

# EDISON THE MARVELOUS

How Trainboy's Instinct Developed the Inventor.

## HIS START IN LIFE

Try Everything and Anything was His Motto—His Indomitable Activity and Continual "Monkeying Around" Has Been of Incalculable Benefit to All Mankind.

If there are vast possibilities in that little word, if Thomas Alva Edison had become a hamorist, instead of an inventor, what a difference it would have made to the world.

Fortunately for the world the inquiring spirit of the boy gained the ascendancy over his jocose inclinations. He was forever asking his father the reason for this and that, and when, in very desperation and thinking frankness the better policy, the unhappy parent would answer "I don't know," the boy would reduce him to still further depths of distraction by instantly demanding "Why don't you know?"

At the age of 14 he was candy-butchery, newspaper editor and electrical experimenter, all on board a train; by the time he was 18 he had become a "tramp" telegraph operator with a notable record for speed; at the age of 22 he was a full-fledged inventor, selling his stock-ticker for \$40,000—which sum he carried about with him for two days, afraid to entrust it to a bank.

Many stories are told of his in-



THOMAS A. EDISON.

domitable activity. While he was developing the automatic telegraph, he needed a solution which would give a chemically prepared paper upon which characters could be recorded at a speed greater than 200 words a minute. He ate at his desk and slept in his chair, until he had found the formula. Ultimately he succeeded in recording 3,100 words a minute.

The electric light, which followed his telephone experiments, afforded an even more striking illustration of this persistency in hunting for the thing. In this case it was a filament that would hold out to burn like the proverbial candle. He tried silicon and boron and a host of other materials. Finally he got some ordinary cotton thread and carbonized it. When it lit up he and his assistants watched it breathlessly for more than forty hours—would it last? It lasted and they saw that carbon was what they were after. What kind of carbon was the next question. Trying various things, they at last carbonized a strip of bamboo from a Japanese fan and found they were on the right track. Even then Edison sent a schoolmaster to Sumatra and another followed up the Amazon, while William El. Moore, one of his associates, went to Japan to get what was wanted. The search for a suitable filament for the electric lamp cost somewhere about \$100,000.

The human touch which characterized every achievement of the "Wizard" whom imaginative journalists pictured as dwelling in a cave of marvels more wonderful than any Alchemist's retreat, is shown in the story of the first phonograph. The model had just been completed, and Carmen, the foreman of Edison's machine shop, unable to believe what he had been told, bet Edison a box of cigars that the thing wouldn't work. The inventor good-humoredly accepted the wager, and with a smile slowly turned the handle of the machine, speaking into the receiver the first words of "Mary had a little lamb." Then the cylinder was turned back, and "faint but distinct" came back the words of that juvenile classic faithfully repeated in Edison's familiar tones.

The kinesiograph, the magnetic ore separator, the method of turning rock and limestone into cement, the building of solid concrete houses by months, all these inventions have interesting stories connected with them. Edison has been by far the most prolific inventor and patentee of any time, having filed more than 1,700 applications in America alone. There are typewriters, electric pen, vocal engine, addressing machines, methods of preserving fruit, cast-iron machinery, wire-drawing, electrical locomotives, making plate glass, compressed air apparatus and many other things among them.

Why does it always seem to rain harder on a Sunday just before church time than on a Saturday just before the matinee time?

## MANY QUEER NEWSPAPERS.

Journal for Which the Subscription Price is Eight Ducks a Year.

In Switzerland there is a newspaper especially for engaged couples. Agents all over the country collect particulars concerning young people who have become engaged to be married, and their names, addresses and particulars of their social position appear in the weekly journal.

Every girl who is thus mentioned receives the paper for one year free, says the London Tit-Bits, the subscribers to it being chiefly tradespeople who send advertisements of their goods to those whose names are so published.

Rheumatism being such a universal complaint it is hardly to be wondered at that there exists a paper entirely for the benefit of the rheumatic sufferers.

This is published in Germany, and in it rheumatic patients discuss their symptoms and tell of anything that has proved a relief to their pains, while medical men contribute articles to it on the different phases, symptoms and species of rheumatism and the progress which the cure of rheumatism is steadily making. Needless to say, most rheumatic patients make a point of seeing this strange print.

There was staying in London recently the editor of the only illustrated paper in the whole of the Caucasus, who, therefore, is in the happy position of having no competitor. He is said to have made arrangements for the publishing of a world's miniature postcard newspaper, the print of which will be so small that the reader will be supplied with a magnifying glass in order to master the contents.

Greenland possesses one monthly journal called the Kalorikmit. It consists of a single sheet of three columns and is published at Godthaab, on the west coast of Greenland. Three months' subscription to the paper takes the peculiar form of two ducks. A sable skin will pay for the paper for a whole year.

America is the land of eccentric names for newspapers. Imagine yourself asking at the bookstall for the "Crows" or the "Miasma Link," or the "Tar-heel," or the "Buzz Saw," or the "Arakansas Thomas Cat." These are actually the titles of newspapers in the States. Yet even these are hardly the worst, for among the list of papers in Alabama are the "Hot Blast," "Spot Cash and Wire Grass Siftings," "The People of California are more or less proud of the Pomo-Tropic," the "Buzz," and the "Ujar," while Colorado has the "Rattler."

**Cows Horn is Useful.**  
Scientifically cow's horn is a combination of phosphate of lime, gelatin and albumen, and, like all nature's products, the ingredients are in the right proportions to make the article useful to man, as well as to the animal that bears it.

The lime makes the horn hard, but there is just enough lime to make it hard without making it brittle, and there is just enough gelatin to make the horn easy to cut and shape.

The core of the horn is bone and to get that out the horn is soaked in water for several weeks. When the core is taken out it is ground up and made into crucibles which are used for melting gold and silver in.

The outer end of the horn is hard and solid and that is used for making knife handles and other things. The hollow part of the horn is soaked for half an hour or so in boiling water, when it becomes soft and may easily be split with a knife.

It is then spread out flat and put between iron plates. There is a time when these horn plates are made very thin by hard pressure, and used in windows and lanterns as we now use glass. They may be made quite translucent.

When horn is heated it may be molded into almost any desired form. That is the way knife handles, buttons and other articles are made.—Chicago News.

### Sins Against Our Eyes.

The first offense against the eyes is reading with a poor light. This requires theiliary muscle to do extra work to sharpen sight. It applies to dim light, twilight, sitting too far from the light.

The second offense is one of posture—stooping or lying down congests the eye, besides requiring unnatural work of the eye muscles.

Reading on trains is our third offense, the motion causing such frequent changes of focus and position as to tax the muscles of accommodation as well as the muscles of fixation.

Reading without needed glasses or with badly fitted ones is the last. Eyestrain is certainly a factor in producing disease of every part of the eye. Old age is the time of retribution for those who have slanted against their eyes.—From Health.

### A Fence of 2,036 Miles.

After five years' work Australia's great trans-continental rabbit proof fence has been completed. Its length is 2,036 miles, and the cost of erection has been nearly \$250,000. It is furnished at intervals of five miles with systems of traps, in which hundreds of rabbits are captured and destroyed daily. Inside the barrier their appears as yet no trace of their presence.—London Tit-Bits.

Why does it always seem to rain harder on a Sunday just before church time than on a Saturday just before the matinee time?

# SPERRY TAKES COMMAND

Will Take the Battleship Fleet Around the World.

## IS AN ABLE OFFICER

In the Spanish War He Missed the Glory but Not the Hard Work—A Quiet Mathematician Who Has Been in the Navy Forty-Six Years. A Romantic Start.

Do I know Sperry? Let me see. He entered the service in '62; that was forty-six years ago. If that computation is right, I have known Sperry forty-five years and have known him intimately some forty-odd, says E. W. Very, a retired officer of the United States Navy. You want to know what kind of a commander-in-chief he is going to make. In so far as the fleet is concerned, I can say without hesitation, that precisely as Evans has reported from Magdalena Bay that the fleet is in better shape than it was when it left Hampton Roads, so Sperry will be able to show to an inspection board when the ships anchor there again.

His start in active service was as romantic as the start of a harrowing dime novel, although I never could persuade him to view it in that light. He started for the China station on the corvette Sacramento and they got along all right until somewhere near the mouth of the Hooghly River on the way to Calcutta, when the



CHAS. S. SPERRY.

ship went ashore at night in a fog and was a total wreck. No lives were lost and no clothes were saved, so all hands came home rich only in experience. If I were commissioned to write Sperry's biography, I could no doubt rake up lots of such material of harrowing interest to the people who pass their lives at home, but in order to be truthful I would have to get my detailed facts from the fountain-head, and right there is where I should meet with defeat, for the reason that all such episodes would appear to him too commonplace to be worth even relating.

Sperry is phlegmatic. I doubt if he took his shipwreck any more seriously than a person would who stepped in a mud puddle. It was all over as soon as his pajamas got dry. Appearances are always deceptive, and the matter-of-fact air may come from absolute vacuity of mind, but such an accusation can hardly be laid at his door. His innate mathematical talent sent him repeatedly to the Naval Academy as an instructor in higher mathematics. Only the best talent in the service would ever be picked for president of the Naval War College, and he served in that capacity for three years, relinquishing it to go as the naval member of the Hague Conference.

He missed the glory of the Spanish war, but he by no means missed the hard work of it, for as ordnance officer of the New York navy yard he had anything but a sinecure. There was scarcely a day for more than six months then that at least a dozen of the purchased yachts were not at the docks to be armed and started off in a hurry, but not a mistake must be made.

I saw Sperry at his work often in those days, and it was a joy to the spirit to see the machine work. There was a tangle in the thread every five minutes but it came straight in a moment and without a stop in the regular motion of the shuttle. He is going to handle the fleet of battleships in exactly the same way. It is not merely a matter of navigating some twenty odd vessels in company. There is the comfort, the well-being, the training, and the steady enthusiasm of fifteen thousand people to be maintained. It takes a steady hand at the wheel and solid sense unaffected by what is called the excited position to carry the cruise to a successful finish. Trust Sperry.

He will increase the fleet's efficiency beyond the slightest doubt. He knows the business of naval work to-day; all through his life, come good or come ill, he has not only had the faculty but as shown in his work, he has exercised it to the full of keeping up with the times, and making use of experience in the most effective way; and under all circumstances doing his work with the ease and steadiness of the trained athlete.

Laughter in Pe'ria is considered effeminate.

## PILGRIMS DRANK NO TEA.

Therefore No Teapots Came Over in the Mayflower.

It may be trusted that no lineal descendant of the Pilgrims would, ever claim to have or to have seen a teapot that came over in the Mayflower. Whatever articles in whatever number may be treasured as parts of the sacred cargo that was landed at Plymouth Rock in 1620, relic hunters may rest in the assurance that no rival owns a teapot of Mayflower descent, says the Boston Globe.

The explanation is simple. When the Mayflower sailed for America an ounce of tea was rare enough to have made up a fitting gift for royalty. Yet forty years later the wealthy and fashionable people of England were fairly familiar with tea which the East India Company had first brought into the country, and four years later it was on sale in the coffeehouses, at which time a pound might be purchased for the moderate sum of 60 shillings.

Only 25 years later tea was on sale in Boston, and soon after there were two tea houses besides those kept by Daniel Vernon and Benjamin Harris. In the first decade of the eighteenth century it could be bought from Zabdiell Bolton at his apothecary shop.

Today the coffeehouses of 100 years ago in London are in reality tea-houses. In England were made the first teapots of pottery. Later the most delicate creations in porcelain appeared, but as tea became popular the art of the teapot maker was less exclusively refined.

## Do Hornets Keep Guard?

Is a hornet's nest guarded by sentinels after the manner of ant hills? It is not so easy to decide, for their private habits do not invite familiar approach. But some experiments seemed to point that way. No noises, however near or strident, had the least effect upon the workers. Blow on divers instruments as loudly and shrilly as I would, they poured in and out of the gate or labored on the walls, intent wholly upon their own affairs. But at the slightest jar upon the window or shutter, out flew a bevy of irate insects and flung themselves against the wire window screen with an angry "bump" that showed how good was their intention, at least, to defend their home. It was always so; a squad of workers, free and ready for aggressive duty, seemed to be lurking near the gate prompt to sally forth upon alarm. Even at night a few kept near by, and although their pores had lost its vicious sting and they moved about with sluggish pace like sleepy watchmen, as doubtless they were, they left upon the observer the impression that they were upon sentinel service in which the community was never lacking.—Dr. H. C. McCook in Harper's Magazine.

## A Skunk Story.

The hunter in question was coon hunting on a very dark night. His dog was worrying some animal in the bushes, and he went to see what it was. The bushes being very thick, before he realized it, he was close up with the dog, who was barking around a skunk and he received a charge from the animal full in the face. A portion of the fluid entering his eyes, caused him the greatest agony for about ten minutes, and he firmly believed that he would never see again. This wore away and now comes the strange part of the story.

As I said the night was very dark and the men were all carrying lanterns, but the hunter could see quite clearly as at twilight. The effect appeared to be to dilate the pupil of the eye like atropine. This condition lasted through the greater part of the rest of the night, and enabled him to travel without a light and see clearly across the valley to the opposite hills.

I do not remember to have seen it ever stated that an accident of this kind produced such an effect on the human eye.—Forest and Stream.

## The Cautious Reporter.

"Young man," said the editor to the new reporter, "you lack caution. You must learn never to state a thing as a fact until it has been proved a fact. You are apt to get us into libel suits. Do not say, 'The cashier stole the funds.' Say, 'The cashier who is alleged to have stolen the funds.' That's all.—Oh, get something about that first ward social tonight."

The next day half way down the social column, the editor saw the following cautious paragraph.

"It is rumored that a card party was given last evening to a number of reputed ladies of the First ward. Mrs. Smith, gossip says, was the hostess, and the festivities are reported to have continued until 11.30 in the evening. The alleged hostess is believed to be the wife of John Smith, the so-called 'high-priced grocer.'"—Success Magazine.

## Tired Wires.

Metals get tired as well as living things, a scientist declares. Telegraph wires are better conductors on Monday than Saturday on account of their Sunday rest, and a rest of three weeks adds ten per cent to the conductivity of a wire.

## When He Asks for Her.

One of the mockeries of life is how surprised a girl's family always seems when a fellow asks for her hand after they have arranged it.

# LIVE IN DAILY ANGUISH

Mysterious Death Threats That Terrorize Czarina.

## ENEMIES ON ALL SIDES

Land is Honeycombed with Hatred and One Instant's Relaxing of Vigilance on the Part of Guards May Mean Destruction of the Entire Royal Family.

Planned to the pillow where sleeps the child who, if his life be prolonged, will some day succeed to the throne of Russia, the Czarina. It is reported, recently found a note.

In brief, terrible words it informed the unhappy lady that it was useless to attempt to protect the life of her son, that both the boy and his father were certain to be stricken within the twelvemonth.

How came it in this place, protected as it by thousands of soldiers, this frightful threat, every word of which was a stab to the mother's heart, is a mystery not explained. It is incomprehensible that the most daring nihilist could have passed all the guards and stolen his way into this most private of chambers. Yet the Czarina has preferred to believe this explanation rather than accept the other and more awful theory, that traitor, in her own royal household, menaces the life of her beloved boy.

The horror of the incident is but typical of what the royal mothers of Europe are suffering.

It is the custom to laud the courage and devotion of mothers of the poor, and their heroism is justly praised, but the least fortunate of them is no more torn by dread, an-



RUSSIA'S CZARINA.

guish, fright and misery, than half a dozen of Europe on whose heads are set crowns and whose shoulders are wrapped in the purple of kingdom.

The fright of the Czarina over the newest threat to the life of her son and her husband are but the renewal of scares that have increased in violence in the last two years. A score of Russian Generals and men high in power have fallen by the mob, the pistol and the dagger of the fanatic.

When the bomb thrown into his carriage blew the Grand Duke Sergius to fragments the unhappy Czarina saw the assassin's hand penetrate into her own family. She knows that the land is honeycombed with hatred of her line. Her husband, her son, herself and even her poor little daughters are in the glare of this hatred. One instant's relaxing of vigilance on the part of the guarding soldiers, treachery in her own household or carelessness on the part of herself or her children, may mean a new tragedy in unhappy Russia, and more blood of royalty is spilled in the never ending battle with Nihilism.

These are the thoughts the Czarina carries with her day and night. These added to the normal burden of every mother, the ills of the children, their education, their tendencies, makes a weight under which the trust-spartan might bend.

With every attack on royalty, successful or unsuccessful, the fears of the Czarina must be augmented. She must feel that the chain is tightening, that the regicides are coming closer. Thirty people were killed a couple of years ago when soldiers fired into a palace of the Czar, and it was only chance that saved Nicholas from being numbered with the slain.

## Aerial Letter Boxes.

Aerial letter boxes have been placed in all large tenement houses and apartment buildings in Budapest, Hungary. When a postman enters the hall on the first floor of the building he places the letters in the boxes allotted to the different families. A spring is then pressed and electricity does the rest. The boxes are shot up to the floor required where they remain until emptied or until the postman comes again and brings them down by touching another spring.—Popular Mechanics.

Perhaps one reason why so few contemporaneous writers weigh their words is that words don't sell by weight any more.

It is stated that the nourishment in three baked bananas is equal to about twenty-six pounds of bread.

## THE HELL OF WAR.

Disease More Deadly Than Bullets, Kills Four Times as Many.

The splendid achievement of scientific medicine in civil life in the prevention of disease, should be even more effectually obtained in an army, where only healthy men are accepted, and vigorous outdoor camp life should keep its units, who are subject to strict military discipline, in perfect physical condition. Health alone, however, is no guarantee against the insidious attack of the silent foe that lingers in every camp and bivouac, says an article in Appleton's. It is this foe, as the records of war for the past 200 years have proved, that is responsible for four times as many deaths as the guns of the enemy, to say nothing of the vast number temporarily invalidated or discharged as unfit for duty.

It is the dreadful unnecessary sacrifice of life from preventable diseases that constitutes the hell of war today. In the Russo-Turkish war the deaths from battle casualties were 20,000, while those from disease were 80,000; in our great civil conflict, of the nearly 600,000 men who perished on both sides, about 400,000 were sacrificed to disease to 100,000 from battle casualties.

In a recent campaign of the French in Madagascar 14,000 men were sent to the front, of whom 29 were killed in action and over 7,000 perished from preventable diseases. In the Boer war in South Africa the English losses were ten times greater from disease than from the bullets of the enemy. In our recent war with Spain 16 lives were needlessly sacrificed to ignorance and incompetency for every man who died on the firing line or from the result of wounds.

That the monstrous sacrifice of 80 per cent is almost totally unnecessary, was abundantly proved in the records of the Japanese war, where 1,200,000 men were sent to the front, in a country notoriously unsanitary, and only 27,000 men died from disease to 59,000 who fell in the legitimate line of duty on the field of honor. This because the Japanese had a properly equipped medical and sanitary department, whose officers were empowered to enforce proper sanitation and hygiene.

## A Lion Tamer's Secret.

The lionhound growled and the great yellow lion leaped back in fear.

"The lion could kill the bound," the trainer said, "but he doesn't think so. He thinks the bound could easily kill him."

"Why?"

"When the lion was a cub, this boundhound, full grown, lived in the cage with him. The big dog could, of course, lick the little cub, and the cub therefore feared and respected him. Now the cub is grown up but he still thinks the bound is the better."

"We rear a cub with a full-grown bound in this way for a reason. The bound is a protection to us trainers afterwards when the cub is grown; for then, should he become rambunctious, one look from the dog will send him, subdued and ashamed, slinking off to the cage's furthest corner."—Philadelphia Bulletin.

## The Polite Toothpick.

The clubman, having finished his turkey dinner, picked his teeth.

"It is provincial," he explained, "to regard the use of a toothpick as impolite. The world's most fashionable restaurants—the Ritz, the Savoy, Pallard's and so on—set toothpicks on every table, each toothpick sealed in a little paper envelope.

"We have a town in Michigan, the town of Harbor Springs, which is devoted to the toothpick industry. Here a huge factory turns out 7,500,000 white birch toothpicks in a day.

"The process is simple. The logs are sawed into bolts twenty-eight inches long, the bolts are steamed, and then sliced as thin as cardboard. The slices are cut into ribbons three inches wide, and the ribbons are run through a machine that drops into a basket on the right the finished toothpicks, and into a basket on the left the refuse splinters.

"Quill toothpicks mostly come from Joinville le Point, a town near Paris. This town takes the quills of 2,000,000 geese and produces 20,000,000 picks a year."—Philadelphia Bulletin.

## Unique Record.

William Fulton Jackson, the general manager of the North British Railway, has a unique record. He has walked the entire length of the North British Railway. What other general manager of a system 1,140 miles in length can claim to have walked over the whole of it?—Railway Magazine.

## A Watch for the Blind.

The blind now have a watch on which the hours are indicated by movable buttons on relief upon the dial. The wearer finds the time by passing his hand over the dial and finds the button indicating the hour depressed. A strong minute hand shows the minutes.

## One-Ninth of the Land.

Siberia contains one-ninth of all the land on the globe. Great Britain and all Europe except Russia, together with the United States, could be enclosed within its boundaries.