FALL 2019

DIXON

BOSS

ROBERT RIPLEY'S UNBELIEVABLE LIFE

THE SURPRISING HISTORY OF CONCRETE

WHAT A RIDE!

AFTER 135 YEARS, ROLLER COASTERS CONTINUE TO PROVIDE CHILLS AND THRILLS

Real **solutions** for real challenges.

It's true that we have a broad product line available "anytime anywhere" to meet your everyday needs.

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BOSS
Fall 2019

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CUSTOMER SERVICE

Customers, where would we be without them? As we discover in this edition of BOSS ("Pony Express," page 38), it was the customer Ford Motor Co. had in mind back in the early 1960s as it was developing the Mustang. In this case, Ford's target was the post-war baby boomer generation. The car was a huge success with these customers. At Dixon, we are constantly looking for Mustangs—products that customers want.

Do we listen to our customers enough? I hope so, but I suspect we all can do a better job with the users of our products. Customers are our lifeblood. If you are a user of Dixon's products, please let us know if we need to improve an existing product or if we can come up with a new item to fulfill a need.

I should end this letter now, but first, my own Mustang story: In 1994 I bought my wife a Mustang convertible for her 50th birthday. I was so excited to give it to her, and on her birthday, I handed her the keys and said, "Happy 50th." She smiled and said, "I am only 49." Oh, well. That Mustang is still in my garage.

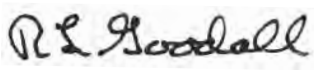


Photo: William Gray

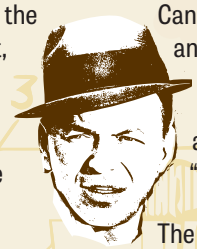
DIXON DRILLER
PUBLISHED ONCE A MOON SINCE 1932

FALL 2019
To enjoy the Dixon Driller on a monthly basis, visit *dixonvalve.com.*

TRIVIAL MATTERS

DID YOU KNOW THAT...

The five oldest words still in use in the English language are: town, priest, earl, this and ward.



The heaviest U.S. president was William Taft (332 pounds); the lightest was James Madison (100 pounds).

About 15 percent of Americans secretly bite their toenails.

Who wears the pants? Not European men—until the early 1800s. Before that, they wore tights.

At 209 tons and 100 feet long, the blue whale is the world's largest carnivore.

Canada has the longest coastline of any country on Earth.

Frank Sinatra's last TV appearance was on the sitcom "Who's the Boss?"

The three largest Native American tribes in the U.S. are the Cherokee, Navajo and Chippewa.

The average taste bud lives only 10 days before it dies and is replaced with a new one, unless you burn your tongue.

The least common time for a bank robbery is Wednesday between 3 p.m. and 6 p.m.

More than 40 percent of the population of Kenya is under the age of 15.

Twenty-five percent of the people at sporting events say their presence affects the outcome of the game.

Smokers eat more sugar than non-smokers.

The average American will change homes 11 times in their life.

It takes 12 ears of corn to make one tablespoon of corn oil.

In Israel, for wine to be kosher, the grapevines must be at least 4 years old and left unharvested every seventh year.

Rain contains vitamin B12.

Uncle John's Biggest Ever Bathroom Reader
Grapes illustration: freepik.com

ON THE LIGHTER SIDE

What's the difference between an elephant and a flea? *An elephant can have fleas but a flea can't have elephants.*

If a giraffe, an elephant, a camel, a bear, a pig, a frog, two mice and a snake all sheltered under one umbrella, how many got wet?
None. It wasn't raining.

How do you spell mousetrap using only three letters?
C-A-T.

What is a dog's favorite part of a journey?
Embarking.

Why is getting up in the morning like a pig's tail?
It's twirly.

What did the doctor give the sick pig?
Oinkment.

"Waiter, do you have frogs' legs?"
"No sir, I've always walked like this."
"Waiter, is there soup on the menu?"
"No ma'am, I wiped it off."

How can you tell one cat from another?
Look them up in a catalog.

Which member of a marching band has the highest risk of being hit by lightning?
The conductor.

Have you heard the joke about cherries?
It's pitiful.

What do you call a cow that eats grass?
A lawn moo-er.

Where did Napoleon keep his armies?
Up his sleevies.

Ha Ha Ha! Over 400 Very Funny Jokes
Illustrations: Can Stock Photo/dedMazay and Vecteezy

BENJAMIN FRANKLIN's contributions to American political, scientific and civic life remain unmatched to this day. Here are five facts about him you may not have known.

1. He "retired" at 42. Franklin made enough money from his printing business that he was able to devote the majority of his time to his hobbies—inventions, politics and civic causes.

2. He never patented an invention. Instead, he believed that "as we benefit from the inventions of others, we should be glad to share our own … freely and gladly."

3. He wasn't initially in favor of American independence, once writing that "every encroachment on rights is not worth a rebellion." Before speaking out against the crown, some accused him of being a British spy.

4. He often is credited with popularizing the game of chess in America. His essay, "The Morals of Chess," described fair play as it related to life as well as to the game. He was inducted into the Chess Hall of Fame in 1999.

5. In his will, Franklin left a thousand pounds sterling (about $4,500 or $125,000 today) to both Philadelphia and Boston. That money ballooned to several million dollars and has gone to fund everything from museums (Philly's Franklin Institute) to fire companies and scholarships.

Illustration: Anne Schulte

Dixon's five-port int

PRODUCT SPOTLIGHT

STAINLESS STEEL FIRE DEPARTMENT CONNECTION

APPLICATIONS:

- Stainless-steel FDC allows flow of water up to 90 stories without auxiliary pumping systems

SIZES:

- Bodies: 4" and 6" outlet
- Snoots: 2½" x 2½" and 2½" x 3" inlet

FEATURES:

- Uniquely designed clappers are fully reversible with perpendicular trunnion, allowing one body to be installed for top or bottom connections
- Concealed unit mounts behind a wall plate; escutcheon sold separately for exposed installation
- Made in the USA
- 100 percent tested

ake manifold

STEADY FLOW

BY EMPLOYING DIXON'S INTAKE MANIFOLDS, A WELL SERVICES COMPANY OVERCAME CATASTROPHIC FAILURES TO ITS HYDRAULIC FRACTURING FLUID-ENDS, PREVENTING COSTLY OPERATIONAL DOWNTIME AND REPAIRS.

THE SITUATION: Hydraulic fracturing operations are intense and time critical. The need for continuous and uninterrupted flow from the myriad high-pressure pump units within the "hot zone" near the well head allows little room for equipment failures.

THE PROBLEM: The hydraulic fracturing company was having issues with pump manifolds clogging on its worksites. Over the course of two months, the company had experienced 17 total failures to the fluid-end manifold on its high-pressure pumps, due to a buildup of sand and rock in the system.

THE SOLUTION: Maintenance technicians at the company replaced the pumps' common "log-style" manifolds with Dixon's one-piece, "zoomie-style" intake manifolds. The Dixon product allowed for a smoother, clog-free flow of hydraulic fracturing fluids to the high-pressure pumps under the same harsh conditions.

THE OUTCOME: To date, the company has utilized more than 30 Dixon intake manifolds at hydraulic fracturing sites throughout the Southwest's Permian Basin, Texas' Eagle Ford and the Bakken Formation in the northern United States and Canada. The company reports that none of the manifolds have clogged.

MATERIALS:
- Body: 316 stainless steel
- Shutters: 4" x 2½": brass; 6" x 3": 316 stainless steel
- Snoots: 304 stainless steel
- Pivot pins: brass on concealed units, stainless steel on exposed units

SPECIFICATIONS:
- 4" x 2½" maximum pressure: 500 PSI
- 6" x 3" maximum pressure: 600 PSI

APPROVALS:
- 4" x 2½" is Factory Mutual approved
- 6" x 3" is Factory Mutual and NYFD approved (Two models: straight with grooved outlet and 90°)

For more information, call Dixon at 877-963-4966, or visit dixonvalve.com.

DIXON DIGITS

13 MILLION

NUMBER OF PIECES DIXON BRASS MANUFACTURES FROM 2.7 MILLION POUNDS OF RAW MATERIAL ANNUALLY

CORRECT CONNECT

DIXON'S NEW COLOR-CODED SYSTEM MAKES CONNECTING HOSE ASSEMBLIES QUICKER AND SAFER.

On a job site or in a manufacturing plant, identifying which coupler mates with the correct male plug can sometimes be a tangled mess. Which connection goes where? After listening to feedback from its customers, Dixon has developed a seemingly simple but highly effective solution to the problem: its HT-Series Correct Connect System.

Available in five colors, the system works by installing colored bands on the coupler and plug sides of Dixon's HT-, HTE- or HTZ-Series connectors. Rather than hunting for the correct fittings, all a user has to do is match up the colors.

Available in sizes from ¼ inch to 1 inch, the bands are easily field replaceable. "Previously, if an operator used the wrong quick connect and the machine didn't operate, they'd need to reconnect," says Chris Jarman, regional sales manager for Dixon. "That takes time, risks equipment damage and jeopardizes safety. The Correct Connect System makes the job site more efficient and safe."

Other benefits? The Correct Connect bands also reduce the chances of product cross-contamination, help with preventive maintenance schedules and shorten setup time for more efficient hose routing.

"It's a very simple solution," says Jarman, "but it's a feature that really differentiates our product."

—Joe Sugarman

SCOTT JONES, VICE PRESIDENT OF SALES AND MARKETING

As vice president of sales and marketing at Dixon, Scott Jones is tasked with promoting the company's products to a global marketplace. One of Dixon's most significant advantages over the competition, he says, is the company's longtime emphasis on educating its distributor customers on how to properly assemble, use and re-sell its products. "We really look at training as being one of the key differentiators that we can provide to our distributors," says Jones, who has worked at Dixon for more than 30 years. "It's a priority for me."

Q So what's the payback to Dixon for emphasizing training?

A It pays us back in many ways. One way, obviously, is safety. Because we manufacture and sell a variety of parts and products, it's important to fulfill what we call our "duty to warn" our customers about the inherent dangers of misapplying or misusing our products. We truly care about our customers and want to make sure they stay safe.

Q What are some of Dixon's training programs?

A We're probably best known for our Hose Coupling Workshop, which has been going on for at least 30 years. It's designed to train our distributors on the safest and most efficient way to make hose assemblies using Dixon products. Geared more toward hose-shop employees, the one-day class emphasizes best practices and how our products are used in the field. We offer this course at most of our distribution centers around the U.S.

Q What are the sessions like?

A Sessions are 50 percent classroom training and 50 percent hands-on training. So, they'll be taught some principles, like understanding force charts and proper coupling installation. Then we take the students out into the shop and put hoses together. We also address proper test methods and how to record that information.

Q Any other regularly scheduled workshops?

A Additionally, we offer Selling the Right Connection (SRC). The goal is to teach and coach distributor salespeople how to sell Dixon products successfully, depending on different markets. The SRC workshop is a two-day class, only offered at our Chestertown headquarters.

Q Why does Dixon offer this type of program?

A Our distributors have a lot of different products that they could be selling to their customers on any day of the week. They represent hundreds of suppliers to their end-user customers. We want the mindshare of our distributors, so we instill confidence in them to talk about Dixon, instead of another product they may know less about.

Q What are these sessions like?

A We give them the opportunity to be hands-on and active. We have six to eight Dixon coaches who manage breakout sessions based on different products and markets. We know that salespeople by their nature are competitive, so we mix in some competition. We run a takeoff on "Jeopardy" about the things we've taught them. We have a "Price Is Right"-type event where the customers get in a line to connect the right coupling to its mating part. The session culminates with a role-playing competition. Each team selects a product that they've learned about and then role plays how they would sell this product to their customers.

Q So what do you see as your role in all this?

A It's my role to set the tone. I think it's easy to say you believe strongly in training, but you really have to commit to it with enthusiasm. It's just another way we can be different. I also see my role as thinking of ways we can expand training like offering web-based course offerings for our customers. I want to inspire our entire sales team to hone their skills as teachers and coaches, because as Dixon sales professionals, it is the core of our responsibility—teaching and coaching leads to successful selling.

Steve Colomey at a Hose Coupling Workshop

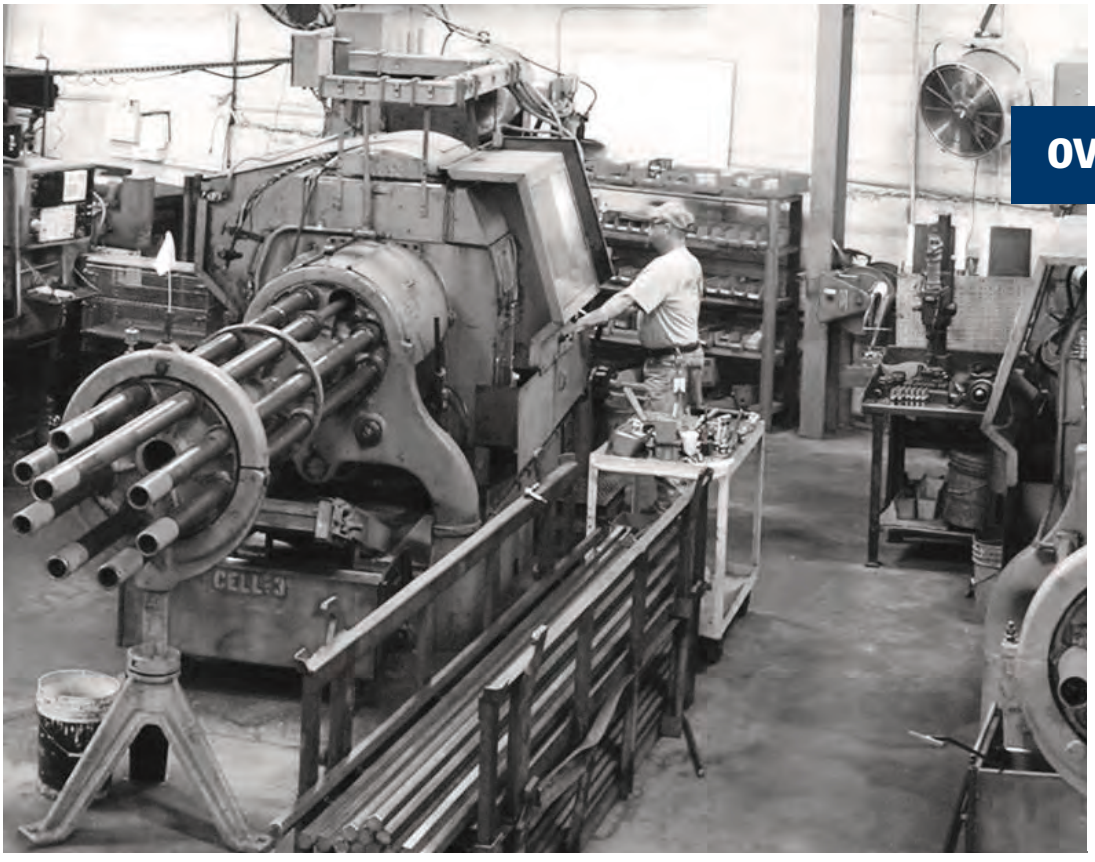
For more information, call Dixon at 877-963-4966, or visit dixonvalve.com.

AND I QUOTE...

"Be more concerned with your character than your reputation, because your character is what you really are, while your reputation is merely what others think you are."

— John Wooden, college basketball coach

FROM THE ARCHIVES



OVERACHIEVER

Dixon's Acme Gridley multi-spindle screw machines are reliable workhorses that have been humming along since the early 1940s when the company purchased its first. The company's current oldest model dates to the 1950s and has been refurbished several times while the newer Acmes date from the late 1970s. These machines are still used at Dixon today to produce everything from ground joint stems to male stem couplings to threaded combination nipples.

HOW MUCH IS TWO PLUS TWO?

BY **MICHAEL JOSEPHSON**

A selection committee of the board of directors was assigned the task of hiring a new CEO. The chairman decided to ask only one question: "How much is two plus two?"

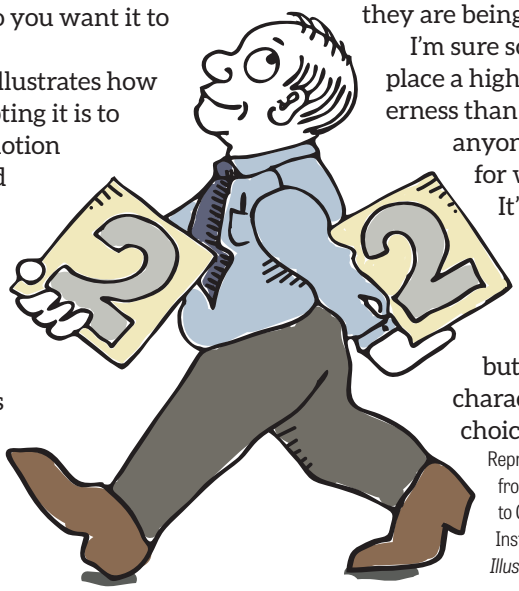
The first candidate was the chief financial officer. Baffled by the question, he answered straightforwardly. "It's four."

The second candidate was chief engineer from the company's research lab. He proudly answered that the result depends on whether the twos were positive twos or negative twos. The answer could be minus four, zero or plus four.

The sales manager was more creative: "Well, the way I look at it, two plus two is 22."

Finally, they brought in legal counsel. He wrote down the question on a yellow legal pad, looked directly in the eyes of the questioner and said: "How much do you want it to be?"

This story illustrates how easy and tempting it is to suspend any notion that we should be candid and truthful in answering questions. And it's not just lawyers and politicians who succumb to the temptation. Lots of us delude ourselves into thinking it's part of the game to give an answer we think the interviewer wants to hear. This is not only dishonest, but in many cases it's counterproductive. Experienced interviewers usually can tell when they are being conned.



I'm sure some companies place a higher value on cleverness than credibility, but anyone worth working for wants integrity. It's often hard to be honest when we think the truth will be used to our disadvantage, but to a person of character there is no choice.

Reprinted with permission from You Don't Have to Be Sick to Get Better, Josephson Institute of Ethics. © 2004

Illustration: Anne Schulte

LARGER THAN LIFE

Sculptor Gutzon Borglum began carving South Dakota's Mount Rushmore in 1927. Original plans called for the figures to be depicted from head to waist, but insufficient funds forced construction to end soon after Borglum's death in 1941. (His son, Lincoln, finished the final details a year later.) Most of the carving was done with dynamite, as workers blasted off portions of the mountain to create rough shapes before fine-tuning with jackhammers and finally hand tools. Workers had to be lowered in sling-like harnesses called bosun's chairs to carve. Despite the danger of the work, no lives were lost during the carving of the monument.

Carving George Washington's likeness, Mount Rushmore, 1931

SAFETY CUSHION

A CAR ACCIDENT IN THE EARLY 1950S GAVE RISE TO THE WORLD'S FIRST AUTOMOTIVE AIRBAG SYSTEM.

BY **JIM DUFFY**

No dummy: Since becoming mandatory, airbags have saved tens of thousands of lives. *Photo: Alamy*

John Hetrick's journey into the annals of automotive safety began during a Sunday drive in spring 1952 with his wife and 7-year-old daughter on country roads north of Harrisburg, Pa. Cresting a hill, Hetrick found his 1948 Chrysler Windsor headed straight for a boulder littering the roadway. As he steered into a ditch, both Hetrick and his wife reached out instinctively for their daughter, in a frantic attempt to keep her from slamming into the dash or windshield.

No one was injured, but Hetrick couldn't shake the image of his daughter's body headed for that windshield. Shouldn't there be a way to protect her? Could some sort of protective cushion open up during a car accident?

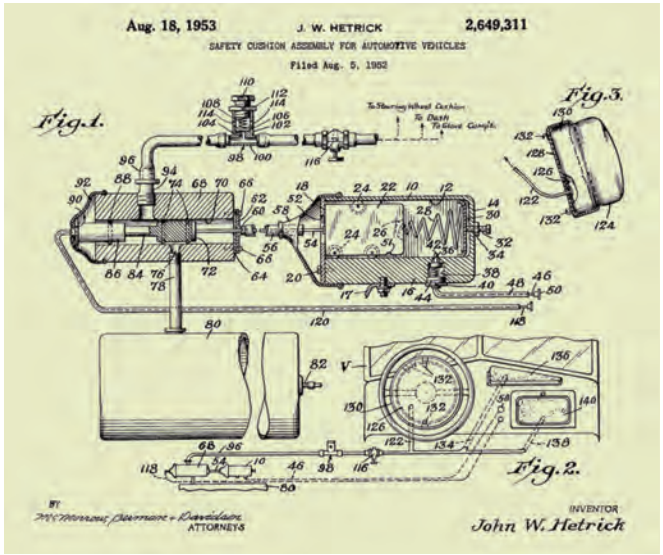
An industrial engineer, Hetrick went to work. He remembered his Navy days during World War II, much of which he'd spent working on torpedoes powered in part by bursts of compressed air. Months later, he patented the concept of an automotive "safety cushion" system that had air tanks under the hood connected to three inflatable bags along the dashboard and two more behind the front seats. The triggering mechanism was a spring-loaded weight that sensed sudden deceleration.

Hetrick pitched his invention to car companies but didn't get much of a response. That silence may have been based on justified skepticism, rather than callous disinterest. Though prescient on a conceptual level, Hetrick's 1952 "cushion" wasn't ready for prime time—it was too slow. Research in the years that followed showed that airbags need to inflate within 40 milliseconds to be effective. That's nearly as fast as the blink of an eye.

Credit for breaking that speed barrier goes to a later inventor, Allen K. Breed. In the late 1960s, he made two big improvements to Hetrick's cushion. The first was a new trigger—a steel ball set in a tube and held at one end by a magnet. Second was the inflation mechanism. When a collision knocked that steel ball free, it would roll into an electrical circuit and set off a chemical mini-explosion, releasing nitrogen gas that inflated the airbags.

THE FIRST-EVER ACCIDENT INVOLVING TWO AIRBAG-EQUIPPED CARS—BOTH 1989 CHRYSLER LEBARONS—WAS A HEAD-ON AFFAIR ALONG ROUTE 640 NEAR CULPEPPER, VA.

Even then, daunting obstacles remained. In 1969, a team of Ford engineers traveled to Washington, D.C., to



John Hetrick's patent application for the first inflatable airbag.

show off the latest airbag system. When they hit a button at the key moment, nothing happened. Volvo ran crash tests at slow speeds in cars occupied by two dozen anesthetized baby pigs. Most of those critters died in ways that raised fears that airbags might inflict injuries on children and small women.

Another problem: Customers weren't interested. The first airbags to hit the market in the mid-1970s did so as an option that cost a few hundred dollars extra. Sales were dismal. But throughout the 1980s airbags became more popular.

A milestone finally arrived on March 12, 1990, 38 years after Hetrick patented his cushion concept. The first-ever accident involving two airbag-equipped cars—both 1989 Chrysler LeBarons—was a head-on affair along Route 640 near Culpepper, Va. Both drivers survived. In the 1990s, a lengthy debate unfolded between government regulators who wanted to make airbags mandatory in every car and auto executives who argued that would be both too expensive and not effective enough.

The regulators won: airbags became mandatory in 1998—and statistics prove their success: The National Highway Traffic Safety Administration estimates that the devices have saved more than 50,000 lives so far.

Congress shall make no law

respecting an establishment of religion, or prohibiting the free exercise thereof; or abridging the freedom of speech, or of the press; or the right of the people peaceably to assemble, and to petition the Government for a redress of grievances.

The First Amendment of the Constitution probably wouldn't have been there at all if Thomas Jefferson hadn't demanded it. The document had all but been drafted when Jefferson insisted to his friend James Madison, who was tasked with writing the document, that the Constitution must include a Bill of Rights, spelling out citizens' freedoms.

Initially, the First Amendment applied only to the federal government. After all, it begins with "Congress shall make no law..." After independence, it was generally felt that there should be no nationally established church—unlike England, where the monarch is the supreme head of the established church. Initially, not all states followed this clause. Until 1833, Massachusetts required all men to belong to a church, which could tax its members.

The free speech clause was intended by the colonists to ensure that freedom of expression would be preserved by law. Jefferson and Madison believed it essential to any democratic political process, and Jefferson, in particular, realized the necessity of a free press: "Were it left to me to decide whether we should have a government without newspapers, or newspapers without a government, I should not hesitate a moment to prefer the latter," he wrote.

The First Amendment's petition and assembly clauses were passed with little controversy. Throughout British North America—and in England itself—petitioning was an important way for individuals to express their views to the local governing bodies. Debates regarding this clause frequently linked "assembly" to the story of William Penn, who 100 years earlier, had been arrested in London for leading religious services outside and charged with "unlawful, tumultuous assembly that disturbed the king's peace."

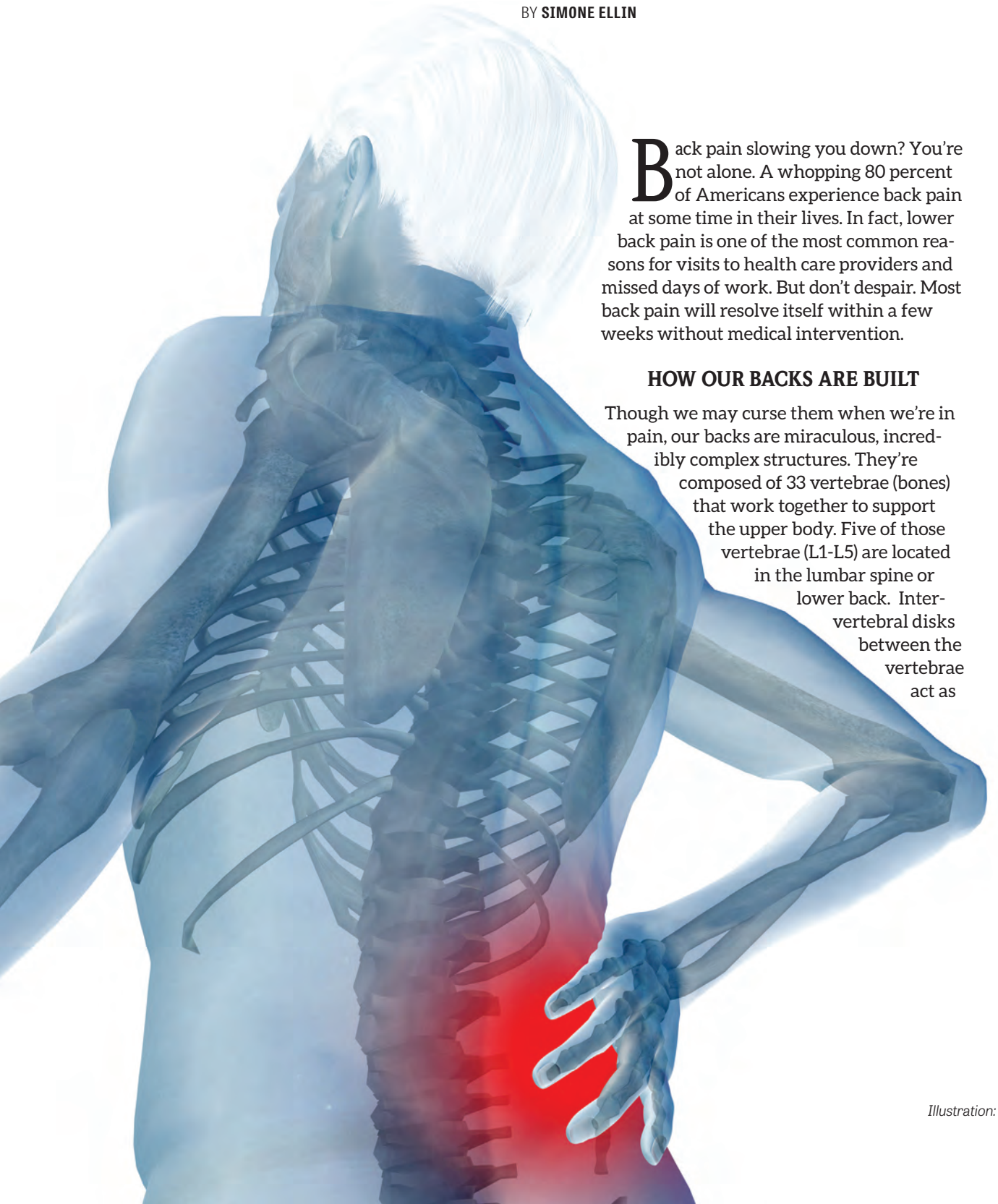
Despite its seemingly straightforward language, the First Amendment is far from easy to interpret. Perhaps no other amendment has been examined as much by courts as this one, as legal minds have attempted to define the limits of these freedoms. Those definitions have evolved throughout American history, and the process continues today.

Illustration: Shutterstock

BACK TALK

LOWER BACK PAIN TAKES A TOLL ON MILLIONS OF AMERICANS EACH YEAR.

BY **SIMONE ELLIN**



Back pain slowing you down? You're not alone. A whopping 80 percent of Americans experience back pain at some time in their lives. In fact, lower back pain is one of the most common reasons for visits to health care providers and missed days of work. But don't despair. Most back pain will resolve itself within a few weeks without medical intervention.

HOW OUR BACKS ARE BUILT

Though we may curse them when we're in pain, our backs are miraculous, incredibly complex structures. They're composed of 33 vertebrae (bones) that work together to support the upper body. Five of those vertebrae (L1-L5) are located in the lumbar spine or lower back. Intervertebral disks between the vertebrae act as

Illustration: Shutterstock

shock absorbers protecting the bones during movement and maintaining the space between the vertebrae. Fibrous connective tissues (ligaments) stabilize the vertebrae, while tendons attach the muscles of the back to the spinal cord. The back contains an impressive 31 pairs of nerves attached to the spinal cord that regulate body movements and conduct signals from the body to the brain. With so many interdependent parts and functions, it's no wonder our backs ache sometimes.

WHAT GOES AWRY

The most common lower back ailments are caused by something called spondylosis—degeneration of the joints, disks and bones of the spine brought on by the wear and tear of aging. When the doctor says you've got a herniated or bulging disk, sciatica or spinal stenosis, aging is probably the culprit.

Though aging makes us more susceptible to injury, it's not the only cause of back pain. Sprains and strains caused by twisting, lifting, overstretching or failure to stretch before exercise also can result in back pain. "Weekend warriors" (you know who you are!) or those who don't exercise regularly but over-exert themselves when they do—are especially prone to these conditions.

In other cases, back pain can be caused by inflammatory conditions such as arthritis, osteoporosis, endometriosis and fibromyalgia.

NEW TREATMENT GUIDELINES

Thankfully, if you're suffering from back pain, you have a range of treatment options available. In addition to rest, you might want to try physical therapy, massage, acupuncture, yoga, pilates or seek chiropractic care. All of these treatments have been shown to relieve pain in many individuals.

Treating back pain with prescription and over-the-counter pharmaceuticals is fine for short-term back pain, but when it comes to chronic back pain that lasts for more than a month, it's better to lay off the drugs, according to guidelines issued by the American College of Physicians in 2017. The ACP recommends pharmaceuticals only when alternative therapies don't provide relief. In other words for longer-lasting back pain, try something else before relying on Advil to get you through the day, every day.

Additionally, the guidelines discourage the use of MRIs for most patients, since the results are frequently deceptive. Steroid injections, another common treatment for back pain, also are deemed ineffective by the ACP.

If you're still not finding relief after therapy and/or medications, surgery remains a possibility, but should be considered a last resort. Typically, back surgery is recommended when chronic back pain makes it difficult to stand and walk; if you're experiencing numbness and/or leg weakness; or if there is significant impairment to your quality of life. Though surgery can be helpful—particularly for patients with herniated disks—it is not effective for everyone. When deciding whether surgery is necessary, seek a second opinion and carefully weigh the risks of surgery against its potential benefits.

Rarely, back pain can signal a serious condition. If your back pain lasts longer than two weeks regardless of rest and the use of over-the-counter medications, don't be a hero. See a doctor.

WANT TO PREVENT BACK PAIN?

There are no guarantees, but these tips may help:

1. Practice good posture
2. Move mindfully
3. Don't pick up heavy items
4. If you must pick up heavy items, do so using proper technique, squatting, carrying the load close to your body and straightening the legs
5. Use ergonomically designed furniture and sit in a chair with good lumbar support
6. Regularly perform age-appropriate, low-impact exercises that strengthen back and abdominal muscles
7. Stretch before and after exercise
8. Keep weight within healthy limits
9. Quit smoking
10. Sleep on your side in the fetal position on a firm mattress

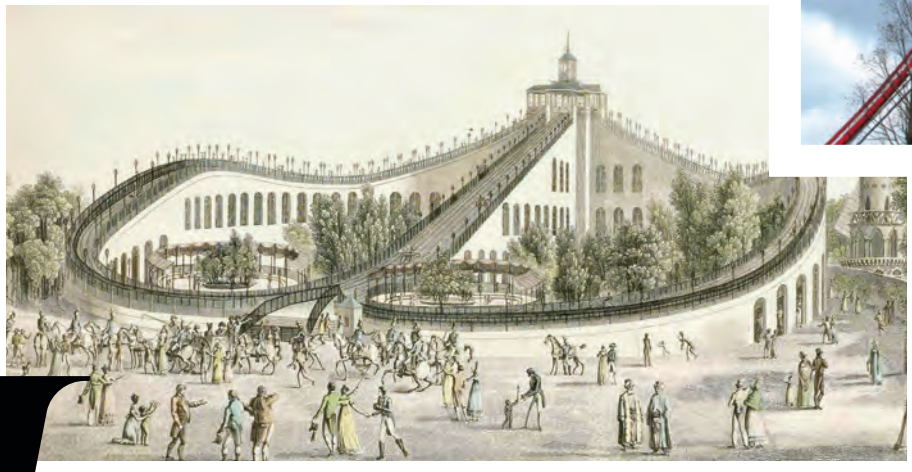
Wipeout roller coaster Pleasurewood Hills theme park in Lowestoft, England. *Photo: iStock*

WHAT A RIDE!

SOME 135 YEARS AFTER AMERICA'S FIRST ROLLER COASTER MADE ITS DEBUT AT CONEY ISLAND, THRILL-SEEKERS CONTINUE TO EMBRACE COASTERS THAT ARE FASTER, STEEPER AND SCARIER THAN EVER.

BY **MARY K. ZAJAC**

Left: Coney Island's classic wooden Cyclone coaster dates to 1927. ***Below:*** An early 19th-century roller coaster thrilled crowds in Paris. ***Right:*** The Steel Dragon 2000 in Nagashima, Japan, drops riders at 95 mph. ***Far right:*** Kingda Ka, at Six Flag Great Adventure in Jackson, N.J., is the tallest and fastest coaster in the United States.



LaMarcus A. Thompson did not invent the roller coaster. He didn't even hold the first patent. But on June 16, 1884, Thompson became the first person to successfully construct a roller coaster when his Switchback Railway made its debut on Coney Island.

The Switchback was no speed demon. Traveling a leisurely 6 miles per hour, the cars undulated up and down its small hills along a 600-foot stretch of beach. The starting peak reached a not-so-staggering height of 50 feet. Gravity alone propelled the train along the rest of the route until momentum ran out. Then the passengers disembarked and attendants pushed the car up another incline so the passengers could re-board and ride back to the starting point.

Compared to the deep dips and crests and loop-the-loops of the coasters that followed, the Switchback Railway offered a pretty tame ride. But people waited in line for up to three hours to pay the 5 cents admission ($1.30 today), and within months, a competitor, Charles Alcoke, opened a second roller coaster on Coney Island, one that ran in a continuous oval track. By 1885, Coney Island had three coasters, including one with a hoist to pull passengers high in the air before plunging them down to the ground. The fever for coasters had begun.

In the 135 years since, Americans have lined up to ride roller coasters with famous names, like the Cyclone and the Cobra's Curse, Space Mountain and the Spider—sometimes losing hairpins (as one early rider reported) or even lunch in the process—all for the thrill (and fear) of the ride.

Remarkably, the basic core technology of a roller coaster is unchanged since the early 1900s, according to Robert Coker, author of *Roller Coasters: A Thrill-Seeker's Guide to the Ultimate Scream Machines*. "Like a great composer, you have eight notes and a

standard octave," he writes, "but what you do with those notes is what makes it genius."

Roller coasters move by momentum and gravity, rather than by engines, and are often drawn to the top of the first peak via a chain lift or via a catapult launch that uses electromagnets to move the cars up an incline. The cars build up potential energy that, once released at the top of the hill, converts to kinetic energy and propels the cars downward. The force of gravity works with or against the cars, causing them to accelerate or decelerate. Gravity and visual cues also contribute to the array of sensations riders experience—from the impression of weightlessness to the sinking feeling in the stomach.

Today, there are an estimated 5,000 roller coasters worldwide with 900 active coasters in the United States alone. According to the National Amusement Park Historical Association, the longest is Japan's Steel Dragon 2000 at 8,133 feet while the fastest is Formula Rossa, which speeds along at 149.1 mph 171 feet above Ferrari World on Yas Island in Abu Dhabi. The oldest surviving coaster is the 117-year-old Leap-the-Dips in Altoona, Pa.'s Lakemont Park, and Sandusky, Ohio's Cedar Point Park's 18 coasters tops the amount found in any other park.

But while roller coasters have a

THE WORLD'S FASTEST ROLLER COASTERS

149.1 mph
Formula Rossa
Ferrari World,
Yas Island, Abu Dhabi

128 mph
Kingda Ka
Six Flags Great Adventure,
Jackson, N.J.

Hold tight: Seat restraints on Kingda Ka

120 mph
Top Thrill Dragster
Cedar Point, Sandusky, Ohio

112 mph
Red Force
PortAventura Park,
Salou, Tarragona, Spain

112 mph
Dodonpa
Fuji-Q Highland, Yamanashi, Japan

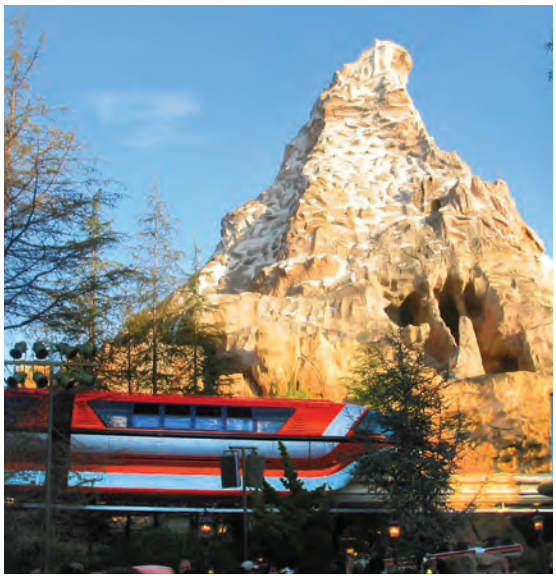
100 mph
Superman: Escape from Krypton
Six Flags Magic Mountain,
Valencia, Calif.

100 mph
Tower of Terror II
Dreamworld, Queensland, Australia

95 mph
Steel Dragon 2000
Nagashima Spa Land,
Nagashima, Japan

95 mph
Fury 325
Carowinds, Charlotte, N.C.

93 mph
Millennium Force
Cedar Point, Sandusky, Ohio



GRAVITY AND VISUAL CUES ALSO CONTRIBUTE TO THE ARRAY OF SENSATIONS RIDERS EXPERIENCE—FROM THE IMPRESSION OF WEIGHTLESSNESS TO THE SINKING FEELING IN THE STOMACH.

Left: Originally used to haul coal, the Mauch Chunk Switchback Railway was America's earliest version of a coaster when it debuted in 1873. ***Above:*** Disneyland's Matterhorn ride was inspired by Walt Disney's trip to Switzerland. ***Right:*** Reaching a top speed of 149.1 mph, Abu Dhabi's Formula Rossa is the world's fastest coaster. ***Below:*** Items often lost by riders and found beneath roller coasters.

rich and innovative history in America, historians trace the origin of the ride to 15th- and 16th-century ice slides constructed in villages around St. Petersburg, Russia. Tucked into a straw-padded ice block, thrill-seekers whooshed down ice-slicked ramps from heights as high as 70 feet. These amusements, known as Flying Mountains or Russian Mountains, became more sophisticated by the 18th century and metamorphosed into structures with wheeled carriages that ran along a hilly grooved track by means of a windlass and cable. In Paris, an early rendition dubbed Les Montagnes Russes (Russian Mountains) caused a small stir in 1804 when a newspaper reported that the wheels of the carriage had been known to fly off at any time. The same source later claimed that the danger only increased the public's fervor for the ride. Russian Mountains continued to gain in popularity across France and eventually spread to other European cities.

In the States, sources point to Mauch Chunk Switchback Railway in eastern Pennsylvania (the town is now known as Jim Thorpe) as America's earliest version of a coaster. Originally used to haul coal, the Switchback began to offer rides to tourists in 1873. The amusement offered thrill-seekers a steep climb of 664 feet followed by an equally precipitous plunge as well as a meandering 18-mile ride through the mountains, all for the cost of a dollar. In 1873, more than 35,000 took the trip.

The Mauch Chunk Switchback inspired LaMarcus Thompson's later forays into coaster construction at the turn of the century. In 1888, he founded the L.A. Thompson Scenic Railway Co. and introduced a new kind of coaster experience around the country. Thompson hired designers and engineers to create elaborate artificial environments, offering riders a chance to experience Bible scenes, Egyptian pyramids and the magnificent Asian-styled Dragon's Gorge at

Photos: Shutterstock

Coney Island's Luna Park, while riding on trains propelled by steam power and cables.

Interest and innovation in roller coasters continued to grow along with the rise in popularity for amusement parks. Figure 8s, loop-the-loops and steeper curves drew more and more customers, and by the 1920s, nearly 2,000 roller coasters were operating in the United States in what came to be known as the "Golden Age of Roller Coasters." Built of wood, the coasters sported jaunty names like the Wildcat at Lake Compounce, Conn.; the Jackrabbit in Kennywood Park in West Mifflin, Pa.; and the Giant Dipper on California's Santa Cruz Beach Boardwalk. Perhaps the most famous, Coney Island's Cyclone—still thrilling riders today—was built in 1927 with plunging drops that measured between 53 and 60 degrees.

Production and interest in roller coasters and amusement parks waned during the Great Depression and World War II. Their mid-century renaissance can be ascribed to Walt Disney, who during a trip to Switzerland in 1959 sent a postcard of the Matterhorn to his team and ordered them to "build this." The engineers designed a snow-capped mountain and a coaster made of tubular steel that was so highly anticipated that even Vice President Richard M. Nixon and his family showed up for its opening. Using steel made for a smoother ride, a faster ride and tighter turns. Soon every park wanted a steel roller coaster, and a new era of coaster construction was launched.

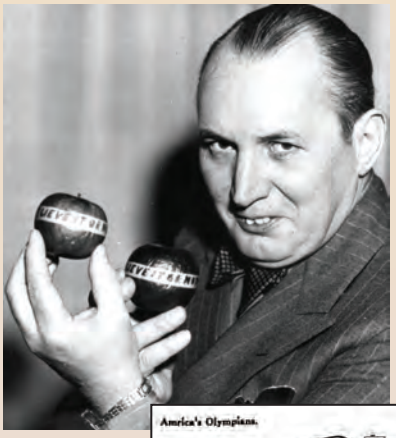
The newest technology in coasters offers forward and backward launches (Full Throttle at California's Six Flags Magic Mountain), multiple inversions and periods of being upside down (Steel Curtain at Kennywood), greater heights (Kingda Ka at Six Flags, New Jersey) and faster launches (Formula Rossa in Abu Dhabi takes riders from 0 to 149 mph in four seconds). In other words, for roller coaster fans, the future holds plenty to scream about.

Believe It!

IT'S BEEN 100 YEARS SINCE ROBERT RIPLEY'S FAMOUS COMIC MADE ITS DEBUT. HIS SUCCESS WAS A DISTINCTLY AMERICAN RAGS-TO-RICHES TALE—ONE THAT STILL RESONATES IN TODAY'S SOCIAL MEDIA WORLD.

BY **JIM DUFFY**

In 1932, cartoonist Robert Ripley, known for his oddball "Believe It or Not" newspaper cartoons, decided to turn the tables on his readers. Instead of illustrating another of his strange-but-true tales from around the world, he would have readers submit their own. After publishing the invitation in his syndicated newspaper comic, he received a whopping 2.5 million replies in just two weeks. It was an undeniable indication of just how wildly popular Ripley's column was at the time. Oh, and for the record, the winner was a man who, while swimming at a Brooklyn beach, happened upon a monogrammed hairbrush he had lost during World War I when the Germans sank his ship in the middle of the Atlantic.



Ashamed of his ugly teeth, Ripley retreated into a world of cartoons.

Exactly a century has now passed since "Believe It or Not" first appeared in the *New York Globe & Commercial Advertiser*, but the story of the up-by-the-bootstraps entrepreneur behind that famous brand remains fresh and fascinating. Ripley made millions of dollars in his lifetime. He traveled to the farthest corners of the globe. And he figured out how to win people's attention and make money from it—an influence on business still being felt today.

That's not bad for a shy, chubby, buck-toothed high school dropout whose roots were as modest as can be. Born in 1890, LeRoy Robert Ripley grew up in Santa Rosa, Calif., a small city near San Francisco. His father died when he was 15, leaving a widowed mother of three who was soon taking in boarders and doing laundry. Ripley pitched in by delivering papers and polishing headstones in a marble factory.

He was an odd sort of teenager. On one hand, he was a gifted athlete who would play semi-pro baseball and become a top-notch handball player. On the other, he was a social misfit, ashamed of his ugly teeth and suffering from what his biographer, Neal Thompson, terms a

"pathological dread of girls."

Ripley retreated into a private world of sketching and cartoons. Unable to afford proper supplies, he often drew on butcher paper and used a chopping block as an easel. He never had formal lessons. "Whom did I study under?" he later said. "I studied under the stars of Santa Rosa."

In 1908, Ripley mailed off an unsolicited illustration to *Life* magazine that reflected his hardscrabble circumstances. It showed a woman who was the spitting image of his mother doing laundry. The caption—"The Village Bell Was Ringing"—played on the words belle and wringing.

Much to Ripley's surprise, the magazine sent him a check for $8. He was off and running. After quick stints as a sportswriter/illustrator for newspapers in San Francisco, he moved to New York City. Late in 1918, while at the *New York Globe & Commercial Advertiser*, Ripley published a cartoon under the banner "Champs & Chumps" that had sketches of nine men performing odd athletic feats, including one man who walked backward across the continent. He repeated the gimmick the following year, changing the title to "Believe It or Not."

Back in those Roaring '20s, popular cartoonists and illustrators often ascended into pop-culture celebrities. Ripley was soon hanging out with Damon Runyon, the Marx Brothers and George Gershwin. Gossip columnists spread rumors about his frequent over-indulgences with alcohol and women, especially during Ripley's brief, bizarre marriage to a Ziegfeld Follies dancer. In 1922, the *Globe* bet big on its rising young star, sending him off on "Ripley's Ramble 'Round the World," which was just that, a circumnavigation of the globe that crossed the American continent and then went through China, India and Europe. While churning out illustrated travel tidbits for the newspaper at every stop,

Ripley's Odditoriums can be found all over the world, including Atlantic City (above) and Niagara Falls, Ontario.

he seemed to settle at last into a "Believe It or Not" groove.

"All my life I have waited for this day—the day when dreams come true," he wrote in his first dispatch. In India, Ripley was mesmerized by the extremes of Hindu spirituality. He drew images of one man who'd been sitting on a bed of nails for years and others who kept arms upraised at all times. He described the population of Benares (now Varanasi) as "the weirdest collection of humanity on the face of the earth," but he never depicted his subjects in a demeaning manner.

One of Ripley's most famous finds was J.T. Saylors, aka "Rubber Face," who could extend his bottom lip over his nose. *Photo: Alamy*

"When he presented people doing odd things, it wasn't in a mocking tone," says Thompson, the biographer. "It was in an appreciative tone."

Back in New York, Ripley soon became the star attraction in publishing magnate William Randolph Hearst's new King Syndicate, which placed "Believe It or Not" in more than 100 newspapers. Hearst started paying Ripley's way on one globetrotting adventure after another—by some accounts, Ripley visited 201 out of a then-total of 235 countries in the world.

"I have traveled the world over searching for strange and unbelievable things," Ripley told his readers. "... Believe me when I tell you about the man who died of old age before he was 6 years old; the river in Africa that runs backwards; oysters that grow on trees; flowers that eat mice; fish that walk and snakes that fly."

By this point, Ripley was receiving 100-plus letters and packages a day. One contained a shrunken human head. "Please take care of this," said a note. "I think it is one of my relatives." At one point, he was voted the most popular man in America, besting James Cagney and Franklin D. Roosevelt.

In the 1930s, Ripley built a multimedia empire that would be the envy of modern-day celebrity entrepreneurs. He starred in national lecture tours. The first "Believe It or Not" book, a collection of his columns, came out in 1929, selling more than 500,000 copies. He adapted the "Believe It or Not" brand for radio, starring in a hit show that ran for 14 years and featured publicity stunts, like broadcasting from the bottom of the Grand Canyon. He also starred in Hollywood shorts.

"... BELIEVE ME WHEN I TELL YOU ABOUT THE MAN WHO DIED OF OLD AGE BEFORE HE WAS 6 YEARS OLD; THE RIVER IN AFRICA THAT RUNS BACKWARDS; OYSTERS THAT GROW ON TREES; FLOWERS THAT EAT MICE; FISH THAT WALK AND SNAKES THAT FLY."

After a wildly successful two-year run with a physical display of oddities during the Chicago World's Fair, he opened his first "Odditorium" there in 1933. Among the attractions was one man who swallowed light bulbs and another who smoked pipes through his eyes. Soon, Odditoriums opened in San Diego, Dallas, San Francisco and elsewhere.

In the midst of the Great Depression, Ripley earned $3,000 per radio show, $1,000 per lecture and $7,000 a week for newspaper work. With books, short films and museums in the mix, his income soared past $500,000 a year, the equivalent of $9 million today.

He purchased an island near Long Island Sound, christening it BION, after Believe It or Not. The 28-room mansion there became, in Thompson's estimation, "one of the most bizarre dwellings in America," with mastodon tusks and countless other oddities on display. Among the pets was a 28-foot-long boa constrictor named Gertie.

During World War II, Ripley put his commercial enterprises on hold to work with support-the-troops charities, using his rich and famous friends to help draw crowds. He also drew many cartoon panels in these years depicting historical and present-day military heroes.

Erik "The Lizardman" Sprague is featured in many Ripley Odditoriums. *Photo: Alamy*

After the war, he made the bold decision to abandon radio in favor of a new-fangled medium, television, even though the latter was barely getting off the ground.

Alas, the world would never get a chance to see how that gamble played out. While filming the 13th episode of his new TV show, Ripley collapsed. Three days later, on May 27, 1949, he died of a heart attack at age 58. Ironically, one of the topics in that show was the backstory behind the funeral dirge, "Taps."

Today, Ripley rests in a cemetery under those Santa Rosa skies that inspired him as a youth. Meanwhile, his name lives on at Ripley Entertainment, the company that still publishes "Believe It or Not" books and a daily newspaper cartoon. Dozens of Odditoriums still operate across the country.

But the legacy of Ripley's all-American, rags-to-riches tale is bigger than that. "In many ways, what he did is still happening all over the place today," the media historian Robert Thompson of Syracuse University told PBS in an episode of "The American Experience." "If you want to get into the soul of Robert Ripley, you simply log on, go to YouTube, and knock yourself out. Because that's where the spirit of 'Believe It or Not' lives today."

One Degree of Robert Ripley

AS ROBERT RIPLEY'S EMPIRE GREW, HE SOMETIMES FEATURED THE WORK OF OTHER ILLUSTRATORS. IN 1937, HE PUBLISHED THE PUBLIC DEBUT OF A 12-YEAR-OLD BOY NAMED CHARLES SCHULZ, WHO WOULD GO ON TO CREATE "PEANUTS."

IN THE LATE 1930S, LOONEY TUNES CREATED A CHARACTER NAMED EGGHEAD THAT WAS ALMOST CERTAINLY BASED ON RIPLEY. OVER TIME, EGGHEAD WOULD MORPH INTO ELMER FUDD.

IN 1940, RIPLEY NEEDED A SHORTWAVE RADIO EXPERT WHILE BROADCASTING FROM THE BOTTOM OF THE GRAND CANYON. THE 31-YEAR-OLD LOCAL MAN HE HIRED WAS BARRY GOLDWATER, WHO WOULD BECOME A U.S. SENATOR AND THE REPUBLICAN NOMINEE FOR PRESIDENT IN 1964.

ROCK SOLID

CONCRETE HAS BEEN AROUND FOR MILLENNIA AND STANDS AS STRONG AS EVER, CONSTRUCTING THE MODERN WORLD.

BY **BRENNEN JENSEN**

Just how long has humankind toiled with concrete? Archaeologists discovered remains of the stuff used for flooring in a Neolithic settlement dating back nearly 9,000 years.

Essentially, man walked on concrete before he rolled on it; concrete is older than the wheel. And if the earliest concrete makers had recipes, they were passed along orally. Concrete predates writing.

It is almost impossible to imagine our modern world without this ancient substance—for buildings, roads, bridges and other infrastructure. And yet we probably don't think about it much—mankind's second-most-used substance after water. (And when we do, it's not always positively; the term "concrete jungle" evokes a harsh and unpleasant cityscape.) Its versatility is a strength. Amassed in great bulk, concrete can create engineering marvels such as the Grand Coulee Dam (which used 12 million cubic yards). In more artistic hands, it can display graceful beauty, such as in the curvilinear, sail-like lines of the Sydney Opera House.

The earliest concrete was primitive to be sure, and many ancient peoples experiment-

The modern urban landscape would look very different without concrete.

ed with "artificial rock" made via cooking lime and/or gypsum. (One theory suggests man discovered concrete after making fires atop natural limestone outcroppings and later finding some of the fire pit dust had hardened after a rain.) The Chinese are said to have added sticky rice to their concrete when building the Great Wall and early Meso-Americans colored their concrete with iron oxide, lending it a reddish tint.

The ancient Romans were concrete's first great makers and artisans. Their storied Pantheon was erected in the second century but remains the largest unreinforced concrete dome in the world. And concrete helped Rome's Colosseum become the looming landmark tourists gawk at to this day. Indeed, the word "concrete" is of Roman origin—Latin for "grow together."

And this might be a good time to clarify terms. Though concrete and cement are sometimes used interchangeably in casual conversation, cement is actually an ingredient of concrete. It is the glue, generally processed lime and clay, that when mixed with water, sand and other adjuncts, makes everything "grow together" into concrete. (To borrow a bit from baking: Cement is flour and concrete is the dough that becomes bread.)

Romans developed ways to kiln lime at more than 1,600 degrees Fahrenheit and also added volcanic ash known as pozzolan to their concrete. It was probably a happy accident that its chemical properties made it stronger, especially in maritime uses when it came in contact with salt water. The vast trading empire built concrete harbors that have withstood millennia of pounding waves. Scientists now think the salt reacted with chemicals in the

ash to make a concrete that actually grew harder over time.

Alas, after the Roman Empire fell and disappeared, so too did their concrete advancements. An English bricklayer from Leeds named Joseph Aspdin is considered the father of modern concrete after patenting Portland Cement in 1824. He kilned a mixture of lime, clay and water and named it after a durable limestone from the Isle of Portland off the Dorset coast. But is he really the father of concrete? The concrete tale veers somewhat from scientific development to melodrama here. It seems Joseph had a huge falling out with his son William and cast him out of the family concrete business. William Aspdin legged it for London to set up his own concrete shop. Alas, he was "an incorrigible liar and swindler," says author Robert Courland in the pages of his tome, *Concrete Planet*. He stole from his own firm, fabricated outrageous claims about his product, and ultimately had to flee to Germany in a cloud of debt (where he ran, then ruined, a concrete company and died drunk in the street at age 48). The odd thing is, he really did perfect his father's methods and made a superior cement—basically, what we use today.

Metal reinforcing arrived in 1886 as concrete's next big jump. In 1903, it allowed Cincinnati's 16-floor Ingalls Building to become the first reinforced concrete skyscraper. Just over a hundred years later, reinforced concrete enabled the Burj Khalifa skyscraper to rise 163 floors above Dubai as the world's tallest building.

Some of the cutting-edge concrete rolling out today includes one that can heal itself. This "bio-concrete" incorporates bacteria that come alive when cracks allow water in and they set about secreting chemical sealants to affect a repair. Electrically conductive

Opposite: The Romans knew concrete: The Colosseum has stood for nearly 2,000 years. ***This page:*** The 16-story Ingalls Building in Cincinnati, completed in 1903, was the world's first reinforced concrete skyscraper. ***Above:*** Concrete also takes graceful forms, such as the "sails" on the Sydney Opera House in Australia or the ceiling of Rome's Pantheon.

RESEARCHERS ARE HARD AT WORK CREATING MORE EFFICIENT MANUFACTURING TECHNIQUES FOR CONCRETE THAT ABSORBS CO_2 OUT OF THE AIR.

concrete also is being tested that could be used to melt ice off of runways or highways.

But plain old concrete is more popular than ever. Way more popular, in fact—its use has grown four-fold since 1990. More than 2 billion tons of it are produced annually, the lion's share in construction-crazy China. (Between 2011 and 2013 alone, China is estimated to have used more concrete than the U.S. did in the whole of the last century.)

So what does the future hold for man's favorite building material? Researchers are hard at work creating

Using the equivalent of Grand Coulee Dam's 12 million cubic yards of concrete, you could build a highway from Seattle to Miami. *Photo: Gregg M. Erickson*

more efficient manufacturing techniques for concrete that absorbs CO_2 out of the air. Experts also are exploring how concrete might be able to permanently trap CO_2 if the gas released during its production is captured and injected into the setting substance. Bottom line: During the next millennium, our ubiquitous gray friend will likely become a lot more green.

DIXON OFFERS A VARIETY OF PRODUCTS FOR THE CONCRETE INDUSTRY, INCLUDING:

- Internal expansion couplings
- Grooved end fittings and clamps
- Nozzles

A GOOD EGG

WAS THERE REALLY A BENEDICT BEHIND EGGS BENEDICT?

Actually, there was. It's just a question of which Benedict decided to combine poached eggs, cooked ham and hollandaise sauce and serve it on an English muffin first. One story has the dish being initially concocted at Manhattan's famed Delmonico's Restaurant in the 1860s when a regular patron, LeGrand Benedict, asked chef Charles Ranhofer to create something new for her lunch. And indeed, the chef's 1894 cookbook does include a recipe for Eggs à la Benedick (sic). Another story claims that it was Lemuel C. Benedict, a retired Wall Street broker, who strolled into the Waldorf Astoria Hotel in the 1890s, hoping to find a cure for his morning hangover. Benedict later claimed that he ordered "buttered toast, poached eggs, crisp bacon, and a hooker of hollandaise." The hotel's chef was so impressed by the dish, he put it on the menu, swapping ham for bacon and an English muffin for toast. Whatever its origins, Eggs Benedict has gone on to become an obligatory dish on any respectable brunch menu.

—Joe Sugarman

Photo: Shutterstock

MEMORABLE NIGHTS

BUNK IN A WOODEN BEAGLE? SLEEP IN A FORMER PRISON? HERE ARE 10 OF THE MOST UNIQUE PLACES TO STAY IN AMERICA.

BY **JOE SUGARMAN**

In Cottonwood, Idaho, you can spend the night inside of Sweet Willy, a 30-foot-tall wooden beagle. The **Dog Bark Park Inn** sleeps four in two rooms and boasts air conditioning, a full bathroom, continental breakfast and myriad doggie art created by its chainsaw artist owners. *dogbarkpark.com*

Make your Swiss Family Robinson fantasies come true and book a treehouse at **Out 'n' About Treehouse Treesort** in southern Oregon. The network of treehouses (the tallest is 47 feet off the ground!) is strung together by bridges, zip lines and ladders. Some of the ornately built houses boast modern amenities like running water, toilets and refrigerators. *treehouses.com*

The ***Queen Mary*** was the most luxurious cruise ship in the world when it set sail in 1934. You can get a taste of its heyday by booking an Art Deco stateroom on the historic ship, which is permanently docked in Long Beach, Calif. Guests can sign up for tours of the ship and dine in its three luxe restaurants. *queenmary.com*

Falling asleep in class is encouraged at the **McMenamins Kennedy School** in Portland, Ore. The 35 guest rooms are former classrooms, decorated with old desks and chalkboards. The old cafeteria is now a gourmet restaurant, serving up blackened ahi tuna and elk burgers, while the auditorium has been converted into a movie theater. And the girls room? It's now a brewery and guests can sip beer at the Detention Bar. *mcmenamins.com/kennedy-school*

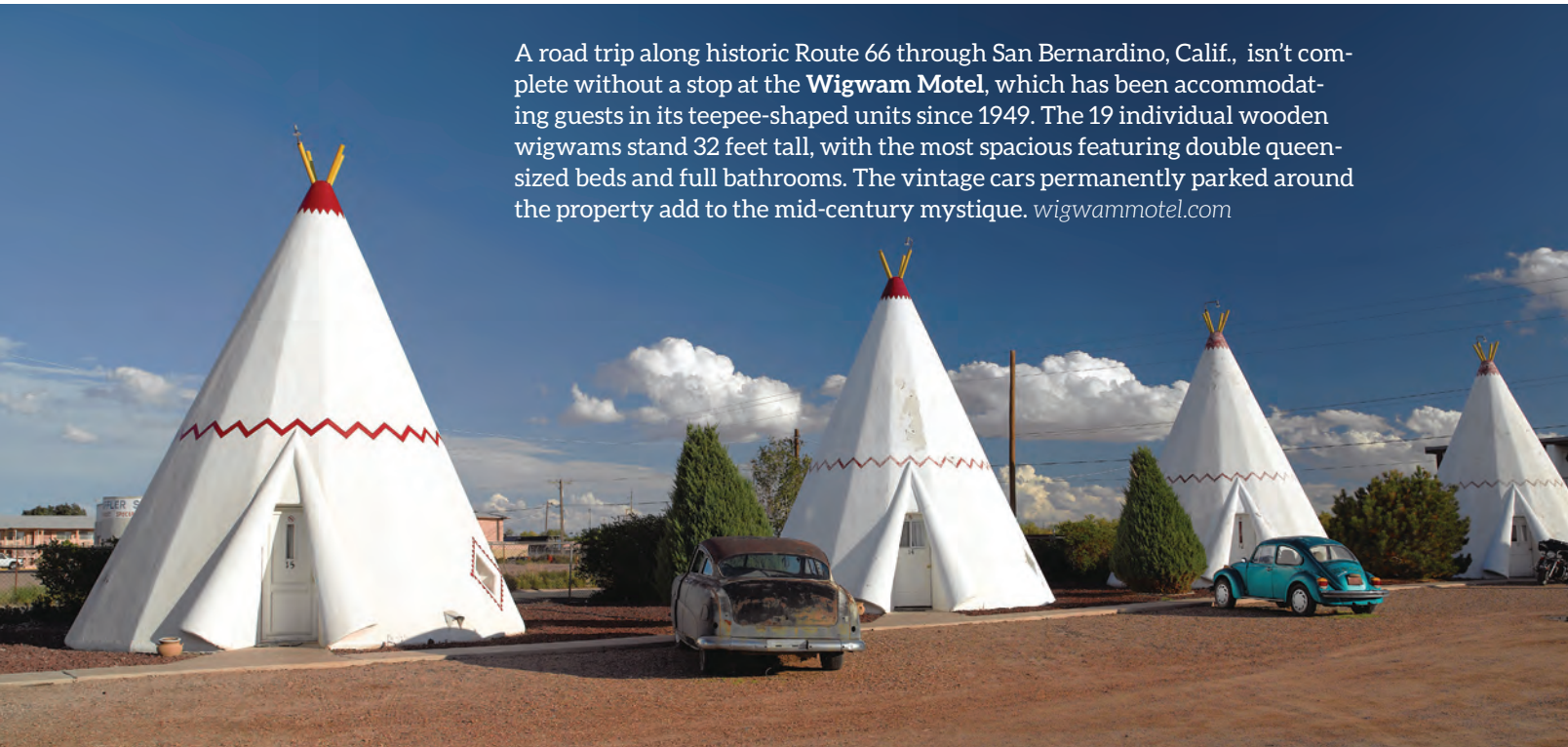
If your kid has a thing for Legos, they'll love the **Legoland Hotel** in Winter Haven, Fla. Its 152 rooms and suites feature Lego themes, from pirates to princesses. More than 2 million Lego bricks make up over 2,000 models throughout the hotel. Kids also can design their own Lego creations through daily master model builder sessions. *legoland.com*

The prisoners who slept at Boston's Charles Street Jail never had it so good. The 19th-century prison, which once accommodated Malcolm X and disgraced Boston Mayor James Michael Curley, has been re-imagined as the **Liberty Hotel**, a luxury, 298-room lodging. Guests can dine among the original jail cells at Clink restaurant or imbibe at Alibi, once the prison's drunk tank. *libertyhotel.com* *Photo:Alamy*

Like big cats? Then book a bunk at **Turpentine Creek Wildlife Refuge**, an Arkansas-based nonprofit that hosts animals rescued from the exotic animal trade. The refuge contains more than 100 tigers, lions, pumas, and other cats, once held as illegal pets. Guests can stay in rustic lodges or treehouse accommodations on the 460-acre property. *turpentinecreek.org*

No need for helmets and headlamps if you stay at the **Beckham Creek Cave Lodge** in the Arkansas Ozarks. This luxury cave dwelling, set inside a sprawling underground cavern, features four bedrooms, four full baths and kitchen and multiple living areas with lofts and balconies overlooking a beautiful valley. *beckhamcave.com*

"Sleeping with the fishes" is a positive thing to do at **Jules' Undersea Park** in Key Largo, Fla. At the world's only undersea hotel, guests must don scuba gear to access accommodations 21 feet beneath the water's surface. (You have to be dive-certified or take a course before your stay.) Once inside, large windows give guests magnificent views of the lagoon's aquatic life. *jul.com* *Photo:Alamy*



A road trip along historic Route 66 through San Bernardino, Calif., isn't complete without a stop at the **Wigwam Motel**, which has been accommodating guests in its teepee-shaped units since 1949. The 19 individual wooden wigwams stand 32 feet tall, with the most spacious featuring double queen-sized beds and full bathrooms. The vintage cars permanently parked around the property add to the mid-century mystique. *wigwammotel.com*

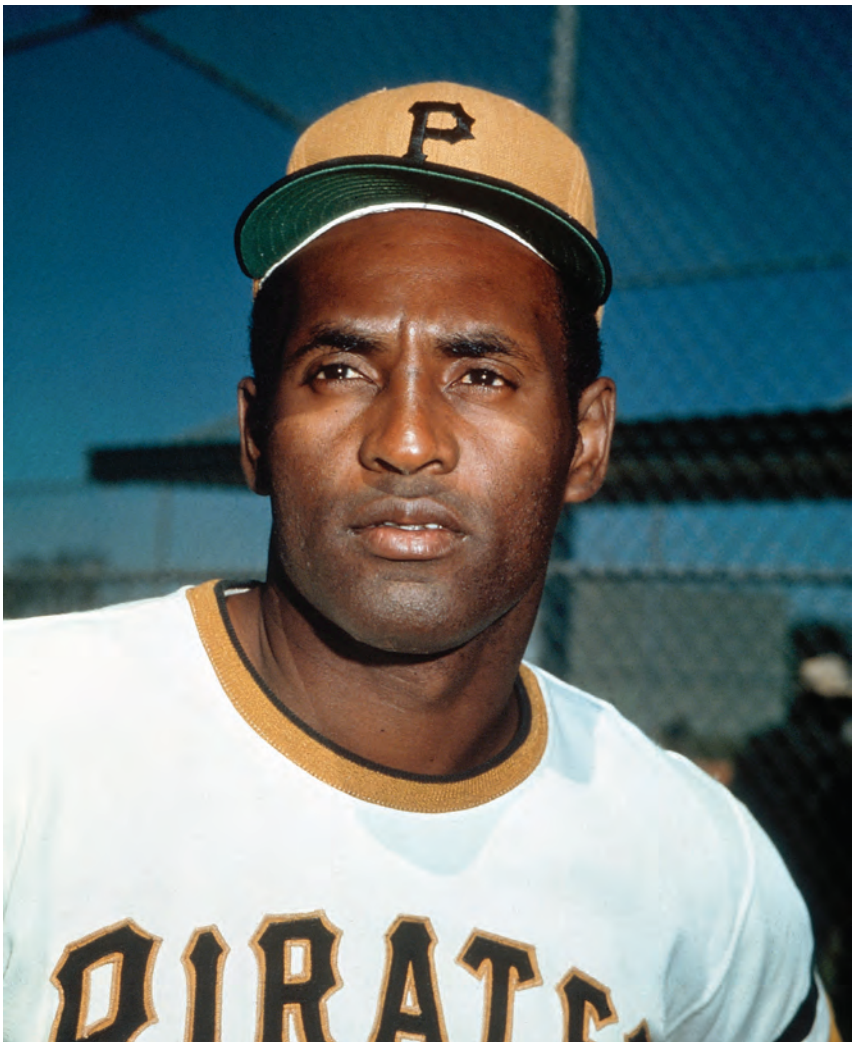


Photo: Getty Images

MOST VALUABLE PERSON

MAJOR LEAGUE BASEBALL'S ROBERTO CLEMENTE GAVE HIS LIFE TO HELPING THOSE IN NEED.

BY **CHARLIE VASCELLARO**

On New Year's Eve, 1972, Pittsburgh Pirates outfielder Roberto Clemente boarded a propeller-driven DC-7 airplane at Puerto Rico's Isla Verde International Airport bound for Managua, Nicaragua. Clemente, 38, had chartered the small jet and crew to fly relief supplies to victims of an earthquake that had claimed the lives of 5,000 people, injured another 20,000 and displaced more than 250,000 from their homes in Nicaragua.

After takeoff, the plane, overloaded with 4,200 pounds more than the maximum allowable gross weight, failed to gain enough altitude. The pilot attempted to turn back but never made it, submerging into the Atlantic Ocean just 1.5 miles from shore. All five of those aboard—the three-man crew, a passenger and Clemente—perished. Clemente's body was never recovered.

It was a tragic ending to a remarkable life, but representative of what kind of man Roberto Clemente was. Throughout his 18 years in the major leagues, Clemente was always helping those less fortunate. Once he began making big league money and being paid for endorsements and television commercials, he donated much of his pay to charitable causes. He was a regular visitor to hospitals in major league cities on the road and when he was presented with a check for $6,000 on "Roberto Clemente Night" in Pittsburgh in 1970 he donated all of it to a local children's hospital.

Clemente was born in Barrio San Anton, Carolina, Puerto Rico, in 1934. In high school, he excelled at both

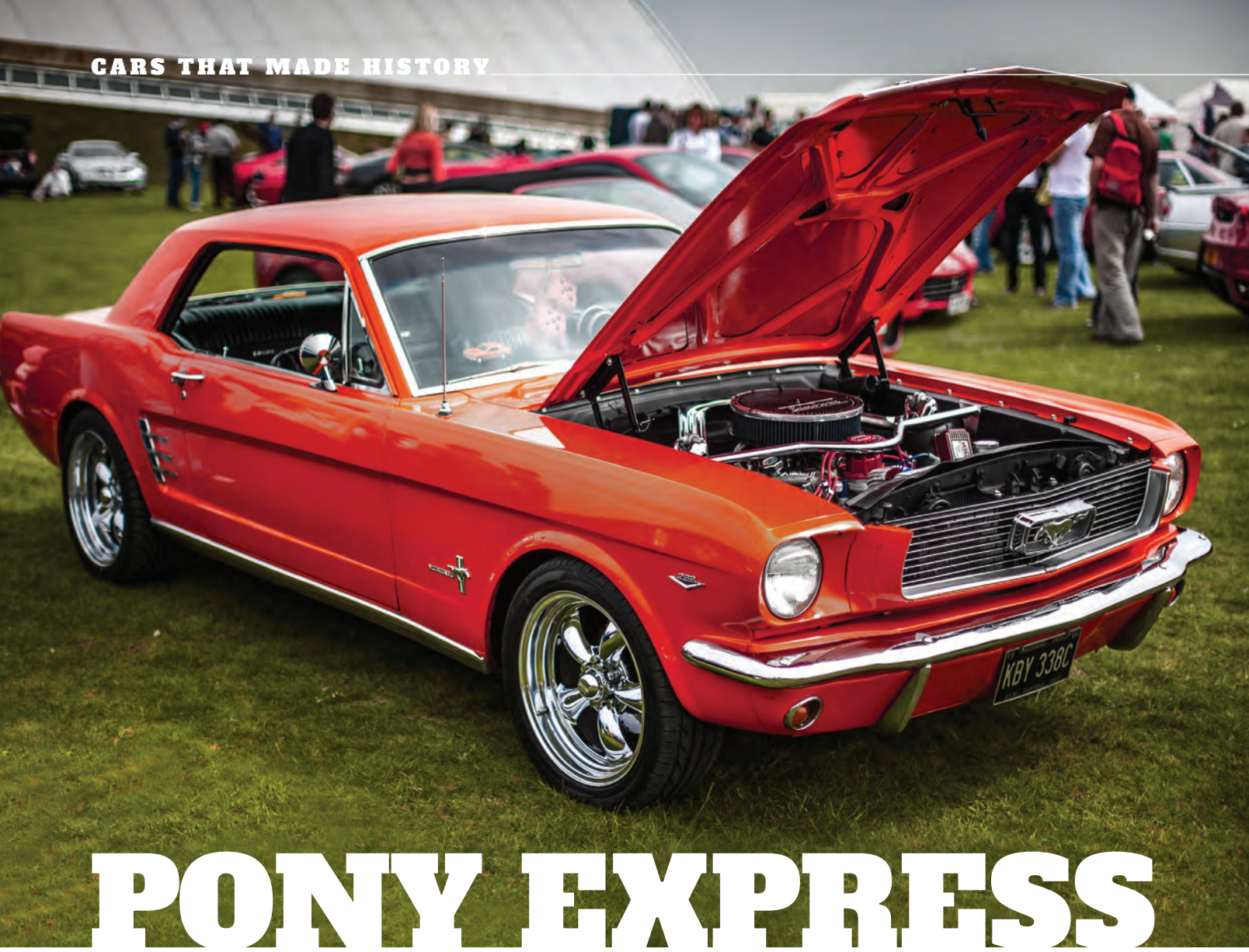
baseball and softball. Originally signed by the Brooklyn Dodgers in 1954, Clemente was later drafted by the Pirates and made his major league debut at age 20 in 1955. He would go on to rack up exactly 3,000 hits in his big league career from 1955 to 1972. Clemente won four batting titles, hitting a career-high .357 in 1967 and recorded a lifetime .317 average. He led the National League twice in hits, captured the Most Valuable Player Award in 1966, won 12 Gold Glove Awards and was named to 12 NL All-Star teams. He is generally regarded as the greatest right fielder in the history of professional baseball.

After his death, the Baseball Writers' Association of America voted in favor of waiving the usual five-year period of retirement required for eligibility before a player's name can appear on the Hall of Fame ballot. On March 20, 1973, he became the first Latin American player to be inducted into the Hall.

A statue of Roberto Clemente stands in front of a bridge that bears his name in Pittsburgh. He was posthumously awarded the Presidential Medal of Freedom in 2003. *Photo (bridge): Shutterstock*

Upon his passing in 1973, Major League Baseball renamed its Commissioner's Award in his memory. Since then, the Roberto Clemente Award has been presented annually "to the player who demonstrates the values Clemente displayed in his commitment to community and understanding the value of helping others."

St. Louis Cardinals catcher Yadier Molina won the award last season largely due to his relief work in his native Puerto Rico during the aftermath of Hurricane Maria. "For us, Clemente is a hero and a legend and we highly respect and admire him not only as one of the greatest players but as a humanitarian," Molina said upon learning he would receive the award. "[He] lost his life helping those in need and to be associated with him is a true privilege."



PONY EXPRESS

HOW A LITTLE MARKET RESEARCH HELPED THE FORD MUSTANG GALLOP AWAY FROM THE AUTOMOTIVE HERD.

BY **ADAM STONE**

Gawkers at the 1964 World's Fair had ample diversions to choose from. There was a Saturn V rocket on display, as well as a dolphin show and the World's Largest Cheese (a 17-ton cheddar!).

That huge cheese may have faded from memory, but what remains is Ford Motor Co.'s contribution to the fair: The unveiling of the 1965 Mustang, a car destined to become the automaker's biggest seller since 1927's Model A and a legend in the history of American driving.

Why did the Mustang hit the streets with such a momentous roar? Priced at a modest $2,368 ($19,200 in today's dollars), the car appealed to baby boomers just getting their driver's licenses. As the first of the "pony" cars—smaller than a muscle car but bigger than an imported sports car—it had a sporty styling that has enchanted drivers ever since.

The car set a record for first-year sales and won Ford executive Lee

Iacocca a spot on the cover of *Time* magazine. Ford expected to sell 100,000 Mustangs in the first year. It hit that number within three months and ultimately sold more than 400,000 that year.

Given the public's warm embrace, it's surprising that car reviewers were initially lukewarm about the Mustang.

Road & Track wrote that while the Mustang had generated "more excitement and interest than the introduction of any car we can remember," it was mostly just OK. "There is plenty of room for the driver to get into the Mustang ... and the shift lever is within comfortable reach." *Really?* That's all you got?

Consumer Reports said it was "an agreeable car—one in which an individual appearance is achieved in a compact package with minimum handicaps."

The '65 Mustang's 4,700cc engine. *Photo: Acabashi*

Apparently, the postwar boomer kids saw something the critics had missed. Low-slung, convertible, amply powered and relatively inexpensive, the Mustang embodied fun and youth and freedom.

Those characteristics were deliberate: Breaking with conventional practice at the time, Ford actually researched its demographic and designed the Mustang specifically to be the kind of car young adults would want to own. As a result, the Mustang "was perhaps the most important car of its era, not so much for what it was, but for what it represented," wrote auto historian Aaron Severson. "The idea of identifying a market and a set of consumer *desires* and developing a new product specifically to fulfill those needs was a new concept."

Ford executed flawlessly on that concept, down to the winsome color choices: Champagne Beige, Rangoon Red, Tropical Turquoise. Ford aimed its new sedan at the baby boomers' heart and the arrow found its target. That massive early success helped secure a place for the '65 Mustang in the pantheon of great automobiles, a place it has held ever since.

Tony Mendez at the Los Angeles premiere of *Argo*. *Photo: Alamy*

MASTER OF DISGUISE

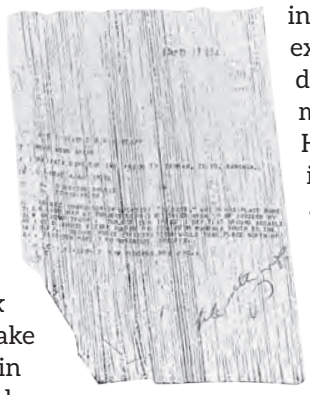
CIA OPERATIVE TONY MENDEZ'S ESCAPADES WERE MADE FOR THE MOVIES.

BY **ADAM STONE**

Even if you've never heard of CIA operative Tony Mendez, you may know his work. Ben Affleck brought to life the spy's most daring escapade in the 2012 film *Argo*.

In the annals of espionage, Mendez's crowning achievement is known as the "Canadian Caper"—and an audacious stunt it was. In the midst of the January 1980 Iran hostage crisis, he smuggled six American diplomats, who had eluded capture and were holed up at the homes of two Canadian representatives, out of the nascent Islamic state, under the noses of its revolutionary leaders.

"He had them pose as a Canadian film crew scouting for a place in Tehran to shoot a movie," according to his *New York Times* obituary. "He supplied them with fake Canadian identities and instructed them in the proper mindset to pass through armed Iranian security; and he led the way, pretending to be the crew's production manager."



Shredded CIA cable recovered by Iranians from the U.S. Embassy.

Mendez signed onto the CIA in the mid-1960s, drawn by a newspaper advertisement looking for artists willing to work overseas. As a part-time painter of murals and other commissions, he was able to use his artistic skills to create counterfeit and forged documents to help CIA agents in covert missions around the world. He expanded his skills to become a master of disguise, an expert in makeup and other means for altering or obscuring identity. His elaborate ruses were legendary and included transforming a black agent and an Asian diplomat into a pair of white business executives to escape Soviet surveillance and also creating a spring-loaded mannequin that enabled a CIA source to sneak out of his car while a dummy popped up in his place.

It took creativity and thorough knowledge of spy-craft to create a

fake film crew in search of a location for an imaginary science-fiction movie. It was an impressive feat, even for a man who in his long service with the CIA had earned a reputation as an expert at "exfiltration," the art of whisking people quietly away from dangerous situations.

Followers of the Ayatollah Ruhollah Khomeini storm the U.S. Embassy in November 1979.

"It's not just the make-up," Mendez told *The Times* in 1997. "Disguise is not just the face you present. It's the 6,000-year-old secrets, the capability to create illusions. The essence is illusion and deception."

Mendez died in January 2019, but his voice lives on in CIA documents, where he describes the daunting complexities of the Canadian Caper.

"The stakes were high," he wrote. "A failed exfiltration operation would receive immediate worldwide attention and would seriously embarrass the U.S., its president and the CIA. It would probably make life even more difficult for all American hostages in Iran."

In fact the operation went off seamlessly, and it became the stuff of legend in spy circles. The CIA went public with the story in 2007 through an article in *Wired* magazine. Then in 2012, with Affleck acting and directing, the screen version of the story won three Oscars, including Best Picture.

Mendez met the president and earned the CIA's Intelligence Medal of Merit, the Intelligence Star and two Certificates of Distinction. Affleck said of Mendez that he "never sought the spotlight for his actions, he merely sought to serve his country." Yet the spotlight found him.

Spies usually toil unnoticed, so maybe there's a little irony in the story of a man who worked in secret, and who then became world-famous thanks to a real movie … about a fake movie.

Or maybe that makes perfect sense, in the shadowy world of espionage.

Dixon boasts offices, manufacturing facilities and distribution centers in more than 30 cities around the globe. In every issue of *BOSS*, we highlight a cultural icon from one location. In this issue: Portland, Ore.

PORTLAND'S DEAREST DEER

Since its installation in 1940, the neon and incandescent White Stag sign has greeted westbound motorists entering downtown Portland, Ore. Located on top of the White Stag building, the sign originally advertised the White Satin Sugar Co. until 1957 when White Stag Sportswear moved in and added the trademark leaping stag.

In 1989, the lettering on the sign was changed from White Stag Sportswear to "Made in Oregon—Old Town," a reference to the retail chain of the same name that occupied the building for more than 15 years. These days, the sign, which was designated a historical landmark in 1978, is owned and maintained by the city of Portland. Every Christmastime since 1957, the stag greets Portlanders with a seasonally appropriate new look: Just like Rudolph, its nose turns a bright red.

Photo: Steve Morgan

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