

MRS. GLADSTONE.

Something About the Noble Wife of England's Grand Old Man.

No woman lives a more useful life than the wife of England's greatest man. Although seventy-six years old, Mrs. Gladstone has still sufficient energy to reflect the motto adopted by her when only a little girl: "If you want a thing well done do it yourself."

Her father, Sir Richard Glynn, Bart., of Hawarden Castle, was in the habit of saying that even as a child, this pet daughter evinced a remarkable talent for leadership; and subsequent events have proved that the baronet's impression was correct.

While Mrs. Gladstone is in perfect sympathy with her husband and ever ready to be of service to him, yet she is more interested in raising the moral and social standard of those around her than in anything else. For years she has not only encouraged horticulture and floriculture among the cottagers in her neighborhood, but has personally assisted in the selection of plants and the laying out of plots.

She has an abundance of tact and in argument she is quite as logical as her husband. During a prolonged interview with a particularly combative and unreasoning woman on one occasion her husband is said to have remarked: "Well, now, this is rather unprecedented, you know. My wife usually talks over the most pertinacious of them in less time than this. But she'll beat," he added, laughingly, "for she never fails."

Being quite domestic in her tastes, Mrs. Gladstone is highly delighted to find this talent among her friends.

In the selection of these this lady is never influenced by the accident of birth, wealth or social position. Her two requirements are moral worth and brains. Thus the proudest home in England is always open to professional people.

In 1862, during the cotton famine, Mrs. Gladstone worked night and day to alleviate the misery. She established an Orphan's Home at Clapham in 1866. This afterwards became a home for incurables.

Mrs. Gladstone's social, educational and charitable projects have always been warmly seconded by her husband, who is more proud of his wife than of anything else in the world, not excepting his own honorable and brilliant career.

The following story will illustrate this lovely woman's great heart: "O, if I could only do something for you!" a poor singer whom Mrs. Gladstone had been able to render a great service once exclaimed. "That is easy, my dear," the lady responded. "Easy for me to be of service to you?" the lady exclaimed, the grateful tears flowing down her cheeks.

"Yes; by doing something for some body else. A kind word, a bit of practical advice, a helping hand—even if there isn't much in it," Mrs. Gladstone replied with a smile, "will always be doing something for me. And more than that my child, it will be doing something for yourself and something for God."—*London Letter.*

THE STEWART MILLIONS.

How the Widow of the Dry Goods King Spent Her Last Years.

The moral about "the curse of riches" has never been more forcibly painted for the general public than in the proceedings to break the will of Mrs. A. T. Stewart. When her husband died the millionaire's wife, who had had but little comfort and no happiness up to that time, might have reasonably looked forward to somewhat of a royal time during the rest of her four-score years. But the poor old lady, desolate and alone, found life as hard a burden as ever. Her husband left her an estate of a dozen millions or more, yet at the end of the first year she found herself in debt, and her indebtedness kept growing to the end of the chapter. As she grew poorer the Hiltons grew richer, and yet never for a moment did they let her out of their grasp or from beneath their eyes. The testimony of the old book-keeper tells a story of fact that outdoes any romance. He says that the day A. T. Stewart died his confidential friend and adviser, Judge Hilton, went to the office and examined his books, not waiting until the millionaire's flesh grew cold. Then he took thirty per cent. from the \$10,000,000 or \$12,000,000 at which the dead man's share in the business was valued, and proceeded to sell the latter to himself for \$1,000,000 left him as a legacy. But this \$1,000,000 was never paid to Mrs. Stewart; it was "owed" to her, and meanwhile she was brought in debt for nearly all the money she wanted. The poor old lady was helpless; she had none but the Hilton family within reach; and so she drifted on through life, hampered for money in the midst of wealth, and died a gentle pauper. Many a writer used to speak of Mrs. Stewart's great riches—of her picture-gallery, her jewels, her bric-a-brac and her "laces"—and women all over the land envied the great millionaire's widow her independent position; and all the time the woman who lived under guard in her white marble palace on Fifth avenue might have been willing to exchange places with the wife of a mechanic who pushed her baby-carriage past her windows, and who tired and did her own work in a hired tenement. The hearing has not been a pleasant one for Judge Hilton. It has brought out what I have hinted heretofore in this correspondence and have been certain of for five years. Stewart was a cruel man to his employees; an employe has signally avenged his cruelty.—*N. Y. Letter.*

A MISTAKEN NOTION.

The Obligation Due From the Nineteenth Century to the Eighteenth.

There is always to be heard and read, under one form or another of expression, a great deal of indulgence in mutual congratulation as to this nineteenth century of ours, and all of its accomplishments, its tremendous intellectual force, its wonderful achievements, while we speak and think of it as though the nineteenth century were something that has suddenly wheeled out of space, unrelated to any thing that had gone before, wheeled out as the new burning star in the northern crown did, as something integral without any debt to the past. But in reality the nineteenth century has no such separate and individual existence; it is the last length of the growing stem, and if the life and juice of the stem have run into it more freely, so that it blossoms more generously, it is the other lengths nearer the root that have conducted to it that life and juice; and thus much that has come to perfection in the nineteenth century is indeed but the completed force of the eighteenth, and even of others that have preceded that. Had not Franklin, a hundred years or so earlier, sent his kite into the air, would Morse have sent speech in viewless fire through the air, would Bell have carried a whisper after it around the earth, and the various electricians have kindled their electric lights rolulgent at midnight as the moons of the tropics? If Watts had not watched his tea-kettle lid tremble and dance and lift with the steam beneath it, would the prodigious motive powers that move the commerce of the world have ever been brought into being? Every thing in life is the result of something that has gone before it. We have no actual right to attribute any great doing to ourselves; we are like the sons of rich men whose money has been made for them, deserving or undeserving, and who are only required to let it lie at interest in order to receive income; we are simply the heirs of "all ages in the foremost files of time."

It is not so flattering to our vanity to acknowledge our debt to those that have preceded us, those for whom possibly we entertain some indifferent disdain, as like Mr. Boudierby, to imagine and proclaim ourselves self-made. But it is interesting, now and then, to get a glimpse of the truth, and to understand, not only as a truism as respects the passage of time, but as a fact respecting the work, discovery and general greatness of this era, that there never would have been any nineteenth century if also there had not already been an eighteenth—Hibernianism though the statement may be. Great thoughts have their fruits in great deeds; the eighteenth century was full of great thoughts that have come to fruit in the nineteenth.

In all this we have our reckoning to cast up. We fancy that the emancipation from much that is sordid or belittling, if not degrading, is due solely to the influences of to-day; rather 't is due, we shall find, to the action of to-day, the influences were started long ago. The man who walks the street to-day, educated, comfortable, and at large liberty in the matter of property, labor and movement, would never have been so if the germ of the idea had not stirred far back in the dark, and undergoing all the conditions of growth, and not to-day come into the open light. If in her heart the woman of the eighteenth century had not rebelled against ignorance, against the withholding of her property from her, against being held under compulsion as a piece of property herself, against many of the injustices and inequalities to which very largely through want of observation and thought, she was then subjected, the woman of the nineteenth century would still be where her predecessor was when the first idea of discontent re-monstrated within her—that discontent that grew to open rebellion, and received its reward long after she who first held it was dust and ashes.

We are all of us greatly in the habit of looking down from our scornful height of to-day upon the past as something buried in mists of ignorance, and slothful with want of effort. It might better become us to think of what the past has done for us, step by step, and day after day, till all that it had not we have in full measure. The same habit leads us to despise even our own past as individuals, as if never till now had we attained wisdom, forgetting all about the fact that the despising individual has no more claim upon the desirable future than it has upon this valued present or the disdained past.

We are not of those who in their scorn, or affected scorn, of the present—usually only a dissatisfaction with the duties brought to them by the present—make a fetish of the past and fall down and worship it. But it seems to us that the present will be only the nobler for regarding the claims to respect belonging to the past, will be the less injuriously puffed up in its own conceit—always a hindrance like any other form of puffiness—and will be the fitter to help that future to which in its turn it is so soon itself to play the part of the past.—*Harper's Bazar.*

The earth is prolific and appears as if it would produce crops under any circumstances. And yet it is very exacting. If all of the other conditions for a profitable crop of corn, potatoes, or other plants are fulfilled in the soil, except if it be deficient, the crop will be a failure. Supply the potash and the crops will be abundant.—*Iowa State Register.*

It has been shown by experience that a pig digests a larger percentage of grain, converting it into animal increase, than a steer, cow or sheep.

AMERICAN LINENS.

A Branch of Manufacture That Might Be Developed in This Country.

It is a mistake to suppose that there is any radical difference between the flax fibers grown in different countries. The variations in result depend not on original quality, but on the treatment of the material. The flaxers produced in this country are equally fine with those grown in Belgium and Ireland, and the length is the same in each case. The ultimate fibers are only about two inches long. They are lapped or shingled upon each other in the process of growth, forming long, hair-like filaments which have often been mistaken for the fibers themselves. The coarser the flax the more firmly are these filaments cemented together by glutinous matter, requiring a greater amount of effort in the separation. That is, the process of retting may be so conducted as to render the product from different countries and the yield of different years precisely equal in quality and equally well adapted to the manufacture of linen. Furthermore, the long-sought "mottled flax" is nothing else than the short fibers separated mechanically from their gummy blending into filaments. It has also been ascertained that the formation of fiber in the plant begins about two inches above the root, so that pulling the stalk out of the ground confers no advantage that may not be gained by cutting off the stem just above the surface of the soil.

After removing the seed the retting process is employed for the purpose of getting rid of the sap. This involves fermentation, after which the straw must be thoroughly washed and dried. The fiber is now combined only with "boon," which is removed by breaking and scutching. The modern efforts to get rid of the sap by steeping and boiling in solutions of caustic soda, sulphuric acid or other chemical reagents have failed, as it is found that these chemicals, and even the operation of boiling, destroy the strength and luster which form what is called in Ireland "the nature of the fiber." These processes take out natural oil, the result being that the material will not spin. The process of retting may be correctly and expeditiously performed by keeping the steeping tanks in a warm building, in which a uniform temperature is maintained by the use of steam. This obviates the peculiarities due to climate, if any there be, the steam making an artificial climate, which can be obtained equally well here as in Western Europe.

It is true that the Courtauld and other high-priced flax are grown only in certain localities and retted in waters of peculiar qualities of which are supposed to give them their superior rich and glossy appearance. But if the air in this country were simply to produce at first an article equal to the poorest that is imported it would surely pay well. That poorest stuff, used chiefly for the making of twines, sells readily at eight cents per pound in New York, which is equal to nearly two cents per pound for the stalk, as a ton of the plant will make not far from five hundred pounds of good flax fiber. The cleaning or scutching is performed to-day in the same crude manner as ages ago, twenty-five pounds of clean flax being an ordinary day's work. A machine that would clean twenty times as much was successfully operated in New Jersey for several years, but stopped recently because it was not found possible to obtain the required four tons of straw per day to keep it running, though \$25 per ton was willingly paid for it. Yet many thousands of tons of straw are each year burned, though a man with two horses and a harvester and binder could easily cut ten acres per day close enough to the ground for the purposes of the manufacturer, against half an acre, which is the stint of a worker who pulls the stock up by hand in Europe.

There would seem to be no good reason why the flax industry should not be developed in this country as successfully as that of cotton was several years ago. Nothing but ignorance stands in the way of making American linens equal to all ordinary requirements and effecting a vast increase in the value of the products of Western soil.—*Chicago Tribune.*

Physiology of Pleasure.

The question has often been asked as to what constitutes the greatest pleasure, and who is the happiest man, but it is obviously one that does not admit of solution. The intensity of the pleasurable sensation is a matter of temperament and surroundings, but, ceteris paribus, the happiest man is he who possesses the greatest sensibility, the most powerful imagination, the strongest will and the least number of prejudices. The men are rare who can, by an effort of the will, arrest the oscillations of sorrow and allow only cords of pleasure to vibrate. Pleasure is the mode of sensation, never the sensation itself, and it is not a paradox, but an incontrovertible physiological truth, to say that no pleasure exists which is essentially or necessarily a pleasure. The ideal of perfection in humanity would be to efface pain from the list of sensations, and to give all men the maximum number of pleasures. All the rest, as the philosopher said, is but dream and vapor.—*Medical Press.*

An Unreliable Young Man.

Father—You have given up your position again, I see.
Son—Yes, father.
Father—That's the third or fourth time this year you have left your position. I don't think you would stick to your business if you did nothing but sell paper.—*Texas Siftings.*

HUNTING WILD BOARS.

A Barren Sport Which is Dangerous as Well as Exciting.

Wild boars were reported to us by a neighboring farmer as having been seen in a large patch of canes by the river. As these wild hogs do a great deal of damage to the growing crops, the farmers are always prompt in letting the white hunters know whenever the pests make their appearance. So off we started for the fray very early one morning before sunrise, this being the correct time to enjoy the sport. The beaters were previously sent forward to surround the brake. We were mounted on tams, diminutive but stout ponies, which are far better suited for this sport than horses are. Our weapons of offense consisted of light yet strong, well-balanced lances or spears, ranging from five feet upward in length, made out of bamboo or lancewood, which latter somewhat resembles ash in general toughness. These spears are fitted with steel heads ground to a sharp point, not barbed. A keen-bladed hunting-knife, to administer the coup de grace if necessary, completed our outfit. Most of these knives came from India, where very fine cutlery is made, the steel being finely tempered and flexible. I possessed an invaluable one, which I had brought from Afghanistan, captured from a hill chief during one of the wars in that country. A griffin, as a new arrival is called in India, has to take several lessons in the use and management of this boar-spear, when mounted, before he can venture to take part in the danger and excitement of pig-sticking. It is a hazardous sport at the best, but doubly so for a new-comer. When we reached the place, which was just beyond one side of the brake where the boars were lying perdu, we ordered the beaters to go ahead. They formed a semi-circular line around three sides of the brake a few paces only from each other, then proceeded slowly through the canes, the circle gradually straightening, beating sticks together, and shouting. The boars, alarmed, ran out of their concealment by the only way open, which was the side where their mounted enemies awaited their coming. When the tusked monsters appeared each cavalier selected his boar, and rode with couched spear full at him. If the boar was missed, or only slightly wounded, he in turn became the assailant, and it required much skill in horsemanship to avoid the savage onslaught. He will, with one vigorous push, rip up your pony's belly, perhaps mangling one of your legs with his tusks, which are quite as dangerous weapons against you as your spear is to him. The whole secret of successful pig-sticking lies in the knack and practiced adroitness with which the boar is manipulated. You must not gallop at the boar full tilt with spear held firm; you would not be able to stand the shock. The spear would probably be shivered into splinters or broken off short in your hand, and you roughly hurled from your saddle on to the earth, where the infuriated hog would soon gore you to death. You must be careful on striking the boar dexterously to withdraw the spear by a quick turn of the wrist as you gallop on. A skillful hunter will, with one well-aimed thrust, pierce the boar's heart, killing him instantly. We managed to kill the whole drove, numbering seven, that morning, without any casualty to ourselves. The tusks are very handsome and are made into a variety of articles, such as hilts of daggers, handles of hunting and carving knives, paper knives, inkstands, and candlesticks inlaid with silver. The workers in ivory carve with much good taste and execution, the figures especially being well done and lifelike. It is interesting to watch these men at work; they squat on their hams, curving their limbs around and holding the ivory between their feet, using their toes, which are long and flexible, as fingers. Thus their hands are left free to use in the actual work of carving. They take a long time to carve any work of special importance. A fine set of ivory chessmen, carved in character, each one a finished representative of the piece, often takes over a year to complete. Some handsome sets have even taken longer. But time with Orientals is not valued. The workman is making his living and putting in his allotted span of existence upon earth, and that is all he cares for.—*Charles Aubrey, in San Francisco Chronicle.*

Copperas as a Fertilizer.
Favorable reports from France regarding copperas as a fertilizer have caused considerable inquiry of late. Copperas has been recommended from abroad as a valuable dressing for different crops. It is claimed that copperas prevents mildew, and a very weak solution destroys moss, etc., the spores of mildew. An explanation of the favorable effect of copperas is that it increases the power of the plant for assimilation; there is a large percentage of fiber and nitrogen, but the increased crops are not due to a supply of sulphuric acid by the copperas, as super-phosphates containing an abundance of the acid proved to have less effect. One of the Connecticut station bulletins cites an instance where copperas was used as an experiment in this country on corn with good results. The chemist of the station, while approving of more experiments in this direction, does not believe that copperas will be found generally helpful. He points out that it will be injurious to plants when applied in too large quantities, but that it may be found of advantage on rich garden land that has had an abundance of other fertilizer material for many years. The general belief in this country is that copperas as a fertilizer has little if any value.—*N. Y. World.*

PUNGENT PARAGRAPHS.

A nasturtium three years old, with a spread of twenty-five feet and a continual show of blossoms, is reported in a Boston conservatory.

"Let bygones be bygones" is no sort of a motto for a woman. She would turn her head around to look after a stylish bonnet if it broke her neck.—*Burlington Free Press.*

A young wife can be a good housekeeper without bothering to polish up the spare change in her husband's pocket every time she cleans up the rest of the silver in the house.—*Somerville Journal.*

"Hello, Jones, where are you going?" "Getting ready to develop my gold mine." "What machinery do you choose?" "None. I'll take my wife along. She'll be sure to find the pockets if there are any."

The only man who was ever known to keep a cash account of his private expenses straight for a year died the year afterwards, and the doctors said his death was caused by mental overwork.—*Journal of Education.*

Nearly all the words that begin with s-l-i are unpleasant ones," explained a teacher to her class. "Can any one of you think of an example?" "I can," shouted a small urchin, holding up his hand, "slipper."

The story from Indiana that a boy had found a nest of gold and silver coin while "grubbing" will be accepted with caution by other boys whose fathers have patches of ground to "grub."—*Nashville American.*

The sweetest of sweet girl graduates blooms only for one season. The society belle fights for her place year after year, and knows so many bald-headed old fellows she can keep in tow that she makes the way of the debutante difficult.

Horace—"I say, David, how old do you suppose Miss Jones is? Her aunt says she is only twenty-one." David (who knows a little of business)—"Aw, yes, Horace, marked down from thirty-three; to be disposed of at a bargain, don't you see?"—*Life.*

Gwendolen (in shady path)—"Won't you take my hand here, George?" George—"No; somebody'll see us and think we're pretty love-sick for a married couple." Gwendolen (coaxingly)—"They won't think we're married at all; they'll think we're only engaged."—*Harper's Bazar.*

John, dear, what would you do if I were to die?" Husband—"Don't speak of such a thing. I would be desperate." Wife—"Do you think you would marry again?" Husband—"Well, no; I don't think I would be as desperate as all that."—*Epoch.*

Don't you think that the majority of people are a little off?" "A majority? Why, bless your heart, everybody's crazy, more or less, and has been from the beginning—with the possible exception of Adam, and I rather suspect there was an hereditary taint in his blood."—*Boston Transcript.*

The man who casts the vote of the whole rolling-mill the fellow who agrees to deliver a precinct at the proper time, the chap who carries the ward around in his vest pocket, the great man who controls the county, is now standing on the street corner where he may be seen of men. Take notice of him, my son, and watch him well when he is counted by and by. You will then observe that he aggregates one vote, and you won't have to bid high to get that one.—*Burdette.*

How to Make Iced Tea.

Iced tea is constantly growing in favor, and is now considered a standard beverage in many homes. Some enterprising grocers also furnish a trial cup to their patrons, and in this way sample their teas. The question was once asked us, "How is iced tea made?" and while some of our readers may smile at the question, yet we assure them there's nothing very ridiculous in it. To be sure it is only to drop a piece of ice into a goblet of tea and the thing is done. But then, the tea itself! It isn't every one who knows how to make that tea, and to them this hint will not be unprofitable. Put the tea in an earthen or agate-ware pot and set on the back of the stove where the pot and contents will get thoroughly warm; then pour on water that has been freshly boiled, and boiling thoroughly at the time; let it stand on the back of the stove for fifteen minutes, by which time the tea will be perfectly drawn. If you desire the tea to be perfect and to remain so, separate the liquid from the leaves by pouring it off into another vessel. If your intention is to spoil it, you have only to boil it, and let it remain with the leaves in the pot.—*Table Talk.*

Sudden Loss of Memory.

Sudden forgetfulness is not an unusual thing in the pulpit. Aubrey, the antiquary, says that when he was a freshman at college he heard Dr. Sanderson, Bishop of Lincoln, well known for his work, "Nine Cases of Conscience," break down in the middle of the Lord's Prayer. Even the great French preacher Massillon once stopped in the middle of a sermon from a defect of memory; and Massillon himself recorded that the same thing happened through excess of apprehension to two other preachers whom he went to hear in different parts of the same day. Another French preacher stopped in the middle of a sermon and was unable to proceed. The pause was, however, got over ingeniously. "Friends," said he, "I had forgot to say that a person much afflicted is recommended to your immediate prayers." He meant himself. He fell on his knees, and before he rose he had recovered the thread of his discourse, which he concluded without his want of memory being perceived.—*Chambers' Journal.*

MISCELLANEOUS.

Basic slag, the refuse of steel works when freed from iron and reduced to powder, proves to be a valuable fertilizer.

"Do they miss me at home?" is the favorite angling of the Burlingtonian whose wife and grown up daughters are fond of pegging plates and chunks of coal at him.—*Burlington Free Press.*

Some laborious statistician figures it out that in each minute in the United States, night and day, all the year round, twenty-four barrels of beer have to go down 12,000 throats, and 4,800 bushels of grain have come to bin.

William Penn, when laying out the city of Philadelphia in 1682, is said to have modeled it on a design of ancient Babylon, and expressed a desire that Philadelphia should be a "green country town, which would never be burnt up and always wholesome."

Sacramento, Cal., is virtually a city without laws. In a trial a few days ago the fact was brought out that the ordinances now used were never ordered or accepted by the City Trustees, or approved, as required by law, in any newspaper, and there is no record to show that they were adopted.

Uncouth Young Man—"Ray I kiss you, Miss Jones?" Miss Jones (indignantly)—"What do you mean, sir?" U. Y. M. (surprised)—"Don't you know what a kiss is yet? Well, you are the funniest girl I ever saw. Guess you'd better study the dictionary awhile. Good evening."—*Toledo Bee.*

Well, James," said the chippodist, "we must keep up with the times. Look at this new sign." "Capital!" exclaimed the assistant. "That will surely catch the public." Then he went out and tacked up a sign that read: "Corns Removed While You Wait."—*Detroit Free Press.*

According to the *Engineering and Mining Journal*, the Panama Canal uses about 100,000 tons of coal a year, and buys almost exclusively the best so-called "smokeless" Welsh coal. Owing to the great number of engines at work on some sections of the canal and the heavy atmosphere, the "smoke nuisance" is very great, and the use of anthracite has been suggested.

A nine-year-old girl, spending the summer in a country boarding-house, was a favorite with her fellow-boarders on account of her beauty and sprightliness. One of them was so devoted that his attentions became annoying to her. One day she said to her mother, "Do you think Mr. Brown ought to call me a puny devil?" "Why, no, my dear, of course not. But are you sure he did?" "He called me an imp; and I looked in the dictionary to see what it meant, and it said a 'puny devil.'"—*Home Life.*

A true story of the perplexity of a graduate of the Boston English High School over a word that he found occurring with vexatious frequency in the foot-notes of a work that he read recently: "Do you know," he asked, "who bid, the author, was? I've been reading a book that has lots of extracts from his writings in it, and I can't find his name in any encyclopedia." The young man was told that he was a relative of the distinguished author, Anon, who has written some of the most beautiful things in the English language.—*Boston Transcript.*

A lawyer living in a town near Waterbury Conn., states a fact which well illustrates the thrift and frugality which characterize many of the old families which have not been touched by modern extravagance and love of display. In that town three estates have been settled within a few months aggregating property to the amount of \$700,000, and yet he says if all the household furniture of those three families had been sold at the best possible price the amount received for it would not have amounted at the outside to over \$300. It is too often the habit now to have thousand-dollar furnishings for hundred-dollar estates.

A POWERFUL MAGNET.

The Almost Incredible Force Necessary to Overcome Its Attraction.

A most interesting electrical experiment has recently been made at the engineering station of the United States army at Willett's Point, L. I., by Major W. R. King, of the Engineer Corps, by which he transformed two fifteen-inch Rodman guns, weighing 50,000 pounds each, into an immense electro-magnet. The guns were placed side by side, and joined at the breech by a number of pieces of railroad iron. The guns were then wrapped separately by fine insulated copper wire, over eight miles of it being used. The wire used was an old torpedo cable consisting of forty small insulated wires bound together into a cable of about three-eighths of an inch in diameter. The electricity was obtained from a twenty-are light Weston dynamo.

A number of experiments were made with this most powerful magnet, and it was found that a force of 20,600 pounds was necessary to overcome the magnet's attraction and draw the armature from it. A string of four fifteen-inch shells, weighing 320 pounds each, was suspended from one of the guns, and was discovered in the course of the experiments that there was a point in the bore of the guns, and seven and one-half inches from the muzzle, where the magnet repelled instead of attracting. Small pieces of iron were propelled from it with force, while a shell placed at that point was rolled slowly out of the gun until it dropped from the muzzle and was caught by the attracting force at the mouth of the gun.

It is thought that the power of the magnet would have been greatly increased if more wire had been used in the wrapping and if more railroad iron had been used in connecting the guns at the breech.—*N. Y. Mail.*