### Sixty-One More War Vessels in Process of Construction.

A Description of the Formidable Ships to Be Added to the Nation's Marine Fighting Force - Interesttar Tables Showing the Equipment of the World's Leading Sea Powers

The past two years have witnessed the most extraordinary development of naval armament that has been seen during any similar period in the history of the world This may be due in part to the publication of Captain Mahan's "Influence of Sea Power Upon History," but whatever the motive, it seems undentable that all the great nations of the world have definitely reached the conclusion that military power must henceforth mean mayal power; that the great battles of the future will be fought upon the sea, and will be contests of such titanic forces as the world has

It has been recognized that the seaports and commerce are vital points of every nation possessing a seacoast. England has long admitted the fact that her navy is a sine qua non of her national existence and her policy for many years past has been to keep its power equal to that of the combined navies of any other two patiens, and whatever the increase of other nations, and whatever the increase of other navies, this policy has been resolutely maintained without regard to expense. She is expending during the current fiscal year for new ships alone \$46,300,000, against \$25,000,000 during the year 1897-38, and there will be completed and commissioned during this year five first-class battleships, fourteen protected ships, seven unpro-tected ships, and twenty-four torpedo-boat destroyers, all aggregating 161,200 tons

France the estimated cost of the new ships under construction is \$113.225,460, of which it is proposed to expend \$21,449,420 during the current year. These vessels comprise seven first-class battle-ships, eighteen first-class armored cruisers, nineteen smaller cruisers, fifty-six torpedo boats, and eight submarine boats. Of these, five of the battleships, six ar-mored cruisers, fifteen cruisers, thirty-three torpedo boats, and two submarine boats will be commissioned during this

in Russia it is proposed to expend for new ships this year \$22,531,305, against \$14,352,885, during the previous year. The German Emperor is executing all nis influence toward practically doubling the naval force of his country, realizing that only by se doing can the prestige of Germany as a first-class power be maintained.

tained.

It remains to be seen what Congress will do for the American Navy. Of all nations, Great Britain only excepted, the United States has vital need of a powerful navy, because she has three thousand miles of vulnerable seacoast, which can only be protected by may all force, and now that America has distant and widely seattered possessions to protect and maintain communication with, the need becomes more pressing than ever.

New Ern for the Navy. Beginning with 1883, a new era dawned he American Navy. The States began the building the "White Squadron," which has been appropriately termed the nucleus of the "new Navy." Since then the unusual development of traffic and navigation, and the acquisition of far-off territories with other reasons, have caused demands for greater expenditure in building and maintaining fighting ships. Since 1883 the progress made in naval development has been noteworthy. The following first-class battleships ere in course of construction at the be-

were in course of construction at the be-ginning of this year: Alabama - Displacement, 11,565 cons; 12 knots speed; 19,000 tons indicated horsepower; main battery, 18 guns; secondary, battery, 28 guns; 4 long Whitehead totpe-do tubes; officers, 40; men, 45%; launchet,

head torpedo tubes; officers, 40; men, 455; launched, 1888.

Kearsarge - Displacement, 11,525; speed, 17 knots; horsepower, 11,674; main battery, 22 guns; secondary, 22 guns; 4 long Whitehead torpedo tubes; officers, 40; men, 513; launched, 1898.

Kentucky - Displacement, 11,525; speed, 17 knots; horsepower, 20,000; main batter, and the sub-marine torpedo boat Plunger, which is 85 lates in course of construction is the sub-marine torpedo boat Plunger, which is 85 lates in course of construction is the sub-marine torpedo boat Plunger, which is 85 lates in course of construction is the sub-marine torpedo boat Plunger, which is 85 lates in course of construction is the sub-marine torpedo boat Plunger, which is 85 lates in course of construction is the sub-marine torpedo boat Plunger, which is 85 lates in course of construction is the sub-marine torpedo boat Plunger, which is 85 lates in course of construction is the sub-marine torpedo boat Plunger, which is 85 lates in course of construction is the sub-marine torpedo boat Plunger, which is 85 lates in course of construction is the sub-marine torpedo boat Plunger, which is 85 lates in course of construction is the sub-marine torpedo boat Plunger, which is 85 lates in course of course of construction is the sub-marine torpedo boat Plunger.

Missouri — Displacement, 12,500 tons; speed, 18 knots; horsepower, 16,000; main battery, 20 guns; secondary, 26 guns; 2 January 1, 1900, there were under consubmerged torpedo tubes; officers, 40; men, struction 8 battleships, 3 sheathed battle-Ohio-Displacement, 12,500; speed, 18

knots; horsepower, 16,000; main battery, 20 guns; secondary, 26 guns; 2 submerged Wisconsin—Displacement, 11,565; speed, 17 knots; horsepower, 16,000; main battery, 18 guns; secondary, 28 guns; 4 long Whitehead torpede tubes; officers, 25; men, 452; launched 1888. torpedo tubes; officers, 35; men. 478.

The construction of the above-named ressels was begun in the years 1876, 1897, and 1822, respectively. When completed they will constitute a facet of the most modern warships equipped with the latest improvements known to the science of marine engineering, and the Bureau of Ordannes, Especial attentions can of marine engineering, and the Bu-reau of Ordnance. Especial atten-tion is being given to practica-bility in all directions, adaptability to quick and effective maneuvring, the most power-ful guns, and great speed. Of the above-named vessels the Alabama Illinois, Kear-sarge, Kentucky, and Wisconsin will be commissioned during the early part of this year, leaving the Maine, Missouri, and Ohio to be completed part year.

to be completed next year.

After the termination of the Spanish war the fleet guined quite a different significance, because America, as a result of the conflict, had entered the ranks of colonial powers and required ships of large coal capacity and great speed. The pro-gramme for the increase of the Navy, for which \$55,000,000 were voted for new conwhich \$55,000,000 were voted for new con-structions and armamonis alone, was therefore changed, and on March 3, 1895, the building of three sheathed battle-ships of 15,500 tons, the Georgia, New Jer-ney, and Pennsylvania, with a contemney, and Fennsylvania, with a contemplated speed of nineteen knots; three large armaned cruisers, sheathed, of 12,000 tons, the West Virginia, Nebraska, and California, with a speed of twenty-two knots, and seven sheathed, protected cruisers of 2,200 tons, with a speed of seventeen knots, with the exception of the Albany, which is to have a speed of twenty knots was authorized. The indicated horsepower of The indicated hersepower of authorized. The indicated horsepower of the cruisers, the Denver, Des Moines, Chattanooga, Galveston. Tacoma, and Cleveland, is 4,700, and that of the Al-hany 7,500. The New Orleans, which was commissioned March 18, 1898, and is at-tached to the North Atlantic station, Je-lengs also to this class, and her indi-cated horsepower on trial was 7,500. All of the above cruisers are to be fitted with twin screw, vertical expansion type of of the above cruisers are to be fitted with twin screw, vertical expansion type of engines, water tube boilers, decks and scheer work of fire proofed wood. They will each carry a complement of thirty of-ficers and 265 men, except the New Orleans and Albany which will have twenty-four officers and 341 men. Their main batteries will consist of ten 5-inch rapid-fire guns; secondary batteries, eight 6-pounder rapid-fire, two 1-pounder rapid-fire guns (two Colt guns, excepting the Albany and New Orleans, whose main battery will concist of six 6-inch rapid fire guns and four 4.7-inch rapid fire guns, with a secondary battery of ten 6-pounder rapid fire, eight 1-pounder rapid fire, and two Colt guns.

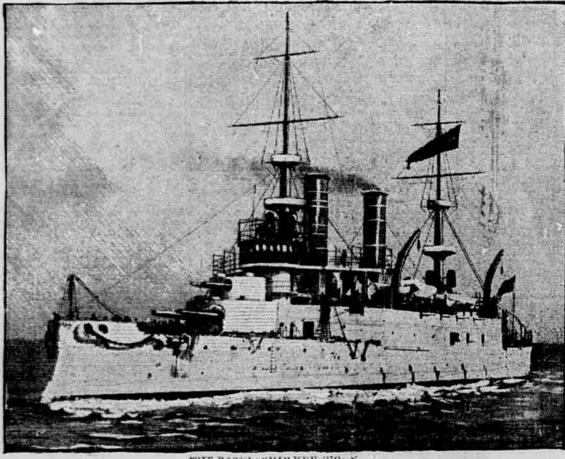
All ships of the United States Navy, R

The four single turret harbor defence monitors, Arkansas, Connecticut, Florida, monitors. Arkansas, Connecticut, Florida, and Wyoming, which were authorized May 4, 1898, at a cost of \$260,000 each, were also in course of construction at the beginning of this year. Their displacement is indicated at 2,235 fons, horsepower, 2,400, and speed, twelve knots. They will carry seven officers and 124 men each, a battery of sixteen guns, and will be com-pleted during this and the coming year.

The two battleships, Missouri and Onto, will be completed early in 1902.

The war vessels authorized by the act of March 3, 1859, are progressing favorably. The three battleships, Pennsylvania, New Jersey, and Georgia, with nipeteen known. THE NEW AMERICAN NAVY is stated at the Navy Department, will in the future, be built of steel, the underwater body sheathed with wood and cop-

The three battleships, Pennsylvania, New Jersey, and Georgia, with nineteen knots speed, and the three armored cruisers, West Virginia, Nebraska, and California, with twenty-two knots speed, are nearing completion. The awards for the building of the six cruisers, Denver, Des Moines, Chattanooga, Galveston, Tacoma, Cleveland, of seventeen knots, estimated speed, authorized by the same act, have been of about 13,000 tons trial displacement, Levis



THE BATTLESHIP KENTUCKY.

To the above-described fleet which is un-

ter construction must be added the follow-

the beginning of the "new Navy," and

which are of most modern construction,

and have proved themselves capable in

Battleships-Indiana, Iowa, Massachu-

its, and Oregon. Second-class battle-hip

-Texas. Armored cruisers-Brooklyn and

ror. Protected cruisers-Atlanta, Balti-

The Chesapeake, a training vessel for the Naval Academy, was in course of com-pletion on the first of January of this year. She is a sailing ship, and her con-struction was authorized in 1897. Her bât-tery consists of twelve guns, displacement 1.175 tons, and her cost is estimated at \$112,000. The construction of sixteen torpedo boat

destroyers was authorized May 4, 1898, at a contract price of \$285,000 each, for hull and machinery. They are to be completed this year. Their displacement, when fully equipped, ready for sea, all stores and a normal coal supply on board, will be \$20 tons, their speed twenty-eight, twenty-nine, and thirty knots, respectively, and indicated horsepower on trial, 7,000, 7,200, 8,000, 8,300, and 8,400, respectively. The type of their engines and boilers will be the twin screw, vertical inverted; triple the twin screw, vertical inverted; triple expansion. Their battery will consist of two long 18-inch Whitehead torpedo tubes and two 14-pound rapid fire and five 5-round rapid fire guns; all joiner work to be of fire proofed wood, and each boat will carry four officers and sixty-nine men. one names of the boats are Bainbridge, Barry. Chausery, Dale, Decatur, Hopkins, Hull, Lawrence, Maedonough, Paul Jones, Perry, Preble, Stewart, Truxtun, Whipple, and Worden.

Seventeen torpedo boats were in course Seventeen torpedo boats were in course of construction at the beginning of this year, and will be completed before 1901. Their average speed is indicated at 28 knots, and they will have a complement of I officers and 26 men. The total hull and machinery contract price for these torpedo vessels, with the exception of the Sring-ham and the De Long, amounts to \$2.957,-150. They will be equipped with three 1s-inch Whitehead torpedo tubes, and three and four 1, 8, and 6-pound rapid-fire guns, respectively. They will be propelled by twin-screw vertical quadruple expansion. Hillingis Displacement, 11,555; speed 17 knots; horsepower, 10,000; main battery, 18 guns; secondary, 28 guns; 4 long Whitehead torpedo tubes; officers, 40; men, 455; launched, 1898.

Kentucky—Displacement, 11,525; speed, 15 knots; horsepower, 10,600; main batter, 22 guns; secondary, 22 guns; 4 long Whitehead torpedo tubes; officers, 40; men, 514; launched, 1898.

Maine—Displacement, 12,560; speed, 18 knots, horsepower, 16,600; main battery, 20 guns; secondary, 26 guns; 2 submerged torpedo tubes; officers, 40; men, 478.

struction 8 battleships, 3 sheathed battleships, 3 sheathed armored cruisers, 7 ships, 3 sheathed armored cruisers, 7 tected cruisers, 12 gunboats; 3 light-draft lady sheathed protected cruisers, 4 monitors, 1 gunboats; 6 composite gunboats; 1 training United States training vessel for the Naval Academy, 16 ship; 2 special class; 16 torpedo boat des-

made, and work on them is progressing carrying the heaviest armor and most powerful ordnance for vessels of their class, to be sheathed and coppered and to rapidly.
Since the rebuilding of the fleet began in Since the rebuilding of the fleet began in 1883, there has been appropriated by a ts of Congress for hull and machinery, \$101, 217,562; for armor and armament \$1.521,082; for equipment, \$2,429,628. The actual cost of finished vessels amounted to \$28,529,511.85, and the estimated final cost of vessels now in course of construction is \$62,576,610.23. class, to be sheathed and coppered and to have the highest practicable speed and great radius of action; twelve gunboats of about 906 tons trial displacement, to be sheathed and coppered; three protected cruisers of about 8,006 tons trial displace-ment, carrying the most powerful ord-nance for vessels of their class, to be sheathed and corporate and to have the

of action.

The estimates and appropriations for the year 1960 for the increase of the Navy, in-cluding construction and machinery, amount to \$5,992,402; estimates for the same for 1901, \$18,773,101; estimates and ing vessels which have been acquired since appropriations for 1900 for armor and armament, \$4,000,000, and the same amount for 1901; estimates for 1900 on equipments. \$200,000, and appro, riations, \$400,000; es mates for equipment for 1901, \$250,000 The Secretary of the Navy says that the

New Orleans. Unprotected cruisers—De-troit, Marbiehead, Montgomery, and Reina Mercedes. Gunboats—Bancrott, Benning-ton, Castine, Concord, Don Juan de Aus-tria (fron gunboat), Isia de Cuba, Isia de Luzon, Machias, Petrel, Topeka, and York-town Light-draft gunboats—Helena, Nash, ville, and Wilmington. Composite gun-boats—Annapolis. Marietta, Newport,

boats—Barcelo, Cushing, Davis, Du Pont,
Ericsson, Faragut, Fox, Foote, Given,
Mackenzie, McKee, Morris, Porter, Rodgers, Rowan, Somers, Talbot, Winslaw, 14,561, Of this number 3,500 were serving Worden, and Stiletto.

All of the designated vessels, with the exception of the nineteen gunboats under 500 tons purchased by the War Department, or captured during the Spanish war have been built and equipped since 18.2. They constitute the new Navy and the most modern array of fighting ships in the world, and comprise 12 first-class battleships; 2 first-class battleships, amount of the latest returns, is as follows: ed; 1 second-class battleship; 2 armored ling to the latest returns, is as follows:

cruisers; I armored cruisers; I armored BATTLESHIPS ram: 4 steel, single-turreted monitors; 6 double-turreted monitors 9 iron, singleturreted monitors; 13 protected cruisers; 8 protected cruisers, sheathed; 4 unpro-

sheathed and coppered, and to have the highest practicable speed and great radius

naval establishment has greatly increased in the past year or two, and it is neces-sary to maintain it in an efficient condi-tion.

New York. Armored ram-Kathahdin. Double-turreted monitors—Amphitrite. Monadnock, Monterey, Puritan, and Terrancisco. Protected cruiser, sheathed.

New Trienns. Upprotected cruisers sheathed.

New Trienns. Upprotected cruisers—Detroit, Marbiehead, Montgomery, and Reina Mercedes. Gunboats—Bancroft, Benning-ton, Castine, Concord, Don Juan de Austria (fron gunboat), Isla de Cuba, Isla de Jary, Navy, which consider the appril town. Liebe.

# WEAPONS OF ANTIQUITY.

Chivalric days of warfare, if one is t believe the writers of historic novels, the storier based upon deeds of the Indian tribes everywhere, and multi-tudinous accounts of the pluck and glory of achievements of the anand glory of achievements of the ancient Greeks, Romans, and Egyptiaus, and the mighty hosts of warriors whose valor set the world in awe before the discovery of gunpowder, began when the weapons of opposing armies were the bow and arrow, the javelin, the snear, the harpoon, and the lance. The swoon, has always figured as the insignia of a warrior from a date long before the Christian era. It is the sign of a courtly solder, and to de-Total

nited States ..... prive an officer of his sword is to censign the infortunate victim to the most hu-miliating disgrace. It was so in the past and is so today.

Of all the weapons that held sway in antique and prehistoric periods, the sword still holds its own. It is the first weapon mentioned in the Bible, where the Lord stationed an angel with a flaming sword to prevent the dissolutions. Many and Fra-TORPEDO BOATS. Building, Total,

Building, Total

Building.

Bullding.

reference 3. 108 101 30 30 101 50 101

TORPEDO VESSELS.

TORPEDO BOAT DESTROYERS.

nited States ....

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Italy

Edgar S. Maclay, author of "The History of the United States Navy," says that the American people are more indebted to their Navy than to any other single branch of the Government for the proud position they hold today among the nathe achievements of our sailors during the past century are considered. The list of victories cannot be equaled by any nation in the same period.

### PRESERVING VALLEY FORGE.

atriotic Women to Rehabilitate Washington's Hendquarters.

Pennsylvania's patriotic women, under he auspices of the Valley Forge Chapte of the Daughters of the American Revolution, are about to undertake the repairing of Washington's headquarters at Valley Forge, and will give an operatic entertain ment for the purpose of raising the neces sary funds.

Among the hundred, of Revolutionary patriots buried at Valley Forge during th neampment of Washington's army in the terrible winter of 1777 and 1778, only one grave is marked, and that the grave of Capt. John Waterman, the Rhode Island patriot. Waterman's grave is on an emi-nence several hundred yards back from the Schuyikill River, on the farm of I. Heston Fold, and about equidistant between Val-ey Forge village and Port Kenne-

dy. It is a picturesque spot, overlooking the valley of the Schuyikili on the north and the beautiful Chester Valley on the south. It is near where the big log huts once stood, and in one of which Waterman s supposed to have died.

About three years ago and soon after Waterman's grave was located the Governor of

Rhode Island and a number of prominent members of the Rhode Island Historical Society visited Valley Forge and completed arrangements for the erection of a propememorial to Waterman. The matter was brought before the Legislature of that State, and \$10,000 was appropriated to erect State, and appropriate to erect a granite monumers over the grave. The shaft was prepared in Rhode Island and annt to Valley Forge, and placed over the grave, a number of prominent officials of the State being present at the time.

The monumet is a plain shaft of Rhode Island granite, with a simple inscription, as but little data concerning Watermen could be obtained. The shaft stands about seven feet high and is four feet hick at the base and has a rough, unpolished fluish. Quite recently a strong wire covering was alread even the grave and marginary.

As soon as the weather will permit thirty granite markers will be erected at the different places of historic interest at Valley Forge, the surveys for the work having just been completed. These mark-ers are all on the ground, and when planted will be about seven feet high.

## AN "AMERICAN DUEL."

Fatal Affair of Honor Betwee Reidelberg Students. (From Science.)

During my residence in Heidelberg a la nentable and terrible affair took place that threw a profound gloom over the uni-versity and the entire town. Two German students, having quarreled, decided the earth was not large enough for both of them to live in, and resorted to the diabolical practice called the "American du-In a darkened room the two young

Prehistoric Glory of the Tribal Boand Arrow.

the sign of a courtly soldier, and to de-prive an officer of his sword is to consign

projectile used on earth, and antedates the sling, the most interesting work of which is found in the overthrow of the mighty glant Goliath by the doughty lit-tle David. Poets have immortalized the bow and arrow and artists have in iron, bronze, granite, and marble shown the appreciation of the ages in which that weapon was the main reliance of opposing phalanxes. On high Olympus the heath-en gods gave the bow and arrow their most supreme appreciation. It was as potent in love as in war. Cupid used it in his chase after hearts, just as Diana did in her chase after stags in mythologi-

uity was more often decided by a selen-tific use of the bow and arrow than it is tinc use of the low and arrow than it is today by modern artillery and high ex-plosives. True, in those times there were more nations to fight each other; every tribe was a nation, and one battle gen-erally decided affairs. That, however, does not cast a shadow upon the antique glory and grandeur of the bow and ar-

row.

The lance and the spear were the "winged shafts" of the Trojan war, and hold the highest place as weapons in the lilad of Homer, though grehers with their bows do not suffer in comparison. The battles before Troy were generally hand-to-hand combate, and warriors with lances or swords had better opportunity to show their powers than the bowmen.

The points of arrows and the other sharp weapons of war, excepting perhaps spears.

weapons of war, excepting perhaps spears, lances, and swords, in olden times as well as in comparatively modern days, were of stone, flint stone, and very sharp at that The North American Indians seem to have The North American Indians seem to have become adopts in fashloning them and very effective these arrows were in their execution. Nature must have suggested the idea to the aborignes for there is no record that they were taught by any descendant of the ancients of the old world to manufacture them.

These wearons together with numer us.

These weapons, together with numerous These weapons, together with numer-us others of prehistoric days, are to be found in the United States National Museum. There can be found a complete display of stone weapons used in remote ages, langing from the hatchet to the arrow head. Many of these have been subjects of much superstition in the days of their user-like and were recarded as having a fulness, and were regarded as having a foliness, and were regarded as having a heavenly crigin or supernatural power. The possession of them in some parts of Europe has been regarded as a most tortunate circumstance. The stone fr m which they are formed, the uneducated masses believed, came direct from heaven. They have been regarded as affording projection against fire and other miscoriumes. ection against fire and other mis(ortunes, and by the same token of their divine

heads and superstition lifes with the au-vance of progress. Polished sione hat hets and glistening stone arrow penals serve no longer either as weapons or amulets and their only great value consists in the history of their ancient uses in decisive con-flicts between men. The latest reports show that in more

than one portion of the globe the imple-ments of warfare used centuries before the dawning of a light upon hisfory, are with alight changes, in service today. The spear or the bayonet even now belong every modern army, and are most effective weapons in a charke. Lances, flint pro-jectiles, clubs, bows, and arrows, and the protective shields, are in vogue in every uncivilized part of the globe

# WRECKING A MINISTRY

The Ease With Which French Officinls Are Driven From Power.

The wrecking of the ministries has be-

ome a mere trick, like the spot stroke in fillards, and in the interests of France it should be barred. It was a reproach as far back as the time of Louis Philippe. Mur-ger's Hohemian, on moving into new lodg-ings, orders the conclerge to wake him every morning by calling through the key-hole the day of the week and of the month the moon's quarter, the state of the weather and "the Government under which we live." Amid Moderate Repubienns Radical Republicana Radical So. cialists, Socialists dyed in the wool, Reac-tionary Monarchists ditto, and Rallies, who have graciously accepted the republic under the protoise of a reasonable share of the loaves and fishes, there is always sure to be somebody to offend. If you hold the disinterested position of a mere ob-server, and have access to the lobbies, you may spy the tempest on the horizon when the cloud is no bigger than a man's hand. I have seen M. Clemenceau as storm-fiend-in-chief, and M. Clovis Hugues in sub-charge of the Cave of the Winds—the latter perhaps with a twitching palm which manifestly itches for its threatened ap-plication to another member's face. The cloud bursts as by order, the minis-

try is laid on its back. Sometimes there is no warning, and the catastrophe comes as by a bolt out of a clear sky. The machine of course, is no more disturbed by it than the solid rock would be in the like case; but the moral effect is none the less to be deplored. The worst evil is the way in deplored. The worst evil is the way in deplored. The worst evil is the way in which it uses up the governing men. They get tired of being laid on their backs for nothing, and at every fresh crisis there is nothing, and at every fresh crisis there is nothing, and at every fresh crisis there is nothing. The number of sitting and standing time. The number of sitting and standing time. The number of sitting and standing time. to serve become more numerous and more embarrassing, and the fear grows that the resident will finally have to advertise in the newspapers for a minister. There ought to be a club of ex-ministers, or a monthly dinner of them, where they might neet and compare notes on the futility of all effort to please a people with disease of

the nerves.

As the bell gives the signal, and it is "ai! aboard" for the descent. I reflect that France will have to watch herself, or she may find this disease incurable. Her mis-fortune is that she has been taught to live from this part of the organism in public affairs. Her private life is free from all reproach of the kind. There the nation is tion to be transported to a distant city stribey accompanied the funeral cortege with torches and music. The students claimed he was not a suicide, for he was killed in an honorable duel, and they maintained that his opponent was not accessory to his death, because he shot himself. I had many arguments with them and never could convince them of their extraordinary tergiversation.

# IN PRIMITIVE PORTO RICO

The Undeveloped Condition of America's New Island Colony.

Evidences of Devastation Wrought by the Harricane Still in Existence, Crude Farming Devices of the Natives-Agricultural Industries Paralyzed by the Mortgage Burdens.

An investigation of the agricultural tedustries of Porto Rico with a view to the future development of these interes a haz been completed by Dr. O. F. Cook, under the auspices of the Department of Agriculture. Dr. Cook during his Porto Rican. tour obtained many interesting facts and devoted himself especially to the study of the island's natural products with a view to preparing an accurate description of

Dr. Cook says that he found in Porto Rico splendid possibilities for American capital. With energetic development the unemployed could readily be taken care of, specially in the building of railroad lines. there being no connected transportation system. This is only one of the fields for the laborer. Even the coffee trade which is by far the greatest industry, has been languishing for the last five years, owing largely to the fact that the plantations are in almost every instance heavily mortgaged and are now in danger of forcelosure. Many of these mortgages fell due last August, at which time an order was issued extending the time six months. It is hoped by the planters that a similar order mag soon be issued, as the bankers fear that they will not be able to realize on their loans, and hence will not advance money to

those who might otherwise secure credit.

The cultivation of the sugar cane ranks next to the coffee industry in Perto Rico, and perhaps no other country has such excellent natural facilities for its development. Nevertheless, there are vast fields lying under water which only require proper drainage to become abundantly productive.

tive,

Porto Rican tobacco, white excellent imquality, will, Dr. Cook states, never compete with the product of Cuba, and will
doubtless be used principally as a mixture.

The Tobacco Area.

The entire tobacco-producing area of the island covers only about 4,000 acres, being about equal to that of Connecticut, one of our smallest tobacco-producing States, Much of the Porto Rican tobacco is shipped to Cuba and is made into the third or fourth rate Havana cigar.

The fruit of the mange tree, which the American soldiers were forbidden to use during the late war, owing to its supposed poisonous nature, Dr. Cook found to be excellent and luscious and perfectly harmless, except in its green state, when taken under certain conditions it might possibly produce the same results as unripe apples or any other species of unseasoned fruit. Dr. Cook hopes that the mango fruit, together with several other new species, will speedlily be introduced in this country. The oranges of the island are of variable quality, and may almost be said variable quality, and may almost be said to grow wild, as no proper system of cultivation, such as prevails in Florida and Jamaica, has yet been introduced. Were this done the orange crop would, he says, be inferior in quality to none in the world, and the proximity of the island, both to Florida and Jamaica, would render the introduction of proper stock for grafting a comparatively casy matter.

a comparatively easy matter.

There is a pitiful lack of proper means of transportation in the island, Dr. Cook says. The great storm last April almost destroyed the few crude facilities for prop-er transit which had existed up to that boats — Annapolis. Marietta, Newport, Princeton, Vicksburg, and Wheeing, Seel dynamite despatch boat—Dolphin, Steel dynamite fundoat—Vesuvius, Gunboats under 500 tons purchased by War Department and attached to Asiatic station—Albany, Beignord, Mariyeles, Mindoro, Panagao, Panag, Paragua, Samar, Urdsneta, Vasco; captured from Spain, Alvarado, Callao, Leyte, Minanao, and Sandoval. Torpedo boats—Barcelo, Cushing, Baxis, Du Pont.

The Enlisted Anyal Force.

On June 20, 1829, the enlisted force of the last island granite in the last island granite, with a simple inscription, as but little data concerning Waterman could be obtained. The shaft stands about some parts of Europe, even at this day, film arrowheads are considered as and has a rough, unpolished finish. Quite recently a strong wire covering was can, Calamalanes, Guardoqui, Manileno, Mariyeles, Mindoro, Panagao, Callao, Leyte, Minanao, and Sandoval. Torpedo

The Enlisted Anyal Force.

On June 20, 1829, the enlisted force of the last day and to kind a shaving incalculable value presentation as having incalculable value in battles.

In some parts of Europe, even at this day, film arrowheads are considered as and has a rough, unpolished finish. Quite recently a strong wire covering was can have a rough first and a shaving incalculable value in battles.

In some parts of Europe, even at this day, film arrowheads are considered as an out when a shaving incalculable value in battles.

In some parts of Europe, even at this day, film arrowheads are considered as a rough unpolished finish. Quite recently a strong wire covering was a rough unpolished finish. Quite recently a strong wire covering was a rough unpolished finish. Quite recently a strong wire observed feet high and is four feet thick at the base and has a rough unpolished finish. Quite recently a strong wire covering was a rough unpolished finish. Quite recently a strong wire covering was a rough unpolished finish. Quite recently a strong wire overing was a rough unpolished finish. Quite recently a strong er the Government will take any steps in the matter of furnishing appropriations or will offer encouragement to corporations willing to handle such enterprises is still

The bridges over the various rivers have, in many cases, been left in a ruined state since the storms, and much damage in other directions still remains unrepaired. Conservatism and Antiquity.

Porto Rico is largely populated considering its extent, but its people, who are extremely conservative, have adorted the most primitive means to supply their mechanical needs. Their farming implements are of the crudest description, and there are said to be no properly built roads in the island. A common form of lanterns among the peasants is a calabash filled with fireflies which emits a ghostly light through innumerable little holes plereed in the shell.

The gibaros, or small landowners and day laborers of the agricultural districts, are a curious old Spanish stock, largely modified by Indian blood. There are found throughout the Island many traces of the original inhabitants. These relies include stone axes, spearheads, and knives, stone and clay images, and fragments of earth-covers all of which are usually sent to the enware, all of which are usually sent to the

Smithsonian Museum as soon as found.

It is, however, in a commercial rather than in an historic way that Porto Rico promises the greatest interest to this country and, according to Dr. Cook's forthcoming report, the development of the rich agricultural interests of the island will lead to the most satisfactory and profitable results

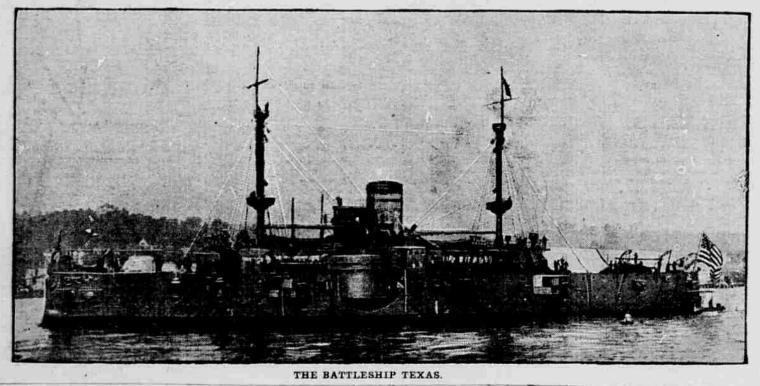
## GERMAN STREET CARS.

Tentonic Devices to Prevent the Evasion of Fares.

(From the Chicago Record.) The chances of evading fares on

street cars of German cities are very slight. When a passenger steps on a car the con-suctor immediately asks where he is going. md then prepares his ticket, which serves also as a receipt for the fare. The preparation of a ticket consists only in detaching it from a block and punching it or marking it with a peucil. This process involves much more work than the simple process of ringing up the fares, as conductors do in places is plainly marked on each car. If a car is designed to carry thirty persons, no more than thirty persons will be permitted to ride on that car at the same time

When anything in Germany is forbidden it is settled once for all. In order that every person who rides shall get the pre-scribed ticket inspectors are employed who scribed ticket inspectors are employed who spend their time in ascertaining whether the conductors are doing their duty. These inspectors step into the cars and ask the passengers for their tickets. They note the numbers of the tickets and whether they correspond with the stubs retained by the conductor. The clerk who gives out the blocks of tickets to the conductors notes the number of the upermost ticket and at the return of each block collects from the conductor who returned it as from the conductor who returned it as many fares as there are tickets detached. The rate of fares varies from 2.1-2 cents to 5 cents, according to the distance. Small children are carried for one-half fare, and anyone for the sum of \$2.50 may secure a ticket which entitles him to ride as much as he wishes for one month. When a is full the conductor displays a pl bearing the word "Occupied."



torpedo boat destroyers, 17 torpedo boats, troyers; 26 steel torpedo boats; 1 subma and 1 submarine torpedo boat, a total of rine torpedo boat, 1 wooden torpedo boat

and I submarine torpedo boat, a total of 61 fighting craft.

Of these the following are expected to be completed during this year: Kearsarge, Kentucky. Illinois. Alabama, and Wisconsin, 5 battleships: Albany, sheathed protected cruiser: Chesapeake, training vessel; Bainbridge, Barry, Chauncey, Dale, Decatur, Lawrence, Macdonough, Paul Jones, Perry, and Preble, 10 torpedo boat destroyers; Dahlgren, T. A. M. Craven, Balley, Goldsborough, Stringham, Bagiey, Barney, Biddle, Blakeley, De Long, Nicholson, O'Brien, Shubrick, Stockton, Thornton, Tingey, and Wilkes, 17 torpedo boats, These fighting vessels are all to be built on the mast approved lines of naval architecture and equipped with the most effective and latest ordnance.

son, O'Brien, Shubrick, Stockion, Thornton, Tingey, and Wilkes, 17 torpedo boats.

These fighting vessels are all to be built
on the mest approved lines of naval architecture and equipped with the most effective and latest ordnance.

During the year 1901, the battieship
Maine, the monitors Arkansas, Connecticut, Florida, Wyoming, the torpedo-boat
destroyers Hopkins and Hull will be com-

troyers; 36 steel torpedo boats; 1 subma-rine torpedo boat; 1 wooden torpedo boat. Another class which proved itself of great value and efficiency in the late war must be added to the above-described na-val fighting force of the United States. This consists of 5 iron and 7 wooden steam vessels, 6 wooden sailing vessels, 17 steel, iron, and wooden steam tugs; also 11 wooden steam vessels which are unfit for sea service, but are used as receiving for sea service, but are used as receiving ships, or Naval Militia practice ships, and 6 wooden sailing vessels which are housed over and are used by the Naval Militia of different States and as receiving ships.

PROTECTED CRUSERS 107 pilied States 1 APROTECTED CRUISERS.

ARMORED CRUISERS

men drew lots, having sworn that he who drew the black ball would commit suicide. The unhappy loser went to his room and discharged a bullet into his breast, but missed his beart, and lingered for several days on his deathbed. His parents were summoned by telegraph and besought him on their knees to disclose the name of his antagonist, but he steadfastly refused, and died with the secret locked in his breast. The students not only excused his con-duct, but praised his courage, and when his remains were taken to the railway sta-