"When you sit in a motor carriage
and feel yourself being carried over the ground
with no horses in front of you, it produces a pleasurable sensation.
As you become more accustomed to it,
the feeling grows to one of delight and lastly
you are completely 'carried away' with it."

The anonymous writer of these words in a July 1906 newspaper noted that there were now more than 200 automobiles in the city of Des Moines, a tenfold increase in four years. The summer before, well-to-do Grover C. Hubbell had purchased from New Haven, Connecticut, a “new $3,500 machine... the largest private car in the city” (its make was unspecified but it was probably a Pope-Toledo). The day of the automobile had without question dawned in Iowa.

A man already aware of the exact meaning of the reporter’s words was Iowa governor Leslie Shaw. In June 1901 he had drawn the attention of another journalist with his enraptured devotion to his own car, made by the Chicago Automobile Company. “To say that the Governor is interested in the machine is put-
ting it mildly,” the writer declared. “He is simply infatuated with it.” So enamored was he of his conveyance that he eagerly gave rides in it to anybody who asked.

Governor Shaw’s public delight in his horseless carriage may have been one of the things on the minds of four men who met on the day after Christmas 1901 to file with the Polk County Clerk of Court the articles of incorporation of the Des Moines Automobile Company, which they had started up with boundless optimism and a substantial capitalization of $50,000; its program was “the manufacturing, construction, buying, selling and handling of self-propelling vehicles.” (The make would be called, appropriately, the Des Moines, after the city where it would be manufactured.)

The next day the Des Moines Daily News published further details. In its new factory at 409 9th, the company would build two vehicles a week at the outset, but it was confident production would triple by the start of 1903. Prices of these cars would be “in the neighborhood of $800 or $900.” They also planned the eventual manufacture of both electric and gasoline-powered vehicles.

The optimism of the company’s founders was not unreasonable. In 1902 no one else in Des Moines was making automobiles, and the city’s growing middle class might translate into enough customers to make a success of the moderately priced car. The establishment of a dealer network was not a priority; the factory was to serve as the dealership, eliminating the factoring of shipping costs on local sales. No clear preference had emerged for gasoline power over steam and electricity, so the company’s plans to build electric cars alongside its gasoline cars was not far fetched. The firm also intended on-site manufacture of every component of the Des Moines but its tires, an ambitious goal for a fledgling business; whether it was attained at any point in the company’s brief existence is unknown. It may have escaped notice that as of that date, three months from the concern’s founding, construction had yet to begin on the factory.

In a full-page ad in the 1902 city directory (below), the company listed four body styles in prices ranging from $650 to $1,600 (in today’s dollars, from $15,000 to $37,000). The $650 model, the Motorette, was a small, light, two-passenger runabout. This was the body style shown in a series of ads the company ran in the Daily News every day of the 1902 state fair; they invited prospective buyers and the curious to “call on” its display at the fairgrounds. After that no further advertisements for the car ran in the Daily News, and it does not appear the city’s streets were ever crowded with Des Moines automobiles.

The Des Moines Automobile Company had been in existence eight months when the Des Moines Register and Leader published a lengthy survey of the city’s automobiles and “devotees”; it indicated that only a single automobile by the Des Moines Automobile Company had been built, apparently the first since completion of a factory. At the time the article appeared, in the fall of 1902, manufacture of the projected two cars a week was claimed to be under way, with expanded production again promised for the near future.

In publishing this auto survey, the paper revealed another problem the Des Moines Automobile Company would have to confront—the existence of local agencies selling more than one make of car. The news article disclosed that the most popular make of the eleven accounted for was the Waverly Electric, of which five had already been sold in Des Moines. The rest were four Locomobiles, three Oldsmobiles, three Toledos (one described as a “Toledo Jr.”), two Electrobikes, two Baker Electrics, a Friedman, a National, a Milwaukee Steam Carriage, the lone Des Moines, and a Winton owned by J. E. Paul, one of the officers of the Des Moines Automobile Company. Every vehicle but the Des Moines had been built outside Iowa; the Locomobiles had come all the way from Connecticut. Three
of the makes most in demand—Waverly, Oldsmobile, and Toledo—were being sold by one dealer, the Will Riddell agency, at 11th and Locust. That no other cars were being built in Des Moines did not mean none was being sold there, and the Des Moines Automobile Company was at once forced to struggle for a foothold in an already diversified and highly competitive market. Within a year of its founding, the firm—for reasons still obscure—was moribund, and by the autumn of 1903 it had been sold.

The story of the automobile called the Des Moines is a forgotten episode in the history of transportation in Iowa. What we can piece together of it shows similarities to those of other intrepid Iowa automobile manufacturers of the era—a chronicle of hard work and optimism confounded by production glitches, a shortage of ready capital, mercurial market conditions, or sheer bad luck. Entrepreneurs in Iowa struggled for two decades to keep local car production going, only to make the bitter discovery that they enjoyed no protection from the blows delivered by the risky new business.

At the turn of the 20th century, and before the rise of Detroit, thousands of American automobile companies appeared and disappeared in a matter of months. Iowa's peak year was 1909, with ten makes more or less in production; the industry in Iowa then went into decline. After 1916 its decline steepened, and by 1920 it was gone. In the ensuing years a few scattered efforts were made to restart it, the last in 1983.

In 1908 Kenneth Grahame, author of *Wind in the Willows*, placed his character Mr. Toad in this wondrous invention called the automobile: “As if in a dream he found himself, somehow, seated in the driver’s seat; as if in a dream, he pulled the lever and swung the car round the yard and out through the archway; and as if in a dream, all sense of right and wrong, all fear of obvious consequences, seemed temporarily suspended.” The early automobile industry shared some of the properties of a dream, even to the names of some of the marques—Dazzler, Meteor, Arabian. The roster that starts below describes the surprising number of Iowans' efforts to create automobiles, along with the names of towns and cities forming their backdrops—from the quiet towns of LuVerne, Marathon, and Walcott to the metropolitan centers of Sioux City, Waterloo, and Des Moines.

In a field that was largely unshadowed by precedent, the early engineers were necessarily free to try anything, and they did: one design stored water in the fenders, others were powered by steam or electricity and not gasoline. But a large number, vaporous as dreams, existed only on paper, and more than 40 reached no further than the prototype stage. Twenty saw spotty or very limited production.

Only five Iowa manufacturers—Mason, Maytag, Galloway, Colby, and Spaulding—even came close to the realization of their own dreams. Here, in the following vignettes, are their stories.

Roster of Iowa automobile projects and production, 1870–1983

**Category 1: Cars believed to have existed only on paper, with construction of even a single prototype doubtful. The dates in this category refer to announcements.**

1. Franklin, 1901, Des Moines
   W. I. Franklin of Des Moines announced, but never produced, automobiles to be powered by either steam or electricity.

2. DeLoura, 1902, Fort Madison
   H. E. DeLoura of Fort Madison announced production of a vehicle around 1902–1903, but there is no indication even one appeared.

3. Leicher, 1903, LuVerne
   This project is known principally from an announcement in *Motor Age* for December 1903 that the Leicher brothers of LuVerne planned production of an automobile.

4. Stoltenberg & Reimers, 1903, Davenport
   A modest capitalization reported at $5,000 was insufficient for production of this car, which probably did not exist even as a prototype.

5. Swanson, 1903, Marathon
   The Swanson, a project of J. M. Swanson, would have had four-wheel drive.

6. Gate City, 1904, Keokuk
   A vehicle announced by the Gate City Motor Car Company.

7. Lamb, 1905, Clinton
   The Lamb Auto Company, also known as the Lamb Boat and Engine Company.

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Fred Duesenberg was a German American master mechanic who with his brothers August and Heinrich had grown up in Rockford, Iowa, in Floyd County. He led a restless life, moving frequently in search of auto-racing venues and fresh business opportunities; he was a racing engineer who incidentally designed and built some passenger cars, not a passenger-car manufacturer who occasionally utilized racing-car design.

In 1905 Fred and Augie found themselves in Des Moines, where Fred had been working as a repairman and selling Ford, Acme, Gale, Rambler, Marion, and Queen automobiles. In the summer of that year he met Edward Mason, clerk of the U.S. District Court for Iowa; the outcome of their meeting was the Mason Motor Car Company, which Mason capitalized with a substantial amount of his own money. (A solid capitalization had not saved the by-then vanished Des Moines Automobile Company, but on the other hand it, unlike Mason, had not had the services of Fred Duesenberg.)

In February 1906 Fred and Augie took to the streets in their newly completed prototype they called the Marvel, soon to be rechristened the Mason in acknowledgment of the source of its financing. On May 12, 1906, in a famous stunt, the Duesenbergs drove this machine up the west steps of the state capitol (below), twice in forward and once in reverse. The Mason could take the punishment. As small and tough as an army Jeep, it was powered by a two-cylinder, water-cooled

announced but never produced an automobile; it remained in business for some time as a dealer.

8. Criterion, circa 1906, Des Moines
Promoter J. F. Kitto operated in the Midwest in the early years of the 20th century; almost all his automotive ventures, of which the Criterion was one, seem to have existed only as stock schemes.

9. Des Moines Dazzler, 1906, Des Moines
The Dazzler was another promotion of J. F. Kitto.

10. Sunderlin, 1908, Boone

11. Waterloo, 1908, Waterloo
An announcement of the Waterloo Car and Engine Company.

12. Atlantic, 1909, Council Bluffs
The Atlantic Automobile Company was formed primarily as a dealership. Its corporate articles provided for manufacture but none was undertaken.

13. States, 1911, Oskaloosa
The States Auto Supply Company claimed $50,000 in capitalization for the automobile it intended to build, but construction even of a prototype was unrealized.

14. Van, 1911, Waterloo
An unrealized project of Louis C. Erbes, who later went on to build and market the LCE automobile. (See Galloway, #87.)

15. Cannon, 1912, Des Moines
The J. F. Cannon Company is believed to have been fictitious.

16. Fishback, 1912, Waterloo
A promotion of R. Wilton Fishback.

17. WG, 1914, Waterloo
An announcement of N. H. White of Pottstown, Pennsylvania, and Waterloo, Iowa, the WG may have entered production in Pennsylvania but did not reach even prototype stage in Iowa.
engine of Fred Duesenberg’s own design. (With significant modifications, this engine would power most of the Mason cars until the company ceased business eight years later in Waterloo; in normal tune it probably gave the Mason a top speed of over 60 miles per hour.) The Mason would become the best-known passenger automobile to see actual production in Iowa.

The Mason factory went on to turn out between 20 and 25 cars in 1906. According to figures the company published some time later in the Register and Leader, production volume rose to 150 for 1907 and to 200 for 1908, with 400 being built up to the end of March 1909 (these figures are disputed in other sources). Along with the numbers came a boast that dealers “all over the country” were “clamoring” for Masons and that the cars had been sold in eleven states besides Iowa. The writer acknowledged only a single problem, the firm’s inability to meet the “fevered demand” for its cars (a new Mason factory was being built in Des Moines in March 1909).

With business so vigorous, it must have come as a surprise when in May 1909 Mason and his partners precipitately sold a controlling interest in the company to the well-known Newton entrepreneur Fred Maytag. Because the terms of this transaction turned out not to be particularly favorable to Edward Mason, or to the car he and Fred Duesenberg were building, it is hard to see why he accepted them at all unless he had no choice. In September 1909, Masons were being put through their hill-climbing paces on a steep ramp set up on East 30th Street just outside the main gate of the state fairgrounds, where fairgoers could not miss seeing them. But two months later Maytag announced the transfer of his recently acquired automobile operation to Waterloo. Once the new arrangement was in place, the Mason itself went into immediate eclipse, now being designated “the Maytag, formerly the Mason.” The new make was powered either by a four-cylinder Excelsior engine or by the two-cylinder Duesenberg power plant.

It is unclear if there were any 1910 Masons; in some cases it may be hard to tell if a given machine, of those manufactured, in several different size configurations. (See also Summit, #71.)

Category 3: Single prototypes that either could not achieve production or had never been meant to; many of these remain unknown and more will undoubtedly come to light in further research. This is the largest single category.

20. Nelson Electric, circa 1870, Redfield
The prototype of this very early vehicle may have been only a working scale model (said to be extant), a project of Henry D. Nelson. (The Nelson Electric should not be confused with the Nelson, #46.)

21. Andrews, 1895, Center Point
A. B. Andrews of Center Point is said to have constructed a small, light automobile, somewhat like a baby carriage, with a spring-wound motor. (Compare with Lybe, #18.)

22. Davis, 1895, Waterloo
A prototype of the Davis Gasoline Engine Company, the Davis was built for entry in the Chicago Times-Herald contest.

23. Mann, 1895, Gladbrook
the company manufactured in early 1910, is a Maytag or a Mason. There were certainly none for 1911, though Fred Duesenberg went on racing both the two- and four-cylinder cars, always referring to them as Masons. It is said that for some reason many Maytags carried no badges or logos; the Maytag in the State Historical Society’s collections in Des Moines appears to display no external identification.

As frequent paper reorganizations pushed Edward Mason and Fred Duesenberg to the peripheries of the firm’s structure, Fred Maytag tried to field a diversified line of vehicles that included a hybrid farm wagon/passenger car like William Galloway’s, but by the late spring of 1911 it was plain that after only 18 months the new venture was in trouble. Fred Maytag had gone into debt for parts inventories far in excess of actual orders and soon came under pressure from his creditors to take bankruptcy. The company never did, but it ultimately entered receivership. Production stopped in August 1911 after 865 Maytags had been assembled. At the end of the year Maytag handed Edward Mason’s ruined company back to him and returned to Newton. He later ruefully described the venture as his “automobile fiasco,” and he was neither the first nor the last Iowa entrepreneur whose good sense and proven business acumen seemed to desert him when he tried building cars.

Mason did his best to resume production, carrying Maytag’s 1911 lines into 1912 and restoring the Mason name to all of them. The mainstay of the revived offerings was designated the Model A. It was the last embodiment of the machine Mason and Duesenberg had first built in Des Moines; after six years of Duesenberg’s modifications and improvements, its two-cylinder en-

On a 50 percent incline set up near the 1909 Iowa State Fair, a Mason once again demonstrates why it was called the “hill climber.” Eleven passengers are inside the vehicle, while part owner Edward Mason stands by the ramp.

Lee Count Mann and his brother Thomas were the builders of a single, gasoline-engined prototype.

24. Smisor, 1899, Webster City
The four Smisor brothers first built a buggy powered by a single-cylinder proprietary gasoline engine, then constructed a second prototype with an engine of their own design.

25. Tri-City, 1899, Davenport
The Tri-City Carriage Company of Davenport was reported in 1899 to have two automobiles under construction.

26. Brelsford, 1900, Villisca
A prototype of a “light,” gasoline-engined car.

27. Fageol, circa 1900, Valley Junction
The three Fageol brothers, sometime automobile dealers in the Des Moines area, appear to have built a prototype under their own name before they departed for California, where around the time of World War I they attempted manufacture of a luxury automobile. They went on to develop a successful line of trucks still being sold in the late 1930s.

28. Asquith, 1901, Waterloo
S. A. Asquith, a jeweler, built a prototype. He apparently did not try to produce. In 1903 he became an Oldsmobile dealer but subsequently abandoned the car business to return to jewelry.

29. Bruening, 1901, Ackley
The Bruening brothers constructed a single prototype automobile with a gasoline engine.

30. Crawford, 1901, Le Mars
Little is known about this prototype, constructed by J. B. Crawford.

31. Pugh, 1901, Davenport
William J. Pugh, co-owner of the Pugh and Bofinger Machine Shop, was the builder.
THE "MAYTAG" Once The Mason

"The Hill Climber"

This Irresistible Car has Whipped them All in Climbing Hills, Endurance, all Displays of Power and Economy of Maintenance.

The "Maytag" (formerly the Mason), though of modest price, has been creating sensations in different parts of the country for the past four years. Climbing over one hill in the $6,000 class in different tours, hill climbing contests, endurance runs, and the like, the Maytag is proving itself to be the equal of the finest imported cars in operation, speed, dependability, endurance, and economy of maintenance.

And the Maytag is equally far ahead of all low or medium priced cars in other respects—easiest riding, simplest in operation, most economical in maintenance, travels from four to forty miles an hour on high, and is as neat as a ghost.

Made in six models, $1,250 to $1,750

Write for catalog and name of nearest dealer

Maytag-Mason Motor Co., Waterloo, Iowa

Above: Described as "a whirlwind on wheels," the "irresistible" Maytag is touted for its endurance and affordability in this advertisement.

Right: At a time when automobiles—even large, luxury models—were relatively noisy, this elegant catalog claims that the Maytags were unusually quiet, "Silent as the Sphinx." For several of the models in the catalog, the veneered-wood body was available in light blue, wine, or blue-black, with the chassis in wine or yellow.

gine was nearly indestructible, and at $800 these cars were bargains, though they could not undersell the $690 Model T Ford. But whatever the reason, sales of the Mason faltered, plummeting from 218 in 1912 to only 33 for 1914, its final year of production. The firm's remaining assets were auctioned off in September 1915. A luckless marque in many other ways, the Mason may nevertheless boast the best survival rate of any Iowa-made automobile—as many as 25 are thought still to exist.

The collapse of the Mason operation marked a beginning, not an end, for Fred and August Duesenberg. Now completely committed to the design of sophisticated high-speed engines,
they moved first to Waterloo, then, in 1914, to St. Paul, Minnesota. Throughout the teens Duesenberg engines found numerous applications in military and marine projects as well as in high-stakes racing. In 1921 the brothers were living in New York City and building, in a New Jersey factory, expensive and advanced cars bearing the Duesenberg name. By 1927 this venture was near failure but became the object of a spectacular rescue by Errett Lobban Cord, an entrepreneur and promoter; a flamboyantly powerful Duesenberg already designed by Fred and August was added to Cord's corporation. It was a legendary vehicle, going on to become the personal transportation of Clark Gable, Greta Garbo, and Gary Cooper. An essentially American, midwestern artifact, it was built in Auburn, Indiana, and remained in production until the late 1930s.

Fred Duesenberg's ties to Iowa were solid. He lived half his life in the state, and his wife was an Iowan. He did not forget Rockford; at some point after moving east he donated money to the Rockford Library book fund with the words, "It affords me much pleasure to do something for the old home town." When he died in July 1932 of injuries sustained in the wreck of one of his own cars, the Rockford paper remembered him as "this enterprising boy who went out from the home community many years ago." The local people knew something about him not widely noted later—the severe arthritis of the hands that he suffered from all his adult life. It can only have been agonizing for him when he drove or worked on cars.

43. Maxen Electric, 1904, Cedar Rapids
Three automobiles of this name were constructed in 1904, and one is said to survive. The car was announced again nine years later but no production ensued. This enterprise was run by Roy McCartney of Cedar Rapids.

44. Baker, circa 1905, Des Moines
The Classic Carriage Works of Des Moines was reported in 1986 to have under restoration a vehicle built by "the patriarchs of the Baker Machinery Company." Its general body configuration placed its date at prior to 1910. It was stated to have four-wheel drive and to be powered by a "Crest" engine.

45. Allen, circa 1905, Oelwein
Clyde Allen, a blacksmith and maker of small gasoline engines, constructed a prototype supposedly with the help of Walter P. Chrysler. Because Chrysler appears not to have arrived in Oelwein until about 1905, the date of 1903 in a county history is too early. (The Allen may have been built as late as 1909.)

46. Nelson, 1905, Harlan
T. K. Nelson, the operator of a Harlan repair shop, constructed an automobile prototype, fabricating all its parts except for the body. He never attempted production because he thought cars could not sell in large numbers and would remain diversions of the rich. (The Nelson should not be confused with the Nelson Electric, #20.)

47. Richmond Amphibian, 1905, Jesup
This bizarre vehicle, somewhat boat-like in shape, was claimed to be operable on water and ice as well as on dry land; it may well have been defeated by the deep mud of 1905 Iowa roads.

48. Iowa, 1907, Des Moines
A project of Jesse Wells, this vehicle is, remarkably, the only one found so far to be named for the state.

49. Foster, 1908, Newton
Galloway
A passion for automobiles in Waterloo

Between 1903 and 1918, five of the seven auto makes produced in Waterloo shared a tangled corporate genealogy whose progenitor was William Galloway, local manufacturer, investor, and developer.

Beginning in about 1903, Galloway first became involved in the Waterloo Motor Works (which turned out Waterloo Duryea automobiles for the Duryea company of Reading, Pennsylvania). When it failed in 1905, Galloway went on to start, in 1906, a company to manufacture small farm implements of all kinds and to sell them by mail. This soon made him a millionaire, but the automobile remained a powerful lure, and from 1908 to 1911 he sold, also by mail, a curious vehicle bearing his own name, a two-cylinder, chain-driven buckboard costing $570. Known as the Galloway “GT Farm Wagon” and not unambiguously a passenger car, it had a half-ton capacity and was easily adaptable to hauling light farm loads during the week. Galloway probably had the machine assembled on the premises of the Dart Truck Company, which he had recently purchased. (At least three Galloways are said to survive, one of them in the Smithsonian.)

Galloway knew Fred Maytag; in 1909 he had helped persuade him to locate his newly acquired Mason-Maytag company in Waterloo, and eventually bought a substantial interest in it. Some Maytag production appears to have gone on in the Waterloo Motor Works plant; it is likely that Galloways and Maytags not only shared some components but that the last Galloways were in fact badge-engineered Maytags. By the summer of 1911, however, the Maytag company’s affairs were charitably describable as a mess, and Fred Maytag had abandoned the failing concern.

Galloway tried again in 1915, this time as a dealer for the Argo automobile of Jackson, Michigan. The following year he began building this car under license, calling it the Arabian. Despite the name’s connotation of exotic luxury, the Arabian was a small, inexpensive vehicle, like a cyclecar; at $300 it cost significantly less than the 1916 Model T.

Meanwhile, a Minnesota entrepreneur, Louis C. Erbes—he had known the Duesenberg brothers in St. Paul and had underwritten some of their racing ventures—transferred manufacture of his own LCE automobile to Waterloo, taking over part of the silent Maytag-Mason factory and assembling his car mostly from leftover Mason and Maytag parts. This venture lasted until 1916.

By then nearly all the other indigenous marques were gone as well; the disappearance of the LCE left Galloway’s Arabian as the only automobile still being made anywhere in Iowa. It may not have outlasted the LCE by much; although trade publications listed it as late as 1919, actual production had probably ceased a year earlier. Its demise marked the end of sustained automobile production in Iowa.

A prototype built by the W. O. Foster Company.

50. Huber, 1909, Davenport
Emil Huber had been involved briefly in the Meteor venture in Bettendorf (see #74); he built his own automobile to run in the 1909 Glidden Tour, a promotional event held from 1902 to 1913 to test the stamina and reliability of automobiles. Huber hoped a good showing on the tour might attract financing for its production.

51. Robertson Steam, 1909, Ames
A prototype steamer built by Lew Robertson, this is, surprisingly, the only one found so far to have originated in Ames; none has been recorded from another university town, Iowa City.

52. Harrington, 1910, York Township, Iowa County
Howard Harrington was reported to have constructed a small car—its wheelbase said to be 72 inches—on his family’s farm in York Township.

53. Blank & Schreiber, 1914, Walcott
A cyclecar, constructed around bicycle components and generally utilizing chain drive, like many others of its kind.

54. Hathorn, 1914, Davenport
A cyclecar, one of several constructed in Iowa at the height of the brief but intense national interest in this type of vehicle.

55. Keys, 1914, Council Bluffs
The Keys Brothers Carriage Factory built two automobile prototypes, one of them powered by a 40-horsepower Buda four-cylinder engine of the type used in Spaulding automobiles.

56. Mason-Moehler, 1914, Waterloo
The Mason-Moehler was a luxury automobile based on Duesenberg-designed components and announced by the resuscitated Mason company in mid-1913 as a 1914 model. Though it appeared in
William Galloway lived on for 34 more years. At his death it was reported that during his lifetime he had owned a total of 67 automobiles and that he had taken delivery of the first car in Waterloo to be steered with a wheel and not with a tiller. Only after 15 years had he abandoned his stubborn efforts to make a success of the car business, and it must have been clear to anyone who knew him before 1920 that automobiles were one of his passions. Yet the notices of his death treated him only as a successful real estate developer and a pillar of two communities—Waterloo and Cedar Falls—omitting any mention of his futile but determined involvement in motor vehicle manufacture. Obituaries of prominent men tend not to acknowledge their business failures.

Mason advertising for the firm’s last year of business, it does not seem to have entered serious production.

57. Wells, 1914, Des Moines
Hal Wells, a sometime mechanic and racing driver for Spaulding, built an interesting prototype, not intended for production, with a four-cylinder flathead engine, a four-speed transmission, and coachwork that featured a round (“monocle”) windshield. (This Wells should not be confused with another Wells, #70.)

58. U.S. 8, 1915, Cedar Rapids
A prototype reported to have been displayed at the 1915 Iowa State Fair.

59. Dartmobile, 1922, Waterloo
A prototype built relatively late in Iowa automobile history, the Dartmobile was a project of William Galloway’s successful Dart Truck and Tractor Corporation.

60. Owen, 1926, Cedar Rapids
During 1925–1926, W. E. Owen, Jr., a Grant High School teacher in Cedar Rapids, constructed an automobile on a 100-inch Woods-Mobilette cyclecar chassis (probably inexpensive to obtain a dozen years after the cyclecar craze had evaporated). The vehicle was powered by a four-cylinder Perkins engine and was claimed to be capable of reaching 50 miles per hour.

61. DeNeui, 1949, Wellsburg
Dickie DeNeui, a Wellsburg-area farmer, built a tiny car, its body “studded with glass beads,” for occasional transport around his farm; its power came from a six-horsepower Briggs and Stratton engine. It was a favorite of local children, who probably recognized it as the carnival toy it essentially was. It resembled the National Juvenile (see #84).

62. Brooklands, 1980, Des Moines
A diminutive three-wheeler powered by a 500-cc Honda motorcycle engine, this prototype was built by Michael Bogardus, who in 1983 donated it to the State Historical Society of Iowa. Its obvi-
Wisconsin-born William M. Colby was only 36 in 1911, the year he began to build automobiles, but he already had behind him an impressive string of classic entrepreneurial successes. It included brick-and-tile operations in Mason City, Fort Dodge, and Lehigh; the two-million-dollar Washington Brick, Tile and Sewer Pipe Company in Spokane; and the People’s State Bank of Mason City, which he had directed until 1910.

Failure in his next venture seemed impossible. Indeed, a contemporary biographical source proclaimed him “a grand success in life” and assured its readers he would be involved in “many important enterprises yet to be established in this and other states.” No one foresaw the debacle of entrepreneurship that would bring him down.

The Colby Motor Company of Mason City first put its cars on public sale in February 1911. They were displayed at the Chicago Auto Show in that same month and were said to have gotten a favorable reception. In March they appeared at the automobile show in Des Moines; on this occasion, Colby took out an advertise-
ment in the *Register and Leader*, declaring, “There is a Mighty Good Reason for the Coming of the Colby” and soliciting 50 dealers. Without exaggeration it described the vehicle as a bargain at its $1,750 price, and it probably was. Colbys were big, solid cars powered by four-cylinder Excelsior engines of the same type found in Maytags and in competition with Spaulding at their shared price level.

Throughout most of 1911, William Colby’s new venture seemed to shine with promise. A huge factory was completed in May, and during the summer Colby automobiles earned a reputation for toughness and speed in races and endurance runs around the Midwest; the Colby “Red Devil” racer and its driver, Billy Pearce, became popular attractions on the circuit.

By then Colby had confidently issued an opulent sales catalog asserting a production capacity, and by implication a demand, for 4,000 cars annually, but only 137 Colbys seem to have been built for the model year, far below the company’s expectations.

An ominous tremor went through the company with the death on October 19 of Billy Pearce, whose

Enclosed automobiles like this one were not common until the late 1920s. Most had only a bulky buggy top that was pulled up in bad weather. In 1911, the price tag on this Colby Model A was $3,500. (This translates to an astronomical $73,000 in today’s dollars, reflecting the high cost of new technologies.) Below: Automotive engineers found abstract beauty in the functioning components, and the catalogs conveyed that in their illustrations.

*Clutch*

This is of the multiple disc type—steel to steel—dished face, running in oil. The large pressure, or engaging spring, is centrally located and is readily adjustable. The construction of the clutch is such that no thrust pressure is thrown onto the engine bearings. The releasing collar is provided with a ball thrust bearing. The clutch will readily transmit fifty to sixty horse-power, and running in oil, as it does, it may be engaged as delicately as may be desired, yet, when once engaged, there is no possibility of slipping, hence no heating and sticking of the clutch will ever be found.

**Category 4: Sporadic or limited production, generally of fewer than 500 cars.**

64. Morrison Electric, circa 1887–1895, Des Moines

William Morrison, an engineer who had studied at a Scottish university, arrived in Des Moines in the late 1880s and by 1890 had constructed a passenger vehicle, a surrey powered by electricity, which he wanted to display at that year’s Iowa State Fair. It was not ready, but it did cause a sensation in the Sen-i-om-sed parade on September 4, the day before the fair ended.

Morrison was not particularly interested in automobiles as such and had built his vehicle to prove a point about the applications of storage batteries, on which he had begun taking out what would be a long series of patents; it was powered by 24 electrical cells driving the rear wheels through a four-horsepower motor of the kind used in streetcars. Morrison evidently constructed a few more of these electric voitures, but probably did not regard this as production in the usual sense. It is nevertheless hard to overstate the historical importance of the Morrison electric car, if only because it may well have been the first four-wheeled, self-propelled vehicle seen in Des Moines.

William Morrison was living in Los Angeles with his wife and a daughter when he died in March 1927; his body was returned to Des Moines for burial in Woodland Cemetery. Local residents recalled him as “a quiet, mysterious man” who sometimes carried “thousands of dollars” in cash with him in a black leather satchel.

65. Daley, 1895–1898, Charles City

M. H. Daley, a maker of farm machinery, is said to have produced a few automobiles; one of them was claimed to weigh only 195 pounds and to deliver 100 miles per gallon!
Upholstering leather seats in the Colby factory was a carry-over craft from the era of building buggies and carriages.

66. Adams-Farwell, 1898–1909, Dubuque

(See photo on front cover.) It is hard to do justice in a short space to the strange Adams-Farwell of Dubuque; it was exotic even for a period when whimsical experimentation was on ample display in the design of automobiles. Like the Spaulding, it was the product of a long-established company not engaged primarily in making passenger cars. Unlike the Spaulding, it was not in the least conventional (in addition to a peculiar automobile, the Adams company’s product line included stoves, wheelchairs, and cast-iron grave markers among many other things). The Adams-Farwell’s anomalous engineering was the work of Fay O. Farwell (1859–1935), a mechanic of genius who had joined the Adams company in 1897 as “General Superintendent.” Work on an automobile began at once and proceeded through five prototypes before production got under way in November 1904.

Almost all the Adams-Farwells were built to order, and no two were exactly alike. Their mechanical refinements were ongoing, ingenious, thorough, and resistant to summarization. At least two of these nevertheless rate more than passing mention. The first is the car’s five-cylinder, horizontal, air-cooled, revolving (not rotary) engine; the second is its movable steering mechanism, which made it possible to steer an Adams-Farwell from the right or the left side, or even from the back seat (this feature resurfaced in 2002 on the Mitsubishi “Space Liner” concept car). Innovations and workmanship like the Adams-Farwell’s cost money, and the average price of one was $3,500, placing it outside the reach of most buyers at the turn of the century.

Production of the expensive vehicles limped to a stop about 1909 after 47 had been built (exclusive of the prototypes). Outside the company that had given it birth, it then slipped into oblivion until the mid-1930s, when Henry Ford conducted a public search for one to put
Colby racer blew a rear tire during a warm-up in Sioux City. Less than two months later, in the first of what would be three reorganizations, the Colby Motor Company was merged with the National Farm Machinery Company of Davenport; this brought down on it the attentions of a frugal, new business manager, H. S. Murphy, who reported finding "irresponsible ordering procedures" and set about tightening the firm's managerial practices. Murphy's tactics included suspending credit on new orders. Sales rose to 203 for the 1912 model year and to 211 for 1913, but these would have been calamitous numbers in light of the company's indebtedness.

In some ways, the gap between Colby's inventories and its sales may have been the least of its problems. As its debts mounted, it persuaded a rich, elderly widow, Marie Walsh, to sign off on them and guarantee their payment. It is doubtful she understood what this would entail. When Walsh's family sued Colby to recover the money she had advanced, the court proceedings formed a lurid chronicle in the Mason City Globe-Gazette for months; by the time they ended, Colby automobile production had long since ceased. It is unclear if any Colbys were built during 1914. (Only a single Colby auto is known to survive; it is on display at the Kinney Pioneer Museum in Mason City.)

The company's decline and collapse had come with bewildering speed, especially given William Colby's record of managerial expertise. The progress of the auto industry was irresistible. In May 1914, the Globe-Gazette made a point of noting a local funeral procession with no horse-drawn vehicles. Ten months later Mason City put on its first automobile show, displaying 22 makes to enthusiastic crowds. It is not known if William Colby was in attendance.

in his Dearborn museum. None was found until the 1940s, however, when a single example came to light in Florida; it ultimately was purchased during the 1960s for the legendary Harrah collection in Reno, where it underwent a microscopic restoration (see cover). Strangely, Harrah's seems never to have contacted the Adams company for advice on the project, but it is said that at some point the car was briefly returned to Dubuque, where Adams personnel finally examined it and pronounced the restoration accurate. (This vehicle's original purchaser had been James Beach of Dubuque.)

67. Madsen, 1901, Council Bluffs
A small, 700-pound runabout built by L. P. Madsen with unusual features that included water storage in the fenders.

68. Des Moines, 1902, Des Moines
See opening story, pages 146–148. No production figures for the Des Moines automobile have been found, but it is said three were still registered in Des Moines as late as 1910.

69. Duryea, circa 1903–1905, Waterloo
(See Galloway, #87.)

70. Wells, 1904–1910, Des Moines
Jesse Wells's enthusiasm for automobiles was born when he caught sight of Morrison's electric car on the streets of Des Moines in 1890. In less than ten years he had acquired the profitable Locomobile franchise (at 7th and Grand), and went on to add an automobile livery that included rental cars. Between 1904 and 1910 he constructed seven automobiles, the first powered by steam and the remaining six by gasoline, for his and his family's use. (This Wells should not be confused with another Wells, #57.)

71. Summit, 1907–1909, Waterloo
The Summit Carriagemobile Company appears to have produced a few cars powered by something known as the "Caldwell cylinderless self-cooling en-
Spaulding
Iowa made for Iowa buyers

The Spaulding automobile of Grinnell was built by a successful and well-established company, most of its output consisting of buggies and wagons, which it continued making for some time after automobile production was under way. Spauldings were ample, tough, tank-like vehicles, sturdily constructed and selling in what would now be considered a medium-price range.

The company assembled them from purchased components; their proprietary four-cylinder engines came first from Rutenber in Indiana and later from the Buda company in Illinois. Series production of Spauldings began in 1911 and ended around March 1916—the exact date is unknown—after a total of 1,418 had been built.

Early automobiles were not all painted dark, somber colors. This 1914 Spaulding Model H is shown in citron yellow, a color first popular for carriages. For autos, it remained in vogue through the mid-1920s. Rendering by the author.
The company’s founder, Henry Spaulding, was a cautious and somewhat secretive man who resisted incorporation of his company and would not disclose its, or his, net worth after an 1896 Bradstreet estimate of $750,000. But he did not fear innovation, and as a result his cars underwent steady detail and mechanical improvements.

The factory gave little official support to racing as such, but Spaulding automobiles often took part in mapping expeditions, endurance runs, and tours; in 1913 a Spaulding crossed Iowa in 9 hours and 14 minutes, a distance of 337 miles, at an average speed of 37 miles per hour.

The make had certain other moments of glory. From among five Spauldings (“in various colors”) at the 1911 Des Moines automobile show, Iowa governor Beryl Carroll purchased one off the floor for himself. This could only have been gratifying for Henry Spaulding, even aside from the publicity, because he strongly believed Iowa consumers were better off with Iowa-made products. A 1912 advertisement for Spaulding cars proclaimed: “‘Made in Iowa’ is better than ‘Made in Germany’ for Iowa buyers.” This stated a reasonable belief but in the long run did not reflect the needs and preferences of Iowa purchasers. Spaulding may nevertheless be considered

mobile dealer, undertook production of a small run of light cars (known variously as Hobbie Accessibles, Accessibles, or Hobbies). One of the available body styles was the “piano-box buggy.” Hobbie remained a dealer in the Hampton area for many years.

76. Lagerquist, 1909, Des Moines
The Lagerquist Carriage Company was located at 209 Grand in downtown Des Moines and for a single year carried on production of what were termed “high-wheel motor buggies.”

77. Marshalltown, 1909-1910, Marshalltown
In the busy year of 1909 the Marshalltown Buggy Company joined the sizable list of Iowa manufacturers trying their hands at building automobiles, but by 1910, after producing a small number, it limited its output to buggy tops and accessories.

78. Bertzchy, 1909-1912, Council Bluffs
A. J. P. Bertzchy attempted the manufacture in 1908 of a behemoth he called the Desert Flyer, weighing five tons and meant for hauling loads of miners about the goldfields of Nevada, but the effort got no further than a prototype built in Chicago.

He then sought to build a car under his own name, using components of the Meteor automobile (see #74). He ordered from the Bettendorf manufacturer parts enough for 25 cars, and they evidently were delivered to Council Bluffs before the Meteor plant burned. Then, over a two-year period, Bertzchy apparently proceeded to build and sell the 25 cars before abandoning production and continuing as an automobile dealer.

79. Zip Cyclecar, 1913-1914, Davenport
The diminutive Zip Cyclecar, also known as the Skinner and priced at $395, was built on a 92-inch wheelbase; during its
A testimonial from a pleased owner. Right: Mud nearly obscures the words “SPAULDING TEST CAR” on the seat back. Up until the 1930s, Iowa roads were a commemoration of mud.

80. Unnamed, 1915, Waterloo
Louis W. Wittry, manager of the Waterloo Gasoline Engine Company, is said to have constructed six automobiles he left without a brand name; he did not pursue automobile manufacture and concentrated on making stationary engines.

81. Arabian, 1915–1918 [F], Waterloo
(See Galloway, #87.)

82. LCE, 1916, Waterloo
(See Galloway, #87.)

83. Littlemac, 1931–1934, Muscatine
The Littlemac, the only automobile ever built in Muscatine, was the project of Herbert and Ralph Thompson, deeply involved in local politics and civic enterprise. They were confident of a yearly demand for at least 25,000 of the tiny vehicles they wanted to build. Designed by Clayton Frederickeon, the Littlemac rode on an 80-inch wheelbase and was powered by a 152-cubic-inch, four-cylinder Durant engine. There were two body configurations, a panel truck and a two-door sedan.

The Littlemac was conceived in 1929. By the time production seemed ready to start two years later, fast-worsening economic conditions did seem to herald at least some demand for a cheap, basic passenger car. But it was a long shot. The Thompsons’ faith in their idea obscured the fact that the niche they envisioned was already occupied by Ford and Chevrolet: Miniature cars had never been, and would never be, lasting successes in America. Risky business conditions were not the only problem. The Thompsons struggled to obtain materials and capital: during a two-year battle with spotty financing and unsteady parts supply, the company turned out only six sedans and five trucks. A promising parts arrangement with the expiring William C. Durant firm collapsed when Durant took the most successful Iowa manufacturer of cars, just as Mason’s vehicles were the best known. At one point the company boasted it had eight dealers in Iowa and four more lined up in other states. It even had some sort of presence as far away as California, where it appears to have sold at least 30 cars during the summer of 1912.

The establishment of a dealer network and the sale of cars outside Iowa underscored Spaulding’s seriousness and its viability as an automobile manufacturer. But in the end, as Iowa buyers turned to big Detroit companies like Ford and Dodge, Spaulding, too, lost out. Characteristically, Henry
Spaulding never formally announced his company was leaving the auto business. Spaulding ultimately undertook manufacture of truck bodies, many destined for Fords, and these were so good that Henry Ford offered to buy the operation. Determined to go it alone, Spaulding rejected the offer. It was a bad decision at a bad time. The Depression wiped out him and his family. (Today, only a single Spaulding automobile, in dismantled condition, is known to exist, and it was recently returned to the site of its manufacture in Grinnell.)

Henry Spaulding was a prominent civic figure who, among other things, had served in the state legislature, but when he died in January 1937 the Grinnell Register ran a five-column obituary that omitted any mention of his seven-year involvement in the automobile business, or for that matter of any of his commercial ventures after about 1920. By 1937 it must have been payment but defaulted on the purchase; the Littlemac company never saw so much as a gasket. The last Littlemac was a badgeless truck somehow assembled as late as 1934; it is said to have ended as a prop in high school plays in Washington, Iowa. Neither it nor any of the other Littlemacs is known to survive.

84. National Juvenile, 1932–1945
[?] Des Moines
The National Juvenile had a wheelbase of only 60 inches and was powered by a single-cylinder Briggs and Stratton engine prevented by an attached speed governor from propelling the vehicle more than 12 miles an hour. Whether it was an automobile or a toy is hard to decide. When production of the diminutive cars was announced in May 1932 by the National Sales and Manufacturing Company of Des Moines, the firm, which also manufactured washing machines and popcorn makers, was located at 609 Keosauqua Way. Twenty Juveniles had been turned out by the announcement date. Since a Juvenile could not be used as daily transportation, many were featured in promotional campaigns, in parades, or as contest prizes, and some were straightforwardly sold as toys. It is said that a National Juvenile may have appeared in one or more Groucho Marx movies. Exactly how many National Juveniles were produced is unknown, but they presumably were in sporadic production until the company that made them ceased business around 1945.

85. Litestar, 1982, Scranton
The Litestar automobile, actually an enclosed motorcycle with tiny outrigger wheels, was designed by James R. Bede. Many Litestars were powered by 450-cc Honda motorcycle engines, and all rode on a long (123-inch) wheelbase. They were notable for their swooping aerodynamic lines, atypical in the early 1980s and predictive of the design practice of 15 years later.

The Litestar story displays the same
intractable confusions as those of Mason, Maytag, and Colby. In Iowa the vehicle's manufacture was shared by two companies already in established, non-automotive businesses: Scranton Manufacturing Corp. and a subsidiary in nearby Carroll. These sites accounted for production of about 30 Litestars in late 1982 and early 1983. Hopelessly optimistic sales projections were made by the parent company, the Tomorrow Corporation, which claimed it could make and sell 20,000 in the first year. Eventually, sporadic production was carried out at several small midwestern factories in 1982-1985. Exact volume is unknown, but a current marque registry includes 140 of these conveyances, some badged as "Litestars" and others carrying the name "Pulse"; at least one Scranton-built Litestar is known to survive. It is probable that no two Litestars were identical. Scranton Manufacturing was making corral gates, leaving it vulnerable to the collapsing farm economy of the time; when gate sales fell, the money for the Litestar project dried up.

86. Mason, 1906-1909, Des Moines, and 1912-1914, Waterloo
Story on pages 149-153.

87. Galloway, 1908-1911, Waterloo
Story on pages 154-155.

88. Maytag, 1910-1914, Waterloo
Story on pages 149-153.

89. Colby, 1910-1914 [?], Mason City
Story on pages 156-159.

90. Spaulding, 1910-1916, Grinnell
Story on pages 160-164.
Epilogue

Although a handful of autos were designed or built in Iowa between 1922 and 1983, nearly all automobile production in the state ended before 1920. For the automobile industry in America, the period 1910-1920 was a time of ferment. Companies sprang suddenly up everywhere, like mushrooms, and they were just as ephemeral. This was the artisan stage of the technology, with assembly and sales taking place on the premises of buggy works or in the corners of dingy little factories. Even in the few cases of production in dedicated facilities, almost all the labor was still manual, and there were no assembly lines. The industry in Iowa barely outlasted the period of transition from mere horseless buggies to true automobiles.

In the turmoil of the automobile market anything was possible, especially failure. In Iowa and other states the hope for an indigenous automobile industry faded quickly as a powerful tidal ebb of factors, some geographic and some economic, drained production away to Detroit and its suburbs, leaving behind scattered pools of independent manufacture in the Midwest and Northeast. The industry in Iowa left few traces, and the survival rate of all cars built before 1920 is poor in any case.

Throughout the 1920s, advances in automobile engineering accumulated steadily, so that by 1925 a 1910 car was likely to be seen as a mere curiosity, whereas in 1935 a decently maintained 1925 automobile was still practical transportation. The older cars ended in junkyards, where after a quarter century their remains fell to the scrap drives of World War II. The few now left in restored condition are noble curiosities, no more drivable on an interstate highway than they were on the mud roads of Iowa in 1915.

In the perspective of 100 years, efforts to keep auto-

mobile production going in Iowa appear quixotic; yet apart from their understandable failure to second-guess the market, men like Henry Spaulding and Edward Mason knew what they were doing, and they believed in it. Their vision was the same as Henry Ford’s or Walter Chrysler’s, no less clear for remaining unrealized. What they, too, perceived was the automobile’s spectacularly successful resolution of the issue between aesthetics and technology, and its promise of freedom, the same one that had registered at once with the newspaper reporters turned loose in a Spaulding in the spring of 1910. The chronicle of the automobile industry in Iowa is the story of a failed but admirable attempt to realize this promise.

Philip G. Hockett is a graduate of the University of Iowa. This article marks his third appearance in this magazine.