EXERCISE YOUR BRAIN

Given a little time and a modicum of mental strength, you should be able to solve these. (But in case you can't, the answers are on page 540.)

1. Name the only U.S. state that has four consecutive consonants in its name.

2. This special number is in order: 8,549,176,320. What kind of order?

3. What letter does not occur in any U.S. state name?

4. Name the only number that, when spelled out, has the same number of letters as its value.

5. What do these five words have in common?

adam buoy claim gall ramp

6. Name the only two U.S. states that contain three consecutive vowels in their name.

7. What nine-letter word can be made by unscrambling these letters?

ACCEHIMNS

8. This U.S. state name is made up of three words—in order. The first and the third words have opposite meanings, and the middle word is very egotistical. (*Hint:* It's not a two-word state name.) **9.** What's the minimum number of playing cards in a hand that can consist of one king, two clubs, three jacks, and four hearts?

10. Think of the only 9-letter word that contains one vowel. (If your brain isn't too weak.)

11. Think of a dangerous five-letter reptile. Remove the letter "o" and rearrange the remaining letters to form a four-letter crustacean that's not nearly as dangerous.

12. One of these animals does not begin with something that the other three do. What? pigeon donkey beetle bullfrog

13. Name exactly 100 words that do not contain the letters a, b, c, or d. (Hint: They're all connected...and they keep getting bigger.)

14. What's special about the word "swims"?

15. In what well-known word do these six consecutive consonants appear?

tchphr

A HOLE IN THE HEAD

241

If you've ever said, "I need that like I need a hole in my head," you might want to read this article to find out what you're missing.

THE HOLE STORY

There's actually a term to describe the practice of purposely boring a hole into the human skull for "medical" purposes. It's called *trepanning*, and it dates back at least 7,000 years archaeologists have discovered Neanderthal skulls that had nickelsize holes in them. During the Middle Ages, the procedure was used to release the "demons," which were believed to be the cause of mental illness. By the 19th century, trepanning was still commonplace, although it was believed to cure mental illness by relieving pressure on the brain, not by exorcising evil spirits. The surgery fell out of favor in the early 20th century, when doctors realized the primitive procedure was ineffective (and dangerous).

In 1962 a Dutch self-help guru named Bart Huges tried to spearhead a modern-day trepanning comeback. While searching for a way to expand his consciousness and increase his brainpower, he somehow concluded that the key was in somehow opening up the skull. His "reasoning": Children are fast learners and have creative minds because their skulls are not yet fully formed or fully enclosed, and their high levels of creativity are due to higher levels of blood flow (and oxygen) to the brain. Huges decided that with trepanning, he could mimic the open skull and reap the rewards of increased blood flow. Using a surgical drill, Huges performed the procedure on himself (and then stitched up the skin over the borehole...himself).

DRILL BITS

For the record, there is absolutely no scientific evidence that drilling a hole in the head results in anything other than putting a person at serious risk of injury or death. But despite being committed to a mental institution after he extolled the virtues of trepanning to reporters, Huges served as a model for many latter-day trepanning advocates. (One more warning: *Do not try this at home.*)



• In 2000 Heather Perry of England suffered from chronic fatigue syndrome, of which the major symptom is...chronic fatigue. After doing some research, she decided that the only way to cure the condition was to relieve the pressure on her brain by drilling a dime-size hole in her skull. Doctors refused to do it, so Perry did it herself. She stood in front of a mirror, made an incision in her scalp, and drilled. There was no damage (although she was a few millimeters away from piercing her brain) and, according to Perry, her exhaustion is now gone.

• Peter Halvorson and William Lyons of Utah both received trepanning surgeries and touted the benefits of the cranial pressure-relieving procedure on the Internet. Despite the fact that neither man was a licensed physician, a British woman so believed in the surgery that in 2002 she hired them to drill a hole in her head and increase her "brain blood volume." The patient survived, but Halvorson and Lyons were arrested and convicted of practicing medicine without a license. (They received three years probation.)

• In 1995 Jenny Gathorne-Hardy of London read an article about trepanning and was intrigued by the claim that a skull hole could enhance brain function by increasing blood flow. So she put a local anesthetic on the side of her head and drilled a hole. Gathorne-Hardy later told reporters that she feels "calmer, and that the mental exhaustion I became so used to has gone."

• In the mid-1960s, English painter Joey Mellen wanted a hole drilled in his head, believing it would get him "permanently high." His girlfriend, Amanda Feilding, had successfully trepanned herself (and experienced euphoric highs), but it took a bit more work to accomplish Mellen's goal. Feilding unsuccessfully drilled his head once; the hole wasn't deep enough. Then Feilding took over. She botched the second attempt and Mellen lost a lot of blood—enough to require medical attention. But that didn't stop him. After recovering in a hospital (under psychiatric watch), Mellen went home and drilled the hole himself. When he heard what he later called "an ominous sounding 'schlurp' and the sound of bubbling,"—he knew he'd successfully bored through his skull (but *unsuccessfully* drilled into his own brain).

UNLIKELY BENEFACTORS

When people die—or even before—they don't always give their money or assets to their friends and family. Sometimes, often through roundabout circumstances, it ends up in some very unlikely places.

ARGARET WISE BROWN AND GOODNIGHT MOON

Margaret Wise Brown wrote more than 100 children's books. The most famous is Goodnight Moon, a bedtime story in which "goodnight" is said to all the objects in a room. It's sold 11 million copies, making it one of the most popular children's books ever. Brown died of an embolism while visiting France in 1952 at the age of 42. Her will gave all royalties from future sales of Goodnight Moon (at the time, it had sold only about 3,000 copies) to Albert Clarke, a nine-year-old boy whose family lived in the apartment next-door to hers in New York City. Sales of the book slowly grew, and by the time Clarke got access to his inheritance at age 21, there was \$75,000 waiting for him, which he blew on a new car and expensive clothes. His lawyer put him on a weekly allowance, but it was still enough to allow Clarke to wander around the United States, spending the money on drugs, cars, bad real estate deals, and legal fees (he was arrested dozens of times on various charges). Over the past 50 years, Clarke accumulated more than \$5 million in royalties from the sales of Goodnight Moon. When a reporter tracked him down in 2000, he had only a few thousand dollars left.

MARILYN MONROE

At the time of Monroe's death in 1962 at age 36, her estate was worth about \$1.6 million. She willed it to the two people she trusted most: her acting teacher, Lee Strasberg (75 percent), and her psychiatrist, Dr. Marianne Kris (25 percent). When Kris died in 1980, her portion of the Monroe estate—which had grown substantially in the past two decades due to merchandising Monroe's image and the enduring popularity of her movies—went to the Anna Freud Centre, a children's psychiatric research hospital in London. It earns about \$500,000 a year from the Monroe estate.

IKEA FURNITURE

Ingvar Kamprad founded IKEA in Sweden in 1943 as a mail-order consumer goods business and began opening stores a few years later. Today, Kamprad is worth \$30 billion. In 1982 he donated his ownership stake in the IKEA stores to a Dutch charity called the Stichting Ingka Foundation, which operates them through a forprofit subsidiary. With annual profits in the billions, the foundation is technically the world's richest charity. Its goal is to "promote and support innovation in architectural and interior design," but it distributes less than 1% of its earnings to colleges and other institutions...because it's not really a charity. The Foundation is run by a five-member board, headed by Kamprad, who still makes millions of dollars each year because the Foundation only owns IKEA stores, not the IKEA trademark or concept (they're still owned by Kamprad). Every IKEA store in the world pays Kamprad a franchise fee, totaling about \$631 million a year. The whole system was set up so that IKEA was protected against a hostile takeover and so Kamprad could pay less in taxes. For example, in 2004 IKEA made a profit of 1.4 billion euros, but paid only 19 million euros in taxes.

YANKEE STADIUM AND RICE UNIVERSITY

In 1955 businessman John Cox acquired all the stock of the Yankee Stadium Holding Company, making him the sole owner of Yankee Stadium and allowing him to lease the stadium back to the team at a lucrative rate. Seven years later, Cox died, leaving Yankee Stadium to his alma mater, Rice University in Houston, Texas. In 1971 New York City invoked the right of eminent domain and forced the university to sell them Yankee Stadium for a \$2.5 million "condemnation fee." (The university had a partner: the land under the stadium was owned at the time by the Knights of Columbus. It had been sold to them by its previous owner, John Cox.)

J. M. BARRIE'S PETER PAN

In 1929, eight years before he died, Scottish writer J. M. Barrie gave the copyright to his most famous work—his original 1904 stage version of *Peter Pan*—to the Great Ormond Street Hospital. The millions in royalties they've earned since then on productions of the play have enabled the London institution to become England's top children's hospital.

According to statistics, approximately 40,000 Americans are injured by toilets every year.

BEDTIME STORIES

We won't be offended if you doze off while reading this page.

• Studies show that 41 percent of people sleep in the fetal position, 28 percent on their side, 13 on their back, 7 on their stomach, and the rest in two or more positions.

• Mark Twain wrote most of The Adventures of Tom Sawyer and The Adventures of Huckleberry Finn in bed. Another author who wrote in bed: Robert Louis Stevenson.

• 64 percent of women sleep on the left side of the bed.

• King Louis XI of France received visiting dignitaries in his bed, which he called the Bed of Justice. At one point, he owned 413 beds.

• Tip: The handles on the side of a mattress aren't for moving it—that stretches it out. The handles are only supposed to be used to rotate or flip the mattress on the box springs.

• More than 600,000 Americans are injured by beds every year (mostly by falling out of them or bumping their heads on headboards). • World record for making a bed: Wendy Wall of Sydney, Australia, made one in 28.2 seconds (1978).

• Queen and king-size beds weren't available until the 1950s. The Simmons company invented them in 1958.

• Sleep experts say that people who sleep on their right side have better digestion.

• The word "mattress" comes from the Arabic *matrah*, for "where something is thrown."

• Two adults sleeping in a double bed have less personal space than a baby in a crib.

• Sleep law: in Tallinn, Estonia, couples are not allowed to play chess in bed.

• 40 percent of men snore, and 30 percent of women do.

• Now *that*'s a king-sized bed: the Great Bed of Ware, built in the 1590s in the town of Ware, England. On display at the Victoria and Albert Museum in London, it measures 10 by 11 feet and could sleep as many as 15 people.

30 PEOPLE YOU DIDN'T KNOW WERE CANADIAN

...or did you? If you didn't, well, now you know.

1. Paul Anka, singer/composer ("Diana" and "My Way")

2. Norma Shearer, Oscarwinning actress (*The Divorcée*)

3. Bat Masterson, Old West lawman

4. Frank Gehry, architect

5. Fay Wray, star of the original 1933 King Kong

6. Peter Jennings, ABC news anchor

7. Christopher Plummer, star of The Sound of Music

8. Leslie McFarlane, writer of the first *Hardy* Boys books

9. Robert Goulet, singer/actor

10. Lennox Lewis, heavyweight boxing champion

11. (and 12.) Scott Abbott and Chris Haney, inventors of Trivial Pursuit

13. Steve Nash, two-time NBA most valuable player

14. Conrad Bain, played the father on *Diff rent Strokes*

15. Mary Pickford, silentfilm actress nicknamed "America's Sweetheart" **16. Wolverine,** fictional superhero from the X-Men

17. Tommy Chong, of Cheech and Chong

18. Art Linkletter, TV host

19. Kim Cattrall, actress from Sex and the City

20. Jack Warner, founder of Warner Bros. Studios

21. Louis B. Mayer, founder of MGM Studios

22. James Naismith, inventor of basketball

23. John Kricfalusi, creator of Ren and Stimpy

24. Seth Rogen, actor/writer (Knocked Up, Superbad)

25. Joe Shuster, co-creator of Superman

26. Morley Safer, journalist from 60 *Minutes*

27. Linda Evangelista, supermodel

28. Frederick Banting, scientist who discovered insulin

29. Neil Young, rock star

30. Monty Hall, host of Let's Make a Deal

THE FIRST WAR GAME

If you've ever played Risk, Diplomacy, Axis & Allies, Dungeons & Dragons, World of Warcraft, or any other game that lets you conquer the world, here's the war game that started it all—the most influential game you've never heard of.

NSTANT REPLAY

For as long as armies have gone to war, there's been a need to remember lessons learned in battle. The losers want to know what went wrong, so that it doesn't happen again; the winners want to understand why they won, so that they can repeat their success. But how do you pass these lessons on to the next generation of military officers before they've even been in combat?

Card games and chess have both been played in Europe since the 1500s, and over the centuries numerous attempts were made to use them for strategy games that would teach young officers the lessons of war. But no matter how many variations were tried replacing the jacks, kings, queens, and aces with captains, majors, colonels, and generals, or giving chess more pieces, more players, or a larger or more varied game board—these attempts never came close to recreating the battlefield experience. Their value as an instructional tool for young officers was limited at best.

THE SANDMAN

Then in the early 1800s, Baron George von Reisswitz, a Prussian civil servant and military-history buff, decided to create a war game entirely from scratch:

• Why limit yourself to a chessboard? Von Reisswitz thought it made more sense to play on a surface with real topographical features. He built a box several feet square and filled it with sand that could be used to model the hills, valleys, rivers, roads, and bridges that a Prussian soldier might encounter on a real battlefield.

• He made the playing surface large enough, and the square blocks that represented soldiers small enough, so that the blocks approximated the size of actual soldiers on a battlefield landscape. This allowed von Reisswitz to incorporate the concepts of time and distance into the game, something that had not been a part of card- and chess-based games. • Troops on the march can only travel a certain number of paces per minute. By setting the scale of the game at 3 centimeters = 100 paces, it was possible to measure the distance between opposing groups of soldiers to calculate where and when they would meet on the battlefield. And since the range of rifles, cannons, and other weapons was also known, it was possible to tell when a group of soldiers would come within range of enemy fire.

Although von Reisswitz discarded playing cards and chess, he retained a third popular game of the era—dice—which he used to incorporate the important and often decisive role that random chance—or "friction," as it's sometimes called—can play in warfare. Is the weather too hot? Too cold? Too wet? Do rain or ice or snow make the roads impassable? Is troop morale unusually high? Abysmally low? Were they sleeping when the enemy attacked? Did their drinking water give them dysentery? Von Reisswitz understood that having more soldiers and a superior position on the battlefield can only go so far in determining the outcome of a battle. He incorporated rolls of the dice to account for anything and everything else.

THE MIDDLEMAN

But von Reisswitz's most interesting and valuable innovation was his decision to deny his players knowledge of everything that was happening on the battlefield.

• In chess, both players see the entire board at all times and know where all the pieces are at any point in the game. In warfare things are very different, of course. The commanders' knowledge is limited to what they and their troops can see with their own eyes. The location and deployment of the enemy, the size of its forces, and the direction in which they are moving are anyone's guess.

• Von Reisswitz wanted to replicate this important concept of limited knowledge, so he created the position of a game master or "umpire," who would host the game and be the only person with full knowledge of everything that was happening.

• At the start of the game, the umpire would explain the battlefield scenario to the commanders of opposing armies, and then these commanders would go off into separate corners or even separate rooms to prepare written orders. Each commander would give their plan to the umpire; neither commander would know what the other's troops were doing.

• Then, as the game progressed, the umpire would reveal this information to the commanders only as quickly as they would have learned it on an actual battlefield. If one side's troops were hiding in a forest, for example, the umpire wouldn't reveal their position on the sand table until the other side's troops got close enough to spot the hidden soldiers themselves.

• As the umpire revealed information to the players, they would use it to issue new written orders. This in turn caused the umpire to reveal still more information, which would prompt yet another set of orders. The process continued this way until one side won the battle.

• Having the umpire implement the orders of both sides at the same time allowed both armies to act simultaneously, just as they would in a real war, instead of having one side sit still while the other side made its move, as was the case in cards or chess.

FRIENDS IN HIGH PLACES

Kriegsspiel, or "Wargame," as the game came to be known, might have remained an obscure hobby had the captain of cadets at the Berlin Military Academy not learned of the game and mentioned it during a lecture in 1811. Two of his students—Prince Friedrich and Prince Wilhelm of Prussia, the teenage sons of King Friedrich Wilhelm III—wanted to play. They arranged for von Reisswitz to umpire a game at Berlin Castle, with the princes commanding their own armies. They enjoyed the experience and told the King about it. He, too, was soon hooked on the game.

Another early player of Kriegsspiel was Baron von Reisswitz's own son, George von Reisswitz the Younger. By the early 1820s, he was an officer stationed in Berlin, and while there he and several friends played regularly. When they didn't like something about the game, they changed it. For example, they abandoned sand tables in favor of maps, which were much more portable, and they changed the scale of the game to allow for larger battles fought with entire brigades (3,000 to 4,000 men) of soldiers.

George's improvements must have been impressive, because when Prince Wilhelm played the new version, he saw to it that it was demonstrated to the entire Prussian general staff. "Gentlemen," the chief of the general staff exclaimed to the group, "this is not a game; this is a war exercise! I must recommend it to the whole army!"

TODAY, PRUSSIA—TOMORROW, THE WORLD

Soon the entire Prussian officer corps was playing Kriegsspiel. Then, after Prussia won wars against Austria in 1866 and France in 1871, other countries began to take an interest in the training methods of the Prussian officer corps, including Kriegsspiel. Interest in the game spread throughout Europe and the United States. By the turn of the century, even civilians were playing, too, with clubs springing up in England and elsewhere. Just as George von Reisswitz the Younger had set to work changing parts of the game he didn't like, the new hobbyists made their own changes.

Many were inspired to create entirely new games of their own: • In 1913 H. G. Wells, author of *The War of the Worlds*, got in on the act: He wrote *Little Wars*, a set of rules for combat with toy soldiers and spring-loaded cannons.

• In the 1950s, an American war game enthusiast named Charles S. Roberts founded a game company called Avalon Hill, which remained the dominant war game publisher into the 1970s.

• Then in 1971, two war gamers named Gary Gygax and Dave Arneson came up with a game of their own that, if anything, was even more revolutionary than Kriegsspiel.

> Even if you've never heard of Gary Gygax and Dave Arneson, you've almost certainly heard of the game they invented. Who knows—maybe you even played it. That story begins on page 318.

*

*

LE JUGHEAD

Remember Jughead, the character from Archie comics who wears a cardboard crown and loves to eat cheeseburgers? In the French version of the comic he's called *Doudingue*, in Spanish he's *Torombolo* and in German he's *Knallkopf* (literally "bang head").

Most expensive video game ever: Grand Theft Auto IV, which cost \$100 million to develop.

SEVEN (UNDERWATER) PLACES TO SEE BEFORE YOU DIE

Grab your snorkel and flippers and get yourself to these amazing subaquatic locations before you slip and slide off this mortal coil.

1 . THE GREAT BLUE HOLE. It's off the coast of Belize in the Caribbean Sea. If you fly over it what you'll see is the Caribbean's emerald-green water interrupted by a narrow, ringshaped blue "island." Inside the ring is an almost perfectly circular, darker blue spot, more than 1,000 feet in diameter. It's a sinkhole, and it's about 400 feet deep. During the last ice age, when sea levels were much lower than they are today, it was a dry, limestone cave system. When the water level rose, the cave filled and its roof collapsed, creating the hole. Put on your flippers and you can explore the tunnels below the surface. Jacques Cousteau studied the site in the 1970s, and called it one of the 10 best places on the planet to go scuba diving.

2. THE GALAPAGOS ISLANDS. These islands in the Pacific Ocean, 600 miles off the coast of Ecuador in South America, are remarkable for many reasons, high among them the fact that for millions of years they were isolated from other areas on the planet. Result: The Galapagos Islands are home to some of the most diverse and unique animal life in the world. Aside from the more than 450 species of fish, about 20% of which are found nowhere else, it's the only place in the world where you can see the marine iguana (the world's only oceangoing lizard), Pacific green sea turtles, Galapagos sharks, and Galapagos penguins, the northernmost of the penguin species. You might even see whale sharks, the largest fish in the ocean, which grow up to 40 feet long and can weigh more than 40,000 pounds. (Don't be afraid: They eat plankton.) You may also find yourself in the middle of a school of hundreds of hammerhead sharks. (Go ahead, be afraid now.) Hammerheads can be dangerous to humans, but

attacks are rare and no human deaths from hammerheads have occurred in recorded history. The best time to go is from December to June, when warm ocean currents keep the water between 75° and 80° F.

3. THE YONGALA. On March 23, 1911, a 350-foot passenger ship sailing from Melbourne to Cairns, Australia, ran into a cyclone off the coast of Queensland. It sank, and all 122 people aboard perished. The ship was the SS *Yongala*, and its wreckage was discovered in 1958 about 13 miles off the coast, resting about 100 feet below the surface. It's now officially part of the largest coral reef system in the world, the Great Barrier Reef. The ship is remarkably intact—and is considered by many expert divers to be the best place to go diving in the world today. It is described as "like swimming in a huge aquarium," with the ship itself being encrusted in many kinds of very colorful soft and hard coral species. On any given dive you may encounter bull sharks, tiger sharks, dolphins, giant groupers (weighing hundreds of pounds), sea turtles, octopi, manta rays, sea snakes, and much, much more. And the water's warm, from 70° to 80°F.

Warning: Do not go inside the ship! It's a protected heritage site, and you can be arrested and heavily fined for disturbing it.

4. THE BIMINI ROAD. It's Atlantis! Well, that's what some people say, anyway. It's actually a half-mile-long succession of large, rectangular limestone rocks configured in an almost rectangular shape about 20 feet beneath the ocean's surface near North Bimini Island in the Bahamas. The shape and layout of the rocks lead many people to believe they're the remains of a manmade structure, possibly a wall, a foundation, or a road. It was discovered only recently, in 1968, by pilots flying over the area, and has since been studied intensely. Most geologists and archaeologists believe it's a naturally occurring, if unique, phenomenon, but others disagree. In any case, you can snorkel or scuba dive in the clear, blue-green waters and check out the sight for yourself.

Bonus trivia: The final scene of *The Silence of the Lambs*, in which Hannibal Lecter says to Agent Starling over the phone, "I'm having a friend for dinner," was filmed at an airstrip on tiny North Bimini Island.

5. BARRACUDA POINT. Located off Sipadan Island in Malaysia, Barracuda Point has many colorful coral and fish species and other amazing flora and fauna, and the water's warm and clear, so you can see it all. But the most amazing thing about this dive locale is that at any moment you may find yourself in the middle of what is called a "barracuda tornado": thousands of the slender, frightening-looking fish, some up to six feet long, forming huge hollow cylindrical towers, swimming in a seemingly choreographed procession. It is considered one of the most exhilarating events in diving. (Luckily, barracudas rarely attack humans.)

6. THE HISPANIA. The SS *Hispania* was a 236-foot Swedish steamship that attempted to pass through the treacherous Sound of Mull between the Isle of Mull and the west Scottish coast during a brutal storm in 1954. She ran aground on a reef known as *Sgeir More*, or Big Rock, and sank to the bottom about 85 feet down. (The crew survived; the skipper refused to leave the ship and was last seen standing in the bridge, his hand raised in a salute, as it went down.) The spookily intact ship still stands where it landed, almost upright, covered in orange and white sea anemones. Experienced divers can swim into it and below decks to encounter fish and other marine life that have made the ship their home.

7. BLUE SHARK ISLAND. This is a dive site near Catalina Island, a small, rocky island off the coast of California, south of Los Angeles. For a reasonable price, you can go out on a small. boat with experienced divers. Then you can help them cut up some fish. And then you can throw the fish parts (called *chum*) into the water...and help lower the dive cage. Then you can climb inside the dive cage and get up close and personal with large blue sharks! And if you want to, you're free to jump in the water outside the cage and get even more up-close to the sharks...along with the fish parts and blood and all that. Along with blues, the area is also home to make, soupfin, and leopard sharks, and if you're lucky you might spot the rare, raylike angel shark. And if you're really lucky-or really unlucky-you might see a great white shark. They're not uncommon, with specimens approaching 20 feet long seen in the area. To a shark that big, you'd be just another piece of fish parts. So good luck, chum!

Haptodysphoria is the odd sensation some people get when touching peaches or other fuzzy surfaces

OWNEY GOES POSTAL

265

Longtime BRI readers know that we've always had a fondness for dogs. Owney is one of the best ever.

OG TIRED One autumn day in 1888, a young, straggly, Terrier-mix mutt snuck into the Albany, New York, post office and went to sleep on top of some empty mailbags. The next morning, postal employees discovered him...and took a liking to him. They decided to let him stay at the office and gave him the name "Owney," although nobody seems to know quite why.

Owney seemed strangely attached to the mail bags. He didn't just like sleeping on them in the office; he sat on top of them in the mail wagons as they were taken to the railroad station to be loaded on mail cars. One day he went a little farther---literally---when he jumped into one of the train cars and made the trip from Albany to New York City, sitting on top of the bags. That, it turned out, was just the beginning.

ON HIS OWNEY

The self-appointed mailbag guard dog started taking longer and longer trips, hopping from mail train to mail train, and would sometimes be away from the Albany office for months at a time. These weren't chaperoned outings—Owney just went wherever he wanted, following the bags on their routes. At some point, the clerks in Albany attached a note to his collar, asking other clerks to look after the dog and to attach baggage tags to his collar so they could keep track of his travels. It quickly became clear that Owney was crisscrossing the entire country, and within a year clerks from New York to California—and even Mexico and Canada—knew him and considered him part of their large, postal family.

By the early 1890s, Owney's exploits were known well enough within the postal community that John Wanamaker, the United States Postmaster General, ordered a special "doggie vest" for the pooch. They needed it to accommodate the growing number of



tags on his collar, which were so heavy that Owney could hardly lift his head.

OWNEY OWNS THE WORLD

In 1895 Owney made his way—via dozens of trains—to Tacoma, Washington, where the clerks there decided to put him on a mail ship. Next stop: Kobe, Japan, a trip the dog made officially registered as "Mr. Owney." By this time, he was known around the world and in Japan was issued an imperial passport, leaving him free to travel aboard the trains wherever he liked. From Japan Owney traveled to China, back to Japan, Singapore, the Suez Canal, various stops along the North African coast, and then across the Atlantic to New York City. From there he went by train back to Tacoma, arriving on December 29, 1895, to the cheers of hundreds of fans. Owney had completed the around-the-world trip in just a little more than four months. Not bad for the 1890s…not to mention for a dog.

RETURN TO SENDER

Unfortunately, Owney's heartwarming story has a tragic end. In 1897 he was deemed too old to travel, and the clerks in Albany "retired" him—except that Owney didn't take to the idea. Without the Albany postal employees knowing it, Owney hopped a train and ended up in Toledo, Ohio, where the clerks chained him to a wall in the basement of the postal station. According to the National Postal Museum, "Owney was mistreated while being shown off to a newspaper reporter in Ohio and became so mad that he bit a postal worker." The Toledo postmaster felt he had to do something, so he summoned a police officer, and on July 11, 1897, Owney was shot and killed.

Today, his legend lives on at the Smithsonian National Postal Museum in Washington, D.C., where you can see his stuffed body in a display case. With him are many of the more than 1,100 tags, tokens, hotel room keys, and medals that Owney received in his estimated 143,000 miles of travel as the unofficial mascot of the U.S. Railway Mail Service. In 2008 the *Washington City* paper voted Owney's display the "Best Animal Monument" in all the District. It remains one of the museum's most popular exhibits, especially with children...and postal clerks.

SOLD!

How much would you spend for something you really wanted? You never know until you get caught up in the bidding frenzy at an auction and end up paying, say, \$32,000 for a PEZ dispenser. Here are some record auction prices.

AN ACTION FIGURE: A

12-inch-tall prototype for the original G.I. Joe line from 1963 was purchased by Baltimore's Geppi Museum in 2003. Price: \$200,000.

A YO-YO: Richard Nixon autographed a yo-yo for country star Roy Acuff when the president visited the Grand Ole Opry in 1974. When Acuff died in 1992, the yo-yo sold at auction for \$16,000.

A KIDNEY STONE: In

2006 online casino Golden-Palace.com paid actor William Shatner \$25,000 for a kidney stone he'd recently passed. (Shatner donated the money to Habitat for Humanity.)

A PEZ DISPENSER: In

1982 PEZ made two prototypes of a dispenser featuring a white-helmeted astronaut. They were shown to the merchandise department of the 1982 World's Fair, but never went into production. That's probably why one of them brought in \$32,000 at a collectibles auction in 2006.

A BOTTLE OF WINE: A

bottle of Chateau Lafite from 1787, thought to have been owned by Thomas Jefferson (the bottle was engraved with "TH.J"), sold for \$160,000 in 1985. It's too old to drink—it was purchased by a Jefferson enthusiast, not a wine collector.

A BOOK: In 1188 King Henry of Brunswick (now part of Germany) commissioned an order of monks to write his political biography, entitled *The Gospels of Henry the Lion.* In 1983 a copy sold at auction for \$12 million.

A STAMP: An error at a Swedish printing plant in 1855 resulted in a run of stamps being printed on yellow paper instead of the standard green. Only one of the stamps still exists; it was sold in 1996 for \$2.3 million.

A DONUT: To raise money for Hurricane Katrina victims, the "Roula and Ryan" morning radio show in Houston auctioned off a donut on eBay. It pulled in \$5,100.

... "pantyhose with shaping band for cheeky derriere relief."

A BASEBALL CARD:

There are only six 1909 Honus Wagner "T-206" cards in mint condition known to exist. In 2000 a T-206 once owned by hockey great Wayne Gretzky fetched \$1.27 million on eBay.

AN M&M: In 2007 a brown M&M sold for \$1,500. What was so special about it? In 2004 the candy had flown on board SpaceShipOne, the first privately funded space flight.

A CAR: Only six Bugatti Type 41 Royale sports cars were ever made, all between 1927 and 1933. Original price: \$42,000. One sold at a Japanese auction in 1990. Price: \$15 million.

A LETTER: In 1991 a letter written in 1863 by President Abraham Lincoln to Major General John A. McClernand explaining the Emancipation Proclamation sold at auction. Price: \$748,000.

A PIANO: A handmade Alma-Tadema model Steinway and Sons piano built in the 1880s was sold to the Sterling and Francine Clark Art Institute in Massachusetts in 1997 for \$1.2 million. A VIOLIN: In February 2008, Russian businessman Maxim Viktorov paid \$7 million for a rare 18th-century Stradivarius violin.

A PHOTOGRAPH: Photographer Edward Steichen took a photo of a heavily forested pond in Mamaroneck, New York, in 1904. He titled it "The Pond-Moonlight." In 2008 one of three existing original prints sold for \$2.9 million to a private party. (The other two are owned by the Metropolitan Museum of Art and the Museum of Modern Art in New York City.)

A MUSHROOM: An English restaurateur purchased a two-pound Italian white truffle at a charity auction in Tuscany. Price: \$28,000.

A PAINTING: Mark Rothko's painting *White Center* sold in 2007 for \$72.8 million, an art-auction record.

A PIG: In 1985 Bud Olson and Phil Bonzio bought "Bud the Pig" at a Texas livestock auction for the price of \$56,000. Bud was a rare crossbreed barrow. (A "barrow" is a neutered male pig.)

ah, blah, blah: Studies show that it's usually the more talkative spouse who gets his (or her) way.

THE DA VINCI OF DETROIT

139

Harley Earl is considered one of the three most important figures in the history of the American auto industry (Henry Ford and GM head Alfred Sloan are the other two). Yet other than car buffs, few people have heard of him.

THE HOLLYWOOD KID

In 1925 the General Motors Corporation made plans to begin manufacturing a car called the LaSalle. It would be sold by Cadillac dealerships, but for a price slightly lower than the least expensive Cadillac. Larry Fisher, Cadillac's general manager, was looking for someone to design it and found his man working in the custom body shop of the Cadillac dealer in Los Angeles: Harley Earl, the son of a Hollywood coach builder who started out building horse-drawn vehicles—actual *coaches*—before switching to automobile bodies in 1908.

Earl, in his early 30s, had acquired a reputation for building one-of-a-kind autos for rich Hollywood movie stars. His car for cowboy star Tom Mix, for example, was painted with stars emblazoned with Mix's "TM" logo and had a leather saddle on the roof. His car for comedian Fatty Arbuckle, while much more sedate and elegant, cost Arbuckle an incredible \$28,000—at a time when a new Ford Model T sold for less than \$300.

QUICK AND DIRTY

What really impressed Fisher about Harley Earl wasn't so much his cars for the stars as it was his method for designing them: Before he built the final product, Earl made full-sized mock-ups of his vehicles using modeling clay. Unlike working with sheet metal or wood, the common technique of other coach builders, clay was quicker and easier to work with. If Earl wasn't happy with the shape of a door he'd made, for example, instead of spending hours making a new one out of wood or pounding one out by hand from sheet metal, all he had to do was add a little more clay or scrape a little off, repeating the process as often as necessary until he got exactly the look he wanted. The ease of using clay allowed Earl to be very ambitious and creative in his designs, and just as importantly, it allowed him to think of the car as a single, integrated unit, not a bunch of mechanical components bolted together.

140

When Earl arrived in Detroit, he set to work designing four different versions of the La Salle: a coupe, a roadster, a sedan, and a touring car. He borrowed heavily from the Hispano-Suiza, a popular European luxury car of the day, and then implemented what would become a lifelong design principle: Longer, lower cars were more appealing to the eye than shorter cars with high rooflines.

SOMETHING TO SEE

Fisher and his boss, GM head Alfred Sloan, were impressed with all four of Earl's designs and ordered them all into production for the 1927 model year. Those 1927 LaSalles were the very first high-volume, mass-produced cars that had ever been designed by what would become known as a *stylist*, someone who cared as much about how the car looked as he did about how it ran.

Remember, the auto industry was barely 20 years old in 1927, and it had taken all that time just to advance the state of the art to the point where cars were dependable, affordable, and could be mass produced by the hundreds of thousands with no loss of quality. The engineers who had made all of this possible weren't concerned with what the cars looked like: If buyers wanted a car that looked good on top of everything else, that was what the custom coach builders were for. Cadillac still sold a lot of unfinished cars to these companies—chassis, engine, power train, wheels, radiator, etc., but no body—and coach building firms could spend as much time as they wanted crafting beautiful, luxurious auto bodies by hand.

Those 1927 LaSalles were special cars indeed—they outshone many of the Cadillacs that were supposed to outshine them. Was it their long, low-slung look? Was it their two-tone paint jobs unheard of in mass-produced cars, which were still mostly available in only dark blue or black? Was it the "Flying Wing" fenders that did it? Those LaSalles flew off the car lots, so impressing GM head Alfred Sloan that he created an entirely new department, the Art and Color Division, to bring GM's design work in-house, and he brought Harley Earl out from California to run it.

The American auto industry would never be the same again.

Part II of our story is on page 269.

The seven classic virtues: prudence, fortitude, restraint, justice, faith, hope, and charity.

THE DA VINCI OF DETROIT, PART II

Harley Earl was a man of many gifts, the most important of which may simply have been good timing. He happened to join GM at a time of profound change in the auto industry when his talents could be put to the most use. (Part I begins on page 139.)

IDEAST MEETS WEST When Harley Earl arrived in Detroit in the late 1920s, there was no guarantee that his ideas regarding automobile design would prevail. He had the support of Alfred Sloan, the head of General Motors, but the auto industry was still dominated by engineers who were openly hostile to the idea that how a car looked was as important as how well it was built. These engineers were no-nonsense guys and *very* conservative; one designer said they "dressed like detectives and rarely even took their hats off." When Harley Earl from Hollywood rolled into town wearing suede shoes with bronze-colored suits and purple shirts, spinning yarns about the car he'd designed with a saddle on the roof, the engineers dismissed him as a "pretty boy" and a "pantywaist" and probably figured he wasn't going to last very long.

Besides, what was wrong with the way cars looked? They had a certain austere, utilitarian beauty to them, the automotive equivalent of a hammer or an electric drill. Making cars *prettier* made about as much sense to these engineers as putting makeup on a shotgun.

BRAVE NEW WORLD

But the auto industry was changing, and changing quickly. For most of the previous two decades, automakers had sold most of their cars to people who had never owned one before. Henry Ford had won the battle to sell Americans their very first autos; his giant factories could produce them faster, cheaper, and in greater quantities than any of his competitors could. By 1923 the Model T had a 57 percent share of the U.S. automobile market. Half of all the cars in the world were Fords.



By that time, however, just about everyone in the United States who wanted a car had one. Now the trick for automakers was getting customers to replace the cars they already owned and had already *paid for*—with new ones that cost more money. And the auto companies had to get them to do it long before the old car wore out, because if a company had to wait for the old car to die before they sold the owner a new one, it wouldn't sell enough cars to stay in business.

LIVING IN THE PAST

In the contest to sell Americans their *second* car, Henry Ford was his own worst enemy. Ford was fixated on the Model T and rightly considered it his greatest creation. Yet over the 19 years that it was sold by the company—the *only* automobile sold by the company during that time—he refused to upgrade or improve upon the original design. He dismissed as frivolous "knickknacks" such innovations as speedometers, gas gauges, shock absorbers, hydraulic brakes, accelerators on the floorboard instead of on the steering column, and electric starters in place of hand cranks. Ford fought these improvements year after year, often firing the very capable executives who dared to suggest them. (Many of these executives were snapped up by GM.) On those few occasions when Ford finally did incorporate something new into the Model T design, it was usually long after it had become standard equipment on competing cars.

While Henry Ford kept his foot on the brake, Alfred Sloan of GM kept his mashed down on the accelerator. In addition to continually updating his automobile designs, Sloan invented new ways for people to pay for their cars. Where Ford had always insisted on being paid in cash and in full (banks did not yet offer car loans), Sloan created the General Motors Acceptance Corporation (GMAC) to finance the purchase of GM cars. Even though it was impossible for GM to match Ford on the actual price of the car, GMAC financing actually made GM cars more affordable for many buyers. By 1924, the same year that GM became the first company to accept trade-ins, a third of all GM car purchases were financed by GMAC.

For all the emphasis Sloan put into improving the quality of GM automobiles, he also understood that new technology was

very costly to develop, took years to bring to market, and often didn't pan out. But he wanted to maintain the illusion of continual improvement, so in the mid-1920s he introduced the auto industry's first "annual model change." From then on, even when the mechanical components of a car remained the same from one year to the next, the car's appearance would change every year, if only in subtle ways, to keep the public interested in it.

WHAT'S NEW IS OLD...AGAIN

The annual model change would have another effect on consumers: It would cause them to become increasingly dissatisfied with their existing cars from one year to the next, a concept that became known as "planned obsolescence." (Earl preferred to call it "dynamic obsolescence.") With any luck, the planned obsolescence would drive car owners into a car dealership a few years early to trade in older cars that had become shabby and dowdy before their time.

Making annual style changes in all the cars sold by GM's five divisions—Chevrolet, Oakland (later renamed Pontiac), Oldsmobile, Buick, and Cadillac—required a lot of designers, which was why Sloan decided to set up GM's own in-house Art and Color Division. Those conservatively dressed engineers from the Old School may not have wanted to hear it, but guys like Harley Earl, with their suede shoes, loud suits, and purple shirts, were here to stay...and soon they'd be calling the shots.

Putt-putt over to page 415 for Part III of the story.

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REAL (ODD) BOOK TITLES

- I Was Tortured By the Pygmy Love Queen
- Cheese Problems Solved
- High Performance Stiffened Structures
- Living with Crazy Buttocks
- The Joy of Chickens
- Greek Rural Postmen and Their Cancellation Numbers

THE DA VINCI OF DETROIT, PART III

How big an impact did Harley Earl have on car design? Even today, auto stylists in Detroit still utter the phrase, "Our father, who art in styling, Harley be thy name." Here's the final installment of our story. (Part II is on page 269.)

EINVENTING THE WHEELS

K If there's one person responsible for the evolution of what we think of as an "antique" car into one that begins to resemble what we think of as a modern car today, it's Harley Earl. When he arrived at GM in 1927, mass-produced cars still had a sort of thrown-together look, because that was how they were made: Partially assembled cars rolled along a quickly moving assembly line, and autoworkers raced to attach one component after another—a hood over the engine, fenders and a running board on the frame, headlights on the fenders, and so on, until the car was finished. The trunk of the car was exactly that—little more than a steamer trunk attached behind the passenger compartment.

Earl thought that a car should look like a single, unified whole, not just a bunch of components attached to each other, and he began to impart his vision on GM cars. One by one, the distinguishing features of antique cars began to fall away: Boxy shapes and sharp corners gave way to the curves and smooth, flowing lines of Earl's streamlined bodies. Headlights and fenders were integrated into the bodywork, and so was the trunk—from now on, it would be a trunk in name only. And the spare tire would no longer be bolted to the rear or mounted on one of the running boards (Earl got rid of those, too); it would be hidden *inside* the trunk.

LOW RIDERS

Earl liked to explain that his purpose from the very beginning was to make cars lower and longer, if for no other reason than he thought oblong shapes were more pleasing to the eye than the short, boxy cars that were common when he was starting out. Just as he had with the 1927 LaSalle, Earl began lengthening the

The scientific name for hairs standing on end because of fright is piloerection.



wheelbase (the distance between the front and rear wheels) of the cars he worked on. This created enough space between them to lower the passenger compartment so that the occupants were cradled more or less *between* the front and rear wheels instead of on top of them, which is where people had ridden since the horse-and-wagon days. In addition to making the car look nicer, lowering the passenger compartment made for a smoother ride.

WHAT A CONCEPT

The changes that Harley Earl brought to automobiles were dizzying, especially to an auto-buying public that had seen very little change in automobiles since their invention. But Earl was careful to introduce his changes gradually, never making more in a year than he thought customers could adjust to. He had an exquisite sense of just how much he could get away with without alienating potential buyers, and he fine-tuned his judgment by producing the auto industry's first concept cars, which he used to preview his designs with the public and test whether they went too far.

THE HIDEOUT

Earl didn't spend a lot of time at the drafting table himself; instead, he oversaw a network of 17 different design studios, including one for each division of GM and 12 other special studios that made up the Art & Color Division. (Earl renamed it the Style Section in 1937.) He did his thinking in a hidden office he called the "Hatchery," which had blacked-out windows, no telephone, and a phony name on the door so that no one would disturb him there. He came up with the overall strategic vision for his cars, and then worked with the different design studios to bring his ideas to life. An excellent critic of other people's work (which didn't always make him the easiest guy to work with), he pushed and prodded and preached and praised until the designers working under him brought his dreams to life, exactly as he'd envisioned them. (Kind of like Uncle John.)

In the process, Earl oversaw the design of virtually every Chevrolet, Oakland (renamed Pontiac in 1932), Oldsmobile, Buick, and Cadillac designed between 1928 and 1959. The 1949 Cadillac Coupe de Ville, Cadillac's first pillarless hardtop, with no roof support pillar behind the front doors to obstruct the driver's vision. The 1953 Cadillac Eldorado and Oldsmobile Fiesta, with the first wraparound windshields. The 1959 Chevy El Camino, General Motors' combination sedan and pickup truck (hey, nobody's perfect), produced in response to the successful Ford Ranchero. All these GM cars, and all the others, too—Harley Earl styled each one.

DREAM MACHINES

A true son of Hollywood, Earl thought of his cars as pieces of entertainment. He wanted people to derive pleasure by looking at them, and he wanted driving them to be a dream. "I try to design a car so that every time you get in it, it's a relief—you have a little vacation for a while," he liked to say.

For all the changes Earl made to his cars, in his early years at GM they still managed to be shaped like cars. But in the 1940s and '50s, his designs became ever bolder, as he drew obvious inspiration from locomotives, airplanes, torpedoes, and eventually even atomic missiles and rocket ships. Airplanes and rockets have tailfins because they *need them*—they'd crash without them. The tailfins (inspired by the Lockheed P-38 Lightning fighter plane) that Earl introduced to automobiles, beginning with the 1948 Cadillac, served no functional purpose at all. Earl couldn't give GM customers a real jet plane or rocket ship to the moon, but he could make them feel like they were flying whenever they got behind the wheel of one of his cars.

Thanks in large part to Earl's influence, the American automobile was no longer just a means of transportation. More than ever, it became a status symbol and an object of desire. People didn't buy cars just because they needed them; they bought them because they *had* to have them, a feeling that lasted until they traded it in on the next model (which they also absolutely had to have).

MR. DETROIT, MR. WORLD

Earl worked for GM for 30 years, from 1927 until his retirement in 1958 after overseeing the development of the 1959 models. If your dream car was built by GM in that period—a 1957 Chevy Bel Air convertible, perhaps—you have Earl to thank for it. If your dream car hails from the same era but was built by Ford or Chrysler, or even MG or Citroën, you may *still* have him to thank for it



because his designs proved so successful that virtually every other car company in the world adopted his methods, all the way down to the clay mock-ups he pioneered while he was still building cars for Hollywood film stars. Many of the best-looking cars produced by other automakers were designed by Earl-trained stylists who were lured away from GM.

Few of these designers were able to repeat their mentor's success, and without GM's enormous profits, few of the smaller American auto companies, including Kaiser-Frazer, Hudson, and Nash, could keep up with the pace of annual model changes. They either merged with other struggling companies, or went under. Given GM's problems in recent years, it's easy to forget that by the early 1960s more than half of all cars sold in the United States were made by GM, with Ford and Chrysler divvying up the rest. In those days, GM's biggest fear was being broken up by the federal government for being a monopoly—in that sense, the company was actually selling *too many* cars for its own good.

TOO LITTLE, TOO LATE

On Earl's watch, GM cars became ever bigger, ever longer, ever heavier, ever chrome-ier, and yet toward the end of his career even he apparently began to realize that being bigger, longer, and heavier had its limits. After a trip to a sports car race in 1951, Earl came away so impressed with the enthusiasm that the drivers had for their autos that he talked GM into building the company's first-ever two-seater sports car—the 1953 Corvette, which was substantially smaller than most other GM cars made that year.

By the late 1950s, the story goes, Earl couldn't help but notice as he walked from the parking lot into his office that many of his young designers had taken to driving smaller cars—lots of Corvettes, of course, but also Porsches, Triumphs, Fiats, MGs, and even Volkswagen Beetles, whose most appealing feature to VW buyers was that they weren't anything at all like the cars being sold by Detroit. Small cars were likely to play a big role in the future, Earl thought, and as he approached retirement he pushed GM to begin building more small cars so that fans of these little imports would also have a range of domestic cars to choose from.

Earl succeeded in bringing the Corvette into production, but his theory that smaller cars were the wave of the future did not win much acceptance at GM. After he retired in 1958, his successors continued grinding out one gas-guzzling land yacht after another, even as the Ford Edsel, described by one historian as the *"Titanic* of Automobiles," flopped in 1957 (taking \$250 million of Ford's money with it) and sales of the Volkswagen Beetle—and other small cars like it—continued to climb year after year.

END OF THE ROAD

GM paid (and continues to pay) a heavy price for ignoring Earl's advice and not moving into the small-car business in time to compete with the Japanese automakers. But perhaps the most enduring testimony to Harley Earl's brilliance as a designer is that more than 50 years after he left the company (he died from a stroke in 1969 at the age of 75), his cars are still considered the high-water mark of American automobile design. GM has spent 50 years looking for another designer who could make its buyers feel the same way about brand-new Saturns, Chevys, Pontiacs, Buicks, and Cadillacs as they do about the cars designed during the Earl era. And they haven't found one yer.

COSMIC QUESTIONS

Why are the elderly called "old people," but children are never called "new people"?

If it's true that we're here to help others, then what are the others here for?

Do all cemetery workers work the graveyard shift?

If they're just stale bread to begin with, why do croutons come in airtight, resealable packages? How come when asked what things they'd bring to a desert island, no one ever says "a boat"?

When a dog food is "new and improved," how do they know?

If a deaf person goes to court, is it still called a hearing?

How did Noah prevent all those animals from eating each other?

The Netherlands has about 10,500 miles of bicycle lanes, complete with their own traffic light

One gallon of motor oil can pollute one million gallons of fresh water.