, the 50 hp model XXXI. In 1907 they produced the Thomas-Detroit Forty—"2550 pounds of liveliness with a taste for space eating on American roads." This car, a smaller four cylinder priced at \$2750, had been designed by neither the Americans, the French nor the German in Thomas' engineering group, but Howard E. Coffin, a former Olds engineer. It came about this way. At Oldsmobile Coffin had worked closely with Roy D. Chapin, service and sales manager. It occurred to the two of them that with their combined talents—Coffin's in design and engineering, and Chapin's in sales and finance—they should go into business together. Chapin resigned from Olds in 1906 and went to California for a vacation and to drum up capital. He found financiers cautious, but returning East on a train after the San Francisco earthquake he met E. R. Thomas, who agreed to organize the Thomas-Detroit Company. Capitalized at \$300,000, the plan was set up in Detroit in a former match factory. While the cars were made in Detroit, they were bought and marketed by Thomas in Buffalo. In the first year of production ending June 15, 1907, 503 Thomas-Detroits were built and shipped—and Chapin and Coffin were contracted to build 750 more.

"By the end of this year," announced the company in *Country Life*, February, 1907, "there will be 2400 Thomas cars in use."

However, the Thomas-Detroit was short-lived. Chapin and Coffin were keen to run their own show, and they brought in Hugh Chalmers, who bought out Thomas' share in the company, which was renamed Chalmers-Detroit in 1908. For a time E. R. Thomas remained on the board of directors, but he soon withdrew, while the Chalmers-Detroit eventually gave birth to the Hudson.

The Thomas-Detroit was not the only area of expansion for the company at this time. They entered the taxicab field with a small four-cylinder chassis, and in 1908 two new six-cylinder models were produced, the L6-40 with bore and stroke of 3 5/8 x 4 5/16 and rated at 31 hp ALAM, and the K6-70 of 5 1/2 x 5 1/2 dimensions, rated at 72 hp.

The 6-40 was the first Thomas shaft-drive car. On a wheelbase of 122 inches, it offered three body styles: touring (\$3000), Flyabout (\$3000) and limousine (\$4500). The 6-70 retained chain drive, and on its wheelbase of 140 inches it carried seven passengers effortlessly and luxuriously at up to 70 mph! Despite its size it was a much more pleasant car to drive than the 6-40. The latter was rough and noisy but the 6-70 was remarkably sweet running, quiet and reliable. ("Bigger is Better" was certainly true at Thomas, and the company seemed to have been much happier designing high-powered cars.) It was described by the *Los Angeles Times* as "the climax of automobile construction. It is the fastest stock car in the world. The price has been made within the reach of all, and it can be purchased for \$6000." (Presumably by "all," the editor meant all of Beverly Hills.)

In the winter of 1906-07 an Englishman rejoicing in the name of The Honorable C. S. Rolls came to New York representing a relatively unknown make which in its two years operation had built a few cars known as Rolls-Royce. Although he was on business, his Gilbert and Sullivan title and foppish appearance caused much amusement amongst the shirtsleeved American automobile set. Unable to resist putting him on, they told him that French cars were at least three years ahead of English—not that this was too much of a leg-pull at the time. Rolls, nettled, in turn made some derogatory comments about American automobiles, both to the American press in New York on his departure and again to English pressmen on his return to London. His remarks were a curious mixture of keen insight and total ignorance. An example of the latter was his statement that "The six-cylinder car is not looked on seriously by our American cousins—in fact they do not understand it. Special experience is necessary and this the Americans have not yet acquired."

Franklin had been building very fine sixes from 1905, and Pierce had introduced a superb six-cylinder car in the summer of 1906, followed quickly by Peerless and Stevens-Duryea. Since the contemporary six-cylinder Rolls-Royce created so many problems that its production was terminated after a mere thirty-seven had been made (and an entirely new six—the Silver Ghost—had to be designed), C. S. Rolls was certainly extending his neck.

Whether Rolls met E. R. Thomas in America is unknown, but the *New York Herald* called on E. R. in Buffalo and asked him to reply on behalf



1909 Model L 6-40 Flyabout

Harrah's Automobile Collection

of American motor manufacturers. Thomas not only issued a well-worded and pointed reply, he threw down a challenge. After first commenting sarcastically that criticism of American goods was an age-old story and a state-of-mind with the English, Thomas tartly noted that European and English manufacturers seemed extraordinarily keen to buy American machine tools with which to build their cars.

"The important question is," wrote Thomas, "Is the automobile reliable under the adverse conditions on American roads? As reliability is the surest proof of workmanship and material, I maintain that the Thomas and other American cars excel any foreign made car. It is easy enough to make a car that will successfully operate on the 'billiard table' roads of France and England, but it might well fare differently in America.

"One car may be sold to an owner who never left the smooth and level roads of New Jersey," he continued, "but the next might go to an owner who wants to drive through Death Valley without nursing his car or fearing for his neck.

"I hereby challenge Mr. Rolls to a long distance road contest between a Thomas Flyer and any regular stock touring car made by the Rolls-Royce Company, from New York to Chicago and return. To ensure adverse conditions, the contest is to begin [within] thirty days."

To see that the cars were stock, Thomas went on, they were to be selected at random from any garage or customer owning stock 1907 touring cars, each owner to be supplied with a new car by the factories. Selection would be made by a committee named by Judge Hotchkiss, president of the AAA, and the committee would inspect the cars to certify their catalogue specifications, and prescribe the rules of the contest.

Rolls' reply passed the buck to his American agent, W. C. Martin. Martin accused Thomas of "being imbued with the high-speed mania," and excused himself from the fray by tut-tutting that "such a contest would not prove anything."

This was virtually the end of the matter, although a week after Rolls and Martin declined the challenge, an Englishman named Edward Arnott wrote the *Autocar* deploring the fact that "an American manufacturer had challenged a British car to fair competition and had not had his challenge accepted." He offered to run against Thomas in his British Arrol-Johnston.

Although the match race unfortunately fizzled out at this point, Thomas was soon to get his "long-distance road contest." The "road" part of it would be secondary in more ways than one, the distance would be immensely greater than he or anyone else had imagined, and the contest would involve not one but five cars from four European nations. And again, British cars would be conspicuous by their absence.

The "Great Race" of 1908 had its prototype in an almost equally unbelievable epic the previous year—the Peking-Paris competition of 1907. Three cars had managed to struggle across Asia via the Gobi Desert and Siberia, through Russia and Europe, finally to Paris. The winner had been Prince Scipione Borghese in an Itala, followed by two de Dions. The interest aroused had encouraged the sponsor, *Le Matin*, a Paris newspaper, to plan an even more ambitious event, from New York to Paris!

Le Matin needed an American co-sponsor, and the *New York Times* agreed to join them in its promotion. A route was laid out from New

York to San Francisco, then by ship to Alaska, down the Yukon and across the Bering Strait either by ship, or by ice to Siberia. To be sure of ice on the Yukon and Bering Strait, the race had to start in winter.

At first E.R. Thomas had not intended to enter a car, since no one had yet driven across North America in the winter, hence the delay which resulted in George Schuster receiving one day's notice to get ready for the race. Actually the car itself received little more time for preparation. It was taken from a factory lot of four cars available the day Thomas decided to enter the race. This was three days before the start.

The race has been done to death in print more often than anyone would now care to establish, including *AUTOMOBILE Quarterly's* own hero-and-villain account in Volume 1, Number 2. A full-length book has been written from Schuster's own remembrance, and a feature-length film has also been based on the epic. The latter, though good entertainment, made no attempt at accuracy and was mostly pure fantasy.

What matters most about the New York to Paris race is simply this. After seven or more decades of every conceivable and inconceivable kind of automobile competition, it is still the greatest automotive contest ever staged. It was something from the pages of Jules Verne, yet it actually happened. In 169 days, a handful of men and machines clawed their way across three continents, comprising most of the world's land surface, deliberately selecting the worst time of year and, it seems, at first sight, the worst possible route. It is at least questionable whether even polar explorers of this period invited greater hardships and risks.

The Thomas competitors were formidable opponents, including the elaborately equipped German Protos, and the French Motoblocs and de Dions, which were prepared by veterans of the Peking-Paris. There was talk of skullduggery by the Germans in an attempt to prevent the Americans winning, but the Thomas triumphed over all obstacles and was declared the official victor.

Back home in the United States, the fortunes of the American entry were followed with tremendous interest, nowhere of course, more than Buffalo.

Demand for cars picked up after the results of the 1908 race; the triumphant landing of the car in New York in August, and the equally celebrated return to Buffalo a few weeks later—all amidst cheering crowds, civic receptions and hundreds of column-inches in newspapers throughout the country—was perfectly timed publicity for the new 1909 models then being announced. Needless to say, the company made the most—though not the best—of it. Their publicity rightly pointed out the uniqueness of the achievement and took justifiable pride in the car's having been selected from stock only a few days before the race. This was in contrast to the lavishly prepared Protos, for instance. Nor could they resist a dig at their neighbor and rival Pierce-Arrow, by pointedly comparing the New York to Paris and the "easy daylight travel of a Glidden Tour on well travelled roads, always amidst friends and in sight of villages or farm houses. The difference between the Thomas feat and the most trying public performance of other American cars will be readily apparent."

These were facts. Where the company blundered, in the opinion of

the man best fitted to know, was in the publication of a booklet on the race which omitted mention of trouble or repairs on the trip. This might have been excusable had the account not gone on to positively declare that the car was "never in a repair shop, none of the valves were ground or changed, not a spark plug was changed." They even declared in an advertisement published in October of 1908 that the Thomas "COULD START FROM PARIS TODAY AND COME BACK OVER THE SAME ROUTE."

As George Schuster commented cynically, "Many people knew differently." Actually neither car nor crew were ready for any such return trip, and newsmen were left in no doubt on this point when they interviewed the crew on arrival in New York. Schuster had said, "None of us would undertake it again for anything in the world."

Blunder number two was more serious. Misleading publicity might be laughed off but improperly tested cars in the hands of the public were another matter. The 1907 cars were well proven designs that gave little or no trouble. Seven hundred had been sold, plus four hundred taxicabs.

In 1908 when the new K and L models were introduced, sales rose to 816. The aftermath of the New York to Paris saw a twenty-seven percent increase in sales for 1909, to 1036 cars, as the company worked shifts to keep up with the increased demand. That year, however, the big four-cylinder F model was phased out and the Model M was introduced as its replacement in September, 1909. At the same time the firm announced an "immense addition" to the number one plant which was being built, bringing the total floor space to 790,000 square feet, with an ultimate capacity of 7500 cars per year.

But the high hopes were never realized. In fact, sales had already passed their peak and would continue to fall until the death of the company a few years later.

What was wrong? George Schuster says the main reason was the poor record of the L and M cars. Arriving back from Paris he found Montague Roberts unpopular at the factory and discouraged from taking part in the parade. The reason was that Roberts was rejecting too many Model L's. The cars were "noisy, underpowered, and leaked oil." When Schuster got back into the factory, on final inspection, he discovered a similar situation with the M, yet his attempts to improve the standard were overruled as unnecessary perfectionism. Finding his position in the plant uncomfortable, Schuster moved to the Boston distributor, Charles Henshaw, and took the post as service manager. Shortly afterward Schuster was proved right as defective cars came back to the factory, and dealers began to throw in their Thomas franchises. Even such an important dealer as Harry S. Haupt in New York quit and his place was taken by Henshaw. The situation was serious because the company's major strategy hinged on the L and M models, since neither the expensive K nor the Thomas fire engines were big sellers. The cost of the race—nearly \$100,000—falling sales, expenditure on expansion, the expense of putting recalls right, and the demands of bankers all caused heavy losses. As the company retrenched and salaries were cut, the organization began to go to pieces, and key men left for other firms.

Thomas himself had decided to retire at the age of sixty, so in 1910 he sold his interests to Eugene Meyer, the New York banker. Meyer in-

stalled a new management group with E.P. Chalfant as president, F.R. Humpage as vice-president and general manager, W.L. Gleason as factory manager and J.S. Ramsey as treasurer. All had Packard experience, but it didn't help. In any case, changing management at this critical time may have accelerated disaster. Sales in 1912 fell to 350 cars, and the 1913 models had no sooner reached the market than the company found itself in the hands of the receivers, August 19, 1912. A declaration of bankruptcy and dissolution soon followed, unfortunately, and it seems, in the light of later knowledge, unnecessarily. George Schuster holds that the company might well have been saved if modern legal methods had then been operating, since the troubles had been worked out of the early M series and in its later versions had developed into a fine car.

The six-cylinder M had been announced in September, 1909. It was engineered by H.G. McComb, and in contrast to the earlier big Thomas models, it was a "long-stroker"—4¼ by 5½ inches. McComb claimed that it did not have to run so fast as a short-stroke engine to deliver its power. This was true as to rpm, but completely untrue as to piston speed. The most likely reasons for the change—again a reversal of past Thomas sales talk, which as recently as 1907 had declared for square engines as preferred by the best engineers in the world—was that a short-stroke six would have been very long, suffering torsional problems, and the T-head lacked the compactness necessary for good combustion.

Explaining the various features of the car on introductions McComb had emphasized that science was playing a very important part in design. A laboratory had been set up in the Thomas plant within the past year to eliminate as far as possible the "personal element." For instance, "weeks and weeks" had been spent designing the transmission and an equal amount of time had been devoted to the mathematics of it, which were then checked by stress diagrams drawn up according to the principles of the graphical statics of mechanisms. Weeks were spent in the laboratory making the engine quiet, even to the use of a phonendoscope rather than the more common (and cheaper) stethoscope. McComb had gone to the trouble of obtaining this from Pillings, a surgical instrument firm in Philadelphia. McComb also pointed out that they had built a test machine for ball bearings, and had made the surprising discovery that some makes of bearings lasted up to one hundred times as long as others, when tested at twice their rated load. "Needless to say, we used the best ones," he said. Other laboratory work had been done on combustion chamber shapes and streamlining of induction passages, all to improve engine efficiency. To ensure this would not be lost by inferior work in the shop, inspection standards included a measurement of combustion space in every cylinder to ensure uniform compression on all cylinders in each engine assembled. Another instance of care in design, McComb remarked, was the beautiful little ball and socket joints in the ignition and carburetion controls. "On this small article we spent some three weeks in design alone. We could have designed some kind of joint in three hours."

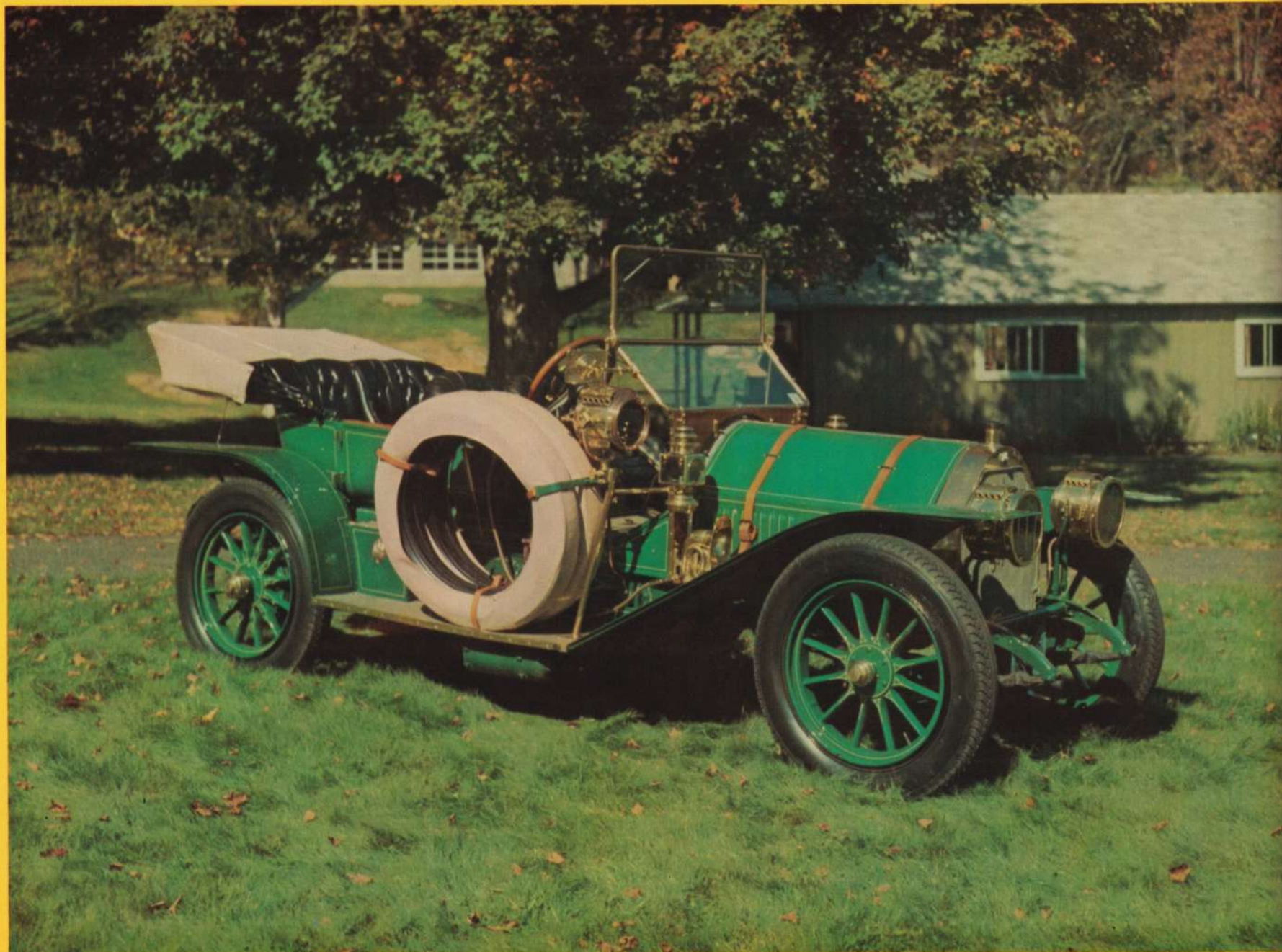
Since McComb's talk gave no hint of the mechanical and manufacturing problems related by Schuster, it seems that there must have been insufficient liaison between engineering and production in the firm at the time.

One area in which there was little trouble was the body department.



1910 Model M 6-40 Touring

Harrah's Automobile Collection



1910 Model M 6-40 Flyabout Owner: Paul Rutherford, Jr.



1912 Model MC 6-40 Touring Seal Cove Automobile Museum



1910 Model K 6-70 Touring Harrah's Automobile Collection



All bodies were designed by the company body design department under A. A. Woodruff and were in 16 gauge aluminum on a selected ash frame. After construction and inspection the bodies were then prepared for the paint department where the various priming, rubbing, drying, rough and flat color operations occupied as much as three weeks. Following this the interior was upholstered and trimmed in French cloth or leather. Limousines had toilet cases, electric cigar lighters and ash trays ("for gentlemen"), electric annunciators, electric dome lights, ventilators and "every detail known to coach construction." The bodies were then returned to the paint shop for the final coat of varnish, and left to dry in a dark room for three days.

Like the earlier big Thomases, the M was a fine performer; factory charts showed the engine developed 64 hp at 1500 rpm and the cars would run from 4 to 57 mph in top gear. One of these cars in a demonstration had all gears except high and reverse removed and was then driven from Buffalo over the Berkshires, the White Mountains, the Green Mountains and the Adirondacks—all in top!

The 1911 MX model was little changed, but there were some important alterations made in 1912's, particularly in the riding quality and engine efficiency. Although the MC's compression was reduced over the MX, the former actually gave another seven bhp because of the improved manifolding and carburetion, and repositioned sparkplugs. Three hundred fifty MC's were built in 1912, and the K6-70 was still listed, still with chain drive. These two cars comprised the Thomas range for that year, since the taxicabs had been dropped. The fire engine department continued to prosper in its modest way.

Earlier problems in production had been overcome, and by 1912 factory literature emphasized constantly that manufacture and inspection were being given utmost care. There had been a tightening up on the previous period of laxity. "Since Mr. Gleason's appointment as Factory Manager," read one brochure, "the factory is working on more exact limits than ever before. Not a blueprint leaves the Engineering department without Mr. Gleason's personal supervision and OK of working limits which must govern the making of that particular part. Consequently our inspectors have no option—a part must measure within the limits set for it or the inspector must order it discarded, and such a part once discarded becomes junk; its use for any purpose is absolutely prohibited."

Before final assembly of the car, each motor was run in by belt for five hours, then tested forty-eight hours with natural gas fuel, and finally run under its own power for ten hours. This was followed by individual assembly inspection of the chassis and final assembly inspection. With the test body, the chassis was then taken for a two-hundred-mile road test with company tires and wheels. The testers OK was then subject to a final test by the head of the Road Test Department, and the car was then returned to the paint shop and the Final Finishing Room. From here it had to pass yet another inspection by the sales inspector. Even then random checks could still follow. The new management were taking no chances. President Chalfant and General Manager Humpage frequently dropped in and selected cars for an additional fifty or hundred-mile test run.

The sales force was armed with ample facts. A handy but comprehensive

sales booklet issued in January, 1910, shows how far the commercial department had progressed in a few short years. Their arguments were presented scientifically and were probably modeled on the carefully compiled reports coming from the new engineering laboratory. In fact, the Thomas Sales Manual looked remarkably similar to the best in use today, as can be seen from the following chapter headings—all thumb-indexed for easy reference: “Presenting in Simple and Concise Manner the Selling Points of the Thomas ‘Flyer,’” it opened in the best Madison Avenue style with The Pre-Approach, followed by the Preliminary Explanations, Demonstration and Closing Arguments. Then came a list of specifications, and a chat about the Factory Inspection System and Thomas Upholstering. Inevitably, there was a chapter on Thomas Records, plus the equally inevitable collection of Testimonials.

Despite all efforts, sales declined. It is uncertain how many 1913 models were built, but the factory certainly anticipated a reduced volume—less than half—over 1912. A summary issued by the receivers early in 1913 shows that in addition to the dozen or so 1913 cars built by the company and the receiver up to February 15, 1913, there existed sufficient material and parts to build “from one hundred to one hundred and fifty complete automobiles and fire chassis.” Also, there was one complete 1914 model in the sale—the only one apparently that was ever built. The 1913 had self starter and dynamo electric lighting, a new body style and side lights built into the cowl. The 1914, which would have been the MCX model, used the MC chassis and the MX engine. It had wire wheels and a Gray and Davis lighting system. Capable of four to fifty-five miles an hour in top gear, it was to have sold at \$3250.

This car, along with the New York to Paris car, several other cars and fire engines, a bus, the company stock of replacement parts, jigs, fixtures and a great many other items were part of “Lot One” in the public auction of the company held in March, 1913. The company’s assets were listed at \$1,700,000 (with liabilities of \$960,000) and the total inventoried value of parts, supplies, repairs and replacements was well over half a million dollars. For a high-priced product the Thomas enterprise had been big business. It was knocked down for the fractional sum of \$256,000.

What did the Thomas name really stand for? What had the enterprise achieved? Despite mistakes, it had built one of the greatest cars of the day. That most of them were satisfactory can be easily proved. Of seven thousand Thomases built, six thousand were still in use at the time of the receiver’s sale.

The Thomas was part of the early industrial heritage of America, growing, learning, achieving, employing thousands and hitting the headlines. If its publicity and challenges seemed bombastic, they were no more than the spirit of the times and no worse than the claims made by many contemporaries in Europe. Thomas, himself was a genuine patriotic American of varied interests, versatility and no mean achievement. His lengthy career—he died aged eighty-five—saw America progress from a rural economy to the greatest industrial nation in the world. But the car that Thomas created was a car of a particular era only. It was essentially Edwardian at heart. It is entirely appropriate that it should be remembered today by the example reviewed on the pages following. ❖





1909 Model K 6-70 Flyabout Harrah's Automobile Collection

THE NEW YORK TO PARIS THOMAS FLYER

Call Her Indestructible

BY MARION GEORGE

Of the fourteen-hundred-odd vehicles in the world's largest collection, there is no doubt as to which car ranks Number One. Packard and Franklin are by numerical count (and family preference) well ahead of any other make represented at Harrah's, but so far as individual cars go, the New York to Paris Thomas Flyer holds a unique place.

"To be able to acquire it," says Bill Harrah, "have Mr. Schuster authenticate it and to be able to take both the car and Mr. Schuster to Tonapah to the exact spot they were in in 1908, was the greatest and most enjoyable experience I have had in connection with collecting and restoring antique cars."

The New York-Paris car occupies a place of honor in Showroom Number One. It stands against the north wall, appropriately facing west. Literally as well as figuratively, it is on a pedestal. Lesser cars in the collection have to be content with the floor. But the car is not ostentatiously sited for all that. Entering the showroom from either end, you will not immediately notice the Thomas. It shares the showroom with scores of other vehicles and to get to the prize exhibit you must pass at least half of them. Several of them, too, are Thomases. The collection has a round dozen examples of the make, believed to be the largest number in one place and comprising about half the Thomases known to still exist.

But inevitably you are drawn to the "Round the World Car." It is a memorable sight.

PAINTING BY PETER HELCK



