

Marsh Rainbow Arch Bridges • A Celebration of Snow • Penmanship • 1860s Teacher's Diary
FALL 1998 • \$6

Iowa Heritage

ILLUSTRATED



Front Porch

Dear Readers:

This issue presents a historical look at Iowans and snow, through wonderful photos from the collections here at the State Historical Society of Iowa.

Winter snows sometimes transform Iowa into the scenic landscapes of the West and the windswept dunes of the coasts. Out west, it may take eons for wind, water, and general geological tumult to generate dramatic formations. Not in Iowa—give us a good snowfall and strong winds, or a well-directed snow removal effort, and we have instant dramatic formations (at least until they melt).

Such a “geological” event occurred one winter on our family farm in Scott County. A mountain emerged at one end of our lane.

My brother, Gary, had a dairy herd back then, and if our lane drifted shut, he had to figure out a way to get the full milk cans to the milk truck that made its daily pick-up route on our road. Sometimes just a narrow path was shoveled down the lane, but one year, perhaps in the late 1950s when I was about nine, we must have hired a snowplow to clear the lane, because an entire mountain of snow arose at the south end of the lane, near our house.

That mountain lasted most of the winter, and well into the



Ralph Tremaine photographed this scene in February 1936 near the high school in Alton. Can any readers in Sioux County, or elsewhere, explain how the tunnel came to be?

spring. My mother and brother probably saw it as a huge pile of spent money. (What must it have cost to hire a snowplow to clear a lane a good eighth of a mile long?)

I, however, saw that “mountain” as a huge pile of fun and adventure. I tramped mountain paths into it, played “Heidi and Peter the goat herd” on it, imagined outlaws hiding around the next turn.

Certainly adults and children have different memories and perceptions of snow and all its attendant woes. Twenty-eight-year-old Chauncey Clark Horton surely had quite enough of Iowa’s snows in the winter of 1861/62, as you’ll read in his diary in this issue. But for children and adults alike, this century or the last, a wonderful sense of camaraderie and celebration often arises when snow falls.

I hope this issue stirs your own memories of Iowa snowfalls and Iowa camaraderie. I hope, too, that it encourages you to contemplate differences—and simi-

larities—in how Iowans have dealt with snow over the decades. Drop us a line; our address is below. After all, what’s an Iowa Front Porch for, if it’s not for talking about the weather?

This issue also provides a summer interlude: the photos of Marsh Rainbow Arch bridges, by historian Jim Hippen. For a sample, see the back cover. You can almost hear the bobolinks singing, the water gurgling, the rush of a car on a gravel road, and all those other summer sounds in Iowa that resonate around our bridges and waterways.

—The Editor

Come and converse on our front porch!

Share your thoughts with other readers here on the Front Porch page. Send your letters to Ginalie Swaim, editor, *Iowa Heritage Illustrated*, 402 Iowa Avenue, Iowa City, IA 52240-1806. Or by e-mail: gswaim@blue.weeg.uiowa.edu. Letters may be edited for length and clarity.

Editor: Ginalie Swaim

Subscriptions: Carol Carey, Jenni Olson
Memberships: Rosa Snyder, Lisa Lovett

In 1920, the State Historical Society of Iowa founded one of the nation’s first popular history magazines—*The Palimpsest*. The magazine was renamed *Iowa Heritage Illustrated* in 1996, the year of Iowa’s 150th anniversary of statehood.

Iowa Heritage Illustrated (ISSN 1088-5943) is published quarterly by the State Historical Society of Iowa (SHSI), the historical division of the Department of Cultural Affairs, State of Iowa. © 1998 State Historical Society of Iowa. Visit the Society electronically at <http://www.uiowa.edu/~shsi/>. EDITORIAL AND SUBSCRIPTION OFFICES: SHSI, 402 Iowa Avenue, Iowa City, IA 52240 (319-335-3916). Subscriptions: \$19.95 for 1 year; \$35.90 for 2 years. *Iowa Heritage Illustrated* is also available as a benefit to members of the State Historical Society of Iowa. MEMBERSHIP OFFICE: SHSI, 600 E. Locust, Des Moines, IA 50319 (515-281-8837). The State Historical Society of Iowa and the editor are not responsible for statements of opinion made by contributors. Printed with soy-based ink on recycled paper. Second class postage paid at Iowa City, IA. Postmaster: send address changes to State Historical Society of Iowa, 402 Iowa Ave., Iowa City, IA 52240-1806.

This code (©1998 State Historical Society of Iowa, ISSN 1088-5943/98/\$1.00) indicates the copyright owner’s consent to reproduction of an article for personal or internal use. The consent is granted, however, on the condition that the copier pay the stated per-copy fee of \$1.00 through the Copyright Clearance Center, Inc., 222 Rosewood Drive, Danvers, MA 01970 for copying beyond that permitted by Sections 107 and 108 of the U.S. Copyright Law. The consent does not extend to other kinds of copying, such as copying for general distribution, for advertising or promotional purposes, for creating new collective works, or for resale.

Let your imagination soar
on a voyage to Iowa's past . . .



Heritage

RATED

Fall 1998, Vol. 79, No. 3

Living as
bridge builder **98**



Celebrating **105**



Subscribe today to
Iowa Heritage Illustrated
and you'll save 20%*

Use the tear-out postcard at the
back of this issue for your ticket
to yesterday . . .

While you're signing up
fill out a gift subscription card
and bring your friends
along for the ride



PHOTO BY JAMES C. HIPPEN

A treasure trove of amazing historical photographs! **106**

On Days of Fine Penmanship

Story about a lost
and a lost art.

Henning



132

Marabée masters the pen

Marabée, she wrote: "Hydropathy, Hymns, Huns."

139

Getting some improvement in writing": 1860s diary of Chauncey Clark Horton, a penmanship teacher

A young teacher boards with quarrelsome families, trudges
through mud and snow, and instructs unruly students.

140

observed party stops for a photograph. The group is
from P. Bacon's Sunday school class of the M.E.
[Cedar County] 1906." Left side, front to back:
Mrs. M. Bacon, Bertha Bacon, Olga Smith, Myrtle Whitmer,
back: Bessie Chown, Bessie Nicolaus, Mabel
Marabée, Gertrude Illingsworth. The driver, "Mr.
Marabée" and two sons. Inside, more on Iowans enjoying snow.

* off the single-copy price

Iowa Heritage

ILLUSTRATED

Formerly The Palimpsest

Fall 1998, Vol. 79, No. 3

Marsh Rainbow Arch Bridges

Take something as ethereal as a rainbow, and something as concrete as, well, concrete. The story of an Iowa bridge builder and today's vanishing "rainbows."

Text and photos by James C. Hippen

98



PHOTO BY JAMES C. HIPPEN

Chasing Rainbows, Saving Bridges, and Celebrating a Local Landmark

Tips for bridge lovers and bridge rescuers.

105



Snow

A veritable blizzard of amazing historical photographs!
by the editor

106

The Halcyon Days of Fine Penmanship

A personal story about a lost occupation and a lost art.

by William E. Henning



132

Augusta Larrabee masters the pen

Over and over, she wrote: "Hydropathy, Hymns, Huns."

by the editor

139

"Am making some improvement in writing": From the 1860s diary of Chauncey Clark Horton, an itinerant penmanship teacher

An earnest young teacher boards with quarrelsome families, trudges through mud and snow, and instructs unruly students.

140


On the Cover



SHSI (IOWA CITY)

Bundled up in fur lap robes, a bobsled party stops for a photograph. The group is identified on the back as "Frances P. Bacon's Sunday school class of the M.E. Church of Wilton Junction [in Cedar County] 1906." Left side, front to back: Anna Riggerberg, Nellie Luellyn, Bertha Bacon, Olga Smith, Myrtle Whitmer, Vera Ayers. Right side, front to back: Bessie Chown, Bessie Nicolaus, Mabel Marshall, Ada Sherberger, Anna Wacker, Gertrude Illingsworth. The driver, "Mr. Scott," stands in back with his two sons. Inside, more on Iowans enjoying snow.





Marsh Rainbow Arch Bridges

Text and photos by James C. Hippen

There is something inherently pleasing about an arch. Bridge designer James Barney Marsh knew that.

He also knew that there is something inherently pleasing about saving money.

Thus, his design of the concrete Marsh Rainbow Arch bridge was doubly pleasing. This type of bridge became fairly common in the Midwest between 1911 and the 1930s. Today it is vanishing from our landscape.

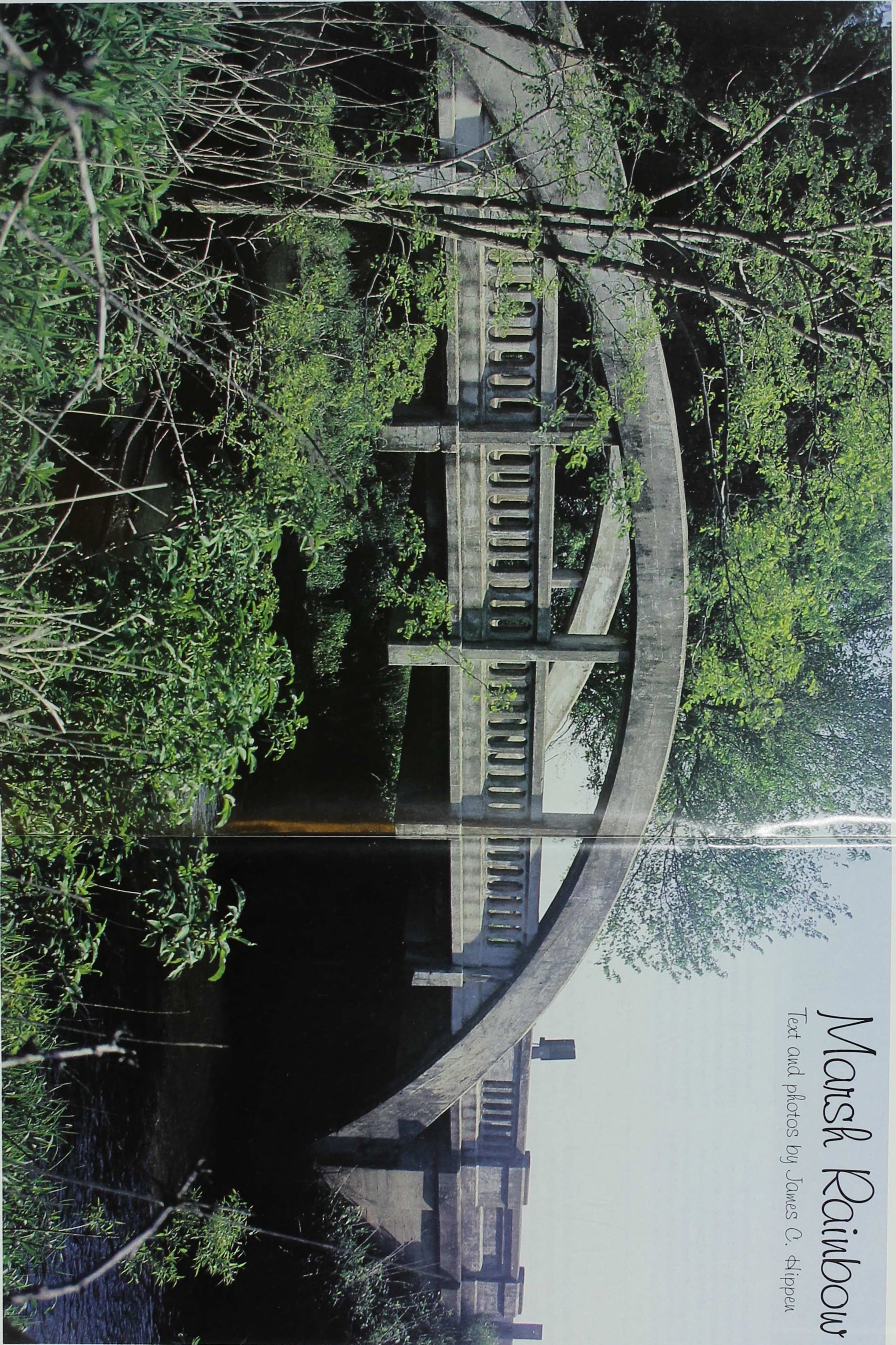
Marsh began his life's work in the late 19th century, a bonanza time for sellers of bridges in Iowa. As counties and townships replaced old bridges or built new

With reinforced-concrete arches rising like rainbows, the Marsh Rainbow Arch bridge was once a popular choice for spanning Iowa's waterways. Today only nine remain. The bridge on the left was built in 1918 and crosses Squaw Creek (North) in Harrison Township, Boone County.

Stories Behind the Sites

This occasional series showcases Iowa's historic structures and places. Preserving historic places and resurrecting their stories allow us to get that much closer to the everyday drama of the past. We can amble around the structures, pace off the sites, breathe the atmosphere. We begin to understand how a building, or a bridge, or a street reflects the time in which it was first created and used. Iowa has some 5,000 structures on the National Register of Historic Places, and many more are judged eligible. Behind each is a story of why that site is significant to our history. In this issue, the story behind a particular kind of bridge.

—The Editor



Marsh Rainbow
Text and photos by James C. Hippen

Arch Bridges

There is something inherently pleasing about an arch. Bridge designer James Barney Marsh knew that.

He also knew that there is something inherently pleasing about saving money.

Thus, his design of the concrete Marsh Rainbow Arch bridge was doubly pleasing. This type of bridge became fairly common in the Midwest between 1911 and the 1930s. Today it is vanishing from our landscape.

Marsh began his life's work in the late 19th century, a bonanza time for sellers of bridges in Iowa. As counties and townships replaced old bridges or built new

With reinforced-concrete arches rising like rainbows, the Marsh Rainbow Arch bridge was once a popular choice for spanning Iowa's waterways. Today only nine remain. The bridge on the left was built in 1918 and crosses Squaw Creek (North) in Harrison Township, Boone County.

Stories Behind the Sites

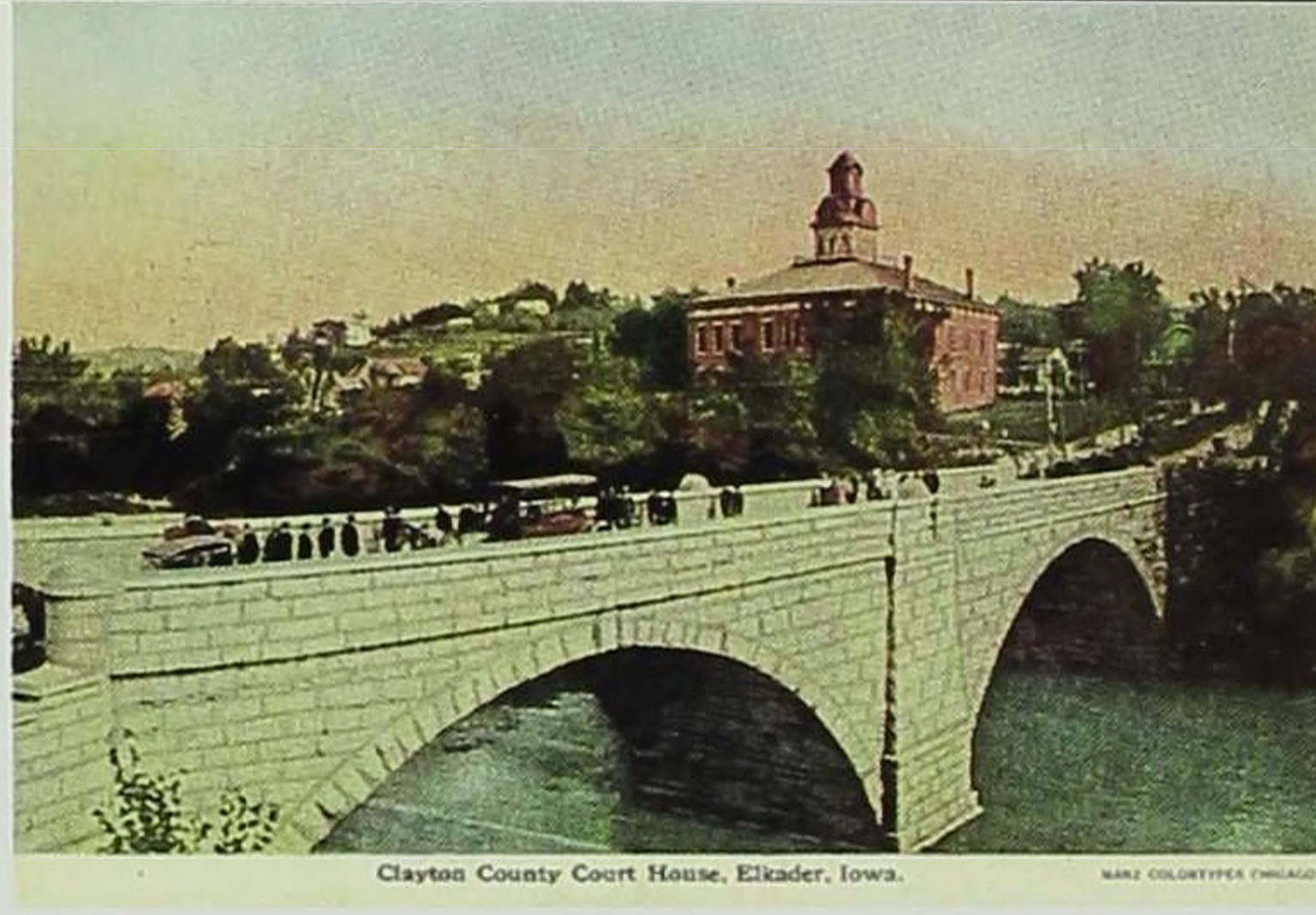
This occasional series showcases Iowa's historic structures and places. Preserving historic places and resurrecting their stories allow us to get that much closer to the everyday drama of the past. We can amble around the structures, pace off the sites, breathe the atmosphere. We begin to understand how a building, or a bridge, or a street reflects the time in which it was first created and used. Iowa has some 5,000 structures on the National Register of Historic Places, and many more are judged eligible. Behind each is a story of why that site is significant to our history. In this issue, the story behind a particular kind of bridge.

—The Editor



SHSI (IOWA CITY); KOCK COLLECTION

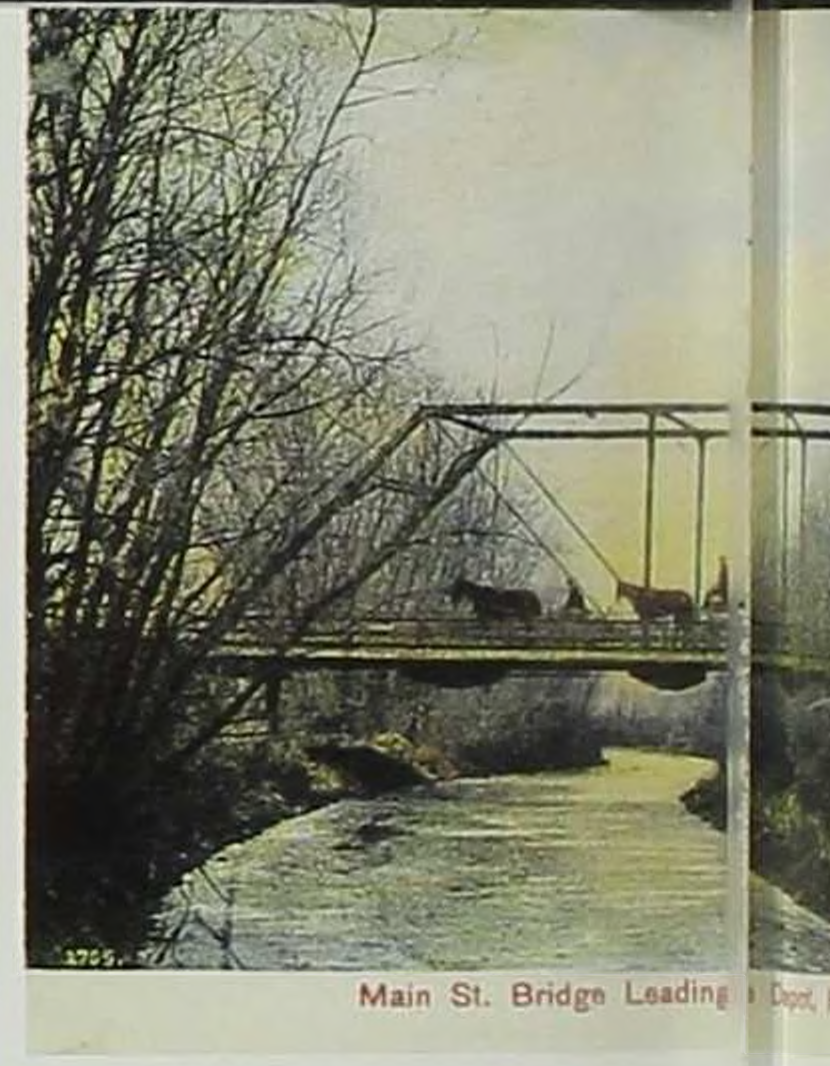
Wooden bridges (above) were quick and cheap to erect, but until creosote was applied to timber to prevent rot (starting around the turn of the century), their lifespan was only a decade. The ultimate test of a wooden bridge was whether it could hold a 15-ton traction engine, as above.



Clayton County Court House, Elkader, Iowa.

MARZ COLORTYPE CHICAGO

Stone bridges, on the other hand, were far more permanent. This two-span stone bridge in Elkader still carries traffic today. Built in 1888/89 by Dubuque engineer M. Tschirgi, Jr., with locally quarried stone, it is the only stone bridge of this scale built as a wagon or highway bridge in Iowa.



Main St. Bridge Leading to Depot, Hamburg, Iowa.

The postcard describes this iron bridge (center) as "Main St. Bridge Leading to the Depot, Hamburg, Iowa." Iron bridges like this one were easy to construct in the field because the joints were connected by pins, rather than by more labor-intensive rivets, which had to be heated and beaded over

ones over the hundreds of waterways that lace Iowa, they considered the options. Wooden bridges, of course, were the simplest, especially for spanning creeks and small streams, but they required high maintenance. Stone bridges were elegant and permanent, but

also expensive. Iron bridges had been in increasing use after the Civil War, and, like the newer structural steel bridges, combined durability and economy. By the century's end, a promising alternative entered the discussion: the reinforced-concrete bridge.

American bridge builders recognized the promise of reinforcing concrete with steel, an idea developed in Europe. Among the pioneering reinforced-concrete bridges were Melan arch bridges (named after Austrian designer Josef Melan), and among the earli-

SHSI (IOWA CITY)



James Barney Marsh was born in Wisconsin and received a bachelor's degree in Mechanical Engineering in 1882 from Iowa State College of Agriculture and Mechanic Arts (now Iowa State University) at Ames. First as a contracting agent in Des Moines for bridge companies headquartered in Cleveland and Kansas City, and then as head of his own Marsh Bridge Company in Des Moines, Marsh was engaged in a highly competitive business.

Near the turn of the century, bridge companies sometimes adjusted bids to pass the work around among friends, and added enough to the bids so that all involved received a certain profit. It appears that in at least one case, Marsh was involved in such "pooling," along with other area bridge builders, in bidding on a Des Moines bridge project in 1896. The spread among the top eight bids (including Marsh's) was only \$1,611. The ninth bid, by John H. Killmar of Des Moines, was \$5,844 lower than the next lowest bid, yet Killmar was deprived the contract, based on an injunction obtained on technical grounds. Apparently Killmar was not part of what the *Des Moines Leader* called the bridge "combine." Although the Iowa Supreme Court ruled for Killmar in 1897, it refused to allow questions as to whether pooling had occurred.

Marsh also learned that bridge building was a risky business. Early in 1909, the Marsh Bridge Company fell into receivership, perhaps as a result of the Panic of 1907; Marsh Engineering Company was the successor. Then a Melan arch bridge begun by Marsh in 1906 in Peoria, Illinois, collapsed before completion. *Engineering*

News dubbed it "the largest recorded failure of a reinforced-concrete bridge." (The principal cause was probably the unauthorized removal of some protective sheet piling at one abutment, the fault, perhaps, of a subcontractor.)

Nevertheless, reinforced-concrete bridges were becoming Marsh's specialty. In 1909 his company completed a three-span arch at Dunkerton, Iowa, still standing today.

—James C. Hippen

MARSH ENGINEERING CO.
DES MOINES, IOWA

Designers and builders of Safe,
Economical, Beautiful and Per-
manent Bridges.

ASK OUR PATRONS



...pot, Hamburg, Iowa.



Waterloo in Elk's Parade, Waterloo, Iowa.



Concrete Bridge on River to River Road

Guthrie Center, Iowa

FOUR POSTCARDS COURTESY OF THE AUTHOR

by hand. Iron and steel bridges were more durable than wooden bridges because they didn't rot or catch fire, but in later years they became obsolete as traffic not only became heavier but also required greater height and width clearances.

A parade crosses the Melan arch bridge in Waterloo, built in 1902 by James Barney Marsh, about a decade before he patented his own Marsh Rainbow Arch bridge. Melan arch bridges pioneered the use of reinforced concrete for bridges in America.

Children wade near this reinforced concrete bridge, built circa 1910 near Guthrie Center on the River to River Road (later Highway 6). It is typical of most reinforced concrete bridges in that the arches were below the roadway. In Marsh Rainbow Arch bridges, the arches were above the roadway.

est constructed in the U.S. was the single-span, 30-foot Melan arch bridge at Rock Rapids, Iowa, in 1894 (and extant today).

That same year, Melan bridge promoter Fritz von Emperger announced to the American Society of Civil Engineers, "If it should be possible to construct a concrete bridge for the same price as an iron bridge, it needs not a great prophet to predict a revolution in the construction of highway bridges." James Barney Marsh would become part of that revolution.

By 1896 Marsh had established himself as an independent bridge designer and contractor based in Des Moines. He undoubtedly kept a keen eye on new developments in reinforced concrete, and soon was making it his specialty.

Included in the cost of building reinforced-concrete bridges were royalties owed to the original patent holders, some of whom had become especially adept at manipulating the U.S. patent system. The trick was to load their

original patent claims with nearly every possible arrangement of reinforcement and other structural elements—thereby either collecting royalties on each arrangement used, or suing for infringement. The undoubted master of this game was Daniel B. Luten of Indianapolis. By 1913 Luten held 36 patents related to concrete bridges, comprising 384 features that might be infringed.

When Luten sued Marsh for patent infringement in 1911, Luten had already brought at least ten other lawsuits into federal courts. Although Marsh eventually won, assisted by the Iowa Highway Commission, the case was not resolved for seven years. In the meantime, Marsh did not content himself with paying royalties to Luten or with building infringement-free bridges. He set out to develop and patent his own bridge design.

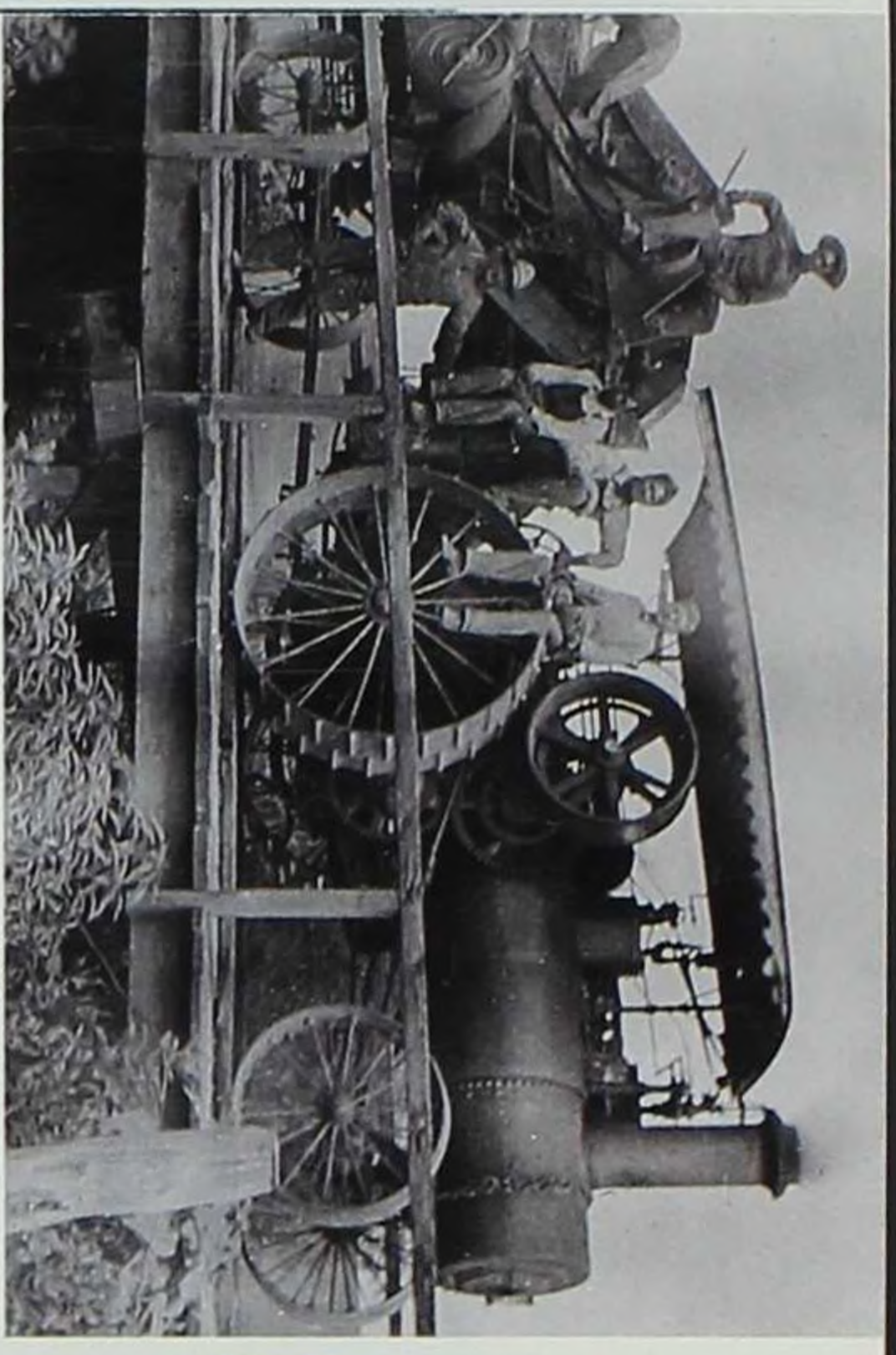
As both an engineer and a contractor, Marsh thoroughly understood arches and concrete, but he was also a businessman, primarily concerned with building

sound bridges for competitive prices. So he masterfully adapted contemporary engineering materials to the current construction methods and market forces. Patented in 1912, the reinforced-concrete "Marsh Rainbow Arch bridge" was designed to be built without any temporary scaffolding (called "falsework" or "centering") in the streambed. The design spelled savings, in several ways.

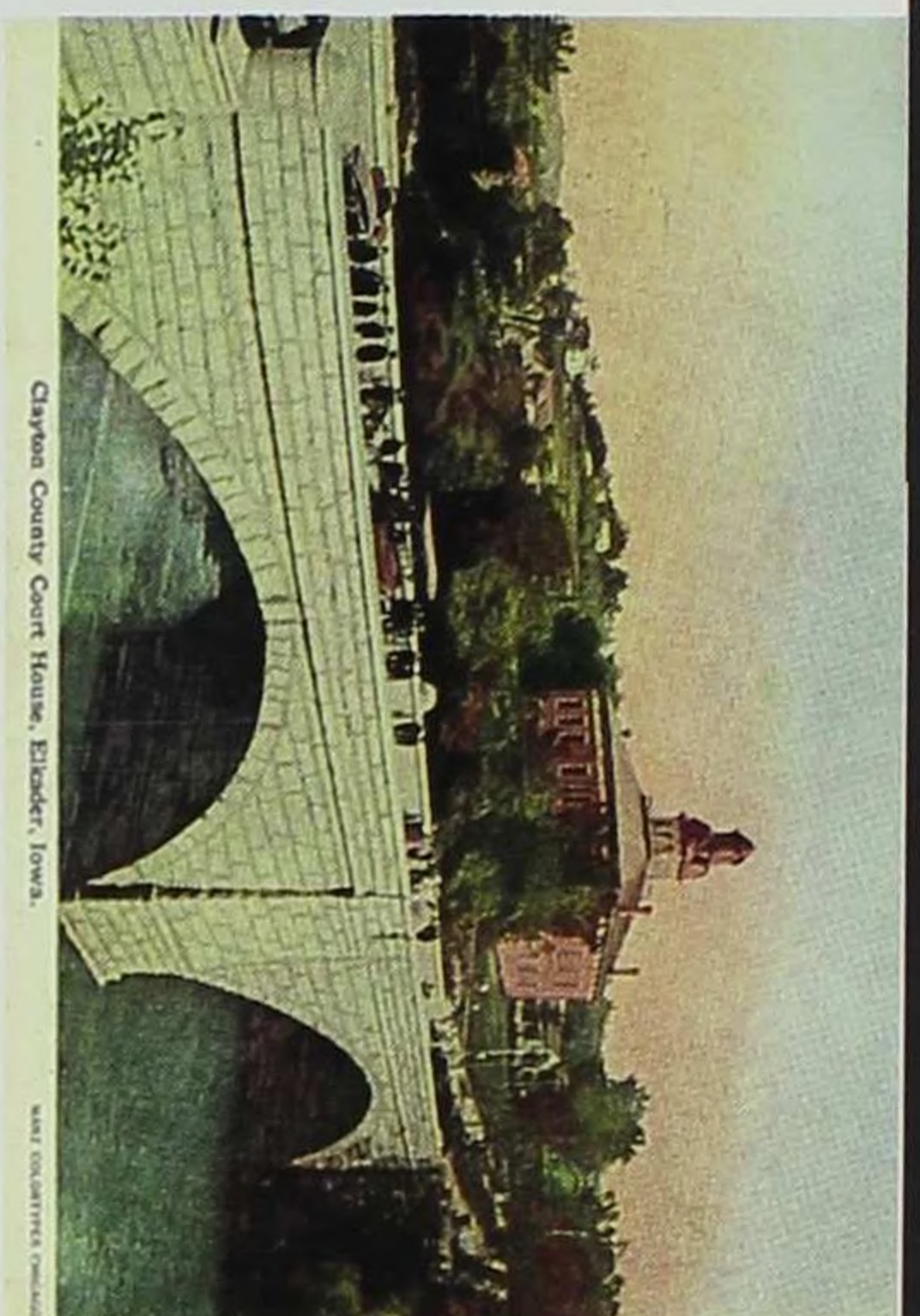
First, labor costs, on the rise since 1900, were minimized because concrete construction required only an experienced foreman, a few carpenters, and some unskilled workers.

Second, not only did the arches and open spandrels require a minimum of concrete, but Portland cement was affordable and no farther away than Mason City. Rock and sand for aggregate were also usually close at hand.

Third, for reinforcement Marsh made maximum use of structural steel (costs had fallen 50 percent since 1900). And because structural steel was self-supporting, this eliminated the need for timber falsework at a time when timber prices were rising dramatically.



SHS IOWA CITY KOCK COLLECTION



CHAMPAIGN COUNTY COURT HOUSE, DEERFIELD, IOWA



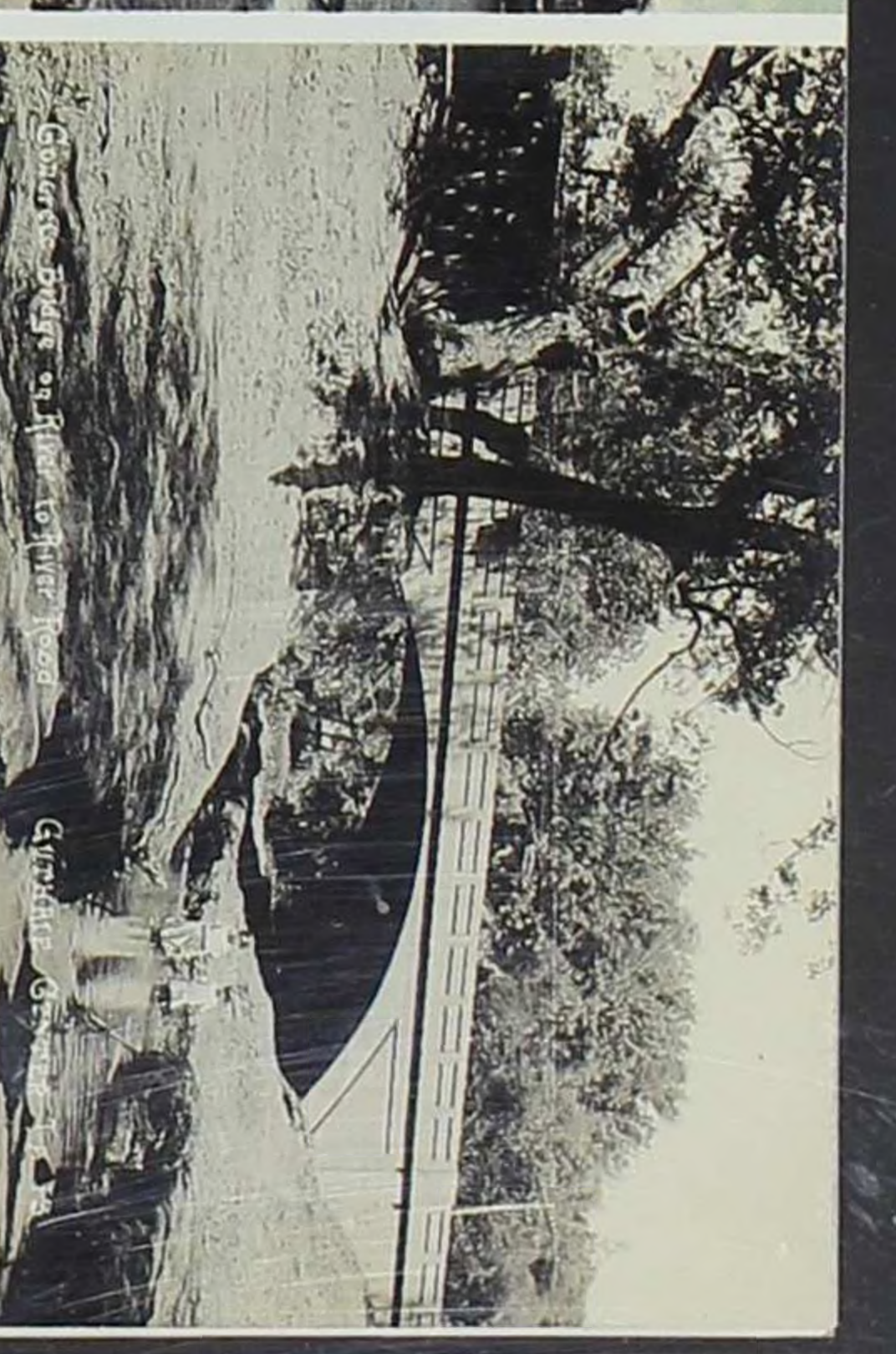
MAIN ST. BRIDGE LEADING TO THE DEPOT, HAMBURG, IOWA



DEPOT, HAMBURG, IOWA



PARADE CROSSING THE MELAN ARCH BRIDGE IN WATERLOO, IOWA



CHILDREN WADING NEAR THE REINFORCED CONCRETE BRIDGE, BUILT CIRCA 1910 NEAR GUTHRIE CENTER ON THE RIVER TO RIVER ROAD (LATER HIGHWAY 6). IT IS TYPICAL OF MOST REINFORCED CONCRETE BRIDGES IN THAT THE ARCHES WERE BELOW THE ROADWAY. IN MARSH RAINBOW ARCH BRIDGES, THE ARCHES WERE ABOVE THE ROADWAY.

Wooden bridges (above) were quick and cheap to erect, but until creosote was applied to timber to prevent rot (starting around the turn of the century), their lifespan was only a decade. The ultimate test of a wooden bridge was whether it could hold a 15-ton traction engine, as above.

Stone bridges, on the other hand, were far more permanent. This two-span stone bridge in Elkader still carries traffic today. Built in 1888/89 by Dubuque engineer M. Tschirgi, Jr., with locally quarried stone, it is the only stone bridge of this scale built as a wagon or highway bridge in Iowa.

The postcard describes this iron bridge (center) as "Main St. Bridge Leading to the Depot, Hamburg, Iowa." Iron bridges like this one were easy to construct in the field because the joints were connected by pins, rather than by more labor-intensive rivets, which had to be heated and beaded over

by hand. Iron and steel bridges were more durable than wooden bridges because they didn't rot or catch fire, but in later years they became obsolete as traffic not only became heavier but also required greater height and width clearances.

A parade crosses the Melan arch bridge in Waterloo, built in 1902 by James Barney Marsh, about a decade before he patented his own Marsh Rainbow Arch bridge. Melan arch bridges pioneered the use of reinforced concrete for bridges in America.

Children wade near this reinforced concrete bridge, built circa 1910 near Guthrie Center on the River to River Road (later Highway 6). It is typical of most reinforced concrete bridges in that the arches were below the roadway. In Marsh Rainbow Arch bridges, the arches were above the roadway.

ones over the hundreds of waterways that lace Iowa, they considered the options. Wooden bridges, of course, were the simplest, especially for spanning creeks and small streams, but they required high maintenance. Stone bridges were elegant and permanent, but

also expensive. Iron bridges had been in increasing use after the Civil War, and, like the newer structural steel bridges, combined durability and economy. By the century's end, a promising alternative entered the discussion: the reinforced-concrete bridge.

American bridge builders recognized the promise of reinforcing concrete with steel, an idea developed in Europe. Among the pioneering reinforced-concrete bridges were Melan arch bridges (named after Austrian designer Josef Melan) and among the earli-



SHS IOWA CITY

James Barney Marsh was born in Wisconsin and received a bachelor's degree in Mechanical Engineering in 1882 from Iowa State College of Agriculture and Mechanical Arts (now Iowa State University) at Ames. First as a contracting agent in Des Moines for bridge companies headquartered in Cleveland and Kansas City, and then as head of his own Marsh Bridge Company in Des Moines, Marsh was engaged in a highly competitive business.

Near the turn of the century, bridge companies sometimes adjusted bids to pass the work around among friends, and added enough to the bids so that all involved received a certain profit. It appears that in at least one case, Marsh was involved in such "pooling," along with other area bridge builders, in bidding on a Des Moines bridge project in 1896. The spread among the top eight bids (including Marsh's) was only \$1,611. The ninth bid, by John H. Killmar of Des Moines, was \$5,844 lower than the next lowest bid, yet Killmar was deprived of the contract, based on an injunction obtained on technical grounds. Apparently Killmar was not part of what the *Des Moines Leader* called the bridge "combine." Although the Iowa Supreme Court ruled for Killmar in 1897, it refused to allow questions as to whether pooling had occurred.

Marsh also learned that bridge building was a risky business. Early in 1909, the Marsh Bridge Company fell into receivership, perhaps as a result of the Panic of 1907. Marsh Engineering Company was the successor. Then a Melan arch bridge begun by Marsh in 1906 in Peoria, Illinois, collapsed before completion. *Engineering*

News dubbed it "the largest recorded failure of a reinforced-concrete bridge." (The principal cause was probably the unauthorized removal of some protective sheet piling at one abutment; the fault, perhaps, of a subcontractor.) Nevertheless, reinforced-concrete bridges were becoming Marsh's specialty. In 1909 his company completed a three-span arch at Dunkerton, Iowa, still standing today.

—James C. Hippen

MARSH ENGINEERING CO.
DES MOINES, IOWA
Safe, Sound, and Beautiful
Designers and Builders of Permanent Bridges.
ASK OUR PATRONS

est constructed in the U.S. was the single-span, 30-foot Melan arch bridge at Rock Rapids, Iowa, in 1894 (and extant today).

That same year, Melan bridge promoter Fritz von Emperger announced to the American Society of Civil Engineers, "If it should be possible to construct a concrete bridge for the same price as an iron bridge, it needs not a great prophet to predict a revolution in the construction of highway bridges." James Barney Marsh would become part of that revolution.

By 1896 Marsh had established himself as an independent bridge designer and contractor based in Des Moines. He undoubtedly kept a keen eye on new developments in reinforced concrete, and soon was making it his specialty.

Included in the cost of building reinforced-concrete bridges were royalties owed to the original patent holders, some of whom had become especially adept at manipulating the U.S. patent system. The trick was to load their

original patent claims with nearly every possible arrangement of reinforcement and other structural elements—thereby either collecting royalties on each arrangement used, or suing for infringement. The undoubted master of this game was Daniel B. Luten of Indianapolis. By 1913 Luten held 36 patents related to concrete bridges, comprising 384 features that might be infringed.

When Luten sued Marsh for patent infringement in 1911, Luten had already brought at least ten other lawsuits into federal courts. Although Marsh eventually won, assisted by the Iowa Highway Commission, the case was not resolved for seven years. In the meantime, Marsh did not content himself with paying royalties to Luten or with building infringement-free bridges. He set out to develop and patent his own bridge design.

As both an engineer and a contractor, Marsh thoroughly understood arches and concrete, but he was also a businessman, primarily concerned with building

sound bridges for competitive prices. So he masterfully adapted contemporary engineering materials to the current construction methods and market forces. Patented in 1912, the reinforced-concrete "Marsh Rainbow Arch bridge" was designed to be built without any temporary scaffolding (called "falsework" or "centering") in the streambed. The design spelled savings, in several ways.

First, labor costs, on the rise since 1900, were minimized because concrete construction required only an experienced foreman, a few carpenters, and some unskilled workers. Second, not only did the arches and open spandrels require a minimum of concrete, but Portland cement was affordable and no farther away than Mason City. Rock and sand for aggregate were also usually close at hand.

Third, for reinforcement Marsh made maximum use of structural steel (costs had fallen 50 percent since 1900). And because structural steel was self-supporting, this eliminated the need for timber falsework at a time when timber prices were rising dramatically.



A Marsh Rainbow Arch bridge (built in 1916/17) crosses Big Creek (North) in Garden Township, Boone County. Note how the end of each arch tapers toward the abutment, and how the arch is anchored into the abutment below floor level.

Finally, since Marsh held the patent, he would owe royalties to no one.

Marsh's design of the "Rainbow Arch" may not have been a triumph of original invention. The key design feature was that the floor slab was not tied to the arches, and thus could slide independently of the arch ribs. The patent text explains that this allows for temperature changes and the consequent changes in length of the arches and the floor. Yet without challenging the actual necessity for this, it is not unfair to

note that the most tangible benefit was the great savings in reinforcing steel and in labor costs.

Essentially, Marsh was patenting the technique of *not* doing something—tying the ends of the arches to the floor—which everyone else was trying very hard to do. But this was his genius: to omit something and to do the job in another way at lesser cost.

Marsh also seized on a name for his bridge that was a public relations triumph. Although not part of the patent, the name "Rainbow Arch" already appeared in advertisements in 1912. The name appealed to all the deep-seated folklore about rain-

bows and good fortune. And the arch itself—visible above the bridge floor, not below it—was its own aesthetic selling point. Now even rural townships could have bridges that resembled the elegant bridges in Des Moines, Cedar Rapids, and other big cities.

Arches appealed to the public, and concrete was the ideal material for building arches. If so desired, concrete could be made to resemble the ever-popular stonework. Furthermore, concrete arches looked more sturdy than the 19th-century iron bowstring arches, and they did shake less—especially under the increasing load and speed of motor vehicles.

Perhaps the ultimate testament to the Rainbow Arch's aesthetic appeal is a concrete bridge in Minot, North Dakota. To avoid infringing on Marsh's patent, the bridge was built in a different form, but non-structural arches were raised along the roadway to give the bridge the look of a genuine Marsh Rainbow Arch.

Marsh continued to build Rainbow Arches into the 1930s, particularly in Iowa, Kansas, and other plains states. Probably the largest he ever designed is the five-span Rainbow Arch at Cotter, Arkansas, now a National Historic Civil Engineering Landmark.

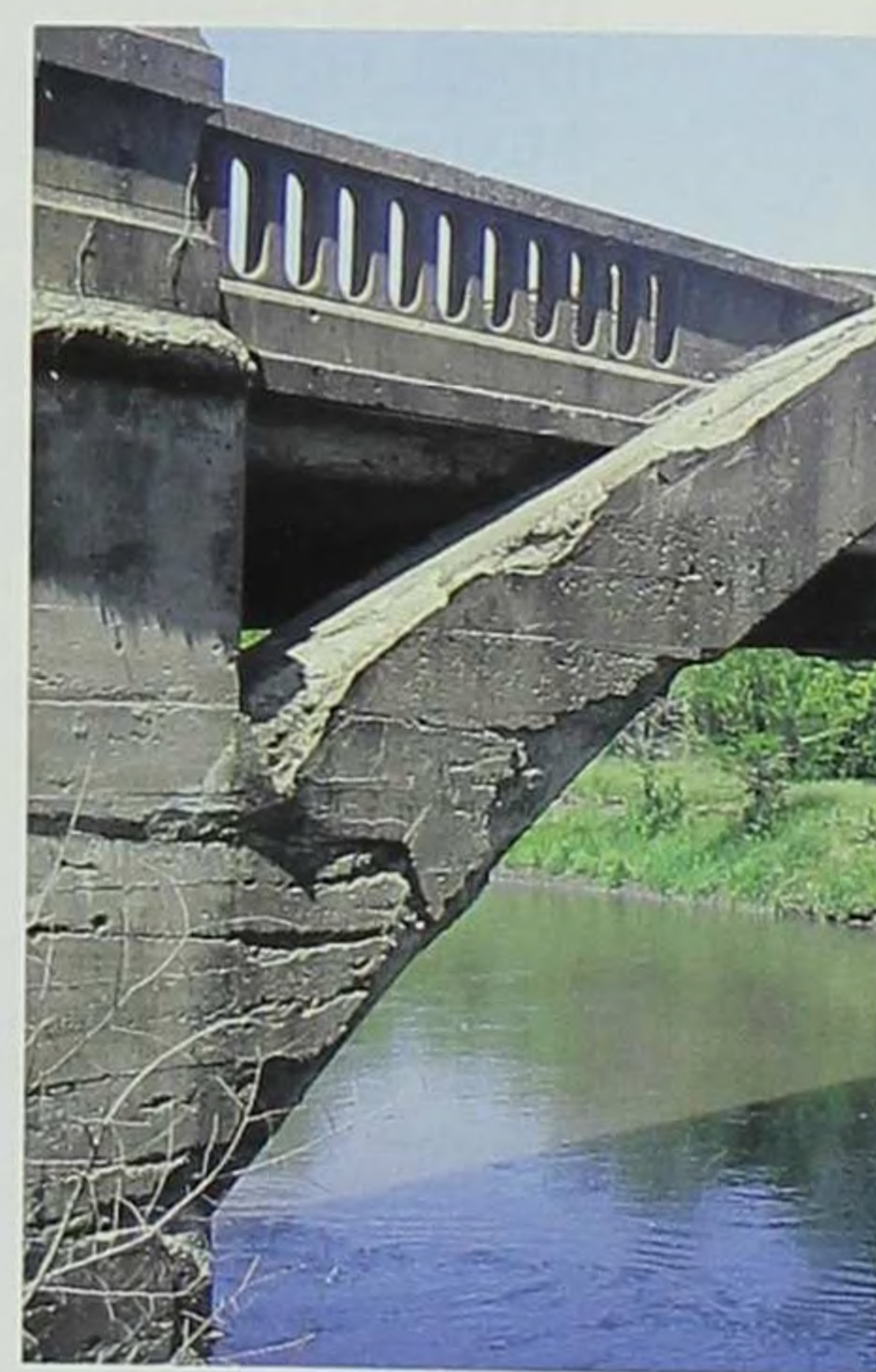
After the 1930s, however, few Marsh Rainbow Arch bridges were built. For one reason, although engineers admired the boldness of the design and construction method (especially that it required no falsework for temporary support), they also worried that construction errors or shortcuts by less experienced contractors or careless laborers could end in disaster. Second, although the arch rises above the roadbed, thereby escaping the brunt of ice and high water, uprooted trees and flood debris, the bridges were not invulnerable. When the concrete did chip or break away, the steel reinforcement was eventually exposed, leading to rust and more deterioration and weakening. Finally, because the arches were above the roadway and therefore fixed its width, the bridges could not be widened. As farm equipment increased in size, the bridges took their share of gouges, scrapes, and curses from farmers trying to ease their wide loads between the arches. Once a popular design for "wagon" or

Troubled Bridges

Close-up photos document problems that have plagued Marsh Rainbow Arches. Here, the concrete surrounding the steel reinforcements has broken away, inviting rust. Built in 1915, this bridge crosses Lake Creek near Rockwell City in Calhoun County. (Note new bridge in the distance.)



Built in 1914, the bridge on Beaver Creek (southern Union Township, Boone County) was replaced in 1996. Near right: Deteriorated concrete had left structural steel exposed on the arch ribs. Far right: Ice and logs during high water had damaged the arches' ends, where they were anchored to abutments.



A tractor and farm machinery squeeze between the arches of the Beaver Creek Bridge (North) in Beaver Township, Boone County. Built in 1919, the bridge carried early Lincoln Highway traffic—when vehicles were far lighter and narrower.



"highway" bridges, in time, Marsh Rainbow Arches no longer served the needs of road traffic.

For half a century, James Barney Marsh prospered in the bridge business, starting his career as a salesman for iron bridges and ending as an accomplished designer of concrete arches. Besides Rainbow Arches, he also designed a number of beautiful and functional open spandrel deck arch bridges, ranging from one at Mederville, Iowa (1918, still standing today) to the magnificent six-span Henley Bridge at Knoxville, Tennessee (1932). His life outside his Des Moines office and drafting room was what might be expected of a successful Iowa entrepreneur earlier in this century: He was married, had three children, was an Episcopalian, a Republican, and

an active Mason. He died June 26, 1936.

Today, as few as nine Marsh Rainbow Arches stand in Iowa, but recent inventories and documentation projects have helped to secure the bridge's place in history. Once dismissed by bridge historians as a wasteful combination of structural steel and concrete, the design should actually be considered structurally and economically sophisticated for its day. In creating the Marsh Rainbow Arch, James Barney Marsh combined his sense of aesthetics and his masterful handling of reinforced concrete to design a bridge form that appealed to public taste and the public pocket-book. ❖

The author is a historian in Decorah, Iowa. He specializes in bridges, railroads, highways, and similar subjects.

NOTE ON SOURCES

For a general background on the history of bridges, see: Carl Condit, *American Building* (Chicago, 1968); Eric DeLony, *Landmark American Bridges* (NY, 1993); and Donald C. Jackson, *Great American Bridges and Dams* (Washington, 1988).

Specific sources on Marsh arch bridges include several unpublished reports, generally accessible through the State Historic Preservation Offices (in Iowa, Kansas, Minnesota, and Ohio) or sponsoring agencies. For Iowa, see FRASERdesign, "Iowa Historic Bridge Inventory," prepared for Iowa Dept. of Transportation, 1993, and the following HAER reports [Historic American Engineering Record], held by the National Park Service, Dept. of the Interior in Washington, D.C.: David L. Cook and Randall Raber, "Marsh Rainbow Arch Bridge [Newton, Iowa]," HAER No. IA-19 (1987); Juliet Landler, "Lake City Rainbow Bridge," HAER No. IA-46 (1995); Richard Vidutis and James Hippen, "Mederville Bridge," HAER No. IA-79 (1996); and Dawn M. Harrison and Dario Gasparini, "Reinforced Concrete Arch Bridges," HAER, Iowa Historic Bridges Recording Project II (1996). For a more extensive bibliography, order the booklet featured on the opposite page.

Marsh Rainbow Arch bridges were sophisticated, affordable choices, especially for rural Iowa earlier in the 20th century. Below, a Marsh Rainbow Arch bridge built in 1916 crosses the east fork of the Des Moines River, in Kossuth County.

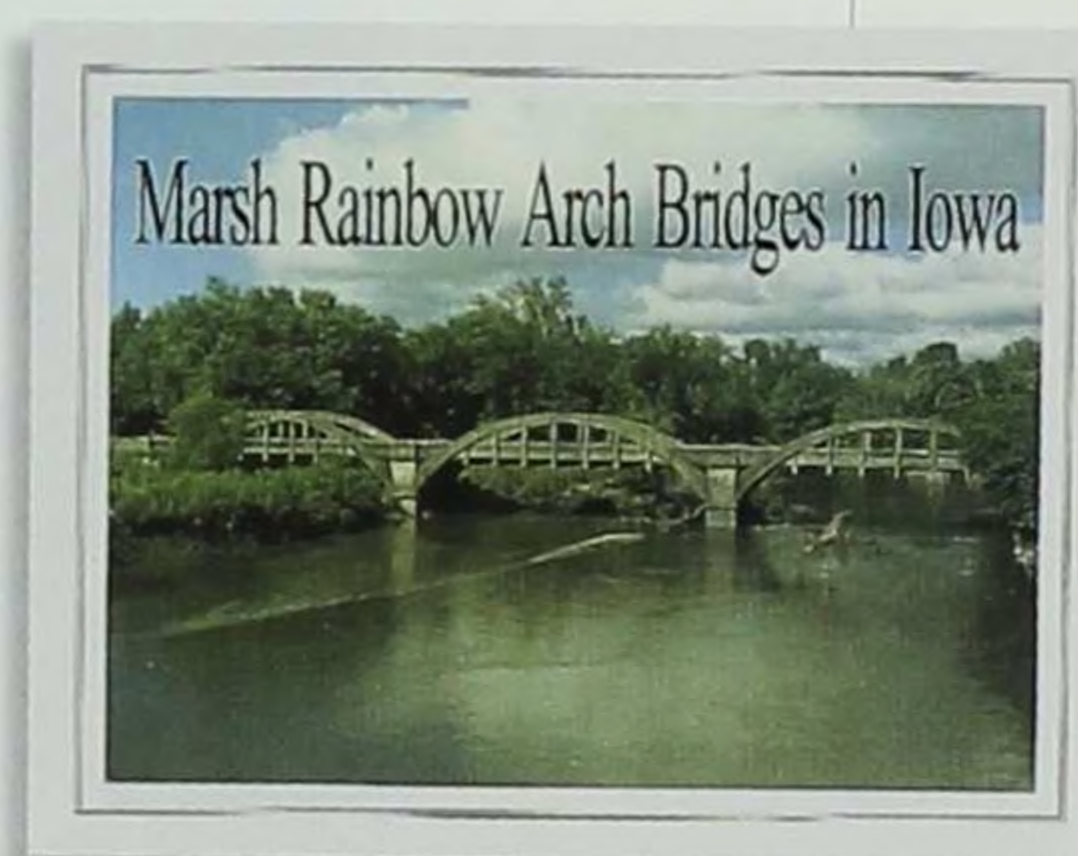


Chasing Rainbows—a guide for Iowa

A more complete look at these bridges appears in *Marsh Rainbow Arch Bridges in Iowa* (see right). This 23-page booklet by James C. Hippen includes photographs of Iowa's eleven Rainbow Arch bridges as of mid-1996; township maps showing their location; a detailed essay; and an extensive bibliography. To order, send \$2.50 (to cover shipping and handling) to: Office of the Boone County Engineer, Boone County Courthouse, 201 State Street, Boone, Iowa 50036.

The booklet, as well as the preceding article, developed out of a larger project in recent years to inventory and document historically important bridges in Iowa. Participating agencies included the State Historical Society of Iowa, through its State Historic Preservation Office (SHPO); the Iowa Department of Transportation; and the Historic American Engineering Record. As a result,

some 200 Iowa bridges were declared eligible for the National Register of Historic Places, including eleven Marsh Rainbow Arch bridges (seven of them in Boone County). SHPO and the Federal Highway Administration reached an understanding, to which Boone County and the Iowa Department of Transportation agreed, that the unavoidable loss of some bridges would be lessened by testing the structural soundness of one bridge, by preserving at least one bridge, and by publishing the booklet.



Saving Bridges—from graffiti

Graffiti on concrete bridges in a rural setting presents challenges for historic preservationists. Most removal methods also reduce the lifespan of the material. Clear sealants can trap moisture and promote mildew and fungal growth beneath them but are important for easily keeping the bridges free of graffiti.

The following illustrated publications provide more information. (Note: Visit the National Park Service's web site at <http://www2.cr.nps.gov/> to view or purchase the *Preservation Briefs*.)

Preservation Brief 38: Removing Graffiti from Historic Masonry by Martin E. Weaver (1995). Cleaning methods for removing surface-applied graffiti without damaging historic masonry. Discusses barrier coatings and advance maintenance. Emphasizes prompt removal as the key to preventing recurrence of graffiti. (GPO

#024-005-00158-7. \$1.75. To order, call (202) 512-1800.

Preservation Brief 39: Holding the Line: Controlling Unwanted Moisture in Historic Buildings by Sharon C. Park, AIA (1996). How to diagnose moisture problems and choose remedial treatments, manage moisture deterioration; repair and maintain materials; correct problem areas; plus recommended treatments and those to avoid. GPO #024-005-01168-4. \$1.25. To order, call (202) 512-1800.

Keeping it Clean: Removing Dirt, Paint, Stains, and Graffiti from Historic Exterior Masonry, by Anne E. Grimmer (1987). How to identify what building materials might be affected by cleaning; write "specs"; schedule cleaning; test procedures. \$5.50 (+\$5 shipping). PRG, Inc., P.O. Box 1768, Rockville, MD 20849-1768. (301) 309-2222

Celebrating a Local Landmark—in Lake City

Graffiti, vandalism, and general disrepair had taken their toll on the three-span Marsh Rainbow Arch bridge (right) just south of Lake City, in Calhoun County. Although the bridge had been closed to traffic since 1985, local citizens still valued it. Raising more than \$30,000, the Lake City Women's Monday Club supervised repairs to the concrete and removal of mildew, fungi, and graffiti, and then celebrated with a ribbon-cutting and rededication in September 1997. The Iowa Historic Preservation Alliance named the bridge project a rural winner in its "Iowa's Best Preservation Awards" for 1998.



PHOTO BY JAMES C. HIPPEN



PHOTO COURTESY OF IOWA HISTORIC PRESERVATION ALLIANCE

SHSI (IOWA CITY)



A stunning and magical scene after a snowstorm in Washington, Iowa, in 1882. Local photographer Samuel Armstrong mounted and sold the photograph as a cabinet card. (All photos in this essay are from the collections of the State Historical Society of Iowa.)

SNOW

For Iowa, snow is a given. We curse it and we celebrate it. In winters of heavy snowfall, we compare each storm to those etched in our memories. In years of light snow, we caution newcomers that "this isn't your typical Iowa winter."

We frequent the hardware stores for the newest style of snow shovel or snowblower, the clothing stores for the warmest and most water-resistant fabrics, the sports stores for the fastest-flying sleds.

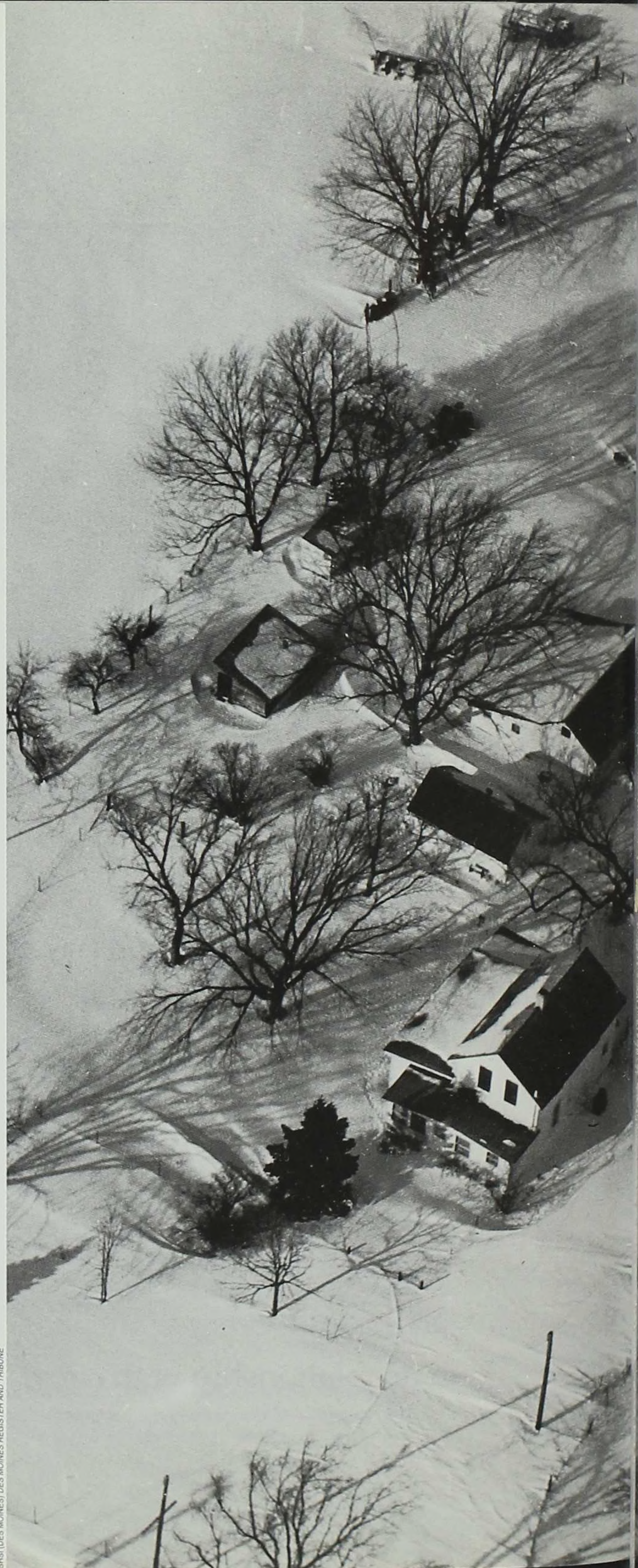
Snow. How we shovel it, dress for it, and move through it have certainly changed in the last century, as the following historical photographs reveal. But whether it is 1880, or 1936, or today, there are certain classic stages we Iowans go through every winter as we rekindle our love-hate relationship with snow.

—*The Editor*

Stunned . . .

First, we are stunned by the snow, by its beauty, its completeness, the way it commands the landscape into silence. Since the mid-19th century, we Iowans have pulled out our cameras, donned our boots, and stepped out to survey the snow.

Fences and telephone poles stitch puckered seams across an Iowa farmyard blanketed with snow. Circa 1960.





Stunned . . .

First, we are stunned by the snow, by its beauty, its completeness, the way it commands the landscape into silence. Since the mid-19th century, we Iowans have pulled out our cameras, donned our boots, and stepped out to survey the snow.

Fences and telephone poles stitch puckered seams across an Iowa farmyard blanketed with snow. Circa 1960.



PHOTO BY DES MOINES REGISTER AND TRIBUNE

SHSI (DES MOINES)



A snowbound photographer in Swea City created this photo postcard of a February 1909 snowstorm that blocked the streets in the northern Kossuth County community.



SHSI (IOWA CITY)

Mounted as a cabinet card in an Iowa City photographer's studio, this unidentified photograph demonstrates Iowans' ongoing fascination with snow and its stunning ability to stop us, literally, in our tracks.

Stuck . . .

The next stage, of course, is the sinking realization that, regardless of destination or vehicle, we are stuck.



SHSI (IOWA CITY)

Being stuck in the snow was nothing unusual in the winter of 1935/36, when tremendous snowfalls stranded far more vehicles than this lone truck.



But being stuck is all relative, as these two travelers found out in Des Moines in November 1957. Four-year-old Donna Gilley tugs at the tricycle handlebars as three-year-old William Gilley adds traction.

SHSI (DES MOINES); NOV. 19, 1957 DES MOINES REGISTER AND TRIBUNE

Shoveling out . . .

Hailing neighbors, we begin the next stage—shoveling ourselves out. We call upon muscle power and horsepower, and, as the work gets underway, someone thinks to photograph our progress. “Because,” we say to each other, “years from now, no one will believe that it was this deep.”



Ralph Tremaine photographed these three scenes in February 1936, as Iowans helped clear the way for trains on Chicago & North Western’s Eagle Grove-Hawarden line.



ALL THREE: SHS (IOWA CITY)





Shovelling out . . .

Hailing neighbors, we begin the next stage—shoveling ourselves out. We call upon muscle power and horsepower, and, as the work gets underway, someone thinks to photograph our progress. “Because,” we say to each other, “years from now, no one will believe that it was this deep.”



Ralph Tremaine photographed these three scenes in February 1936, as Iowans helped clear the way for trains on Chicago & North Western's Eagle Grove-Hawarden line.



ALL THREE SHOTS (OWNA CITY)





SHSI (DES MOINES)

Left: A farmer hefts a shovel and walks down a cleared lane, November 1959.

Below: Pedestrians at Fifth and Walnut Streets in Des Moines, January 1949, watch as snow heads up the conveyor belt of a mechanical snowloader and into a waiting truck, at the speed of a truckload per half minute.

Next page: Near Spirit Lake, photographer L. F. Williamz captures a dramatic moment as a train on the Chicago, Rock Island & Pacific blasts through drifts in March 1917. SHSI (IOWA CITY)



SHSI (DES MOINES); DES MOINES REGISTER AND TRIBUNE, JAN. 1949



L.F. WILLIAMS

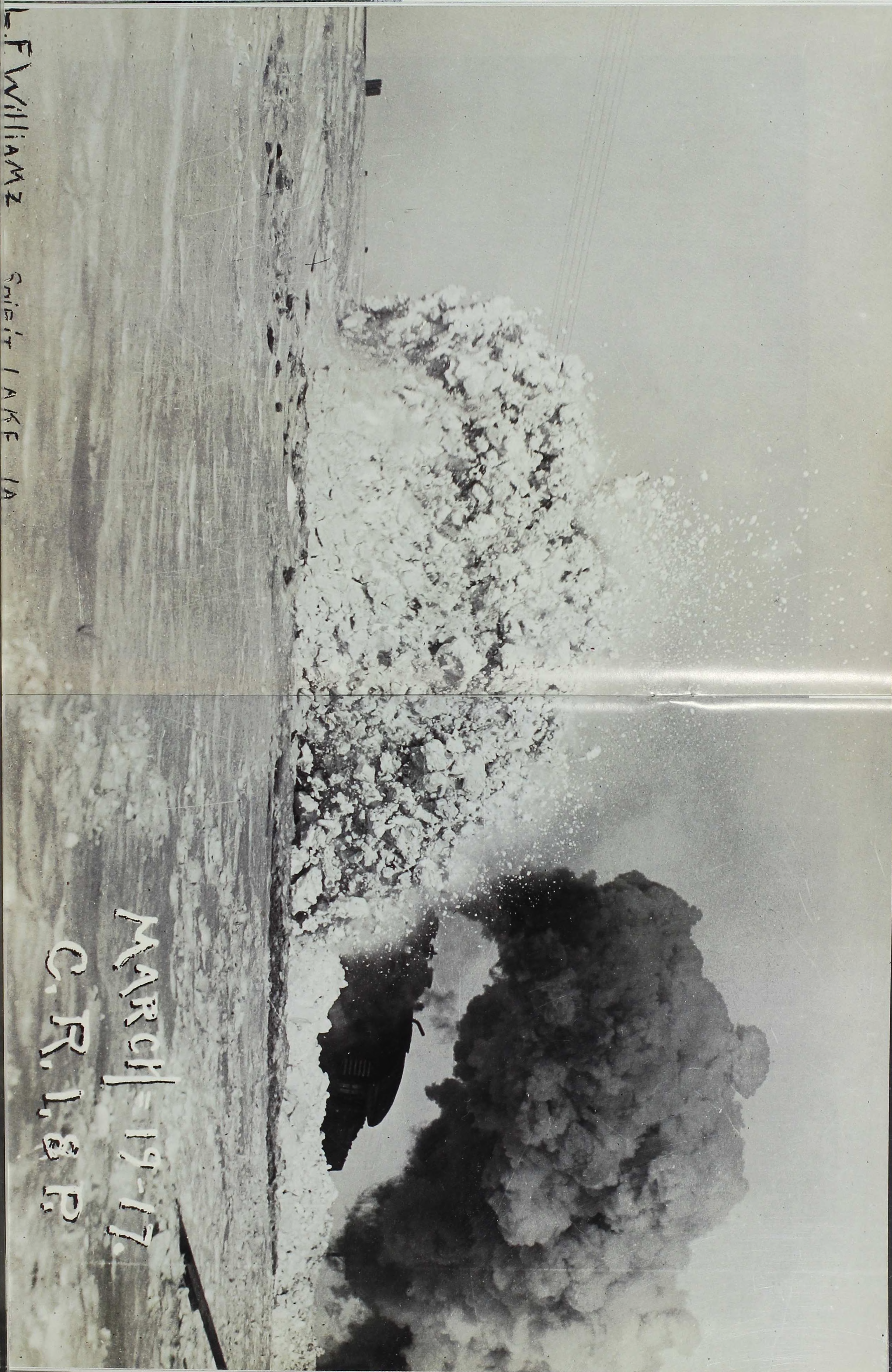
SPIRIT LAKE IA.



MARCH 19-17.
C. R. L. & P.

L. F. WILLIAMS

SNIBBIT LAKE IA



MARCH 19-17.

C. R. L. B. P.

Settling Forth . . .

Finally, once sufficient snow has been blasted and blown, shoveled and shifted—or has simply melted away—we set forth to resume our daily business. We seek each other's company, eager to share stories about who conquered the deepest drifts and whose horsepower performed the best.

Sleights and bobsleds surround the Monroe County Courthouse in Albia, circa 1900.



SHS (IOWA.GOV)

Setting forth . . .

Finally, once sufficient snow has been blasted and blown, shoveled and shifted—or has simply melted away—we set forth to resume our daily business. We seek each other's company, eager to share stories about who conquered the deepest drifts and whose horsepower performed the best.



Sleighs and bobsleds surround the Monroe County Courthouse in Albia, circa 1900.



SHS (IOWA CITY)



SHSI (IOWA CITY)



SHSI (IOWA CITY); CUNDILL COLLECTION

Above: Satchel in hand, a Maquoketa citizen sets forth after a March 1923 snowstorm.

Right: Nellie and Wilma Warren pause outside their home in West Liberty, about 1904.

Below: Ears peek above the drifts as a mule team pulls a wagon and its passengers through the winter snows of 1935/36.

Left: Two women strike a jaunty pose in front of the Winnebago County Courthouse in Forest City.



SHSI (IOWA CITY); W. A. WARREN COLLECTION

SHSI (IOWA CITY)



SHSI (IOWA CITY); YOUNG COLLECTION



Snow comrades watch as a single sled barrels down a 30-foot drift.

Surrendering to the joy . . .

SHSI (DES MOINES); PHOTOGRAPHED BY JOAN LIFFRING FOR THE DES MOINES REGISTER AND TRIBUNE (JAN. 27, 1962)



Others among us simply surrender to snow's splendidly slippery nature. We pile into sleds and sleighs, strap on skis, seek out the pure joy.

Left: Photographed near Cedar Rapids, where they were attending college, four sisters of a religious order in India embark upon a sleigh ride in January 1962.

Overview: While a woman smiles from the porch, a bobsled party poses in West Liberty.

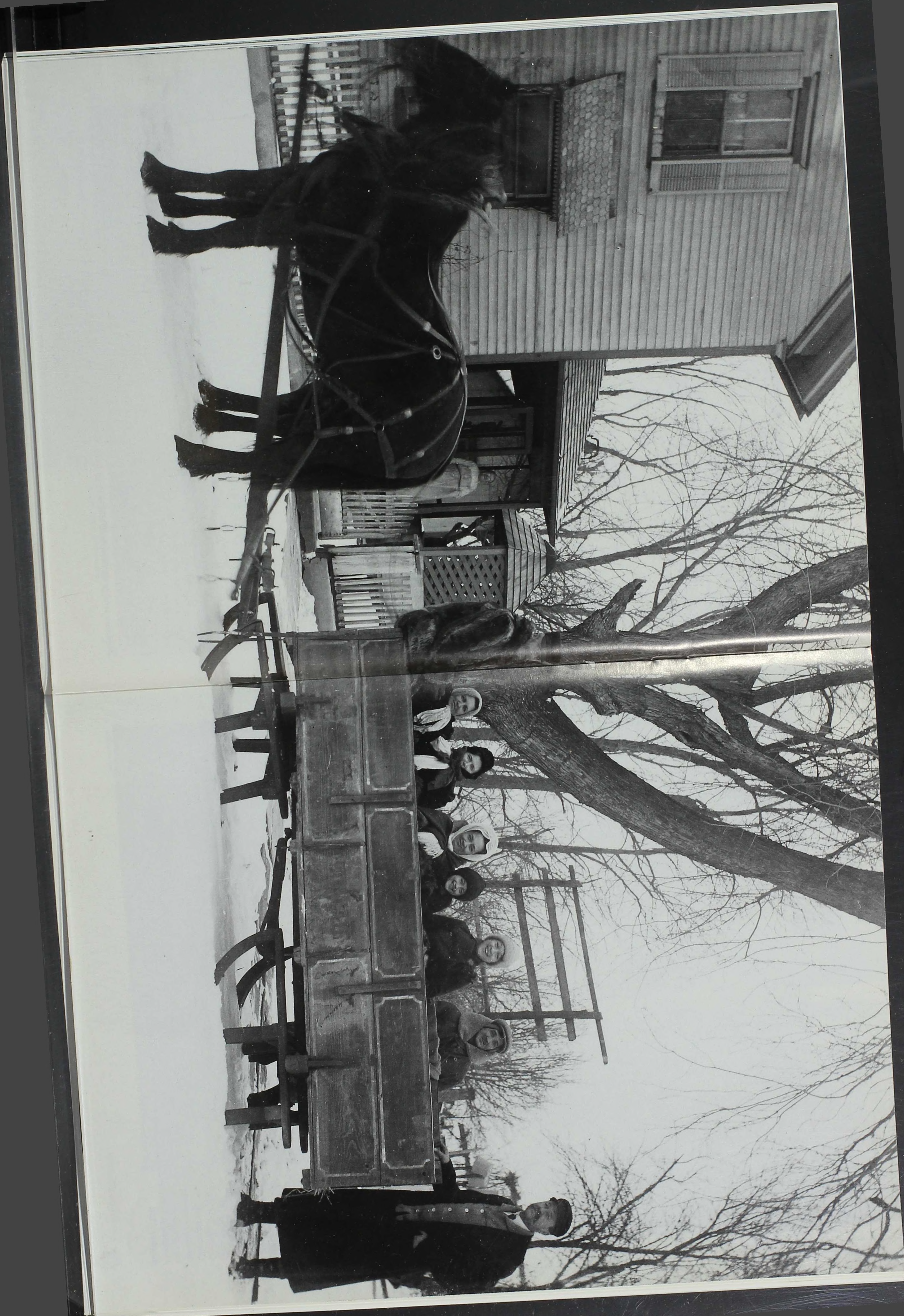
SHSI (IOWA CITY); W.A. WARREN COLLECTION



Sledders trudge up Simplot's Hill in Iowa Falls, about 1900. Only the dog looks back at photographer Frank E. Foster.



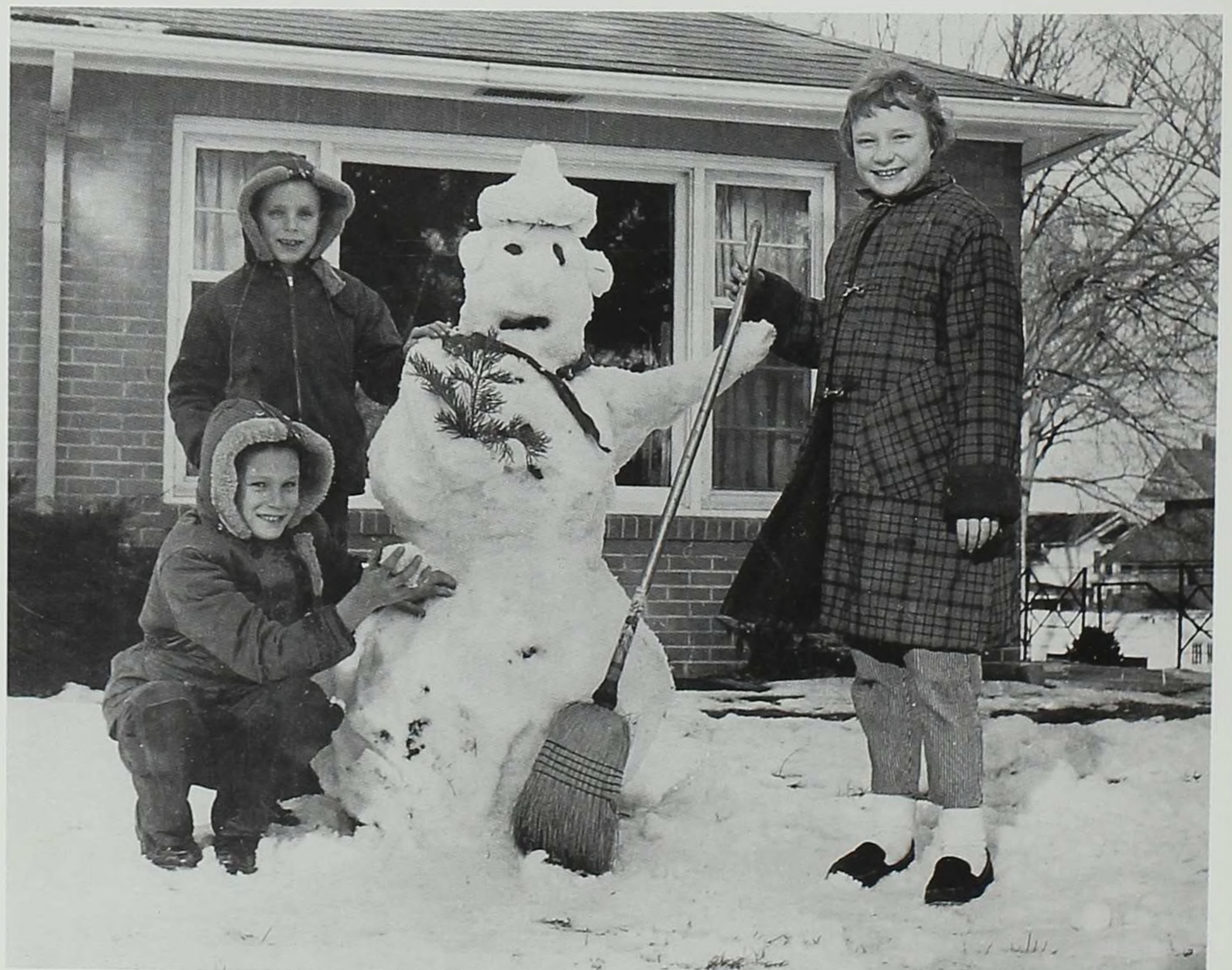






SHSI (IOWA CITY)

Barth L. Wick of Norway, Iowa, tests—and confirms—the force of gravity.



Steven Edwards (kneeling) and Gordon and Jan Goettsch add finishing touches to a snowman in Monticello, December 1958.

SHSI (DES MOINES)



In galoshes, headscarf, and snowsuit, Shirley Riley hooks a leg over a school railing in Des Moines, 1944.

... and to
the solitude ...

... of Iowa's snow

Silhouetted against the winter sky, a child holds the reins of a horse-drawn sled transporting an enormous log to a sawmill. Photographed on the Heiber family farm, in Black Hawk County. ❖



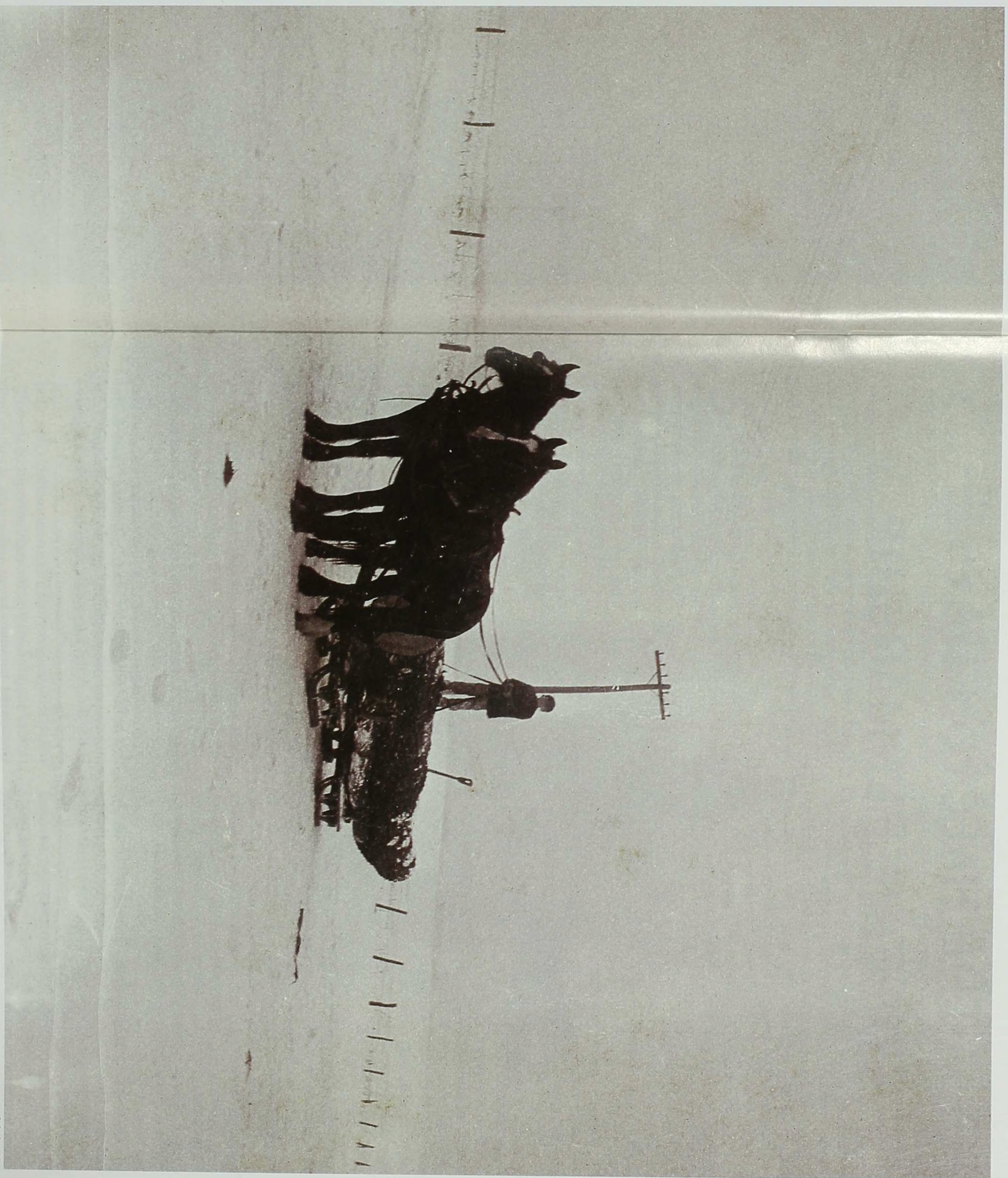


SHSI (IOWA CITY)

◆ ◆ ◆ and to
the solitude ◆ ◆ ◆

◆ ◆ ◆ OF IOWA'S SNOW

Silhouetted against the winter sky, a child holds the reins of a horse-drawn sled transporting an enormous log to a sawmill. Photographed on the Heiber family farm, in Black Hawk County. ◆



THE HALCYON DAYS OF FINE PENMANSHIP



by
William Christopher Henning

*I*n August 4, 1961, our family gathered in Cedar Rapids, Iowa, for the birthday of my father, William Christopher Henning. There were visitors, phone calls, a camera session. Fine though this was, the real blessing came to my father when he could escape to his room.

He sat down at his desk, a giant oak rolltop that he had had for 40 years. Here, with his paper and pens and ink, he was in his element. He uncorked his bottle of Higgins Eternal black ink, then dipped into it his Gillott Principality pen. On a corner of paper he tested the pen. A pin prick of ink first, then as he applied pressure the nibs sprang open and the mark became

wider and wider. Yes, the pen was functioning as it should. He wrote:

I am ninety years old today and can write some yet.

A certain ruefulness must have possessed my father as he contemplated what he had just written. The infirmities of age come and go, and on some days my father did much better than this. The style that he essayed on this particular day was ornamental shaded script. It requires rhythm and an exquisitely controlled pressure to produce just the right amount of shading. One might compare script writing to skating; both

skills are acquired only after considerable practice, and both demand a smooth-flowing speed to make the arcs, the loops. Yet at the age of 90 not many people skated so well, nor did they write so well, either.

My father's skill and pride in his penmanship were part of a vanishing tradition, and he was one of the last in a long line of penmen. Several, in fact, studied or taught in Cedar Rapids, Iowa, and from that vantage point, he experienced the halcyon days of fine penmanship. But that is getting ahead of the story.

Good handwriting was prized in previous eras, and so were its practitioners. When early writing master Abiah Holbrook died, his funeral notice in 1769 declared him to be the "greatest master of the pen." (Among Holbrook's 220 pupils was one whose very name is synonymous with a well-written signature: John Hancock.) Thomas Jefferson handled the pen well, but for the final copy of the Declaration of Independence sought a better penman than himself, the Quaker Timothy Chalkley Matlack. Jacob Shallus penned the Constitution and was paid well for it.

In the 19th century as well, the attractions of writing a good hand were more appreciated than they are now. It would be decades before the typewriter would make inroads on longhand writing, and even then there was no argument that script writing was more personal and, if well done, more beautiful.

Penmanship was often taught by itinerant teachers and writing masters, who borrowed methods and styles from each other and developed their own virtuosity and loyal followers. Of 19th-century penmanship teachers, Platt Rogers Spencer was perhaps one of the more enterprising. By 1859 his system was published, and Spencerian copybooks became fixtures in schoolhouses, as students endeavored to mimic the flawless script at the top of each page.

Like Spencer, Austin N. Palmer had an ambition to be a fine penman. He studied at George

Gaskell's penmanship school in New Hampshire, where the walls were covered with the more decorative side of penmanship—"flourished" birds, snakes and bounding stags. "Nothing else in the world was quite so beautiful or important as ornate penmanship," Palmer remembered. He paid his tuition by sweeping floors, addressing newspaper wrappers, and making up packages for Gaskell's prosperous learn-to-write-by-mail business. Soon Palmer became an itinerant teacher himself, advertising and conducting his own classes. In 1879, when his mother moved to Cedar Rapids, Iowa, where her daughter was living, 22-year-old Austin followed.

For two years Palmer worked in Cedar Rapids as a contract writer for a land company and as a policy writer for an insurance company, for in those days such documents were handwritten. This experience impressed on him the value of writing fast, tirelessly, and yet legibly. "I thought that I was an expert penman at the beginning of my office experience but I soon learned that I was not even a good business penman," Palmer recounted. In the following years, he would remedy that situation by developing the Palmer Method of handwriting and promoting it from Cedar Rapids.



Platt Rogers Spencer first published his Spencerian system of penmanship in copybook form in 1859.

About the time that A. N. Palmer was realizing his weaknesses as a business penman, my father, William C. Henning, was a boy in Michigan, practicing his own handwriting in the feeble light of a coal oil lamp on winter evenings. He later described how his father "would often write something in his best hand and challenge me to beat it," and how his mother "had several copy books that she had filled with practice during her late school days, and I would look them through and through with great admiration."

His greatest inspiration and instruction, however, was his older sister, Ida. "The neatness and uniformity of her handwriting were quite marvelous. During the fall and winter she traveled to Flint to attend a private normal school and here she received instructions in plain and ornate writing," he recalled. "She brought home an oblique penholder, the first I had seen. To me

it was a fascinating novelty and I was immediately ready to try my hand with it. I would watch her write with it, cutting smooth shaded strokes and delicate and graceful fine lines."

With practice, his own skills grew, and by age 16, in 1887, he was teaching his own evening penmanship classes in the neighborhood schoolhouse. Later, after studying at Oberlin Business College in Ohio, he sought personal training. When he heard that Louis Madarasz, whom some considered the world's finest penman, was teaching for one A. N. Palmer in Cedar Rapids, Iowa, my father wrote to inquire.

The replies received from Palmer's school were addressed in a flowing hand, the strokes exquisitely formed, the best writing my father had ever seen. In December 1892, he headed to Iowa to study under Louis Madarasz and A. N. Palmer.

Madarasz was known as an "offhand" writer, meaning he simply sat down at his desk and wrote — sans penciled guide lines, sans warm-up. He had first learned penmanship from a *Gaskell's Compendium* ordered through the mail, and as a teen, he earned money by setting up a table in a public place and writing calling cards.

Throng gathered around to watch him write their names in as many different ways as he had cards to fill, swiftly, easily, covering his table with the cards as he set them out to dry.

The rapidity with which Madarasz turned out fine work was in his favor. He could write a set of business capitals in 21 seconds. He could produce a large heading in a few minutes (a comparable job by an engrosser, outlining in pencil, filling in with pen and brush, would take many hours). And he created a sort of awe or mystique. "Just to watch him work," one pupil said, "was worth a trip across the continent." His swirling pen produced great capitals in an infinite number of ways, and if anyone has ever achieved perfection in the writing of small letters, it was Madarasz.

Eager to emulate Madarasz, my father practiced his drills. A solid page, the "O's" swinging large and shaded, the small letters marching with perfect regularity: Ohioans Ollivier Ollivette Ostrum. The showy capitals first catch the eye, but the connoisseur looks sharply at the small letters: em eminent engineers endeavoring eminent endings. The aim is perfect spacing, perfect shape, uniformity: can cannery caucus candies carrying coal.

In April of 1893, my father met a student who would become a lifelong friend. Francis B. Courtney enrolled at Palmer's school in Cedar Rapids to study for one month under the great Madarasz. Courtney already wrote with such phenomenal skill that one

might ask what he was doing there, and was there anything left to teach him.

Much of Courtney's fame came from his ability to demonstrate his wonderful skill on a blackboard. While he talked to his audience, his hands were busy producing a labyrinth of graceful curves. He wrote with both hands in opposite directions. He duplicated anyone else's writing, wrote style after style, produced fine monograms on instant notice. And he saved until last a feat

that never failed to bring down the house: he wrote upside down and backwards—not material that he had practiced earlier but names called out from the audience and, as the *Milwaukee Journal* had it, "faster than the ordinary man could write them in the ordinary method—and about a hundred times better as well."

Once in a while Courtney's sheer virtuosity got the better of his good judgment; this is most often seen in his "flourishing." In flourishing a bird, for example, he might rain on the strokes until the bird existed in a veritable thicket. Perhaps he failed to see the cluttered mess he was creating because he was so pleased at the way his hand was behaving.



COURTESY OF THE AUTHOR

Francis Courtney excelled at ornamental penmanship and "flourished" birds like this one. (The capital letters beginning each section of this article are also by Courtney, from alphabets he developed.)

A. N. Palmer knew that flourishes and ornamental styles had their place in penmanship instruction. He himself had often choked with emotion over a piece of exceptionally fine ornamental writing. But the practical aspects of penmanship were Palmer's forté, since he believed that everyone should be able to write with ease, speed, and legibility. And, as he also believed, the best way to learn this was through the Palmer Method. In developing his method, he later recalled, he had studied "the movement used by the best business writers," having "never found a really good business penman who wrote a style embodying legibility, rapidity, ease, and endurance who did not employ muscular movement."

Palmer made much of what he termed "muscular movement"—the term was not original with him, but he used it so much that it became his. The proper position was essential: the arm, with its rolling motion, was to be supported by the large muscle of the forearm. "Practice makes perfect," he was fond of saying, "but only practice of the right kind." Various drills developed control and established rhythm. Ovals and straight lines ("push-pulls") were practiced; then letters were interspersed between the ovals and push-pulls, and then words. One practiced until the next movement came naturally, and one movement flowed into another—as one dance step flows into the next.

The correct tools were also important for speed and evenness. Steel pens were always used, and Palmer instructed his pupils to dip deep and remove the pen slowly from the inkwell so it would hold maximum ink. With only one dip of ink, he assured his pupils, he could make 500 ovals—and probably 2,000 with the right pen, sufficient ink, and quality paper.

Like Spencer, Gaskell, and Madarasz, Palmer had mastered promotion as well as the pen. Since 1884 he had been publishing a monthly magazine, *The Western Penman*, as one way of promoting his method. And here is where my father reenters the picture.

Having left Cedar Rapids in 1893, after six months of study under Madarasz and Palmer, my father had been teaching in business colleges in the East and the Midwest. Palmer asked him to prepare a series of lessons on business handwriting for *The Western Penman*. He did, returning to Cedar Rapids in 1901, to teach for

Palmer and to help operate the school. At the end of each day he would sit down to a stack of mail that he was to personalize. Palmer would approach quietly and watch Father's pen swing through the words "A. N. Palmer" on piece after piece of promotional mail.

Palmer was hard at work, trying to get the Palmer Method into schools. Circulation of *The Western Penman* had skyrocketed from 10,000 to 25,000 when a Catholic school administrator in Michigan invited him to teach the Palmer

Method to 200 nuns gathered for summer school. From this developed the "red book" (his standard adult instruction manual) and adoption in parochial schools.

Palmer's next victory was at Public School No. 4 in New York City in 1904. Interest was enormous. On some days, 500 educators crowded in to observe. Adoption of the Palmer Method from this point was swift, but certainly not without the constant urging of Palmer himself. Naturally enterprising, Palmer outstripped his competitors by getting teachers to come to learn his method during the summer months.

Although Palmer used the magazine—renamed *The American Penman* in 1907—to promote his method,



Palmer's "red books" became standard instruction manuals for his method of practical penmanship. Below: a few lessons.

LESSON 116—Drill 139

Always study drill before practicing.

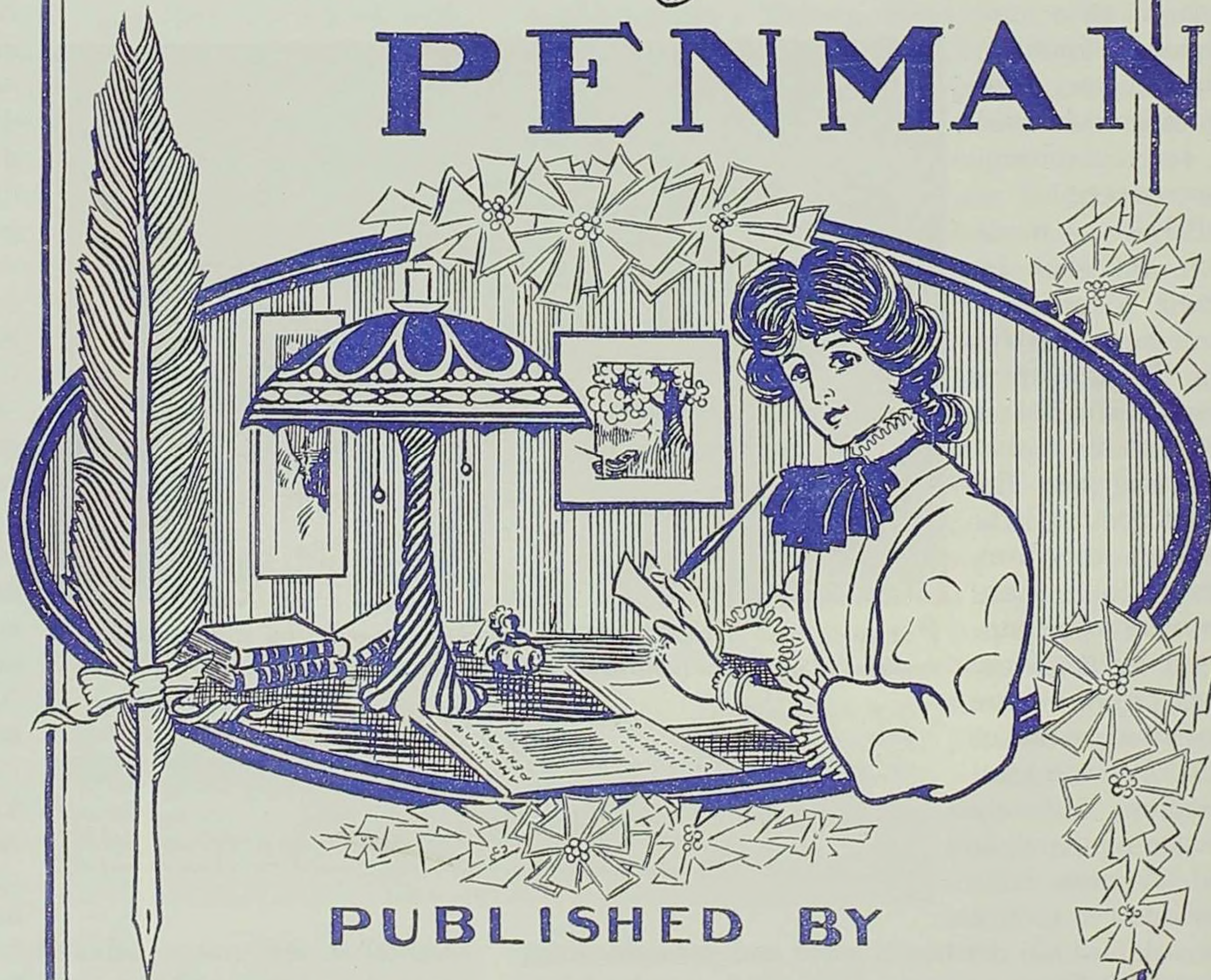
LESSON 117—Drill 140

Be sure to use a good rapid movement.

PROFESSIONAL EDITION

NOVEMBER, 1907

The AMERICAN PENMAN



Published every month in Cedar Rapids, Palmer's *American Penman* magazine was filled with specimens submitted by students and teachers, advice from the experts, endorsements from the business world, and advertisements for typewriters, free-lance work, and writing supplies. In August of 1907, William C. Henning became associate editor.

PUBLISHED BY

THE A.N. PALMER CO
CEDAR RAPIDS
IOWA.

SUBSCRIPTION RATES { Student's Edition Sixty-five Cents per Year. In Canada 75 Cents
Professional Edition One Dollar per Year. In Canada \$1.20


its columns were open to other fine penmen, such as C. P. Zaner and E. C. Mills with systems of their own to promote. But he made sure his own opinions were known. For a time "vertical writing," a European import, threatened to be widely adopted. Palmer, however, considered it slow and mannered and generally absurd. Vertical writing was soon a dead duck, and Palmer claimed credit for shooting it down.

He also took a few shots at his favorite enemy, the copybook system of teaching. Although the standard copybook began with directions on how to sit, hold the pen, and move the arm and hand, teachers too often taught penmanship by simply telling their pupils to copy the words at the top of every page. Palmer knew that learning penmanship required more than slavish copying of copybook models. He promised his subscribers that *The American Penman* would continue to offer every phase of penmanship instruction, expand into special editions for students and professionals, offer criticism, share news of professional gatherings, and devote special attention to ornamental script in its "Department of Flourishing."

Palmer had a good many other ideas for his magazine, his company, and for the world in general—but he had a train to catch for New York, where he was opening a new office. (Others were in Boston, Philadelphia, Chicago, Portland, and Pasadena.) He left Cedar Rapids in 1907, and my father, seated at a rolltop desk, now found himself to be the new associate editor of *The American Penman*.


The editor's desk was a wonderful place for my father, who had dedicated his life to fine handwriting. He was in touch with the whole fraternity of penmen, who sent him courses on how to write and letter and specimens to be engraved for the magazine. And he did not hesitate to include courses of his own in ornamental writing, text lettering, and business penmanship.

My father was associate editor for five years, until *The American Penman* was moved to New York. He then became principal of Cedar Rapids Business College, which offered classes in typing, shorthand, and penmanship—as did most business schools—and sponsored Palmer Method summer sessions for teachers.

 With the adoption of printed forms, fewer companies were calling on penmen to hand-write contracts and insurance policies. But as my father knew, there were still other needs for fine handwriting. People brought in plaques to be engrossed, identifica-

tion cards to be written, dedications to be made in presentation Bibles, and certificates for text-lettering and script.

Although seasonal, the filling-out of diplomas gave many penmen all the work they could handle, as they told my father in their frequent correspondence with him. Even his old friend Francis Courtney supplemented his correspondence school income by preparing diplomas. As he mentioned in a letter to my father, "Last week I lettered eighty diplomas for Cleary of Ypsilante." Another colleague and friend, William E. Dennis, looked fondly toward the end of the diploma season: "Rushed to death with more diplomas. . . . I get out the 1st of July and bum around for 2 months so's 2 b in good trim for fall work."

 My father also prepared diplomas, for his school and others. While some were done at his office, most were done at home. As the diplomas were finished, he set them aside to dry on the table, the bed, the bookcase, in chairs, even on the floor. The room was strictly off limits to any pets in our family, as the creatures had ideas of their own about penmanship and might redistribute the ink with their feet.

There were other sources of income. Many prominent penmen were asked to examine handwriting—"expert work," they called it—which frequently led to testifying in court about whether the handwriting was spurious or genuine. As Courtney wrote, "Have had a lot of expert work this winter. Just finished a case for the German-American Bank of this city. Got fine write-ups in the daily papers here." In April of 1926 he told my father: "I have averaged so far this year five new cases a week." Cases big and small so occupied Courtney that in 1930 he worried, "I don't do enough writing to keep in fine trim."

Through his own "expert work" my father was in contact with lawyers throughout Iowa. Often there was an early morning rush, with traveling bag and stuffed briefcase, to catch the train to Elkader or Cherokee or Keokuk or some such place tucked away in a corner of the Hawkeye State. Later when I was old enough to help drive, I would go with him to these towns, where the cases always seemed to be tried in dimly lit courtrooms in antique courthouses, with the flies buzzing and the lawyers droning away on points of law beyond my comprehension.

By the 1950s and 1960s however, the state of penmanship was no longer flourishing. There had been a wretched decline in sensible methods of teaching penmanship in the schools, and the writers of truly fine

script—to say nothing of ornamental shaded script—had become few and were becoming fewer.

Lettering was in a quite different situation, especially broadpoint pen lettering (often called “calligraphy”). Interest in lettering classes was burgeoning, and drugstores sold calligraphy manuals and kits of supplies. Lettering is a deliberate, plodding sort of activity; you might compare it to walking. Speed is not much of a factor. It might take a calligrapher an hour, a day, to produce a large piece. Virtually all of the fine script writers also were good at broadpoint pen lettering, and for some it became their chief occupation. But good script writing is something special. It comes only through trained motion, and the movement is fast and complicated.

My father retained much of his handwriting skills well into his nineties. He occasionally practiced his script, writing large with a felt-tipped pen (the felt tip steadied his hand, and the large size was easier to see as his vision diminished). He had an idea one day that it might help if he regressed to the Palmer Method drills, the ovals and push-pulls, and he asked me to bring him a package of Palmer Method paper stashed away on a high shelf in his closet. But the paper was old and had so rotted that it fell apart with one fold.

After my father broke his hip, he spent much of his time in his kitchen. It was cozy and bright, and his wheelchair fit nicely at a big table where he could carry on his efforts to recapture his penmanship. When he was abed I searched his clothing and the floor for handwriting specimens he had dropped. His wheelchair usually had a good crop of cards and smaller bits of handwriting that I plucked from cracks

in the footrest, from between the spokes and under the cushion.

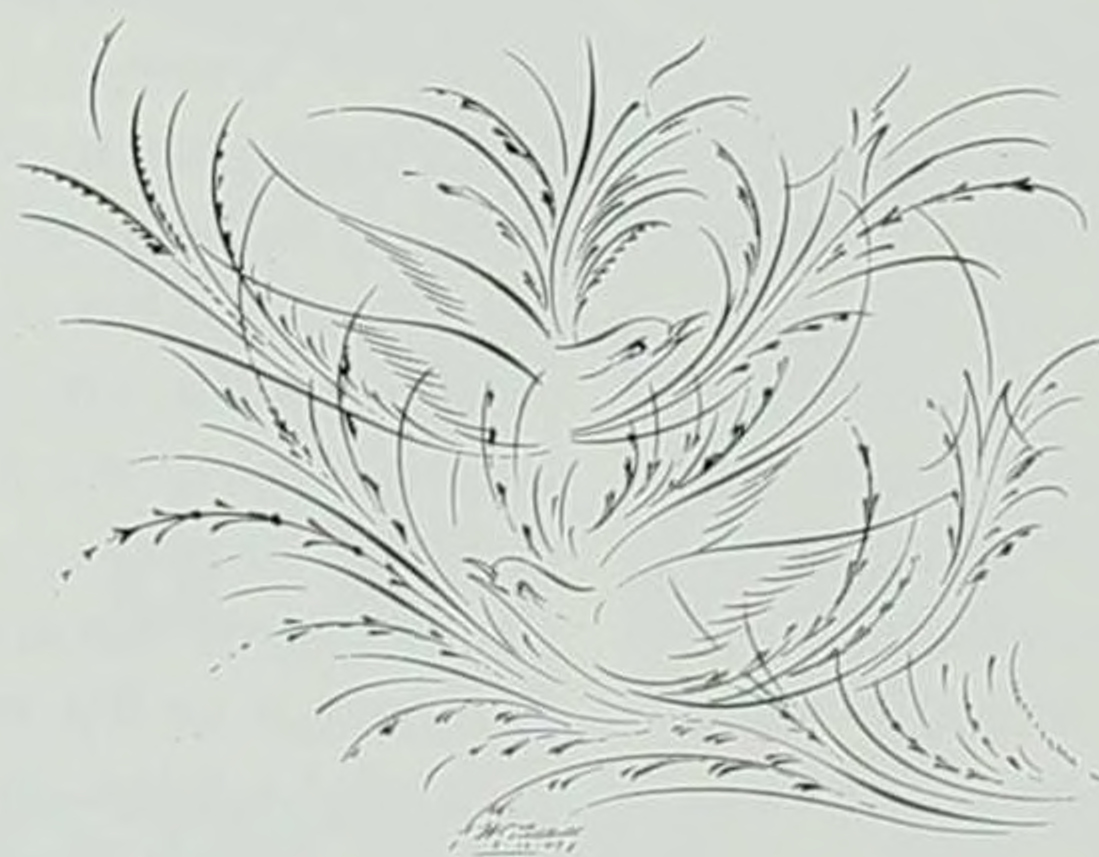
Summer 1971 came, and the International Association of Master Penmen and Teachers of Handwriting gathered in Cedar Rapids for my father’s 100th birthday. He had so looked forward to this that we speculated that once this was behind him, he might go into a rapid decline. He didn’t. Sometimes he tried to write, but by now that had failed him. But there was still fine writing to look at. That winter, I again piled the boxes of specimens on the kitchen table, and he looked them through and through, immersed in the vital stuff of his life.

One day I came across an object far back on a high shelf. It was a framed set of 14 cards, which the great Madarasz had done for my father in 1893. On each card, Madarasz had written my father’s name in an entirely different script. My father had treasured these, but he had not seen them for years, thinking that they had been lost.

I carried them into the kitchen. I did not thrust the cards on him all at once but just held them there, until, with his limited eyesight, he gradually became aware of what I had found.

“Madarasz! Oh, Madarasz!”

And when he could contain his excitement, the magnifying glass came out, he turned the cards this way and that, leaned close, traced the great swirls that by some magic produced a never-ending variety of capitals, and the tiny march of small letters, and again his world came alive. ❖



The author, William E. Henning (1911-1996), was an artist and a writer. Under the federal New Deal projects in the 1930s he painted two Iowa murals: Iowa Farm Life at the Manchester Post Office, and Transportation at Harrison School in Cedar Rapids (which he restored in 1984). His best-selling novel The Heller (Scribner, 1947) is set in the Cedar Rapids area. In later years, the author developed a book-length manuscript on American penmen, drawing upon the unpublished memoirs of his father, William C. Henning, and upon his own association with his father’s Cedar Rapids Business College, where he taught shorthand until the school closed and his father retired in the mid-1940s. This article is a much abbreviated version of the manuscript and is published here with the generous permission of his widow, Bette Henning. (The flourished bird above is the work of his father.)

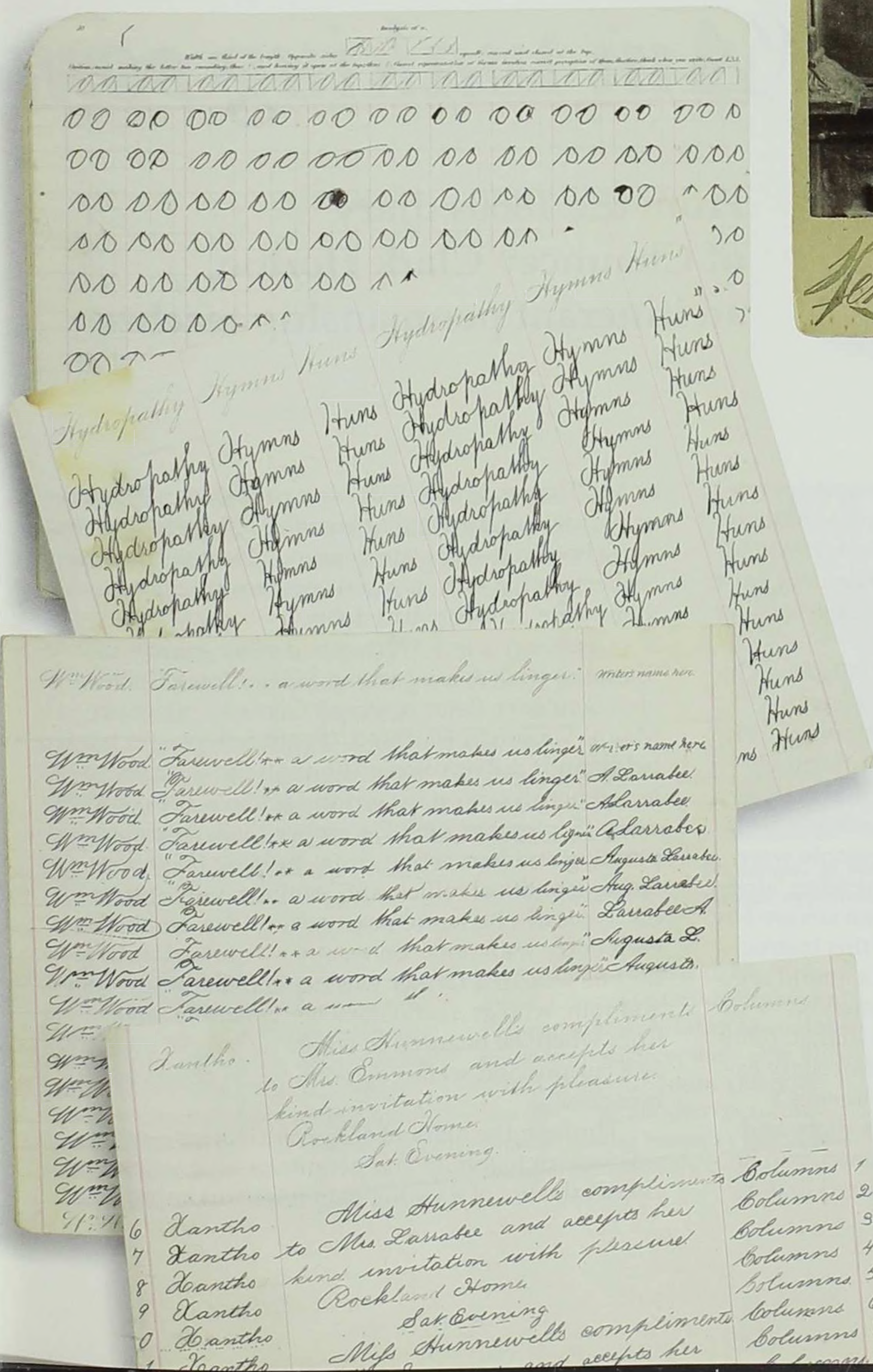
Augusta Larrabee masters the pen

In the copybooks of Augusta Larrabee (right), we see the developing penmanship of a young girl in the late 19th century.

The first page (below) testifies to Larrabee's endless practice of individual letters. The page is from Book 1 of the *Spencerian System of Practical Penmanship*. The outside



SHS (IOWA CITY); LARRABEE COLLECTION



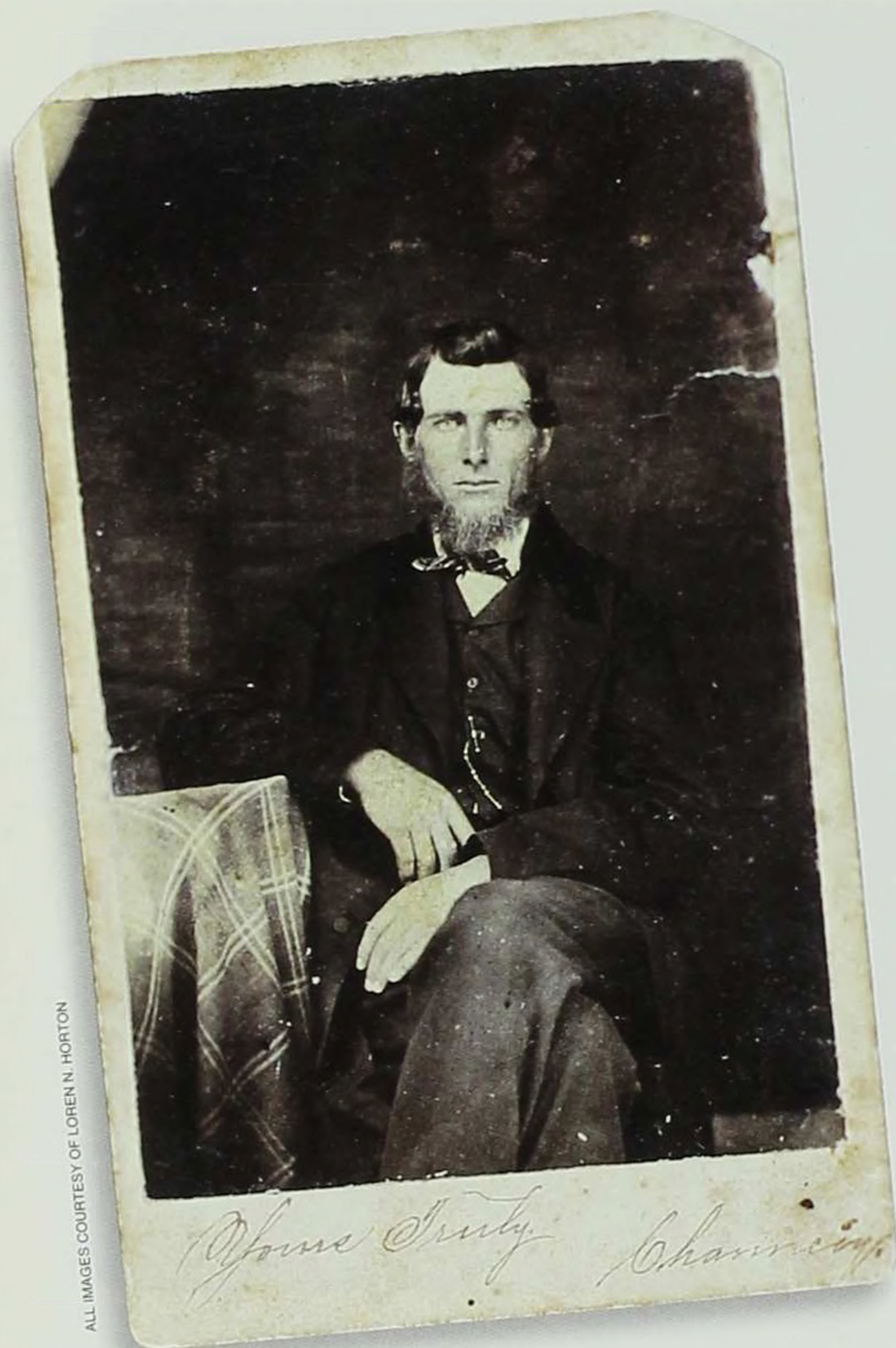
cover (see page 133) bears the name "Miss Gussie Larrabee."

The other three pages shown here are from Books 5 and 8 of *Babbittonian Penmanship*, another system taught in the 19th century.

On these pages, Augusta Larrabee progresses to more interesting material. First, to series of alliterative words—Hydropathy, Hymns, Huns. Then, to poetic sentences—"Farewell! ** a word that makes us linger"—and various arrangements of her name. Finally, on the bottom page, she applies her penmanship to an everyday situation befitting a young lady, as she practices a written response to a formal invitation.

Born in 1864, Augusta Larrabee was the daughter of Anna and William Larrabee (Iowa's 12th governor). Their home, Montauk, is just beyond Clermont, Iowa, and is now a historic site of the State Historical Society of Iowa.

—The Editor



ALL IMAGES COURTESY OF LOREN N. HORTON

"Am making some i

**From the 1860s diary
of Chauncey Clark Horton,
an itinerant penmanship teacher**

One would not expect that teaching penmanship would be particularly taxing—until we catch a glimpse of Chauncey Clark Horton in the early 1860s, trudging miles through January snow and March mud, boarding with quarrelsome families, and instructing rude and unruly pupils.

Horton (*above*) was 28 years old in 1861, when he decided to teach handwriting. In the 19th century penmanship was frequently taught by itinerant writing teachers like Horton, who organized "writing schools" in area schoolhouses when regular classes were not in session. "It may seem surprising to 20th-century readers that a large number of people were willing to pay tuition for instruction in writing, singing, dancing, spelling, and other skills not covered by the regular school curriculum, and that this instruction was available to people who did not attend regular school," comments Iowa historian Loren N. Horton, who is also the grandson of the diarist. (Our thanks to Horton, for permission to reprint diary excerpts, penmanship samples, and other images.)

Horton transcribed his grandfather's diary and researched the names and places mentioned, and he concludes that certain individuals—referred to only

as Mr. Thayer, Frank, E. F.—are probably colleagues or partners in the writing business. "Because the writing school was a private venture," Horton continues, "collecting the tuition was a constant problem, and there were probably bad debts."

Chauncey Clark Horton had other sources of livelihood as well. A graduate in 1856 of Iowa Conference Seminary (later renamed Cornell College, in Mount Vernon), he farmed, taught school, and later held minor public office. Although the excerpts selected here focus on his writing schools, the complete diary (September 1860-December 1862) describes planting and harvesting crops, helping neighbors, attending political rallies, and joining a volunteer militia. Typically, he wrote nearly every day, and began each entry with notes on weather—understandable for one who as a farmer was dependent on sunshine and rain, who as a schoolteacher generally walked from where he boarded to where he taught, and who as a curious and well-read young man observed nature closely.

Through the diary of "Chance" Horton—as he was known to family and neighbors—we witness a year in the life of a young man intent on improving

improvement in writing"

his own hand. He diligently practices his penmanship "birds," makes copybooks, and creates specimens. He is also intent on teaching others—and determined to collect enough tuition to make it all worth his while.

As the diary begins below, Horton is living near Monticello, Iowa. He is attending a teacher's institute when he first mentions "penmanship." As the year unfolds, he will conduct writing schools, often in two schoolhouses a day, in Jones, Scott, Clinton, Jackson, and Cedar Counties. By the next summer he will be teaching penmanship to his peers at a teacher's institute.

—The Editor



A sample of Horton's ornamental lettering. Bowen's Prairie was a community northeast of Monticello (Jones County).

OCTOBER 1861

21: . . . Attended the evening session of the Teacher's Institute. There was quite an interesting debate on the subject of procuring regular attendance at school and of exciting an interest in studies. But few teachers were in attendance.

22: . . . The institute is growing in

interest. The subjects of M. Arithmetic, Grammar, Orthography, and Penmanship were taken up and the manner of teaching them ably illustrated by Mr. Childs of Dubuque. . . .

26: . . . In the afternoon commenced taking lesson in writing on the Spencerian method.

NOVEMBER

5: Monticello. . . . Commenced taking lessons of M. A. Thayer for which I am to pay him fifteen dollars down and fifteen more when earned by writing. . . .

7: . . . Am making some improvement in writing.

8: . . . The school was very noisy

to night, much more so than on yesterday evening. Heavy frost.

13: . . . To day have tried another plan in writing. I have written each alternate line and Mr. Gage the others. Thus far the plan works admirably as we can see each others faults and correct them much better than when we write upon separate sheets.

14: . . . Have written to day on the plan adopted yesterday and find that it improves my writing much faster than writing entirely alone.

19: . . . Went to Anamosa on the [railway] cars in the P.M. Stopped with Mr. Graham. In the evening went down to the schoolhouse, through the mud and water, and found no scholars and had to mud it back again the best I could, however it cleared up and the moon shone brightly. Froze some.

20: . . . Writing school commenced to night with thirty nine scholars; and judging from their appearance and behavior the school promises to be a pleasant one.

23: . . . I am improving slowly in writing and shall be able to teach before long nothing preventing.

25: . . . My improvement in writing is slow, now, but plainly seen.

DECEMBER

4: . . . Thawing fast. Have been collecting [tuition] this forenoon, with very poor success. Three of us have been busy all day and collected but three dollars and a half.

13: . . . Commenced school [at Highland Grove, south of Anamosa] in the evening with thirty six scholars. The room is quite small and we are very much crowded. All appeared quite attentive and anxious to learn. . . .

16: . . . Commenced our second school [at Green School?] to day about two miles from the first, with twenty four scholars. Prospects for a good school look encouraging.

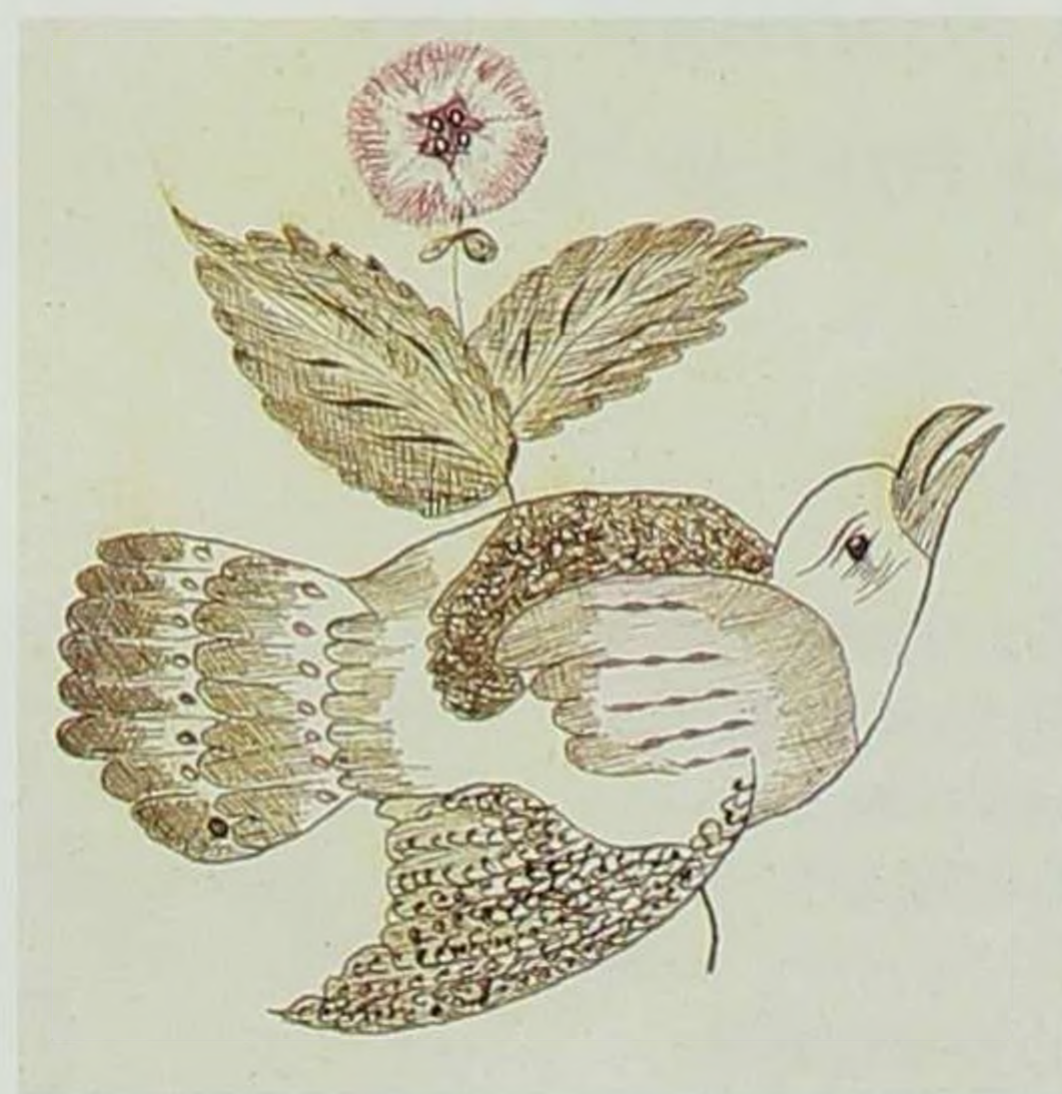
17: . . . Bought a bottle of ink for which I paid fifty cents and Frank ten.

18: S.W. wind; clear and warm. Received one new scholar in the afternoon school. Have been very busy writing copies so that I can not get

time to practice on anything else.

21: . . . At night, the attendance was good but there is not so general an interest taken as there is at the afternoon school. It is very lonesome here and getting more so every day.

22: Got up this morning about eight o'clock and found it snowing, and blowing from the East. Found no fire in either room which we are permitted to inhabit [in this place where I board] except one small coal in the fireplace, about large enough to light a pipe, and over that, some six or seven of the family were quarreling like cats to see who should have possession. By dint of persuasion, and finally by doing it myself, got a fire started in the stove when the whole family made a rush for it, like a pack of hungry dogs after a bone. The whole posse are to infernal lazy to



A robust bird ornaments one of Horton's specimen pages.

build a fire, but would rather freeze for fear they might accommodate some one else. Frank and I have stayed in the house all day for it has snowed all the time and is still snowing, with a N.E. wind, though not very cold. We have written some to make the time pass more agreeably, though on the whole it has been very lonesome with nothing to break the monotony, except breaking down a chair and the occasional slipping off of the board bottoms letting a fellow down slap, on his ___ dignity. It is now evening and the whole tribe are in the room and the old buck is look-

ing over my shoulder, to see what I am writing, I suppose, while the young ones are bleating around like April calves in a thunder storm. Whack; goes another chair bottom and I shall be obliged to hold up, for the humdrum rather increases than otherwise. Tough times these, especially for the profession we follow, or which follows us, it matters not which.

23: . . . Had two schools. In the evening were favored with some impromptu poetry by the school ma'm, Miss Sarah Secrest, which we shall be under the necessity of replying to.

24: . . . Have written a little rhyme in reply to the schoolmam, but have not finished it. Stayed at the school house to night and wrote copies after school.

25: . . . Had school at ten o'clock at the Green schoolhouse, and at half past five at the brick. Have fared exceedingly well to day, as the folks have killed and cooked a Turkey, it being Christmas. It would indeed be strange, if we did not meet one good streak in the course of two weeks or more. Yet we anxiously wait the time when we shall take our departure from this inhospitable place; and may the Furies seize E. F. if he ever gets us into another place like this illbegotten hole. The schoolmam and a number of other visitors were at the evening school and behaved very ill mannerly till they were spoken to.

26: . . . To day we are paying for the good time yesterday, for we have made a dinner out of chunks and scraps which were thrown overboard from the Ark. In a piece of bread which fell to me, I found a lump of pure T-d as large as a good sized bean, and well stuck together with hog's bristles. This may be doubted, but I will swear that it is nothing but the unvarnished truth. O! for the time of our departure! for it grows worse and worse every day, nay every hour. Attended the afternoon school alone. Had no school at the brick [schoolhouse?] on account of the cold, which was very severe.

28: . . . Went to the afternoon school alone and commenced at half

past two. Frank tried to collect some this forenoon but met with very poor success. I expect we shall have considerable difficulty in getting all our pay.

1862
JANUARY

Pioneer Grove,
Cedar County
[near Mechanicsville]

3: . . . Snow and rain all day; have made 41 books today and . . . 164 copies which has kept me very busy. . . .

6: . . . Commenced my afternoon school with seventeen scholars. Have to walk about three miles to get to it.

14: . . . There is not much to write about now, but it is write copies and go to school all the time, nearly. I do get a little time now, for practising, which I try to make the most of by improving every moment.

16: . . . Closed my evening school to night. Most of the patrons were prompt in paying up their tuition.

22: . . . Have been running through the snow all the forenoon and have collected five dollars. Frank came back again today. He pays fifteen dollars and leaves the company. He is, without doubt, taking the best course for himself and I think that I shall soon go for myself as I believe there can be more made in that way.

23: . . . Went down to the Bethel church [in Cedar County] to see Thayer. Found him and Minnie all right and enjoying themselves very well. They have a large school and in the evening, rather a noisy one. . . . My trunk, I left at Rice's Hotel in Mechanicsville until I get a school.

25: . . . I have written a very few copies to day and scribbled some.

29: The snow continued to fall till

Recipe for fine black ink
2 lb. Extract of Logwood
1 oz. Bichromate Potash
2 oz. Glycerate
4 gals. Rain water; boil and strain through a cloth.
Use:
2 oz. Extract of Logwood
1 gal. soft water, immerse gently in an iron vessel 15 minutes.
24 grains bichromate potash, 12 grains precipitated potash, dissolved in a little hot water, add to the mixture.
Wash the paper with water, and when dry, dip it in the ink, and when dry, it will be black and common.

Horton's recipe for "fine black ink" rests on his open diary.

long after dark and the weather was severely cold. Went to writing school at night and assisted all I could. It was the last night and was abundantly noisy. . . . Went down to Thayer's about noon and helped them eat an old hen that was tougher than an old buzzard. Then went to writing and this is the result. I cannot write much now for there is nothing about which to write. M. A. and Minnie are out collecting.

30: . . . Went to Tipton to day. We are boarding at the Union Hotel. I am going to have but one school this time and that in the afternoon. I am going to assist Thayer in his schools and practice the remainder of the time. I receive but half pay during this set, and expenses paid the same as usual. School commenced to night with 57 scholars. There are a few very rude boys in attendance who seem to care little whether they learn anything or not.

31: . . . Had writing school in afternoon, twenty scholars mostly

ladies, have written but little to day.

FEBRUARY

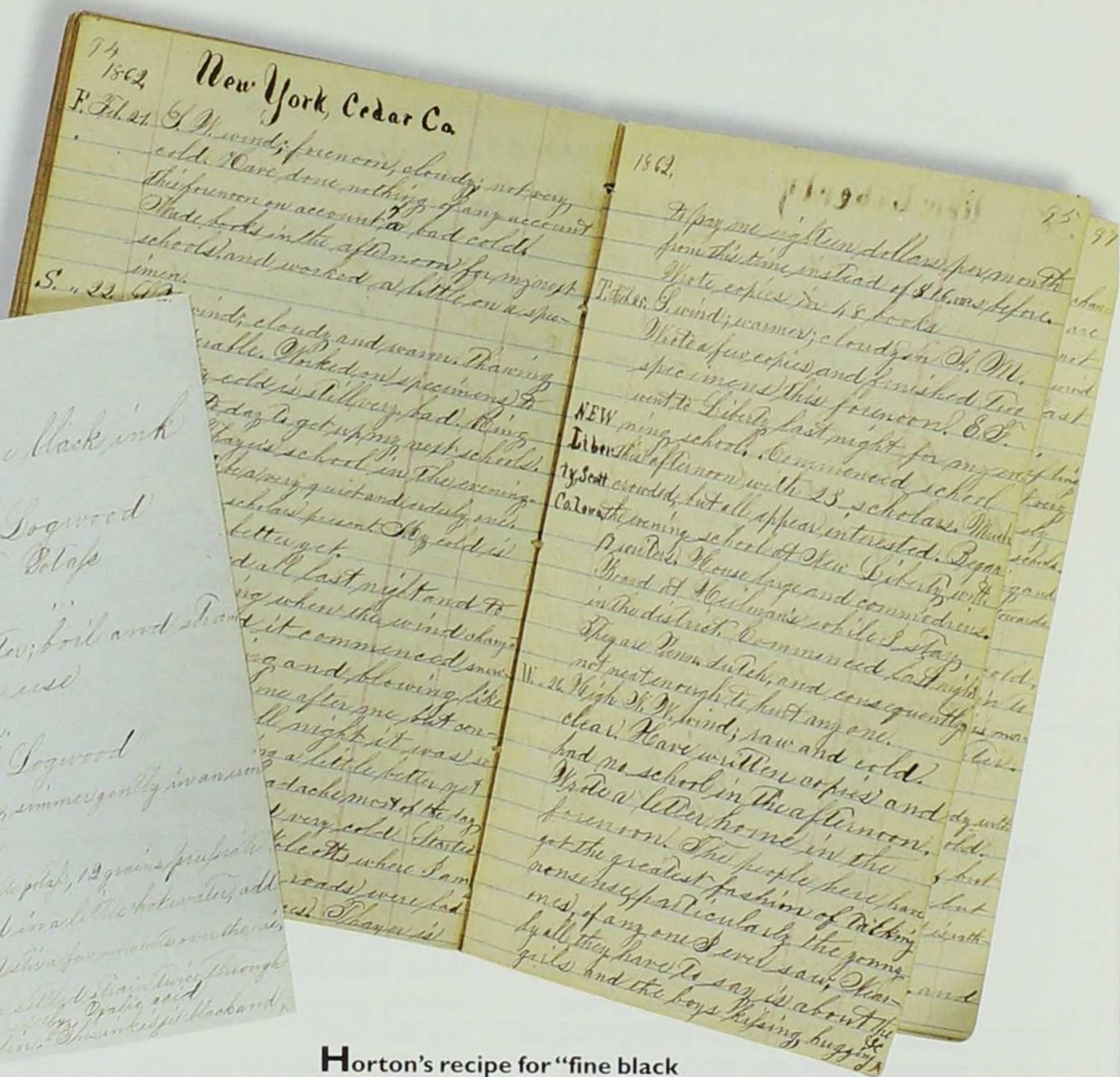
3: . . . Commenced my afternoon school with twenty three scholars. Most of them are small, yet they take hold as though they meant to do something.

4: . . . Had five new scholars to day. Had a fine sleigh ride nearly to my school. The evening school was much disturbed by a few very unruly members who do not wish to learn themselves or let others learn.

13: . . . Snow flying furiously all day. Went to my school in the afternoon and froze one of my ears. Stayed all night with Mr. Piatt. The night was intensely cold.

14: . . . Changed my boarding place from the Hotel to Mr. Beatty's. The change, I think, will be an agreeable one, at least, so far as changing from cabbage to potatoes.

20: . . . Went out where Thayer is. The distance is a little over 7 miles. . . . Am nearly sick with a cold and sore



throat. We are boarding with a Mr. Stanton. Received a letter from home. Very hard getting round on account of the deep snow.

21: . . . Have done nothing of any account this forenoon on account of a bad cold. Made books in the afternoon for my next schools, and worked a little on a specimen.

25: . . . Wrote a few copies and finished two specimens this forenoon. E. F. went to Liberty last night for my evening school. Commenced school this afternoon with 23 scholars. Much crowded, but all appear interested. Began the evening school at New Liberty [in western Scott County], with 19 writers. House large and commodious. Board at Heilman's while I stay in the district. Commenced last night. They are Penn. dutch, and consequently not neat enough to hurt any one.

26: . . . The people here have got the greatest fashion of talking nonsense, particularly the young ones, of anyone I ever saw. Nearly all they have to say is about the girls and the boys kissing, hugging, etc.

27: Had to walk to my afternoon school. Plenty of visitors to day, keeping every thing in an uproar. Have engaged a fellow to take me to my afternoon school for his tuition.

MARCH

3: . . . Snow has drifted furiously all day so that I have had no schools. Have passed the time in writing and drawing birds. Became colder towards night.

Delicate flourishes swirl around Horton's lettering, "Written with a steel pen."

12: . . . There is nothing to write as every day is very much alike in incidents. Have been reading Mrs. [Harriet Beecher] Stowe's Dred. Finished it yesterday. Do not think it is such a wonderful book as it has been puffed up to be.

13: This morning read Rip Van Winkle from Irving's Sketch Book. Clear; N.E. wind. Had but 7 scholars last night. I suppose the high wind scared them out. . .

18: . . . Evening school [near Big Rock, in Scott County] very quiet and much interest manifested. Dark and muddy going home. Froze some during the night.

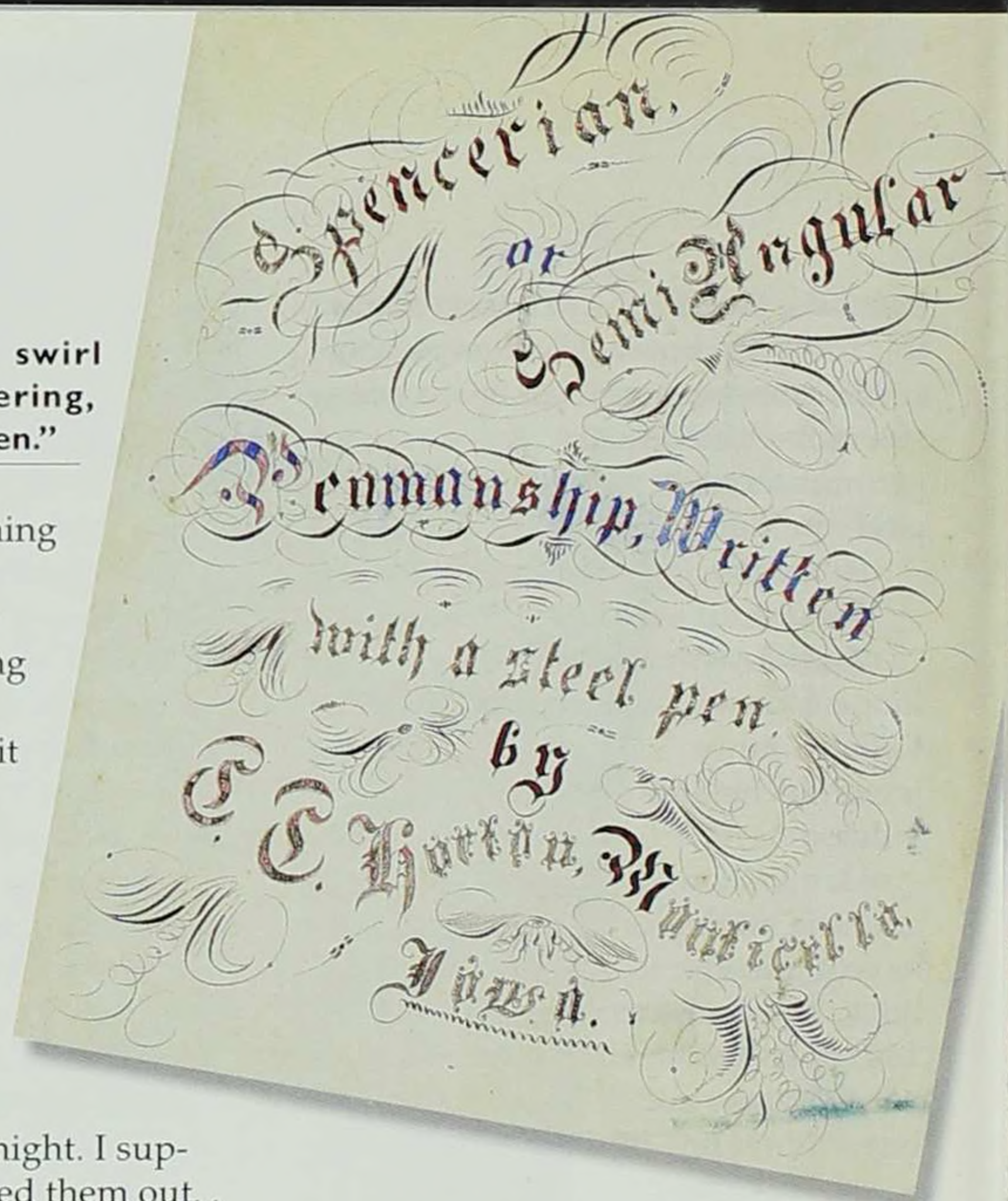
25: . . . Went to my school on foot and when I came back the water had raised so as to carry off the bridge and I was thus forced to walk nearly a mile farther than usual. Partially clear. Heard a lark, for the first time, this afternoon.

APRIL

22: Westerly wind; clear and cool. Mate and I went about two miles this forenoon to see a machine sow wheat broadcast. P.M. Minnie and he went to town. Closed my school this afternoon. All except one paid promptly. Went to meeting in the evening. Have bought my writing trunk, holders and ink stands, paper and pens, of Mate, today, for which I allow him \$5.55. I am also going on my own account when I finish my present schools. Quite cool in the evening.

23: Cold all day. Received a letter from home this afternoon which informed me that [my

Under a bower of flowers, "C. C. Horton, Teacher of Penmanship," practices a contract.



brother] Elias had enlisted. I hardly know what to do, everything, it appears, is at loose ends as it were. Have done but very little to day.

MAY

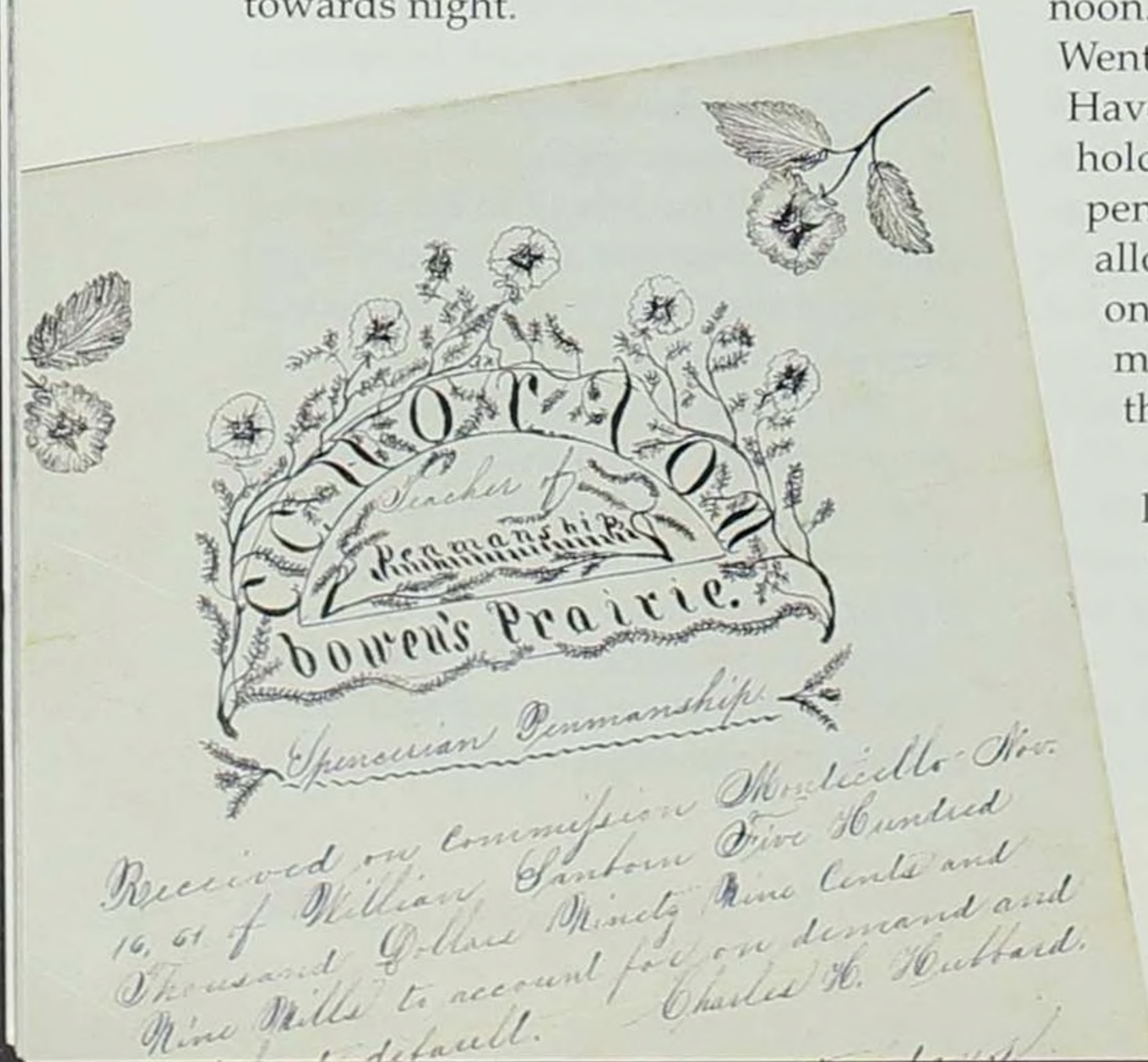
10: . . . Mr. Thayer came up to day. We have concluded to stop our business with the present schools and go home. . .

12: . . . The plum trees began to show their blossoms yesterday, and to day are in full bloom. All the trees are putting out leaves very fast. P.M. heavy thunder shower. But few scholars were out to day. Rain in the evening so that I had no school. Received my specimens from Maquoketa this forenoon.

13: . . . Closed school this evening. This is my 29th birthday. On my last I promised to make some improvement in the coming year, and have done so in respect to penmanship, and the coming year, if life and health are spared hope to make a great deal more.

JUNE

13: . . . Attended the Teacher's Association at the Congregational Church. Quite a number of teachers were present, and all manifest a good degree of interest. Conducted most of the exercises in penmanship. ❖



Journey back

through time with
Iowa Heritage Illustrated—
your tour guide to
Iowa's amazing past



Detach & mail today!



Give a gift

subscription of
Iowa Heritage Illustrated
to a friend, relative,
colleague, or your
favorite library.
You'll save 20%
off the single-issue
price — or even more
if you order 2 years'
worth of colorful,
intriguing issues.

If tear-out subscription cards
are missing, or to order by
phone, call 319-335-3916.

Send Iowa Heritage Illustrated to me!

YES! Please start my subscription to *Iowa Heritage Illustrated* on the terms I have indicated below.

- 1 year: \$19.95 2 years: \$35.90 (I save \$4.00)
 New subscriber Renewal

Name _____

Address _____

City _____

State/Zip _____ Phone _____

- Payment enclosed. Bill me later.
 Bill my (circle one): VISA MasterCard

Card # _____

Expiration Date _____ Signature _____

Send Iowa Heritage Illustrated as a gift!

GIFTS! Please send *Iowa Heritage Illustrated* as a gift subscription
and send a special card announcing the gift in my name.

- 1 year: \$19.95 2 years: \$35.90 (I save \$4.00)
 New gift order Renewal

Gift for _____

Address _____

City _____

State/Zip _____ Phone _____

Gift from _____

Address _____

City _____

State/Zip _____ Phone _____

- Payment enclosed. Bill me later. Bill my (circle one): VISA MasterCard

Card # _____

Expiration Date _____ Signature _____

Send Iowa Heritage Illustrated as a gift!

GIFTS! Please send *Iowa Heritage Illustrated* as a gift subscription
and send a special card announcing the gift in my name.

- 1 year: \$19.95 2 years: \$35.90 (I save \$4.00)
 New gift order Renewal

Gift for _____

Address _____

City _____

State/Zip _____ Phone _____

Gift from _____

Address _____

City _____

State/Zip _____ Phone _____

- Payment enclosed. Bill me later. Bill my (circle one): VISA MasterCard

Card # _____

Expiration Date _____ Signature _____

Place
Stamp
Here

**Iowa Heritage Illustrated
State Historical Society of Iowa
402 Iowa Ave
Iowa City IA 52240-1806**

Place
Stamp
Here

**Iowa Heritage Illustrated
State Historical Society of Iowa
402 Iowa Ave
Iowa City IA 52240-1806**

Place
Stamp
Here

**Iowa Heritage Illustrated
State Historical Society of Iowa
402 Iowa Ave
Iowa City IA 52240-1806**

Iowa Heritage Illustrated

One in a Million

Among the millions of items in the collections of the State Historical Society of Iowa is a rooster that played an important role in World War I.

In 1917, Iowa heeded President Woodrow Wilson's call to contribute to the war effort. To raise money for the Red Cross, Iowans donated items to be sold at public auction—including furniture, farm implements, livestock, and hay. Mark Dunkerson, a farm hand near Fontanelle, Iowa, donated a live rooster.

Enter auctioneer D. R. Jones, of Casey, Iowa. Jones (below) and his partner Ed Mienkey staged one of their Red Cross auctions in Fontanelle, and sold Dunkerson's rooster for fifty cents. But the new owner refused the rooster and asked that he be sold again. And he was, for another half dollar. The second owner also refused him. The crowd made a game out of the bidding, with the rule being that no one could keep the rooster more than five minutes. By the end of the evening, the rooster had raised nearly \$300 for the war effort.

Now dubbed "Jack Pershing" (perhaps after U.S. General John Pershing), the rooster and Jones hit the road, traveling to auctions in Iowa and South Dakota. When traveling by rail, Jack Pershing was too valu-



able to put in the baggage car, and conductors tended to frown on Jones boarding with a chicken coop. After a little friendly conversation, Jack Pershing and D. R. Jones usually traveled in the smoking car, there the center of attention.

And they remained the center of attention at auc-



tions, too. As the *Audubon County Journal* later reported: "While Jack, seemingly appreciative of the demands and dignity of his new station (and without a moment's training) perched proudly on Jones' shoulder, cocked his head understandingly and mingled his shrill tones with the cheering crowds by crowing lustily, Jones unloosed his inspired eloquence in a plea for action, at once, forthwith, and without delay." Besides Fontanelle, Iowa communities where the rooster was auctioned included Adair, Audubon, Berea, Canby, Cumberland, Exira, Fisk, Waukee, Eureka Township in Adair County, and Lincoln Township in Cass County.

As Red Cross fund-raising efforts grew more organized, Jones retired Jack Pershing to his own flock. And "in due time," the *Journal* tells us, "while he was yet plump, and husky, and handsome, he was humanely put to death." Taxidermist E. C. "Gene" Wilson of Exira mounted the rooster, and he was offered to Edgar Harlan, who as state curator of Iowa's historical collections accepted him as a true "Iowa product."

All told, Jack Pershing had traveled some 8,000 miles and raised nearly \$40,000—in today's terms, three-quarters of a million dollars.

— by Benton Sen
student editorial assistant

PHOTO BY JAMES C. HIPPEN



Crossing the Des Moines River in Kossuth County, this Marsh Rainbow Arch bridge was built in 1916 and is one of only nine such bridges in Iowa today. Iowan James Barney Marsh patented the design in 1912, applying his sense of aesthetics and economy to a revolutionary new building material, reinforced concrete.