

KEEL OF DEFENDER.

Preparations for Its Casting Under Way at Bristol, R. I.

Working Plans for the Many Fittings of the New Yacht Being Closely Guarded—Texas Cotton to Be Used for the Sails.

At the boat shops at Bristol, R. I., the other day it was learned that the keel of the cup defender will not be cast for three, if not four, weeks. By that time the keel mold for the new defender will be ready on the floor of the shop, and there is nothing now known to prevent the running of the lead two days later. This would indicate that the hot metal would be pouring into the mold on or about Thursday, December 27.

The working plans for the many fittings that will enter into the construction of the new craft are meanwhile being printed and attached to boards. The prints are guarded with as much care as if they were gold dollars, and very few of the many employes have yet had a glance at them. As regards the sails, which are now well begun, there have been rumors that the grade of cotton duck was the production of South Carolina, but from the appearance of the threads of the canvas the head sails of the boat are of similar material to that used in the make-up of the head sails for the Columbia in 1899. The market designation is Texas upland cotton, but it is a special weave. It has been found by experience that the Texas product, when woven especially close, is as good for racing sails, if not better, than the South Carolina cotton. The muzzling process with which the new defender's canvas will be treated causes the weave to be more compact, and gives the sails good form, as was demonstrated on the racing sails of some of the 70-footers last summer. While there are some points to indicate that the new defender will be clothed with a larger amount of canvas than was the Columbia, it is believed that the area of the sails now being made will not be much greater. Another important matter that has had its share of discussion at Bristol is the use of all-steel spars, with the exception of the bowsprit, which will undoubtedly be of wood. The introduction of a steel topmast would be a novel feature, especially if that spar is to be of the telescoping variety. If such a spar is introduced at so high a point above the load water line it certainly will eliminate weight to quite a degree.

No work has been begun as yet on the building of the mold for the lead keel of the new boat, notwithstanding reports to that effect. The frames for the mold were shaped out three weeks ago, and the act of setting them up and piecing them from the inside will be only a three days' job when it is begun.

A NOVEL DINNER.

Archaeologists See Foot of Babel in Chocolate and Hot Bread in the Shape of Ancient Bricks.

Dr. Henry S. Morton, president of Stevens Institute, gave a dinner the other evening at his residence, 529 River street, Hoboken, N. J., which is said to have been the most novel in that city's history. Dr. Morton's guests were a dozen archaeologists of international reputation.

Among the guests were Dr. John P. Peters, of the University of Pennsylvania, and Dr. Edgar James Banks, formerly United States consul at Bagdad, Turkey. Dr. Peters and Dr. Banks have earned an enviable reputation in the field of archaeology.

One of the novel features of the dinner was the centerpiece, made from chocolate. It was nearly four feet high, about four feet square at the base, and represented the ancient tower of Babel, as nearly as can be reproduced from ruins unearthed. Arab workmen, donkeys and mules, in confections, adorned the tower and the space around it. The sands of the desert were represented with chocolate.

At the plate of each guest was a small brick of bread, typifying the bricks made in the time of Sargon the First, who ruled on the banks of the Euphrates 3,800 years ago. The cards indicating the place of each guest bore their names in cuneiform script, with a translation. The fees were served in the form of camels.

BABY DIES OF OLD AGE.

Young Woman in Virginia the Victim of a Remarkable Malady.

Fannie O'Kennon, daughter of Peter O'Kennon, who died at her father's house in Matoca, a small manufacturing town in Chesterfield county, near Richmond, Va., the other morning, was, the doctor says, a victim of old age, although only in April she had celebrated her twentieth birthday. Her case was remarkable. She had not grown in stature since she was two years old and her faculties at the time of her death were those of a child. She was two feet two inches tall and could speak only such words as she was able to articulate at the age of two years.

Miss O'Kennon played with picture books and toys and in all her actions was a perfect child. Her face was wrinkled like that of a woman who had lived many years.

Paper Out of Tobacco. The ribs of tobacco leaves are among the substances out of which paper is made.

Consumption in Norway. About 7,000 of the inhabitants of Norway die every year of consumption.

ALASKA FUR GROWS SCARCE.

Hunters, Arrived at Tacoma, Report Ruthless Slaughter of Animals.

Ruthless slaughter by hunters and prospectors of foxes and other fur-bearing animals in Alaska during the past three years has reduced the fur output of that territory 50 per cent. Dealers say fur-bearing animals are passing away so rapidly in Alaska that, like the dying Indians, they will soon become extinct unless the national government takes some steps for their protection. The great decrease in output is partly due to the fact that fires started by miners have burned over great tracts of country formerly filled with fur-bearing animals. Fires have driven full-grown animals into inaccessible parts and have burned to death young animals, which are usually most valuable for producers. Indians are not as energetic at hunting as they formerly were. This is due partly to the growing inaccessibility of animals and partly to the fact that with the advent of the white men Indians have become more lazy and prefer to do odd jobs for miners than to shoulder their guns and hunt. These facts are brought out by fur dealers now returning from their general purchasing trips along the Alaskan coast. They expect prices will rapidly increase, since Alaska has been for years the greatest fur-producing district in the world.

HAS FAITH IN THE RICH.

Massachusetts Bishop Says They Can Best Be Trained in Office.

Bishop Lawrence, of Massachusetts, in an address at the Episcopal conference at Providence, R. I., declared that, while the rich are becoming richer, the poor are becoming poorer. Then he declared that he would sooner trust a rich man in office than a poor man in office with the rich man on the outside.

"In the long run," he said, "it is only to the man of morality that wealth comes. We occasionally, like the psalmist, see the wicked prosper, but only occasionally. The savings are in the hands of hundreds of thousands of hard-working men, and scores of thousands of men whose incomes ten years ago were from \$2,000 to \$5,000 have now from \$5,000 to \$10,000.

"As to the multi-millionaires, only a small fraction of their incomes can be spent for their own pleasure; the bulk of what they get has to be reinvested and becomes the means whereby thousands earn their wages. They are simply trustees of a fraction of the national property. When, therefore, the question is asked: 'Is the material prosperity of this nation favorable or unfavorable to the prosperity of the people?' I may say with emphasis: 'In the long run and by all means favorable.'"

PREPARED FOR HER FUNERAL.

Woman Foretold Her Death, Arranged Flowers for Her Coffin, and Died.

Mrs. Catherine Ault, aged 44, of Kokomo, Ind., the other day told her friends that her time had come to die. She was afflicted with asthma, but her case was not considered at a dangerous stage. Mrs. Ault had a collection of flowers on exhibition in Knights of Pythias hall, at Galveston, eight miles northwest of Kokomo. She took the flowers from the hall to a church, remarking that a funeral would occur there during the week, and those particular arrangements would be appropriate for the occasion. She arranged the collection near the pulpit in an oblong square the size and form of a coffin. On leaving the church she said to a friend: "Those are for my coffin, and I will be there this week." She then closed various business matters with neighbors and went home. She retired early, saying to the family: "Do not call me for breakfast." In the morning she was found dead in bed. Death was from natural causes. The funeral took place the next day, just as she had arranged, the flowers she took to the church adorning the casket. She was a widow and a daughter of George Stanley, a well-known resident of Galveston.

EXCITED OVER WHIRLPOOL.

Residents of an Ohio County Attracted by a Strange Occurrence.

Excitement prevails at Marysville, O., and in Union county over the sudden formation of a large whirlpool in Darby creek, caused by the subsidence during the recent rains and high water of a large area of the creek's bottom five miles south of Marysville. The space of ground which went down is about 180 feet long and 75 feet wide. The ground has sunk 200 feet deep, and the heavy rains have filled up the place with water and formed an immense whirlpool. The roar of the water can be distinctly heard for a great distance. It has attracted the attention of thousands of people from all over the country, and great crowds visit the place daily.

Movable Kitchens.

A perambulating kitchen made its appearance in the streets of Warsaw recently. It was provided with 500 quarts of pea soup and passed through the industrial quarters, stopping for a short time at the sewage works, where several hundred men are employed. In the Warsaw "east end" the movable kitchen supplied food for the women and children, the soup being served into the customers' vessels, which were often of the crudest type.

LOVE VS. PATRIOTISM

American Girl Breaks Engagement with German Baron.

Not Willing to Marry Her Titled Lover Because He Would Not Settle in the United States.

Miss Antoinette Finck is an American girl who breaks her engagement to marry into a noble German family rather than make her home in a foreign country. This innovation is all the more significant because the young woman admits her affections were deeply interested. Miss Finck is a daughter of the late Frederick Finck, who was a well known lawyer and broker of New York. The family possesses considerable wealth and enjoys a good social position. Miss Finck lives at the old family home, 138 East Nineteenth street.

While traveling in Germany last year with her mother, Miss Finck met Baron John Karl von Stechow, whose mother is a descendant of the Douglas Hamilton family of Scotland, and a relative of the prince of Bismarck. The baron was an officer in the German army reserve. Miss Finck and her mother returned to New York last spring. A month ago the engagement of Miss Finck and Baron von Stechow was announced, and it was said the wedding would occur at the Finck family residence on December 12.

Miss Finck took pains that it should be known that she would not move to Germany; the baron must make his home in America. Thus the situation stood until the other day, when Miss Finck published the simple announcement that her engagement with Baron von Stechow had been broken. Miss Finck said: "Our engagement was based on the distinct understanding that it would involve Baron von Stechow's future residence in America. But later he thought he could not come to this country and consequently the engagement was broken."

WORRY THE GERMANS.

The Big Increase in the Imports to That Country from the United States Causing Alarm.

In his annual report to the state department Consul General Mason, after giving figures showing the increased import of food products from the United States by Germany, says the statistics naturally inspire great uneasiness among certain German economists, particularly those of agrarian tendencies, who insist that in respect to food products, forage grains, and certain other materials Germany is becoming altogether too dependent upon the United States.

This sentiment was sharply evinced in the wholesale denunciation by the German press of the recent \$20,000,000 loan which was placed by the imperial government at New York. It is pointed out that in the decade from 1890 to 1899 the total imports into the United States from Germany were \$88,665,402, while the imports of Germany from the United States were valued at \$1,085,826,736, leaving a net balance of \$20,761,334 against the empire; and the question is asked, when and where this dependence upon the republic for cotton, copper, bread stuffs, meats, petroleum, forage grains, and now money is going to end, or whether it will lead if not checked by higher duties and sharper restrictions.

A COSTLY DUCK HUNT.

Edwin Gould Pays \$1,000 for a Week's Sport on Great South Bay.

One thousand dollars for 20 ducks. This is a price Edwin Gould paid for a week's sport on the waters of the Great South Bay. For a long while Mr. Gould, who is an enthusiastic sportsman, has been planning for a duck hunt. Long before the season opened he had talked about the pleasures of the prospective trip and invited a party of kindred spirits to share them with him. They were not slow to accept the invitation and last week his big steam yacht, Nacla, coaled and provisioned for a long trip, started from New York. Twenty ducks, some of which are even said to have been sea-gulls, were killed. It is said the cost for the preparations for the trip was slightly in excess of \$1,000, as the party expected to be away for some time.

NEW NAVAL GUN TESTED.

Splendid Results Shown by the Latest Trial of the Six-Inch Weapon.

The new six-inch naval gun for the battleships of the Maine class was tested the other day at the Indian Head proving ground under regular service conditions with excellent results. With a charge of 45 pounds of powder, giving a pressure of 16.7 tons a square inch, the gun gave a muzzle velocity of 3,023 feet. With an 18-ton pressure, which is above the service allowable, the gun has shown 2,128 feet, but the latest showing is considered very superior on the service basis.

With a higher grade of powder the gun is expected to do a shade better. It is 50 caliber, and is the type of a large number now being made for the new ships.

A Difference Explained. The czar of Russia weighs 35 pounds less than the young queen of Holland. This, suggests the Chicago Times-Herald, is probably due to the fact that his loving subjects keep him jumping livelier than she has to.

Paris Mushroom Trade. Paris has 60 wholesale firms which deal in mushrooms exclusively.

MARCONI MASTERS THE MASTS

Will Not Need to Use Those of Extreme Height in Sending Wireless Messages.

"Sig. Marconi has mastered his most difficult," remarked one of his staff to a London Daily Express reporter the other day. He added: "According to reasonable calculations we shall have America and Great Britain upon speaking terms before the first Christmas of the new century." To make this statement, however, was a very different thing from making known Sig. Marconi's secret. In general terms, though, the basis of his triumph may be indicated to a small degree. Wires must be used, one at either end, and about 200 feet long, called antennae or feeders.

This is obviously not a costly expedient, but the new fact that obviates the need for masts as high as Snowdon in the discovery of means of controlling the air waves. Sig. Marconi's infinite capacity for taking pains has enabled him to construct apparatus whereby he can lengthen the air waves to an almost unlimited extent. Furthermore, by the same ingenious device sound will be made to travel close to the surface of the ocean over the whole distance, thus circumventing the dreaded difficulty presented by the curvature of the earth. Hence the masts erected at Southampton and on Long Island need not, it is now contended, be higher than the roof of a New York skyscraper.

THE DUKE'S DEBTS.

They Are "All Right"—So Says the Rich Father-in-Law of Duke of Manchester.

Eugene Zimmerman, whose daughter was married to the duke of Manchester in England, was interviewed at New York. He said: "I have come here to meet my daughter and her husband. After they have rested here a few days we will go to Cincinnati, and a reception will be given at my home. The duke is a bright chap. I like a man who went to work as he did as a newspaper man when he was here. Some of his articles were first rate, too. At no time was I opposed to his marriage to my daughter. Those stories are all moonshine."

"Is it true that the duke is in a bad way financially?" asked the reporter. "I guess there won't be any difficulty about his debts. Not at all. That does not make any difference. I don't care about the marriage portion. That is a private matter. But there won't be any trouble about debts. They will be—well, that's all right; all right."

"Is it likely that the duke may settle down in America and enter the railroad business?" "No, no; the duke is going into British politics. He is entitled to a seat in the house of lords and he is going to turn his attention to politics."

DRUNKEN MAN IN CHURCH.

Preacher Put a Drunkard Into His Pulpit as a Horrible Example.

There was a dramatic scene at the Presbyterian church in Kokomo, Ind., the other night, where a revival is in progress, conducted by Evangelist Merton Smith, of Chicago. On a front seat near the pulpit sat a drunken saloon porter, who had wandered in the place in a dazed condition. The preacher was waxing loud and eloquent on the intemperate man arose and in a stentorian tone denounced him as a scoundrel and a liar. A number of women fainted. "Don't take him out!" exclaimed Evangelist Smith, as the janitor pushed the man towards the door. "It is not the man, but the liquor in him, that speaks. If he is no worse than I was once." With the set standing by his side in the pulpit the minister continued his discourse, with the living subject for a horrible example. After the outburst the man repented and wept. It was a touching scene, and there were few dry eyes in the house.

ANTS DESTROY A MANSION.

Library Floor of Baltimore Residence Shows the Ravages of a Tropical Pest.

The library floor in the palatial residence of Miss Mary Garrett, who shared in the Garrett millions, at the corner of Monument and Cathedral streets, Baltimore, gave way the other day and disclosed the fact that the structure had been invaded by white ants, which had literally honeycombed the woodwork. The joists were eaten through and through.

So extensive had been the ravages of the insects that it will be necessary to practically rebuild portions of the edifice, and much costly paneling is hopelessly ruined. The architect entrusted with the restoration consulted the entomologists in the agricultural department at Washington as to the most effective means of combating the pest.

Wrong of the Chinese.

Prof. Martens, in a recent course of lectures on international law at the University of St. Petersburg, declared that the troubles in China were the reasonable result of the endless injuries to which China has been subjected by Europeans since the early years of the century. If we stood in the place of the Chinese, attached to his emperor and to his religion, we should understand why the present anti-foreign uprising was inevitable." Prof. Martens is private counselor and perpetual member of the Russian foreign office.

Indiana in Canada.

There are about 100,000 Indiana in the dominion of Canada, located upon reserves in different districts.

GENIUS IN MATHEMATICS.

A Missouri Professor Has Discovered a New Principle in Equations.

When William G. Horner, of Bath, England, an obscure school-teacher, in 1819 made known to the world his method of solving numerical equations of any degree the discovery was viewed with suspicion by nearly all the algebraists of Great Britain. "The Royal Society of Great Britain 'had the luck,'" so Prof. Augustus De Morgan says in his "Budget of Paradoxes," to accept Horner's celebrated paper containing the method which is far on the way to become universal, but they refused the paper in which Horner developed his views of this and other subjects. It took more than 20 years for Horner's method to get a foothold in the University of Cambridge. The professors and tutors in that stronghold of mathematical learning never used it till students coming in from the most progressive preparatory schools employed it in their solutions of cubic equations, and at first they were criticised because it was out of the usual line of work, although it was ten times as simple as the methods of approximation then in vogue, says the Kansas City Star.

All attempts to solve a general equation of the fifth degree have proved ineffectual and one noted analyst, Abel, has demonstrated to his own satisfaction, at least, that the solution is impossible. Equations are divided into two classes, numerical and literal, and a general equation of whatever degree is an equation whose coefficients are as well as the absolute term are literal.

In the history of mathematics it took a long time to obtain a general solution of an equation of the third degree, and after repeated efforts and many failures the general solution of an equation of the fourth degree was effected by several different mathematicians, and here general solutions have been at a standstill more than 200 years. Horner's method was such an improvement over all former methods that as soon as it became known it took high rank and is the simplest yet discovered.

Recently a new discoverer has appeared and he handles numerical equations with an ease and precision that relegate Horner's method to the department of ancient history. This author is Prof. M. A. McGinnis, of Neosho, Mo. In a book of 112 pages Prof. McGinnis presents his system. The key to the discovery consists of certain definite relations that the coefficients of the unknown quantity bear to the roots of the equation. Analysts had discovered certain laws governing the coefficients when the coefficient power of the unknown quantity is unity. By working with the sum of the squares of the roots Prof. McGinnis shows that certain relations subsist when the sum of the squares of the products of the roots are taken two and two, and so on for higher degrees. The author lays down five fundamental theorems which he has discovered and by the application of these and some other principles he has succeeded in solving numerical equations in the briefest manner ever presented. Abel demonstrated that the general solution of an equation of the fifth degree, according to the methods employed in the solution of lower equations, was impossible, which means that the nodes of attack hitherto resorted to would not work. The complications were so great that they could not be unraveled. Prof. McGinnis does not work at equations according to the usual methods presented by mathematicians, but he goes at the subject from another point of attack altogether. By discovering new laws, not hitherto suspected, that enter into the structure of equations, and that the coefficients bear a constant relation to all the roots of the equation, he deduces the principles that were unknown. These being admitted, he then proceeds to solve general equations both of the fifth and sixth degrees, and the beauty of the method is that it solves all numerical equations by processes almost arithmetical.

WHITE HOUSE TREASURES.

Description of Artistic Furniture and Brics-a-brac Collected by the Presidents.

"The Art Treasures of the White House" is the title of an article in Woman's Home Companion dealing with the brics-a-brac that has been accumulated in the executive mansion by the presidents. In the beginning of his article Mr. Fawcett says: "There are doubtless in every large city in the country larger and more valuable collections of brics-a-brac and art furniture than that to be found in the private apartments of the executive mansion, but it is a question whether there is in the length and breadth of the land any other half so interesting. Rarely is, of course, a universal characteristic of the artistic gems scattered through the home of the presidents, but better than that is the fact that almost every piece is fraught with memories and associations that make it a prized possession. Of the whole number, probably half are the gift of kings and rulers—tokens of appreciation from friendly nations—and the remainder having been fashioned especially for the white house, have no duplicates anywhere else in the world."

THE JERUSALEM OF TO-DAY.

The Shadow of the Crucifixion Rests on the Place Forever—A Strange Stillness Reigns.

There is no warm nor bright color here; all is grim and gray except the blue tiles in the mosque of Omar, writes Mrs. Lew Wallace of "Jerusalem as We See It To-Day," in Ladies' Home Journal. The shadow of the crucifixion rests on the place forever; a strange stillness reigns, and laughter would seem like laughter beside an open grave. Women, veiled in white, glide through the dark, crooked alleys like tenants of a city of specters, and even the children, subdued by the overwhelming gloom, are silent beyond the wont of the orientals. Ruins, ruins at every hand! We'll have the prophecy been fulfilled: "Jerusalem shall become heaps." The very stones of the streets are dismal, worn away with burdens borne since they rang with the tramp of legions and glittered with the brass armor of the masters of the earth. Men may come and men may go, but never since the Omnipotent hand stretched the north over the empty space and hung the world upon nothing has there been a race descended from that wolf brood on the Tiber. Outside the walls—saddest sight where all is sadness—are ancient Jews come merely to die in the land of their love. A few in whom there is much—gulls, offer for sale talismans, gems of magic, rings of occult power. The greater number sit in the sun, motionless as statues, without the dignity that should accompany age, in poverty past telling, dreaming away the day and night—apparently without hope, except to have a little holy dust laid on their eyelids when they shall have closed them to sleep with patriarchs and seers in the Valley of Jehoshaphat.

Types of Plagues.

James Cantlie, F. R. C. S., recognizes eight types of plague—namely, the bubonic, the septicemic, the pneumonic, the nervous, the toxic, or fulminant; the purpurial, and the two mild types, pestis ambulans and pestis minor.—London Lancet.

When She Works.

There is no perspiration in the world equal to that of a woman who will show in working for her church or in removing a freckle.—Acheson Globe.