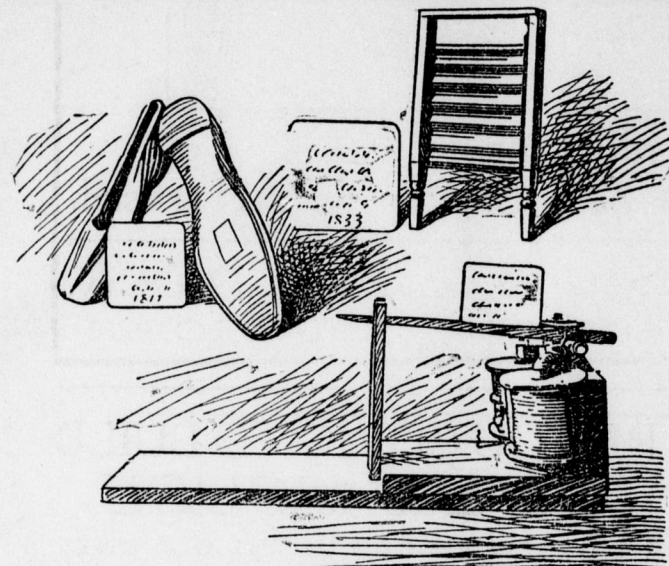


First Models of Great Inventions.

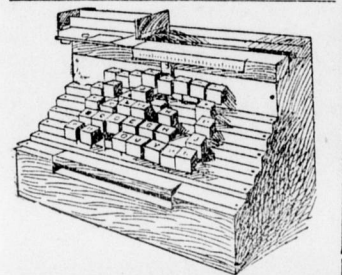
That vast mausoleum of wrecked hopes and blighted ambitions, the model department of the United States Patent Office in Washington, is illuminated here and there with the original models of the very great inventions. In one of the cabinets is to be seen



FIRST WASHBOARD—FIRST PAIR PEG SHOES—MORSE'S MODEL.

Morse's original model of the telegraph instrument, fashioned by his own hands. The model is very crudely made, but it inspires reverence in the visitor, and even a certain sort of awe, when he pauses to think of what the telegraph has done for the advancement of the world, and what a slow universe this would be if we did not have telegraphic communication with our fellow beings the world over.

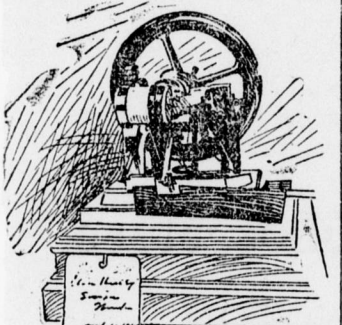
In another cabinet, inspiring the



MODEL OF THE FIRST TYPEWRITER.

same sort of reverence, and bringing thoughts of the days when every bit of sewing in the world was done by hand, is Elias Howe's model of the sewing machine. The visitor unconsciously repents to himself the words of the song of the shirt, "Stitch, Stitch, Stitch," and thinks of the agony of that stitching in the days of Hood, when it was all done by hand.

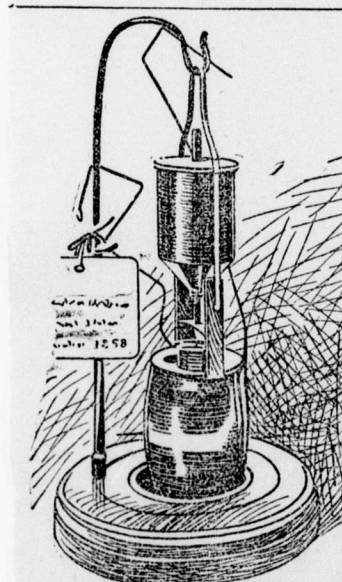
Elias Howe's first sewing machine is almost as crude as Morse's telegraph



HOWE'S SEWING MACHINE.

founder, but in both cases the model operated exactly as described in the specifications, and the patents were accordingly granted.

Not a whit less interesting is the model of the first typewriter, the invention of R. T. P. Allen, a Kentuckian. It is still more roughly made than the models of the telegraph and sev-



FIRST ELECTRIC ARC AND FIRST INCANDESCENT LIGHT.

ing machine, but it proved to be quite as important an invention. The first pair of peg shoes is another interesting invention exhibited in the

model room. The patent on peg shoes was granted to S. B. Hitchcock and J. Bement on July 30, 1811.

Then there is the first washboard. It is as fresh-looking to-day as when it was first placed in the cabinet, and shows not a particle of corrosion, although the name of the inventor was S. Rust, and it was Rust himself who made the model. The patent is dated February 9, 1838. The first arc electric light was made by Collier and Baker, and patented by them May 18, 1858. The first incandescent lamp was

MOST FAMOUS OF DIAMONDS.

England's Crown Jewel, the Koh-i-Noor Will Be Worn by Queen Alexandra. The Koh-i-noor, one of the most famous diamonds in the world, which used to be worn on special state oc-

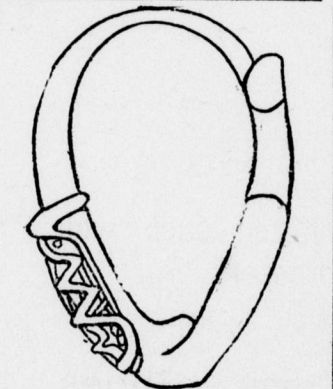


casions by Queen Victoria, may be conspicuous again at the coronation. The King is understood to have ordered it to be placed in the special crown that is being made for Queen Alexandra. The Koh-i-noor, which is usually kept among the crown jewels at the tower, was discovered originally in the celebrated mines of Golconda, about the middle of the sixteenth century. It passed through the hands of several Indian princes, and was presented to Queen Victoria in 1849 by Dhuleep Singh, the last native ruler of the Punjab. The value of this famous gem has been estimated at \$10,000,000.

The Koh-i-noor had a narrow escape before it reached the late Queen. After the annexation of the Punjab in 1849 it was given up to the British, and at a meeting of the Board was handed to John (afterward Lord) Lawrence in a small box beneath many folds of linen for safe keeping. He placed it in his waistcoat pocket and forgot the treasure. When he dressed for dinner the waistcoat containing it was thrown carelessly on one side. At a subsequent meeting of the Punjab Board Henry Lawrence suggested to his brother the advisability of at once forwarding the Koh-i-noor to Queen Victoria. John Lawrence had forgotten that the diamond had been given him; then suddenly remembering, he quitted the Board with an unruffled countenance, hurried home and inquired of his manservant if he had seen a small box which had been left in his waistcoat pocket. "Yes, sahib," the man replied, "I found it and put it in one of your drawers." "Bring it here," said Lawrence. The servant produced it. "Now," said his master, "open it and see what it contains." The old native obeyed, and after removing the folds of linen, he said, "there is nothing here, sahib, but a bit of glass." "Good," said John Lawrence, with a sigh of relief, "you can leave it with me."

Porto Rico's Stone Collars. The puzzle of archaeologists in the American Museum of Natural History, says the New York Herald, is what are termed the "stone collars" from Porto Rico. Senor Lopez-Nassa, an erudite native, recently has written entertainingly of other antiquities, and states his belief that they were used for ceremonial purposes. Professor Otis T. Mason advanced the same hypothesis in 1876, soon after the arrival of specimens at the Smithsonian Institution.

They are of the same size and shape as an ordinary horse collar, and made



ONE OF THE STONE COLLARS.

of very hard, greenish colored stone. They are all more or less ornamented by a knot, or shoulder, on either the right or left side, which is covered with strange figures cut into the hard stone.

At the present writing anthropologists have discovered the purpose or use of everything manufactured by prehistoric man with the exception of these strange Porto Rican "collars."

"Getting Into a Scrape?"

This popular phrase, involving the use of an English word, in a sense different from its proper meaning, has considerably puzzled English lexicographers.

One, more ingenious than the others, has traced its origin to the game of golf.

In the North of Scotland this game is played upon downs, or links, on the seashore, where many rabbits burrow. The small hole with which these animals begin their burrows is called in that part of the country "rabbit scrapes," or simply "scrapes."

It often happens, in the progress of a game of golf, that the ball of some unfortunate player brings up in one of these scrapes and is with difficulty removed. Special rules had therefore to be made for the player "in a scrape."

This would seem an intelligible source for an otherwise rather unintelligible expression.—New York Times.

The city of Portland, Me., has in its streets thirty thousand shade trees, some of which were planted more than half a century ago.

STOKER BECOMES A MAYOR.

Dennis Mulvihill Goes From Factory Furnace to City Hall.

We herewith reproduce the picture of Dennis Mulvihill, the new Mayor of Bridgeport, Conn., who until his election was employed as a fireman in a manufacturing plant at \$14 a week. "Honesty" will be the watchword of this administration," declared the "stoker mayor" in his inaugural speech.

Mr. Mulvihill has worked at the same furnace for thirty years. He was born in Ireland fifty-six years ago. In 1896 he was elected Alderman. He is the first Mayor elected on the Democratic ticket in that city in the last ten years. Mr. Mulvihill was so con-

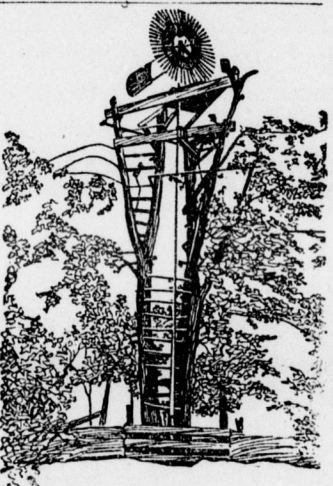


DENNIS MULVIHILL.

fidant of success that four days before election he went from the fire pit to the office of the factory and resigned his employment, saying he might be back after two years.

A Curious Windmill.

A windmill is apt to be a very prosaic and ugly construction, but many attempts have been made with varying success to beautify these very useful and economic power producers. This engraving from the Scientific American illustrates how nature and



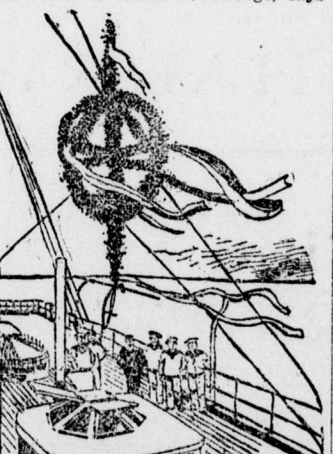
A TREE WINDMILL.

mechanics are sometimes blended. The trees serve only as a support for the platform at the top, and as side rails of a ladder, it being necessary only to provide rounds. The trees serve also to stay the iron support. The windmill, which was built by J. G. Benster, of Moline, Ill., is of peculiar construction, there being no gear wheels or crank, the power being transmitted by an involute wheel which is a part of the steel wheel to which the fans are attached. The surface of the involute is perfectly smooth, as is also that of the wheel attached to the pitman carrier, the one rolling upon the other. The mast is of tubing, the pitman being carried down inside. The wires for throwing the mill out of gear are attached to a thimble on the outside of the mast. From this it will be seen that the trees are not needed for actual support.

A number of these mills have been attached to trees and have been giving excellent results. It is also possible to carry the mills around on a wagon and set them to work at any part of a field.

British Naval Wedding Custom.

By an old custom which obtains in the Navy the marriage of an officer is signaled by the hoisting of a wreath of flowers, with silken streamers, on the vessel to which he belongs, says



the London Graphic. For the first time since the new royal yacht Victoria and Albert was commissioned the custom has just been carried out on that vessel in honor of the marriage of Lieutenant Mansell, her First Lieutenant, to Miss Louisa Richards, the daughter of a naval captain. At night the wreath was brilliantly illuminated with the electric light.

DR. TALMAGE'S SERMON SUNDAY'S DISCOURSE BY THE NOTED DIVINE.

Subject: Grasp Present Opportunities—A Prediction That the New Year Will Be One of the Greatest of All Time—Prepare for the Future.

WASHINGTON, D. C.—In this, Dr. Talmage's first discourse for the new year, he speaks words of encouragement to all the timid and doubting. The text is Exodus xii, 2, "This month shall be unto you the beginning of months; it shall be the first month of the year to you."

The last month of the old year has passed out of sight, and the first month of the new year has arrived. The midnight gate last Wednesday opened and January entered. She deserves a better name, for she is called after Janus, the heathen deity who, they supposed, presided over doors, and so might be expected to bear the name of the year. This month was of old called the wolf month because, through the severity of its weather, the hungry wolves came down seeking food and devouring human life. In the misall of the middle ages January was represented as attired in white, suggestive of the snow, and blowing the fingers, as though suffering from the cold, and having a bundle of wood under the arm, suggestive of the warmth that must be kindled.

Yes, January is the open door of the year, and through that door will come what long processions, some of them bearing palm leaves and some myrtle, others with garlands of wheat and others with cypress and mistletoe. They are coming, and nothing can keep them back—the events of a twelvemonth. It will, I think, be one of the greatest years of all time. It will abound with blessing and disaster. National and international controversies of momentous import will be settled. Year of coronation and dethronement, year that will settle Cuban and Porto Rican and Philippine and South African and Chinese destinies. The timest year for many a decade past has dug its millions of graves and reared its millions of marriage altars.

We can expect greater events in this year than ever before, for the world's population has so vastly increased there are so many more than in any other year to laugh and weep and pray and perish. The mightier wheels of mechanism have such wider sweep. The fires are kindled in furnaces not seven times but seventy times heated. The velocities whirling through the air and sailing the seas and tumbling the mountains will make unprecendented demonstrations.

Would to God that before the new opening year has closed the earth might cease to tremble with the last cannonade and the heavens cease to be lighted up with any more conflagration of homesteads and the iron factories that make swords be turned into blacksmith shops for making plowshares.

The front door of a stupendous year has opened. Before many of you there will be twelve months of opportunity for making the world better or worse, happier or more miserable. Let us pray that it may be a year that will indicate the speed of redemption of the hemisphere. Would to God that this might be the year in which the three great instruments now chiefly used for secular purposes might be put to their mightiest use in the world's evangelization—the telegraph, the telephone, the phonograph. Electricity has such potent tongue, such strong arm, such swift wing, such lightning foot, that it occurs to me that it may be the angel that St. John saw and heard in apocalyptic vision when he started back and cried out, "I saw another angel flying in the midst of heaven having the everlasting gospel to preach unto them that dwell on the earth and to every nation and kindred and tongue and people."

They were tongues of fire that sat on the heads of the disciples at the Pentecost, and why not the electric fire? Prepare your batteries and make ready to receive the world wide message of "whosoever will."

Furthermore, this month of January has the greatest height and depth of cold. The rivers are bound in crystal chains. The fountains that made highest leap in the summer parks now toss no more foam, for every drop would be frozen tear. The sleds crunch through the hard snow. Warmest attire the wardrobe can afford is put on that we may defend ourselves against the fury of the elements. Hardest of all the months for the poor, let it be the season of greatest generosity on the part of the prosperous. How many a family of coal or a pair of shoes or a coat or a shawl may do in assuagement of suffering between the 1st of January and the 1st of February God only knows. Seated by our warm registers or wrapped in furs which make us independent of the cutting January blast, let us not forget the poor, the hearth and the thin garments and the hacking cough and the rheumatic twinge of those who through destitution find life in winter an agony. Suppose each one of us take under charge one poverty-stricken household or one disabled man or one invalid woman. On our way to work let us carry such a charity, though the wind may be howling and the night tempestuous, I should not wonder if we could hear a voice that was heard on Galilee and at the gates of Nain and by the pool of Bethesda saying, "Inasmuch as ye did it to them, ye did it to Me."

Oh, the night of the cold! The arctic and antarctic invading the temperate zone! The victories of the frost—as when the Thames in 1205 became firm as any bridge and the inhabitants crossed and recrossed on the ice and booths and places of temporary amusement were built on the hardened surface, as when many years ago New York Harbor was paved with ice so that the people passed on foot to the adjoining islands. But the full story of the cold will never be known. The lips which would have told it were frozen and the papers that would have written it were benumbed. Only here and there a poet appears. In 1691 the cold was so terrific that the wolves entered Vienna. In 1498 it was so cold that wine was cut with hatchets and distributed among the soldiers. In 1234 a whole forest was killed by the cold at Ravenna. In 793 the Black Sea was frozen over. As we go further back the frosts are mightier, but as we come further down the frosts lessen.

The worst severities have been halted, and the snows have lost their depths, and the thermometers announce less terrific fans of temperature, and the time will come when the year will be one long summer of foliage and bloom. While the world's normal condition will be reformed, the worst climates will be corrected. You could not have a millennium with a January blast possible.

Do not read your almanac backward. Do not go out and ask the trees hung with icicles by January storm whether they will ever again blossom in May and leaf in June. We are moving toward the world's redemption. The frozen tears will melt, the river of gladness will resume its flow, the crocus will come up at the edge of the snowbanks, the morning star will open the door for the day, and the armies of the world will "ground arms" all around the world.

The January of frost will be abolished, and the balm and radiance of a divine atmosphere will fill the nations. If you do not see it and hear it for yourself I think at the utmost your grandchildren will see and hear it. The heavens will take part in the conflict between righteousness and sin, and that will settle it, and settle it right, and settle it forever.

night heard the battle repeated in the skies—the sound of drums, the clash of the arms, the groans of dying men and then the withdrawal of the angels into the silence. These shepherds and travelers repeated in the neighboring towns what they heard, and large numbers of people, expecting that all was a deception, went on the following night, and they heard the same words of triumph in the heavens—the two armies in battle. The hearing of this seeming combat in the heavens, sent ambassadors to inquire into the mystery. In the night they also heard the conflict and came back to the king and took solemn oath as to this mysterious occurrence.

Whether those shepherds and travelers and ambassadors of the king were in delusion I cannot say, but this I know—that the forces of God and the forces of Satan are now in struggle as to who shall win the earth in combat, the heavens as well as the earth in struggle as to who shall win this world for blessedness or woe, and, as the armies of God are mightier than the armies diabolic, we know who will triumph, and we have a right to shout the victory through our Lord Jesus Christ.

The King of Kings, the Lord of Hosts, the God of Joshua and Havelock, leads in the conflict. I have no fear about the tremendous issue. My only fear is that we will not be found in the ranks and fully armed to do our part in this campaign of the eternities.

Again, I remark that the month of January has seen many of the most stupendous events in the world's history and a rocking of cradles and the digging of graves that have affected nations. In this month American independence was declared, followed by Lexington and Bunker Hill and Monmouth and Valley Forge and Yorktown. January saw the proclamation that abolished American slavery. Though at the time there were two mighty opinions and they were exactly opposed—those who liked the document and those who disliked it—there is but one opinion now, and if it were put to vote in all the States of the South, "Shall slavery be reinstated?" there would be an overwhelming vote of "No!" The pen with which the document was signed and the inkstand that contained the ink are relics as sacred and valuable as the original Declaration of Independence, with all its erasures and interlineations. The institution which for seventy or eighty years kept the nation in angry controversy has disappeared, and nothing is left to fight about. The North and the South to-day are in as complete accord as ever were flute and cornet in the same orchestra.

The North has built its factories on the banks of the Chattahoochee and the Roanoke, and the South has sent many of its ablest attorneys into our northern court-houses, its most skillful physicians into our sick rooms, its wisest jurists into our exchanges, its most consecrated ministers into our pulpits—all this the result of the proclamation of January 1, 1863.

Furthermore, I notice that January has been honored with the nativity of some of the greatest among the nations. Edmund Burke was born in the month, the marvel and glory of the legal world, the lion of the religious world, Benjamin Franklin of the philosophic world, William H. Prescott of the historic world, Sir John Moore of the military world, Robert Burns of the poetic world, Polycarp of the martyr world, Peter the Great of the kingly world, Daniel Webster of the statesman world.

But I cannot read the epitaphs of one out of a hundred illustrious graves in this first month of the year. Many of those well known gained half their renown and did half their work through the help of those of whom we know all the world over and will be known through all time, but little is said of her who was born this first month of the year, and without whose help he never could have been what he was—his sister, Caroline Augusta Augusta. She helped him hunt the wilds; she repaired and adjusted his telescopes. She ciphered out his astronomical problems. She was his amanuensis. She planned for him his work. She discovered seven comets and made "A Catalogue of Nebulae and Star Clusters." The month of January introduced her to the universities, but she has never been properly introduced to the world.

Cultivate faith in God and the feeling that He will do for you that which is best, and you will be ready for either sunshine or shadow. The other eleven months of the year 1892 are not all to be made up of gladness or of grief. The cup that is all made up of sweetness is insipid.

Between these just opened gates of the year and the closing of those gates there will be many times when you will want God. You will have questions to decide which will best supersede the world. There may be illness in the body or perplexities of mind or spiritual exhaustions to be healed and comforted and strengthened. During the remaining twenty-six days of this month lay in a supply of faith and hope and courage for all the days of the seven months. Start right, and you will be apt to keep right to the end.

Before the ship captain gets out of the New York Narrows he makes up his mind what sea route he will take. While you are in the narrows of this month make up your mind which way you will sail and unroll your chart and set your compass and have the lookout on the watch for the davits and be ready for smooth voyage all the way across or the swoop of a Caribbean whirlwind.

Rev. Solomon Spaulding was for some time in poor health, and to while away the time he wrote a preposterous religious romance. One of his novels somehow got hold of that book before it was printed and published it as a revelation of heaven, calling it the "Book of Mormon," and from that publication came Mormonism, the monster abomination of the earth. Rev. Solomon Spaulding might have been better engaged than writing that book of falsehoods. He wrote it in the winter, we never have time to do wrong. Harness January for usefulness, and it will take the following months in its train. Oh, how much you may do for God between now and the 31st of next December!

The beautiful "weeping willow" tree was introduced by Alexander Pope into England from a twig which the poet found in a Turkish basket of figs. He planted that twig, and from it came all the weeping willows of England and America, and your smallest planting of good may under God become an influence continental and international.

Now that the train of months has started, let it pass, January followed by February, with longer days, and March, with its fierce winds; and April, with its sudden showers; and May, with its blossoming orchards; and June, with its carnival of flowers; and July, with its harvest; and August, with its sweltering heats; and September, with its drifting leaves; and October, with its frosts; and November, with its Thanksgiving scenes; and December, with its Christmas hilarities. March on, O battalion of months, in the regiments of the years and the brides of the centuries! March on and join the months and years and centuries already passed until all the rivers of time have emptied into the ocean of eternity, but none of all of the host ought to render higher thanks to God or take larger comfort or make more magnificent resolve than this the first month of the new year.

But what fleet foot hath the months and years! People lightly talk about how they kill time. Alas, it dies soon enough without killing. And the longer we live the swifter it goes. William C. Bryant said an old friend of his declared that the going of time is like the declining of the partridge or muffed grouse in the woods, falling slow and distinct at first and then following each other more and more rapidly till they end at last in a whirling sound. But Dr. Young, speaking of the value of time, startlingly exclaimed, "Ask death-beds!"

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