Auto Manufacture and Design in Iowa • Fighting Polio • Car Culture • Yukon Adventure

Winter 2006 • \$9

# Iowa Heritage Illustrated S



## Front Porch

Dear Readers,

Working on this issue—much of it is about cars and their role in our culture—got me to recalling the cars my husband, Jim, and I have owned. Cars aren't one of my passions, so I was surprised to realize that they reflect the transitions in our 35 years of marriage and changes in American culture.

Our first car was a hand-me-down '64 Chevy Impala from Jim's parents. In May 1972 we filled the Impala with wedding gifts, boxes of books (Wordsworth for me, Vonnegut for Jim), an old Sylvania TV, dozens of record albums, and a stereo, and headed west to married life in Tacoma, Washington.

A year later, we were desperate to move back to sweet Iowa, but the Impala was now too small for what we had acquired: thrift-store furniture, camping gear, an abandoned bird's-eye maple dresser we had "liberated" from the basement of a rental house, more books and albums, and a collie and a cat. So we became the proud but ill-informed owners of a used van—what every counter-culture couple needed back then. Jim's brother Mike, who also lived in Tacoma, agreed to try and sell the Impala. We packed the van to the roof, carved out spots for the cat and dog, and bid farewell to the old Impala parked in Mike's driveway.

Three hours down the road, we knew why the van had been such a deal and that it would never make it to Iowa. We lumbered back to Tacoma, unloaded the van, arranged for shipping, beseeched brother Mike to add the van to what now resembled a used car lot in his driveway, sedated the pets, and boarded a plane for Iowa. Cars! Who needed them?

We did just fine without a car for the next few years, occasionally borrowing one but mostly relying on our bikes—until parenthood loomed. Thus, in the spring of 1977, we drove our second-hand 1974 Ford Maverick to Lamaze classes, and not long after, we tucked our new baby girl into her second-hand infant seat and buckled it into the car.

We eventually gave the Maverick to a dear young man named Chris, who had lived with us for a few years, and purchased our first brand-new car, a 1979 Mazda GLC. It had a pitiful heater, but what a turning radius! The car wasn't even a month old before I

had ripped open the vinyl ceiling while loading a sheet of plywood at the lumberyard (building supplies for making doll cradles).

Our Mazda GLC was a Great Little Car, but too little for our family of four (our son was born in 1983), especially on a long vacation. So in 1986, we bought a Nissan Sentra and kept the little Mazda. We were now a two-car family. The Sentra was roomier and could even pull the 1968 Nimrod pop-up camper we sometimes borrowed. But Jim had even bigger things in mind, so in time the Mazda was given to a fellow in exchange for chopping down an aged mulberry tree, the Sentra became our "second car," and we (and our bank) bought a new minivan, right along with the rest of America.

We visited memorable places in those minivans (we traded in a few times), but the hours on the road were memorable, too. Inside the van we were pure, concentrated family, punctuating the hours with naps and spats, games of car bingo and Slug-Bug, negotiations over audio tapes (the Smurfs versus Joni Mitchell), and stops for scenery that sometimes even awed the kids.

Jim still drives a minivan. And I still drive a Mazda, which my son and I shared while he was in high school and college. Thanks to that arrangement, I discovered that I rather liked the dreamy beat of the hip-hop music he left in the CD player, that I really didn't need a car as much as I thought I did, and that bikes are still an option.

Enough of my own car genealogy. Try tracing your own. You might be surprised at the vivid memories that cars evoke in us and how they tie to chapters in our lives.

You might also be surprised, in our opening story in this issue, how many Iowa towns were the sites of early auto experimentation and manufacture. Look for your own town in the extensive roster compiled by author Phil Hockett, who also writes about Iowa's "Big Five" car manufacturers.

Our other stories also relate to travel and mobility. Iowan Etta Schaal journeyed by railroad and steamer to the Yukon goldfields in 1901; her story is inside. And in the 1950s, the polio epidemic compromised the personal mobility of many Iowans. Some of them share with us their memories of pain, grit, and hope.

—Ginalie Swaim, editor

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#### On the Cover

A 1906 Adams-Farwell, built in Dubuque. In this issue, author Philip Hockett tracks early auto manufacture in Iowa and calls Adams-Farwells "exotic even for a period when whimsical experimentation was on ample display in the design of automobiles."

# As if in a dream

# Automobile Projects and Production in Iowa, 1870–1983

by Philip G. Hockett



This beautifully restored 1910 Maytag-Mason typifies the transition between buggies and automobiles.

"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."

he 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.

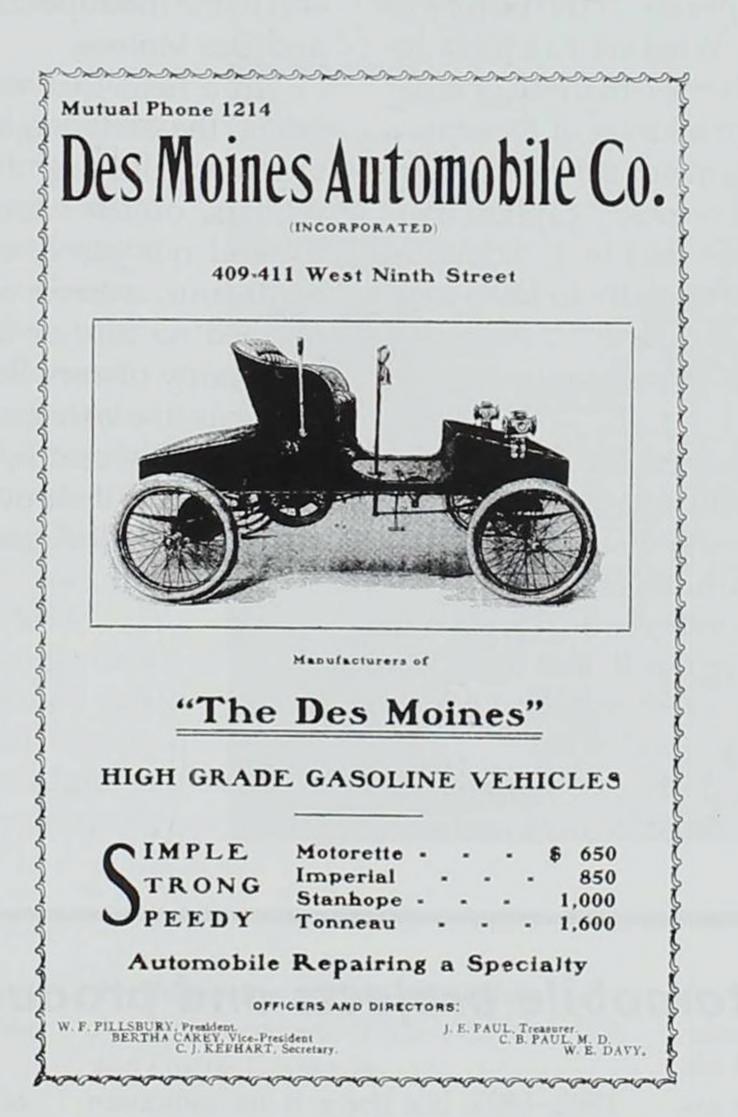
The optimism of the company's founders was not unreasonable. In 1902 no one else in Des Moines was making automobiles, and the city's growing middle class might translate into enough customers to make a success of the moderately priced car. The establishment of a dealer network was not a priority; the 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.



n 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 Electrobiles, 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.

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 I: 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,

## Mason and Maytag

#### Duesenberg's hill climber

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

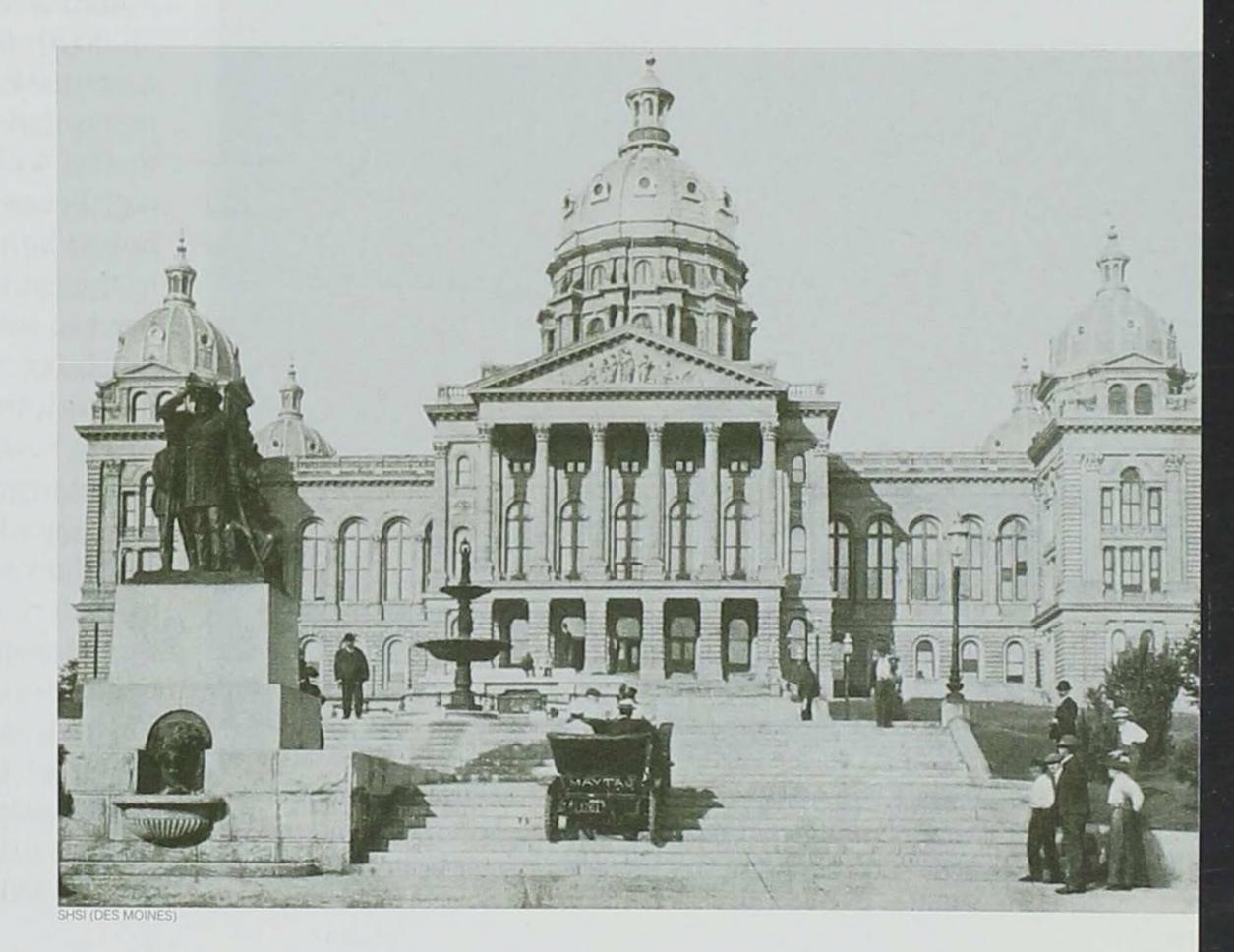
racing engineer who incidentally designed and built some passenger cars, not a passenger-car manufacturer who occasionally

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 Mid-

west 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, lowa, the WG may have entered production in Pennsylvania but did not reach even prototype stage in lowa.

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



From the driver's seat in a 1910 Maytag-Mason: The steering wheel was on the right, allowing the driver to step out on the curb rather than onto a muddy road. On the brass half-circle (within the steering wheel), the outer knob is the throttle and connects to the carburetor (there was no gas pedal), and the inner knob adjusts the speed of the spark. Controls such as these were common up to about 1930. The wooden box (far left) is the coil for the ignition; the removable knob on the front of the box acts as the switch.

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

Category 2: Names referring primarily to engines or large engine accessories rather than to complete cars. Dates in categories 2–5 refer to start of production.

18. Lybe, 1895, Sidney

A peculiar spring-wound motor meant for attachment to buggies; it was said to "store" power on downhill stretches and "release" it on levels and grades.

19. Caldwell, 1908, Waterloo

A kind of engine built around a large, hollow, single piston said to be attachable to buggies, thereby transforming them into "automobiles." It was eventually manu-

factured, 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.

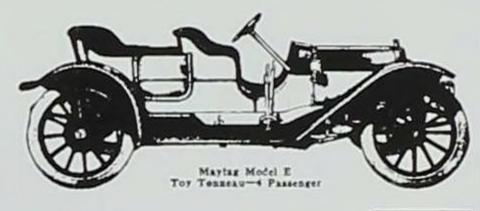
#### 31. Pugh, 1901, Davenport

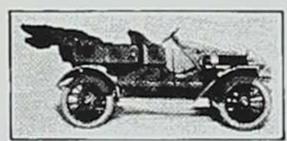
William J. Pugh, co-owner of the Pugh and Bofinger Machine Shop, was the builder

#### THE"MAYTAG" Formerly The Mason

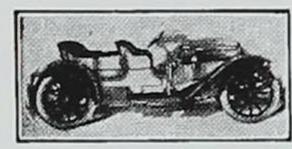
#### "The Hill Climber"

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 hills that are absolutely inaccessible to other cars—winning over cars in the \$5,000 class in Glidden tours, hill climbing contests, endurance runs, and the like. See catalog for records, medals, trophies and cups won.

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

Made in six models, \$1,250 to \$1,750. Double opposed horizontal and four cylinder-24 to 28 and 35 to 38 H. P.

Write for catalog and name of nearest dealer For dealers the "Maytag" line for 1910 is the only whiriwind on wheels. Write at once for proposition.

MAYTAG-MASON MOTOR CO., MAYTAG STATION Waterleo, Iowa

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,

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 automobileseven 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.



of a single automobile prototype.

#### 32. Reuter Steam, circa 1901, Davenport

Production of the Reuter Steam car appears to have failed for lack of adequate financing.

#### 33. Sioux City, 1901, Sioux City

The Sioux City Automobile and Manufacturing Company is known to have tested an early prototype with this name.

#### 34. Burg, 1902, Burlington

A prototype of the Burlington Wagon Company, powered by a proprietary gasoline engine.

#### 35. Davenport, 1902, Davenport A project of the Davenport Cycle Works.

36. Hawkeye, 1902, Burlington

#### 37. Knight, 1902, Keokuk

Frank Knight of Keokuk was reported to have built a single, three-wheeled automobile, fabricating and casting the engine and running gear himself.

#### 38. Littleton, 1902, Des Moines

An article in the Des Moines Register and Leader for August 31, 1902, reported that Ed Littleton of Des Moines, a tailor, was nearing completion of an automobile prototype.

#### 39. Mierly, 1902, Davenport

Davenport physician A. W. Mierly built a single automobile for his use in making house calls.

#### 40. Frazee, 1903, Osage

This prototype was built by George T. Frazee, a jeweler, and is said to be extant.

#### 41. Cole, 1904, Charles City A prototype built by W. H. Cole.

1900 and 1904.

42. Eldridge, circa 1904, Des Moines Eldridge Welding and Machine built several trucks and a single car between

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 highstakes 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.



lowan Fred Duesenberg started out creating the scrappy little Mason (foreground) and capped his career with the super-luxurious, eight-cylinder Duesenberg (background), popular with glamorous Hollywood movie stars. Both makes were shown at the 2002 Salisbury House Automobile Classic in Des Moines.

#### 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 re-

main 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 lowa 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 lowa 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



Galloway's Auto-Transport was "just the thing" for hauling livestock and produce to market and bringing back "groceries, hardware, flour, feed, furniture, coal, salt, lime, cement, or a load of city visitors."

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

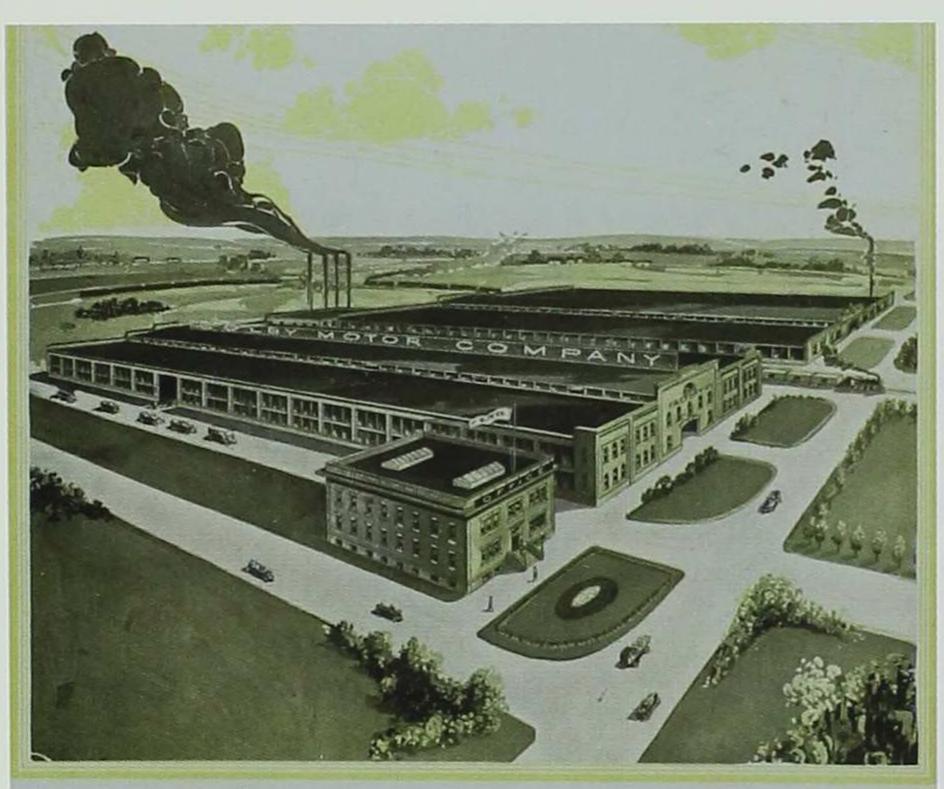
During 1925–1926, W. E. Owen, Jr., a Grant High School teacher in Cedar Rapids, constructed an automobile on a 100-inch Woods-Mobilette cyclecar chassis (probably inexpensive to obtain a dozen years after the cyclecar craze had evaporated). The vehicle was powered by a four-cylinder Perkins engine and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



FACTORY OF THE COLBY MOTOR COMPANY MASON CITY, IOWA



Colby's 1911-1912 catalog hopefully depicts a bustling, productive factory complex. Above: Many of the Colby workers brought with them skills as mechanics and carriage builders, typical of automotive workers for all makes and models in this early period.

# Colby Success turns sour

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-

ous inspiration was the English Morgan "trike," and it was finished in British racing green. Its meager accoutrements—it lacked doors, windows, and a heater—were sporting throwbacks to the period around 1910. It was registered as a motorcycle, and its creator described it as "a riot to drive."

63. Shelburg, 1983, Manson

The premises of the L & M Manufacturing Company were the site of the unveiling on September 23, 1983, of the prototype of the Shelburg automobile. Its creator, David Shelburg, was at the time a resident of Huntington Beach, California; he said that his search for a suitable place

to build his car had led him to west-central lowa. He radiated confidence in his project, declaring that monthly production of three vehicles would soon rise to 5,000, then to 18,000. He also assured local residents struggling with the effects of a depressed farm economy that manufacture of his automobile would create 250 to 300 new jobs for the community.

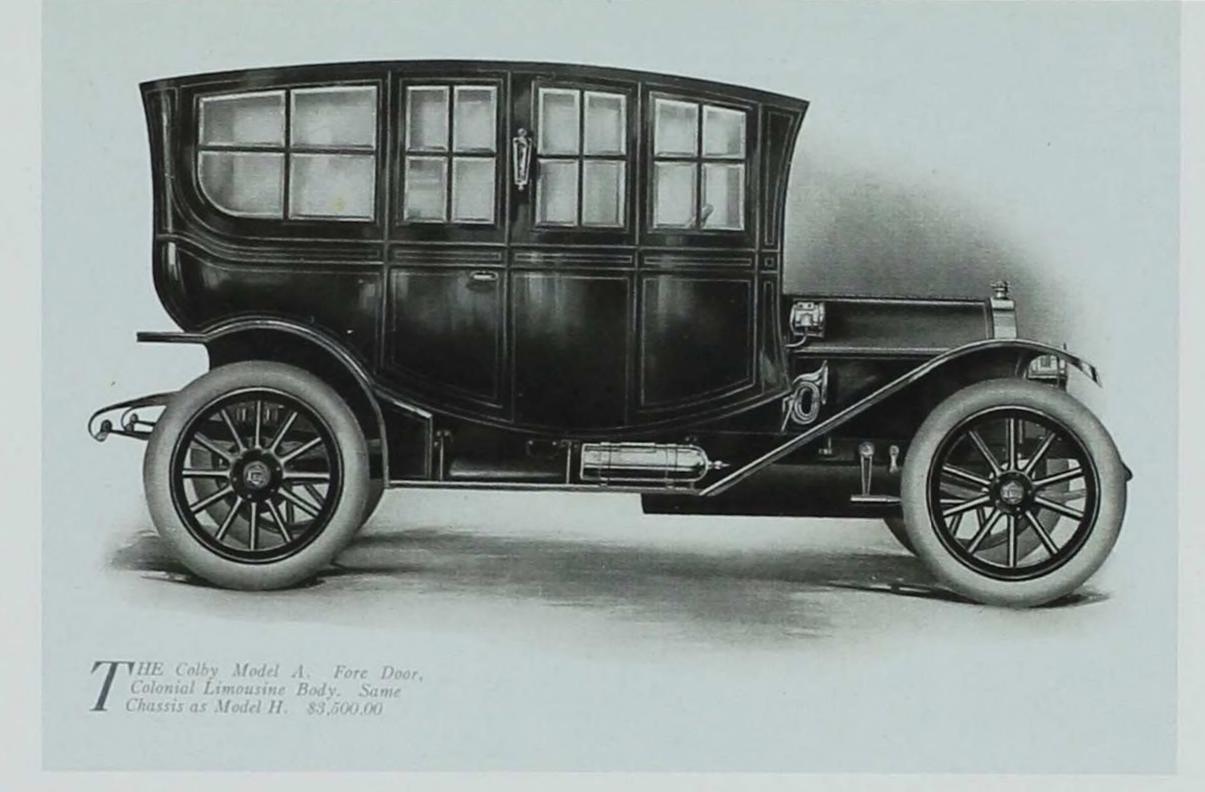
The prototype itself was said to be the fifth and to have run 6,000 test miles, but no rides were offered to the local press. Data on the car's chassis and mechanicals were vague. The unit price was projected at \$14,000, a reflection of the "luxury features" it would offer. The car,

offering everything to everyone, was too good to be true, and though David Shelburg was probably not out to defraud anyone, he nevertheless made claims for his automobile that could not possibly be realized under the circumstances, and the project went no further than the prototype. (It is said Shelburg had approached Dean Louck, the owner of L & M Manufacturing, asking that he disassemble and reverse-engineer the car for production.) It evidently had been constructed outside lowa, but its story is worth including here: this was one of the last efforts to produce an automobile in lowa, 65 years after the disappearance of Galloway's Arabian.

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.

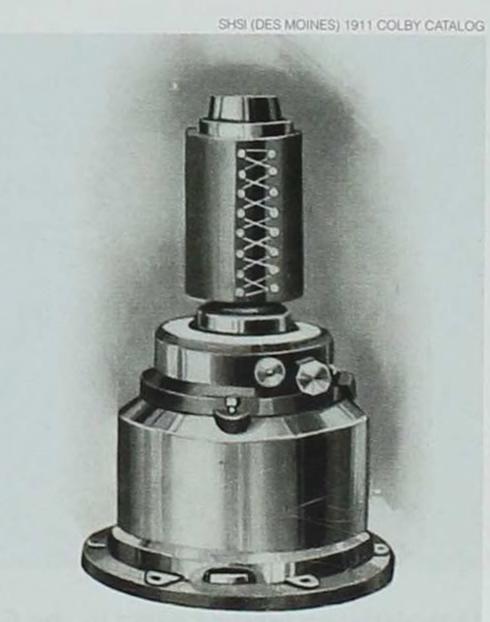
An ominous tremor went through the company with the death on October 19 of Billy Pearce, whose



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 lowa 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 inter-

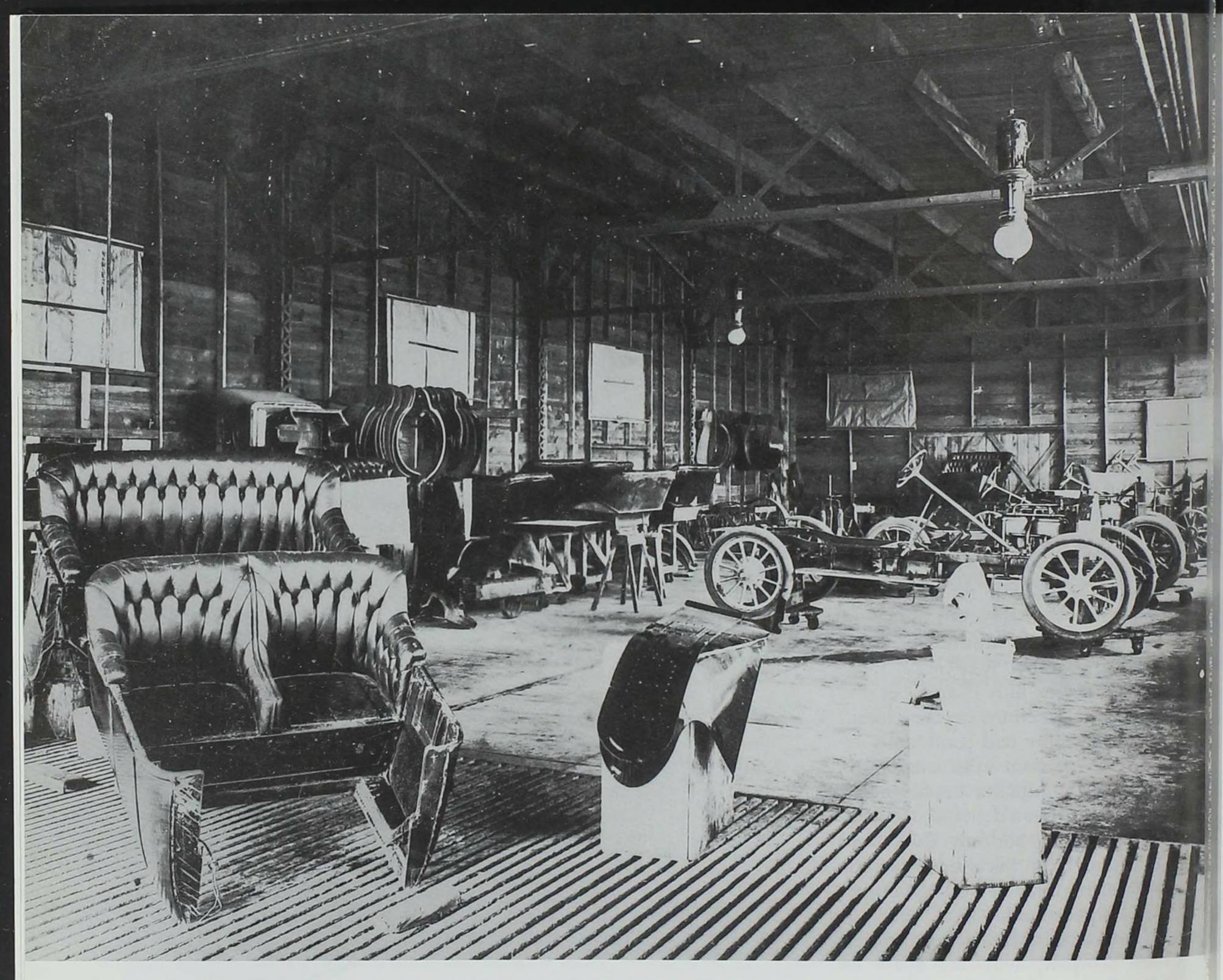
ested in automobiles as such and had built his vehicle to prove a point about the applications of storage batteries, on which he had begun taking out what would be a long series of patents; it was powered by 24 electrical cells driving the rear wheels through a four-horsepower motor of the kind used 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

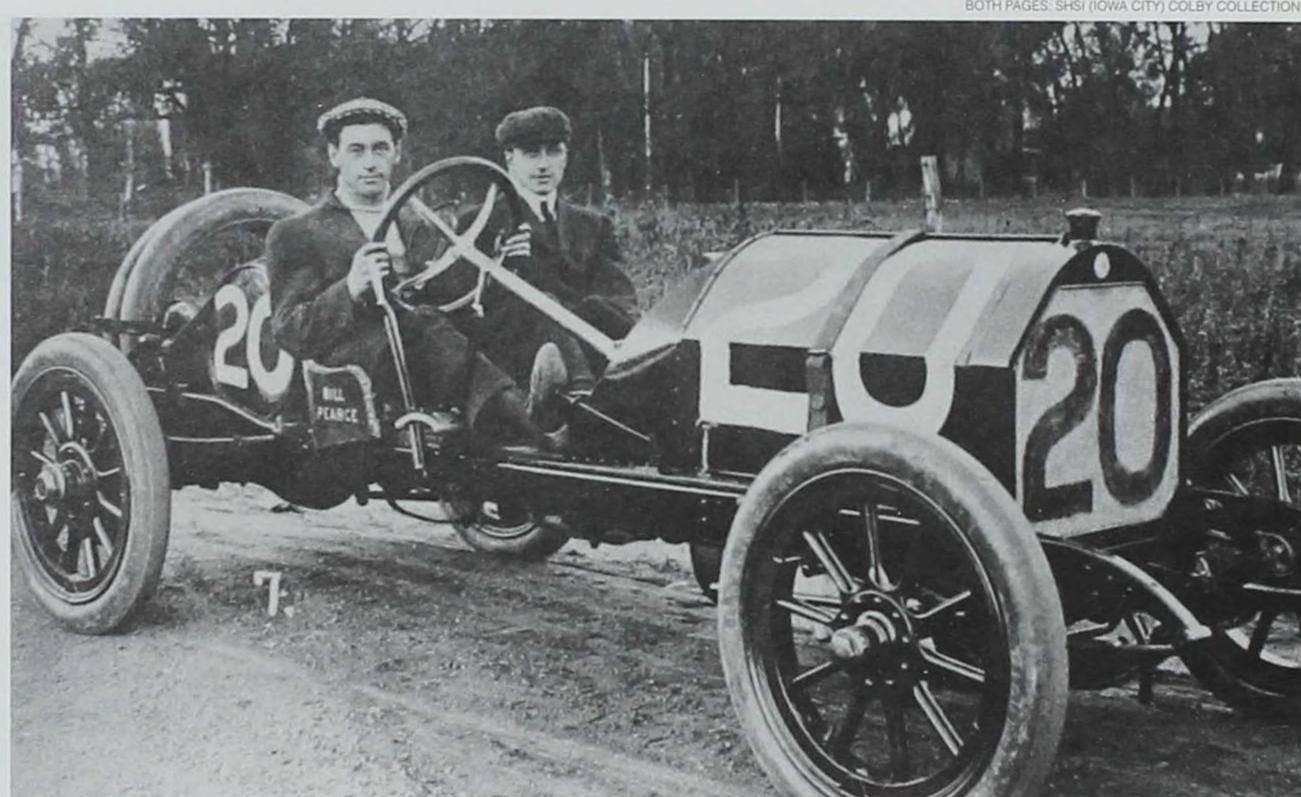
steering mechanism, which made it possible to steer an Adams-Farwell from the right or the left side, or even from the back seat (this feature resurfaced in 2002 on the Mitsubishi "Space Liner" concept car). Innovations and workmanship like the Adams-Farwell's cost money, and the average price of one 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.)



Racer William "Billy" Pearce, at the wheel of the Colby "Red Devil."

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

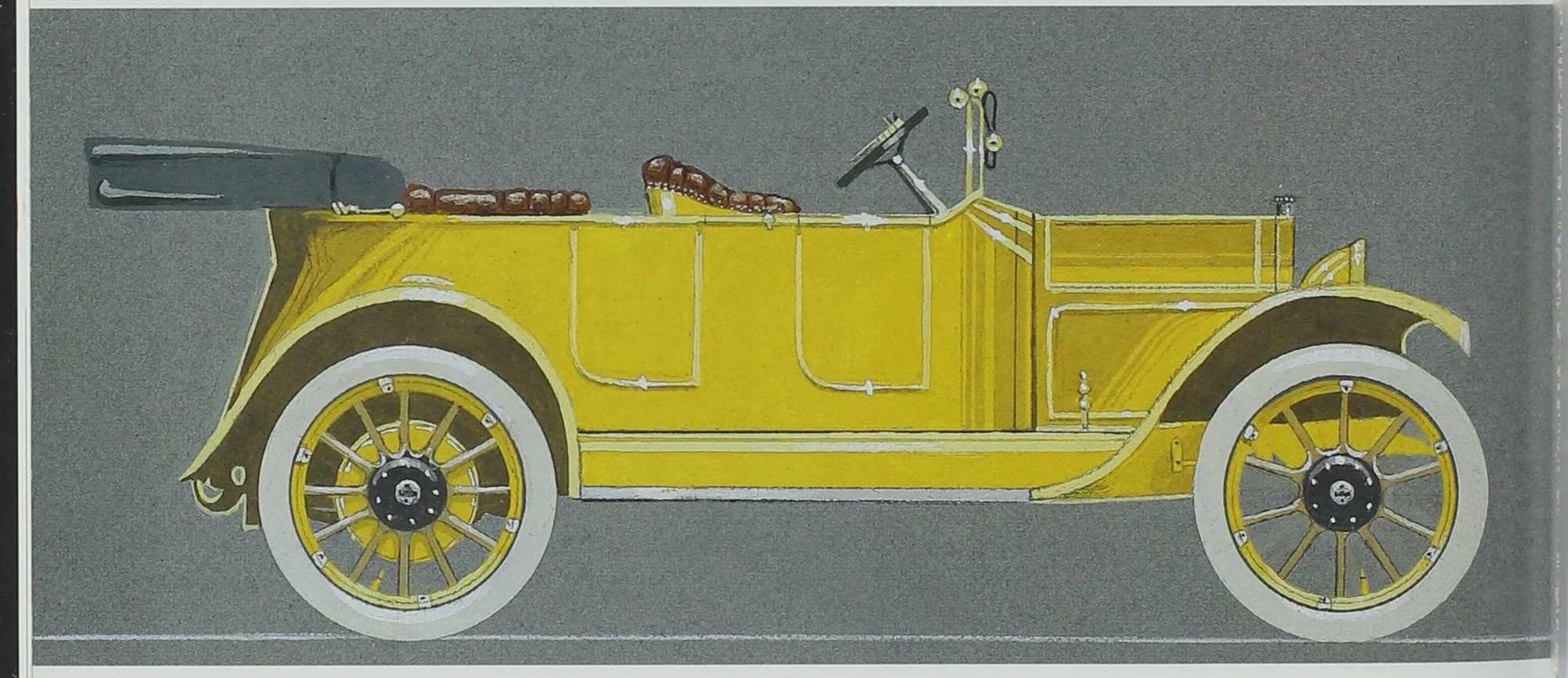
A small, 700-pound runabout built by L. P. Madsen with unusual features that included water storage in the fenders.

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.

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 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.

gine," built in several size configurations. (See Caldwell, #19.) The Summit was also known as the Farmermobile.

#### 72. Hart-Parr, 1908, Charles City

The Hart-Parr Company, much better known as a maker of tractors, built a few automobiles for "internal use," probably as salesmen's vehicles.

#### 73. Monarch, 1908, Des Moines

The Monarch Machine Company, a manufacturer of gasoline engines, made a small number of passenger cars during 1908; some of them were steered by tiller, others by wheel. They were also known as "Road Kings."

#### 74. Meteor, 1908-1909, Bettendorf

Proudly advertised as "The Car That is a Car" and "The Car That Does Things," the Meteor, one of ten early American automobiles by that name, was in production from May 1908 until September 10,1909, when the factory was destroyed by fire. Up to that point about 75 had been built, not counting prototypes and an early version entered in the 1907 Glidden Tour. Their prices ranged from \$1,300 for a basic runabout to more than \$3,000 for a large touring model, so they were not economy cars in the market of the time.

Their producer was Arno Petersen, whose family owned the large Petersen

department store in Davenport and provided some of the venture's financing; the rest may have come from what Petersen later referred to as "New York stockholders." The Quad Cities liked the Meteor; throughout the company's brief existence the cars' appearances on the streets of Davenport were regularly noted on the Saturday automobile page of the city's *Daily News*. But despite talk of rebuilding in Bettendorf, or relocating elsewhere, Meteor production did not resume.

#### 75. Hobbie Accessible, 1908-1910, Hampton

Leslie Hobbie, better known as an auto-

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 POSTAL TELEGRAPH-CABLE COMPANY

INCEPTIONS PRINTED ON THE BACK OF THIS SLARE.

CLARENGE H. MACKAY, PRESIDENT.

RED EIVED AT COMPETITIVE PROGRESSIVE

3 CH CA 41 Night Letter,
Albuquerque N M Sept 2nd-1913.
Spaulding Mfg Co,

grinnell Iowa,

Have arrived at Albuquerque N M covering over 14 hundred miles from San Diego over rough mountains grades deep sand and other rough roads never had to be towed out car in excellent condition weight of car loaded over five thousand pounds.

R P Cooper.

735am



A Spaulding with a stock chassis is a blur on a Grinnell Street in 1914, as it makes a world record. Top: a testimonial to the Spaulding's endurance.

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 Marshall-town 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



Spaulding Mfg. Co., Grinnell, Iowa.

Gentlemen; - I became the owner of a Spalding, through the Roemer Gibson firm here the other day and to say I am well pleased with it is putting it mildly. I had an Overland several years ago, and the last three years have been driving a Marion with a Continental engine in it, which engine, you know, is a very good one. The Spaulding engine has a longer stroke and is certainly a fine one, Buda engine, I believe it is. There are a few things in the 1913 Spaulding that could be added, which some other cars have, but the essentials are there and it is certainly a fine car. Aboutone half of the cars around here, are slightly under powered, and this cannot be said of the Spaulding. It is a muisance to have an under-powered car. The Spaulding moves along with good steady head-way on most any kind of a road. Such a car only needs to be demonstrated in order to sell, I believe. The dash on ours is per aps a little out of date being straight dash but from any view of car except the front it is as good looking as most any of them.

I find that in going into first speed in starting the gear clashes or scrapes a good deal. It does not bother in any of the other changes but clashes quite badly in starting. Do you know the cause of this. In pushing out the clutch, it should stop the spindle or some-thing, should it not so that the change from neutral to low speed could be ade with out scraping. I can see that the spindle? or what ever it is called is turning by looking down through the hole in the floor. Is there no brake to stop this?

Thanking you in anticipation of a reply, I am,

Yours truly,

G. A. Robinson,

Musto Musto

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.

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



BOTH IMAGES; SHSI (DES MOINES) SPAULDING COLLECTION

short production life it was powered by two engines, an air-cooled two-cylinder, and a water-cooled four.

#### 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 [?], Waterloo (See Galloway, #87.)

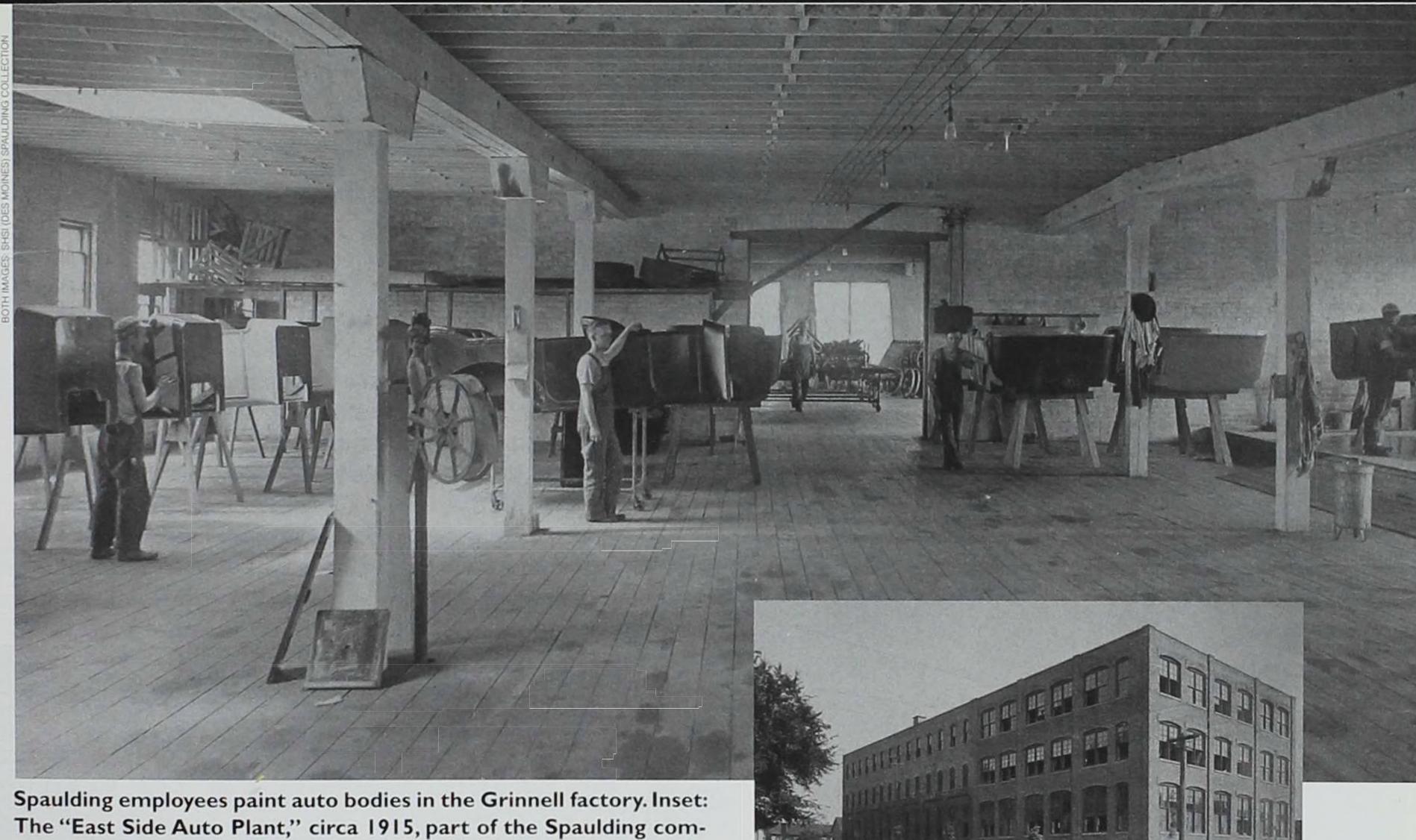
82. LCE, 1916, Waterloo (See Galloway, #87.)

#### 83. Littlemac, 1931-1934, Muscatine

The Littlemac, the only automobile ever built in Muscatine, was the project of Herbert and Ralph Thompson, brothers 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 Frederickson, the Littlemac rode 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



Spaulding employees paint auto bodies in the Grinnell factory. Inset: The "East Side Auto Plant," circa 1915, part of the Spaulding complex (which is now listed on the National Register of Historic Places and is the future home of a transportation museum).

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, lowa. 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

H W SPAULDING

F E SPAULDING

E H SPAULDING

#### SPAULDING MANUFACTURING CO.

IN REPLY REFER TO

VEHICLES



MOTOR CARS

GENERAL OFFICE AND FACTORIES, GRINNELL, IOWA

GRINNELL, IOWA, Hov. 15th, 1913.

Spaulding Mfg. Co., Grinnell, Ia.

COPY

Gentlemen:

Have just returned from a thousand mile trip in southern California with the Spaulding "40" and am very pleased to inform you that it created a sensation wherever I went. On the great hill climb at Riverside where they all go into low, I had no difficulty at all in going to, the top on intermediate, and if the curves were not so short So a person could get any run for it, I believe I could make it like snuff on the high. I was in perhaps twenty towns and at every town some one wented to get the agency for it.

I wish you would let me know about what arrangements you have made about distributing this car in southern California. I had never thought I would get anxious to handle automobiles, as I am getting very close to fifty years old and have been in the Clothing and Gents Furnishing business all my life, but when I see what they all seem to think of this car, it makes me feel uneasy, let me know at it, will you?

Hoping to hear from you soon, I am,

Very Respectfully,

Lewis Culler, Pres. of the Culler Co., Redondo Beach, Calif.

THE ONLY VEHICLE MANUFACTURERS IN THE WORLD SELLING THEIR ENTIRE PRODUCT DIRECT TO THE CONSUMER BY THE TRAILING SYSTEM

forgotten how in the spring of 1910, at the birth of the Spaulding automobile, Grinnell reporters had taken a ride in the first one completed. Entranced by the intoxicating sense of freedom, they had raved that the vehicle was "a dandy . . . an easy, speedy runner . . . a great climber, and a joy unspeakable forever." Nobody reacted this way to a ride in a horse-drawn buggy. The reporters' ecstatic response expressed the feverish demand the new invention would generate, but perhaps not a corollary reality—the uncontrollable market forces it would unleash, and the dangerous mortality rate among companies like Spaulding's.



Left: A Spaulding driver describes his impressive ascent of a steep California hill and then asks if there are Spaulding dealerships in his state. Above: A curious crowd surrounds a Spaulding on a Glidden Tour, sponsored in Canada and the United States by the American Automobile Association, 1902-1913.

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.

Category 5: Total production of at least 500 cars; establishment of a dealer network; sales of cars outside lowa, and regular advertising. (See previous pages for detailed stories about these makes.)

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, 1910-1911, 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-



The profile of a Mason, shot in Des Moines on a foggy February day in 1906. Farther down the street, a team of horses patiently awaits the driver—and their own demise as a means of everyday transportation.

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.

NOTE ON SOURCES

The author wishes to thank George Hess for providing excellent images of his own 1910 Maytag-Mason; Colten Harvey for reviewing the rendering of the Spaulding Model H; the numerous friends, more patient than the writer, who offered encouragement during the article's long gestation; Dean Wittry for alerting the author to the existence of the Litestar; and, above all, John Zeller, who generously loaned materials on the Des Moines automobile. The standard reference on prewar U.S. auto companies is Beverly Rae Kimes and Henry Austin Clark, Jr., The Standard Catalog of American Cars, 1805–1942 (lola, WIS: Krause Publications, 1985, 1996), but it must be used with some caution because its voluminous listed sources are not linked to specific entries. For the Colby vignette: Paula Colby Barrett, "lowa's Automotive Pioneers: The Colby Motor Company," Palimpsest 62:4; J. H. Wheeler, History of Cerro Gordo County, Iowa, 2 (Chicago: Lewis Publishing Co., c. 1915); Mason City Globe-Gazette, 4/7/1914 – 3/2/1915. For Galloway: obituary, Annals of Iowa 31:8; Waterloo Courier, 11/11/1952; and History of Blackhawk County (Chicago: S. J. Clarke, 1915). For Mason and Maytag: George Hess, conversation with author, April and Nov. 2004 (Hess reports that identification for the early months of 1910 is difficult and confusing); Randy Ema, conversation with author, 9/28/2002; A. B. Funk, Fred L. Maytag: A Biography (Cedar Rapids:Torch Press, c. 1936); Don Butler, Auburn Cord Duesenberg (Osceola, WIS: Motorbooks International, 1992); Iowa Register, 8/10/1932; Cameron Hanson and Heather Hull, Past Harvests: A History of Floyd Country to 1996 (Charles City: Floyd County Historical Society, 1996). For Spaulding: Curt McConnell, Great Cars of the Great Plains (Lincoln: University of Nebraska, 1995); and Grinnell Register, 1/21/1937. For Adams-Farwell: Thomas J. Kirkwood, Ill, "The Adams-Farwell Motor Car" (thesis, Loras College, 1965); Beverly Rae Kimes, "You See It and You Still Don't Believe It," Automobile Quarterly (Feb. 1969); John Adam

## Reading the Past

ON HANDS AND KNEES, her parents looked through a dirty basement window of Blank Memorial Hospital in Des Moines. They could see her lying in bed in the makeshift polio ward. So many children fell ill during those deadly summer months of the early 1950s that Blank set up beds in the basement. No visitors were allowed, parents included. They could not talk to her or even let her know they were there. But they could watch as she cried. The woolen hot packs applied to

IT NEW YORK TIMES BENTSELLING COALTHOR OF APOLLO IJ

Jonas Salk and the

cloth, \$15.00 paper.

Conquest of Polio

Jeffrey Kluger, Splendid Solution:

Jonas Salk and the Conquest

of Polio (New York: Putnam's

Sons, 2004), 384 pp. \$25.95

make her knotted muscles relax had blistered her legs.

Fifty years later, those same parents sat in the Perry Public Library while their daughter shared memories of her fight with polio. There were four other polio survivors present that night along with another dozen local residents. The occasion was part of the annual All Iowa Reads project sponsored by the Iowa Center for the Book and the State Library of Iowa.

Each year, All Iowa Reads selects and promotes one book across the state as a community reading project. This year the book is Jeffrey Kluger's *Splendid Solution: Jonas Salk and the Conquest of Polio*, the

story of the battle to develop a preventative vaccine.

Because many Iowans were part of that story, the project invited individuals with personal stories to attend the discussions whether or not they had read the book. Those stories were so compelling that we did not spend much time on the book itself, but the history at the national level took on new significance when it was reflected in the lives of people in the room.

Kluger is a journalist by trade, a senior writer for *Time Magazine*, and he knows how to tell a story. *Splendid Solution* is the story of Jonas Salk, who became a national hero overnight when his polio vaccine all but eliminated the killer disease in massive field tests in 1954. Kluger weaves many strands of the battle together—Franklin Roosevelt's struggles with polio, the creation of the March of Dimes, and especially the pervasive fear that gripped American families each summer with the onset of the polio season—but it is the life and work of Salk around which the story centers.

That is both good and bad news. On the positive side, Kluger creates a gripping drama. We witness the thrills of successful lab tests as the research team builds its case for a vaccine created from dead virus. Salk's confidence that the body could produce effective antibodies when confronted with a dead polio virus put him at odds with Albert Sabin, who insisted that only

weakened strains of living virus could be effective. Pages fly fast as we await the results of the 1954 field tests. And then the news conference from the University of Michigan campus, with 54,000 doctors listening in on closed-circuit TV: "In placebo-controlled areas, the poliomyelitis vaccination was 68 percent effective against Type I, 100 percent effective against Type II, and 92 percent effective against Type III.' "Salk's vaccine worked. There was a defense against polio.

On the negative side, Kluger writes history as melodrama. Albert Sabin becomes the villain, abrasive and domineering as he rejects all approaches to the development of any vaccine except his own. Salk quietly endures Sabin's professional attacks because he has confidence in his own approach, but there's no doubt whose side Kluger is on.

While Kluger researched the subject thoroughly, he occasionally taints the account to heighten the drama. A good example is his account of a research colloquy sponsored by the National Foundation for Infantile Paralysis to compare findings and chart the most promising areas for funding. Citing only the transcripts of the conference as his source, Kluger paints an arrogant portrait of Sabin. He dismissed the findings of one fellow scientist, "regarding the chart with a thin smile." When Salk tried to speak, Sabin cut him off "dismissively." Kluger derives all those connotations from the printed transcripts of the meetings.

The book clearly does not give Sabin his due. Two years after the much-heralded announcements of the effectiveness of Salk's vaccine, the World Health Organization gave Sabin's "weakened virus" approach a trial in countries that had never used Salk's. Eventually the Sabin vaccine gained the upper hand and was the preferred approach for over 40 years. The Sabin vaccine required no shots; it could be administered on a sugar cube and provided broader immunity than Salk's and prevented an immune person from serving as a carrier. Furthermore, the Sabin vaccine produced a lifelong immunity without the need for repeated vaccinations. Kluger gives Sabin little credit for anything but obstructionism.

But to the families who dreaded the disease and the children and adults who were its victims, the story is the development of a way to prevent polio. And the man who first engineered that "splendid solution" was Dr. Jonas Salk. Those who remember that childhood terror will find themselves drawn into Kluger's narrative. Splendid Solution is splendid reading.

—by Tom Morain

Tom Morain is director of community relations for Graceland University in Lamoni. Because he had led a discussion of Splendid Solution in Perry, Iowa, we asked him to review the book for this column.

#### Iowans Remember the Polio Scare

"In 1926 when I was not yet a year old, my father contracted a paralysis, a mystery at first to the hometown physician in Tripoli, lowa....The [polio] ran its natural course and pain was relieved by massage. The outcome was a slow recovery in which my father's left arm and especially his thumb and forefinger no longer were very usable. He was unable to drive a team of horses, so necessary to farm operation in 1927-28. A man was hired to help but profits were not enough to keep him on past six months. A farm auction was scheduled and my parents and I moved to a bungalow in Tripoli. . . . Two years [later] I also contracted infantile paralysis. . . . In the 1930s University Hospitals had a statewide outreach program called State Services for Crippled Children in which physicians, nurses and therapists came to small rural hospitals. ... In Oelwein I was seen by Dr. Steindler, the famous orthopedic physician who long operated out of Children's Hospital in Iowa City. He did recommend a surgery in which a triangular piece of instep bone would be removed to make my feet look better and to make shoe fitting easier. Unfortunately, the procedure would cost \$350 for each foot, money my parents just did not have. So the surgery was not done." -Irma P. Johnson

"The fear [of polio] was so intense, dogs were killed, they sprayed for mosquitoes, play grounds and swimming pools were empty. Some thought spiders from bananas, or the fuzz from peaches caused polio. Any large group gatherings were almost unheard of."

—Virginia Mickey

"There were 32 cases of polio in my home town. I think I was the 27th to come down with it. In the fall of 1948...as we warmed up for the start of our 4th [high school football] game I experienced severe pain throughout my body. One of my teammates noticed I was having a problem and asked if he should tell the coach. I said no, I wanted to play in the game. ... I had a fever for 7 days and was only in the hospital for a total of 10 days.... Our ward was in the basement with windows about the top three feet on one side of the room. That was our only contact with my parents, friends, and coaches. . . . My parents had the Ben Franklin store in Hawarden and since no one knew in what way polio was contagious or infectious they could spend their time

in Sioux City at the hospital because they certainly weren't needed at the store. There were no customers. I remember them saying that someone could shoot a cannon down the main street business section and not hit —Tom Tilgner anything."

"Late Saturday night my mother, my [14year-old] sister Lorna, and I returned home from a trip to Colorado and Montana. It was 17 August 1940. The next night, Sunday, Lorna got sick. Thursday morning at 9:45 she died. . . . Funeral arrangements were made by telephone, as we were in quarantine. The casket was placed by the front window; my parents stood at one end of her casket, Bessie [Dvorak, our hired girl,] and I stood at the other end. We watched all the people come up on our porch and walk past the casket. They were nearly all adults; parents were too frightened to allow their children to come even that close to that horrible disease. The service was held at 2 p.m. on the front —Charlene Nichols Hixon lawn."

"My father contracted polio from one of his [dental] patients—one day he had a terrible headache and the next he was completely paralyzed and in a respirator. My first real memory is of my third birthday party, held in the hospital room next to the respirator. My dad had a slanted mirror over his head so he could see out into the room, and I remember the 'portholes' on the sides of the respirator, so that nurses could tend to him.... He was gradually weaned from the oxygen and flown back to Iowa City, where he underwent a year of physical therapy at the VA hospital. His therapist was an African American, James May, who essentially gave him his life back. Mr. May had to commute from Davenport for several years because his family could not find housing in Iowa City.... My father went back to graduate school and got his master's and Ph.D. in oral pathology. He dictated his thesis and dissertation into a Dictaphone. . . . There is now a scholarship in his name for dental students from Iowa. Thirty-two years after contracting polio my father succumbed to post-polio syndrome and died at the age —Christine Tade of 62.

"The accepted treatment to keep muscles stretched and limber was to wrap the arms

and legs with wet hot packs. . . . One day a nurse asked me if I was ready for physical therapy. . . . I was taken to a room with a huge tub of water, maybe something like a hot tub. I soaked in the water for awhile and then was taken to a bench where a therapist started exercising my limbs. . . . The hospital was so overwhelmed with polio patients that they allowed my parents to take me home.... We didn't have indoor plumbing or a bathtub. My parents borrowed a portable bathtub from our neighbors. It was made of canvas stretched over a frame. I think my mother spent much of each day heating water on the cook stove, putting me to soak in the tub, and then working with me on my exercises.... Mom was unrelenting; no amount of whining on my part got me out of doing my exercises. Sometimes we were both crying during our sessions but we kept going." —Marilyn Bode

"My second grade classmates and I were surprised to see that our new teacher wore heavy metal braces on her withered legs and used metal crutches to drag herself from place to place. It turned out that she had signed a contract before she got polio, and fulfilled it after her partial recovery with our class.... Our classroom was on the second floor, and there was, of course, no handicapped access. I remember the other teachers being irritated because she didn't have to [go] outside to do recess duty. Someone installed metal plumbing pipe bars on both walls of the last girls' bathroom stall so she could get up without help. Those bars stayed there for years after she left. She only taught for one year. I think it was just too hard." —Katherine Howsare

"My memory of the day [my aunt] went to the hospital was of men in white coats coming through the front door and asking her to allow them to assist her to the ambulance ... but she refused and said she would walk out on her own. She lived less than 24 hours.... About six years later, I remember my mother standing in the doorway of our house and yelling out, 'They've found it! They have a vaccine for polio!' She was not a woman given to such outbursts and shortly after that, she took me, my sisters and brother to a doctor [and] we were given our first dose."

-Ann Fisher

These vivid accounts are excerpted from longer personal stories now being collected as part of All lowa Reads for 2007. For the complete stories, or to add your own, visit www.iowapoliostories.org. Join the rest of lowa in discussing Splendid Solution: Jonas Salk and the Conquest of Polio. Find out how at www.iowacenterforthebook.org.

# Car Culture, Iowa Style

by Ginalie Swaim, editor

ars figure big in our lives. They are the safe place for quiet confessions of young love, the reason our bank account suddenly plummets, the companion on a life-changing road trip.

For Americans, learning to drive is a rite of passage into adulthood. Relinquishing our license humbles us. Trading in the old family car brings on a few sentimental tears.

First invented to transport us, cars now serve as a base of operations for our crowded lives. From the driver's seat, we tap into current world news via the car radio, or check in with our colleagues and family via cell phones. If we're hungry, we drive up to a drive-up. If we're bored, we slide in a new CD. If we're lost, we poke at that little GPS box in the front.

Cars have not always played such essential roles. The earliest motorized vehicles, over a century ago, were experimental, expensive, and unreliable. Even by 1910, there were still fewer than a half million registered vehicles in the entire nation. But within two decades, that had exploded to one auto for every five Americans. Historian David Kyvig paints the scene: "By 1929 almost 27 million cars were on the road, in the driveway or parking lot, at the gas station or repair shop, or, increasingly, stuck in traffic. . . . Motor vehicle ownership had gone from being unusual to being commonplace, and American daily life was thereby transformed."

Iowans experienced the same adjustments as the rest of the nation as cars entered our culture. Here begins a glimpse of Iowa during that transformation.

Setting out on a brisk drive on a road near Dougherty.





SHSI (DES MOINES)

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Setting out on a brisk drive on a road near Dougherty.



Autos line the curb, a horse-drawn wagon rumbles under streetcar wires, and, to the right of the tracks, a street sweeper cleans up horse manure. Horses, autos, and streetcars coexisting in American cities produced a chaos of sound, motion, and odor. In New York City in 1900, historian David Kyvig gasps, horses left behind "2.5 million pounds of manure and 60,000 gallons of urine" each day. And as autos replaced horses, the trade-off was the noxious fumes of the combustion engine.

Just as streetcars had allowed cities to expand into the suburbs by linking workers' new, outlying homes to their workplaces in commercial districts, so too did automobiles. According to historian Ruth Schwartz Cowan, "The automobile would make it possible to develop suburban property that had previously been inaccessible—to fill in, as it were, the spaces between the spokes of the streetcar lines."

Of course, autos also filled downtown thoroughfares. Cowan relates that a "traffic expert calculated that automobiles required twenty times as much street space per passenger as the streetcar: '... as if our ladies, and our men, also, wore a hooped skirt arrangement ten or twelve feet in diameter and went through the sidewalks."

Sioux City's Fourth Street, looking east from Pierce Street, circa 1910. Note the car in the left foreground: steering wheels were often on the right side of early autos, so the driver could step in from the curb, rather than from the muddy street. The woman in white (in the next car) shows us how it's done.

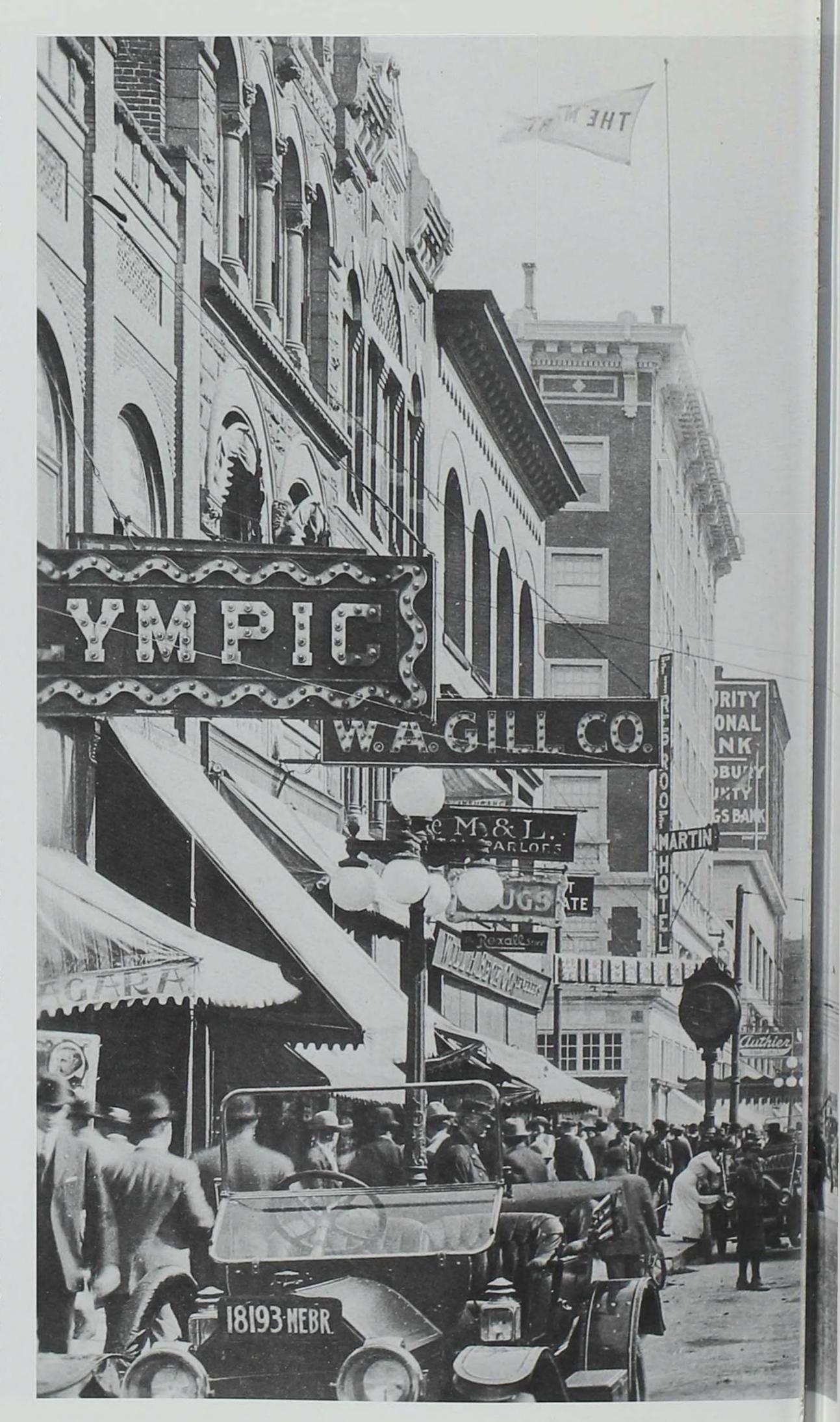


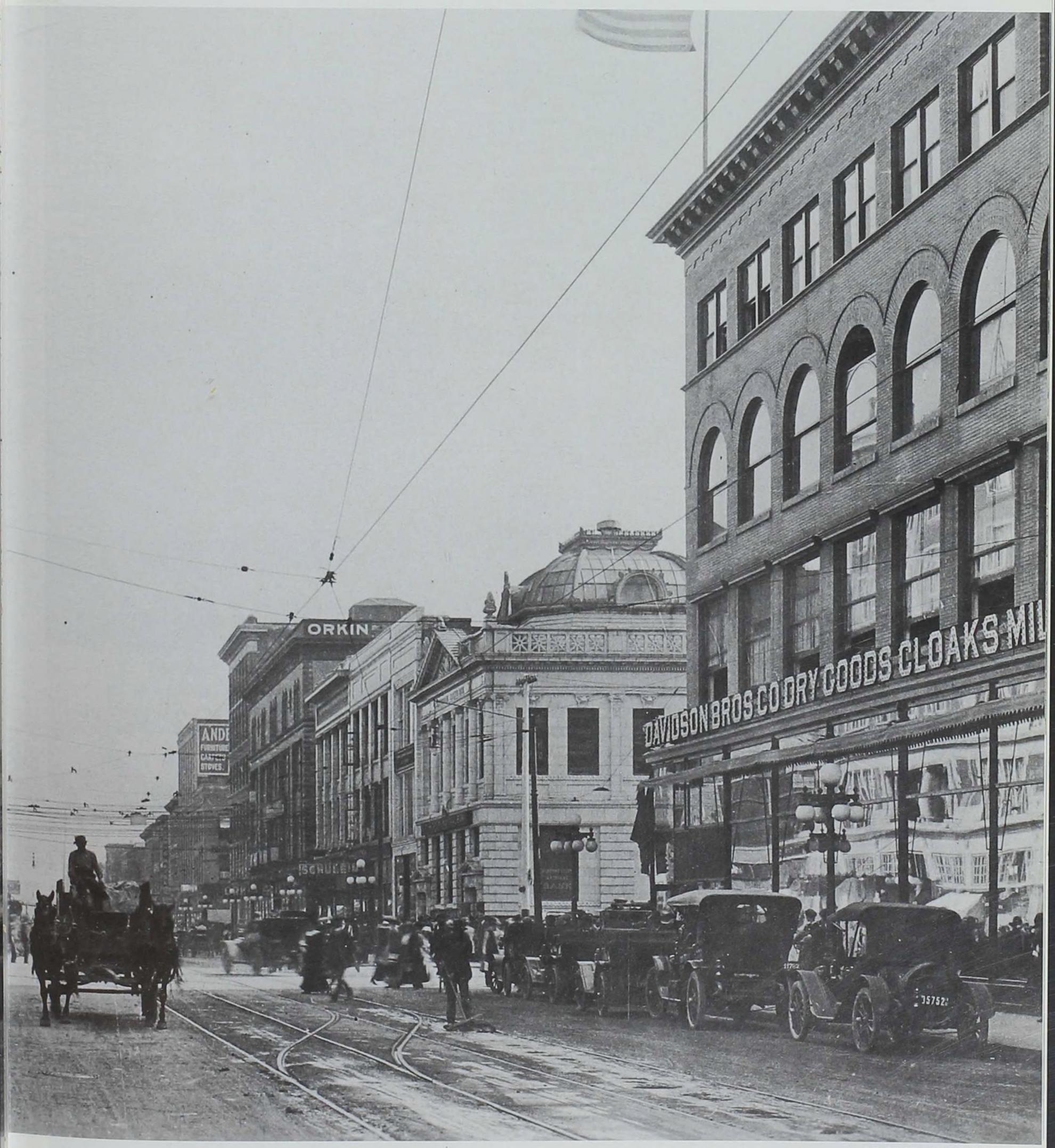
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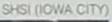
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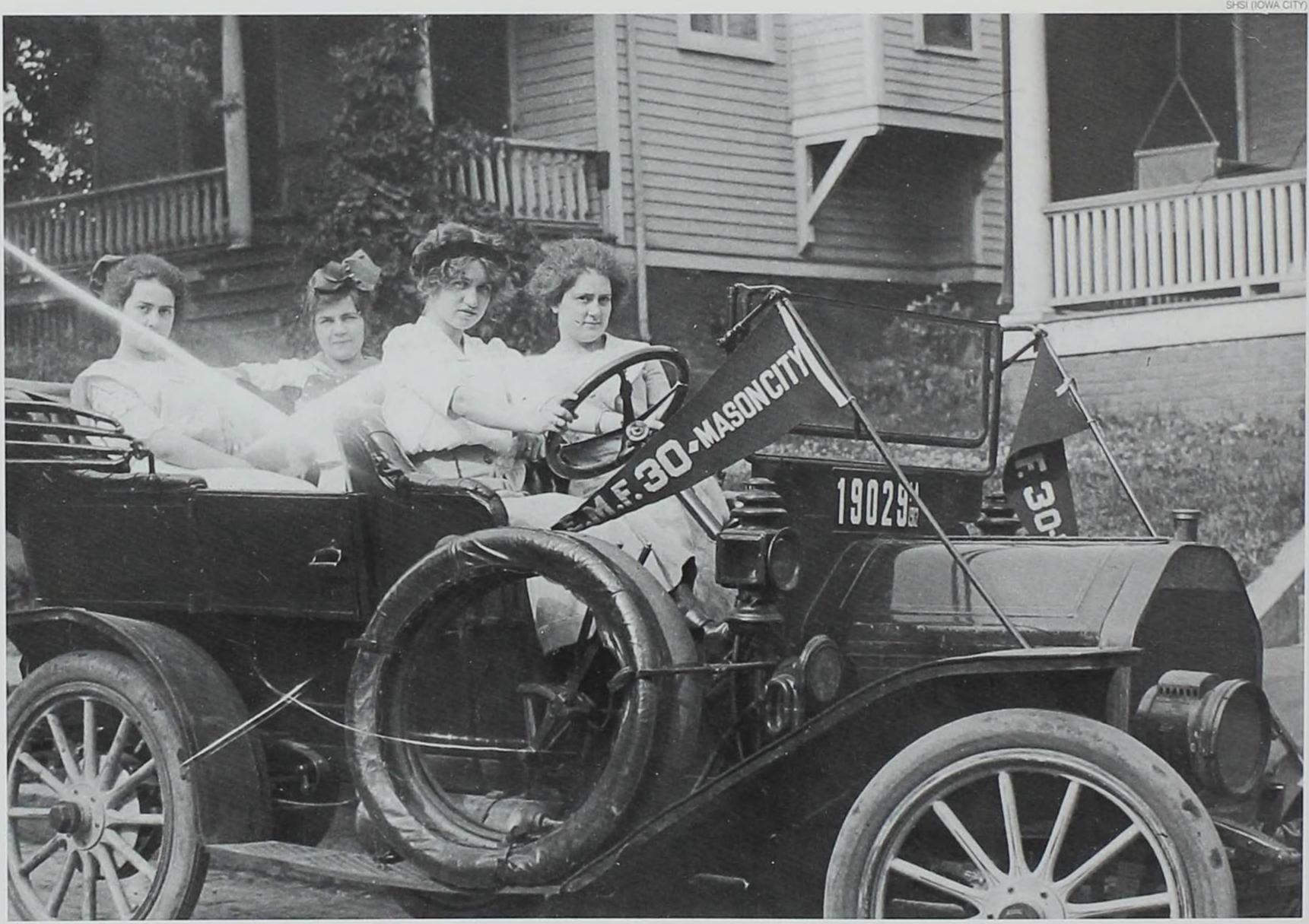
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SHSI (IOWA CITY): LIBRARY OF CONGRESS





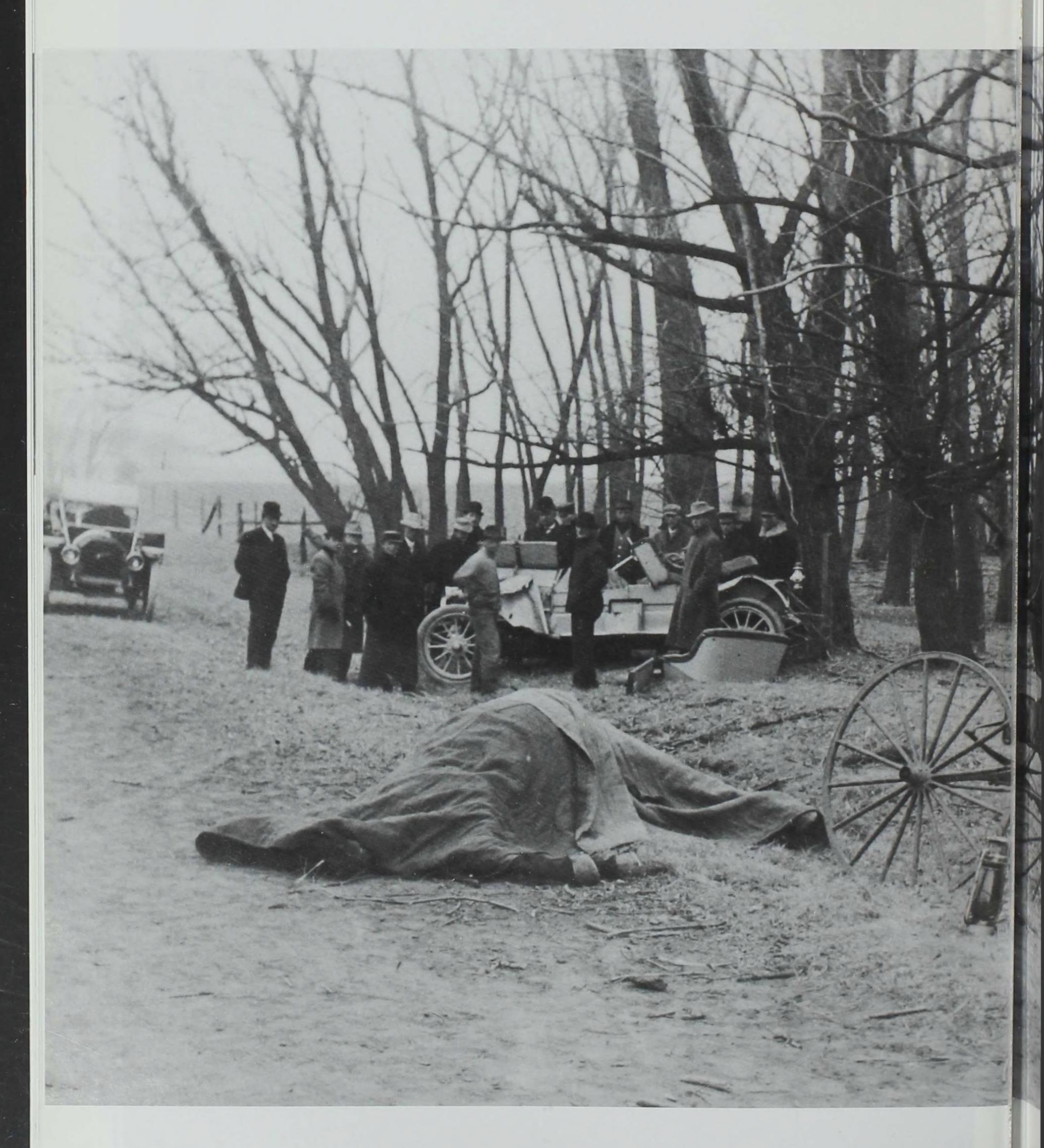
There were squabbles over the family Ford, fears that the young folk were driving to distant roadside dance halls beyond the watchful eyes of the local community, worries that lust would combust in the backseat of the Model T.

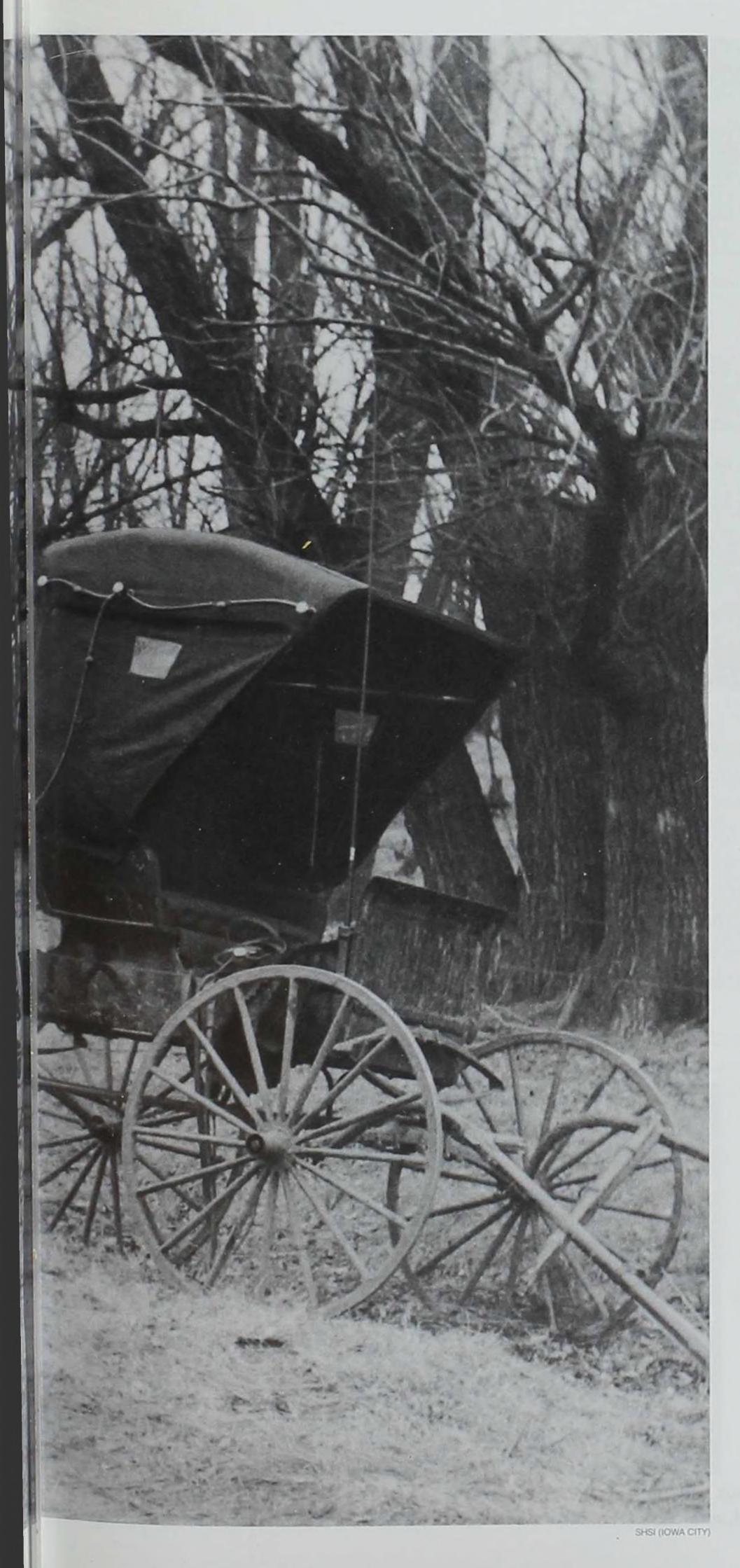
A couple alone in an auto had privacy, mobility, and independence. So did a couple courting in a buggy—but one could seek adventure a lot farther away in a car than in a buggy. "With the aid of an automobile and the device of leaving the dance an hour or so early, a girl can 'pulla wild party' and still return home at a time which does not arouse the suspicion of her parents," observed one sociologist studying the volatile combination of cars and youth.

Historians still disagree on whether autos spelled trouble for young people—or just exposure to mainstream culture. Introduced to new places and ideas, youth began to mix with, and sometimes marry, people from different geographic areas. Rural teenagers in particular "were able to visit movie theatres and other places of amusement in towns," Michael Berger writes, "and as a result all youth moved towards a more standard national set of manners, styles, and diction. . . . The social forces set in motion by the motor car could not be controlled by the dictates of a single family or community."

Above: Marie Lepper and her Mason City friends in Des Moines, about 1912. Opposite: Viola Radden, Sabula, Iowa.







orses weren't fond of automobiles, farmers claimed. Autos were foul creatures, spewing exhaust and stirring up dust. They were noisy (one was likened to "a roadroller loaded with scrap-iron crossing a cobblestone bridge when in motion; and when at rest . . . like fire-crackers under a dish-pan." And they were fast: 20 miles per hour in the country, if the driver obeyed the 1904 speed limit. But what auto owner wouldn't like to push that a bit, to test her new car out on the open road?

"The potential for mishaps caused by terrified horses was so great that the rural-dominated Iowa legislature passed a law requiring the traveling motorist to 'telephone ahead to the next town of his coming, so that the owners of nervous horses may be warned in advance," writes historian Tom Morain. "In Denison, seventy-five farmers met in 1906 to discuss their irritations with the automobile. One speaker . . . claimed that farmers could no longer send their wives and children to town on errands since autos had made buggy travel hazardous. Another advocated a farmer boycott of all merchants who owned automobiles. He favored giving those who owned cars a reasonable time to sell them before the boycott went into effect." But within a decade, as farm incomes rose and Henry Ford perfected his reliable, affordable Model T, farmers embraced what they had at first scorned.

Automobiles were a sea change in rural America. Although some blamed them for destroying community values and unraveling family life, they were also credited with reducing the isolation and inequities of rural life. Farm kids could be bussed to town high schools. Visiting nurses and extension agents could reach more farm households. Ailing farmers could drive to a better skilled doctor in the county seat, rather than the doctor in the closest town. On Sunday (considered a day of deserved rest for farm horses), a rural family might now drive to the denominational church in town, rather than attend the country church just up the road. Farmers were now even known to park their Iowa work ethic and take a trip. One rural sociologist found that Monona County farmers with autos "took from six to twelve longer trips each year, which carried them beyond the confines of their community into other counties."

Horse-drawn vehicles and automobiles collided, literally and figuratively, in rural America. Here, an early accident, possibly in Franklin or Iowa County.



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SHSI (IOWA CITY): BRINGHAM FAMILY COLLECTION



Taxi driver Jess Reel strikes a pose for a family photographer.

eaf through any family album and you'll spot photos of the babies, the aunts and uncles, the family pets—and probably the family car.

Scholar James E. Paster has studied such "automobile snapshots" and finds that they fit into five categories. In each category, the car conveys a slightly different meaning. Taken together, these meanings articulate the role of cars in daily life. As Paster describes the categories, it's not hard to visualize these images, because we've all posed for similar ones ourselves.

Paster's first category includes photos focused simply and solely on the car—especially a newly acquired one. Here, Paster says, the car symbolizes "a trophy [and] proof of achievement." He calls his second category the "go-stand-by-the-car portrait," in which the status "associated with the automobile . . . is transferred to the people who pose with it. . . . The car is still a trophy, but now the photograph includes the winning team."

Then there are the photos in which the car symbol-





The running board makes a perfect spot for a photo op, but maybe it depends on who wants to sit by whom. These snapshots are in a family photo album created by Alice Mary Gifford, one of several albums in the State Historical Society collections.



izes mobility—"families leaving on vacation, a bride and groom leaving their wedding reception, a mother arriving home with her new baby."

Paster's fourth group comprises "snapshots taken from inside automobiles [including] points of interest along the roadside and pictures of the driver or passengers taken by others in the car." "Sometimes their presence is only implied, but the people in these snapshots are on the move. They are going somewhere."

The fifth group "only incidentally" includes cars. Paster comments that cars in the background remind us "how ubiquitous [they] have become [and] how the landscape has been altered to accommodate the automobile; they show how much we have given up for the freedom that the automobile has delivered."

Children overflow the auto driven by W. D. Cannon from lowa City. The photo was taken outside the general store in Middle Amana, about 25 miles west of Iowa City.



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utomobiles were not without their problems. You had to keep the tires filled, for one thing. And then there was the question of where to store the vehicle.

Garage was a new word to Americans. The word was derived from the French verb garer, "to shelter." The Jefferson Bee instructed its readers that the "official name for an automobile livery is a Garage, pronounced Garazj, with an accent on the first syllable."

The word also defined the small, simple structures being built for home owners.



Garages now took the place of barns and carriage houses; in fact, builders and architects first called them "automobile houses." Because gasoline engines presented fire hazards, garages were built away from the house, and often of brick, concrete blocks, or hollow tile. In 1917, the Permanent Building Society in Des Moines advertised that a hollow-tile garage would "last like the pyramids." The American home owner made room for the American auto, sacrificing part of the backyard vegetable garden for a small garage.

More changes were in store. The leisurely custom of relaxing on the front porch, hailing neighbors who walked by, was disappearing, and so was the traditional front porch itself. Garages next moved up to the front of the lot, conveniently linked to the house by a breezeway, or directly attached to the kitchen.



Above: A Lee County barn and an Iowa City garage. Left: Robbie Rickels in Atkins, 1925.



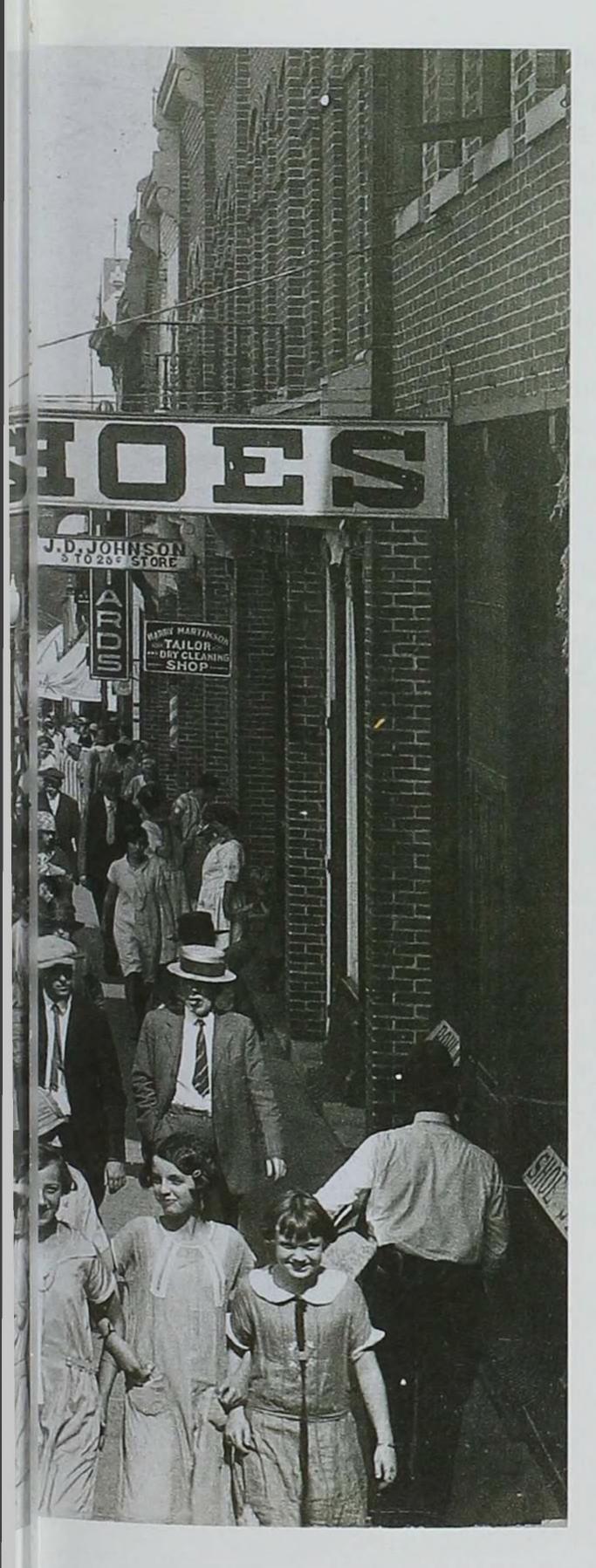
fluence on the habits of consumers, the business of retailers, and the streetscapes of commercial districts.

Townspeople who had typically strolled downtown on errands now thought it was more convenient to use the car. Groceries were

less often ordered by phone and delivered to the home; more likely, the customer drove to the grocery store and counted on finding a parking place nearby.

Both rural and urban consumers who owned cars now shopped more often and farther away from their homes. They were willing

to drive to larger towns and cities, where selections were better and prices lower. Historian Lewis Atherton described a farmer in Irwin, Iowa, for whom "it had once taken all day with horse and buggy to shop in Harlan, fourteen miles away, but he could now visit Omaha or Council Bluffs in his au-



SUNSET SHOPPING CENTER

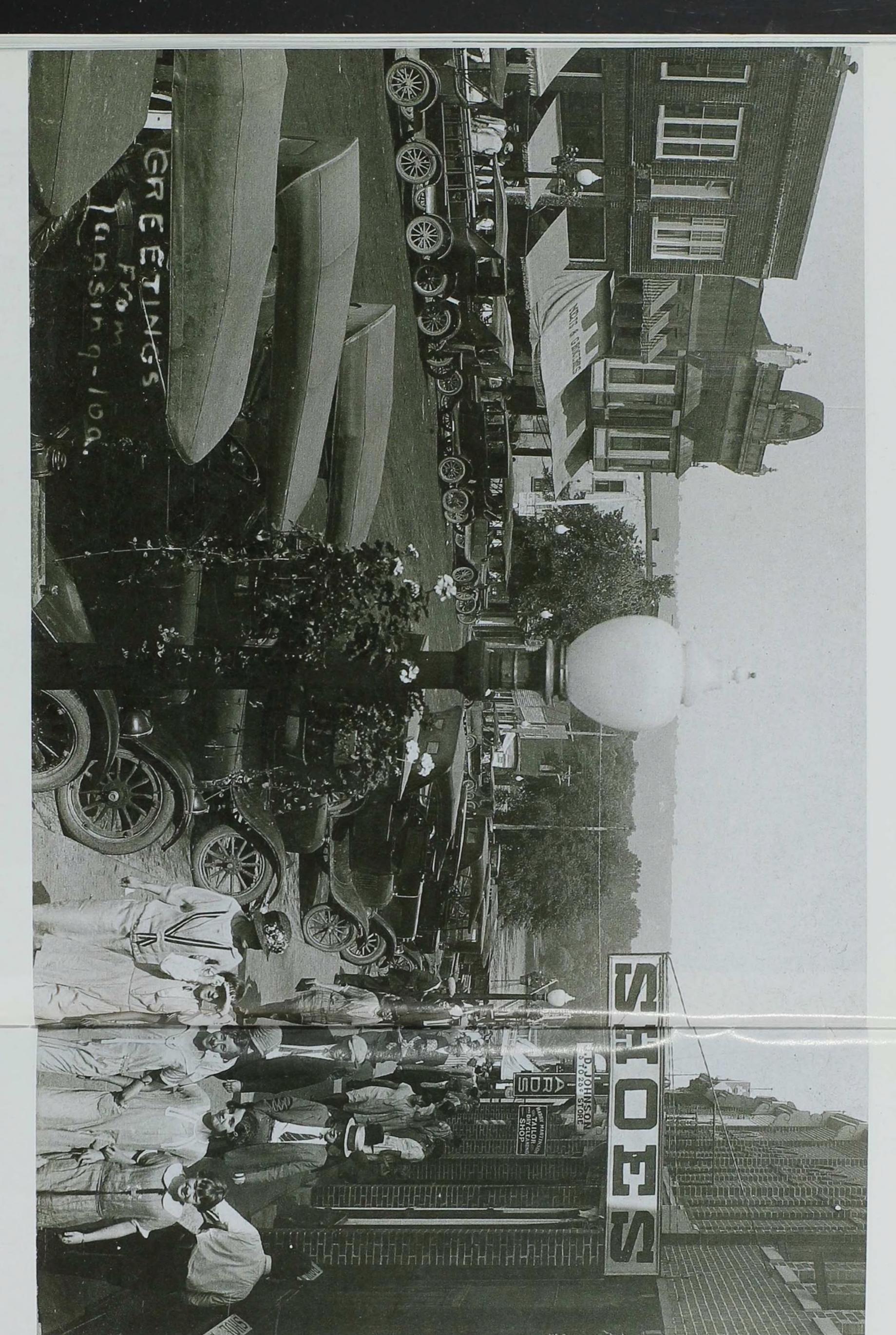
Autos contributed to shifts in shopping districts. Small towns suffered the most, losing business and community vitality to larger towns. Clockwise, from left: Lansing in the 1920s; Sioux City's Sunset Shopping Center, 1960s; and Le Mars, 1950s.

THREE PHOTOS: SHSI (IOWA CITY)



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Over time, retail businesses often abandoned the traditional business districts in the center of town and instead sprawled over the outskirts in low-slung malls surrounded by cement parking lots and arterial highways.



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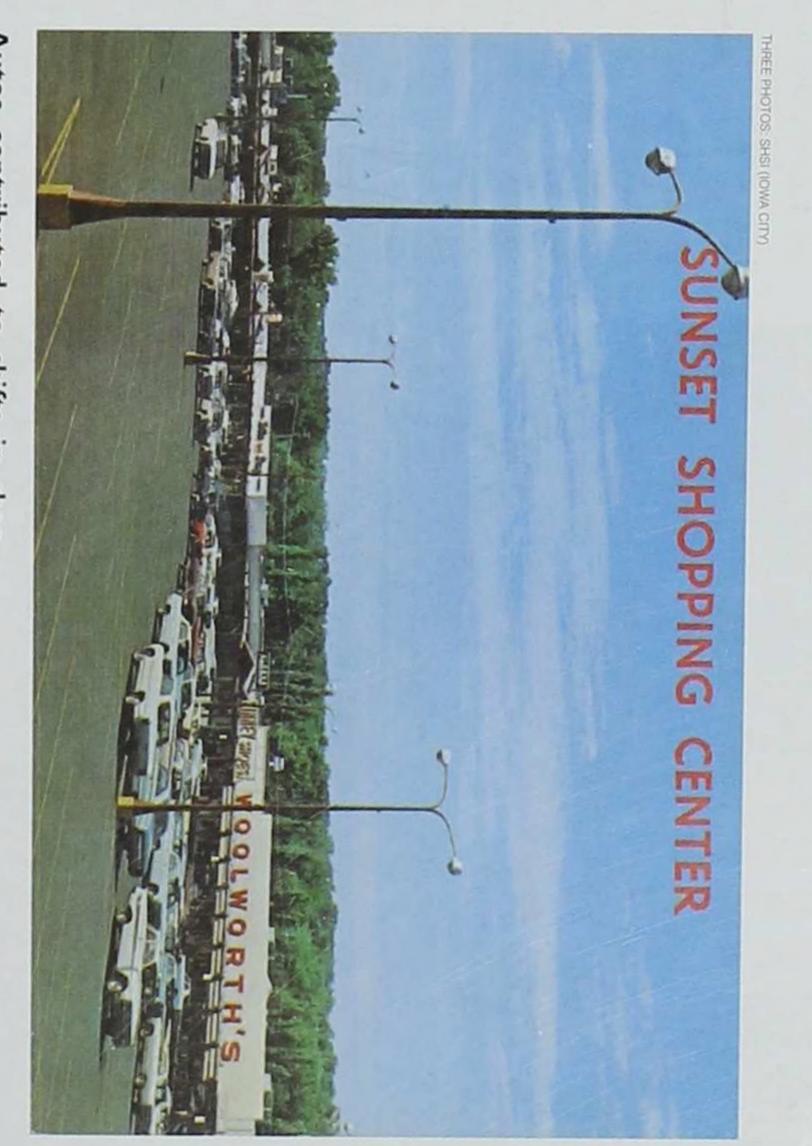
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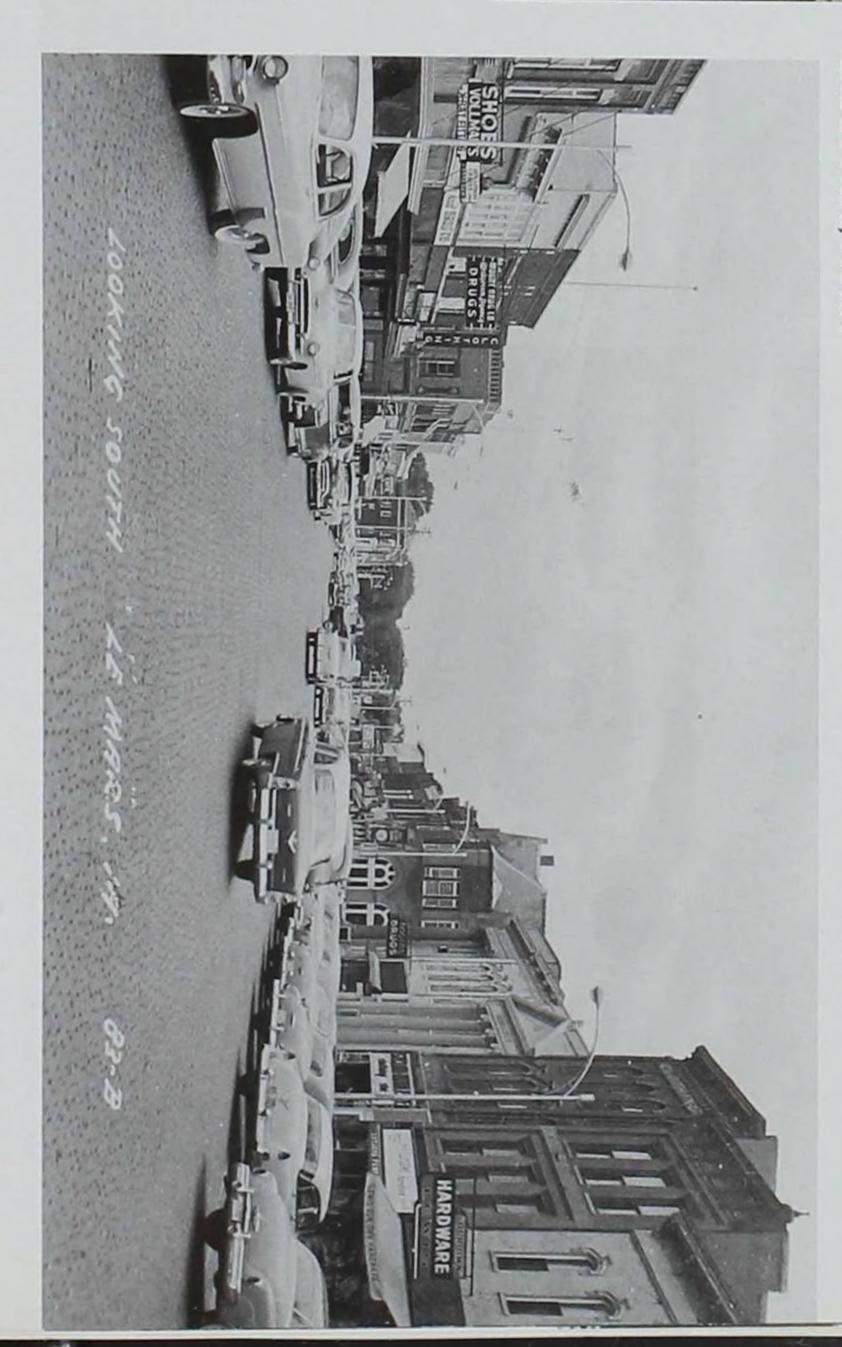
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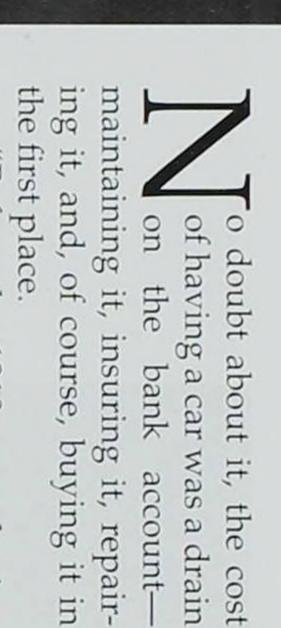
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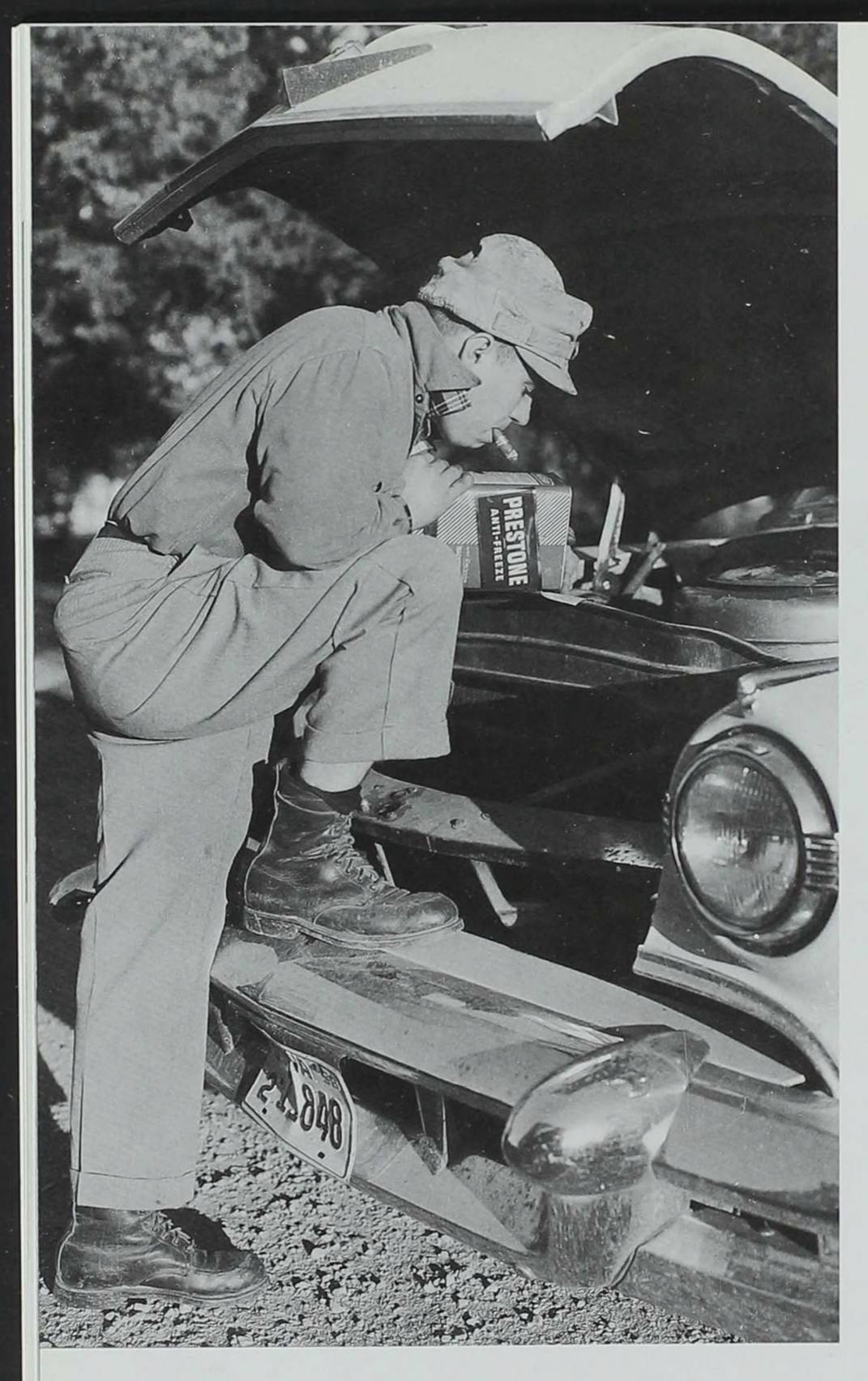


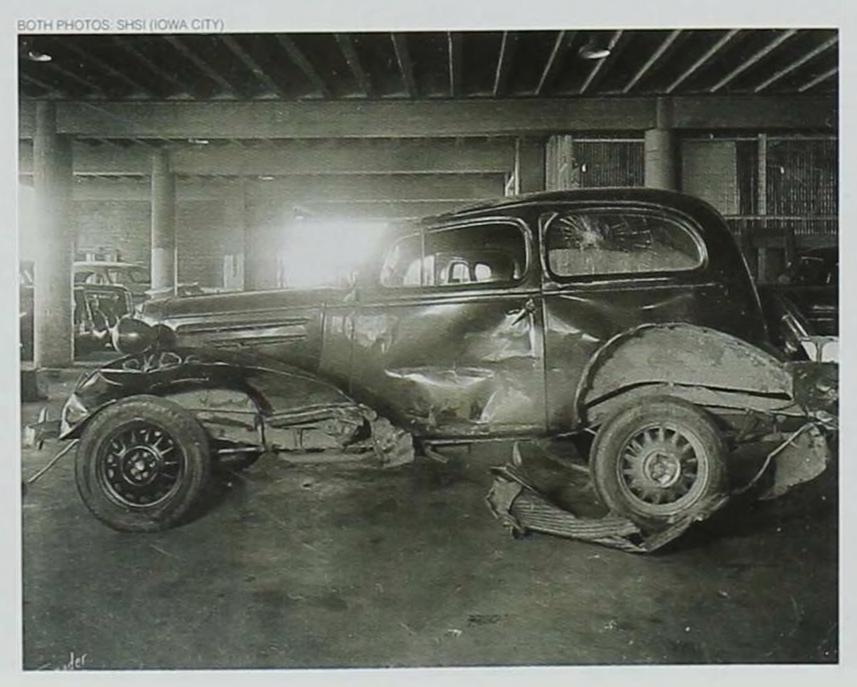
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left), cars eventually meet their doom, for insurance documentation. in salvage and scrap yards. Left: A side profile of a smashed car, photographed Even with routine maintenance (upper







of having a car was a drain on the bank account—maintaining it, insuring it, repairing it, and, of course, buying it in the first place.

"Before the 1910s, purchasing an automobile required immediate cash payments. . . . No wonder that at first only people with considerable reserves of cash on hand could afford automobiles," historian David Kyvig writes. "In the 1910s a few banks, finance companies, and independent auto dealers experimented with time purchase plans. But not until General Motors and Dupont, awash in World War I profits, established the General Motors Acceptance Corporation in 1919 did a manufacturer itself finance credit buying of automobiles. Within two years, half of all automobile buyers were entering into credit purchase agreements; by 1926 the figure reached threefourths." Buying on credit "dramatically enlarged the population that could afford the initial cost of an automobile" and "made it much easier for a car buyer to get behind the wheel of a more expensive car with conveniences."

Kyvig notes that "since new technology did not emerge every year to provide a fresh incentive for purchasing a new car, other means had to be found to entice customers." Ad campaigns pushed stylistic changes—a different dashboard or fender design—"to persuade automobile owners that to be up to date they should trade in and trade up." A new marketing concept was born—planned obsolescence.

Even with routine maintenance (upper left), cars eventually meet their doom, in salvage and scrap yards. Left: A side profile of a smashed car, photographed for insurance documentation.





SHSI (IOWA CITY): PHOTO BY JOAN LIFFRING-ZUG BOURRET

s this nation's postwar consumer society barged into the second half of the century, the size and power of cars expanded. Interstates cut broad swaths across the nation, freeways sliced through old urban neighborhoods, beltways looped around entire cities. Scientists pointed skyward to something called smog, while manufacturers, citizens, and lawmakers wrangled over safety standards. Foreign compact cars

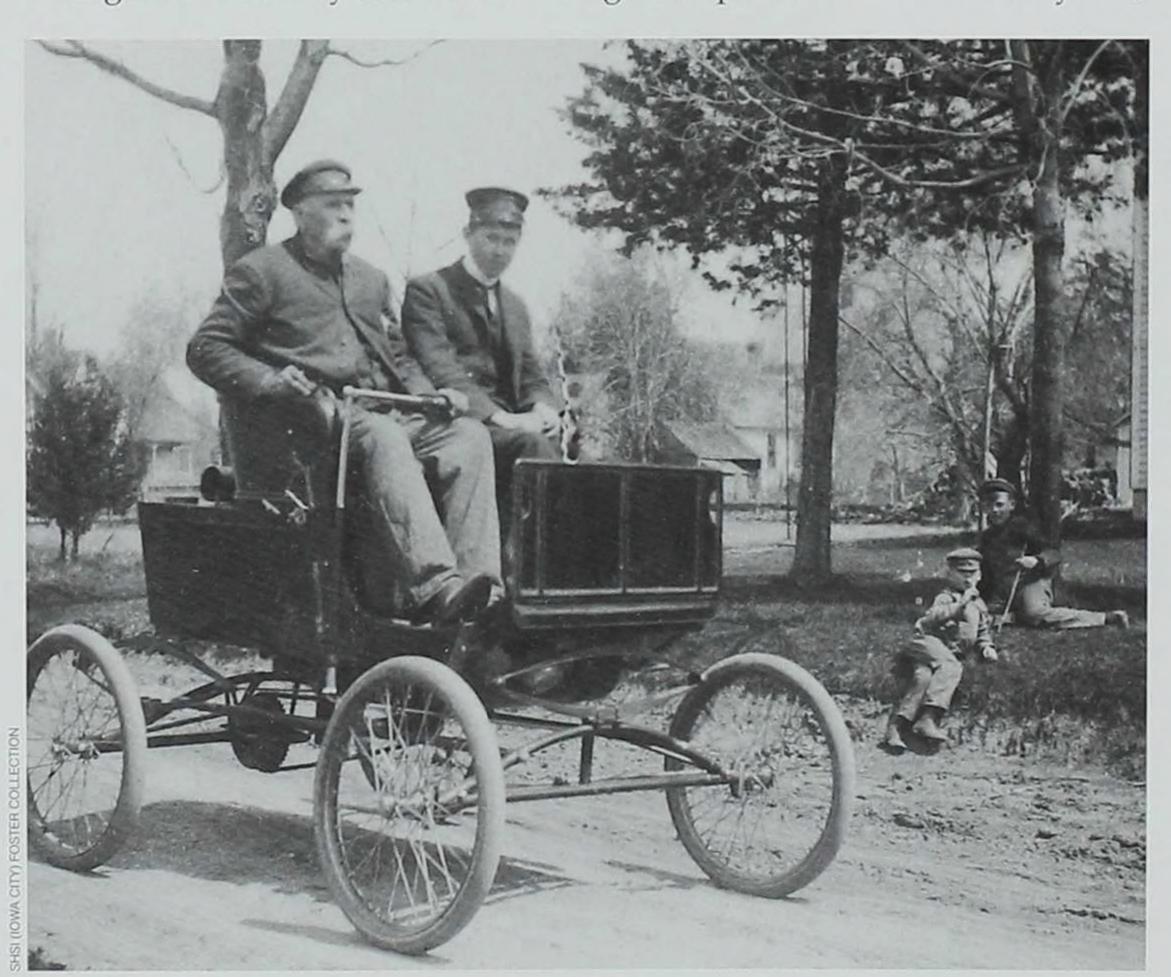
squeezed into dealerships. Gas prices rose. The size of U.S. cars contracted, then expanded.

Today scientists point not to the smog over our cities but to the melting ice that caps our planet. As both Americans and world citizens, we are asked to ponder our dependence on cars, to examine our driving habits. Now and then we meet someone who hasn't owned a car for years, and we ask ourselves: "Could we do

> that? Would our lives be better or worse? Or just different?"

> "The technological system that some people call 'automobility' was originally built out of inventors' hopes and entrepreneurs' dreams," Ruth Schwartz Cowan writes, "but it has now been set in the concrete of several thousand miles of highway and several million suburban subdivisions and in habits that Americans have been developing for several generations."

> One hundred years ago, many Americans dismissed the peculiar vehicles that terrified horses and floundered in the mud. Then the technology of the automobile took hold of us and, as history reveals, changed our lives and our culture. Leave it to humorist Will Rogers to have said it just right: "Mr. Ford, it will take a hundred years to tell whether you have helped us or hurt us, but you certainly didn't leave us like you found us." \*



A Locomobile on a dirt street in Iowa Falls catches the eye of boys on the grass. Right: Fifty years later, parked cars are just part of the night scene in Manchester.



#### SHSI (IOWA CITY) LEWIS COLLECTION

### NOTE ON SOURCES

Tom Morain offers a useful and entertaining look at lowa during the automobile age in his *Prairie Grass Roots: An Iowa Small Town in the Early Twentieth Century* (Ames: Iowa State University Press, 1988). The following also examine cars and American culture: Michael L. Berger, *The Devil Wagon in God's Country: The Automobile and Social Change in Rural America, 1893—1929* (Hamden, Conn.: Archon Books, 1979); Lewis Atherton, *Main Street on the Middle Border* (Bloomington: Indiana University Press, 1984); Ruth Schwartz Cowan, *A Social History of American Technology* (New York: Oxford University Press, 1997); Jan Jennings, ed., *Roadside America: The Automobile in Design and Culture* (Ames: Iowa State University Press, 1990); David E. Kyvig, *Daily Life in the United States, 1920-1940: How Americans Lived Through the 'Roaring Twenties' and the Great Depression* (Chicago: Ivan R. Dee, 2004); and Robert S. Lynd and Helen Merrell Lynd, *Middletown: A Study in Modern American Culture* (New York: Harcourt, Brace & World, Inc., 1929). Annotations to this article are held in the *Iowa Heritage Illustrated* production files (SHSI-Iowa City).

# An Iowan's Yukon Adventure

by Marietta Miller Schaal



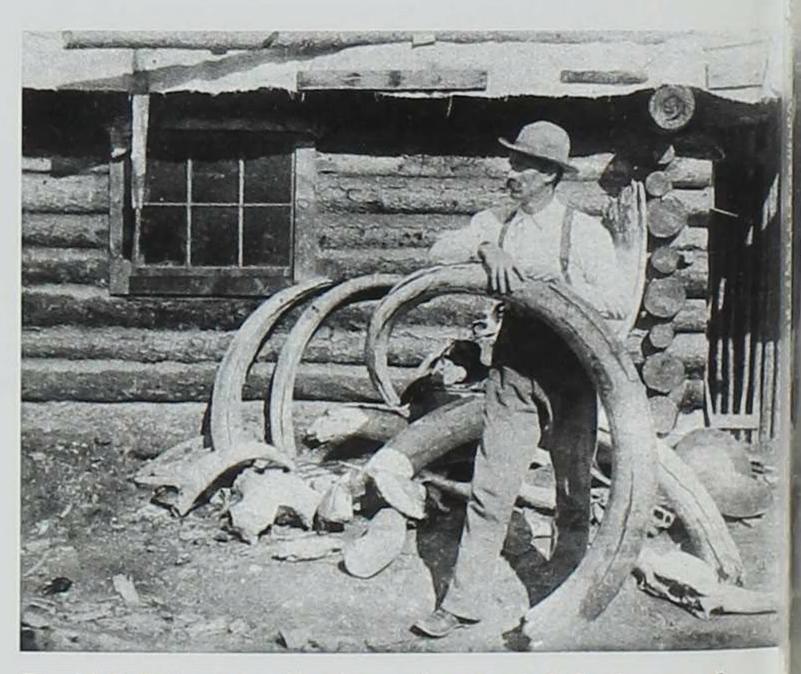
Iowan Marietta ("Etta") Schaal poses in her wolverine parka, surrounded by three dogs and mining equipment, near Magnet Gulch in the Yukon.

In 1911, David F. Schaal donated an eight-foot mammoth tusk to the State Historical Museum. He had found it a decade earlier in the deep, gold-bearing gravel deposits of Magnet Gulch, near Dawson City in the Yukon. The museum displayed the tusk in the typical fashion of the day—in a "cabinet of curiosities," showing the artifact for its own sake, but with no interpretation to reveal its larger significance or context, and no story to capture our imagination.

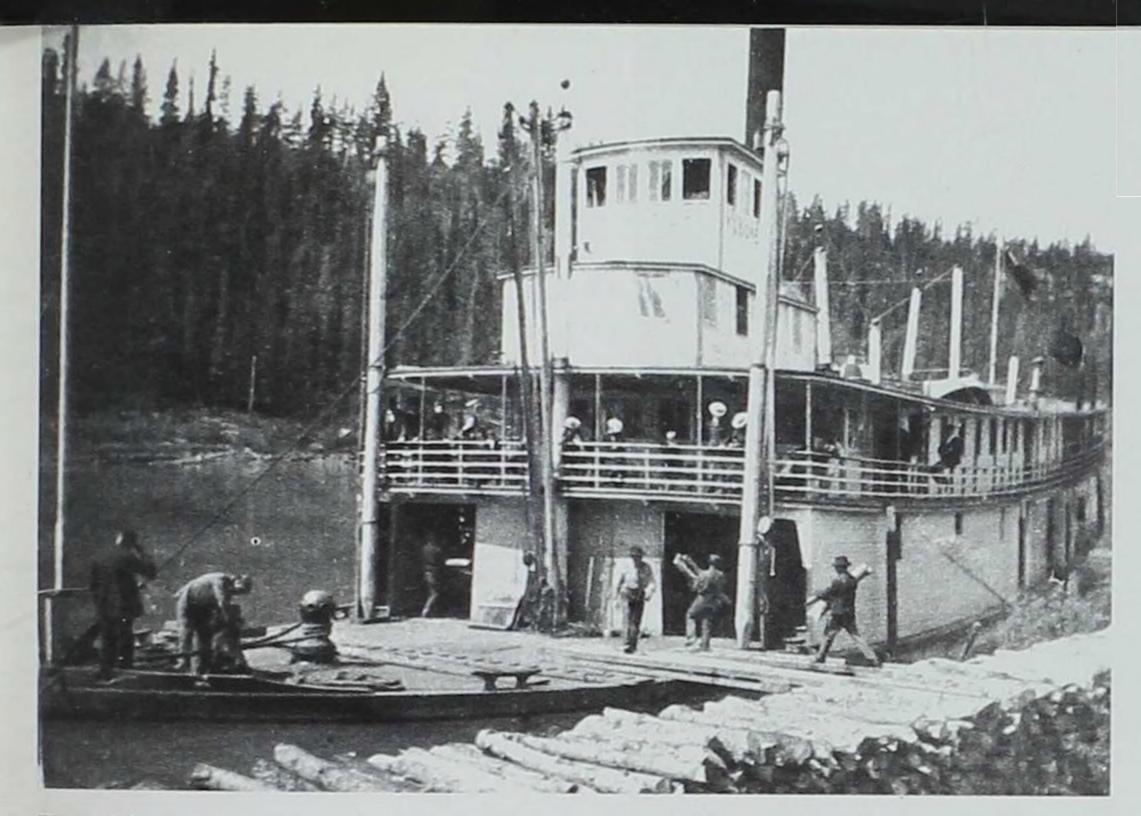
Nearly a century later, the museum again displayed Schaal's tusk, in its "Mammoth: Witness to Change" exhibit. A museum visitor named Mabel Hudson, of West Des Moines, spotted the tusk and realized that it was the one donated by her father. She invited me to lunch and showed me her mother's photo albums and the following text, "Account of Trip to Yukon Territory."

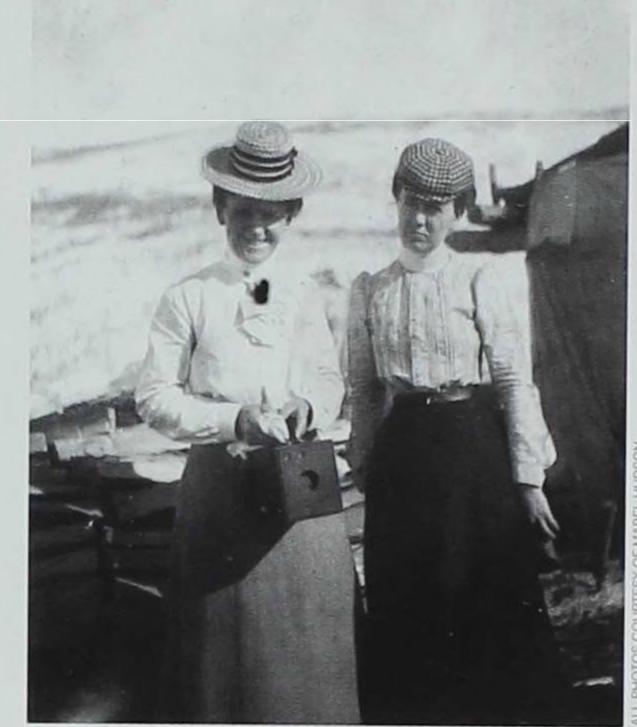
Here was the story behind the tusk. In 1900 Fred Schaal of Seattle had convinced his brother David, then of Polk City, Iowa, to travel with him to the Yukon. The next year David's wife, Marietta ("Etta") Schaal, and Fred's wife, Franc, joined their husbands in the goldfields. Thanks to Etta's words and photos (which she took with a small box camera), we see their Yukon adventure through the eyes of a 26-year-old Iowa woman.

—Bill Johnson, museum curator



David F. Schaal holds the tusk—the left incisor—of a wooly mammoth, next to more tusks and bones found in the Schaal diggings. Mammoth remains, which in the Yukon date back 30,000 years, are also found in river and glacial deposits in Iowa. See the Schaal tusk in the "Mammoth: Witness to Change" exhibit in the State Historical Building, Des Moines.





The Yukoner stops to take on wood for fuel, between White Horse and Dawson. Right: Mrs. Seebom with camera, and Etta.

n July 1, 1901 we left Polk City via the Northwestern to St. Paul and from there over the Northern Pacific on the North Coast Limited, passing through Minnesota, North Dakota, Montana, Idaho, and Washington, reaching Seattle in the evening of July 4.

After a good night's rest we started out in the morning to find when a first-class passenger steamer would sail for Alaska and found that the Dolphin would sail in two days, so we purchased our tickets and secured our staterooms, then set out to take in the town, which we did as thoroughly as our time would permit for there are many things of interest in Seattle. The view which I enjoyed the most—and never shall forget—was beautiful Mt. Rainier, the perpetual snow-capped mountain 40 miles distant.

It was with happy hearts we boarded our steamer about 7 o'clock the evening of July 6, for she was billed to sail at 8 P.M. We were four days on the Dolphin and had every comfort one could enjoy in their own home, and such elegant meals I had never seen before. The scenery was beautiful, so many wooded islands, Indian villages, etc. At Petersburg

our steamer landed for an hour or more and while there we visited the salmon canning factory where nearly all the [employees] are Indians. They have a nice mission there where a missionary teaches them.

We also visited Ft. Wrangel, where there is also a mission and near it is a totem pole carved by the Indians. Wherever our boat landed to take on wood, the Indians would come out of the woods to see the sights, the passing steamers are the most they see or know of the outside world. On the eve. of July 10 we reached Skagway, a rude little town nestled among the mountains and overlooking the oceans. This is a Military post where the U.S. Govt. has stationed probably a few hundred soldiers. We visited the barracks, took a walk up a mountain trail, and retired about 11 o'clock while it was still broad daylight, as we were so far North now and in the long days. On the following morning we left Skagway for White Horse, a distance of 112 miles over the narrow gauge R.R., the White Pass and Yukon R.R. fare being \$20, or  $16^{2}/3$  cents a mile. This building of this road is said to be one of the greatest engineering feats that was ever accomplished.

There are many places where the solid rock has been blasted around the sides of the mountain only wide enough for the little cars to pass, others where for miles tunnels have been made through mountains, and still other places where great high trestles are built over chasms to look down which makes you feel that your life is as uncertain as the rickety little train you are riding on. We felt a little safer when we were over the summit and on more level ground, but still better when we reached White Horse that evening and found we could get one of the nicest of the many river boats, the Yukoner, out of town that same day.

We had several hours and so visited the Barracks, this being a Canadian Govt. post. Here our trunks were inspected, and I had to pay \$2.50 duty on my camera. Our trip of two days and nights down the Yukon R. was full of interest and very pleasant in every way. Along the banks of the river we saw many queer Indian graves; also some very nice military stations. We reached Dawson, our destination, about 8 P.M. and telephoned out to the boys we had arrived and would be out on the first stage we could get; their claim being 12 miles from Dawson. We



reached there about 11 o'clock, and it was still light as day.

The little log cabin Mr. Schaal had secured for our home was about 12 x 14 ft. square, had one window, one sash, and one door in it. Built onto this was what is called a cache, a place where all the provisions are kept. We ordered a stove, a little cast iron,

what would cost perhaps 10 or 15 dollars here, and it cost us \$40 there. We had a hand-made bed, table, and one chair, and for cupboards we nailed boxes up on the wall. We burned wood, and for this paid \$16 per cord. The blueberries were now ripe, and we used to go every day and gather all we could use. They were equal

to our strawberries or raspberries here. The red raspberries, currants, and cranberries were also plentiful, and we preserved all we needed of them for our winter's use.

In September . . . we moved into . . . a larger and warmer [cabin]. I then began to bake bread to sell. I received 25 cents a loaf where I sold it or \$6 for baking up a sack of flour, they furnishing the flour. I soon had all the customers I could supply. I baked nearly every day from 15 to 17 loaves. The days were now getting pretty short. I thought it so romantic to burn candles, but later on I was glad to have a lamp, a very plain one but cost \$2.50 and a five gal. can of oil cost \$5. About this time we bought our winter supply of provisions which cost us between \$350 and \$400. Our potatoes cost 22 cents per pound, or \$13 per bushel. These we kept piled up in sacks in our cabin, so you know our cabin was warm. The boxes containing the canned goods, cream, milk, corn, tomatoes, beans, peas, salmon, oysters, pumpkins, all kinds of fruit, etc., were opened on the side and stacked up, thus taking less room and being very convenient. We also bought dried fruit and crackers by the box and

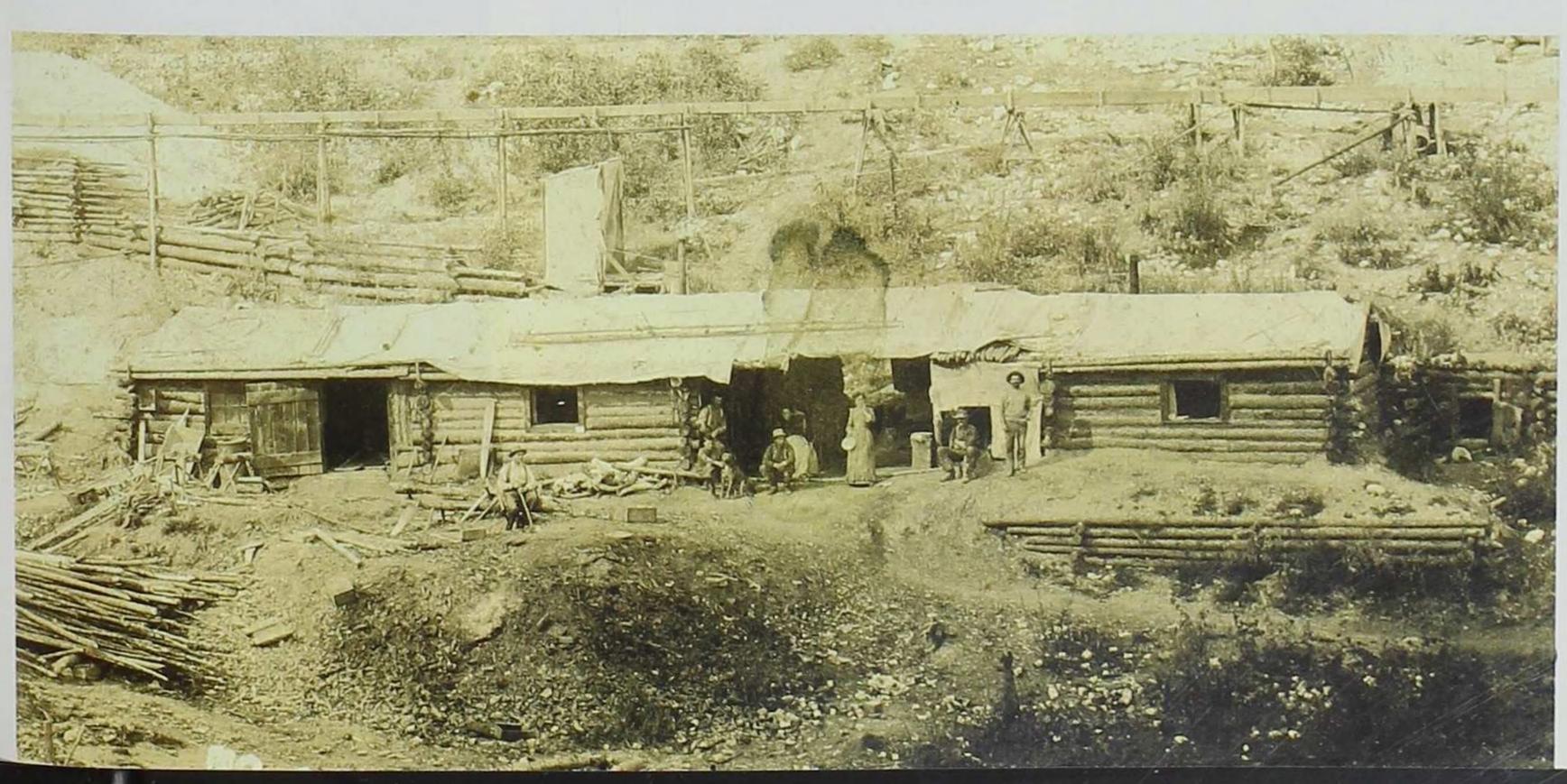




Top of page and here: Two views of Etta and Dave Schaal's 12 x 14 cabin, with bleached flour sacks on the walls to cut the cold and brighten the cabin. Right: Etta's sister-in-law Franc Schaal with her son Roy, in Franc's cabin.



Two commercial photos of Magnet Gulch, near the Schaals' diggings. Left: Miners show their determination in the rough terrain. Below: a miner's cabin far larger than the Schaal cabin.





Garvie's Hotel & Lunch Room advertises meals for miners, and stables for horses and dogs.

flour by the hundred. These with the coffee, sugar, hams, and bacon we put in the cache for they would not freeze. A case of eggs cost us \$30. We also used the crystallized egg which was as good for baking purposes as any. The Yukon river

Etta and a friend. Books, music, letters, and social visits helped while away long winter nights.

froze over at Dawson on Nov. 11, and after this the mail was carried in on sleds drawn by dog teams until the ice was very thick, then by horses. We had mail all winter and could buy most any paper or periodical we wanted of the different news boys who made regular trips out on the creek. We had good neighbors near us and often visited and spent the evening from cabin to cabin. There are people there from nearly every country in the world except Chinese, and

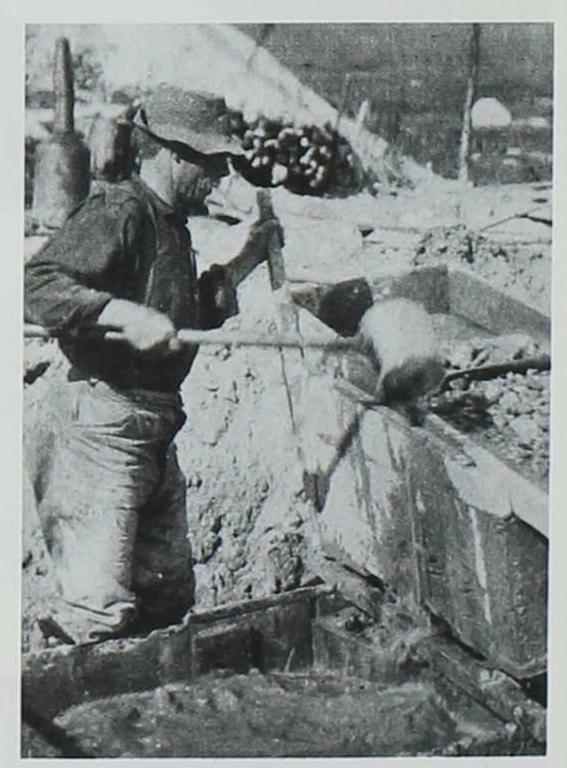
a number of these came as far as White Horse and were sent back. This gives an excellent chance for study of the nationalities. One soon learns to distinguish them by sight.

The days were very short in the winter. We would light our lamp soon after 4 o'clock in the P.M. and burn it in the mornings until 10 o'clock; for about three months we did not see the sun at all, but the delightful summers more than compensated for the long winters. The first snow fell Sept. 28, and from then until in June we could see snow somewhere on the north sides of the hills. One thing that added greatly to our enjoyment was a beautiful pianola owned by a Mr. Northrup, near us, a nephew of Helen Gould. The pianola was purchased by Helen Gould in New York City at a cost of \$1,000 and sent as a present to her nephew. We with others were often invited in of evenings to hear it, and I never before or since have enjoyed music so much. We also had two men near us who played the violin and guitar together, and they with several others used to spend a good many

evenings at our cabin. Altogether the winter was very pleasant even if it was often 60° below zero. Two other ladies and myself made it a rule to call on each other on the coldest days just to say we had been out. This fact made one man say he knew we were chuchaco's by our being out, if we had been sour-doughs we would know better. These are the Indian terms for new and old.

In the spring I took a few boarders, had five most of the time from March until we came out in September. I received \$2 per day each for their board. This with my bread baking kept me quite busy. On the night of June 21 a party of us went to one of the highest points near us for a picnic. We saw the sun until 11 o'clock, and it came up again at 2 o'clock. We took several pictures by the natural light at midnight which are as clear as any we had ever taken.

At this time of year the sluicing season had begun again; the snow was melting on the moun-



A miner pours water over gravel to loosen the gold, which next falls through a screen as the box is shaken.



Midnight on Mt. Lookout, June 1902. The picnickers found an elk horn and wrote their names on it. Etta is in the front, in the plaid hat.

tains, and with the rainfall water was plentiful, and this means plenty to do in a placer mining camp. The dumps they had all gotten out during the winter were to be washed up; and the open cut work was in full blast. Many companies ran a day and a night shift now, it being just the same underground and so light all night. The hills now were red, purple, and gold with the beautiful wild flowers, and with plenty of fresh berries and the river open and the boats bringing in fresh supplies, we did not envy our friends back in the States of what they had to eat. The summer passed all too quickly, and in the Autumn we found ourselves debating the question whether to stay there or come outside, but affairs seemed to adjust themselves in such a way it seemed best to return, so on September 15 on board the "Thistle" we started up the Yukon River. So many were coming out now our boat was overcrowded, and the river trip was not so pleasant as going in. At Five Fingers, a place where the river is obstructed by five huge rocks, the boats have

to cable in going up stream; the passage is so narrow here they let most of the passengers off for safety, and we walked about a mile along the bank which seemed a treat to get on land and to walk on soil so seldom trod only on such occasions. The night we went through Hell's Gate, another dangerous place on the river we found a boat stranded

on the rocks, and with the natural swiftness of the river and the waves caused by this boat made it very difficult for us to get past, in doing so our boat had a rudder broken, so we were several hours in this dangerous predicament. The Captain then sent a number of



Canine pals Buck and Blackie flank their friend (probably Etta).

men to the shore in the life boats and by means of cables we were pulled upstream, and without further accident we reached White Horse, where we stayed all night before going over the dangerous little railroad I have before described. While on this, on crossing the Canada-Alaska border line, the whole carload of passengers burst out in the dear old familiar song "America." At Skagway the steamer Dolphin was waiting, and we took passage on her for Seattle and had a very smooth voyage. We spent a great deal of our time out on deck watching the waves, the seagulls, the porpoise following the boat watching for something to eat to be thrown out, and the many beautiful places and islands along our way, and one day while thus engaged a large whale came so near us its back was plainly visible through the water until it made a dive and went deeper under the water. We saw a great many of them spouting not far away. A beautiful sight to me was an iceberg in the distance which looked like pale green glass.

When we reached Seattle we felt like we were at home again. Here we spent two weeks, then going to San Francisco for 10 days, then to Los Angeles for a day, and from there through Arizona, New Mexico, Indian Territory, to Kansas visiting there 5 days, then home on October 27, 1902. To me this has been a wonderful experience, one which I shall never be too old to look back upon with great interest but not with unmixed pleasure for it like the gold we went to seek has its dross. \*

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## One in a Million

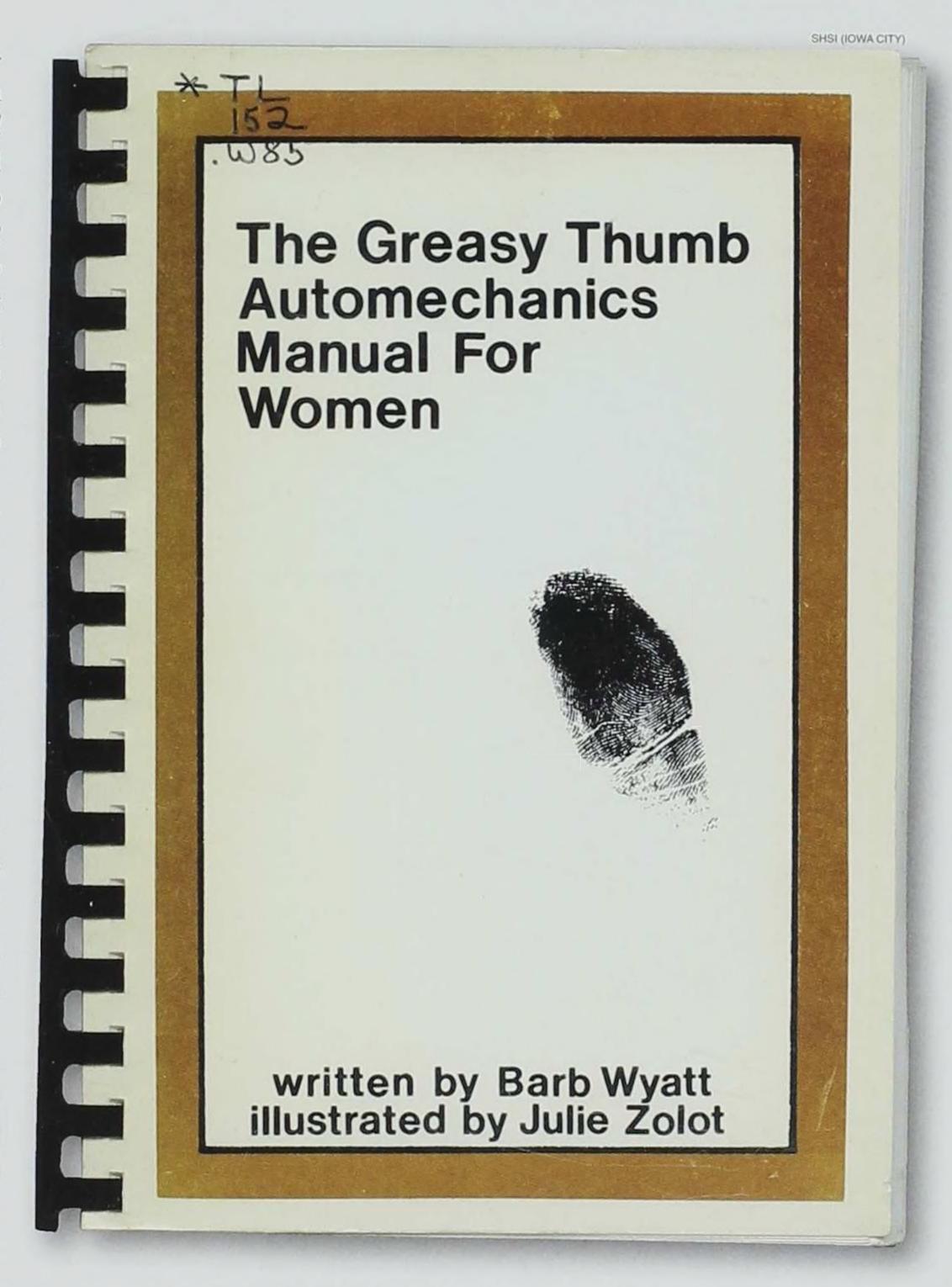
Among the millions of items in the collections of the State Historical Society of Iowa is *The Greasy Thumb Automechanics Manual for Women*. Author Barb Wyatt published the book in 1976, for "the woman who wants to learn something about how her car works, how to maintain it, and how to fix at least some of the things that might go wrong with it. Most importantly, it is a manual for a woman who doesn't have a man around to turn to when she can't get a bolt loose or doesn't understand how to do something."

The book was a product of the dynamic community-building among Iowa City women during the 1970s, a period that witnessed the launch of women's bookstores, clinics, shelters, and resource centers and the entrance of women into the building trades. Wyatt encouraged women to pass on their knowledge about cars to other women, and suggested that they "collectivize" in buying tools. The book was printed by the Iowa City Women's Press on "an old, sometimes working, sometimes not working, small (Multilith 1250) press. . . . It's important that women use whatever equipment they have access to to produce what we need."

An automechanic herself, Wyatt warns her readers that "you have to be prepared to deal with a whole lot of frustration when you work on cars." Her own technique was to "walk away . . . and give myself some breathing space so I can calm down and think the problem out."

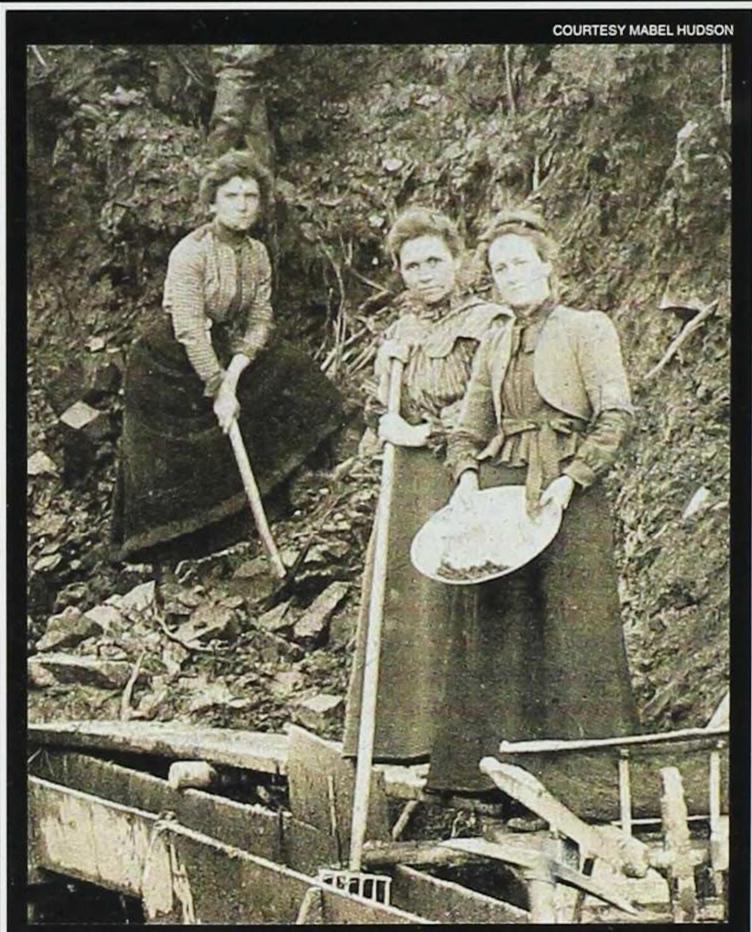
Wyatt recognized that most men grow up around cars and tools, but that many women would initially feel "awkward, clumsy, and completely uncoordinated" while working with tools. "It takes time—you can't learn in a few hours or days what men have had their whole life to learn. . . . Just don't forget that it isn't you or your being a woman that makes you 'naturally' clumsy, but rather that society has deprived you for learning what men take for granted."

Detailed graphics, close-up photos, and straight-



forward directions cover everything from replacing the brake pads and repacking the wheel bearings to positioning your body to apply maxiumum force. Wyatt assured her readers that "everyone breaks off a bolt at least once if not more often (probably a lot more often), so don't let it bum you out too much."

—Ginalie Swaim, editor



A commercial photographer traveled to Magnet Gulch in the Yukon to shoot this image of women searching for gold. Iowan Etta Schaal traveled there, too, searching for adventure.

STATE HISTORICAL SOCIETY of OWA