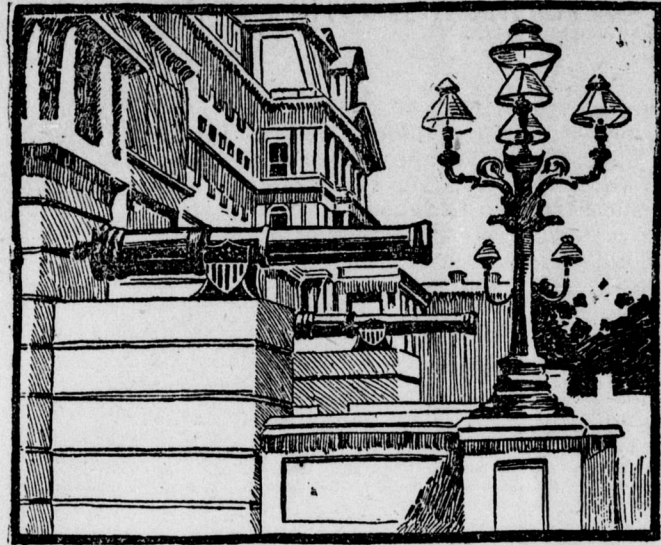


SPANISH GUNS TRAINED ON THE WHITE HOUSE.

Two of the cannon captured by Dewey at Manila, May 1, 1898, now adorn the east front of the War, State and Navy building, in Washington, pointing toward the White House. One of them, called the Bellicosa, was



cast at Manila, October 23, 1780. The other, called the Carduna, bears the monogram of Carlo IV., and was cast at Seville, February 21, 1777. The crown of Spain is cast on each. The present mounts, provided by the Navy Department, are gilt shields, bearing the Stars and Stripes.

Curious Method of Making Wax.

The white wax exported from China is made by the curious method of using minute insects in its production. These insects are found in brown, pea-shaped excrescences or galls attached to an evergreen tree called the "insect tree." The galls are gathered in May and carried in headlong flight to the market towns by bearers, who travel at night so that the heat may not force the insects to emerge during the journey.

They are then placed on the "wax tree," which is a stump varying from three to twelve feet in height, with numerous branches rising from the top similar to the pollard willow.

The wax insects are made into small

Mexico. An officer in battle is always expected to carry his sword in one hand, and if his horse is at all fractious or hard to guide he has very little opportunity to defend himself with his pistol, and there has been instances when if a revolver was within easy reach an officer could have saved his life instead of watching an enemy aim his gun and fire before the doomed man could reach the pistol. The advantage of this combination weapon will therefore be easily understood, as the officer could easily swing the point of the sword toward the enemy in a shorter time than a gun could be raised and fired. The arrangement of the two weapons is such that the trigger can be easily manipulated while the hand is closed over the sword grip.

Mexican Bread Oven.

The accompanying photograph shows the manner in which the Mexicans used to build their bread-ovens. Seen at a distance these peculiar contrivances look like something between an



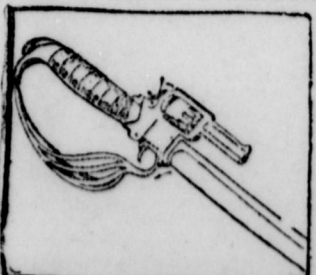
CHINAMAN FASTENING A PACKET OF WAX INSECTS TO THE WAX TREE.

packets of twenty or thirty galls, which are inclosed in a leaf of the wood oil tree fastened together with rice straw. These packets are suspended close to the branches, under which they hang. On emerging from the galls the insects creep rapidly up the branches to which they attach themselves, and begin forming a coating of wax that in about three months attains a thickness of almost a quarter of an inch.

The branches are then cut off, and after removing as much of the wax as possible by hand they are put in a kettle of hot water, when the remaining wax floats on the surface and the insects finish their term of usefulness by going to the bottom.

Weapon For Officers' Use.

Here we illustrate a combination



Australian's biggest offertory was taken up at the consecration of the Bishop of Carpentaria in Sydney Cathedral. It amounted to \$42,500, and is perhaps the largest on record.

Minting Money

How the Metal is Transformed Into Bright Pieces of Money.

THE Director of the Mint, George E. Roberts, is probably about the best equipped man in the country for the purpose. He has three big money manufacturing plants in operation—at Philadelphia, at San Francisco, and at New Orleans, turning six hundred tons of silver into subsidiary coin. The Southern mint is working at its full capacity now on silver dollars alone.

From the ingot to the coin is a rapid journey at one of the mints. It begins in the "weighing room," where stands the pair of balances that receives all the metal brought in. The scales in the Philadelphia mint are said to be the largest and finest in the world. They have a capacity of 685 pounds, but exhibit instantly the variation of



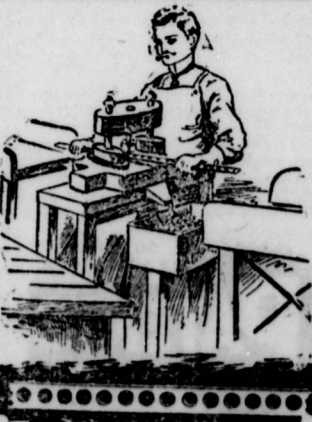
MILLING THE COIN.

one-hundredth of an ounce. The system of weighing and recording begun here is carried out with every transfer of the metal until it is delivered as coin to the cashier.

After leaving the weighing room the silver or gold, as the case may be, is sent to the melting room, where it is dumped into the huge plumbago crucibles. After melting, the coin material is cast into bars, and when cold a fragment is cut from each, which is sent to the assay office. The assayer ascertains the proportion of pure metal in the bar and amount of alloy needed to bring it to the required standard. The bars are again melted, the alloy doled in, and the metal then cools in bars about a foot in length, half an inch in thickness and regulated in width according to the size of the coin to be manufactured.

In the melting room for gold and in many other departments of the mints the floors are overlaid with hexagonal latticed iron plates, through which fall the small particles of gold that adhere to the shoes of the operators. The sweepings of the floors are even saved and treated for the gold and silver dust. Director Roberts is authority for the statement that more than \$20,000 is thus saved annually.

The rolling room next receives the metal, which is passed between powerful circular crushers at the rate of 200 bars an hour. The bars come out as ribbons the proper thickness for strips from which to cut the "planchets." These last named are coins in the plain before they receive the stamp or are milled. Before the planchets are cut, however, the ribbons pass through several presses to bring



CUTTING OUT THE COINS.

them to the proper hardness and to cause them to pass muster in the way of width and thickness to the breadth of a hair.

After the planchets are cut the metal begins to look like coin. The round pieces drop from this marvelous machine at the rate of 250 a minute, though when pressed a speed of 280 can be attained. The perforated strips go back to the crucible, while the planchets go to the coining-room. Here they are carefully sorted by girls who are wonderfully expert in detecting those that are under or over weight. The perfect planchets then go to the adjusting room, where they are further scrutinized. Then they visit the milling machine.

The planchet leaves this operation with its edges turned up to protect the device which is stamped on later. Many persons call the fluting or "reed-ing" on the coins the "milled edge." This is an error.

Before the final stroke is given the coin that will make it an obligation of the United States Government it goes to the cleaning-room, for after it has passed through so many processes it is black, greasy and anything but silvery or golden. They are heated to a dull red and dipped into boiling acid, which very quickly removes every trace of grime or grease. The planchets are dried after their acid bath in revolving cylinders filled with sawdust. They come out bright and shining, and are finally hustled into the coining-room, whence they become full-fledged pieces of money.

FOR FOG AND NIGHT SIGNALS.

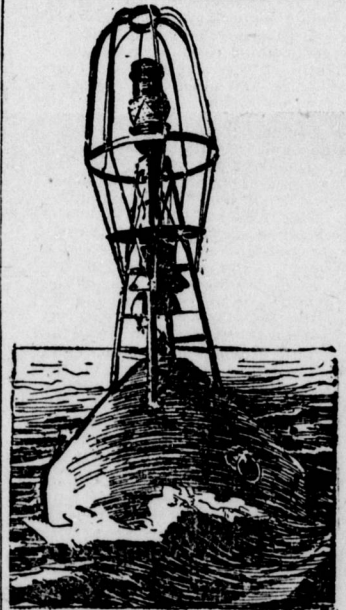
Gas and Bell Buoy, Which Burns Three Months and is Seen Six Miles.

Remarkably effective as an aid to navigation is a gas buoy which at the same time is a bell buoy. It is likely to play an important part in the protection of the shipping of this port, as well as being a most important factor in increasing and developing the commerce of New York. This is so because through the proper use of these buoys this harbor could be made navigable at any hour, at low tide as well as when the tide is full, while fogs and thick and stormy weather would no longer be a bar to the free and expeditious entry of ships of all tonnage.

The height of the buoy over all is eighteen feet. From the water line to the focal plane it measures ten feet six inches, and the diameter of the body of the buoy is seven feet, the total weight being 6860 pounds. The body of the buoy forms the receiver for the compressed gas, and is of sufficient size to give buoyancy for flotation and of adequate strength to safely hold a pressure of 150 to 180 pounds per square inch.

On top of the body is a wrought iron tower about six feet high, surmounting which is a lantern. Surrounding the lantern is a cage for protecting it, and the tower is provided with a platform on which to stand to light or adjust the flame.

Just below the platform is suspended a bell weighing 185 pounds. This bell is sounded automatically every twenty or thirty seconds, or indeed at regular intervals of any duration, all of which may be predetermined. The flow of the gas from the receiver to the lantern furnishes the means of operating the bell. Thus a reliable



NEW GAS AND BELL BUOY.

sounding of the bell warning is secured without any dependence upon the action of the waters, as is the case with the old-fashioned bell buoys.

The advantages of these buoys can be easily understood, for they not only furnish a fixed or flashing light, that can be seen a distance of between six and eight miles, but operate in combination, and most successfully, a bell, thus affording a double protection to mariners. These buoys will burn continuously day and night, from three months to one year, with one charge of gas, and may be rented for about fifty cents a day, including the cost of gas. Buoys of this type without the bell attachment are used very largely by all the civilized nations of the world, and are officially recommended. England has 236 in service, France 223, the United States 134, Germany 98, Holland 60, Denmark 21, Egypt 112, Canada 46 and Italy 15.—New York Herald.

Ridding Havana of Dogs.

Havana used to be overrun by ownerless dogs almost as badly as Constantinople. The many curs were everywhere about the streets. Since the American occupation the work of clearing Havana of these nuisances has been going on, and now the streets are comparatively free. In the last year nearly 6000 dogs had been captured in the streets and killed by the municipal dog-catchers.

The Kaiser's Speechmaking.

A journalist who has often been called upon to make a stenographic report of a speech by Emperor William declares that the Kaiser speaks slowly at first, but gradually gets faster and faster, until it is impossible to follow him verbatim. The reporters, he says, generally write down what they can, and by comparing notes afterward, concoct a tolerably accurate report of what he said.

DR. TALMAGE'S SERMON

SUNDAY'S DISCOURSE BY THE NOTED DIVINE.

Subject: Spirit of Unrest—It is the Cause of Much Unhappiness—Need of the Church and the World is More Stability—Stop Gadding About.

(Copyright 1904.)

WASHINGTON, D. C.—From an unusual text Dr. Talmage in this discourse rebukes the spirit of unrest which characterizes so many people, and shows them the happiness and usefulness to be found in stability; text, Jeremiah ii, 36, "Why gaddest thou about so much to change thy way?"

Homely is the illustration by which this prophet of tears deplores the vacillation of the nation to whom he wrote. Now they wanted alliance with Egypt and now with Assyria and now with Babylon, and now they did not know what they wanted, and the behavior of the nation reminded the prophet of a man or woman who, not satisfied with home life, goes from place to place gadding about, as we say, never settling where or in anything, and he cries out to them, "Why gaddest thou about so much to change thy way?"

Well, the world has now as many gadabouts as it had, in Bible times, and I think that that race of people is more numerous now than it ever was—gadabouts among churches, among religious theories, among churches, among neighborhoods—and one of the greatest wants of the church and the world is more steadfastness and more fixedness of purpose.

It was no small question that Pharaoh put to Jacob and his sons when he asked, "What is your occupation?" Getting into the right occupation not only decides your temporal welfare, but may decide your eternal destiny. The reason so many men and women are dead failures is because instead of asking God what they ought to be or do, they through some vain ambition or whimsicality, decide what they ought to be. Let me say to all young men and young women in homes, in school or college, do not go gadding about among occupations and professions to find what you are fitted for, but make humbly and direct appeal to God for direction.

While seeking divine guidance in your selection of a lifetime sphere examine your own temperament. The physiologist will tell you your physical temperament. Your enemies will tell you your weaknesses. If you are, as we say, nervous, do not become a surgeon. If you are cowardly, do not become an engineer. If you are hoping for a large and permanent income, do not seek a government position. If you are naturally quick tempered, do not become a minister of the gospel, for while any one is disadvantaged by ungovernable disposition there is hardly any one who enacts such an incongruous part as a mad minister. Can you make a fine sketch of a ship or rock or house or face? Be an artist. Do you find yourself humming cadences, and do the treble clef and the musical bars drop from your pen easily, and can you make a tune that charms those who hear it? Be a musician. Are you born with a fondness for argument? Be an attorney. Are you naturally a good nurse and especially interested in the relief of pain? Be a physician. Are you interested in all questions of traffic and in bargain making, are you apt to be successful on a small or large scale? Be a merchant. Do you prefer country life, and do you like the plow, and do you hear music in the hum of a harvest field? Be a farmer. Are you fond of machinery, and are you turning wheels to your fascination, and can you follow with absorbing interest a new kind of thrashing machine hour after hour? Be a mechanic. If you enjoy analyzing the natural elements and a laboratory could entertain you all day and all night, be a chemist. If you are inquisitive about other worlds and interested in all instruments that would bring nearer for inspection, be an astronomer. If the grass under your feet and the foliage over your head and the flowers which shake their incense on the summer air are to you the belles lettres of the field, be a botanist.

If you have no one faculty dominant and nothing in your make up seems to point to this or that occupation, shut your eyes up in your own room, get down on your knees and reverently ask God what He made you for and tell Him that you are willing to do anything He wishes you to do. Before you leave that room you will find out. For the sake of your usefulness and happiness and your temporal and eternal welfare do not join the crowd of people who go gadding about among businesses and occupations, now trying this and now trying that and never accomplishing anything.

There are many who exhibit this frailty in matters of religion. They are not sure about anything that pertains to their soul or their eternal destiny. Now they are Unitarians, and now they are Universalists, and now they are Presbyterians, and now they are nothing at all. They are not quite sure that the Bible was inspired or if inspired whether the words or the ideas were inspired or whether only part of the book was inspired. They think at one time that the story in Genesis about the garden of Eden is a history, and the month after they think it is an allegory. At one time they think the book of Job describes what really occurred, but the next time they speak of it they call it a drama. Now they believe all the miracles, but at your next interview they try to show how these scenes had nothing in them supernatural, but can be accounted for by natural causes. Gadding about among religious theories and never satisfied. All the evidence is put before them, and why do they not render a verdict? If they cannot make up their mind with all the data put before them, they never will. There are all the archaeological confirmations of the Bible brought to view by the "Palestine Exploration Society." There are the bricks of Babylon, the letter "N" impressed upon them—"N" for Nebuchadnezzar, showing that he was not a myth—and the farther the shovel of the antiquarian goes down the more is revealed of that most wonderful city of all time. Professor Heilprecht, of the University of Pennsylvania, presents us tablets found in the far East ratifying and explaining Scriptural passages which were before in mystery. As the builders in Jerusalem today dig for the foundation of new E uses they turn up with their pickaxes the ashes of the animals that were used for burned offerings in the temple ages ago, demonstrating the truth of the Bible story about the sacrifices of lambs and heifers and pigeons. There is the history by Josephus describing an unspiced page scenes which the Bible depicts. On the banks of the Dead Sea there are pieces of the very brimstone that fell in the sulphurous storm that destroyed Sodom and Gomorrah. Make up your mind whether the Bible is a glorious revelation of God or the worst imposture of the centuries. Why go gadding about among infidels, atheists and deists asking questions and surmising and guessing about the authority and value of a book which involves the infinities? It is either a good book or a bad book. If it is a bad book, you do not want it in your house nor have your children contaminated with its teachings. If it is a good book, your eternal happiness depends upon the glowing about its teachings. Once and forever make up your mind whether it is the book of God or the book of villainous pretenders.

So, alas, there are those who gad about among particular churches. No pastor can depend on them for a single service. At some time when he has prepared a sermon after all prayer and all research, putting nerve and muscle and brain and soul into its very paragraph, these intermittent attendants are not there to hear it.

But, oh, how the gadabouts injure the churches! Instead of staying in their own prayer meeting or Sunday school or church, they go to other prayer meetings and Sunday schools. I met them on the street going the wrong way on Sunday morning and evening, and I accost them in the words of the text, "Why gaddest thou about so much to change thy way?"

My text also addresses those who in search of happiness are going hither and yonder looking for that which they find not. Their time is all taken up with "musicales" and "progressive eueches" and teas and yellow luncheons and "at homes" and dances and operas and theatres, and instead of finding happiness they get pale cheeks and nervous indigestion and neuralgia and exhaustion and an abbreviated lifetime.

There is more splendid womanhood sacrificed in that way in our cities than in any other way. The judgment day can only reveal the awful holocaust of jangled nerves and the suicidal habits of much of our social life. The obituary of such reads well, for the story is suppressed about how they got their death while standing in attire of gauze waiting for the carriage on a raw night on the front steps.

While in their lifetime they possessed all the ability for the relief of pain and impoverishment, yet they have no time for visitation of the poor or to win the blessing of such as comes upon those who administer to those who are ready to perish. Enough flowers in their dining halls to bewitch a prince, but not one tuft of heliotrope to perfume the room of that rheumatic on the paralytic bed, who the breath of one flower would be like the opening of the front door of heaven.

Find me one man or one woman who in all the rounds of pleasure and selfishness has found a piece of happiness as large as that half dollar which the benevolent and Christ-like soul of the paralytic on the bed of that mother whose children are crying for bread. Queen Victoria, riding in triumph through London at her jubilee, was not so sublime a figure as Queen Victoria in a hut near Balmoral Castle reading the New Testament to a poor dying man.

Let all the gadabouts for happiness know that in kindness and usefulness and self abnegation are to be found a satisfaction which all the gauds of the world aggregated cannot afford.

Among the race of gadabouts are those who neglect their homes in order that they may attend to institutions that are really excellent, and do not so much ask for help as demand it.

I am acquainted, as you are, with women who are members of so many boards of direction of benevolent institutions and have to stand at a booth in so many fairs and must collect funds for so many orphanages and preside at so many philanthropic meetings and are expected to be in so many different places at the same time that their children are left to the care of irresponsible servants, and if the little ones wanted to say their prayers at their mother's knee they would never say their evening prayers at all. Such a woman makes her own home so unattractive that the husband spends his evening at the clubhouse or the tavern. The children of that house are as thoroughly orphan as any of the fatherless and motherless little ones gathered in the orphanage for which that gadabout woman is toiling so industriously.

By all means let Christian women foster charitable institutions and give as much of their time as they can spare, but the first duty of that mother is the duty she owes to her home.

The book of Samuel gives a photograph of Mephibosheth lame in both feet. When we see any one lame in one foot or lame in both feet, we always wonder by what accident he was lamed. Perhaps it may have been in battle for his country, or he may have been run over by some reckless driver or some explosion did the damage. So you wonder how Mephibosheth became lame in both feet. The Bible for a good reason gives us the particulars. It tells us that when he was a child his nurse dropped him. She must have dropped him very hard, for he never again got over the effect of that fall. Long after the accident we find him at King David's table, but still our attention is called to the fact that his feet were crippled, though so long before his nurse dropped him. And mark you that to-day in all departments of life there are those crippled in habits, crippled in morals, crippled for all time. The accident happened in this way: Their mothers were gadabouts and neglected their homes, and the work of training them was given over to incompetent nurses, and the nurses let them fall into bad habits, told them degrading stories and gave them wrong notions of life and practically ruined them.

But Mephibosheth was taken by King David into the palace and seated at the royal table, so by the grace of the heavenly King these unfortunate ones may yet be seated at the King's table in the King's palace, though the nurse did drop them so that morally they were lame in both feet.

Now, what is the practical use of the present discourse? This: Whereas so many have ruined themselves and ruined others by becoming gadabouts among occupations, among religious theories, among churches, among neighborhoods, therefore resolves that we will concentrate upon what is right thought and right behavior and waste no time in vacillations and indecisions and uncertainties, running about in places where we have no business to be. Life is so short we have no time to play with it the spendthrift. Find out whether the Bible is true and whether your nature is immortal and whether Christ is the divine and only Saviour, and whether you must have Him or be disappointed and whether there will probably ever be a more auspicious moment for your becoming His adherent, and then make this 12 o'clock at noon of November 25, the most illustrious minute that you will ever have passed since the day of your birth—until the ten millionth cycle of the coming eternity, because by complete surrender of thought and will and affection and life to God, through Jesus Christ you became a new man, a new woman, a new soul, and God the Father and God the Son and God the Holy Ghost and all angeldom, Cherubim and Seraphim and archangel became your allies.

Found among the papers of the learned Samuel Johnson was a prayer inscribed with the words, "When my eye was restored to its use," and it is a great moment when we get over our moral blindness and gain spiritual eyesight. That is a moment from which we may well date everything. All the glory of Henry II. of France vanished when in a tournament a lance extinguished his eye, and the worst disaster that can happen to us is to have the vision of our soul put out. If you have gone wrong so far, now go right. If the morning and noon of your life have been a moral defeat, make the evening of your life a victory. The battle of Marengo, lost at 1 o'clock in the afternoon, was gloriously won at 6, and in your life and mine it is not too late to achieve something worthy of an immortal. Start right and keep on. Do not spend so much time in tacking ship. David felt the importance of fixedness of purpose when he cried out, "My heart is fixed, O God, my heart is fixed!"