

Stories of Famous People

The Queen's Memory.

Man's stories are told of Mr. Herbert Smith, the new President of the Mining Federation, but perhaps the best is that about his first presentation to Queen Mary.

"I have seen you before," was the Queen's first remark.

"I don't think so," replied Mr. Smith.

"Oh, yes, I have," Her Majesty insisted. "You were the big man in the little brown jersey who went down the Cadeby mine."

It transpired that the Queen, who visited the Cadeby pit immediately after the disastrous explosion in 1912, had noticed Mr. Smith going down with a rescue party. It had quite slipped her memory, but the Queen had not forgotten.

Cover-Married!

Here is a story of Lady Astor and her old Negro nurse, Aunt Betty, whom she met again during her recent visit to America. She was showing Aunt Betty some pictures of Cliveden, her beautiful home on the Thames, and its wonderful lawns and gardens. Aunt Betty looked at the photographs, looked at Lord Astor, and then at Lady Astor.

"Well, Miss Nancy," she said at last, "all I's got to say is dat yo' suitin'ly did overmarry yo'self."

KEEPING BRITAIN'S CLOCKS CORRECT

WONDERS TO BE SEEN AT GREENWICH.

Every Civilized Country in the World Reckons Time from Famed Observatory.

Greenwich observatory was founded by Charles II. in 1675.

That monarch was aghast when the fact was brought to his notice that there was no provision in England for the study of the heavenly bodies and no way of helping navigators to find their longitude at sea.

It was a comparatively simple matter to find latitude, but the early navigators had to rely on "dead reckoning"—calculated from the speed of the ship shown by the log—for their longitude. When we consider that a modern battleship can be as much as twenty miles out of its course by "dead reckoning," we get a better idea of the wonderful courage and adventurous spirit of the old sea dogs.

Studying the Stars.

Without delay, Charles II. appointed Flamsteed, "the Kings Astronomer," at a salary of £300 a year. He received a grant of £520 for a suitable building, but had to provide his own instruments. Flamsteed's original building is still standing, but it is now only one of the many buildings that comprise the Observatory.

The work to be done was defined in the warrant, and the programme has been adhered to strictly by Flamsteed and his successors. At first their chief work was to make such study of the heavenly bodies as would enable them to forecast accurately the positions of the stars and planets in the sky and issue almanacs giving these positions for the use of mariners.

Greenwich observatory now makes time for the whole world, for every civilized country reckons its time from its distance east or west of Greenwich. If we know the longitude of a place we can by simple calculation find out what time it is there at any given hour of "Greenwich Mean Time." There is a difference of one hour for every fifteen degrees on the earth's surface.

The daily distribution of the correct time to the rest of Great Britain, now one of the Observatory's chief activities, was not, of course, possible before the invention of the electric telegraph in 1839.

In the "time room," in a sort of cupboard something like the inside of a large telephone switchboard, are wires connecting with the various stations

Lighting the Earth at Night

The recent celebration of the jubilee of the Institution of Electrical Engineers is a reminder of how rapidly history has been made in connection with the science practised by its members, says an English writer.

It is little more than fifty years since that telegraph was the chief purpose to which electricity could be applied. The "electric telegraph" was then comparatively new on railways, though the first installation, which was from Paddington to West Drayton, was made in 1838-9.

When John Tawel killed Sarah Hart at Salt Hill, near Windsor, in 1846, a message announcing his flight was flashed along the line to Paddington, and the arrest which followed was the first to be brought about by telegraph.

Soon afterwards the inaudible lamp made its appearance. In August, 1878, it was installed in the Gaiety Theatre, where it made a great sensation. A well-known expert declared that it was not suitable for street lighting in London—an opinion which, strange as it seems now, was borne out by the failure of the new system at Billesgate, where it was abandoned early in 1879.

Nevertheless, the new light soon began to gain ground. In 1883 a great stimulus was given by the use of the system for lighting the railway from Westbourne Park to Paddington. A popular novelty in many towns about the same time was skating by the arc light.

Soon after 1887 there was a further development, and one which was destined to have a great effect, though not in this country. At the Whitehall Electricity Works the exhaust steam from the engines was used to heat water, which was supplied to one hundred houses and flats in the neighborhood. This utilization of "waste" was

A Churchill Story.

An amusing story at Mr. Winston Churchill's expense reached me the other day.

On one occasion during the war the Forage Committee received a letter signed "Winston Churchill," asking what the committee meant by commandeering his hay. In reply it was pointed out that the hay was taken under an order signed by the Minister for War—at that time Mr. Churchill himself! After that there was no further correspondence on the subject.

Meat Salesman Claims a Throne.

The throne of Monaco is now claimed by a meat salesman. He is Mr. George Frederick Grimaldi, of Smithfield Market, in London, whose real title is the Marquis Grimaldi. He has title to Monte Carlo, which is practically the whole of the tiny state of Monaco, to establish his right to sit on the throne. He states that the late ruler, Prince Albert, was not the legal heir, and the College of Heralds, which has examined his claim, agrees with this.

The Grimaldi family has a history stretching back for hundreds of years, and has had many ups and downs. One member of it, for instance, was a Duke of Spain, while another was a poor cabinet-maker in London.

to which the time signal is sent. There are also instruments which record the reception of the signals.

The celebrated time-ball on top of Flamsteed's Tower is wound up by a hand-winch a few minutes before 10 a.m. each day, and dropped electrically at 10 o'clock. On the same tower is the recording anemometer, which automatically registers each shift of the weather. The meteorologist examines the sheet for the day, and finds an exact record of the direction of the wind and the time of every change of direction.

The clock—the one that makes "Greenwich Mean Time"—is kept locked up, and is guarded as far as possible from risk of vibration, changes of temperature, and so on.

Magic Machines.

Most people have heard of the two most famous instruments at Greenwich Observatory—namely, the equatorial and the transit circle. Each of these is a circular clock-driven in the horizontal plane at the precise rate of the earth's rotation on its axis, so that a star is automatically kept in the field of view for as long as the astronomer wants to observe it.

The transit circle moves only in the vertical plane, so that a star passes quickly across the field of view and out of sight as the earth rotates. Across the object glass of the transit instrument are stretched very fine thin wires—really spider's web silk—and the exact moment at which the star under observation crosses a particular wire is recorded.

Your Greatest Discovery.

Sir Humphrey Davies said that his greatest discovery was Michael Farraday. A poor boy, son of a blacksmith, applied to him for a chance to wash bottles in his laboratory.

Now, your greatest discovery, my friend, should be yourself. No one can make a greater discovery than that, to find one's self, this is the greatest human discovery.

A Literary Accident.

Some members of a club were talking of a fellow member noted for his precision of speech and writing.

"But," said one, "the met with an accident the other day."

"An accident! Why, what do you mean?"

"The poor chap dropped into the vernacular, bumped against a hard one and split an infinitive."

A Rain Tree.

One of the Canary Islands possesses a rain tree of the laurel species which sheds a copious shower of pure water from its foliage every evening. The natives use the water for drinking and for culinary purposes.

subsequently practised on an enormous scale in the United States; but it did not spread in Britain. Recently, however, a joint meeting of the Institution of Electrical Engineers and the Institution of Heating and Ventilating Engineers was held to consider whether waste heat from modern power stations could not be similarly turned to account.

Electrical engineering subsequently made enormous strides, as is evidenced by the great increase in the membership of the Institution of Electrical Engineers. Ten years after its foundation there were only one thousand members, but now it has more than ten thousand members.

A curious fact connected with comparatively recent electrical inventions is that they were mostly made by men who had no training as electricians. Some of such benefactors, indeed, did not have the advantage even of a scientific education.

David Hughes, the inventor of the microphone, was a musician; Edison was a railway newsboy, Huggings, to whom we are indebted for the telephone transmitter now in common use, was a Church of England clergyman; and Alexander Graham Bell, the inventor of the telephone, was a teacher of the deaf and dumb.

Hughes's success in the domain of applied electricity was particularly remarkable, because, judging from some memoranda he left, he nearly anticipated Marconi. In 1875 he made some experiments in wireless telegraphy, and actually received signals over considerable distances. Unfortunately for the world, however, he was subjected to such plentiful douches of cold water by fellow-scientists that he abandoned his experiments in disgust.

If he had kept on we might have had wireless telegraphy about sixteen years sooner, and his name might have been blazoned all over the earth.

DIVERS' PERILS IN THE OCEAN DEPTHS

NARROW ESCAPES FROM DEATH.

Thrilling Adventures A Re Everyday Events of Life in a Diving-Suit.

"Adventures?" said my old friend, who had worn his diving suit in almost all the world's seas. "Well, I reckon I've had my share, and it's a miracle, nothing less than I'm here to talk of them."

"One of my closest brushes with death was some years ago when we were trying to salvage a 300-ton steamer of the Hamburg-American Packet Company, wrecked on a bar in a Columbian river. I'd been working for days patching her keel, hanging on a swinging shelf we had lowered along her side.

"Well, one day I noticed a sudden shadow against the light; and there, sure enough, was an enormous shark, as wicked-looking as they make them. He swam slowly round almost brushing me with his fins, and then kept perfectly still, looking straight at me with his wicked little eyes.

"I expected him to make a rush at me any minute, so I seized a hammer I was working with and struck it as hard as I could against the steamer's iron side. You know, a blow like that sounds louder under water than in the air, and I gave the shark such a fright that he turned tail and vanished like a flash.

Near and Naaty.

"That was my closest brush with a shark, and quite close enough to please me! But I've seen plenty of them about, only I never seem to care to tackle a narrow squeak in my time. Once the rubber joint under the collar (the "gasket" as we call it) was cut through by an iron ladder falling upon it, and the air went out with a rush, just as it does when a motor-tyre is punctured. A quick jerk on the life-line just saved my life in time.

"I've often had my nose squeezed so that the air was shut off, and I've had some agonizing moments before I have been able to liberate the tube. You see, when the hose gets jammed in this way and the supply of air is cut off, it is only a question of minutes—two or three at the outside—before you are a dead man.

"Once I was working between-decks when the hatch swung me right up against the overhead beams and held me there, squeezing both life-line and hose so tight that I couldn't sternal. Luckily the hose was wire-wound, so that I got my air all right, and after a while I was able to work myself free.

"But, on the whole, I've been a very lucky man—much luckier than some of my pals. There was George Seeman, for instance, an old friend of mine. He was down on a wreck and his hose got caught on the timbers. Three times they tried to lift him and each time he would come up a few feet and they would have to let him fall back. If seaman had only waited, another diver could have been sent down to set him free; but he didn't.

Swirled to Destruction.

"He decided to cut his hose and press his thumb quickly against the hole to keep the water out. He reckoned he would have enough air in his helmet to reach the surface. Drawing his knife, he slashed at the hose with the strength of a desperado man. His slash came clear through all but a shaving of rubber. Again he slashed, this time striking a new place about an inch away and only cutting about half-way through the hose.

"Then he tried nine times more—each cut, as his strength waned, growing shallower, until the two last were mere scratches. Then his strength and life ebbed away together. He was drowned in his air-helmet, and a section of the air-pipe, with its eleven tragic cuts, is still preserved, a mute evidence of the tragedy of a diver's life.

"One of the worst tragedies I can recall is connected with the Holyoke Dam. There was a leak in this structure, and the water was rushing through with a suction so strong that it seemed certain death for a diver to go near enough to stop the leak.

"The leak, however, had to be stopped at any cost, so Captain Conkling, who was in charge of the job, induced a diver—a man I knew well—to put on his suit.

"Before going down the man insisted on having an extra rope—a very strong one—tied round his waist.

"What's that for?" asked Conkling.

"That," answered the man, "is to help to get my body out if the line breaks."

"It all happened just as the diver feared. He was drawn by the powerful suction into the hole. When they tried to pull him out, both hose and life-line parted, and he was only by means of the strong rope round his waist that his body was ever rescued.

The Supreme Sacrifice.

"Conkling called in vain for another volunteer. Not a man would budge.

"Very well," he said, "I must go myself. I'll stop that hole, and I don't want any extra rope either!"

"The brave old man (he was seventy-five at the time) donned his suit, and went down. True to his word, he stopped that hole, but it was with his own body, and to-day, somewhere in the Holyoke Dam, lie the bones of the gallant old man in full diving-dress, stopping the leak no other man left was brave enough to approach.

"But I could tell you many a story of adventures that would make your flesh creep—mostly experiences of men I know personally, and a few of my own. How Hansen, for instance, fought a life-and-death battle with a giant conger-eel; how Fairchild was blown to atoms by the explosion of twenty-eight pounds of dynamite which he was bringing to the surface; and how Timmons once fainted away 100 feet down, and on another occasion let the water into his suit by pulling



THE CHEERY QUESTS.

I have uncles, I have cousins, I have nieces by the score, and in couples and in dozens they come gadding to my door; just to visit for a season, just to make themselves at home; and you here behold the reason for the furrows on my dome. Yet with gaudy smiles I greet them, as they come in ranks and rows, when I'd really like to beat them with a length of garden hose. For they bore me with their chatter, and they talk, in voices strong, of the things that do not matter, of the things that don't belong. If there's a theme or topic that's a weariness to me, they'll discuss it, loud and yavvic, till I wring my hands and flee. But I lack the nerve to can them when they journey to my gate; with a cordial smile I scan them, crying "Welcome" to each skate. Oh, I like to have my nieces come and drink a dish of tea, but they shouldn't bring valises and big wardrobe trunks to me. I can stand a decent number, and my welcome will not fail, if they eat and drink and slumber and depart before they're stale.

ing out a helmet lug for a foolish wager—escaping both times with his life, almost by a miracle."

Build.

Build, for the world is sick of tearing down; Your hammer must be one of industry; Smile, it is more constructive than to frown And smiling, one can do the work of three.

Teeth shut, eyes open with a forward look.— Faith in the vision, willingness to sweat.— Iconoclasm shut within the book.— An edifice must rise, the bravest yet. It matters little what may be your goal.— A house, a coop, a kennel, or a trade, The state, an institution or a soul.— For building, not for wrecking, swing your blade.

—John Girdler.

Influence of Public Schools in Music Appreciation.

There has been for a long time much feeling among private music teachers that the public school music teachers are superficially educated, drill masters, not artists. This fact, however, is merely long-standing prejudice. The public schools are training more for musical appreciation, producing patrons for our symphony orchestras, for the opera and the oratorio than any private agency. Private teachers are usually specialists of a keyboard or of a fingerboard. They count, yes, but not in the influence of numbers. The public school music teachers are developing musical citizens and lovers of music, and are towers of strength in the life of this country, as far as the widespread interest in music counts.

Recently a vocal teacher of class singing in the public schools said: "Youth is the period for laying a good foundation for the arousing of musical instincts, for the unfolding of talent and making preparation for after years. A year or two of voice training like this would be of great value and lasting benefit to every student taking it. Those especially gifted would not only have valuable preliminary training, but having tested their talents, would feel no doubt as to the advisability of pursuing further vocal study if they so desired."

Class singing instruction in the school arouses a healthy competitive spirit, and the flashes of inspirational thought of the teacher benefits many rather than a single individual, as in private teaching.

Bank of England to Become Skyscraper

The Bank of England, one of the most conservative institutions in the world, has succumbed to the skyscraper idea. It is not going to scrape the sky to any very considerable extent, but it will do so by comparison with its present altitude, and the skyscraper principle is fully accepted in the planned reconstruction.

Due to the fact that the greater part of its staff now is working not on the bank premises at all, but in various buildings scattered around the city of London, the Bank of England has at last come to the conclusion that it must reconstruct itself. But additional ground space in the City of London is not to be had at any price, hence the bank's surrender to the skyscraper idea.

The bank at present consists of a single story, covering a wide area of ground space, with, of course, enormous vaults beneath. Its feature is an outside blank girdle wall the dignified banking halls within—the fruit of the inventive genius of Sir John Smeaton—being lighted from above. Within there is a fine open garden court. Though all of the details of the scheme for rebuilding have not yet been settled, the experts now are agreed that the only way of harmonizing the artistic claims of the bank with the duties required of it is to erect a central structure of the necessary height surrounded by a girdle of lower buildings composed of the existing wall.

The new inner building may not, at least at present, go beyond the height of four or five stories, but, superimposed upon the existing single story, it will be the tallest building in an uncustomed skyscraper appearance. Conservative Londoners, however, may console themselves with the thought that, in the congested area of the city, a vista of this modern architectural feature will be almost impossible.

The longer you gaze at an obstacle the bigger it becomes.

United States to Have Another Ship Canal

Surveys have been completed, and a report is being prepared for presentation to the U.S. Federal government for another of the world's large ship canals, to be located in California, and to connect Sacramento, the capital of that state, with the Pacific Ocean, by way of San Francisco Bay. The canal will be 35 miles long, 150 miles wide at the bottom, 350 to 360 feet wide at the surface of the water, and 30 feet deep, capable of floating all but the very largest of deep-sea vessels, and is designed to convert Sacramento, which is 90 miles from the Pacific, into an ocean port. Out of Sacramento, on steamboats, barges, and schooners, are shipped every year 1,000,000 tons of products of the grain ranches, fruit orchards, vegetable farms, and other mines of 29 counties. This production is valued at \$95.95 per ton, the most valuable—and the largest—river traffic in the New World in proportion to the length of navigability of the stream, about 200 miles.

All this large volume of shipments has to be rehandled at San Francisco, Oakland, or other deep-sea ports on San Francisco Bay, and the cost of this transshipment is so great that the saving in this one item alone by the bringing of deep-sea tonnage direct to the Sacramento wharves will pay the cost of the ship canal in about 10 years. In addition to this, the deep

channel of the Sacramento River, which has to be kept up continuously the year round. There are 3,000,000 acres of arable land, suitable for cultivation and available for irrigation, in the Sacramento Valley, tributary to the river and the city of Sacramento. Of this great area, only about 25,000 to 30,000 acres are in production. It is believed that the introduction of deep-sea shipping to the heart of this valley will bring about the early cultivation of these other acres.

The route of the new canal, which is longer than the Welland Canal, as long as the famous Manchester Ship Canal, and wider and deeper than either, will not follow the course of the Sacramento River, which is maintained at a minimum depth of seven feet for barge and shallow-steamer traffic, but runs for two-thirds of its length south from the city of Sacramento, and then turns west of south through Georgiana Slough and into the water and deeper San Joaquin River a short distance above Antioch, which, incidentally, also will become an important deep-water port for the San Joaquin Valley when the canal is completed. The route is selected as the best after an exhaustive survey of several proposed routes.

mic affairs; it estimates the status of business and reflects the prosperity of other industries. In a resumption of building is reflected the downward trend in the price of all materials used in building, and a decline in the cost of labor to a level closer approximating the pre-war level. More building is indicative of hope and of faith in the immediate future. No other disturbance of the years following the war caused such inconvenience and upheaval as the cessation of building, and, in view of all it portends, nothing is so gratifying as the return to a normal amount of construction.

Concentration.

When Lord Northcliffe was in this country and was asked the secret of his success, he said he didn't attribute it to any one thing except concentration. "I concentrate," he said, "upon whatever I take up and keep my mind wholly upon it until I see it through."

Mr. Edison said he early resolved to concentrate upon electricity in all its various phases, and he said it had yielded him marvelous results. If he had split up his attention on a great many different things as many small inventors do, he would not now have been regarded as the greatest living inventor.

His Motto.

A smart boy of fifteen entered the office of a prosperous merchant and asked for employment. He gave satisfactory answers to a few questions, and then the merchant inquired: "What is your motto?"

"Same as yours," the boy replied. "Just what you have on your door-plate."

He got the job.

Chinese Breadfruit.

The Chinese breadfruit, otherwise the panelo, is a citrus fruit that may be described as a cross between the orange and the grapefruit, combining the good points of both. It is regarded by many as the finest fruit grown in the Far East.

Kenora Gold.

The Kenora district of Ontario is being actively prospected for gold and silver. 76 prospectors' licenses being issued. Several claims are being striped, trenched and sampled by engineers retained by financiers in Toronto and Montreal.

Where It Might Have Helped.

"Don't talk to me about colleges!" scoffed the self-made man. "Look at me! Do you suppose I would have been any more successful than I am if I'd had a college education?"

"No," admitted the Professor, "but you might have been less inclined to brag about it."

Anything Welcome.

The very small boy with the very large gun was standing in a country road.

"What are you hunting for?" asked a passerby.

"I dunno," he replied frankly. "I ain't seen it yet."

A Distant One.

When a woman tells her husband she will be ready in a minute she picks out a minute about half an hour away.

Curious Canadian Place Names

By E. M. Chadwick

Canada is unfortunate in having many place names silly or otherwise objectionable, especially duplications of names already existing, but among the names are a few which if not understood, seem strange, but are really well chosen; one of such names is Medicine Hat, a name which I hope will never be changed. It is an historical record of a great battle fought many years ago between two Indian "nations." I think the Black Feet and the Crees, in which there was a fierce struggle for a long time without either gaining any advantage over the other, until it happened that the head-dress of a "medicine man" who was prominent among the Crees was blown off by a gust of wind and carried into the adjoining river, which the Crees believed to be a bad omen, and they lost heart and sustained a severe defeat.

I am not going to ask you to devote much of your space to Indian place names, of which there are a very large number in Canada, but another curiosity I might mention is Moose Jaw, which is the translation of the name given to the place where "the white man mended the cart with a hanty moose jawbone."

One more remarkable name is worth mentioning—Qu'Appelle—which really is a perfect instance of a

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