Salon



PACKARD GRAY WOLF

One of America's first lightweight racers

BY DON FOSTLE

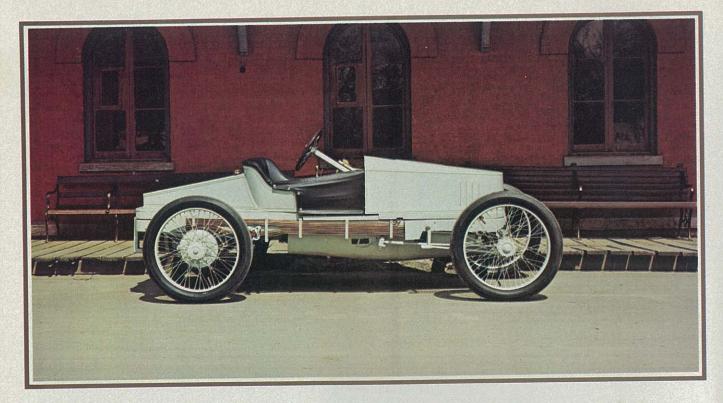
COLOR PHOTOS BY THE AUTHOR

THINK IT is time for you to tell the biggest stories about your racing machine that you can possibly invent, even if you never build it." So wrote Packard stockholder Henry B Joy to James Ward Packard in the spring of 1903. These were difficult times for the Packard company. Something was needed to divert attention from the fact that production was nearly zero. Packard's only marketable car was the singlecylinder Model F, rapidly becoming obsolete in comparison to evolving designs from other luxury manufacturers. Packard's new entry in the market, the 4-cyl Model K, was months behind in its development. Designed to sell for \$7500, the K was still breaking driveshafts, transmissions and rear ends besides fouling sparkplugs at an intolerable rate. The Model K's problems were never really solved. Although a half-dozen were sold, all but one were later recalled and replaced with Model L cars. The Model K episode could be classified a complete failure, except for one thing: the frustration it created spawned a race car vastly ahead of its time. It was a low, lightweight, streamlined, small-displacement vehicle, a stunning contrast to the behemoths it raced and defeated. They called it the Packard Gray Wolf.

The Wolf made its racing debut September 3, 1903, at the

Glenville horse track in Cleveland, Ohio. Spectators and members of the motoring press anticipated a duel between the Wolf and Barney Oldfield's Winton. The new racer they saw that day was a 1310-pound vehicle with aluminum bodywork and a full belly pan. Nine copper cooling tubes ran nearlythe length of the 92-inch wheelbase down each side of the body to a tank in the tail. Onlookers peering into the hatch on the Wolf's nose saw the top of the cast iron, 4-cyl Model K engine with its automatic intake valves, mechanical exhaust valves, updraft carburetor and coil ignition. Displacing 275.6 cubic inches with a bore and stroke of 4.19 x 5.00 in., the engine churned out 25 hp at 1000 rpm. Lubrication was by two drip oilers and splash, from 4 quarts carried in the sump. One of the oilers devoted its 2-qt capacity to the cylinder walls; the other supplied camshaft bearings, rear main bearing and differential pinion bearing.

Power was passed through a leather cone clutch to a 2-speed sliding-gear transmission; the machine was capable of 30 mph in low and 75 mph in direct-drive high at 1000 rpm. Output was transmitted from the midship transmission location via a square shaft and two leather-covered universals to the differential and rear axle assembly. This assembly was located and ***



suspended by longitudinally mounted semi-elliptic springs attached by cast brackets to the steel channel frame; the brackets also acted as pivot points for the cable-operated brake levers. The brakes themselves were a combination of internal-expanding and external-contracting types operating on a common drum. The woven camel's hair external shoes were pedaloperated as the main brake and the brass internal shoes functioned as the emergency brake, actuated by a floorboard lever.

Front suspension was by a transverse semi-elliptic carrying a tubular axle located by radius rods. Spring rebound was limited by leather straps to prevent shackle reversal. The tie rod was carried in front of the axle with its ends wrapped to retain the lubricant. The steeply angled steering mast ran to a worm-and-sector box. Mounted inside the diameter of the steering wheel was a hand throttle and spark advance control. The only instruments on the dash monitored water temperature and fuel-system air pressure.

The Gray Wolf was designed by Charles Schmidt, a 34-year-old French engineer who had come to Packard in the spring of 1902. Schmidt had worked for Mors before immigrating in 1901. His European automotive experience was considered so valuable that Henry Joy bailed Schmidt out of a New York City jail to work for Packard; he had been arrested for running over a dog. With great approval Joy wrote to Packard a few months later: "... notice how closely Schmidt has reproduced the (Mors) motor which they call the 'Paris-Berlin' type."

While the Wolf's engine owed much to another design, the rest of the car was highly original and subject to intense development. During its competition life of slightly over a year, its appearance and features changed from race to race. It was fitted with no less than four bodies, at least two front suspensions, several exhaust systems, various carburetors; 2-, 3- and 4-speed transmissions, cooling-system modifications and numerous other detail changes. The Wolf was a continuously evolving experimental vehicle creating hundreds of hours of round-the-clock work for Schmidt, machinist Ed Roberts and the tiny engineering staff.

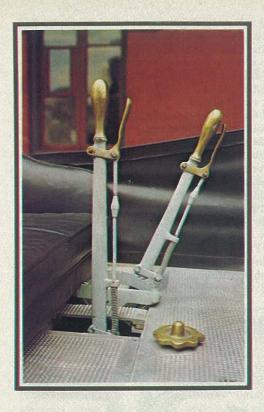
As Charles Schmidt pulled onto the Cleveland track that Thursday in September he could have had no idea of the effort, pain, failures and triumphs that lay before him and the Gray Wolf, a new car and an inexperienced driver both racing for the first time. Turning a lap at 1:05 for the mile and another

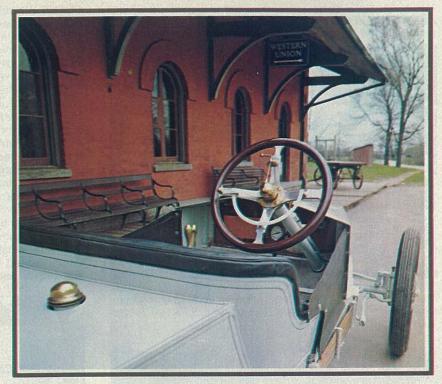
at 1:04, Schmidt returned to the pits to fit larger wheels. As the crew labored to replace the 32-in. wheels with 34s, the course became increasingly crowded with cars practicing for the next day's events. Despite the heavy traffic, Schmidt returned to the track to try out the new car and had just been timed at an incredible 27 seconds for the half-mile when a touring car pulled onto the course and veered into the Wolf's line. Swerving to the inside to evade the lumbering tourer, Schmidt lost control and slammed into the infield fence, knocking out 15 ft of boards before crashing into a post. Though he was thrown 25 ft from the car by the impact, Schmidt got up and hobbled to the grandstand, where it was found he had three broken ribs. The car was badly battered with damage to the front suspension, cooling system and body. Immediate repairs were impossible, so the Wolf was withdrawn. The match with Oldfield would have to wait for the Labor Day meet in Detroit.

It rained in Detroit on Labor Day 1903. The races were postponed a day while the promoters hurriedly attempted to dry the track by setting gasoline fires on the surface. Since Schmidt was in no shape to drive after the Cleveland crash, the Packard people had arranged for Harry Cunningham to pilot the hastily repaired Wolf. Cunningham, who had previously driven the Ford-Cooper 999, acquitted himself well with local newspapers proclaiming him the "star of the meet." After dicing with Oldfield in the Winton, Cunningham pulled past Oldfield to take 2nd in the prestigious Grosse Pointe Manufacturers Cup with Oldfield finishing 3rd. Winning by a remarkably small margin was the 70-hp Ford-Cooper behemoth. The duel with the Oldfield-Winton forces had been met and won, albeit under less than gloriously decisive circumstances.

The next day the Gray Wolf lost a wheel in the third mile of a 5-mi event, but Cunningham was able to bring it to a stop on the remaining three. The crew promptly fitted another rear wheel, enabling the Wolf to participate in one of the most bizarre events of its career.

The occasion was the 10-mi open race. With eight entries sidelined by mechanical problems, only two cars appeared on the starting line. One was Oldfield's 40-hp Winton, the other Cunningham's 25-hp Wolf. The race got off to a clean start, Cunningham taking the lead. Early in the first lap the Winton's engine stalled. Oldfield jumped from the car and tried to restart it without immediate success. Finally, after Cunningham had



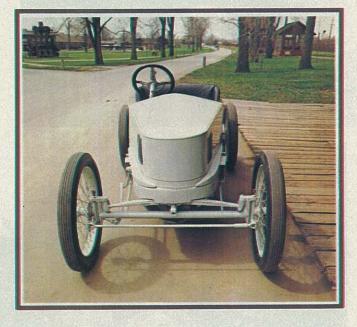


piled up a lead in excess of 2 mi, Oldfield restarted the Winton and took off in furious pursuit—reports said "driving like a madman." Oldfield was closing when a blowout sent his car into a long slide off the course and through a fence. When the Winton finally came to rest upside down, Oldfield was badly hurt and a spectator was dead. What had begun as a 10-car open, then shrunk to a match race, ended with the Wolf circling the track alone to complete the 10-mi distance for the win. Cunningham won another 10-mi event that day, but since neither Cooper nor Oldfield were entered it was not the victory it might have been.

On September 19, 1903 the Gray Wolf appeared before a crowd of 7500 at Providence, Rhode Island. News of the Detroit performance had preceded its arrival in the east and great things were expected. No one was disappointed. Despite his injuries of only two weeks before, Schmidt was driving again as was Cunningham. The Wolf ran away from Paul Sartori in W. K. Vanderbilt's Mercedes and the rest of the field in a 5-mi open race. Shortly thereafter it pulled out for a 5-mi exhibition, running as fast as anyone had run that afternoon in competiton. Observers called it an "impressive performance" but hastened to add: "It seemed to critics that the Packard had a bit more power and speed in it than its driver had the nerve to let show in its trial or its races." But this was only a prelude.

The race of the day, and according to one commentator "the greatest race so far in the history of automobile speed contests," was the 5-mi triangular match. Entered was the Wolf, a 60-hp Paris-Madrid Decauville and a 40-hp Darracq. The Decauville got off to the lead, followed by the Darracq and the Wolf. The Darracq fought its way past the Decauville, followed by the Wolf. By the end of the mile all three cars were within a yard of each other. The dicing continued for the full race, bringing the crowd to its feet "alternately screaming with excitement or holding its breath in fear." They roared across the finish line, all three abreast, separated by scarcely half a length. The Darracq won, followed by the Gray Wolf and the Decauville. "There had never been," said a reporter, "a greater finish of moving things on any circular track on earth."

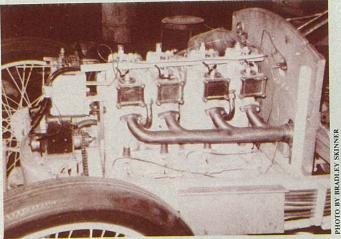
At the Empire City track in New York the same three cars met on October 3, 1903. With Cunningham driving again, the Wolf once more placed 2nd, but this time in a 10-mi race the Decauville won. The Darracq was 3rd. Both the Wolf and the



Decauville broke the world's record time for the distance. In another match race against the Decauville the Wolf lost with the still-recuperating Schmidt at the wheel. The records continued to fall as Cunningham guided the Wolf to 3rd in a 15-mi free-for-all won by Oldfield in an 80-hp Winton. Nearly two full minutes were slashed from the record for the distance during the race.

In the last meet of the season on October 31, 1903 at Brighton Beach, Long Island, the Wolf fared poorly on a badly rutted track. Cunningham claimed it was unsafe to drive the car under the conditions, so the Gray Wolf was turned over to Arthur Champion. Champion, a French bicycle racing star who would go on to found two ignition companies, was driving his first automobile race. Champion placed third in a 10-mi open race and second in the Manufacturers Challenge Cup. During a third event Champion was "gamely letting the Wolf go for all it was worth in an attempt to regain lost laurels" when a steering knuckle broke as he wrenched the car free of a deep rut.

Gray Wolf's engine during restoration: at this writing the owner won't remove the hood for fear of scratching paint because the car is headed for shows. The 4.5-liter 4-cyl engine produced 25 hp @ 1000 rpm.



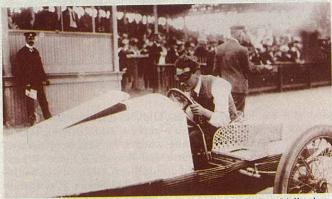
Schmidt testing the Gray Wolf at an unknown track: a previously unpublished shot from the company files, courtesy of Richard Teague.



Champion barely escaped being decapitated as the car crashed through the fence.

But despite the crashes the 1903 season was an amazing success. A low-power production engine, inexperienced drivers and a late start did not deter the Wolf from challenging the fastest cars in America. The combination of five trophies in three meets plus its participation in the incredible Providence Triangular Race brought the Gray Wolf wide recognition and an enthusiastic following. But the consensus at the factory was that the Wolf was too light a car to be consistently successful on the mile tracks. As a result attention was turned to straightaway records, again with astonishing results.

The new emphasis brought Charles Schmidt and the Gray Wolf to the smooth sands of Ormond/Daytona Beach in the closing days of 1903. Officials of the AAA arrived at Ormond on December 28, 1903, but the Wolf had not yet arrived. It had left Ohio by train two weeks earlier and its whereabouts was unknown. Frenzied efforts revealed that the Wolf and its private freight car were on a siding in Chattanooga. The Wolf's car was then attached to a passenger train bound for Jacksonville and was brought from there to Ormond Beach



Harry Cunningham at Providence, R.I. in 1903; Spooner & Wells photo courtesy of Motor Vehicle Manufacturers Association. The nine copper cooling tubes look like airstream lines around the cross-shaft.





The Wolf at the starting line for the Vanderbilt, about 6:28 a.m. on October 8, 1904. The car left the starting line with three cheers from the grandstand-the only car so honored. With Schmidt in the Gray Wolf is "mechanician" William McIldrid. Spooner & Wells photo, courtesy MVMA.

by special locomotive. Finally on January 1 the Gray Wolf made its first runs with Schmidt at the wheel. Without the usual favoring winds and with 40% less power, Schmidt drove the Wolf to a new 5-mi record of 4:43.8, knocking 2.2 sec off Alexander Winton's record set the previous March. The Wolf's low frontal area, slippery body and belly pan were beginning

The next day the car assaulted the 1-mi record. Schmidt drove 2 mi south of Ormond, swung around and went through the start-and-finish timers "like a flash." Secretary Butler of the AAA looked at his watch, smiled slowly, and said, "They're all gone." He meant the records. Schmidt had tripped the clocks at 51 seconds flat, destroying all previous American marks: Fournier's 1901 Coney Island Road mile of 51.8 sec and Winton's 52.2-sec mile on the beach had been toppled. The day's activities ended in the afternoon with the mile at 50.4 sec and a new kilometer record of 29.4 sec.

On Sunday, January 3, 1904, a northerly wind picked up along the beach and Schmidt was eager to take advantage of it. On the day's first run the mile was slashed to 46.4 sec for a 77.58-mph average. Despite four more tries Schmidt could not better the day's premier performance; so ended the Gray Wolf's trials on the sand with new marks for the kilometer, mile, and 5-mi distances. The mile time was a scant 0.4 sec off the unlimited international mark and stood as an American record; the kilometer time was a class record, and the 5-mi run was the fastest ever recorded for the distance and an international record for cars of any class. Schmidt commented, "Stepping out after my fastest mile, I found stretches along the sand, some 8 ft in length, upon which the wheels of the car had not touched. I knew then I had been going some."

The Wolf lay idle until the following spring. But not the people at the Packard factory. Front-page advertisements were taken to announce the Wolf's triumphs in the motoring press. Plans were announced to build a 50-hp racer, and negotiations were entered with Barney Oldfield to drive a rebuilt Gray Wolf during the 1904 season. These were exhilarating times for the young Packard company, though neither the new racer nor the Oldfield arrangement came to pass. With its fame now spread worldwide, the car participated only in exhibitions and time trials during the 1904 track racing season, establishing several

track records in the process.

The events of August 26 and 27, 1904 were typical. The Wolf set a new 10-mi mark at Detroit that weekend and crashed in another record attempt. One observer commented: "It's a poor meet where the Gray Wolf does not kick up in some way, though it is probable that the Detroit experience is the last that Schmidt is likely to have in it, as his employers were heard to declare that he was too valuable a man to them to

be permitted to risk his neck in track work."

Apparently Schmidt was allowed to "risk his neck" at least once more, because H.B. Joy entered the Wolf in the first Vanderbilt Cup race on October 8, 1904. By this time the Wolf was so famous that one of motoring magazines in a feature on "How to Identify Cars & Drivers" commented: "This long, rakish craft is so well known that even the merest novice will know it. Of a dun color, with a very long-hooded front coming to a point, it will be easily recognized." Eighteen cars started the Vanderbilt, but only seven were running when enthusiastic spectators mobbed the course, forcing the race to be called. Ignition trouble defeated one of the huge 90-hp Panhards, a sister car to the winner. A 90-hp Fiat burned out its clutch; broken springs retired a 60-hp Mercedes and a shattered cylinder felled a 90-hp Mercedes. Many others suffered similar fates, but through nearly 300 mi of mechanical carnage the Wolf raced on with only one 20-min stop for engine repairs. Schmidt was wisely driving a very conservative race, apparently aware that to win it was necessary to finish. And he finished 4th. Coming in behind Schmidt were two 60-hp Mercedes and a 75-hp S&M Simplex. Immediately in front of Schmidt was another small car, the 24-hp Pope-Toledo.

The performance of the Pope and the Gray Wolf were the

subject of much comment and amazement, with many apparently aware for the first time of the potential of moderately powered, lightweight cars. Not the least of those who learned from the race was Barney Oldfield. Present as a spectator, Oldfield commented: "I learned a lot and have an opinion of just what a car should be for such a race. I am going to have a try next year . . . and you can say that my car will weigh less than 1800 lb." It would be many years before the advantages of lightweight, efficient, balanced vehicles were widely appreciated, but the Gray Wolf helped. Whether through genius, necessity, or both the Packard company, Charles Schmidt and those who worked with him created a vehicle which would leave its mark on many who never knew it existed.

This would be enough for any car; yet the Wolf was destined to live. Retired from competition, it was consigned to a storage area known as the "experimental shed" where it languished for a decade. An occasional visitor to that shed was a young Packard employee, B. J. Pollard. Though he examined the Wolf on several occasions, his principal interest in visiting the shed was "Old Pacific," the Packard trans-continental endurance car of 1903. From its driver, Tom Fetch, the young Pollard heard firsthand the perils of cross-country travel during the dawn of motoring. And then, one day in 1915, the Gray Wolf disappeared. No one alive today knows exactly how. No records remain. Its absence was not even noticed.

 Γ HE TIME is the early 1940s. B. J. Pollard is a successful contractor, attending a Lion's Club meeting. In conversation a man mentions that he has an old engine in his basement and that it is the engine of the Gray Wolf. When Pollard purchased the engine he was told it had been salvaged from the wrecked chassis of the Wolf in the summer of 1915. The car had been racing in amateur events at a small track in Mount Clemens, Michigan. It had been crashed and abandoned by persons unknown. After lying trackside for several days, the engine was removed for use in a boat and the chassis hauled off by others. In due time the "others" contacted Pollard and offered to sell the chassis. In the brief contact that followed, Pollard learned only that they had taken the chassis with the idea of building a speedster from the remains. Other than disassembling the frame and running gear, they had carried their plan no further.

Pollard now has the theory that the Wolf was given by Henry Joy to Joe Boyer Jr. Son of a powerful industrialist and Packard stockholder, Boyer went on to become an excellent driver, winning Indianapolis before dying in a crash in Pennsylvania in 1924. Since the past is silent on the matter, the theory is based on Mr Pollard's knowledge of Packard operations and a long-since-lost photo of Boyer sitting in the Wolf at the Packard Main Gate. Pollard believes the photo to have been a record of the transfer of ownership from Packard to Boyer.

After securing the engine and chassis Pollard stored them while he worked on other cars in his massive collection. About 10 years ago the engine was pulled from storage and slowly restored. Little needed to be done. An earlier connecting-rod repair was made right, bearings were changed, and the engine was given a clean-up bore and new pistons. In 1970 restoration of the chassis was begun in earnest. A new body was built, since the original was apparently left at the track after the 1915 crash. The chassis and running gear were restored and then assembled. This was not an easy task, since the 1903-1904 modifications and repairs left many scars and unused holes in the frame. After nearly two years of effort the Gray Wolf was once again whole by midsummer of 1972

The Gray Wolf proved Henry Joy's admonition superfluous. It was not necessary to invent stories about the car; it created its own magnificent legend. In track racing, road racing and straightaway trials the Wolf was the universal competitor, a feat almost unknown then and impossible now. It was the archetypal lightweight racer, defeating cars of treble its power and quadruple its displacement. It was a car whose accomplishments grew to meet the epic proportions of its name: the

Packard Gray Wolf.