When a man is first infected with that not-unpleasant disease which makes him yearn for fine old motor-cars, he will, likely as not, first buy himself a middle-aged Rolls-Royce. As he sinks deeper into the slough of car collecting, and his taste is refined, he won't rest until he owns a Type 35-R, T-head Mercer Race-about. But soon he'll toss and turn in his sleep as he dreams of climbing to the rarefied heights of connois-seurship. To reach this altitude he knows he *must* own a chain-drive Simplex.

In the days of its youth there were few machines to equal a simple (simplex in Latin), exquisitely made, fast Simplex car. I have driven and been a passenger in restored Simplexes running on modern tires on modern roads. And each time I've done so I've been amazed and excited by their performance. But what was the Simplex like in its own time?

Recently I came across an account of a trip on a Simplex test chassis, written by Hugh Dolnar. (Dolnar was a nom de plume, an anagram, for Horace L. Arnold, a mechanical engineer and freelance journalist.) It appeared in the April, 1909, issue of the Cycle and Automotive Trade Journal. Wrote Mr. Dolnar: "A Simplex 50 H.P. chassis, fitted with two seats in front and carrying a box with two or three hundred pounds of iron in the rear seat location, driven by William Watson, with the writer in the left front seat as observer, left the Simplex factory, 83d Street and the East River, New York City, at 8 A.M. bound for Babylon, Long Island, via 34th Street Ferry to Long Island City, Flushing and Amityville, return by way of Flushing and 92nd Street Ferry, 100 miles or more round trip.

"The day was cold and clear, with an 8mile breeze from the northeast stinging our faces at first though not distressing after we became accustomed to it, but the seats were sheet-metal buckets, with no hand-holds at all anywhere, except the thin, front edges of the seats themselves, while the partial toe-board gave a foot-hold in one rider's position only, with the feet so high as to prevent leaning forward low enough to take the wind of a 70-mile clip with any comfort whatever. These bucket seats were not upholstered. The driver's seat had a regulation cushion, but the observer rode on a bag of feathers, and made up his mind very early in this most uncomfortable run of his experience that he would do well if he kept his seat through the speedy adventure. The Simplex factory is turning out a new chassis every two or three days and they are all tried out by Watson on Long Island, east of Jamaica and Huntington, where the roads have no speed limit during week days. The particular Simplex chassis of this occasion had previously been driven for three days, perhaps 350 or 400 miles in all, and therefore was handled with perfect confidence by Watson, but who had been told the night before that the observer was not afraid of fast riding and that the run was intended to show what the Simplex 50 could do on the road.

"From the factory the chassis was driven first to the Yorkville Garage, 86th Street near 3rd Avenue, where the gasoline tank was filled full, it being the observer's intention to have the chassis weighed as it stood with its passengers that day, and to note the quantity of gasoline required to fill the tank at the end of the run, but these things were not done as the motor ran through all of our long stops.

"From the Yorkville Garage the chassis was driven to 34th Street Ferry and from Long Island City to Jamaica, legal rate 20 miles after leaving Long Island City. As much of the road was very rough, our pace was not much over 30 miles anywhere, but the cold wind chilled the observer and a long stop for warming was made at Jamaica. Leaving Jamaica on the Merrick Road, which was fairly smooth all the way to Babylon, something like 34 miles, Watson began to push the Simplex with the muffler cut-out open, the observer tried in vain to

Preceding pages: 1912, 50-hp, toy-tonneau Simplex had double chain drive. At price of \$5,750, it was king of American sporting cars.

assume a crouch which would mitigate the stress of the 80 miles' wind and finally calling a dead stop and trying to find a position and hand-hold which would make him feel secure in his seat, with no satisfactory result. There were many teams on the road, but in spite of our speed Watson kept the Simplex far away from all other vehicles, and we reached Babylon, 34 miles from Jamaica, in about 38 minutes total elapsed time, our highest speed being, probably, something over 70 miles [per hour].

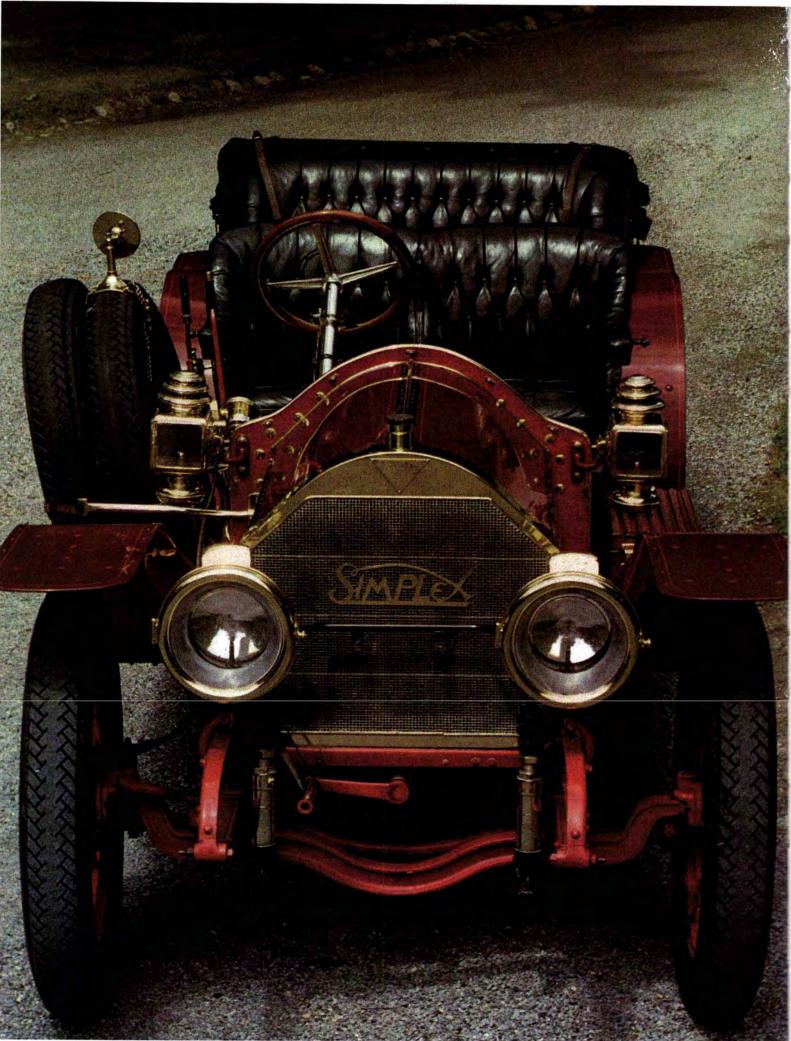
"At Babylon a stop of some length was made for warming, and the observer took a good look at the Simplex seat and toe-board, but could see no better change than that to place the feather cushion at his back instead of sitting on it when the return start was made. Watson drove hard going back and the observer again called for a stop and finally placed the feather cushion at his back and left side and avoided the wind by leaning far to the rear and left as Watson hurried the car back to Jamaica in about 34 minutes total elapsed time for the 34 miles from Babylon, including the full stop at the observer's request and many slow-downs in meeting and passing teams. At Jamaica, closed railway gates held us for 5 minutes or so, and we then jogged to Flushing, where our third stop for warming was made, after which we ran slowly to 92nd Street Ferry where we again had a wait of some minutes, finally reaching the Simplex factory, 83d Street and East River, at 12:15 P.M., the observer being very glad indeed to find himself safely inside the factory walls.

"The Simplex 50 can do 80 miles easily on a smooth, clear road, and was under perfect control at all times, the brake resistance being ample for any speed and working with the utmost smoothness."

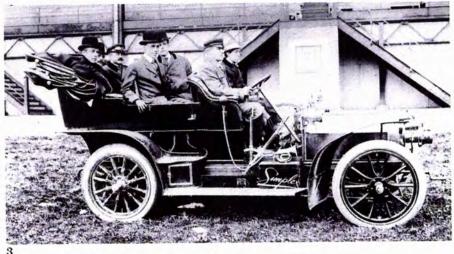
I've never been forced to ride on a bag of feathers while aboard a Simplex. Every time I've enjoyed such a trip I've sat in a fine, soft leather seat. But everything Mr. Dolnar wrote about the Simplex sixty-odd years ago is recapturable in a restored example today. A Simplex will do better than eighty. Its two-wheel brakes will stop it surprisingly well, although I shudder at the idea of depending on them in the dismally crowded areas of Long Island where Watson did his testing. One thing not repeatable today is the remarkable 60-mph average on the Merrick Road between Babylon and Jamaica. Half that would be a fine average today, no matter what kind of super motorcar you might be conducting.

The Simplex was fathered in 1904 by two young men: A. D. Proctor Smith and Carlton R. Mabley, who a few years earlier had set up a business to import the very best among European cars-Panhard et Levassors, Renaults, F.I.A.T.s, Mercedeses. The Smith and Mabley firm's business flourished. But it suffered from a problem which still plagues some dealers in foreign cars-a shortage of merchandise. S & M thought they had an answer. They'd build a French car in America—the 15-hp, four-cylinder Charron, Girardot & Voight. C.G.V. granted a license and plans for what was to be exactly like their 1903 model, except for higher clearance to compensate for primitive American roads. The Frenchmen, however, sent plans for their 1902 model. By the time the first C.G.V.'s rolled out of the Rome, New York, plant of the Rome Locomotive Works, which was building them for S & M, the cars were already obsolete. After three C.G.V.'s were built, Smith and Mabley decided they'd had enough of French shenanigans. They decided to build their own car under their own name, the S & M Simplex, and save shipping charges and customs duties, too.

The car would be an American car—so American that its emblem was a bald eagle, plus a shield with thirteen stripes and thirteen stars. Further, S & M's advertising slogan read, "The first product of an American factory worthy of the name of an American Automobile." There were, however, limits

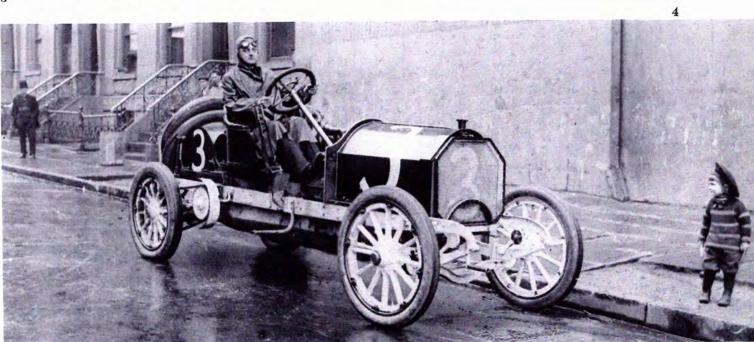






- 1. Purposeful, brutally honest lines of 50-hp, 80-mph Simplex makes efforts of present-day Detroit "stylists" look cheap and insipid.
  2. Four-cylinder, 50-hp, T-head engine was simple in design but painstakingly built of superb materials.
  3. 1905 S & M Simplex
- door gave access to drive chain.
  4. Simplex racer built in
  Simplex's East 83rd
  Street factory inspires awe
  in young resident of
  neighborhood in New
  York City's Yorkville section.

Tourer. Door under tonneau



to Smith and Mabley's advertised Americanism. German Krupp steel—of a quality unobtainable in the U.S.—was imported for use in axles, shafts, and chassis-frame rails.

To build their Simplex, Smith and Mabley hired a superb engineer, Edward Franquist, who not only designed the car, but also ran the East 83rd Street factory.

The 1905 Simplex was not of revolutionary design. Franquist borrowed what was best and practical from the great cars of Europe. If it seemed much like a Mercedes that was because so much of the Mercedes was well worth emulation. But Franquist's car had many unique features.

It had a 30-hp, four-cylinder, T-head engine with a 4½-inch stroke, and a 5-inch bore. The radiator was of the cellular Mercedes type. Since chain drive was used, the four-speed transmission and differential lived in an aluminum case under the front seats. Wheelbase was 106 inches. Franquist didn't feel that outside suppliers had his standards of excellence and made every bit of his cars right in the small factory near New York's East River. Only electrical parts, wheels, and tires were bought from suppliers. Even rivets, bolts, and nuts were of Simplex manufacture. It is hard to visualize the pouring of engine castings, gear cutting, forging of axle parts, and engine testing going on in what is now a posh residential neighborhood.

Each car was assembled by a master mechanic and a helper. The mechanic brought his own tools; the factory supplied only a vise to hold such bits as might require a touch of the file to insure a good fit. A competent journeyman was expected to assemble a complete chassis in a week of ten-hour days. Then Watson or one of his confrères mounted a seat upon it, and took it out on one of those Long Island trips. Afterwards, Mr. Franquist himself took a run on the chassis to check its performance before

it was turned over to the coach builders.

S & M announced a few other cars: an 18-hp, a 50-hp, and a 50-70-hp model. Only a few actually were built and, as far as we know, none now exists from this period. The company went bankrupt during the 1907 economic storm, which dried up the market for expensive cars.

The most interesting machine built during the pre-1907 S & M era was the ill-fated brute of a racing car built for Frank Croker, son of the notorious Tammany chieftain. This 75-hp monstrosity, whose four cylinders had a bore of 6½ inches and a stroke of 6¾ inches, was entered in the 1904 Vanderbilt Cup Race. Too heavy to meet the regulations, it was drilled as full of holes as a target in a shooting gallery in an effort to reduce weight. Thus weakened, the chassis subsided into the road during the race and ended up dragging its vital parts in the dust. During the Ormond Beach trials in January, 1905, with a new, unperforated frame, it rolled over and killed Croker.

In 1907, after Smith and Mabley's failure, Herman Broesel bought the company's assets. Broesel, a wealthy textile importer and automobile enthusiast, was to make the next five years the most successful period in the history of Simplex.

The 50-hp, four-cylinder (5¾ in. x 5¾ in.) Simplex which had been announced was now ready for production under the eagle eye of the perfectionist, Franquist. And, for so high priced a car (\$5,750 for a tourer with a Quimby body), it sold amazingly well. Some 240 cars were built each year.

"Fifty horsepower, 129 in. wheelbase, weight 2683 lbs., double chain drive"—its specifications sound almost prosaic. Many lesser cars had similar ones. What made the Simplex a masterpiece was the way in which these ordinary-seeming specifications were realized. For example, the engine crankshaft was a Krupp chrome-nickel steel forging

with three main bearings. At Simplex a man spent twenty hours fitting and scraping these bearings by hand. Axles, frame, gearshafts—all were meticulously carved and forged from Herr Krupp's steel as slowly and carefully as that crankshaft. Cylinders were cast of "gun iron." A Simplex clutch, in 1909, had no fewer than sixty-seven discs. So accurately were these discs and their shafts and bearings fitted that a few years ago, when a friend of mine found a derelict and rusty Simplex in a scrapyard, he had only to apply a judicious touch of oil to make the clutch operate as delicately and sweetly as it had in its youth.

Simplex built three other models: a 90-hp with a 6½0-inch stroke and a 5¾-inch bore, and giant 3-inch valves, which wasn't all that much more powerful than the Fifty (which was said to put out 60 hp at 1,200 rpm), a 38-hp, shaft-drive model which came out in 1911, and a special order Seventy-Five offered in 1912. This supersporting machine had its engine moved aft, a sharply raked steering column, and a pointed radiator. Either shaft or chain drive could be specified. The Seventy-Five had the same engine as the Fifty, but the huge 3-inch-diameter valves of the Ninety.

It was a matter of course in the early 1900's for any builder of a car with sporting pretensions to go racing. Although Simplex was no exception, Broesel seems to have been less greedy for wins than other car makers. Perhaps the Simplex didn't need the proof of superiority lesser makes lived on. Anyhow, Simplexes had a fine, if short, competition record. In the Brighton Beach twenty-four hour race of October 2–3, 1908, the Simplex took first place, setting a world's record of 1,117 miles. On July 30–31, 1909, again at Brighton Beach, Simplex won the twenty-four-hour race again, "finishing 50 miles ahead of its nearest competitor in a field where the pick of American and European cars were found" (I

quote a Simplex catalogue). By 1910 Simplex had taken first place in four such races at Brighton Beach. (If many other marques also seem to have won at Brighton Beach, it was because there were an awful lot of twenty-four-hour contests at that resort near Coney Island.) But Simplex won elsewhere, too: the National Stock Car Chassis Race at Lowell, Mass., in 1909, where a Fifty covered 318 miles in 352 minutes "over the rough and tortuous Merrimac Valley course"; and at Fairmount Park, Philadelphia, the same year, where a winning Ninety covered 200 miles "of varied and difficult going" in 218 minutes.

Toward the end of the Broesel era, the Simplex Zip, a souped-up nonstandard Seventy-Five in the hands of Lou Disbrow started cleaning up in track racing. In 1911, at Brighton Beach, Disbrow took on the formidable Fiat Cyclone in a match race and won. After many other successes, the Simplex Company named him and the Zip "Track Champions of America" and handed Disbrow a gold medal.

In 1912 Herman Broesel died. His sons sold out to new people—Goodrich, Lockhardt & Smith—who moved the plant from East 83rd Street to New Brunswick, New Jersey. The age of tough, thundering, chain-drive cars was over, and the new owners, looking for a product to suit a more effete time, bought the Crane Company of Bayonne, New Jersey, builder of the big, expensive (\$6,000), quiet, L-head, six-cylinder Crane, designed by Henry Crane. A new marque, the Crane-Simplex, was the result.

During the First World War the factory turned out V-8 Hispano-Suiza engines to power the Allied fighter planes of the Western Front.

After the war Simplex became part of the shaky little empire of a car salesman called Emlen S. Hare, who also owned the vestiges of Mercer and Locomobile. When Hare's Motors went broke, Simplex was finished along with it.