The 1905 "Boss" Steam Car, in unrestored condition, as obtained by the Boyertown Museum of Historic Vehicles Boyertown, Pennsylvania. It is the only "Boss" car known to still exist.

THE "BOSS" STEAM CAR

A very early attempt at building an automobile that was successful.

by Erminie Shaeffer Hafer

READING, PENNSYLVANIA has been the home of many skilled and inventive automotive mechanics.

James L. Eck was one of those who had caught the automotive bug. He completed perhaps the first automotive machine in the state while a resident of Reading. He was a Berks County native, born near Shamrock, Longswamp Township, of an inventive German family. Mr. Eck was at first agriculturally employed, working the family farm with his father, but his hobby was always mechanical tinkering. Later he operated a dry goods store in Kutztown, Pa. when still a youth. He then was also interested in photography and constructing violins.

How James Eck got into the "knitting machine" business is uncertain, but he came to Reading, Pa. in 1892 and opened a factory on the northwest corner of Seventh and Court Streets. Within two years he moved to the Yocum building at Seventh and Walnut Streets, and then in 1896 he took over the building on the northeast corner of Reed and Elm Streets. It is not known just what motivated Eck to build his steam car, but build it he did in the mid 1890's in the Reed and Elm Street building. One Saturday afternoon in May, 1897, he decided to try it out. He peered out of a window of his knitting machine factory and shook his head. Quite a crowd of people was waiting to see something they had heard was about to take place. Eck didn't like what he saw; he didn't intend to be laughed at if he failed. The story of that first road test is best told in the inventor's own words as he related several years later in an interview in the READING EAGLE newspaper of 1913: "I had completed my automobile after several years of experi-

ments. People ridiculed the idea and said that it was impracticable. I must admit that I was nervous as I pulled the car out into the street at my shop at Reed and Elm Streets for a tryout. A score or more of people were on hand to witness my performance. When I saw the people I put my car away again and waited.

"When they had dispersed it was about 9 o'clock in the evening and then I thought it was time for a try again, as I would be unmolested. I put a match to the wick of my kerosene tank under the seat and waited awhile. When the time was ripe, I shifted a lever and threw on the steam and away I went down Elm Street, beard flying to the breeze, past my home, in Fifth Street, up Penn Street to Sixth St. and thence back to my shop without the slightest hitch. I had perfect control of the automobile. People along the streets scattered as though a demon was loose. They stared after me, when they had collected their composure, eyes wide with amazement and mouths open. While passing the hotel at Fifth and Washington Sts., a woman departing from the "Ladies Entrance" of the bar room went screaming back into the bar room shouting to anyone who would listen, and they all did, 'O hurry, come out and look: Here goes a buggy without a horse!' It was the first recorded time that what became known as an automobile traveled over a Reading street. Before I had stabled my car fully 1,000 people came running to get a look at it."

There is some question as to the exact date of this memorable run. In the interview published in the Reading Eagle in 1913, Mr. Eck set the date as May 21, 1898, the automobile having been completed "after several years of experiments." But earlier articles as well as the inventor's obituary in 1924 place the date as May 24th, 1897. This latter date would seem the most plausible, for the following reason: In March of 1897, the Reading Eagle carried the news that one Charles A. Miller, owner of a bicycle shop in the Penn Troy building on the southwest corner of Fifth and Washington was nearing completion of his "steam automobile." Subsequent articles indicate that Miller had then become dissatisfied with his car and withdrew it to add another cylinder and "construct guards to catch flying water and sand." These same articles allude to the fact that before Miller was able to rebuild his car, the Eck steamer was already on the road.

Whatever the date, however, there can be no doubt that James Eck's car was a success. Operated by

Quoting the original sales brochure: "The 'Boss' Steam Car is the best proportioned Auto, made of the very best material, and very strong and simple. The Body is of elegant design, hand-made."

"In the front part of the body is the 15-gallon fuel tank, steam and air gauges, and the tool box, necessary to carry an ample supply of tools."

"The hood was modified to look like the hood over a gas-engined car, although the engine and water tanks are under the seat and rear compartment."

"The large water tank holds 30 to 35 gallons; the tank is not under pressure, can be refilled at any time without the least danger."

"One of the best engines—17-inch boiler, tested with cold water pressure at 700 pounds . . ."

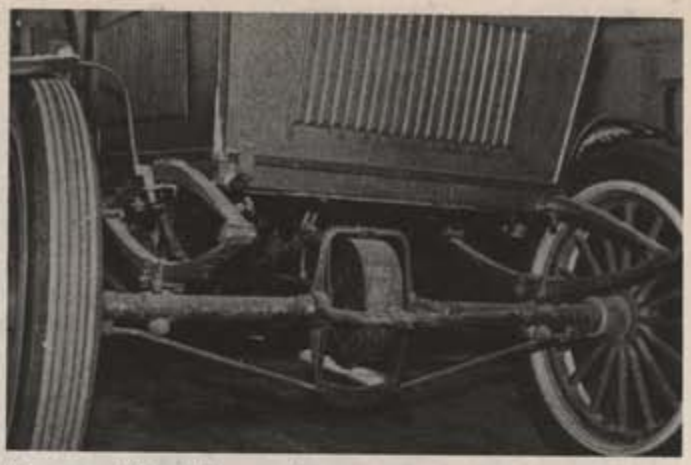
"The car is equipped with side-steering, friction throttle lever and reverse lever."

steam created by burning kerosene under a water boiler, every part of the vehicle, save for the tires, was the work of his own hands. He didn't infringe upon prevailing patents, nor was he influenced by them; every part of the car was built to his own design.

Mr. Eck called his vehicle the "Boss" Steam Car, named after his "Boss" Knitting Machine Works which he owned and operated and where he was later assisted in the business by his three sons who also proved to be expert mechanics. After further refinement and development of his Boss Steam Car, he was prepared to build it for any and all available customers at his Boss Knitting Machine Works.

But Mr. Eck was not satisfied to wait for customers to come to him, he began actively advertising his product. "GET OUT OF DANGER TODAY" proclaimed his 1904 brochure. It advised that the "Boss" car was "the only safe automobile on the market today." Further, "that it was the most convenient carriage on the market," as well as "cheaper than any other carriage on the market" with "more New Improvements than can be found on any other machine." What Mr. Eck was trying to say in a large measure was that his car was superior to all those contraptions that used gasoline engines (for interest was shifting rapidly from steam to the internal combustion engine since Charles Duryea had begun to build his car in Reading in 1900). And Eck said it with a quaint charm which the passing years have made all the more appealing; "Anybody that runs a car and uses gasoline dislikes it, and is always in danger in filling the tanks, and as long as he keeps it in his barn or place he has to pay a very high insurance on account of the gasoline." His contention was that all danger and expensive insurance would be eliminated with the purchase of his "Boss" Steam Car. And further: "Kerosene can be obtained in the most remote parts of the country, whereas gasoline is always very scarce to be had. Kerosene is so much cheaper, will run a carriage twice as far as gasoline for the same cost, without soot, smoke or smell." And from the ecological—although in those days the word was scarcely known—Mr. Eck proceeded into the practical: "A carriage of 1900 pounds, with two people in it, made a trip over very hilly country roads, of 142 miles, consumed 10 gallons of kerosene oil at 9 cents per gallon, and cost 90 cents for the round trip." If that wasn't enough to convince a prospective purchaser that a gasoline car wasn't for him, the brochure continued: "The most Auto dealers tell you only of the gasoline they use; they don't mention the spark plugs, spark coils, igniting dynamos, carburetor, switches, spark advancer, speed gear or transmission gear and clutches, and a lot of levers. All of these are more or less always out of order and are costly to keep them in repair. Steam is the only reliable power. Not one mile of railroad or street railway is driven by gasoline power in the whole United States."

As for the construction of his vehicle, Mr. Eck said, "The 'Boss' Steam Car is the best, well-proportioned car, not at one place very heavy and at another place so frail that it can't stand the strain of the road as you will find most autos are." And, most interestingly, there was added another comment which so well typifies the prevailing attitude of the day regarding that almost-too-new-to-be-true gadget called the automobile. The Boss Car, Mr. Eck suggested, "is so constructed as to hide all machinery which is a very chief objection to most carriages." In other words, some customers might want an automobile, but only if it didn't look like one. Mr. Eck's car was the answer. The "Boss" car sold for $850 to $1200, depending upon the model, runabout or touring, and it had been estimated that Mr. Eck built some twenty-two of his "Boss" cars before deciding to retire from the business. He was enormously proud of his steamer as well he might have been for in its day it truly was an exemplary vehicle. As his



". . . spur differential gear with double-acting band brake of our own make; truss axles make it extra strong.

"Everything is regulated from the seat; a perfect safety valve, automatic pressure and fuel regulators—anybody can run it to perfection in a few days."

brochure noted: "The running gear is made out of the best steel tubing, of heavy gauge, and extra heavy braced to withstand hard usage over country roads and has all the flexibility that is necessary for rough roads with four of the best elliptic springs for easy riding; spur differential gear with double-acting hand brake of our own make; truss axles rear and front that makes it extra strong. The best built and proportioned running gear on the market." (For those desiring it, the Boss running gear complete with 4 springs was available—without tires—for just $140.00). "I made my wheels with 16 spokes of the most beautiful hand rubbed wood, the hub being bound with an iron cap. This hub is not hollow as most other cars are. There are few wheels built as durable. I have a set of wheels which I have used continuously for nearly a dozen years without any signs of wear. It starts with a match to the pilot light under a 30 to 35 gallon water tank in the morning and keeps up steam all day for all kinds of roads and hills, and can be left standing for hours without any attention. It goes 150 to 200 miles with one charge of kerosene oil in its 15 gallon fuel tank in the front with the steam and air gauges, and the tool box. The fuel tank can be filled and all the tools had without raising the floor or any trouble. It has plenty of room between the seat and tool box. It has a 70-inch wheel-base, a 54-inch tread, with 30 x 3-inch clincher tires of the best make, upholstered with genuine leather, spring cushion and back, and is painted with 17 coats of the best Valentine paints and varnishes."

An article in the Reading Eagle published August 26, 1900 tells of Reading's early motorists and the city's start that year into the Duryea gasoline automobile industry. Steam automobiles were not unusual by that time. Eleven men in Reading owned steamers. The Eagle article listed their names as: Harry O. Kohler, William Seyfert, James A. Eck, Edward Youse, Charles A. Miller, Irvin D. Lengel, John M. Archer, William McIllvain, Sebastian Blimline of Sinking Springs, Gustavus A. Boyer and John C. Epler. It is most interesting to note that in the years ahead most of these 1900 steam car owners became inventive pioneers in their own right and renown in the automotive field. Lengel had driven his steamer to New York, a 14 hour trip, and he predicted in that same Reading Eagle article that America some day would have better cars and drive on better roads. Another pointed out that he had taken his steamer over the Reading boulevard to the flagpole on the mountain in Reading at a speed of eight miles per hour. When Mr. Eck ran his "Boss" Steam car on its first trial run there were but three other experimenters along that line in this country. They were the Stanley, now known as the Stanley Steamer; the Apperson, and the Whitney, all very popular cars sought after by antique car buffs today. Mr. Eck predicted that the future of the automobile would be startling in its advances, but that the car of tomorrow would be less intricate in its mechanism.

With his children grown, James Eck disposed of his knitting machine factory and retired to Hyde Park, just outside of Reading, taking with him a pair of his old steam cars which he stored in his garage. On February 1, 1924, Mr. Eck was in Reading on business. He started home rather late, taking the trolley to Temple from Fifth and Penn Streets. When alighting at Jefferson Street in Hyde Park, he was struck by an automobile without headlights attempting to pass the trolley car.

He was taken to the home of his son Edwin and died there the following day. James Eck's estate was inventoried for probate on April 4, 1924. The estate included "two junk automobiles, value $5.00." In June of that year, a "Boss" Steam Car was presented to the Historical Society of Berks County in Reading by Eck's son, Elmer. This same car is now on display in the Boyertown town, Pennsylvania. ■