A Few of Our Favorite Things

100 Creations of the 20th Century

by Jack Lufkin

Artifact photography
by Chuck Greiner and Wayne Johnson

emember the millennium hoopla of 1999, when bookstores, magazine racks, and Internet web sites offered up various lists trumpeting great accomplishments of the century? The list ranking the 100 greatest movies, according to the film industry, stimulated considerable discussion in our household. How, I asked, could those Hollywood types leave out one of my childhood favorites, The Great Escape? Meanwhile, my wife was dissatisfied with the ranking of her favorite movie, The Sound of Music. We both wondered how movies we had never even heard of could rate so high on someone's list. "What a subjective endeavor!" we declared. The same went for other end-of-the-century lists for the greatest athletes, novels, or inventions, or the most influential American women, rock stars, or pop artists.

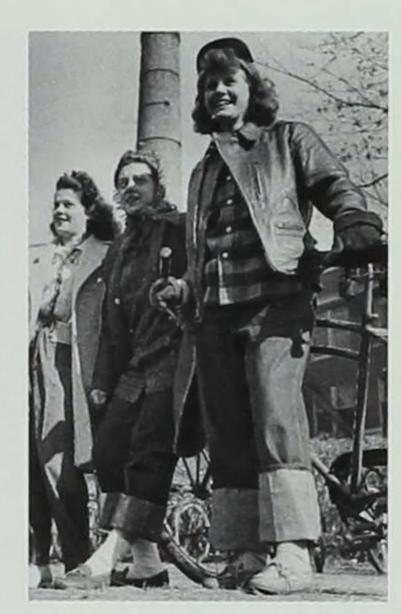
Yet I recalled those lists as I faced the daunting assignment of creating a museum exhibit about the

20th century in Iowa. I needed an interpretive "handle" for such an enormous and overwhelming subject, and I needed a practical approach for revealing history through tangible objects (rather than through discussion of social movements and events). The various "100 Greatest" lists sparked an idea. If film moguls could propose the 100 top movies of the century, then why couldn't a museum curator present an exhibit of 100 signature "things" of 20th-century life in Iowa and America?

The next question was how to decide upon a mere 100—when hundreds more are justifiable. How could one decide fairly? And based on what criteria? Should we celebrate the century's technological prowess by showcasing the most important inventions? Or should the exhibit embody a magical, nostalgic aura? Should we focus upon the many medical breakthroughs that allow us to live longer than our ancestors? What about having fun and displaying the dizzying number of







20th-century fads, foods, and fashions? The longer I researched 20th-century milestones and developments, the longer my list of possibilities grew.

Gradually, the selection criteria emerged and the exhibit took shape as A Few of Our Favorite Things: 100 Creations of the 20th Century. You hold in your hands this special collector's edition of Iowa Heritage Illustrated, as a companion publication to the exhibit. And as you read this issue and visit the exhibit in the State Historical Building in Des Moines, keep in mind how the 100 things were chosen.

irst, the things exhibited must have been new, or primarily linked, to the 20th century, even if they were conceived or invented earlier. Take the automobile, for instance. Its historical roots date back to the late 19th century, but how can one address 20th-century Iowa without including automobiles? The same can be said for telephones, movies, and even soft drinks. Furthermore, the precise origins of some things are hazy and indefinite. For example, when exactly did jazz begin? Or try giving me the year that the first hot dog was introduced, and I'll cite an expert who provides a different date, and another who claims yet another. Yet you would rarely if ever find an Iowa restaurant listing hot dogs, wieners, or frankfurters on its menu prior to 1910.

Second, I avoided picking obscure items and instead chose those that would have been commonly recognized by most Iowans at one time. Many revealed irresistible, amusing beginnings (like flashlights and teddy bears).

Third, rather than including many "technology enablers" (like vacuum tubes, transistors, optic fibers, and microchips), I chose products that sprang from these breakthroughs (like radios, televisions, and computers). Many are the results of what one historian dubbed magic wands of recent technology: miniaturizing, synthesizing, and digitizing.

Fourth, while featuring historically significant objects, I also wanted to include some things to represent our fad-crazed culture. Hence Hula Hoops, a rage during the summer of 1958, made my list. One authority reports that these simple, cheap, plastic rings were the greatest fad of all time. Other items, such as Barbie dolls, survived fad-dom and became cultural icons. For the sake of balance, and to avoid creating an exhibit that merely sparked a sense of nostalgia, I included only a few fads. Therefore, mood rings, Rubik's Cubes, and Mah-Jongg (the 1920s board game, not the popular computer game) did not survive the cut. (You will, however, find a Mah-Jongg



game exhibited with another category, flapper garb, as a way of evoking the spirit of the 1920s.)

Fifth, I included things that have had an effect on life in Iowa, whether major or minor, short-term or long-lasting. Obviously, then, basketball and hybrid corn are included, but the 1940s development of the aqua lung and scuba gear sank from my short list. Although they were significant innovations of the 20th century, they offer little to our understanding of the history of non-maritime Iowa.

Sixth, to engage the perspectives of the thousands of school-age children who visit our museum (and who just might develop a lifelong interest in Iowa's history), I included kids' stuff, hoping that our young visitors might ponder what life was like before wax crayons, comic books, sneakers, or Monopoly.

Seventh, as Iowa's state history museum, we would be remiss not to include inventions by Iowans. Examples in this category include Sam Blanc's Roto-Rooter, John Naughton's Den-Tal-Ez Chair, Christian Nelson's Eskimo Pies, George Gallup's opinion polls, and Walter Sheaffer's self-filling fountain pens.

Eighth, I wanted to include objects popular during different time periods, from the early 1900s Brownie camera, to the explosion of inventions attributed to the world wars, to baby boomer items like electric guitars, to a few current-day items. Sometimes, the inclusion of a particular "thing" just intuitively felt right, and, quite by accident, a chronological balance emerged.

he results of these eight criteria is an exhibit unlike those commonly seen in history museums in general, and unlike any other exhibitions in our museum. A Few of Our Favorite Things: 100 Creations of the 20th Century contains no binding interpretive theme or chronological story linking one item with another. Each of the 100 subjects is presented on its own terms. As with a magazine featuring 100 stories (in fact, like this special issue of Iowa Heritage Illustrated), you turn the page and find a different story not necessarily linked to the one you just read. We've gathered together for you a blender full of items of paramount significance, whimsical turns, and quirky beginnings. Taken together, they do relate to each other in many ways, but you must make your own connections.

And are all of these things truly "our favorite things," as the exhibit title might suggest? That, too, is for you to decide. Over time, some stirred great public controversy or proved to be mixed blessings.

Obviously, many things represent technological mastery, dazzling insight, creative energy, and sheer chutzpah to develop new ideas. These artifacts amplify and corroborate the claim that the past century was indeed the "American century," thanks largely to the vast number of America-originated scientific, technical, medical, and marketing achievements and an economic and political system that made innumerable breakthroughs possible.

Some of the 100 things and their progeny offered new entertainment. Some saved our lives, many improved our health. Some forever altered our lifestyle, some are time-saving conveniences, some show our fickle side. Some made our job duties totally different from those of our ancestors. Some reveal genius—or serendipity. Some evolved from novelties to necessities. Some sparked soaring dreams of future possibilities; others spawned cynicism about humankind. Some things seem remarkably stupid, causing us to wonder why they were ever so popular. Some things make us feel smug about how far we have come. Still others make us feel humble about what may come in our future. All of these things helped define and shape life in Iowa from 1900 to 1999.

In fact, A Few of Our Favorite Things is an overview of our complex human experience. Taken together, these things represent the human need for recognition, our impulses for both good will and greed, altruism and instant gratification. Paradoxically, society has developed things both capable of saving lives and killing people in vast numbers, and things that have both divided us and united us. In essence, these things are really about people—about you and me.

Jack Lufkin is a museum curator at the State Historical Society of Iowa and is the project curator for A Few of Our Favorite Things: 100 Creations of the 20th Century. He has curated other Society exhibits on political caucuses, automobiles, African Americans, and the Iowa insurance industry.



The Wright brothers' successful flight at Kitty Hawk, North Carolina, in 1903, launched the age of aviation. Their invention got a big boost after World War I. Barnstormers such as Neta Snook (right) recaptured the glamour achieved by fighter aces over European battlefields. Their daring exhibitions of flying skill over the fields of lowa, along with the simultaneous achievements of airmail pilots, brought the possibilities of flight home to lowa.

Aviation got another big boost after World War II. By 1948, University of Iowa researchers reporting to the state legislature on behalf of the lowa Aeronautics Commission could state that "flying, no longer a specialty of crackpots and mechanical geniuses, is serious business which merits the consideration of all serious-minded people in lowa."

"I do not know of any work that has more ups and downs than building aeroplanes and learning to navigate them," lowan Oscar Solbrig said in 1914. Three years later, he and his wife, Mary, built this biplane (left), using a Benoist tractor (or front propeller) biplane and an engine from an earlier Curtiss pusher. Below: Neta Snook studied mechanical drawing and engine repair and maintenance at Iowa State College, and then trained at the Davenport Flying School in 1917.



SHSI (IOWA CITY)

Metal Erector building sets were popular in the 1950s. Below: Lincoln Logs and Tinker Toys from the 1920s.

NEDLN LDES

Building Toys

Building toys, whose origins extend back hundreds of years, have long been applauded by educators, as well as by parents and children.

A number of popular variations of toy building blocks have 20th-century origins and are made of wood, metal, or plastic. Although toy building logs were first sold in the 1860s, Lincoln Logs were created in 1916.

Named for Abraham Lincoln, they were the idea of John L. Wright, son of world-famous architect Frank Lloyd Wright. Wooden Tinker Toys were invented about 1915, and wooden Legos in 1935 (followed by plastic Legos in 1949).





Enriched & Sliced Bread

Commercially baked bread rose in popularity as more women worked outside the home and as innovations like factory-slicing (1928) and motorized delivery retained product freshness and added convenience. By 1930, 60 percent of the bread consumed in America was commercially baked (up from only 10 percent in 1850, and 25 percent in 1900). Even in a rural state like Iowa, according to a 1930 poll, three out of four farm households purchased commercially baked bread.

During World War II food shortages, federal health authorities feared outbreaks of diseases caused by nutritional deficiencies. In response, commercial bakers enriched bread with iron, niacin, thiamin, and riboflavin, the nutrients lost during milling and bleaching of the flour.

Underneath a Colonial Bread advertising sign, Arthur Collins Jr. sits with his grandfather on the steps of Meis Foods in Cedar Rapids in the 1960s. Colonial Bakery opened in Des Moines in 1926. Within ten years, it was the world's largest bakery.

Electric Guitars



More than any other instrument, electric guitars influenced 20thcentury popular music, including blues, country, jazz, rhythm and blues, and, of course, rock and roll.

George Beauchamp and Adolph Rickenbacker, who devised an electromagnetic pickup that amplified guitar string vibrations, marketed the first commercial electric guitar in 1931. Guitarist Les Paul and others, such as Leo Fender, experimented with solid-body guitars, trying to minimize vibrations and feedback. Fender also helped develop the amplifier.

Surrounded here by cardboard cut-outs of B. B. King, Ace Frehley of Kiss, and Les Paul, a Sears Silvertone electric guitar rests against its case. Introduced in 1962, the Silvertone was a beginner instrument for thousands of youngsters dreaming of musical stardom. The pickup was housed in a lipstick case under the strings, the top was made of Masonite, and the carrying case held a small vacuum-tube amplifier.

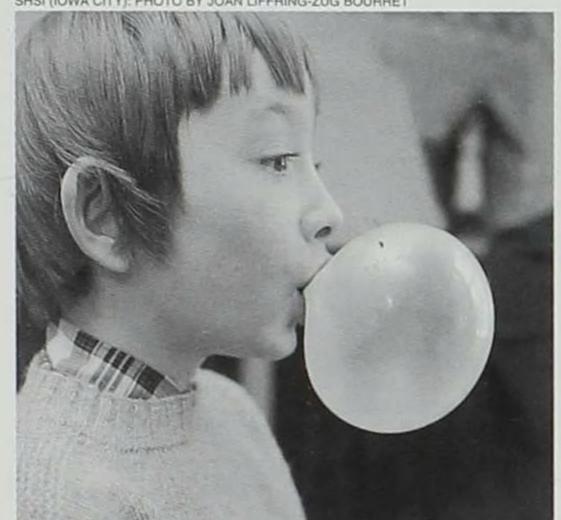
: First-hand

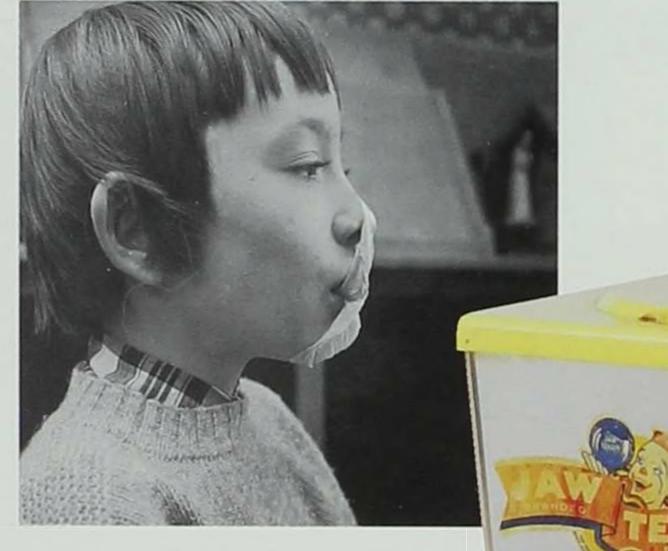
began taking guitar lessons with my sisters when we were attending country school. My folks were intro-: experience : duced to a music teacher who lived in Carroll, lowa, by a neighbor family.

This teacher was a very talented man and he was called Mr. Bell. He would come to our school, drive us home, give us a lesson, and then take us back to school every two weeks. After starting on a regular guitar I wanted an electric guitar to play really bad. My dad came up with a plan to earn money so I could buy one. For three years running, he gave me a runt pig from his litters. I was very diligent in the way I cared for each one and soon had each ready for market. When Dad would take them to

market each year, I was unable to go. You see, each pig had become a special pet. Slowly the money accumulated and I was able to purchase my Gibson electric steel guitar. It was in the early 1940s. At nine years old I was ready to begin to learn how to make music with my special guitar.... With such dedicated parents each one of my sisters and I learned how to play an instrument. We became experienced enough that we were called upon to entertain others. We played different types of music but for me, when we played Hawaiian music, I got to shine....

One of the best places I found to practice was on our front porch. I would turn up the volume and could be heard all around the farm. My folks, particularly my mother, Ruth Hoskins, loved to hear me play. I don't -Elaine Parker, Manly, Iowa know about the farm animals.





Bubble Gum

Alas! The Fleer brothers' first bubble gum—Blibber-Blubber Bubble Gum-failed in 1906 because the bubble was too wet and burst too soon. Fleers' Dubble Bubble, invented in 1928 and introduced in 1937, worked better and became an instant hit.

Meanwhile, bubble gum inserted in packs of baseball cards appeared in stores in 1930, and native Innuit people began chewing bubble gum more than whale blubber. In 1954 Dubble Bubble introduced a televised bubble-blowing contest.



Bubble gum vending machine, ca. 1970.



Pacemakers

Maurice Brewer of Altoona used this Medtronic pacemaker (actual size) in the early 1970s. Pacemakers are battery-powered generators connected to the heart. They are generally used for a slowly beating heart. Today's pacemakers are much smaller than this one.

These seemingly miraculous heart-regulating devices have saved hundreds of thousands of lives. As early as 1932 an American scientist suggested that a "pacemaker" could replace faulty electrical impulses from the brain to the heart. The first pacemaker was implanted in 1959 in Sweden.

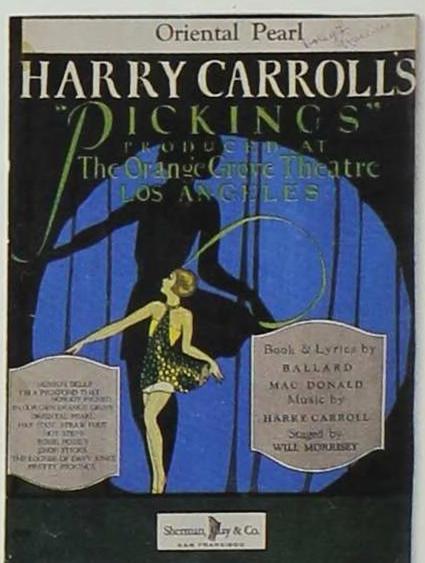
Flapper Garb

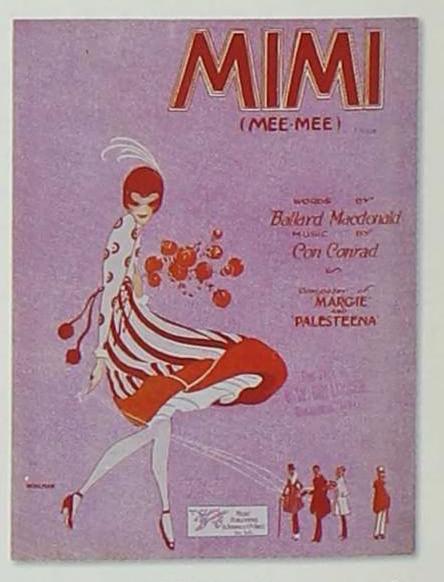


Although the term "flapper" originally referred to French prostitutes seen by American troops during World War I, it came to have a different meaning in the 1920s in the United States. Here, flappers signified a free spirit, social rebellion, and a sassy, Jazz-Age style. Flappers wore short skirts, drank gin (despite Prohibition), puffed on cigarettes (new for women), danced the Charleston, and bobbed their hair (held in place by a new invention, the bobby pin).

Also popular in the 1920s was Mah-Jongg (below), a combination of dice and dominoes. Originally a gambling game among men in China, it became very popular among American women in 1922, even outselling radios, another popular diversion. The Mah-Jongg mania subsided by the mid-1920s.







Covers of 1920s sheet music feature flappers.



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Sneakers

The idea of rubber soles on canvas shoes marked the birth of the general-purpose athletic shoe. Rubber soles meant quiet footsteps—hence, the term "sneaker." In 1917, U.S. Rubber introduced the first popular sneaker, Keds (combining the words "kids" and "peds"). Converse All-Star basketball gym shoes appeared in 1931; the design today remains basically unchanged. Waffle-soled Nikes, designed to improve an athlete's traction, appeared in the early 1960s.

Gene Rawls of Johnston wore these Converse All-Stars in the 1990s.

GRAND III. SAT KEOKUK AUG.30-31-SEP WARNER BROS.



Colorful and dramatic lobby cards and window posters heightened anticipation of those waiting in line. From left: Anthony Adverse (1936), Sinbad the Sailor (1946), King Cowboy (1928), Ransom (1956), and Annapolis Farewell (1935). Right: The Pastime Theater in Iowa City, in mid-1940s, advertises air-conditioning, Coca-Cola, and Joan Bennett and Don Ameche in Girl Trouble, as well as The Riders of the Purple Sage and The Miracle of Morgan's Creek.

Movies

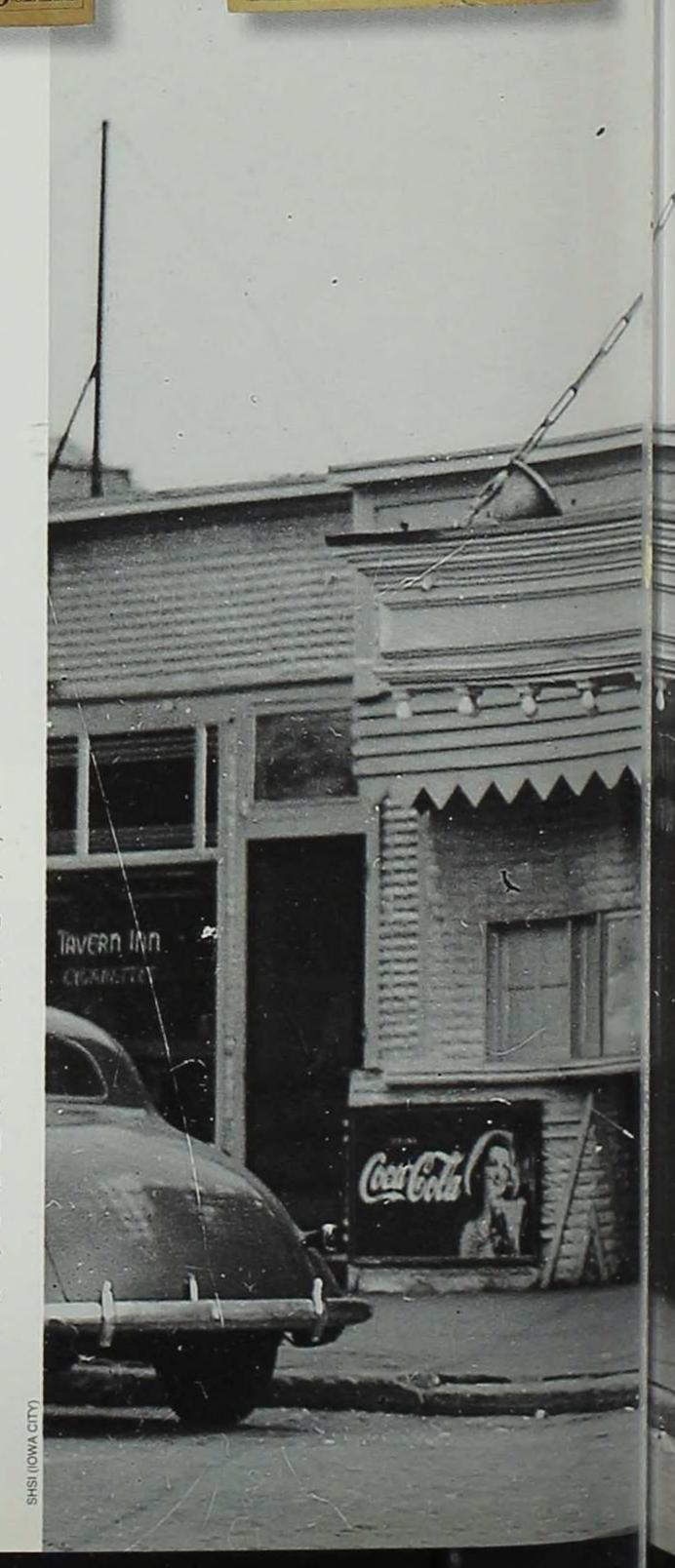
Movies are considered the major art form of the 20th century. After pioneering work by America's Thomas Edison and France's Lumière brothers, nickelodeons appeared in America by the thousands in the early 1900s. For a five-cent admission, viewers could watch early motion pictures. The first major movie with sound, or "talkie," was The Jazz Singer in 1927. By the late 1930s, the industry featured color films.

: First-hand experience

The first time I ever went to a movie was when I was a sophomore in high school (1925). There were theaters in Cedar Rapids and also the Garden Theatre in Marion. I remember my sister coming home from Cedar Rapids when she was in high school, and telling about seeing The Birth of a Nation movie.

She thought it was a wonder of wonders. The rest of the family hardly knew what she meant because we hadn't ever gone to a movie.

All movies were silent until around 1930 when "talkies" first were used. Before that the conversations were printed below the picture. Always there was a newsreel showing recent important happenings in the nation. Sometimes we had read about them, but in the newsreel we could actually see what happened and how. Also there was a serial. This was a short episode from a longer, especially exciting movie shown in part on certain nights or afternoons of the week. Each episode stopped in a most exciting place—just as the hero fell over the cliff and was still falling, or some such. It was one means of promoting business, because people wanted to know how the —Carolyn Kahler Siver, submitted by Suzanne Kahler Neil, Cedar Rapids, Iowa story turned out.







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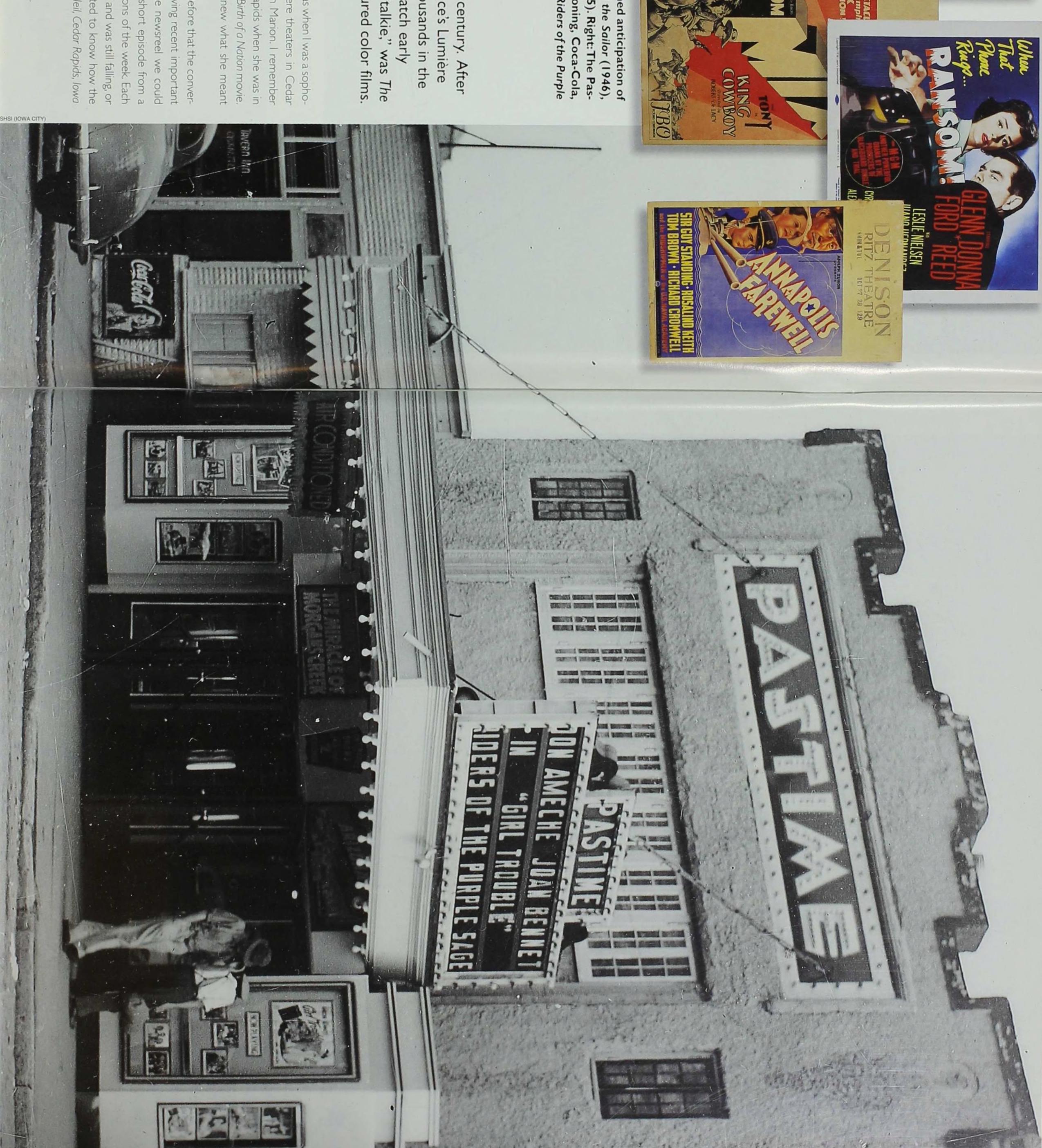
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—Carolyn Kahler Siver, submitted by Suzanne Kahler Neil, Cedar Rapids, lowa



Wristwatches

This early 1900s pocket watch converted into a wristwatch was used in World War I by army captain John C. Christopher of Red Oak, Iowa. Early in the 20th century, pocket watches were falling victim to external forces—fashion, aviation, and war. In the early 1900s, many men's jackets were no longer made with pockets for pocket watches. In 1908, Louis Cartier, brother of the famous jeweler Pierre Cartier, fashioned the first known wristwatch as a practical measure for an aviator. During World War I, the British needed to synchronize troop movements, and pocket watches tucked under uniforms and big coats were cumbersome to reach. All these changes eventually dictated that men would set aside pocket watches for wristwatches (even though many considered them feminine).

The wristwatch became waterproof in 1926, self-winding in 1931, accompanied by date and calendar in 1945, and battery-powered in 1957. The most popular brand of wristwatch, Timex, debuted in 1946, selling for \$6.95 (about \$63 in today's dollars).

Pajamas

In Hindu, the word pajamas means "drawers." Some believe that pajamas originated in India. After the Spanish-American War, the New York Times reported that American soldiers had become accustomed to wearing pajamas. By World War I, Americans increasingly wore pajamas to bed instead of nightdresses for women and nightshirts or long underwear for men.





Jazz

This uniquely American musical form developed from African-American work songs, field shouts, hymns, and spirituals, with African harmonies and melodic elements. Characterized by improvisation or embellishment of a theme, jazz evolved from blues and ragtime and spread from New Orleans and Chicago.

> Jazz became a household word during the 1920s through immortal musicians and composers such as cornetist Bix Beiderbecke. Born in 1902 in Davenport, Iowa, Beiderbecke left school as a youth and became a musician. In 1923, he played cornet with the Wolverine Orchestra in Chicago (in the photo above, he stands with legs crossed) and later moved to New York and played in Paul Whiteman's orchestra. He succumbed to alcoholism and died of pneumonia at age 28.

> Jazz underwent many evolutions, including swing, a form popularized by Iowan Glenn Miller—composer, arranger, trombonist, and band leader. Miller (left) was born in Clarinda in 1904 and left college in Colorado and became a professional musician. He worked with a number of prominent big bands before heading his own band and recording many hits from 1939 to 1942. During World War II, he joined the army, playing music for the troops. A casualty of the war, he died in a plane crash in 1944.



Washers & Dryers

Traditionally, doing laundry was considered the most dreaded household chore, and wash day, consisting of long, hard, manual labor, was called "Blue Monday." The first electric washers with a self-contained electric motor appeared in the early 1900s, including Maytag's first electric model, the Hired Girl. Maytag, in Newton, lowa, revolutionized the washing machine industry with the 1922 introduction of the Gyratator, and its innovative agitator with vanes.

Automatic washers were widely available and purchased in the 1940s. Improvements included spin-dry models with lint filters and different speeds. Clothes dryers, developed in the 1930s, were less commonly used until the 1960s, when Maytag pioneered electronic dryer cycles with temperature controls.

A 1912 Voss washer, manufactured in Davenport and sold at Suvalsky's Master Appliance Company in Council Bluffs.

: First-hand : experience

Running hot and cold water, an automatic washer and dryer, and washand-wear fabric have freed me from years of drudgery. I've pumped water and carried it into the house in

buckets [and] heated it on the kitchen range in a boiler for the family laundry. I also carried water for drinking, cooking, and cleaning. I've used all types of washing paraphernalia, from a washboard to a modern automatic washer. I line-dried clothes for years, dodging rain, bugs, wind, and broken clothes lines in summer. In winter, I froze my fingers hanging up wet clothes and taking down frozen ones. (I still enjoy the freshness of laundry line-dried.) I've used an iron heated on a range, a gas iron, and an electric iron. It seemed like there was always a basket of ironing waiting to be finished. The automatic dryer solved my drying and ironing problem. The good old days were good in some ways, but when it comes to laun-

dry, I will take the good old today. —Margaret A. Callaway, Whitten, Iowa

During the forties, my father sold Maytag appliances in a small town in Ohio. He sold one of the first automatic washers to a local farmer, who bought it for his wife. My father delivered and installed it for her and, since she had never seen one in operation, he guided her through her first washing. When the load was finished the woman opened the lid, expecting to see the clothes lying in the water as in her old wringer washer. The water had, of course, been spun out, and the clothes were plastered to the side of the drum, giving her the initial impression that the washer was empty. "What's happened to my clothes?" she asked, in some panic. My father replied, with a perfectly straight face, "Oh, I forgot to tell you, the first load goes down the drain."

"Oh my gosh," she exclaimed, "those were my husband's best shirts!"
—Edwin Lewis, Ames, lowa



and it is known today as the world's

most popular board game. (Right:

the 1937 version.)

Miniskirts

Cristine Birks, of Hubbard, Iowa, wore a green miniskirt on the sunny day in 1971 when she and a friend strode along a beach in Blackpool, England.

England was the birthplace of the miniskirt, and British clothing designer Mary Quant was its creator. Quant wanted a skirt to allow women "to dance, to move, to be." She introduced the miniskirt at her hip London clothing boutique, Bazaar, in 1965. It became a fashion rage the following year. The miniskirt has come to symbolize the sixties youth culture and, for some, women's liberation.

SALEM, MASS., NEW YORK, LONDON U.S. PATENTS 1509,512-2,026,082 BOARDWALK

With HOTEL \$2000.

Mortgage Value \$200.

Houses cost \$200, each Hotels, \$200, plus 4 houses

With 4 Houses

In 1904, Elizabeth Magie of Virginia created The Monopoly Landlord's Game as a political statement against capitalism. The game had railroads, utilities, and rental properties, and jail, luxury tax, and parking spaces. It evolved towards its present MONOPOLY REG. U.S. PATENT OFFICE form and name as college students played it in economics classes. a Parker Trading Game In the early 1930s, financially strapped Charles Darrow encountered a similar game called Finance, which used Atlantic City place names, as in today's game. Darrow began making sets for sale. Parker Brothers initially rejected Darrow's game, then reconsidered it and named it Monopoly. By 1936, over 200 million games had been sold,



This Shenandoah Super 6 radio was made by Steinite Radio Co., 1925, and sold by radio and seed entrepreneur Henry Field on his KFNF radio show in Shenandoah, Iowa.

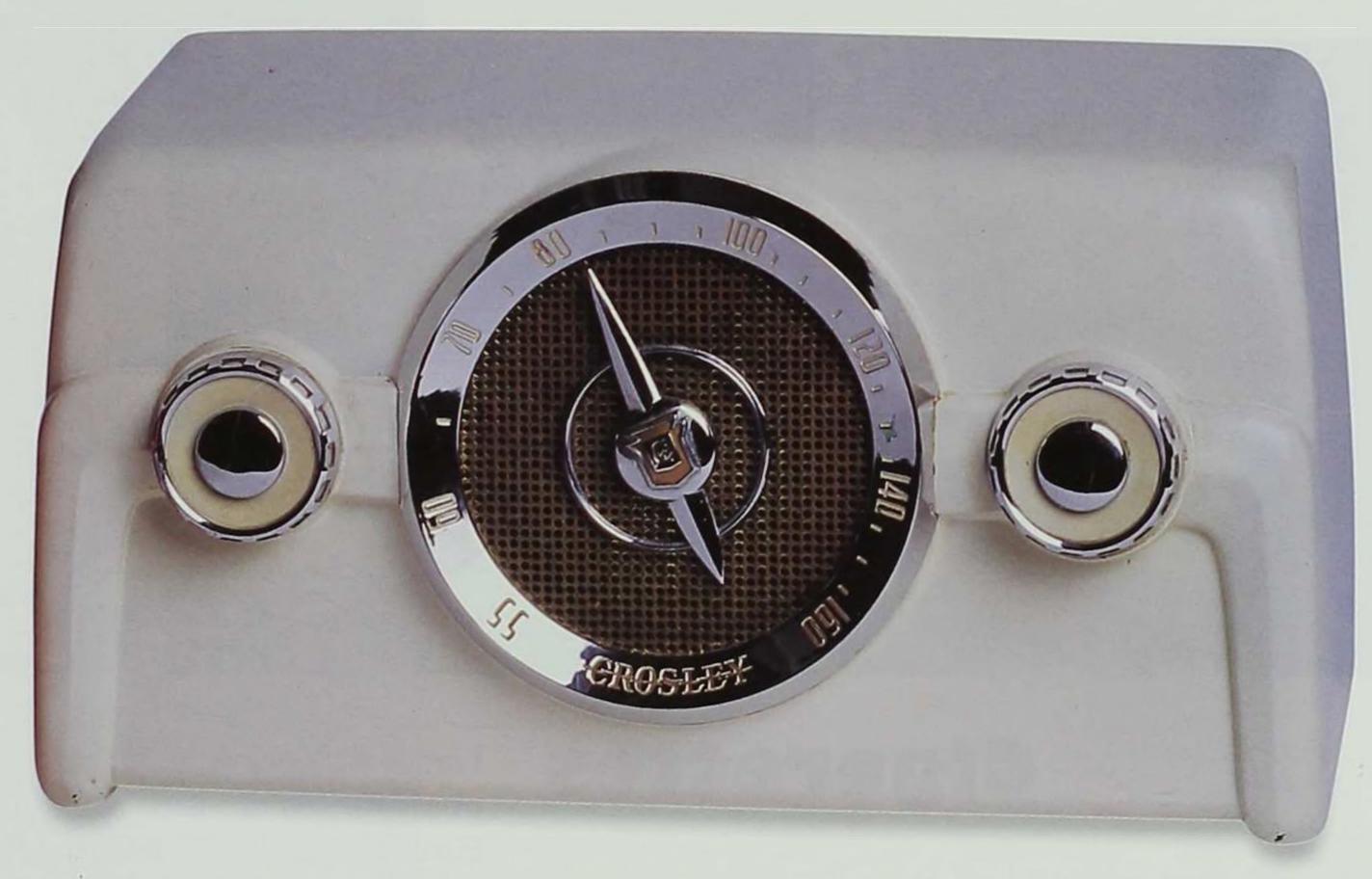


Radio

Radios connected lowans to the rest of the world. Commercial radio developed in the early 1920s and was especially popular in lowa because it mitigated the isolation of rural living.

The "wireless," or radio, was born when Italian Guglielmo Marconi proved in 1901 that an electromagnetic wave could travel without wires over a long distance. In 1906, American Lee De Forest invented the vacuum tube, which amplified sounds to a receiver. Advancements continued. Mid-century vacuum tubes gave way to smaller and more powerful transistors, which later gave way to silicon chips.

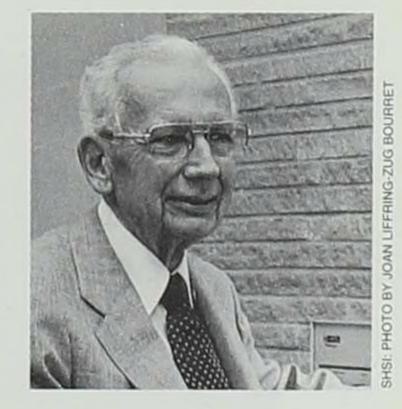




As radios became smaller and more powerful, they also became the constant household and even traveling companions of their listeners. A 1962 coral-colored Sears Silvertone transistor radio was the essence of portability. This white Crosley radio brought Margaret Cheney Larsen Harmon news and entertainment; it sat on her refrigerator from the 1950s to the 1980s.



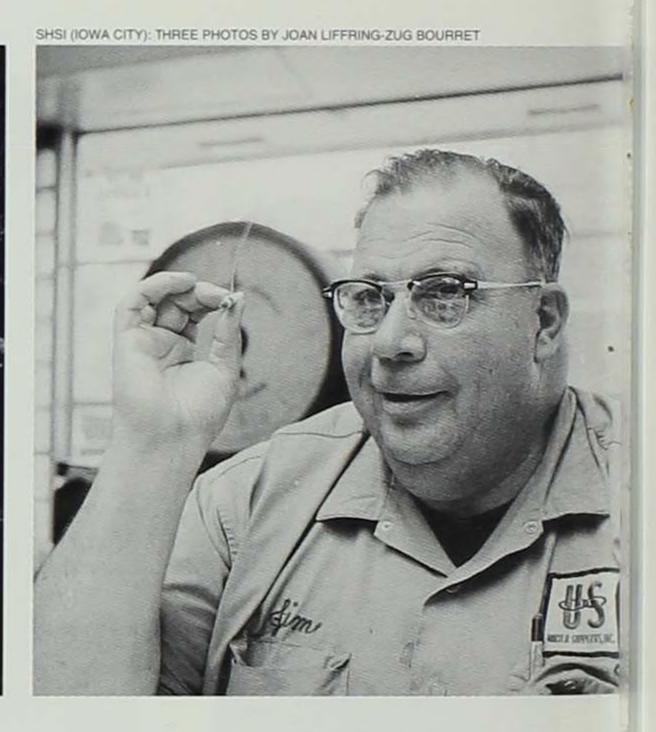
Left: In 1957, this mobile ham transceiver was the first unit combining receiver and transmitting circuits, and was a product of Collins Radio (now Rockwell Collins) in Cedar Rapids. Arthur Collins (right) was



a ham radio operator who became renowned in 1925 as the only person to establish consistent radio contact with Arctic explorers, including Richard E. Byrd. Six years later, Collins formed Collins Radio. In 1933, the company sold equipment for Byrd's Antarctica expedition. Collins initiated a number of radio innovations, including police two-way radios, war-time and postwar aviation equipment, and communication equipment for the space age.







Cigarettes

Native Americans used tobacco for ceremonial purposes for hundreds of years before the arrival of European explorers. Not until the 20th century did cigarettes become a major tobacco product in America.

Smoking was considered unfeminine until the 1920s, when advertisements suggested that cigarettes stood for adult sophistication, sex appeal, and glamorous careers. Cigarette consumption by women burgeoned. During World War I, cigarettes were distributed to soldiers, and their use proliferated during and after the war.

In 1912, a medical student was the first to suggest a link between smoking and lung cancer, but the health controversy in the United States did not begin until 1952, and the U.S. Surgeon General's warning did not come out until 1964.



Elegant 1920s cigarette holders like this one were used by growing numbers of women smokers. Regent was a 1940s brand. The small complimentary pack of Camels was mailed to a small-town lowa business.



Refrigerators

Storing perishable foods before mechanical refrigeration required a cool root cellar or a steady supply of winter-harvested ice for the icebox. Although refrigerated boxcars were used in the 1800s, home refrigeration remained elusive until the advent of electricity and the introduction of practical home units in 1918. By the time freon was introduced in the late 1930s as an effective coolant, half of America's homes had refrigerators. Refrigerators with freezer compartments spelled the end of weekly ice deliveries for iceboxes.

First-hand experience

In the year 1951....life was good to us. We had a console radio, and I had a Schwinn bicycle, a dog, and a three-speed phonograph along with a vacant lot in which to play base-

ball. And when we had nothing else better to do, we'd take turns jumping off the front porch.

Our breakfast nook was located in our five-room brick bungalow and was accessible from the kitchen only. It was a small, out-of-the-way place, which contained a booth big enough for four people, a window seat, a cabinet, and the Coolerator. The Coolerator was known more commonly as an icebox. After school my cousins and I would chip off slivers of ice with an ice pick from the ice block located in the top compartment for our glasses of Kool-Aid. Most kids my age rather marveled at that. I hadn't given it much thought. I must add I was always a little more experienced and could always chip off the largest or smallest bits with my skilled and trained hands. Life was good, simple, and uncomplicated.

That was until third grade. Our class was studying health, where words like spoiling, salmonella, and conveniences of modern refrigeration were mentioned, things I really wasn't aware of. One day Mrs. Parkle, my teacher, asked, "Is there anyone in the class who still has an icebox?"

For once, I was certain I knew the answer, so I quite proudly raised my hand and waved it back and forth—only to my embarrassment to find I was the only one with my hand up. My quick response had brought heads turning my way and suddenly I found myself blurting out that "my father is the manager of Schafer Ice and Cold Storage."

To which Mrs. Parkle, rather in a gasping way, said sympathetically, "Well, now that explains it, doesn't it."

Up until that time I hadn't remembered hearing my mother complain about throwing out spoiled food. But I began to notice her mentioning it. My mother added convincingly one night, "I don't see why we couldn't hide a refrigerator in the breakfast nook." My father's parents were part owners of the ice plant and the thought of telling my grandfather that we would even consider buying a refrigerator sent my father shivering. "It would be like cutting off the hand that feeds you," grumbled my father.

Preserving the family peace has always played an important part of my father's life. This time proved to be no exception and soon after that, sure enough, we were hiding a brand-new refrigerator in our breakfast nook. Faithfully, to further ensure peace, my father continued to bring home a 25-pound block of ice in the trunk of his car every other day. The block of ice was taken out and left to melt in the garage—just in case anyone would get suspicious at the ice plant, and hopefully covering up any evidence that we had succumbed to modern refrigeration.

It became the entire family's job to steer my grandparents away from the kitchen if they stopped by on a Sunday afternoon. Seems like years our family secret was kept. At family dinners, the grandparents were not to do dishes or even carry their plates to the kitchen, which usually meant more work for me.

Then years later, my father decided to casually mention it to his parents. "Well, Helen and I," he fumbled, "well, we're thinking of getting a refrigerator." I think it even surprised him that he told them.

Our stern grandfather looked up at my father. Then his face began to light up. "Well, it's about time, I'd say," he added agreeably, like he'd been waiting for years to hear that. Soon after, my grandparents purchased a new Frigidaire.

-Connie Larson Miller, Ottumwa, Iowa

Band-Aids

Noticing that his wife often suffered minor injuries while doing housework, Earle Dickson, a Johnson & Johnson employee, saw a need for a sterile bandage that would stay in place over cuts and burns and prevent infection. In 1921, Dickson developed a sterile, adhesive bandage, and his employer, Johnson & Johnson, christened it the "Band-Aid."

The public did not immediately accept Band-Aids, until Johnson & Johnson distributed free samples to butchers and Boy Scout troops. Then sales soared. Competitors developed other brands, and today some four billion adhesive bandages are made yearly.



Recording Devices



When Evangelical Lutheran minister Ronald Jesperson recorded and practiced his sermons for various lowa congregations in the 1950s and 1960s, he used this Webster wire recorder. Although then considered portable, the device weighs 28 pounds.

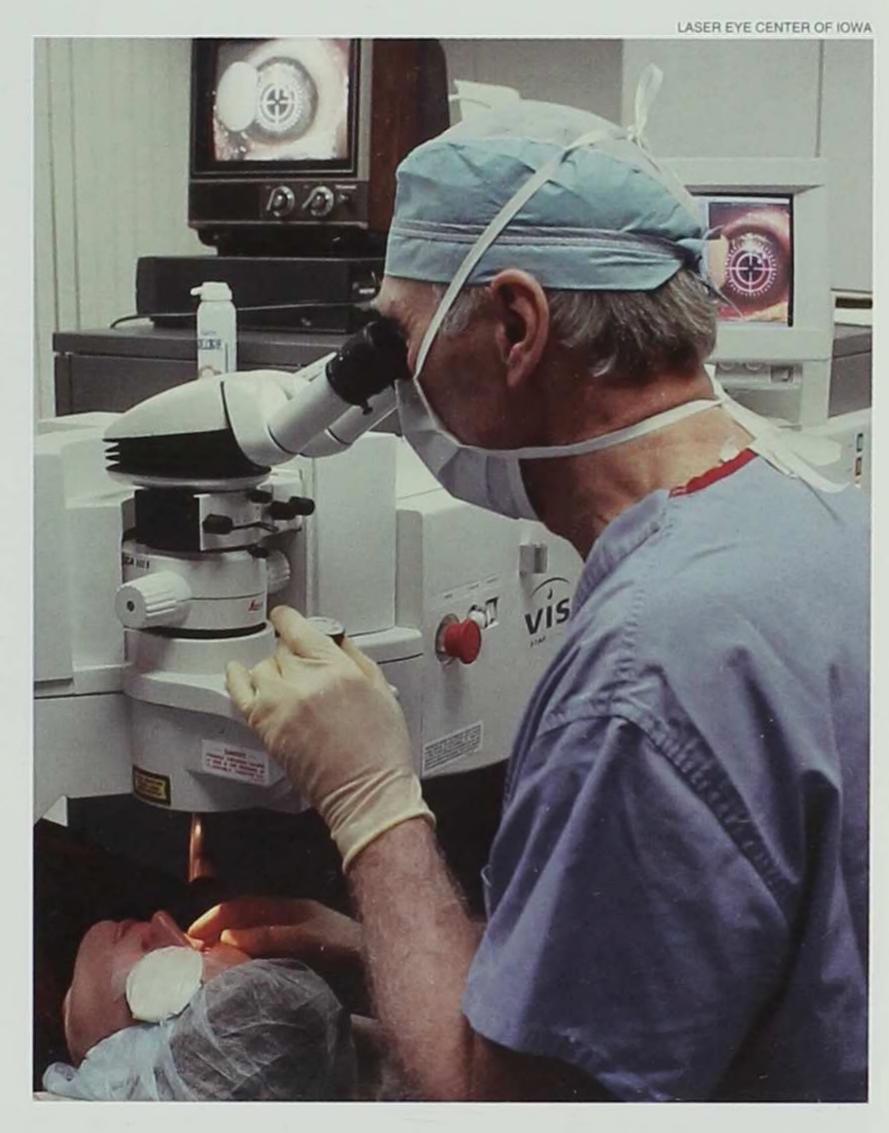
Twentieth-century inventions in recording technology allowed people to make their own recordings and to take music and the spoken word almost anywhere. Thomas Edison's wax disc recording machines for office use (dictaphones) first appeared in the 1890s. The first type of magnetic recorder was the wire recorder, introduced in the 1940s. Magnetic recording devices electronically convert sound waves to magnetic pulses and apply them to metal (or later to plastic), thus recording the original sound.

Lasers

Laser stands for Light Amplification by Stimulated Emission of Radiation. In 1960, Theodore H. Maiman of Hughes Research Laboratories in California built the first laser that fired out of a ruby crystal. This discovery set off a burst of innovation that helped transform global communication and added precision to a variety of technological challenges. Laser applications accelerated in the 1970s with the development of fiber optic communications. Today's innumerable laser applications include repairing retinas, cauterizing surgical incisions, grabbing atoms, aiming artillery, and checking grocery prices on bar codes.

A surgeon uses laser technology for eye surgery in the 1990s.





Power Tools

Early in the century, as applications of electricity proliferated, more and more tools were powered by electricity. As this sheet music illustration suggests, by World War II, power tools and pneumatic tools were wielded by "Rosie the Riveter" and thousands of other American women factory workers.

By the late 1960s, battery-powered tools were appearing (like the cordless screwdriver below). At the behest of NASA, Black & Decker developed cordless, battery-operated drills, screwdrivers, and small vacuums for the Apollo space program.



Hi-Fi's

In the 1920s, Bell Laboratories improved upon the phonograph (invented in the 1890s) and the tinny-sounding, hand-cranked gramophone, by adding a cabinet-sized "dynamic" speaker system. As higher fidelity radio and phonograph systems appeared (like this 1950 Motorola hi-fi, right), informal home concerts and the sheet music business declined. The sound of recordings increasingly seemed "live." By the late 1950s, consumers could buy stereo systems that required two speakers.



SHSI JOVA CITY)

Hot Dogs

Although the invention of this American favorite is often dated to the late 1890s, the term "hot dog" first appeared in the early 20th century. The name was coined by New York sports cartoonist Tad Dorgan. He was trying to draw dachshund sausages in a cartoon, but he couldn't spell dachshund. (Early critics thought that hot dogs contained dog meat.)

In 1964, Des Moines engineer Ray Townsend invented the "Frank-A-Matic," capable of stuffing 30,000 hot dogs per hour. The fully mechanized device stuffed, twisted, linked, and looped franks in one continuous operation.



initially planted it as a supplemental forage. By the end of World War II, it had become a major cash crop, supplying domestic oil. Demand for soybean oil grew, but so did resistance from dairy farmers and creameries threatened by increased soy margarine production. The dairy industry fought to impose a tax on the yellow coloring added to margarine to make it resemble butter.

Today, new uses for soy products continue to emerge, and soybeans continue to be one of lowa's most important crops.

First-hand

And you like margarine yellow. But you get margarine white.

extra cost. No wonder people are stirmd up!

Give them your wholehearted support.

Why? Because of outworn laws that place a Federal tax of 10c per pound on yellow margarine. Actually, if the law would allow it, you could buy yellow margarine at no

Fortunately, ferseeing men in Congress are working to see that you get margarine yellow, the way you want it

Remember-the voice of the people is the voice of the

lawmaker. Fight for the right to yellow margorine!

vividly recall, with the clarity of a youngster encountering something new and exotic, my first encounter with soybeans—roasted soybeans. They were offered for sale in the

Nutritions

early 1940s as a replacement for peanuts, which evidently had some military value during the war. Woolworths of Council Bluffs (now departed) offered them at their candy counter in a large bin. It was my first encounter with soybeans, although I may have had soy sauce on some rare excursion during the Great Depression; however, its relationship to the bean or the plant was obscure. I spent a number of summers on farms during the war years and they planted a wide variety of grainswheat, oats, corn, and even flax. Soybeans never entered the inventory and I think they were considered an exotic crop if thought of at all. I left lowa for 40 years between the late 1940s until 1989. Upon my return, I discovered that two crops, soybeans and corn, monopolized our fertile fields....

Margarine was a fun product during the 1930s and later. We children kneaded bags of white oil with a bead of yellow coloring. Sometimes the coloring was left out because of an urgency to use the margarine. I was raised on margarine and skim milk, 10 cents a gallon and perceived to be fit only to slop the hogs. I don't recall personal experience with the conflicts, although we always had butter on the farm.

-Lee A. Lendt, Council Bluffs, Iowa

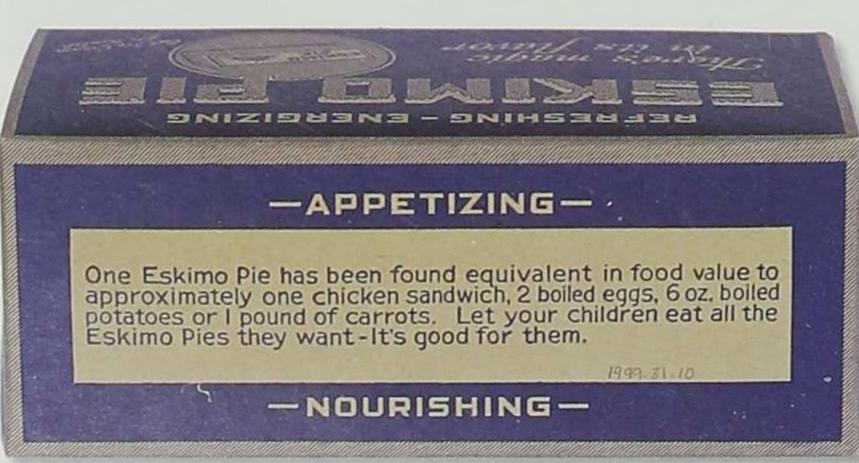
Feminine Hygiene Products



Disposable, commercial feminine hygiene products, which originated in the 20th century, afforded women greater freedom and convenience. For centuries, women had used cloths during menstruation. By 1902, the Sears Roebuck mail-order catalog sold reusable cotton "napkins" that hooked onto an elastic belt. World War I nurses wrapped cellulose wadding (intended for surgical dressings) in gauze and used it for disposable napkins. Kimberly-Clark followed with a cellulose product first marketed in 1920. Tampons were introduced in the 1930s as the first internal protection. As World War II pulled more women into jobs outside the home, nearly all U.S. women switched to disposable, commercial products. Advertisements for feminine hygiene products were restricted to women's magazines from the 1930s until 1972. This one (left) appeared in 1957.

Eskimo Pies

Onawa, Iowa, ice cream vendor Christian Nelson thought up the Eskimo Pie after a youngster could not decide between an ice cream sandwich or a chocolate bar. Nelson teamed up with Russell Stover of Omaha to create the first chocolatecovered ice cream bar. The technical challenge was getting the chocolate to stick to the ice cream. Eskimo Pies became a national sensation, with a million sold daily in 1922.





In the late 1920s at the height of the treat's popularity, this Eskimo Pie carton claims nutritional riches on the side of the box.



Cosmetics & Perfumes

Using cosmetics and perfumes signified loose or disreputable morals until social customs and values changed after World War I. Over time, the routine use of cosmetics by millions of women redefined mainstream ideals of beauty, and many women entrepreneurs played major roles in building the cosmetics industry.

In lowa, two companies developed leading cosmetic lines. The Chamberlains, of Des Moines, had begun a medicine company in 1881 and later sold hand lotion and perfumes, products that outlasted their medical line. In 1915, druggist Carl Weeks of Des Moines created one of the country's most popular cosmetics lines. He called his company Armand, hired a New York advertising firm, sold his products in elegant packaging, and aggressively established a distribution network through drugstores. In the 1920s, Armand ranked first in face powder sales, and Weeks introduced more products. By the 1930s, price cutting by competitors and consumer preferences for sheer powders sent Armand into decline.

Armand and Chamberlain products used early in the century. Above: Primping with 1960s cosmetics.







In my senior year, 1937/38, at Lenox First-hand
High School, I was able to play girls' basketball with one of the best teams in the state. With Kermit Parker as a coach we learned in

many ways respect, gratitude, friendship, and sportsmanship. . . . I had never seen a game let alone worn shorts. What an experience. Our first game was with AIC of Davenport, Iowa. We all worked hard and won

every game until the final game of the state tournament, which was played at Drake stadium. West Bend outplayed us but only by four points, I believe. Tuffy Parker was tournament queen that year.

In the fall of '39, I had the opportunity to go to the American Institute of Business to play, which earned my tuition. We traveled by car from the north coast to the south west, even Edmonton, Canada. We played AAU rules as well as the 6-player games. What an experience.

-Elizabeth (Betty) Drorbaugh Wilson, Corning, Iowa

VERS

Before video cassette recorders (VCRs) were available, watching television and movies was limited by when a TV show was broadcast or when a movie appeared at the local theater. With VCRs, viewers could now watch what they wanted, when they wanted, and as many times as they wanted.

In 1956, the American company Ampex developed a magnetic tape recording device originally used by broadcasting companies to tape programs. In the 1960s, the technology was licensed to Japanese companies, who made VCRs for homes. In 1975, Sony introduced a now-abandoned format called Betamax. The following year, JVC offered the now-common VHS (Video Home System) format with a considerably longer playing time.



The Soike family of Iowa City bought this bulky VHS system in 1980.



Toasters

About 1910, the first electric toasters appeared. No longer would you have to place bread over a fire to make toast. On this 1914 Westinghouse model, toasting happened one side at a time, and the bread was manually flipped over. Improvements followed. In 1919, Minnesota mechanic Charles Strite patented a toaster with a variable timer and pop-up springs. He sold them to restaurants. Toastmaster came out with the world's first home pop-up toaster in 1926. This 1945 General Electric toaster combined chrome and plastic for a sleek design.

Pre-natal & Baby Care Products

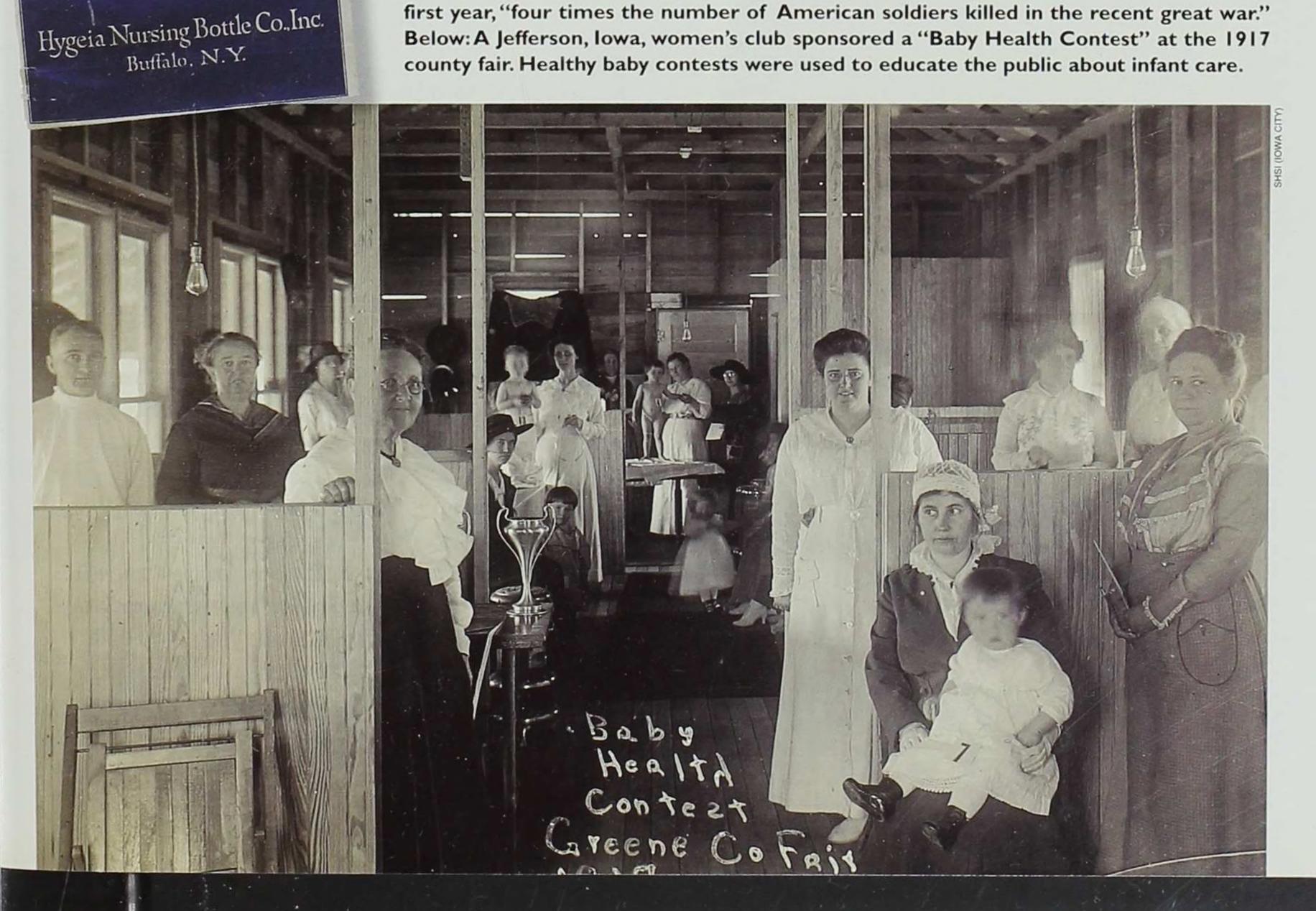


At the beginning of the century, 100 out of every 1,000 infants born in the U.S. died before age one. Today, that number is only 7 out of 1,000—thanks to numerous medical and health advances throughout the century.

By the 1920s, the approach to infant mortality broadened from caring for infant health problems to educating, monitoring, and caring for pregnant women. Safe drinking water, pasteurized milk, and rising standards of living were also key to reducing maternal and infant mortality.

In 1998, a century of advances in pre-natal medicine was symbolized by the birth of the McCaughy septulets in Des Moines.

A brochure for a 1920s baby-feeding kit decries the number of babies who died in their first year, "four times the number of American soldiers killed in the recent great war." Below: A Jefferson, Iowa, women's club sponsored a "Baby Health Contest" at the 1917 county fair. Healthy baby contests were used to educate the public about infant care.





Plastics

Deb King, manager of an Audubon, Iowa, bowling alley, opened a new business in 1955 to coat wooden bowling pins with clear plastic. The plastic coating, "Debs Kote," added durability and protected the pins from grease dripping from automatic pin-setters.

King was one of millions of Americans who appreciated the immense versatility of 20th-century plastics. Although a plastic-like material called celluloid was available by the late 19th century, New Yorker Leo Baekeland came up with a greatly improved version in 1907. Baekeland's plastic was called Bakelite, and it is considered the first synthetic substance. Other variations followed, including cellophane, nylon, neoprene, polyester, and vinyl. Valued for its light weight, plastic began to replace metals and wood in many applications, from kitchenware and toys to medical supplies and furniture.



Legalized Gambling

Legalized gambling has long been controversial in Iowa. Even bingo was not legalized in the state until 1970, although it originated during the Great Depression, when American Edwin Lowe adapted a European game and called it bingo. It became a fund-raising craze, especially for Roman Catholic churches during difficult economic times. (Lowe later created the game of Yahtzee.)

The lowa Lottery began in 1985, followed by racing and casino gambling. Opponents predicted dire social consequences, such as compulsive gambling and family abuse. Proponents promised more revenue and jobs.



During the Great Depression, Des Moines police seized this illegal slot machine.



Polio Vaccine

Polio periodically surged through America during the early and mid-20th century, affecting tens of thousands of Americans. By the 1940s the numbers began to climb dramatically.

Polio, short for poliomyelitis or infantile paralysis, is a viral disease. It attacks the nervous system and impairs muscle groups. If the breathing muscles are paralyzed, then breathing requires a mechanical

respirator like an iron lung (which was invented in 1928).

In 1950, lowa recorded the highest polio rate in the U.S. In 1955, Dr. Jonas Salk announced development of a successful vaccine that prevented polio's onset. Four years later, Albert Sabin developed an alternative oral vaccine. By the mid-1960s, the epidemic was over in the U.S.



Cardboard folders like this one (ca. 1950s) were filled with coins and then donated to the March of Dimes to fund polio research. The March of Dimes, a symbol of countless small donations, was a successful crusade led by polio patient and U.S. President Franklin D. Roosevelt in 1938.

First-hand : experience :

The year was 1954. And like much of the forties and fifties, 1954 was fraught with fear. There was the fear of commies—the red commies, the yellow commies, and the commie

pinkos. And there was also the fear of another invisible enemy, infantile paralysis—polio. None of the kids in our neighborhood in New York State had been infected with the deadly virus. Nevertheless, the fear was there. You never knew who your neighbor was—if he or she was a sympathizer—or perhaps a carrier.

"I don't care what other kids are doing," mothers on our block seemed to agree. "You can't go swimming in the Mineola Pool. You don't want to get polio—do you? Now go wash your hands."

Mrs. Davis, as it turned out, was the first polio victim of our acquaintance. But her polio was a well-kept secret, almost as if it was shameful.

We first met this wonderful lady on the way home from school one bright spring afternoon. It was one of those early spring days when the windows on every house were opened to let the sunshine and fresh air in. At the Davises' bungalow on Roslyn Avenue it also let the music out.

What we first heard was a rollicking rendition of "Piano Roll Blues." ... It was innocent curiosity that had our nose pressed up against the glass on the Davises' storm door. It took awhile, but Mrs. Davis soon realized she had an audience. "Come on in," she bellowed to the little kid she had never seen before. We didn't understand at first why she didn't come to the door as one would expect. "I said, come on in. I'm not going to hurt you," she continued to coax the suddenly reluctant first-grader.

Mrs. Davis wasn't the first person we had seen in a wheelchair. There was old Joe Keegan at the photo studio where Dad spent many evenings and weekends, working with us in tow, as long as we behaved. Joe, who had lost the use of his legs from diabetes or some such disease, was able to drive his own car with added hand controls. Mrs. Davis could not. It was much later in our relationship before we ever saw Mrs. Davis outside the house, when her husband had to lift her in and out of their huge, aging, brown Hudson.

Walter, we learned when Mrs. Davis offered us a snack, had also made Mrs. Davis's house handicapped accessible—long before we had heard the term anywhere else. The kitchen counters were lowered to wheelchair height and doors widened throughout the house.

Even with her disability, Mrs. Davis was perhaps the most cheerful woman we had met in a long time. She loved to play her piano and sing. An audience of one seemed to make her even happier.

Like most grade schoolers, we didn't appreciate the thought of a shot for inoculation against measles, mumps, or anything else—even polio. But knowing Mrs. Davis would spend the rest of her life incarcerated in a wheelchair gave us reason to think more about the trial Salk vaccine.

And like hundreds of other kids at Cherry Lane Elementary School, we impatiently stood in line on June 10th, 1954, for one of several injections to keep us and the rest of the world safe from just one of the known fears of the day, as a part of the first national tests of a trial polio vaccine. . . . Our yellowed Polio Pioneer cards are just a reminder why so many of us are able to walk without braces or crutches.

-Russ Oechslin, Spirit Lake, Iowa

Fishing Gear

In 1937, Iowan Berkley Bedell was tying fishing flies in his Spirit Lake bedroom. Twenty years later, his company, Berkley Fly Company, helped bring forth flexible, resilient nylon or monofilament fishing line.

Besides Berkley fishing line, other improvements throughout the 20th century have made fishing more enjoyable and successful. In 1906, the first outboard motor was built in Detroit (Evinrude motors followed three years later). In 1909, steel fishing rods became available, alternatives to commercial bamboo rods. In the 1940s, fiberglass fishing rods, spinning reels, and spincast reels were introduced; in 1953, non-sinkable flylines; and in 1957, the Fish Finder, using echolocation technology.

1950s fishermen size up their catch. Below: Berkley's spinning fly rod, one of many Berkley products.

CHERRYWOOD
TRAVEL PACK
SPINNING/FLY ROD



Its PIONEER





CORNELIUS HYBRIOS BELLEVUE





Hybrid Corn

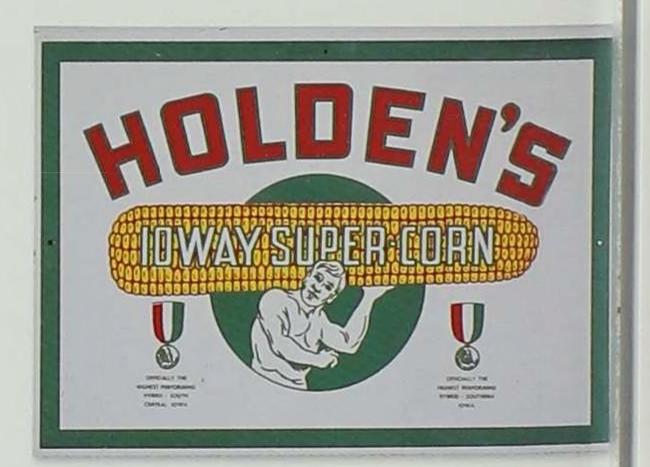
Hybrid corn has made lowa farms the granary of the world. In the early 20th century, lowans played a part in experiments involving inbreeding and crossbreeding varieties of corn to produce greater size, yield, and resistance to disease. By 1922, the Iowa Experiment Station had begun its hybrid corn development program. In 1926, agricultural editor and agronomist Henry A. Wallace and fellow Iowan Roswell Garst founded Pioneer Seed Corn Company, taking hybrid corn commercial. In 1932, Iowa State College introduced its first hybrids. By 1944, nearly all of lowa's corn acreage was planted with hybrid seed, and yields increased dramatically. This colorful array of advertising signs attests to the number of hybrid seed corn producers and distributors in mid-20th-century lowa.

The Harvest Tells

9t's Ockenfels







BEHAN& HELFERT SABULA HYBRIDS TOWA







Blue Jeans

High school girls from Boone, Iowa, had just received permission to wear pants to school, and so they posed in their well-cuffed blue jeans for this 1942 Des Moines Register and Tribune photo. Although teens would eventually call these denim pants "jeans," they also were called "waist overalls" until the 1960s.

Actually, the word "jeans" is traced back to the late 16th century, when Italian sailors from Genoa wore trousers of a sturdy cloth woven in their city.

The French called the people of Genoa "Gênes," and the name became associated with the trousers, too.

During the California Gold Rush, Levi Strauss, a merchant of canvas for tents and covered wagons, began making durable pants for gold seekers. Later worn as work clothes by cowboys and miners, jeans evolved in the 1930s into everyday wear for many Americans. In the 1970s an eruption of designer styles made jeans a major fad. Today, many consider jeans as acceptable for almost any occasion.

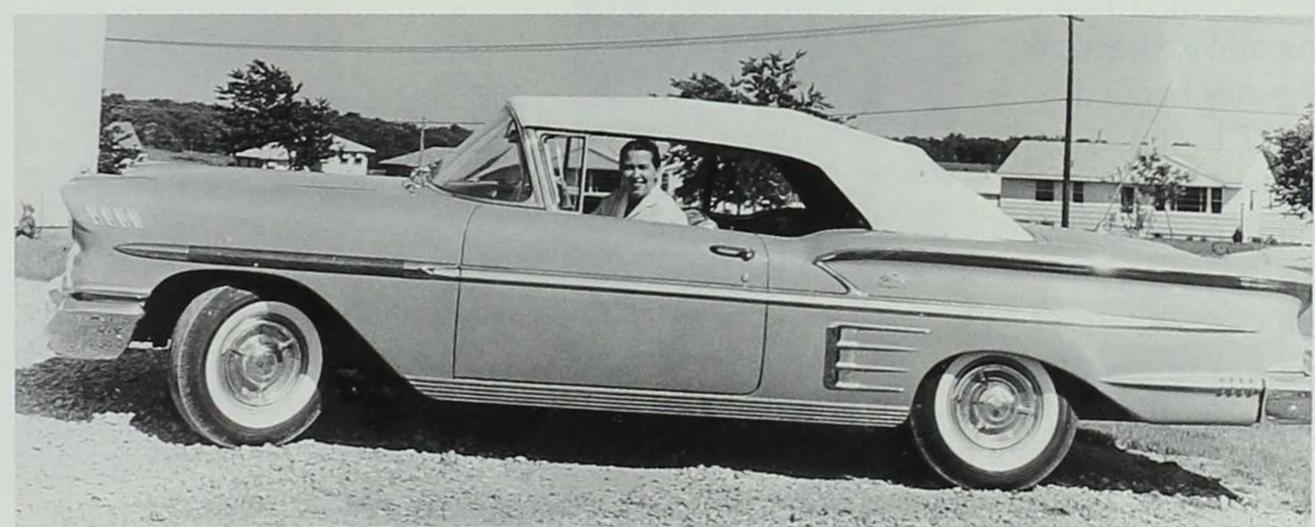


Although the first American car was built in 1893, the automotive age really began in 1908 when Henry Ford unveiled his Model T. The mass-produced Model T (above) was an Iowa farmer's favorite, and Ford opened a Model T plant in Des Moines.

Early in the 20th century, lowa ranked high in car ownership partly because automobiles helped ease rural isolation. Iowans contributed significantly to the automobile industry—from making the first electric car, the Morrison, to the most popular recreational vehicle, the Winnebago. By the 1920s, automobiles affected the American economy more than any other industry—expanding the oil industry, road construction, and employment in manufacturing. Liveries and blacksmith shops converted to automobile repair, and local businesses added gas pumps (above, a gravity pump, ca. 1930). For more on the automobile's impact on lowa, see the concluding article in this issue.



Although the technology and design of U.S. automobiles changed throughout the century, this did not—proud owners enjoyed posing with their automobiles. Above and right: Myron Walker with his 1939 Packard, and Dorothy Cummins in her 1958 Chevrolet Bel Air Impala.





Americans quickly saw the automobile's possibilities for recreational travel. By the 1920s, tourist camps and motels were springing up along early highways. Above, a family combines tent and auto on July 4, 1919. Right: An early 1960s model Winnebago travel trailer, among the first built at the Forest City, Iowa, facility. It features two beds, and a kitchenette, dinette, and closet—all for restless Americans traveling the new interstate highway system of the 1950s and 1960s.



DDT

First hailed as a savior to farm crops, the insecticide DDT (or dichloro-diphenyl-trichloro-ethane) was widely used from World War II to the 1960s. Then, Rachel Carson's 1962 best seller, Silent Spring, alerted

readers to DDT's toxicity to animals, especially bald eagles and other birds, thus fueling the environmental movement. In 1972, the Environmental Protection Agency banned DDT in the United States. Now, more than 25 years since DDT's ban, eagle populations are on the rise.



Saturday Evening Post advertisement announces the "1948 sensation," an insect spray for home use, with five percent DDT.

FAST KNOCKDOWN

QUICK KILL

LASTING EFFECT

WEW SPECIAL SPRAY

It was Thanksgiving evening, Novem-First-hand: ber 22, 1944, and I was living with : experience : five other girls in the Isabel Beveir home management house on the lowa State College campus. Back

then, each home economics student was required to spend six weeks, half a quarter, at some point in her senior year playing keeping house. It was war time and with the associated gas rationing the college officials decided to cancel the usual weekend vacation time for all students, leaving only Thanksgiving Day free of classes....

One of the students in the house had been found to be infected with body lice. Paulina Nichols, head of the Home Management Department, was determined to squelch the spread of the infestation. She contacted the college hospital and in turn the chemistry department for a remedy. The chemistry department had just recently acquired its first DDT powder and volunteered to let her have some of it. Promptly at 9 p.m. Dr. Nichols arrived and set to work going from one bed to the next dusting each of us with this new substance. None of us had any problems with the lice, nor reactions to the DDT.

-Shirley E. Held, Ames, Iowa

It was 1947 to 1953 when my first husband used 100 percent DDT in our house to spray flies, and while me and the children were in the house. I got the kids out as quick as I could because it burned my lungs and my eyes, so I knew it wasn't good for the girls. He used it quite often, because the kids were little and came in and out of the house a lot.

Also I noticed the birds were disappearing. We never heard crows at all and a lot of birds were gone. As soon as it was banned we heard the hoot owls and crows, just a little at first, but about three years later they were coming back.

I'm an ex-smoker and have emphysema plus I lost my right breast to cancer, but I do believe my lungs are partly bad because of the strongness -Norma Clark, Wyoming, Iowa of the DDT.

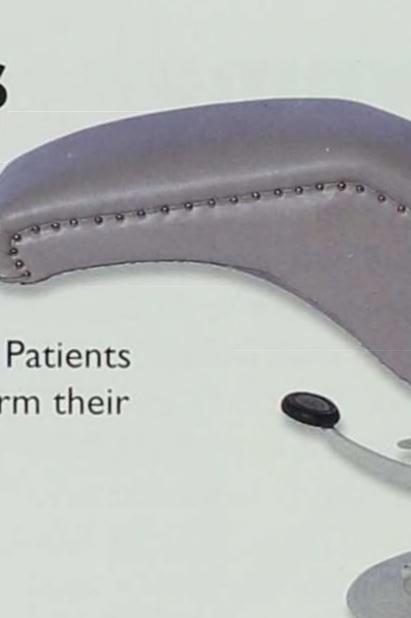
During WWII, I served in the army in the Philippine Islands. In 1945, we were on Mindoro Island, preparing to invade Mindanao Island. One day we were told to bring a set of fatigues (the clothing we wore in the field) to a certain place. We waited in a long line and when we got to the front of the line, our fatigues were dunked in a 55-gallon drum of soapy water, which had a healthy dose of DDT in it. We were told not to rinse the clothes but to let them dry with the soap and DDT in it. These were the clothes we were to wear to Mindanao. The DDT would keep the bugs off of us, and if we were shot, the bullet would not pick up any infections as it went through our clothes.

We also cooled our GI beer with DDT. We had "bug bombs" of DDT, which had a gas in the can to spray DDT. One of the men read the can one day and discovered that the gas was freon. He said this was what they put in refrigerators as a coolant. He put six or eight cans of GI beer in a GI blanket with a bug bomb. He wrapped it up and then pressed the trigger on the DDT can. Sure enough, it cooled the beer.

Years later, when I read of the dangers of DDT, I often thought of -Bob Soesbe, Clinton, Iowa some of the uses we made of it.

Den-Tal-EZ Chairs

Des Moines inventor John Naughton came up with the idea of a new type of dental chair at the 1958 Iowa Dental Convention. He built this 1958 prototype using the base of a barber chair. The Den-Tal-EZ Chair revolutionized dental practice. Patients could be treated lying down, and dentists could perform their work seated, thus relieving back stress.





Compact Discs

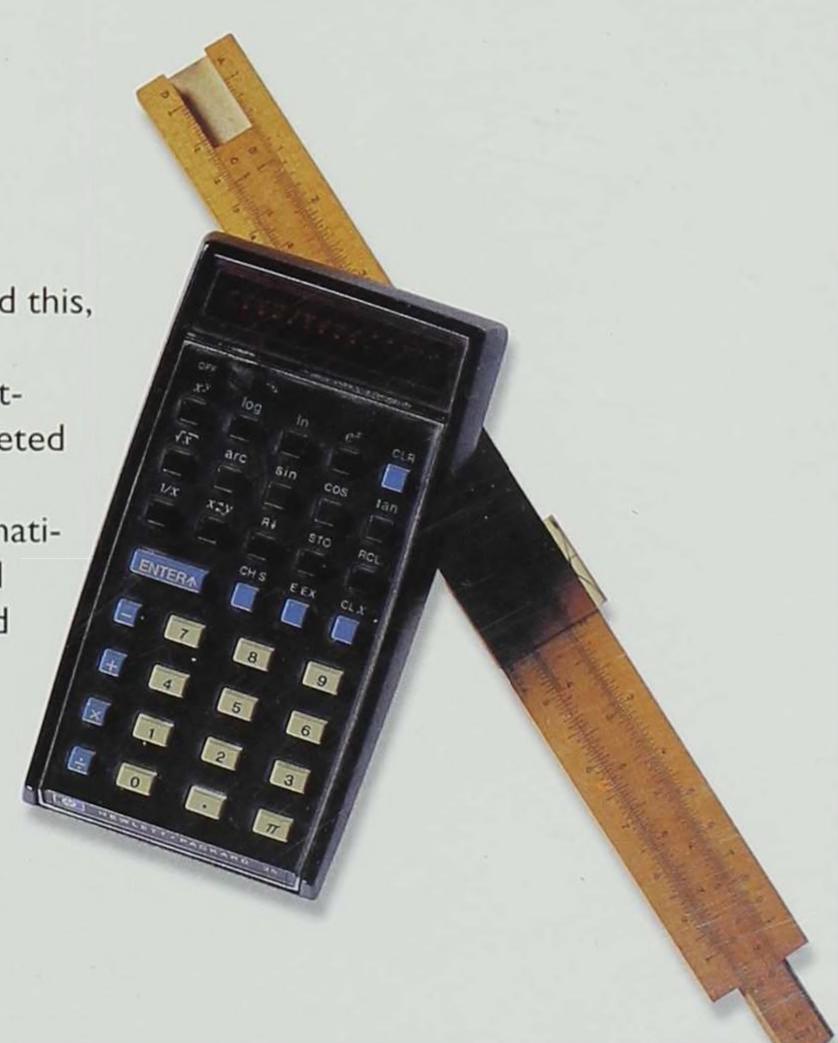
In less than two decades, compact discs (or CDs) have overtaken records and tapes and come to dominate sales of recorded music. Compact discs replaced long-playing records (LPs) because CDs held more music, were more durable, and dramatically improved the quality of the sound. CD technology was developed in the 1970s and became available to consumers in the early 1980s. To prevent theft, CD packaging was designed to be too large to fit in pockets. This CD of Michael Jackson's music is from the late 1980s.

Pocket Calculators

lowa State University mathematics teacher Jerold Mathews used this, his first pocket calculator, in 1972. It could be plugged into the university's main frame computer. Mathews also helped Hewlett-Packard develop calculators, one of many companies that marketed an ever-evolving line of pocket calculators.

Well before the convenience of a pocket calculator, mathematicians used the slide rule, invented in the 1600s and modernized 200 years later. The late 1800s brought innumerable adding and calculating machines with steady improvements.

In the 20th century, these machines continued to evolve, from mechanical to electronic. Microchips and transistors revolutionized calculators. Small calculators used tiny chips with greater capacity than big, bulky machines and slide rules. Expensive tabletop electronic calculators lost consumer appeal when the pocket calculator appeared in the early 1970s.



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Power Lawnmowers

In 1919, American Edwin George installed a gasoline motor from his wife's washing machine onto a lawn cutter, thus creating the first effective power mower. Earlier grass-cutting technologies were scythes, rotary shearing machines (developed in the 1840s), and handpushed rotary mowers (1880s). The popularity of manicured, suburban lawns boosted sales of power lawnmowers. In Iowa, Marshalltown's Cooper Manufacturing Company manufactured power lawnmowers, and Maquoketa's Clinton Engine Corporation manufactured engines. In 1963, Clinton Engines presented this gold-plated lawnmower engine to Iowa governor Harold Hughes.



Polyester

This polyester leisure suit (worn with a polyester shirt decorated with a carp design) was all the rage when William Johnson of Madrid, Iowa, wore the ensemble in the 1970s.

Leisure suits were probably the most famous—or infamous—application of this synthetic material. Invented by the British during World War II, polyester is spun from petrochemicals. Based on its advantages (durability, comfort, and resistance to wrinkles), it became a widely used fabric. Its disadvantage as clothing? It snags easily, pulls apart at the seams, and has static cling.

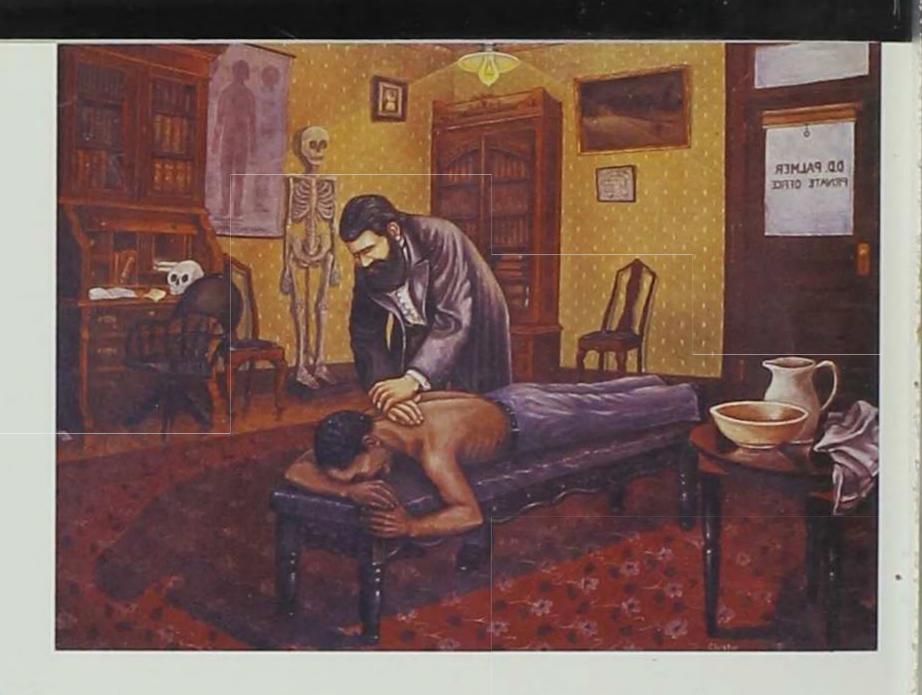




Ruth Handler noticed that her young daughter, Barbara, liked to play teen or adult make-believe with paper dolls. A co-founder of Mattel Toys, Handler created a three-dimensional adult fashion doll named after her daughter. The Barbie doll was an instant hit in 1959. Advertised on television, Barbie became one of the first toys decided upon by children rather than by their parents. In the following years, Mattel created companion dolls as Barbie's friends, wardrobes of fashions, and luxury items from dream houses to sports cars.

Barbie remains the most popular doll in history. She has been reincarnated into at least 75 versions, including a "mod" 1960s teenager, a 1970s disco girl, a 1980s aerobics instructor, and a 1990s Women's World Cup soccer player.

Above: A 1990s Barbie (in goggles) joins three others from the 1970s that were played with by sisters Jill and Jennie Morgan.



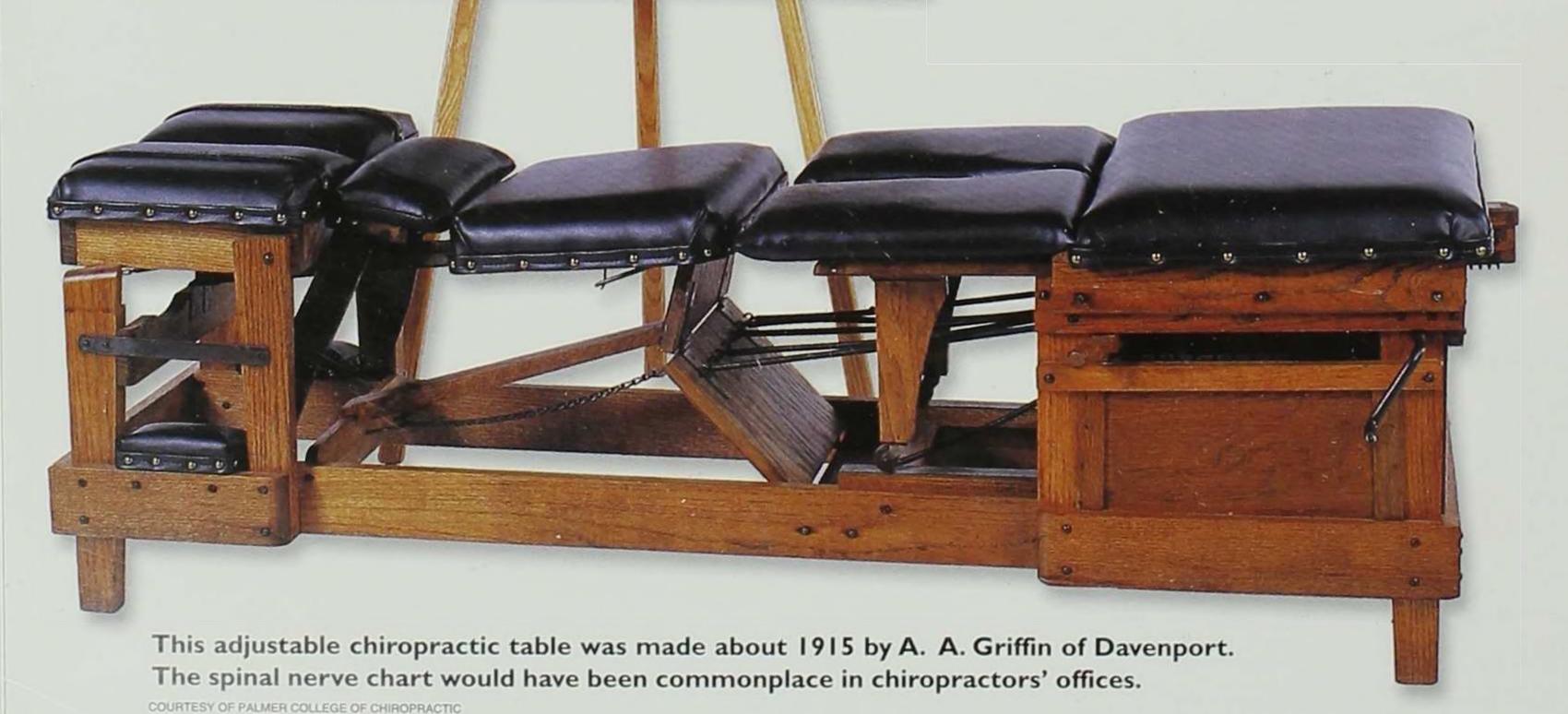
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Chiropractic

D. D. Palmer founded the Palmer College of Chiropractic in 1899 in Davenport. Above, Palmer is depicted giving the first chiropractic adjustment to Harvey Lillard. (Chiropractic is from the Greek for "doing by hand.")

Palmer hypothesized that the brain's energy flow was an essential life-giving force. Improper spinal positions could interfere with this force and affect nerve function. Manipulations by hand could correct spinal misalignments.

Today, chiropractic continues to treat those with spinal misalignments. It is the largest non-invasive, drug-free health care profession in the U.S., and the third largest health care profession (after medicine and dentistry).







Aspirin products once made or distributed in lowa.

Aspirin

As early as 200 B.C., Hippocrates eased pain and fever for his patients by prescribing willow bark and leaves, which contain acetylsalicylic acid—aspirin's active ingredient. In 1899, German scientists at Friedrich Bayer & Co. produced the first aspirin, a powder, for public consumption. In 1900 Bayer introduced aspirin tablets, initially available only as a prescription.

Dr. William D. Paul, a University of Iowa professor, invented buffered aspirin in 1944. Bufferin reduces the acidity of aspirin, nullifying upset stomach.

Doctors now recommend aspirin for a variety of conditions besides headaches—to reduce risk of heart attack and stroke and to combat inflammation from rheumatoid arthritis. Today, people consume about 80 billion aspirin yearly.

Credit Cards

Today we say we'll "pay with plastic," but the first credit card, in 1950, was actually made of cardboard. The Diner's Club card was the first general-purpose credit card, and was the idea of a New Yorker embarrassed by having forgotten to bring cash to a restaurant.

Increased consumer demand and persuasive advertising changed Americans' views of life's necessities—and credit cards. By the mid-20th century, being in debt and buying on credit began to lose their social stigma. Credit terms favorable to consumers have fueled America's economic expansion, and have put many people into debt.

First-hand

Final exams had just ended our junior year in college. It was Memorial Day weekend, 30-some years ago, : experience : and our last cash was spent on cold chicken and watermelon (okay, probably some beer, too) for a picnic.

We were looking forward to our surnmer jobs more than a thousand miles away in Connecticut as we packed the car with most of our worldly possessions. What we hadn't stopped to realize is that after our holiday picnic we had no cash and our checking account had less than \$10 in it. We also knew that very few gas stations between Denison, lowa, and Hartford, Connecticut, would consider taking a check from an out-of-

town college kid anyway.

The folks had frowned on credit cards for many years. They bought nothing but a home and cars on credit. Everything was cash or we went without. But we did manage to convince them that we should get a gas

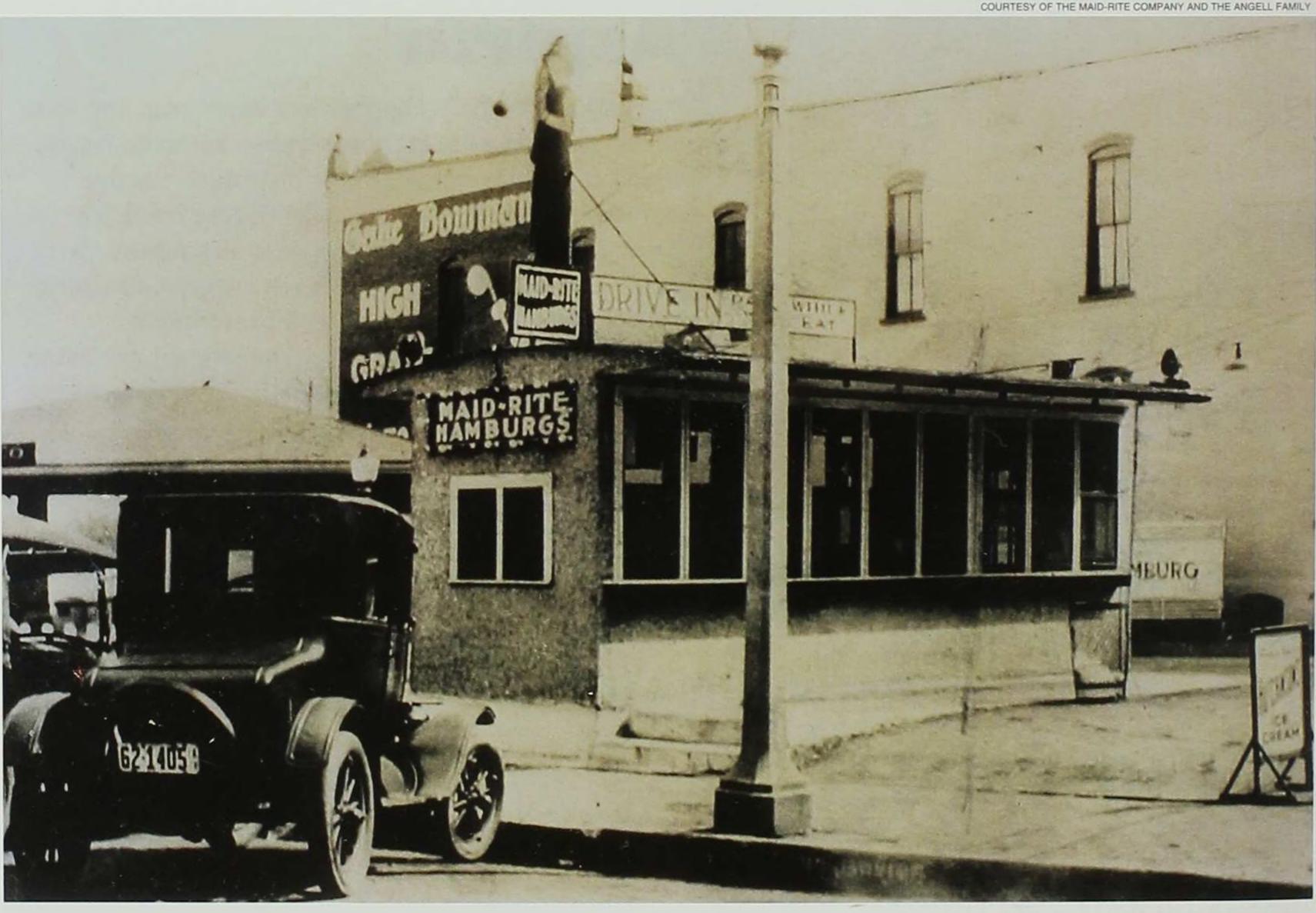
company credit card, a Texaco card (since we could always "trust our car to the man who wore the star") before setting out to school. This was long before the day when Visa and MasterCard flooded campus mailboxes with offers a student couldn't seem to refuse. Credit cards then had very low limits (hey, gas was only two bits a gallon). Issuance also required a job.

We filled up at the Texaco at 16th Street on Highway 30 and made our way east stopping only at Howard Johnson restaurants along the way. Holos was the only place that accepted the Texaco card for food or lodging, Indiana and Ohio were a bit of a problem as Texaco stations were few and far between. But we made it back home with no cash!

It's something we wouldn't think about doing today. And we certainly wouldn't let our kids leave home without making sure there wasn't some cash in their pockets—even though they both have their own credit cards with limits they'd never be able to pay back.

-Russ Oechslin, Okoboji, Iowa





Fast Food

Increasingly on the go, Americans enthusiastically accepted the new convenience of restaurants that served food quickly.

Maid-Rite in Iowa was among the first restaurants to serve "fast food" to passersby and to use drive-up and walk-up windows. In 1926, Muscatine butcher Fred Angell created a sandwich from ground beef and spices. A person who tried it reputedly said it was "made right." Angell's Maid-Rite Hamburg restaurant was soon franchised, among the country's first.



Stupka's, a 1960s Davenport drive-in, featured a typical fast food menu posted on signs outside the restaurant. Top: Early Maid-Rite store in Muscatine, ca. 1930.

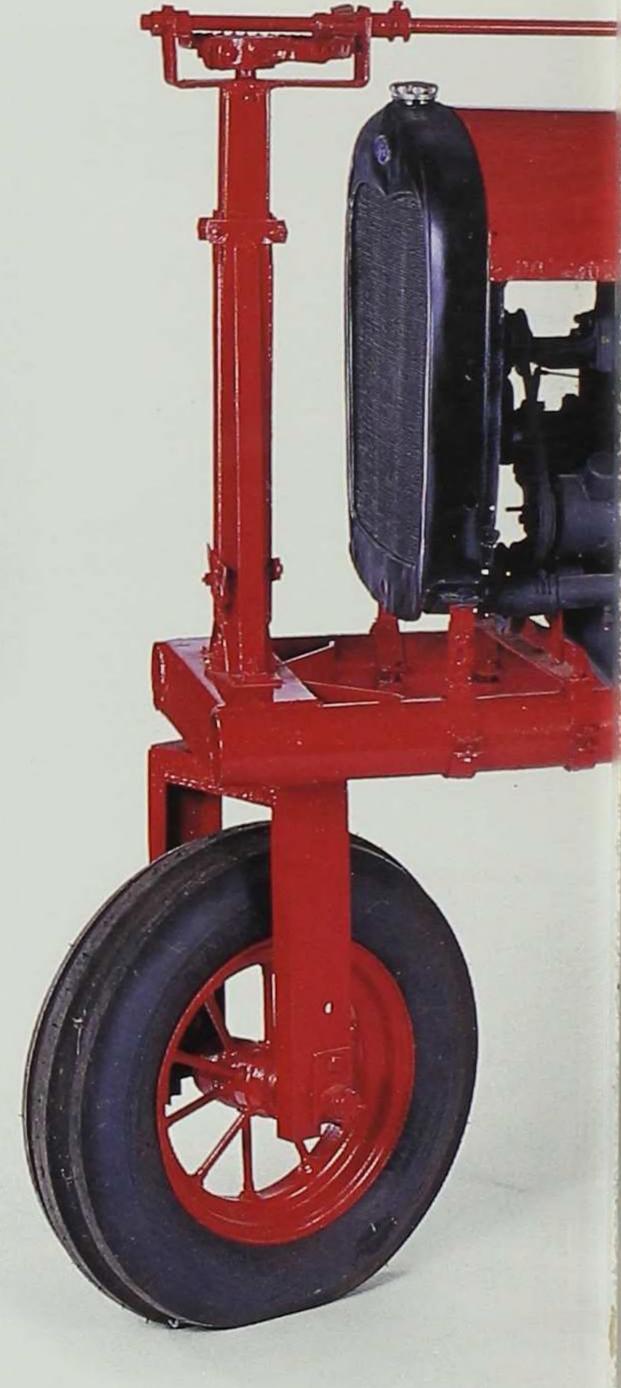


T-Shirts

Named for their "T" shape, these short-sleeved cotton shirts were worn under uniforms by Allied soldiers during World Wars I and II. Pleased with their comfort, returning servicemen continued wearing them back home after the wars. In the 1952 film Streetcar Named Desire, movie star Marlon Brando popularized plain white T-shirts as outerwear. By the late 1970s, people wore T-shirts in all colors and even tie-dyed, and often printed with political slogans, business logos, and jokes.



A farmer on a John Deere waves as he cultivates his cornfield. By mid-century, tractors had replaced most workhorses and hired men on Iowa farms.



Tractors

Among the many inventors of tractors was farmer John Froelich, of Clayton County, Iowa. He developed a prototype tractor in 1892 and sold it to the Waterloo Gas Traction Engine Company in 1893 (later acquired by John Deere). Companies such as Hart-Parr in Mason City (1900) and Thieman in Albert City (1930s) followed, giving farmers an option to horsepower.

By the 1920s farmers could buy tractors with multi-purpose attachments, as companies such as Farmall and John Deere became active in tractor manufacturing.

In lowa, tractors finally replaced workhorses in the 1940s. World War II demanded that farmers grow more food; at the same time, farmers lost their hired men to the armed forces.

First-hand experience

In 1900, Great-Uncle Bert was a mechanical engineer in San Francisco and Chicago. He occasionally looked after the family farm in the Missouri River valley northwest of Little Sioux,

lowa. Much of the ground was untilled, heavy black clay with native prairie grass tall enough to partially hide a man on horseback. Local people harvested the prairie hay for their horses, because the soil seemed too heavy for tillage.

When Great-Uncle Bert purchased a Hart-Parr tractor and plow, he saw an opportunity, but he never knew it changed the course of our family history. He spent his summers plowing virgin prairie so farmers could raise more wheat and corn. As the land became tillable, families established new farms in the valley and helped Little Sioux businesses



prosper... His tractor was so popular he acquired plowing contracts several years ahead. Life was good, until the day he died in a bicycle accident.

The family pressured my grandparents to move from North Carolina to look after the farm and honor Great-Uncle Bert's plowing contracts. They came to Little Sioux in 1910 and lived in town until they built a house on the farm. My grandfather plowed more land for several years, and that brought more people to Little Sioux.

The tractor and plow helped change the landscape from largely open prairie to cornfields and farm houses—but I can't forget the tractor's other effect. Because my grandparents moved to lowa, their children found spouses they would otherwise never have met. I will always be grateful to a man I never met who bought a tractor I never saw. Without them, my cousins, their children and ours, and I would never have lived.

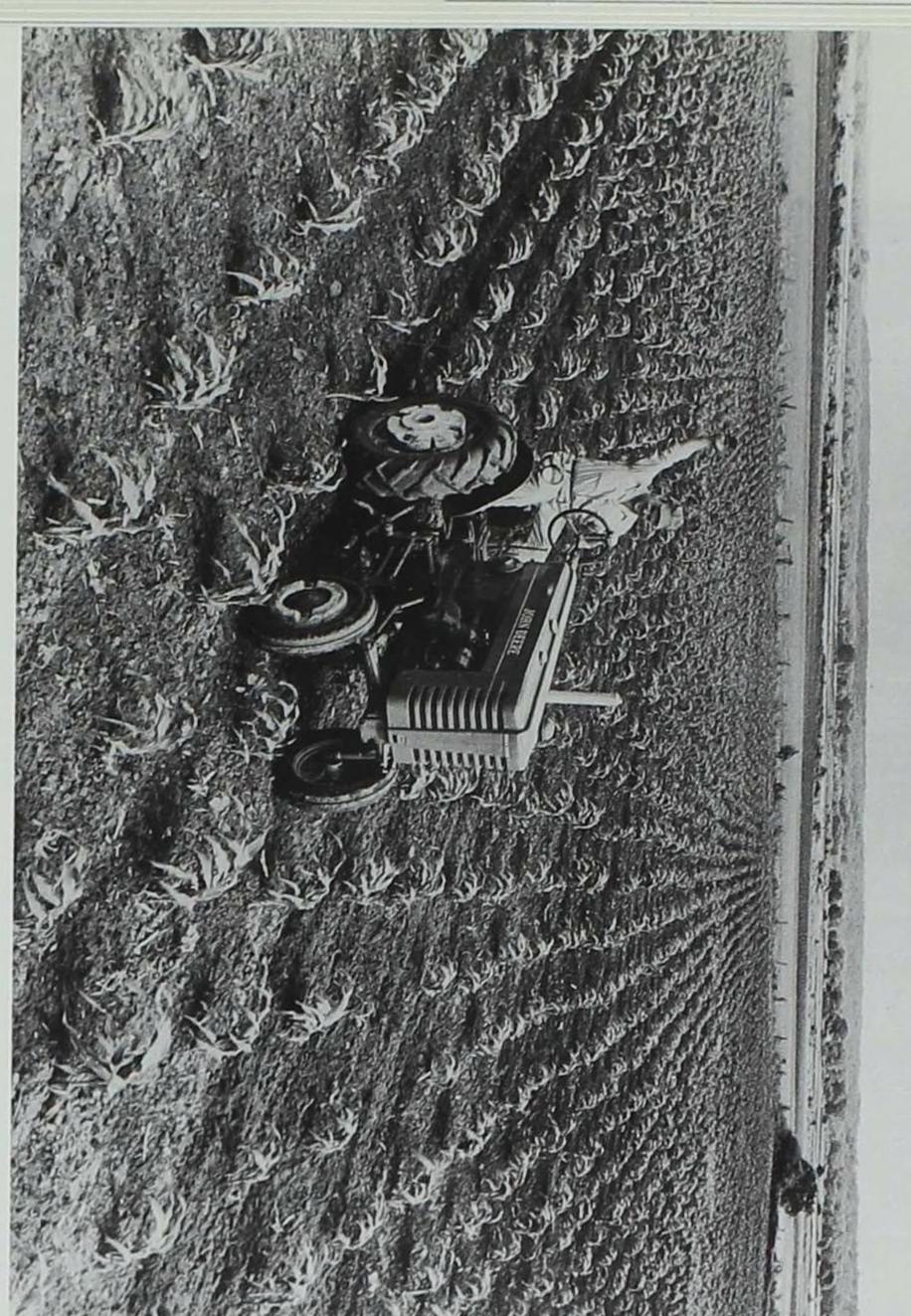
-James C. Perley, Little Sioux, Iowa

Although tractors were used in the thirties for the major share of field work on our farm in Woodbury County, lowa, our horses were unforgettable, quirky servants.... One of our workhorses created a neighborhood spectacle. Black-coated Dick, out in the pasture, wandered into our muddy, high-banked creek, and mired down to his belly. By the time we found him, Dick had struggled to exhaustion and was a muddy mess.

Dad and the hired men tried prying him out of the ooze with long planks but with no success. By the time Dad went to his ace in the hole—our Farmall F-20 tractor—neighbors somehow had heard the word and gathered on the high bank of the creek to help or to gawk.

Sure enough, with ropes around Dick's belly, the Farmall tractor did budge him out of the blue clay mudhole and he staggered to his feet. Dad said that Dick was never the same horse afterwards.

-Gordon Marshall, Milwaukee, Wisconsin



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> The Thieman three-wheel tractor was made in Albert City, lowa, in the early 1930s. It could pull two 14-inch plows, came equipped with either a Ford or Chevrolet engine (this one has a Ford), was advertised as costing the same or less than a horse, and sold all over the U.S., though mostly in the Midwest.

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Teddy Bears

The making of cuddly, furry teddy bears marked the beginning of stuffed animal toys. The bear traces its origins to a 1902 cartoon depicting President Theodore "Teddy" Roosevelt, an ardent outdoorsman, refusing to shoot a helpless bear. The cartoon was titled "Teddy's Bear." Inspired by the cartoon, a toy store proprietor in Brooklyn, New York, made up a toy bear and got the president's permission to name it "Teddy." The new toy was an instant hit, and is still popular, with innumerable incarnations, a century later.

Soft Drinks

Although cola drinks appeared in the 1880s, enjoying soft (non-alcoholic) drinks and carbonated water was only an occasional indulgence in the 19th century. In 1900, the average American consumed about 12 soda beverages per year. Now the figure is about 400 per year.

New ways of bottling and capping soft drinks, along with mass marketing, increased consumption. More and more people drank soft drinks from bottles and cans at home, rather than from the fountain in the local soda shop.

What's the origin of the word "pop"? Before bottle caps came along, beverages were pressure-sealed with a marble inserted in the neck. To drink from the bottle, a person pushed the marble down, and a "pop" sound erupted.

Despite Coca-Cola's dominance by the early 1900s, many local bottlers in lowa made and sold soft drinks. Maquoketa Bottling Works began as a brewery in 1860 and converted to soft drinks during Prohibition. The company's most popular drink was Goody, introduced in 1952 and produced until 1989. It was sold throughout Jackson County to grocery stores, bars, and restaurants, and in several flavors.





This 1948 Hallicrafters television, used by Walter and Jennie Greenley of Webster City until 1952, had a seveninch diameter screen.

Televisions

Iowan Philo Farnsworth numbered among the inventors who helped make television possible. He developed equipment allowing the transmission of images onto the television screen in the 1920s. The first commercial television broadcast occurred at the 1939 New York World's Fair. In the early 1950s, television entered the American home. In 1952, for example, 800,000 Americans bought their first TVs.

: First-hand : In 1949 when I was six, a visit with my aunt and uncle changed how we In 1949 when I was six, a visit with : experience : saw the world. For the first time in our lives, we saw a television. They saw the world. For the first time in had purchased it that morning and

shared the miracle of sights and sounds in a little black box. My father was always interested in new technology (when he was a boy, he had wanted to trade one of his sisters for the first car he saw), and the professional wrestling match we watched that night at their home convinced my father we had to have a television. The next afternoon, we went shopping and returned with a ten-inch beauty. As the evening progressed, my father struggled in the dark to install our television antenna in time for the wrestling match.

Television was so amazing that we watched indiscriminately. The first daytime show I remember was Mel Hansen's farm report on WOW-TV in Omaha. A small calf was on his desk for a while. Another early show allowed the audience to watch people. Technicians installed a camera outside the studio and recorded people as they crossed the street. We watched Johnny Carson talk about nothing and I remember his pulling a dead mouse from the horn of an old Victrola. Broadcasting ended for a time in the afternoon, and my brother and I, who always before had plenty to do, waited impatiently to see what TV offered next when the programming recommenced. Tom Corbet, Space Cadet, Captain Video, Time

for Beany, Howdy Doody, and other shows occupied our late afternoons. My mother liked Martha's Kitchen and Over the Coffee Counter, a talk show, and we watched too, because it was television.

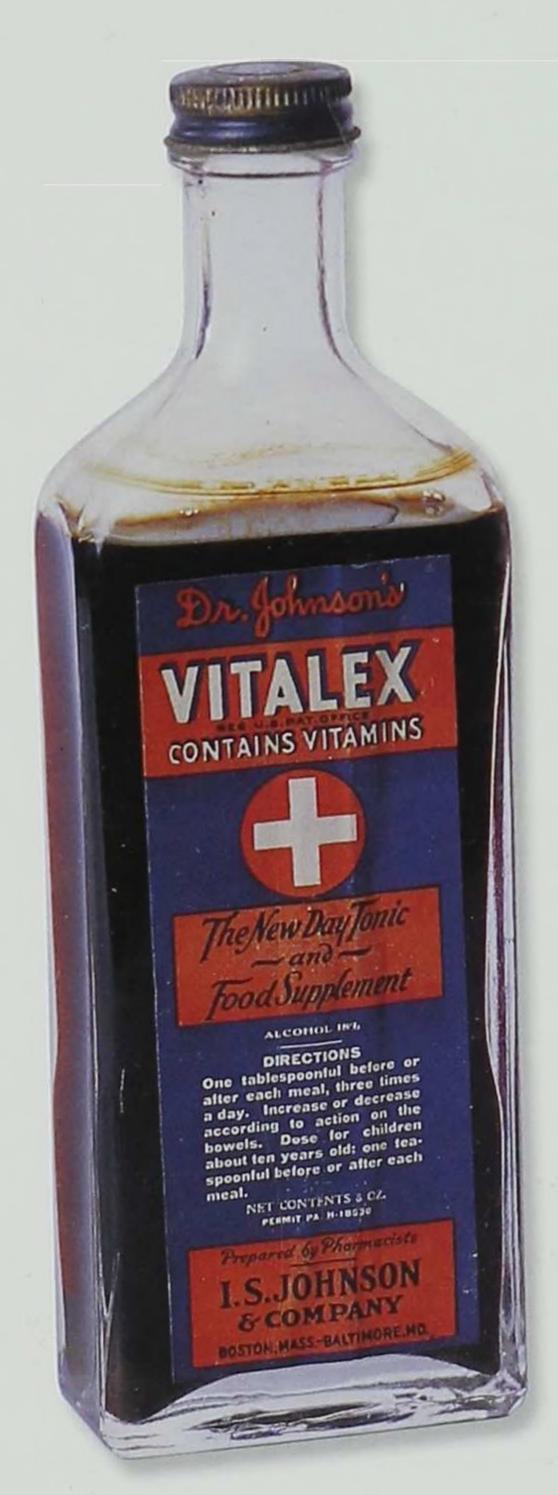
News of our television spread and within weeks, relatives and neighbors filled our living room. We stared zombie-like at images flickering before us. On some nights, it was difficult to walk across the room without stepping on someone....

More weeks passed and our living room slowly emptied as others bought their own televisions. Like us, they replaced evening books, magazines, and family games with quiet awe as "Uncle Milty" Berle and others cavorted across the screen. Daily conversations changed, because we shared our reactions to the previous night's shows. The limited choice of stations gave us a common bond of experiences and made imaginary TV characters real to us.

Television's explosive popularity produced rapid changes. TV screens grew from ten inches to eighteen or twenty-inch monsters and our miracle box seemed not good enough, so we bought a larger set and relegated the old one to the basement, where it remains.

I look at the old TV and recall the way it changed our lives in ways no one could imagine that first summer. Television made the Civil Rights movement, the Vietnam War, and moon landings more vivid than a newspaper or radio account. It took us there in a way nothing before could.

-James C. Perley, Little Sioux, Iowa





Vitamins

By the late 19th century, scientists were concluding that certain diseases such as beriberi, scurvy, and rickets could be mitigated, cured, or prevented by eating certain foods. In 1912, the word "vitamines" (for vital amines) was coined to refer to essential dietary substances. (The letter "e" was later dropped after it was proved that not all vitamins contained amines.) Researchers now began to establish the nutritional roles of various foods. By 1920, researchers discovered that rickets is caused by a deficiency in vitamin A, which exists in cod liver oil. Starting in 1932, vitamin C (ascorbic acid) was the first vitamin to be synthesized, introducing the notion of vitamin supplements.

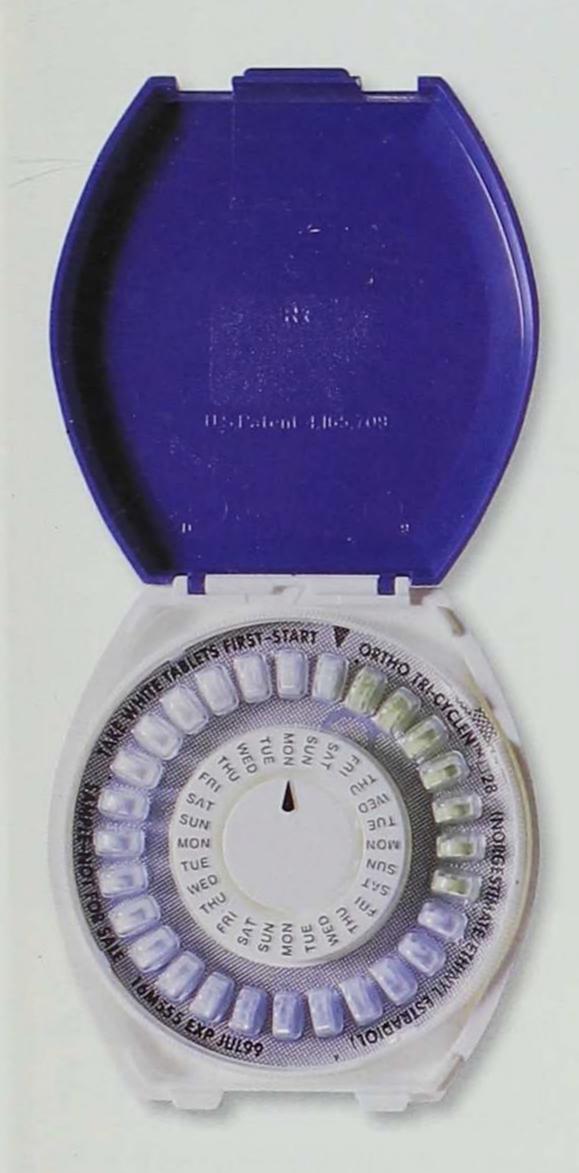
Vitalex Day Tonic and Food Supplement (ca. 1930) combined three vitamins with several natural herbs.



SIXTEEN COLORS

BINNEY & SMITH CO.

150 Iowa Heritage Illustrated



The Pill

The birth control pill, the first oral contraceptive, was approved by the Food and Drug Administration in 1960. It prevents pregnancy by preventing the release of eggs from a woman's ovaries. By 1968, 6 million U.S. women (one-fifth of all women of child-bearing age) were taking the Pill.

First championed as a way of controlling the world's population boom, in the United States the Pill increased society's tolerance for premarital sex and decreased social taboos against discussing sex and birth control.

The Pill was one of the most controversial new technologies of the 20th century. Proponents celebrated how it gave women control over their sexuality and reproductive health. Opponents charged that it encouraged promiscuity. Other opponents opposed all forms of contraception on principle.

By the mid-1970s, critics raised new concerns about possible side effects of long-term use of the Pill, and alternative contraceptives, such as the IUD, became more widely available.

1990s Ortho "Dial Pak" birth control pill dispenser. Days are marked inside to help user keep track.

Air-Conditioners

Willis Carrier invented the system of cooling air and lowering humidity by running air through chilled coils. The first air-conditioned buildings were industrial. When movie theaters began installing units in the 1920s, their summer attendance increased. Window air-conditioners first appeared after World War II.

Air-conditioning increased worker productivity, made cities like Las Vegas and Houston more livable, helped increase the population of the South, and downplayed one traditional role of front porches.



An automobile air-conditioner (ca. 1940). A block of ice was set inside, the device was hooked onto the edge of the car window, and the louver was opened by pulling the cord. As the car moved, air funneled into the opening, was cooled by the ice, and flowed into the car. Occasionally, the screen had to be cleaned of bugs.



Hula Hoops



Flush with success over its 1957
Frisbee craze, Wham-O Manufacturing Company turned its attention to a bamboo hoop used in Australian physical education classes. The company began making similar hoops out of a plastic composite called Grex—and called them Hula Hoops.

Hula Hoops first hit the market in southern California in the summer of 1958, selling for \$1.95. They became an instant hit. In four months, 25 million were sold. lowans of all ages gave the new toy a spin.

Like all fads, Hula Hoops rapidly faded in popularity. By October 1958, the Wall Street Journal declared: "Hoops Have Had It." The price was slashed to 50 cents. Nevertheless, Hula Hoops have been characterized as the most popular fad in history.

Opinion Polls

Early polling in the 20th century focused on consumer preferences and political elections. Although newspaper straw polls were crude and inaccurate, they were popular with the public. University of lowa graduate and newspaper pollster George H. Gallup, of Jefferson, Iowa, pioneered scientific methodology in polling practices. His Gallup Poll, created in the 1930s, became the best known and most respected poll in the world. Gallup turned his interest to political polling when his mother-in-law, Ola Babcock Miller, was elected Iowa's secretary of state in 1932.

The Des Moines Register's weekly Iowa Poll, created in 1943, was one of the nation's first public opinion polls and relied on scientific sampling techniques.

Gallup Poll box used in 1952.



Charlie Parker founded Central Surveys in Shenandoah, Iowa, in 1937.... [In 1936, the Literary Diexperience gest magazine had conducted a poll] mostly done by mail, with people

drawn from car license lists, magazine subscription lists, tax rolls, and just about any other kind of list. I believe they interviewed more than 30,000 people in 1936. Their conclusion was that Alf Landon, the Republican candidate from Kansas, would easily defeat Franklin D. Roosevelt, who was running for a second term.

That same year, a college professor from lowa by the name of George Gallup conducted a much smaller poll using scientific sampling techniques. He came to the opposite conclusion—that Roosevelt would win handily. Among other things, he said Roosevelt would carry the usually Republican state of lowa. Incidentally, the sampling techniques and the math used to determine the reliability of a sample were first developed in the field of agriculture by agronomists who were trying to make accurate measurements of the many complex factors that can affect a crop, such as the weather, the amount and kind of fertilizer, insect infestation, the date of planting, and so on. Gallup was able to apply some of these methods to sampling the voting public instead of acres of corn.

Charlie Parker ... was doing some work that year for the Iowa Republican Central Committee. They asked him to review the Gallup survey and compare it with the Literary Digest poll, I think they had little doubt that the magazine poll, which used a huge sample and was done by a well-known publication, had to be more accurate than a dinky little study done by some unknown lowa college professor.

Well, Charlie studied the polls carefully and came to the conclusion that Gallup knew what he was doing, and that the Literary Digest poll was not reliable because the people they chose for their samples tended to

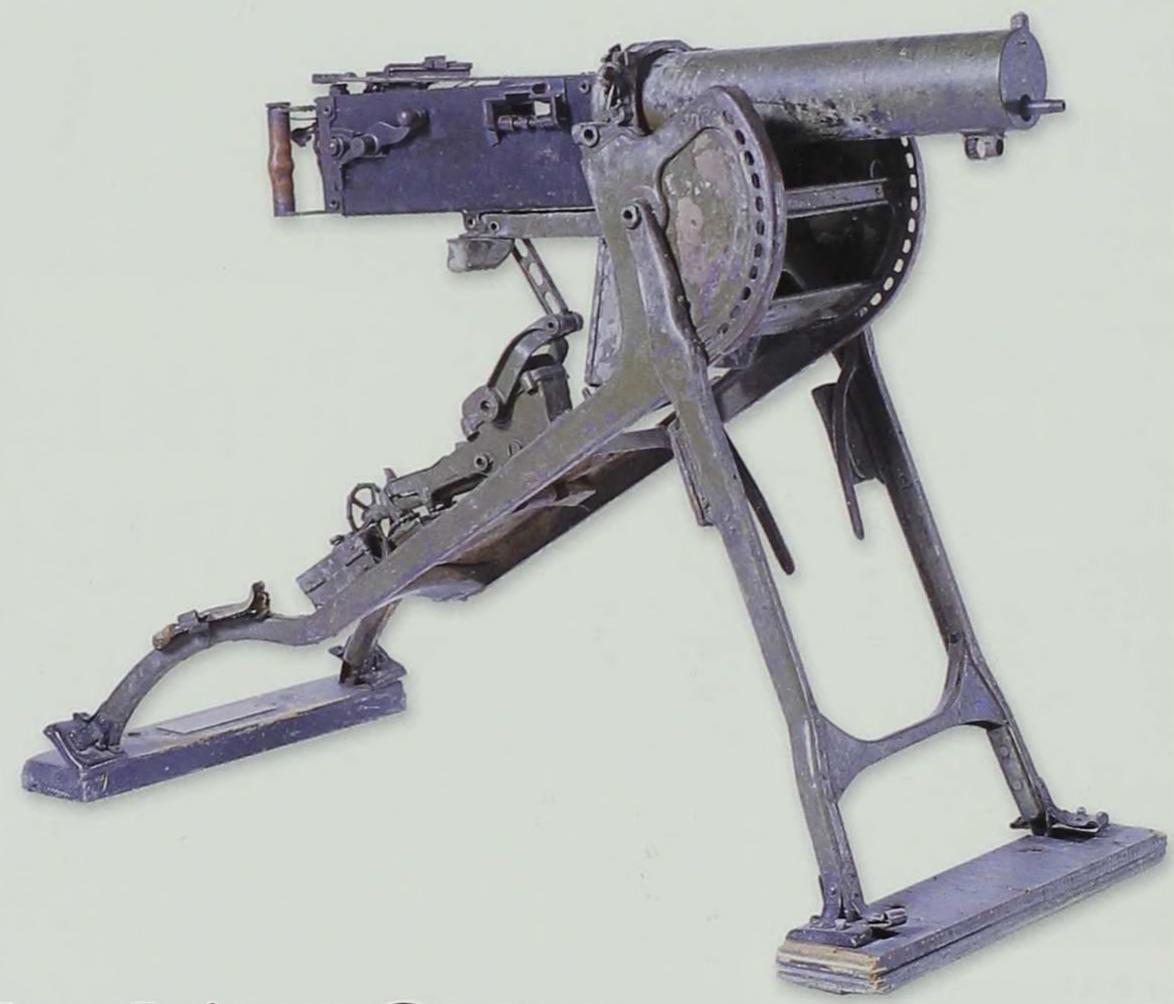


be well off and not a representative cross-section of the people likely to vote. The Iowa Republican party didn't appreciate Charlie's report, but the November election proved that he—and Gallup—were right on target. Landon didn't carry lowa; he didn't even carry his home state of Kansas. In fact, he only carried Maine and Vermont, which led someone to remark, "As Maine goes, so goes Vermont."

The more Charlie thought about it, the more he became convinced that there was a market for this kind of survey.... In the 1930s, there were big changes going on in the field of electric utilities. So-called "public" utilities were being created in many areas, meaning electric systems that were owned by municipalities, counties, cooperatives, public agencies, and even by the federal government, and these were replacing what were then called "private power companies" owned by stockholders. . . . In 1937, some people in Stanton were crying to get the city to start a municipal electric company. . . . Charlie Parker went to the Iowa-Nebraska Electric folks and suggested they hire him to conduct a survey. They saw no need for it since their local manager in Stanton had already assured them that the people he talked to were all in favor of the company and there was really not much interest in having a city-owned system. Charlie made the survey anyway, even though he wasn't getting paid for it. He told the company that they were about to lose the election, and he predicted the margin. Well, Charlie's survey was right on the money and Stanton has a municipal electric system to this day.

In time, Charlie established a national reputation.... Incidentally, three of the best-known pioneers in the field were Charlie Parker, George Gallup from the University of Iowa, and Elmo Roper, who had a jewelry store in Creston in 1936. Someone said you had to be from lowa and be bald to succeed in the field.

> Related by Charles Williams in 1997, submitted by Robert W. Longman, Shenandoah, Iowa



Machine Guns

An American told expatriate inventor Hiram Maxim: "If you want to make a pile of money, invent something that will enable these Europeans to cut each other's throats." In 1884, Maxim perfected a fully automatic 660 rounds-per-minute machine gun, selling it first to the British, then to other Europeans and Americans.

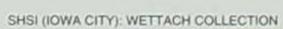
Machine guns forever changed battle strategies, rendering frontal assaults obsolete. The weapon came into its own in World War I. Its firing speed proved indispensable to both sides' armies. Eighty percent of the war's casualties were blamed on the weapon.

Page County civilians watch a demonstration of a machine gun during a World War II bond drive. Above: This German army Maxim machine gun was captured by the American Expeditionary Force in World War I.









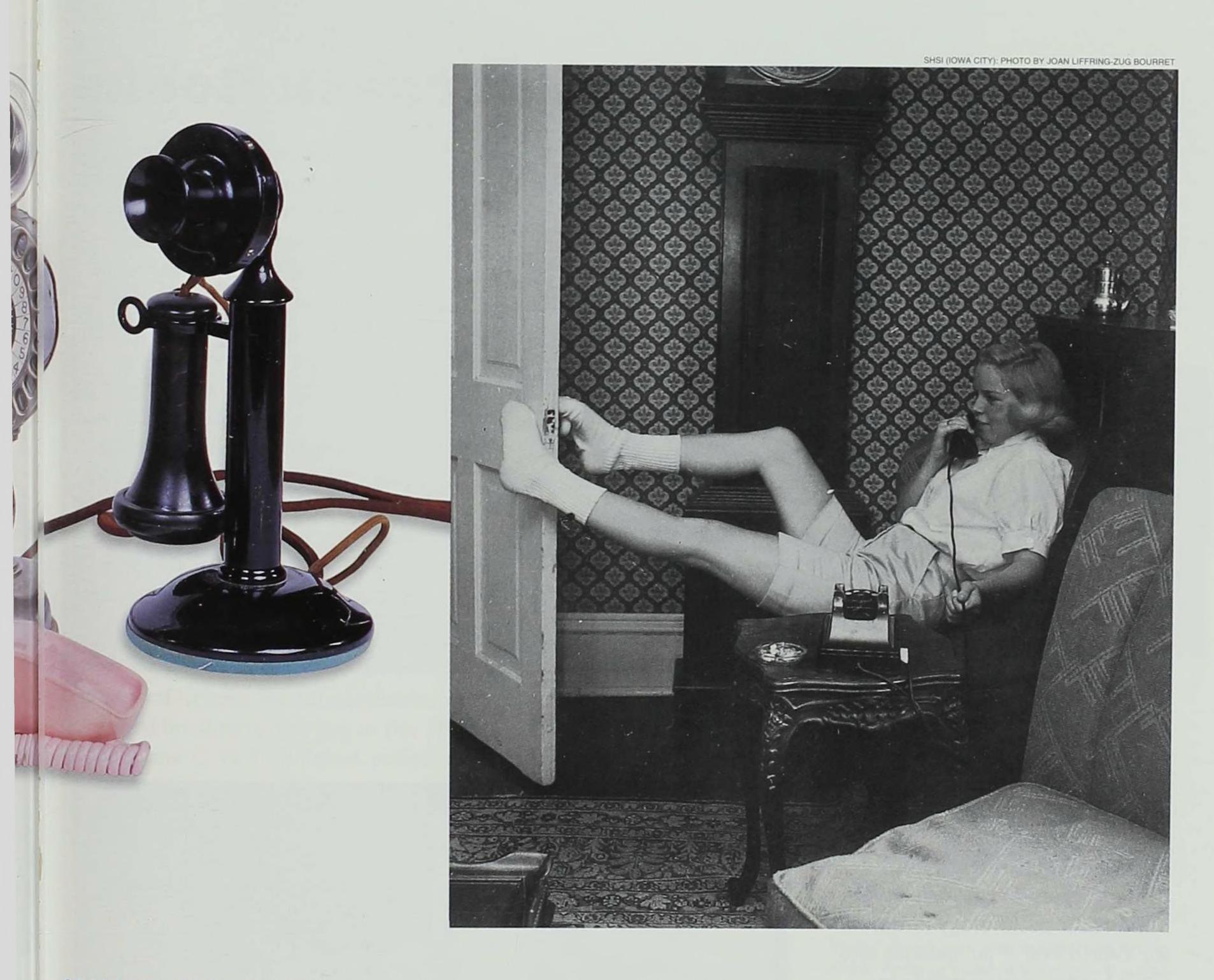


Telephones

Although invented in the 1870s, telephones were essentially a novelty enjoyed by the wealthy in cities until the early 1900s. In 1900, fewer than 10 percent of U.S. homes had telephones.

With a large rural population, lowa led the nation in independent telephone companies targeting rural service. By the time World War I began, 86 percent of Iowa's rural households had telephones—a national high.

Telephones aided in medical emergencies, relaying weather and market reports, reporting road conditions, spreading community news, and easing the isolation of rural living.



First-hand experience:

Early telephone service was very primitive compared to what we have today....The telephone line was one uninsulated steel wire and each telephone was connected to a ground

wire to complete the circuit. If a wet branch touched the wire, the line would short out and it was difficult to hear. In dry weather we would pour a bucket of water on the ground wire to improve the connection....

Each rural telephone line was owned by the families that were connected to that particular line and they were responsible for the repairs and maintenance of that line. When a telephone pole broke, the damaged portion was sawed off and the pole was reset. After a few years the poles were of different heights.

-Wendell L. Rehnblom, Des Moines, Iowa

When we first lived at our farm, the telephone was next to nothing. We were a part of a small telephone system owned by a group of neighbors. Our "central" was in Whittier, and when we wanted to talk to someone

on another line, we called one ring and asked "central" to connect us with that line and ring the certain party. There were several families on each telephone line. Each neighbor had a "ring"—two shorts and a long, or one long and one short ring, etc.

There was also what was called the "general ring" and it usually was one very long, long ring. This was a signal for all people on the line to get to the phone quickly and listen carefully. Sometimes the general ring announced a neighbor needed emergency help, or that some function in the neighborhood was postponed, or any other general information important to all. Of course we could hear our neighbors' rings and they ours. Our conversations were far from private, for anyone else on the line who held his receiver to his ear could hear all that was said by those using the line.

Often the lines went down, and the farmers themselves fixed them. Of course the cost of the phone was practically nothing, but so was the service. Not until the late twenties were we able to become a part of the Bell Telephone system. -Related by Carolyn Kahler Siver,

submitted by Suzanne Kahler Neil, Cedar Rapids, Iowa



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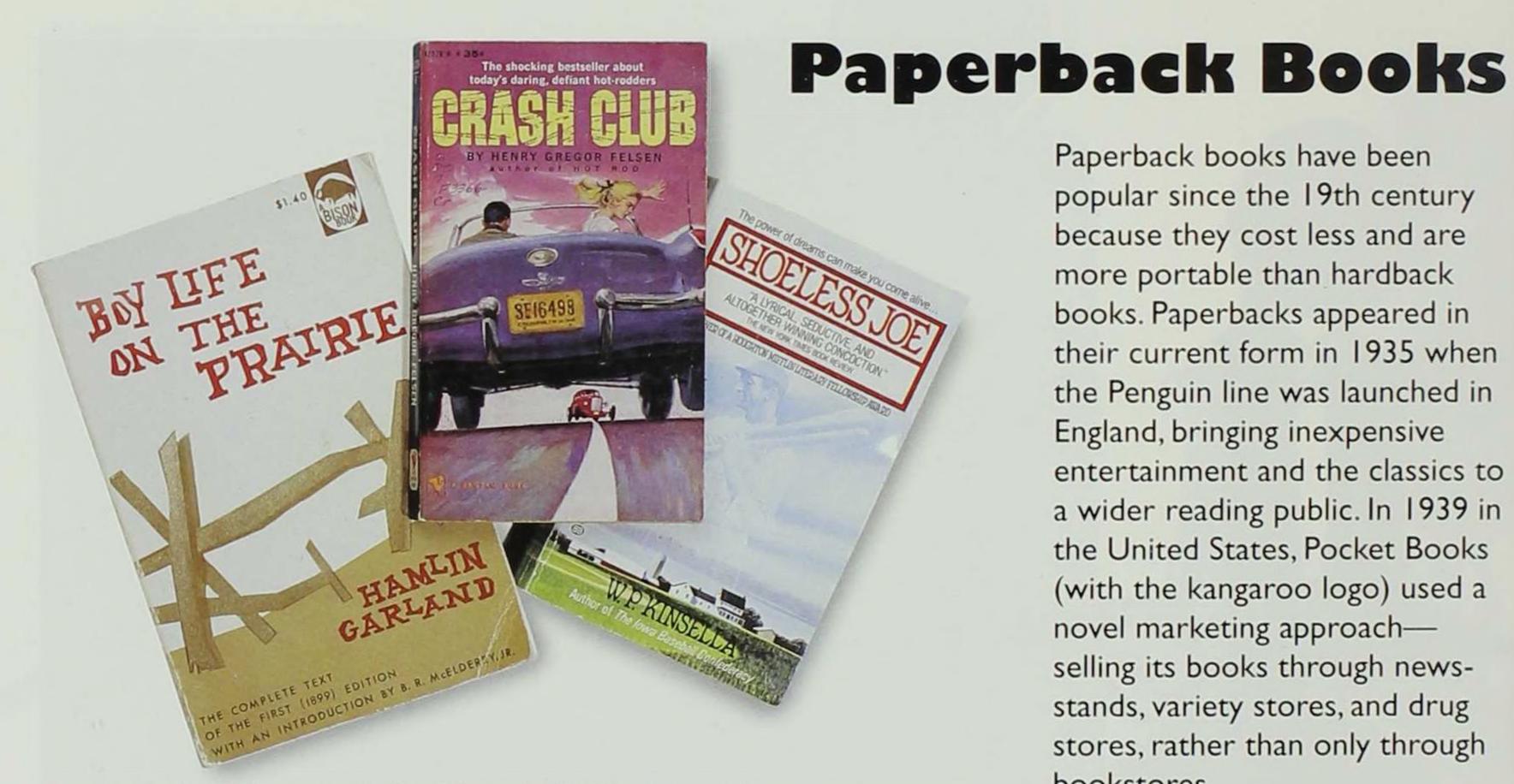
were a part of a small telephone system owned by a group of neighbors. Our "central" was in Whittier, and when we wanted to talk to someone When we first lived at our farm, the telephone was next to nothing. We

> or one long and one short ring, etc. with that line and ring the certain party. There each telephone line. Each neighbor had a "ring" on another line, we called one ring and asked "central" to connect us There were several families on -two shorts and a long,

There was also what was called the "general ring" and it usually was one very long, long ring. This was a signal for all people on the line to get to the phone quickly and listen carefully. Sometimes the general ring announced a neighbor needed emergency help, or that some function in using the line. line who held his receiver to his ear could hear all that was said by those ours. Our conversations were far from private, for anyone else on the nounced a neighbor needed emergency help, or that some function in the neighborhood was postponed, or any other general information important to all. Of course we could hear our neighbors' rings and they

Bell Telephone system. service. Not until the late twenties were we able to become a part of the Of course the cost of the phone was practically nothing, but so was the Often the lines went down, and the farmers themselves fixed them. Related by Carolyn Kahler Siver

submitted by Suzanne Kahler Neil, Cedar Rapids, Iowa

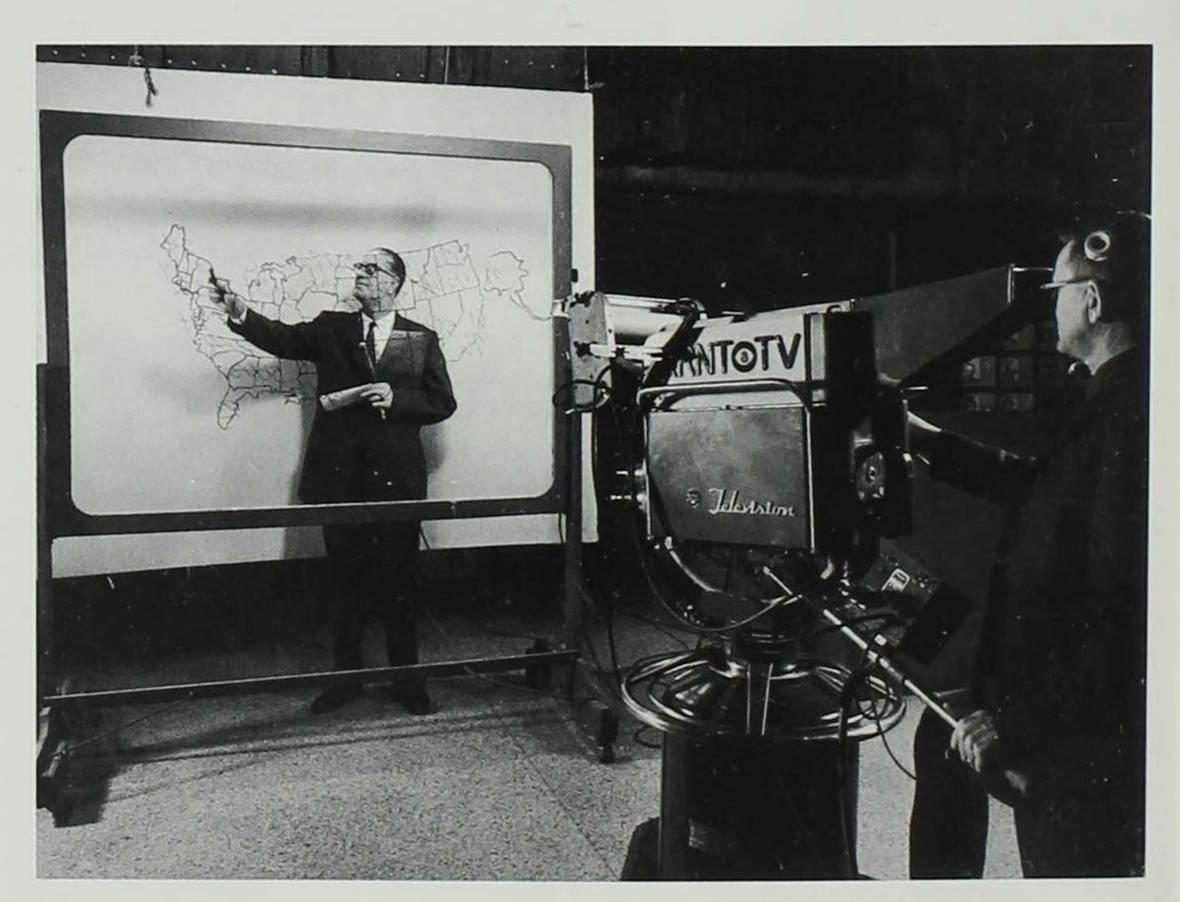


Hamlin Garland's Iowa classic, Boy Life on the Prairie, appeared in paperback in 1961, Iowa author Henry Gregor Felsen's Crash Club in 1961, and W. P. Kinsella's Shoeless Joe in 1987.

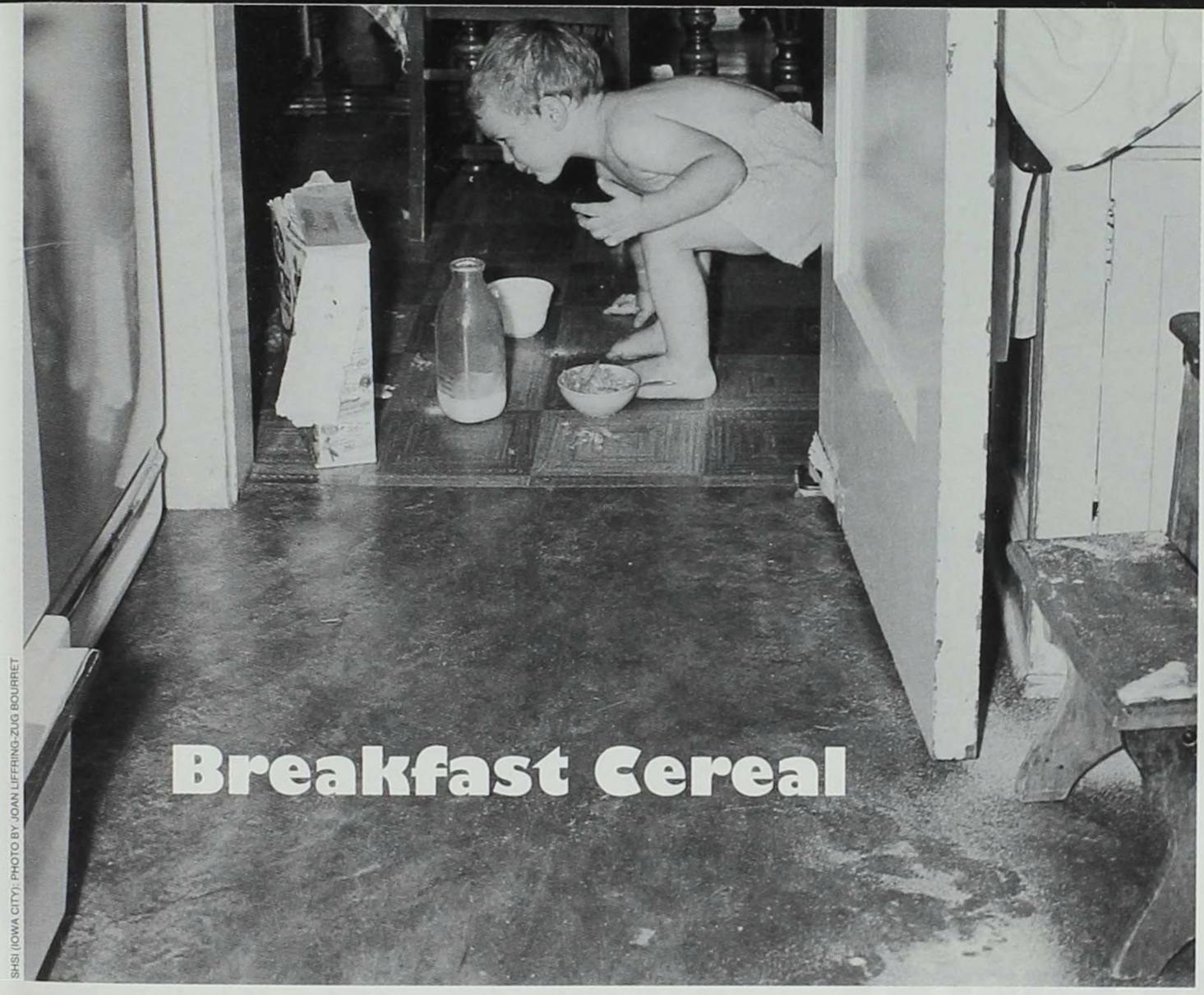
Paperback books have been popular since the 19th century because they cost less and are more portable than hardback books. Paperbacks appeared in their current form in 1935 when the Penguin line was launched in England, bringing inexpensive entertainment and the classics to a wider reading public. In 1939 in the United States, Pocket Books (with the kangaroo logo) used a novel marketing approach selling its books through newsstands, variety stores, and drug stores, rather than only through bookstores.

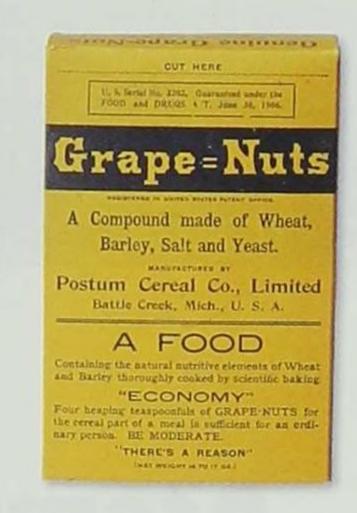
Radar

Working independently, the United States and Britain developed radar technology in time for World War II air defense and naval battles. Radar stands for RAdio Detection And Ranging, and it works this way: antennae at radio stations send out signals, which bounce off an object (an enemy bomber, rocket, submarine, or even a weather front), and reflect back to the sending station, indicating an object's location and speed. Peacetime uses of radar range from weather tracking, air-traffic control, and astronomy research to medical MRI scanning, measuring the speed of baseballs or cars, and burglar alarms.



This innovative see-through weather map showing radar-deployed weather predictions was used by television station KRNT in Des Moines from 1955 to 1973. Weatherman Russ Van Dyke stood behind the map as the camera operator pressed a button reversing the lens (so the map would not appear backwards to viewers).

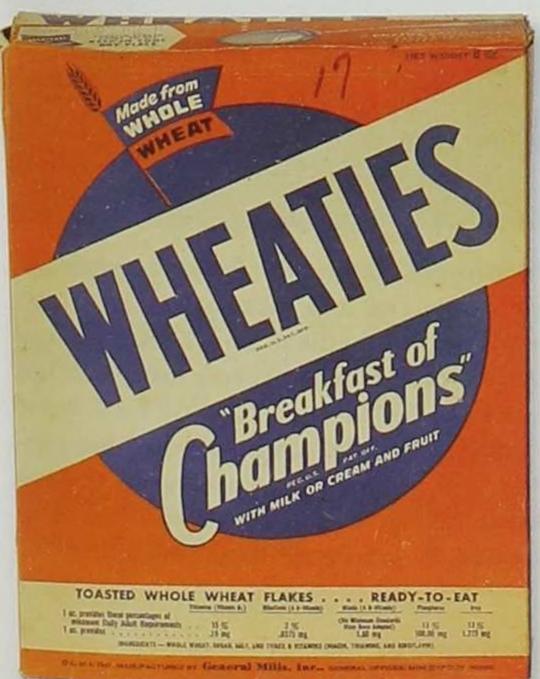




As central heating became available, people chose cold cereal flakes over hot breakfasts. Starting in the 1890s, cereal developers Dr. John H. Kellogg and C.W. Post flaked, puffed, shredded, mashed, and popped grains, while vigorously promoting the health benefits of their products. Breakfast cereals won huge 20th-century markets because of convenience and enticing packaging. Cereal is now the third most popular food item sold in supermarkets, after carbonated beverages and milk.

Above: a child's morning cereal ritual, with tell-tale footprints and stepstool. Grape-Nuts was introduced by Post in 1897 and touted as a cure for tuberculosis and malaria. (This box dates to ca. 1906.) Below, more cereal boxes illustrate changes in packaging and advertising over the decades.

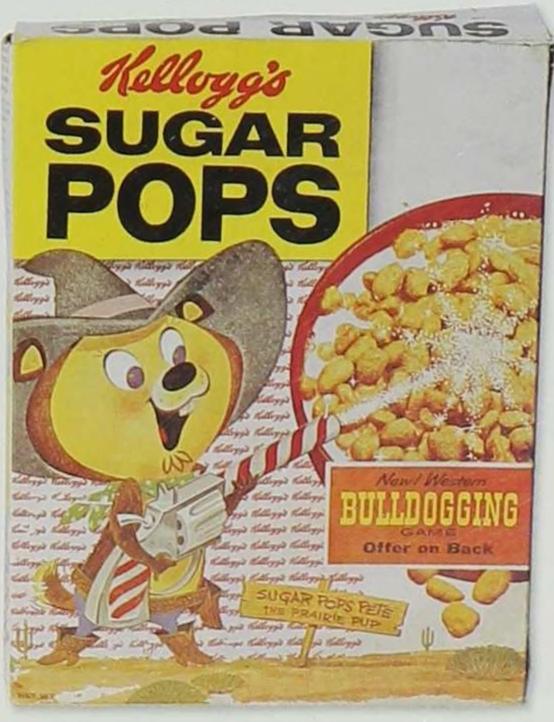
1947 Wheaties box. Introduced in 1924, Wheaties became a hit in the late 1920s, with commercials sung on the radio and box-top premiums targeted to children. Sports champions' endorsements began in the 1930s.



1950s Kellogg's Corn Flakes, with Norman Rockwell artwork and Superman gimmick. Corn flakes were first introduced in 1898 and sold by mail. After malt and sugar remedied flat taste and rancidity, sales soared.



Sugar Pops was an immediate hit in 1950. Kellogg's added a vitamin B sugar coating to the cereal, reversing a policy of not adding sugar. This 1959 box plays on the popularity of Westerns, with a free bulldogging offer on the back.





Atomic Energy

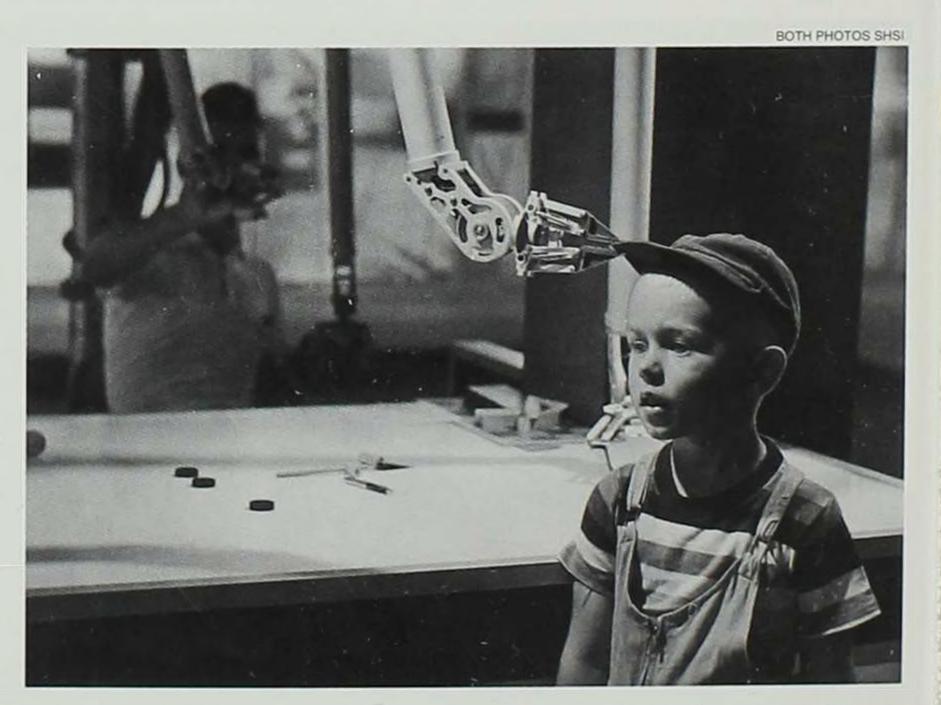
In 1938, German scientists achieved nuclear fission. Firing a neutron into a uranium atom created an explosive burst of energy. The atomic age had begun.

An Iowa State College team led by Professors Harley A. Wilhelm and Frank Spedding developed purified uranium pellets for use in the atomic bomb. The first bomb exploded in 1945 in the New Mexico desert. That same year, two atomic bombs were dropped on Japan, and World War II ended.

During the postwar nuclear arms build-up between the U.S. and the Soviet Union, Americans built fallout shelters and practiced A-bomb drills.



Bright orange and black signs like this one pointed the way to public fallout shelters. Students at Kirkwood School in Des Moines practiced for an A-bomb raid in 1954.



The Atomic Energy Commission's "Atoms for Peace" exhibit at the 1956 Iowa State Fair captured the attention of Lloyd Stangeland, of Gilman, Iowa. The mechanical arm lifting his cap was also used to lift radioactive materials in atomic laboratories.

Left: A "transistorized" family radiation measurement kit contains a ratemeter, dosimeter, and charger that promised to provide "vital information about fallout radiation in the event of nuclear attack." The kit cost \$24.95 (about \$170 today).



Diabetic Treatments

Capitalizing on earlier discoveries that linked diabetes with the pancreas and elevated blood sugar levels, Frederick G. Banting, John MacLeod, and Charles Best won the 1923 Nobel Prize for developing pancreatic extracts of insulin. The development of insulin injections for diabetics proved to be one of the 20th century's most dramatic lifesavers. Still, the disease is on the rise because Americans eat more and exercise less, and although treatments exist, diabetes remains incurable.

Microwave Ovens

Quite by accident, Raytheon engineer Percy L. Spencer melted a candy bar with a radar vacuum tube (or magnetron). This discovery led to the development of the microwave. Microwaves represented the first new way to cook since the discovery of fire or the use of a fiery element. Food is warmed by electromagnetic energy agitating the water molecules.

The first microwaves were for industrial use, weighing 750 pounds and standing five feet tall. After Raytheon purchased Amana Refrigeration in Iowa, Amana began producing and marketing home microwave ovens, and introduced the world's first countertop microwave in 1967. By the early 1980s, microwave ovens were America's fastest selling appliance, ideal for fast-paced lifestyles.



One of the first Amana-made units (ca. early 1970s) was used by Amana employee Reynold Moessner of Middle Amana.



Disposable diapers in three sizes (including a tiny micro-diaper for premature infants) rest on the backdrop of a conventional cloth diaper.

Disposable Diapers

By 1946, Marion Donavan, a Connecticut housewife, was tired of changing leaky diapers. From a nylon parachute, she devised a nylon-covered diaper that kept moisture in and circulated air. She called it the Boater and sold it for \$1.95.

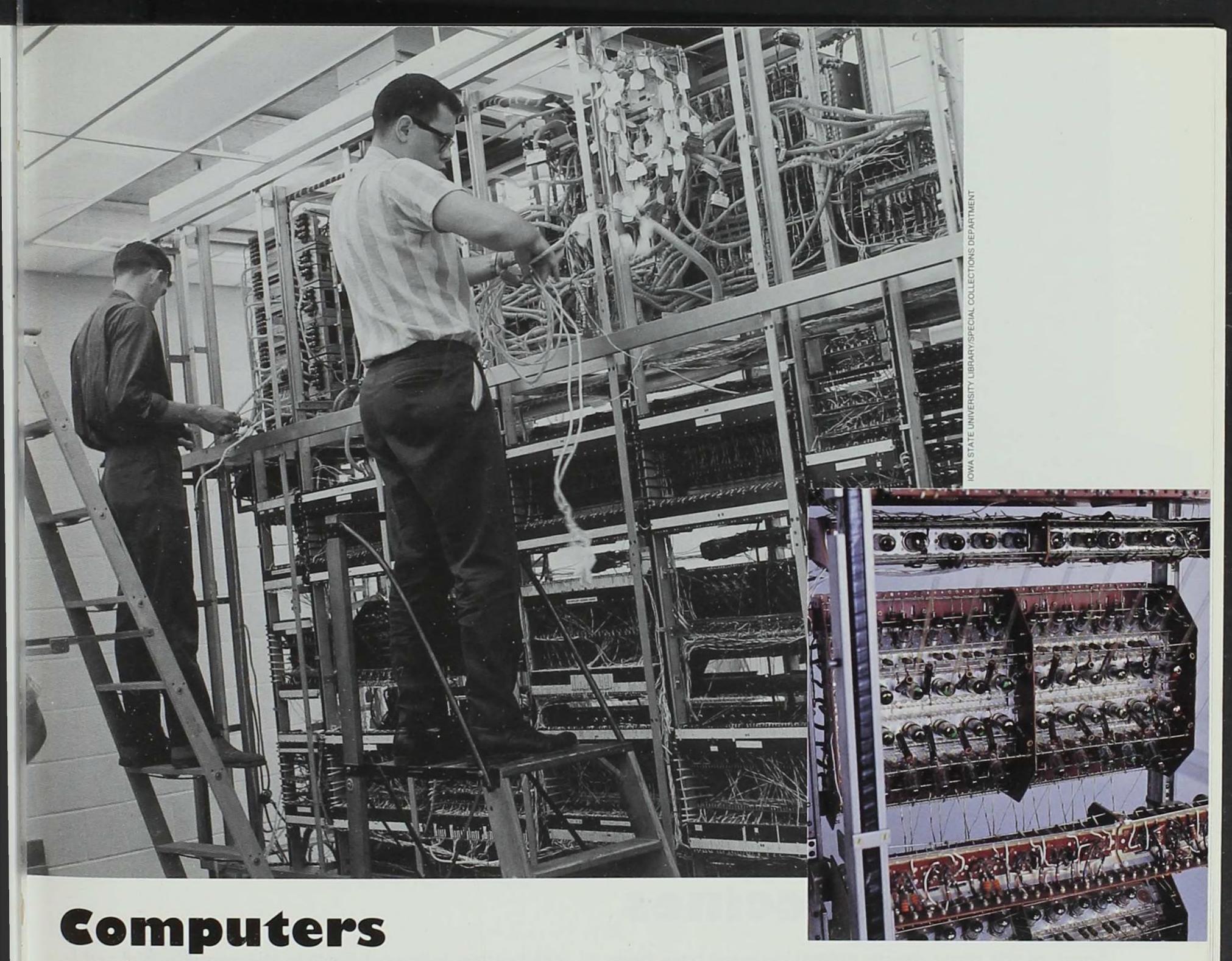
Then, in 1961, Procter & Gamble introduced Pampers to parents. Consumers liked their convenience but balked at their price, ten cents each. The price was lowered, and sales exploded. Similar products followed. By 1990, disposables had captured 85 percent of the diaper industry. Environmentally, disposable diapers pose solid waste and landfill problems; experts believe they will take 400 years to decompose.

Safety Glass

In 1903, a French chemist accidentally knocked over a celluloid-coated glass and noticed that it shattered but did not spray sharp glass particles. Although this new idea—safety glass—was proposed for early automobile windshields as a way of reducing injuries, automakers balked at the extra cost.

The first widespread use was for lenses in gas masks in World War I. Once proven successful during the war, safety glass began appearing as car windshields. Now every car has safety glass, and most eyeglasses are made with safety glass.





lowa State College's John Vincent Atanasoff and his assistant Clifford Berry built the world's first electronic computer, an analog, in 1939. In the mid-1940s, the University of Pennsylvania built the world's first digital computer, ENIAC (Electronic Numerical Integrator And Computer). It used 17,000 vacuum tubes. From the ENIAC came similar developments, such as the Cyclone at Iowa State in 1959 (above and detail). The computing power of these early efforts now can be surpassed by a digital wristwatch.

First-hand experience:

Charlie Parker, founder of Central Surveys, Inc. of Shenandoah, Iowa, used to like to say that his first computer was a bed in a hotel room. He would take each day's completed

questionnaires and place them in piles on the bed, sorting by age groups and sex and by how they answered the key questions in the survey. He would then count each pile and add up his total results and phone the client to report how the survey was going.

When I joined the company in 1957, they were using IBM punch cards and a machine called a sorter-counter. A separate card was used for each interview in a survey, or occasionally two cards if you had an unusually long questionnaire. Some time after we moved to our present location, we bought our first computer—an IBM 1130. The computer along with a printer and other related equipment occupied an entire room. It was fed with punch cards but, wonder of wonders, it could print out all of the tables of data we wanted from a survey in a few hours.

... In 1984, several of us went to Omaha and called on stores selling computers. The new smaller personal computers, or PCs, were becoming the rage, and we felt we had to become more up-to-date. When we talked to some of the young salesmen and told them we had a System I I 30, they had never heard of it. It was probably made before some of them were born. When they asked us about it, I began to tell them that it was coal-fired and steam-operated, and I think they believed it.

-Related by Charles Williams in 1997, submitted by Robert W. Longman, Shenandoah, Iowa



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

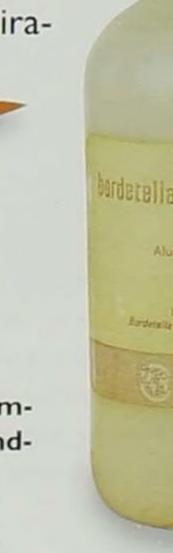
Animal Vaccines

Some of the most deadly animal diseases have been conquered or controlled by Iowans. Vaccines have improved the health of livestock, house pets, and their human handlers, as well as the quality of the nation's food supply.

Hog cholera—a huge menace to the pork industry one hundred years ago—took a frightful toll on Iowa farms. Iowa State College helped lead an immunization program that safeguarded the nation's meat supply during World War I. Total

eradication followed. Early in the century, Richard E. Shope, M.D., worked with Iowa State College to help fight the swine flu virus. In the 1930s, a vaccine was developed against the feared killer equine encephalomyelitis. In the 1970s, Dr. William P.

Switzer, an Iowa State University veterinarian, developed the first vaccines for the swine disease atrophic rhinitis and for a respiratory ailment in dogs.



An advertising pennant from a Sioux City company and a bottle of swine vaccine are reminders of vital developments in animal care.

Comic Books

Superman flew into stores in 1938, the first comic book conceived and originally published and bound in a magazine-like format with original art.

Batman first zapped bad guys beginning in 1939, followed by other comic book heroes—like Flash Gordon, Tarzan, Jim of the Jungle, Prince Valiant, and The Phantom. Other superheroes, talking animals, and sound effects (BAM! POW!) soon filled the pages of comic books.

The Golden Age of Comics lasted through World War II into the 1950s. Attacked by critics demanding censorship of offensive content and advertisements, publishers enacted the self-regulating Comic Code Authority in 1954 to reduce violence and horror in comic books.

A rebirth of the superhero occurred in the early 1960s when Marvel Comics introduced The Fantastic Four, The Incredible Hulk, and Spider Man.



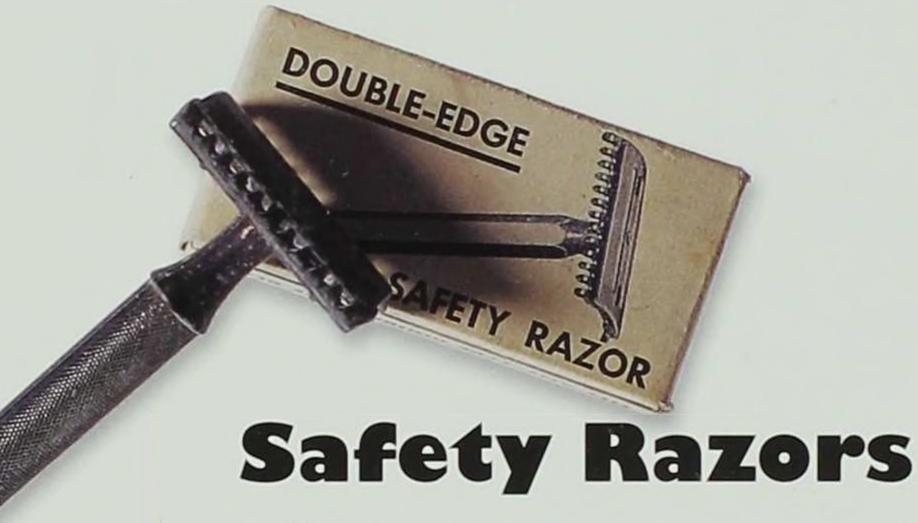


COURTESY ERIC PETERSON (FROM 1935 DES MOINES TRIBUNE)

Roto-Rooter

"There oughta be a better way to do this," muttered Sam Blanc of Des Moines as he finished unclogging potato peels from a relative's sewer line. This experience inspired Blanc to invent a device capable of breaking up tree roots and other obstacles in sewer lines. Blanc's "Roto-Rooter" machine, fashioned on roller-skate wheels, featured whirling blades or knives attached to a flexible cable. Blanc began business operations in Des Moines in 1935 and eventually expanded his business nationwide through an early application of a franchise license system. By the 1950s and 1960s, the public was familiar with Roto-Rooter's jingle, "And away go troubles down the drain."

Sam Blanc poses with his Roto-Rooter.



In 1895 King C. Gillette conceived of a thin, replaceable blade held by a clasp and handle. Introduced in 1903, Gillette safety razors were an instant hit. Hundreds of thousands sold within a few years. The safety razor minimized shaving nicks and ended the nuisance of sharpening dull blades. With safety razors, shaving at home—rather than paying for a shave at the barbershop—became the norm for American men.

Self-Filling Fountain Pens

Before 1908, writers dreaded the messy chore of refilling a fountain pen, a task accomplished with an eyedropper. Fort Madison jeweler Walter Sheaffer introduced the first practical self-filling fountain pen. Shifting a lever on Sheaffer's pen drew ink directly into the pen's reservoir. Although most people now use disposable ballpoint pens, many still prefer fountain pens, which add distinction to one's handwriting.

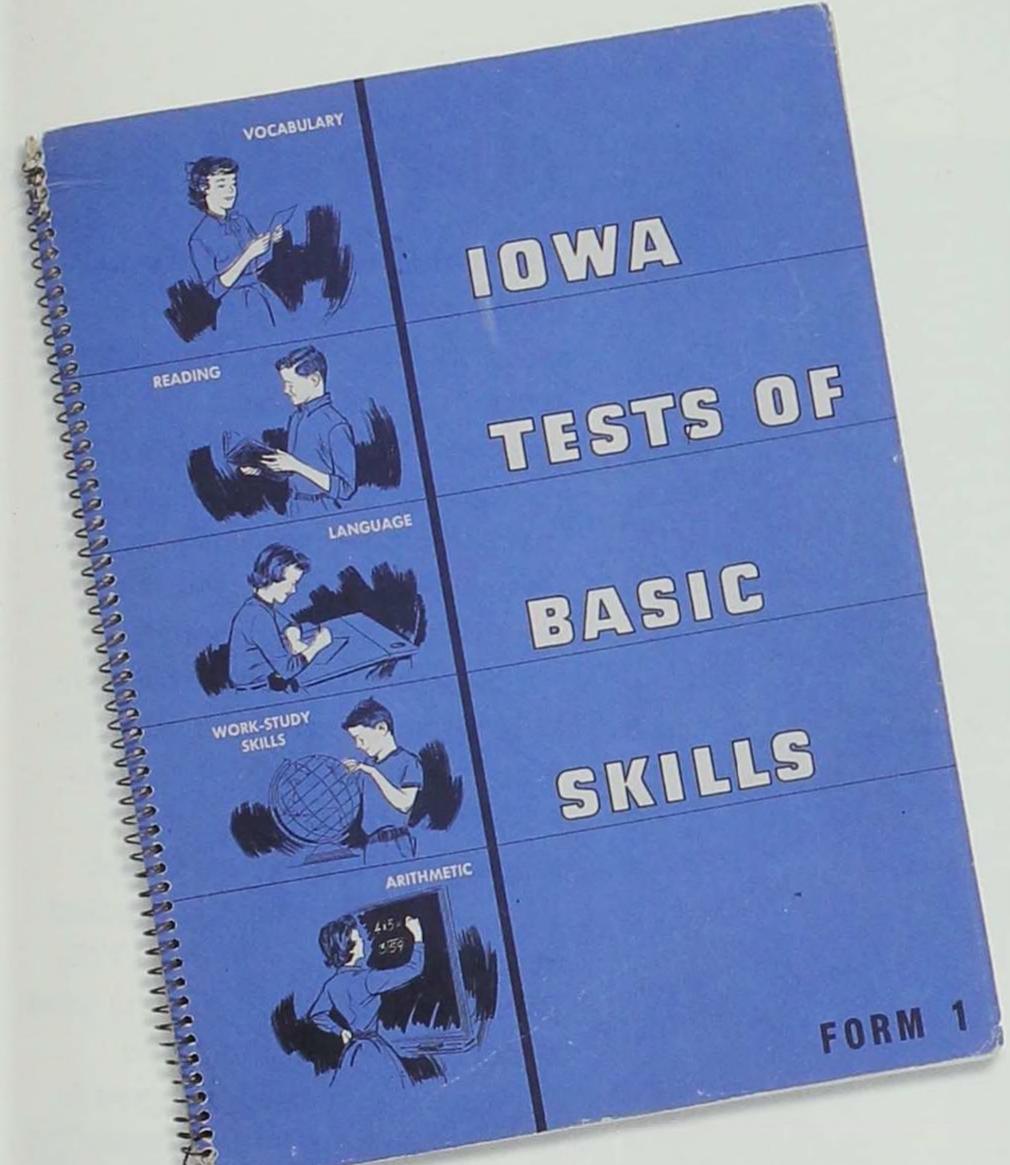


Transparent Tape

In the 1920s, auto painters working on two-toned cars needed a masking tape with pressure-sensitive adhesive. In response, Dick Drew, a researcher at Minnesota Mining and Manufacturing (3M), developed a two-inchwide tape, but it failed in trial runs because of too little adhesive. Drew was told to return the tape to his "stingy Scotch bosses" and add more adhesive. The name "Scotch" stuck.

Drew next developed a moisture-proof cellophane backed with adhesive. Soon known as "Scotch tape," the product was marketed in 1930 to bakers and others for sealing packages.

Transparent tape found even more uses during the Great Depression as cash-strapped Americans repaired household items rather than buying new ones. Tape dispensers debuted in the 1930s.



Skills Tests

University of Iowa educator Everet Lindquist and colleagues wanted an academic competition akin to statewide music festivals and sports tournaments. Designed to improve educational measurements, stimulate scholarship, and applaud bright students, Lindquist's first "Academic Meet," in 1929, was the germ of the Iowa Tests of Basic Skills.

Unlike other skills tests, the Iowa Tests of Basic Skills evaluated both schools and pupils. They also measured skills, not IQ, and were used for educational guidance rather than scholarship selection. Their first national use occurred in 1942.

First-hand

The teacher telling us, "Do not turn over your test booklet until you are experience: Spending the entire school day filling in those little dots. Trying to re-

call what you had just read so you could answer the questions in the reading comprehension section of the test. Filling in all the dots you had left blank the last few seconds before the testing period ended. Those are some of my memories of the Iowa Tests of Basic Skills.

I don't know what other children's reactions were toward the tests, but mine were feelings of dread. Dread not only for the long test day, but also for the results, and for my mother pointing out just how academically average or sometimes below average I was. This standardized testing seemed to always place me in the 40th, 50th, or 60th percentile of all students taking the test, or all lowa students taking the test, or maybe even all students in my school taking the test. Further feelings of academic inadequacy came when I would see my younger brother's higher scores.

To this day I wonder if those tests really did anything for me personally. They may have had an impact on how the teachers taught me or what my teachers emphasized in my personal work. They may also have been a lobbying point for additional school funding. In that manner I'm sure they had some impact. I certainly hope that the results were used for more than just some politician's boast about lowa's higher-than-average scores.

For me the Iowa Tests of Basic Skills became an annual event that, over the years, led into a whole host of other skills tests and entry tests including the Iowa Test of Educational Development; the Army's Basic Aptitude Battery Test and Language Aptitude Battery Test; the SAT and ACT; and last but not least, the GRE. For me, all of those tests harken back to my elementary school days and the lowa Tests of Basic Skills.

—Frank McKinney, Charles City, Iowa



Aerosol Cans

As World War II raged, the U.S. government developed aerosols to spray insecticides, protecting troops against malaria and other diseases. Aerosols, which spray particles in a suspended gas form, marked a new, clean, efficient way to deliver or apply various commercial and home products.

Shortly after the war, Reddi-Wip whipped cream became the first consumer aerosol. At least 1,500 aerosol spray products followed, including hair sprays (left) and, more recently, medical aerosols. Beginning in the 1970s chlorofluorocarbons (CFCs) used as aerosol propellants were implicated as a catalytic agent in reducing the protective ozone layer of earth's atmosphere. By the 1980s, CFCs were rarely used in aerosols.

Peanut Butter

Although peanut butter had been made at home in the 19th century, it became a health food sensation when it was introduced at the 1904 St. Louis World's Fair. Soon grocery stores were selling it in wooden pails and tin buckets. Because peanut butter had to be stirred to evenly distribute the oil, some manufacturers applied the process of hydrogenation (developed in 1901) to prevent oil separation and to prolong shelf life.

First Prize peanut butter was distributed by a Sioux City company.



Crossword Puzzles

Arthur Wynne, a New York World reporter, devised a variation of a children's word puzzle played during Victorian times. Wynne's puzzle first appeared in that newspaper on December 21, 1913. Within ten years, many American newspapers carried their own crossword puzzles, and crossword books had become best sellers.

The Des Moines Sunday Register's first crossword puzzles appeared in September and October 1924 in the women's section, alongside the latest fashions. "It's fun; it's fascinating; and it's fashionable," the newspaper enthused. "Working crossword puzzles has taken the whole country by storm. Your first attempt will show you why the game is so popular." Then the paper went on to provide instructions for this "snappy brain exercise" and "newest national fad."

In 1931, inspired by crossword puzzles, unemployed architect Alfred Butts combined crossword puzzles with anagrams in a new game he called Criss Cross Words, and later Lexiko. Under a new owner, it was renamed Scrabble, and in 1952 it, too, became a national sensation.

Try Your Wits on This Iowa Puzzle

Working Crossword Puzzles Is Newest National Fad

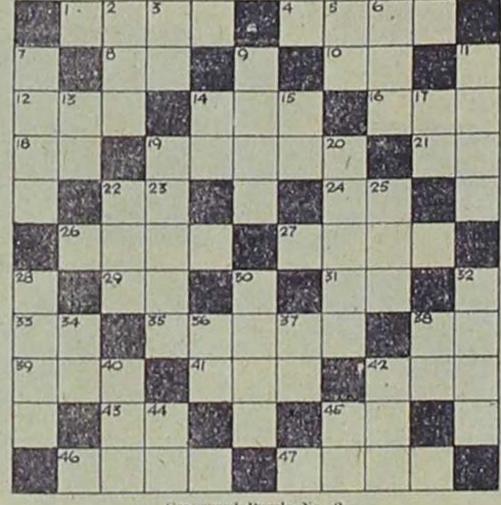
TERES a new crossword puzzle I guaranteed to give the whole family an hour or two's entertainment. It's fun; it's fascinating; and it's fashionable. Working crossword puzzles has taken the whole country by storm. Your first attempt will show you why the game is so popular.

The Sunday Register's crossword puzzles are especially made for lowans. They really aren't bard, either. Just snappy brain exercise. All you have to do is find words which will fit into the white spaces one letter to a square, both horl zontally and vertically. Ample hints as to what the correct words are will be found in the accompanying table. For instance, under "No. 1 horizontal" you find the word "college town." So in the No. 1 space horizontal, on the puzzle, you will write in the word "Ames."

You see this is an lowa puzzle and you'll find fown names in it as well as other words.

The correct words for Puzzle No. I printed last Sunday appear in the smaller illustration. Next Sunday the cofrect answers to Purile No. 2 will be printed

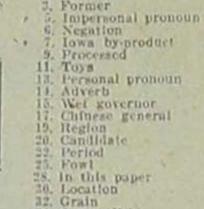
SYNDICATE



Crossword Puzzle No. 2.

Here is the table for Puzzle 2. Human.

THERE is a collegian air about this outdoor frock of I tan worsted with bright colored novelty border. The border is effectively used in the scarf collar. Buttons corresponding with the predominating color in the border are also used. The style is generally becoming.



14. Accomplish 38. Famous river 37. Company. 28. Mixed type 40. Neither 43. Drunk 44. Refusal 45. Musical Note

Horizontal. College town . Famous cartoonist 10. Preposition 12. Possess

14. Watering place

PLACING THE BED

the room. Such cases of headache have been cured by this simple

Clippings from

day, but change the method of preparation. Perchance these re-

Stuffed Baked Tomatoes

until ready to stuff. Mix all the rest of the ingredients and fill the prepared tomato cases. Sar them in a small pan. Add one inch of water and bake in a moderately hot over for twenty minutes. Use a pancake inriner or broad knife to remove the tomatoes from the pan as they are very tender and will easily fall apart.

Stuffed Tomato Salad. six ordispa siped (constpending construction cuts outside checkers)

Two to be stooms a chapped colory

Two is his special checked orders

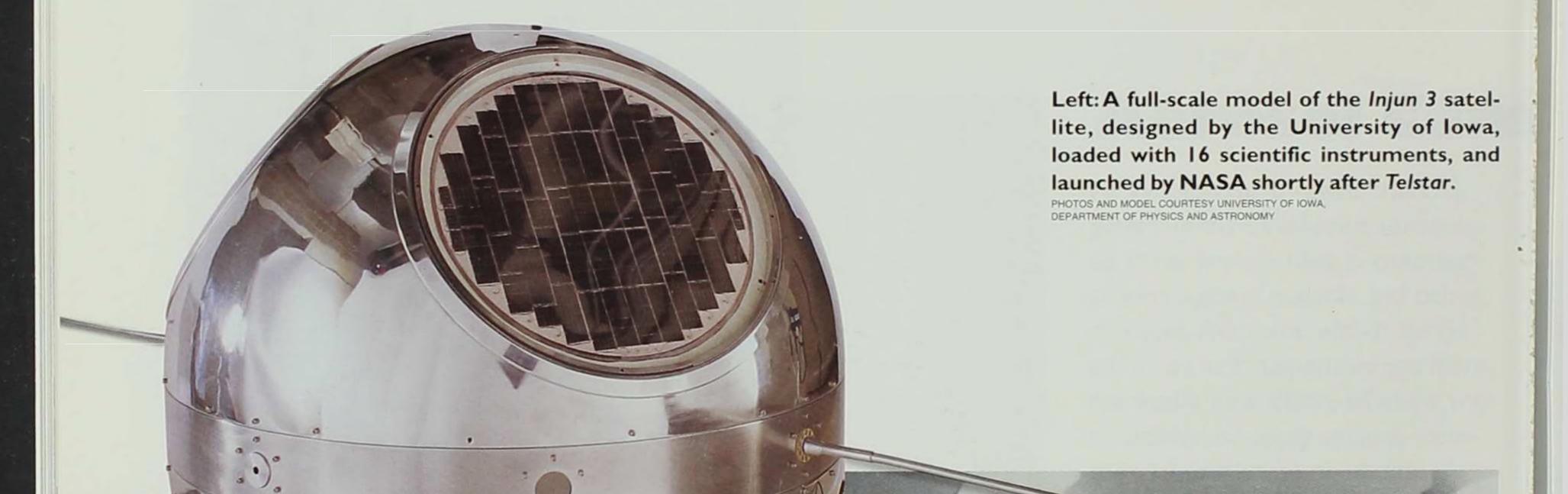
Construction chapped orders

Construction thereof outsides

Construction thereof outsides

Construction of the construction of Wash the tomatoes, peel them cory carefully and remove part of the pulp and seeds. Invert and chill. Mrs. one-half the coor

PHOTO BY CHARLES SCOTT



Space Rockets

Centuries after the Chinese invented crude rockets, the Nazis launched the age of space rockets with the V-2 rocket bombs during World War II. Rockets propelling satellites into earth's orbit began with the Soviet Union's Sputnik in 1957. America's first satellite went into space in 1958, carrying instruments designed at the University of Iowa. Experiments led by astrophysicist James Van Allen of the University of Iowa led to his discovery of intense radiation belts trapped in earth's magnetic field. Satellites now can eavesdrop, relay messages, explore the universe, and transmit television signals and telephone conversations.



Standing in a University of Iowa laboratory in 1955, James Van Allen holds a full-scale mock-up of Loki II rocket with scientific payload attached, prepared for the Arctic-Equatorial-Antarctic rockoon (short for "rocket-balloon") expeditions.



At 3 a.m. on February 1, 1958, William H. Pickering, James Van Allen, and Wernher von Braun hold aloft a full-sized model of *Explorer I*, celebrating the launch of the first successful U.S. satellite. Photo taken at the National Academy of Sciences, Washington, D.C.



As adults raced into space in the 1950s, kids mimicked these efforts with toys. This gyroscope, from 1957, even uses the Russian Sputnik name.

Hylon

Born in Burlington, Iowa, educated at Grinnell College, and employed by DuPont Research Laboratories, chemist Wallace H. Carothers developed and patented nylon, an exceptionally strong polymer filament spun from coal tar, air, and water. At the 1939 New York World's Fair, DuPont's nylon stockings were an instant hit, with 36 million sold the first year. Nylon stockings became a rarity during World War II because the American military needed nylon for tents and parachutes (like this one). One of the most significant of many new synthetic materials, nylon captured the world's attention with several everyday uses, from men's socks (below) to toothbrush bristles. More uses are proclaimed in COLE OF CALIFORNIA DATE OF BAFG. SEP. 1942 this 1957 DuPont advertisement.

news about nylon

BOWN IWOOPS A PLANE picks up the mulbagsrowie, what but nylon rope could take that sudden shock and strain? Nylon fibers, size for size, are stronger than aluminum and equally as strong as some types

size. For lightness, clas-

ticity, great tensile

strength-try nylon!

chairs you're ever picked up-and one of the most durable. Its high strength avlou webbing is extremely resistant to learing and will not deteriorate from mildew. Dusts or washes easily, dries quickly



its great tensile strength after hours in the water. Not harmed by salt or fresh water, mildew, marine organisms. Never needs drying, can be stowed wet! Sure! Nylon!



WANT FRESH GLOVES every morning-gloves that keep their bandbox freshness, hold their shape and trim fit through washing after washing, glores soft and smooth, alim, supple, so long-wearing? Ask for "the kind made of nylon."



WHAT TOO LIKE about nylon stockings - that's what you'll like about punties, when they're made of nylon, Easy to wash, quick to dry, need little or no ironing, soft, luxurious -and they wear, wear, scorf If it's sicer . . . it's syfort!



STRENGTH LONG WEAR TOUGHNESS UGHTNESS ELASTICITY RESILIENCE EASY WASHING PAST DRYING RESISTANCE TO MOTHS AND PERSPIRATION ... CAN ME "SET" TO HOLD ITS SHAPE TO MANUFACTURERS; Are there textile fibers in Fibers in Industry," Write for 13

SETTER THINGS FOR SETTER LIVING THEOUGH CHEMISTRY PRET, Inscinging book —"About De Post Nylon."
Write for is — to Nylon Division. E. L. de Post de
Namours & Co. Heal. Wilmington 98, Delaware.

For nylon ... for rayon ... for fibers to come ... look to Du Pont



Hair Care Products

lowa barber Fred Fitch created and marketed a highly successful dandruff remover and other hair products, from the late 1890s through 1950. Fitch products, sold in barbershops around the country, won international awards and were extensively advertised on the radio.

Fitch's products were among many developments in 20th-century hair care. The "permanent" became a popular fashion in the 1920s after a steam process machine with heated curlers made waving hair easier. Shampoo had also become a popular household product by the 1920s (it was invented in the 1890s in Germany). Other new products and techniques included safe coloring and dyes, hair dryers, and straightening devices—all intended to serve consumers eager for the newest look.

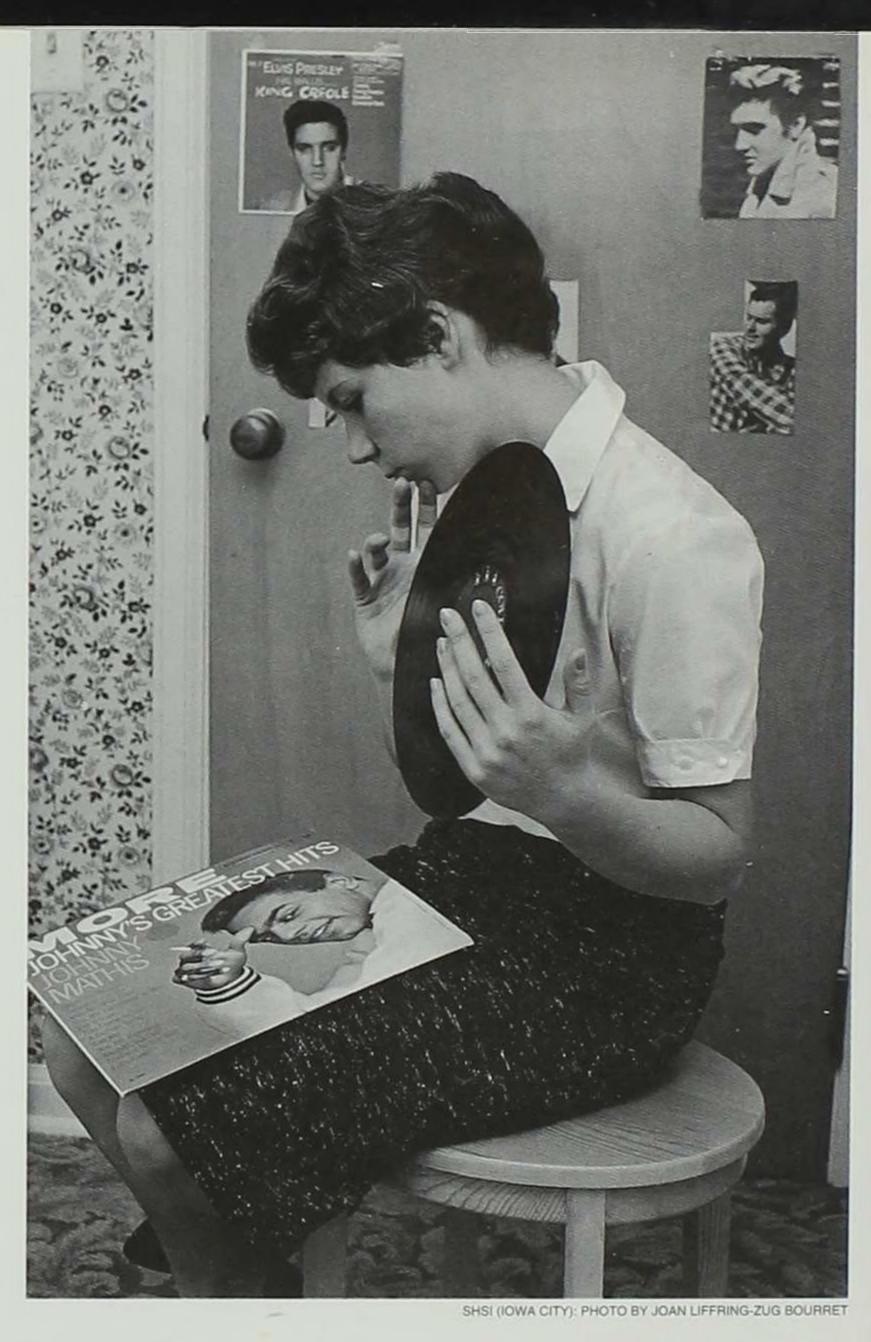


Hair-straightening combs were used primarily by African Americans when straightening was fashionable. Fitch shampoos were produced in Des Moines and other cities. A switch on this 1930s Duart permanent-wave machine could be set for spiral or "croque" waves.

LP Records

Tired of changing 78-rpm records every five minutes, Columbia Broadcasting System scientist Peter Goldmark developed a slower playing, 33¹/₃-rpm format. The new LP (or "long-playing") record, could play for up to 30 minutes, emitted a better sound, and was made of more durable vinyl. Affordably priced records converted the music industry, as musicians made records central to their careers, and as listeners flocked to record shops for the newest records. At right, a teen selects a Johnny Mathis recording, despite the Elvis Presley photo on her door.





Jell-0

In 1897, Orator Woodward adapted a gelatin dessert first developed in the 1840s and called it Jell-O. By 1899, he was on the verge of selling out because of few buyers. An intensive advertising campaign in the early 1900s—built on illustrations by artists such as Maxfield Parrish, and a popular Jell-O recipe book—resulted in soaring sales and recognition of Jell-O as one of America's favorite desserts. In the 1920s, Norman Rockwell's illustrations helped advertise Jell-O.

Based on per capita consumption, Des Moines claims the honor of Jell-O Capital of the World.

Both butlers and thrifty young mothers proudly served Jell-O, according to this 1919 Ladies' Home Journal advertisement. The copy explains that the woman has surrounded the Jell-O with fruit this time, and "for a change from the plain Jell-O she usually whips the Jell-O just as she used to whip cream before she began to save every penny for War Savings Stamps."

Stainless Steel

When stainless steel products entered the marketplace, consumers had alternatives to rusty iron cook pots, chipped enamel pans, and tarnished silverware. The first consumer product made of stainless steel was Ambassador cutlery, introduced in 1921. Stainless steel cutlery and flatware required less polishing than carbon steel—a boon to restaurants and hotels. Innumerable uses developed for stainless steel, especially in science and medicine because the material is comparatively easy to sterilize.

> Magazine advertisement, 1934, for stainless steel.



All are made of ENDURO the perfected Stainless Steel

They look like polished silver. But they are made of steel . . . stainless steel . . . Enduro . . . produced only by Republic. . These articles do not tarnish. They defeat rust and corrosion . . . are stainless and immune to most acids. They always look clean. • Even collar buttons are now being made of Enduro. So are tank cars. Watches and bank vaults. Beer barrels and jewelry. False teeth and the trim on skyscrapers. • Enduro is used in dairies, laundries, oil refineries, hospitals, food processing plants, cafeterias. You find it on ships, motor cars, airplanes. • No other metal has such wide adaptability, combined with such distinctive properties. • This silvery steel is but one of Republic's many

products. For Republic...young, aggressive, alert... is already the world's largest producer of alloys. It has given industry the marvelous rust-resisting Toncan Iron. It pioneered the new "electric weld" pipe. And today, with strategically located plants, Republic is in a singularly favorable position to provide the many new steels that have become so important to industry at large. Licensed under Chemical Foundation patents numbers 1,316,817 and 1,339,376

REPUBLIC STEEL CORPORATION CENTRAL ALLOY DIVISION, MASSELON, O. CENTRAL OFFICES, YOUNGSTOWN, O.

WORLD'S LARGEST CAPACITY FOR STAINLESS STEEL PRODUCTION

ALLOY AND CARBON STEELS . TONCAN IRON . STAINLESS STEEL . PIPE AND TUBULAR PRODUCTS . BARS AND SHAPES - HOT AND COLD ROLLED STRIP

When we were kids, Dad milked First-hand eight to twelve cows. In 1958, he had purchased a used 1950 stainless steel experience: Surge Milking Machine from Madson · · · · · · · · · · · · · · · Surge Service out of Kimballton,

lowa. The equipment had a stationary motor on a vacuum pump to suck air through the lines to run the milking unit on the cow. After each cow was milked, the milk was poured from the stainless steel milking machine into a separator that was a 1958 International Harvester self-washing model that he purchased new "in town" at the local International Harvester shop. This piece of equipment, the separator, also had a new, modern feature that eliminated the need to have equipment cleaned daily.

The fresh milk was "separated" into milk (skim) and into cream. The milk was used for household drinking and cooking and for feeding the young calves, pigs and the barnyard cats. The cream was brought into the house, some for our refrigerator and the family needs, and most was sold.

It was stored in stainless steel five-gallon cream cans that were kept in the cool root cellar (the space we called the cave), which was attached to our basement. Twice a week, we were on a pick-up route for a truck from the Logan Co-op Creamery out of Logan, Iowa. (The driver also picked up Mom's eggs. She would purchase, from the driver, ice cream and butter that he sold from a compartment on the refrigerated truck.)

Older relatives always reminded us how lucky we were that we didn't have to milk cows by hand or that we didn't have to clean the separator each day (as they did when they were our age). However, about once every couple of months. Dad took the separator apart and brought into the house the various parts to be cleaned. We kids used wash tubs in the basement to completely clean the stainless steel parts that looked like cones with holes at each end and various types of grates. Needless to say, these pieces had sour, smelly cream stuck into them and cleaning the separator parts was not our favorite job.

—Kathy A. White, Omaha, Nebraska



snapshots. The Brownie incorporated a host of technological improvements. It was lightweight, versatile, easy to use, and inexpensive—a perfect combination for everyday users. Amateur photographers have embraced one new camera model and technology after another, from snapshot and home movie cameras, to today's video and digital cameras.





Sweaters

"D" is for Douds, lowa, in this 1929/30 school photo of three sweater-clad students. The term "sweater" first referred to equine blankets, used by trainers to make racehorses sweat. In the 1920s, "sweater" came into use for jersey tops fashioned after those worn by French sailors. The 1937 movie *They Won't Forget*, featuring shapely actress Lana Turner in a tight sweater, popularized the pullover.

Sunglasses



The earliest use of tinted eyeglasses dates to the 15th century—Chinese judges wore them to disguise their eye expressions while in court. In the 1930s, the U.S. military commissioned Bausch & Lomb to develop protective glasses for pilots exposed to intense solar glare. Sunglasses were regularly issued to pilots during World War II. By the 1960s, sunglasses had become chic and glamorous for the general public.



Simplex De Luxe

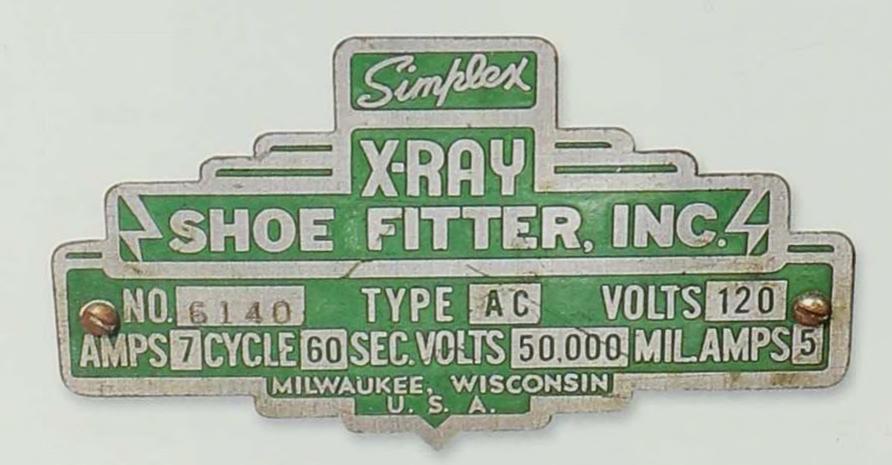
Sleek, trim styling in the modern manner . . . beautiful cabinet work in matched grain veneers . . . rich, mellow hand-rubbed finish . . . handsome, modern fittings . . . all are combined in the Simplex De Luxe X-RAY Shoe Fitter to enhance the quality atmosphere of any store interior.

Add to these the proven performance, safety and convenience features, pioneered and developed by Simplex . . . and you have everything you could ask for in a beautiful, efficient X-RAY fitting aid. It's Simplex — the Original X-RAY Shoe Fitter.

The Simplex X-RAY representative in your territory can give you complete information on both the new Simplex De Luxe and the new Standard Model. If you can't wait 'till he calls, please write for Delivery Dates, Prices and E-x-t-e-n-d-e-d Payment Terms, no interest or carrying charge.

X-RAY SHOE FITTER, Inc. 3533 N. Palmer St., Milwaukee 1, Wis.





X-rays

X-rays, discovered in 1895 by German physicist Karl Röntgen, allowed doctors to see inside the human body without opening it up with a scalpel.

For a few decades in the 20th century, X-rays also allowed store clerks and parents to see inside their children's shoes. Shoe-fitting fluoroscopes, common in shoe stores in the 1940s, used X-rays to reveal the bones of the foot inside the shoe, thus confirming the fit of the shoe. The shoe fitters were later removed as public concern grew about the dangers of excessive X-rays.

Nevertheless, X-rays contributed enormously to the century's revolutionary advances in medical diagnosis, as well as to other fields of science.





A pyramid of processed foods. Except for Kraft's Velveeta cheese, all were products of Iowa manufacturers or distributors.

Processed Food

Early in the 20th century, lowans could buy a variety of processed foods distributed by local producers and packagers. Because of improved processing, safer techniques, attractive packaging, and aggressive marketing, the processed food industry dominated American eating habits throughout the century.

Hand in hand with the processed food industry, the grocery business underwent a revolution. In 1916, the first self-service grocery store opened (Piggly Wiggly, in Memphis, Tennessee); customers could select items from shelves without a clerk's assistance. Supermarkets evolved, combining grocery, meat, bakery, and produce departments; offering several competing brands of processed foods; and providing self-service and cash-and-carry (instead of credit and delivery). One-stop grocery shopping also meant larger purchases—and so did the shopping cart, introduced in 1947.

Vacuum Cleaners

Before vacuums, cleaning rugs meant dragging them outside, hoisting them over a fence or clothesline, and knocking the dust out of them with a rug beater—a laborious, dirty, timeconsuming job. In 1901, an Englishman made a gigantic vacuum cleaner suction device and illustrated its effectiveness in a London restaurant. In 1908, American James Spangler, who suffered dust allergies, patented a smaller, handier vacuum. After Spangler sold a vacuum to Susan Hoover, her husband, William, was immediately impressed and bought out Spangler—marking the start of Hoover vacuums. Hoover employed aggressive, effective marketing through magazines and hardware stores.

A Hoover vacuum advertisement in Literary Digest (1928) asks readers if they are "one of the many women who never dare accept an invitation for the afternoon of cleaning daywhose strength is just enough for cleaning tasks-and no more?" With a Hoover vacuum, the ad promised, they would have the zest for "outings every cleaning day."

The Literary Digest for June 9, 1928 The accurate measure of electric cleaner efficiency is dirt per minute

Cleaning that tires you not at all... POSITIVE AGITATION

RE you one of the many women who never dare accept an invitation for the afternoon of cleaning day—whose strength is just enough for cleaning tasksand no more?

The difficulty is not with you. Lighten your cleaning and you will find yourself with zest enough for outings every cleaning day.

The Hoover will give you this effortless cleaning. It removes more dirt per minute than any other cleaner. That means faster cleaning, easier cleaning, more thorough cleaning.

The Hoover is able to give you this faster, easier, deeper cleaning because of "Positive Agitation," a cleaning principle exclusive with products of The Hoover Company.

"Positive Agitation" vibrates all the deepburied, destructive grit to the surface. With this unmatchable deep-beating are combined

sweeping and suction, giving The Hoover an efficiency that begins where the ordinary vacuum cleaner leaves off. "Positive Agitation," too, restores the original beauty to rugs, by its lifting of the nap and brightening of the colors.

The ability of The Hoover to remove more dirt per minute has been shown by repeated tests made under actual home conditions. We shall be glad to prove it to you on your own rugs. Because of the Hoover's outstanding superiority, you should be sure to see this test, before purchasing any cleaner. Telephone your Authorized Hoover Dealer.

Cash prices: Model 700, \$75. Model 543, \$19.50. Dusting sools, \$12.50. New . . . motor-driven floor polishing attachment, \$7.50. Easy payments if desired. Only \$6.25 down. Prices slightly higher west of the Rockies and in Canada. Hoover dealers will make you an allowance on your old machine.

THE HOOVER COMPANY, NORTH CANTON, OHIO The oldest and largest maker of electric cleaners The Hoover is also made in Canada, at Hamilton, Ontario



First-hand

We got the vacuum cleaner when we got the carpet. Cheap, flat, foam-backed, and experience: brand new, the carpet most likely came from Wards, or maybe from a damagedand-unclaimed-freight place in some tiny

town in the next county. Before carpet we had linoleum with printed geometric, "modernistic" designs or flower patterns on it, and it was supposed to look like carpet....

[The vacuum] came in a big, square carton bearing the Hoover logo and those time-and-space spanning words "Hoover Constellation." Our parents opened the carton while we five kids watched in stupefied wonder as our newest and most fabulous possession was revealed.

Out came the beige, globe-shaped canister, out came the attachments and the instruction manual. Cords were unwound, hoses were connected, attachments were attached. Then my dad, flicking the toggle switch on the canister's side, stepped back as the machine whirred to life and ROSE UP OFF THE FLOOR!

Those witnessing Jesus raising Lazarus from the dead couldn't have been more astonished. This miracle of vacuum-cleaner engineering hovering at our feet was a harbinger from the World of Tomorrow, a world I had only read about in Popular Science. But here it was, a living, whirring, sucking thing of the future, in our house.

It hovered there, magically; a tug of the hose brought the Hoover Constellation gliding to your feet, where it waited, a trained mechanical pet eager to serve you. Dust bunnies trembled under every bed in the house.

Hoover no longer makes the Constellation. Its magic has been surpassed by Hoover's flashier, hipper achievements in vacuum science: Headlights, monster bag capacity, computer-assisted cleaning—ugly, flightless birds next to the Constellation. Nothing ever would have quite the effect the Constellation had on us, nothing ever would make us feel quite so modern.

As I lurched into adolescence in the mid-fifties, I developed, or rather was seized by, the haughty notion that A) Where I was growing up (Iowa) was hopelessly unmodern, backward even; and that B) It was up to me to do what I could to not be part of this backwardness, to get us out of it.

If it's true that popular culture has an immense shaping influence on our individual development, then surely I was influenced. I read books. I looked at ads in magazines. I watched TV. Even something as insignificant as a jet plane passing over our farm gave me some assurance that we were connected to a modern world beyond our enslaving hayseedom. I wanted to be modern. We all did.

Carpeting, appliances, new cars. These solid, material things gave rural people knowledge of and a sense of belonging to a world we were only beginning to catch up to. When people came visiting unannounced, as they did in those days, my mother would grab a bag of cookies from the freezer and put the coffee on, while my dad had one of us fetch our new Hoover Constellation from its storage place.

Gathering around and watching in bug-eyed amazement, our visitors wondered aloud what the world was coming to and what would people think of next, for goodness sake. It was a moment of wonder, bafflement, and connectedness. It was a moment of sharing the belief that we lived in a remarkable world indeed, a world where everything was just getting better and better, a world where household appliances floated on air.

It was magic. It was modern. It was ours. -L. K. Hanson, reprinted with permission of the Star Tribune, Minneapolis, Minnesota



I 930s women's wool Spalding swimsuit. Below, a medley of styles.

Swimwear

Before the 1900s, "bathing suits" were cumbersome, modest outfits. In the early 1900s, people began designing lighter water garments to enhance swimming speed. Jantzen introduced rib-knit stretch suits before World War I, and they became popular with both athletes and the general public.

In 1946, the fashion world introduced a daring two-piece swimsuit called the bikini. The swimsuit was named for a Pacific Island where an atomic bomb was dropped for practice because, as the suit's designer explained, both the bomb and the bikini represented "the ultimate."







THREE PHOTOS: SHSI





Paper Eups

In the early 1900s, public health officials, well aware that germs spread disease, moved to ban the unhygienic practice of using common drinking cups in public places. About the same time, New Englander Hugh Moore invented and marketed a water-vending machine that featured disposable paper cups. His invention failed, but the idea of paper cups was born. Paper cups became associated with health and hygiene. Moore initially called his product Health Kups—later it was changed to Dixie Cups. Today, disposable cups are considered a convenience by some, a waste of resources by others.



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



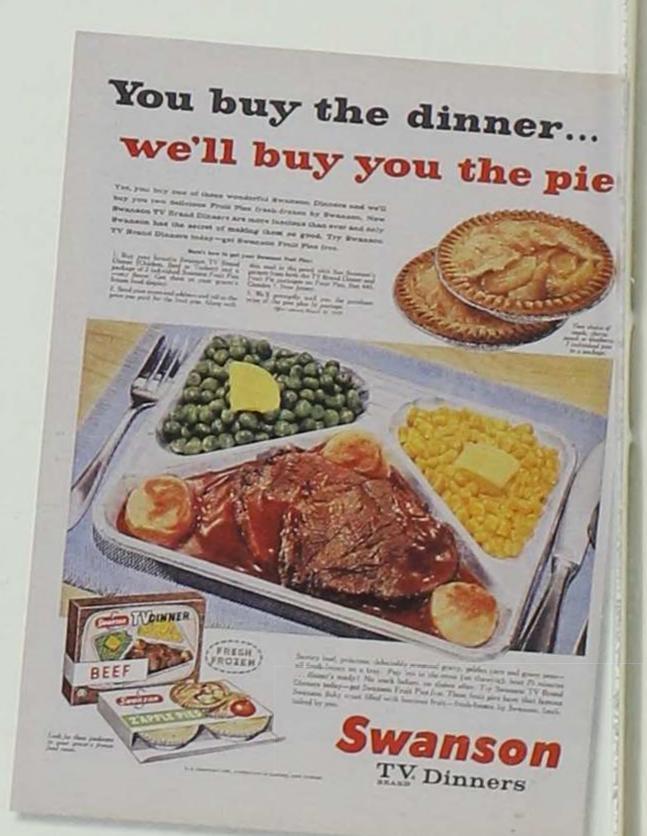
HSI (IOWA CITY): PHOTO BY JOAN LIFFRING-ZUG BOURRE

Frozen Foods

While fishing in Labrador, Clarence Birdseye discovered a quick-freezing and flavor-retaining process long practiced by native Innuits. In 1924, Birdseye began marketing quick-frozen fish and experimented with other foods.

After World War II, freezers became common in U.S. homes, and families stocked them with a wide variety of fish, meats, and once-seasonal products that were now available year round. Swanson introduced the first frozen TV dinner in 1953. This 1956 advertisement (right) promises a square meal with "no work before, no dishes after," and with a special bonus of fruit pies, "fresh-frozen by Swanson, fresh-baked by you."

Another frozen favorite, the ice cream cone, gained national popularity after its introduction at the 1904 World's Fair in St. Louis. Above, a girl in Andrew, Iowa, enjoys a quiet moment with a cone.





Antibiotics

Before antibiotics joined medicine's arsenal, a small cut could develop into a life-threatening bacterial infection. In 1928 Scottish physician Alexander Fleming accidentally discovered that the mold extract penicillin killed staphylococcus. Ten years later penicillin was developed into a medicine for patients. A team of British scientists actually developed the wonder drug penicillin to meet urgent needs during World War II.

Penicillin and other antibiotics revolutionized the treatment of once incurable bacterial infections such as pneumonia, rheumatic and scarlet fevers, syphilis, tetanus, and gangrene. New strains of bacteria—"superbugs"—are now increasingly resistant to antibiotics.

During World War II, Iowan Walter Anneberg was the first doctor with the U.S. Army's 45th General Hospital to administer penicillin.

Zippers

Swede Gideon Sundblack designed an improved, practical version of the "hookless fastener" in 1913—the modern zipper. U.S. military pilots, who needed to change quickly into flying gear, found that Sundblack's metal fasteners worked well for them.

In the 1920s, zippers began appearing on B. F. Goodrich's rubber galoshes (as advertised here in a 1926 True Story Magazine). This is when the word "zipper" first appeared—for the sound of the slider pulling the teeth together. Public acceptance of zippers on clothing grew in the 1930s.

