RHODE ISLAND CLAM-GARDENS

Mad and fand Flats Along the Shore Where the Molluska Are Sowa Breadcast.

Alarm for the safety of the clam fishery, which is an industry of no small importance in Rhode Island and Massachusetts, has been dispelled by the discoverey that the Mollusk-it is the "long" clam and bot the "quahaug" that is meantcan be planted and grown under cultivation as easily as the potato. In fact, the crop can be raised with much less labor than potatoes, inasmuch as the "seed' 'may be sown broadcast without preliminary dig-

Recent experiments by the United States fish commission have proved beyond a doubt the practicability of clam culture on any scale that may be desired, reports the Philadelphia Saturday Evening Post. Last summer small areas of mud and sand flats along the Rhode Island shore were sown wish the little clama which were obtained in unlimited quantities by seeking them in certain easily found spots, where they were so thick that as many as 9,700 were counted in a single quart of mand, the specimens averaging about one-fifth of an inch in length.

The sand containing these multitudes of baby clams was passed through a sieve, so as to separate the mollusks, which were thereupon conveyed in bags to the tidal flats where they were to be planted. For experiment's sake they were planted in various ways, some being simply thrown out upon the sand or mud exposed between the tides, while others were sown over areas which had been more or less dug up preliminarily to make the soil loose. Different stages of the tide and different kinds of weather were chosen for the plantings. In all nearly 6,000,000 clams were used.

As a result, it was found that the best way was to scatter the little clams broadcast over the sand or mud flats without disturbing the soil, for it appears that the bivalves at this early stage of their career possess much greater powers of burrowing than later on, and within a few minutes after being thrown out they make their way down into the sand or mud, fastening themselves securely by means of a rope or "bysus," such as a mussel employs for the purpose of anchoring itself. In a word, they plant themselves. If the soil is first loosened they do not get a firm hold.

Long clams are two distinct sexes. The female at spawning time throws out an enormous number of microscopic eggs, from which, when fertilized, are hatched tiny freeswimming animals. These animals, after a brief career of adventure, settle down upon some solid object, such as a stone or a front of seaweed, and attach themselves by means of threads of a substance which they secrete. When opportunity offers they proceed to burrow into the ground. The prospect of life for an individual clam at this stage of its career is exceedingly small, but the multitudes of the species are so great that there are always plenty that survive.

Reckless overdigging has greatly depleted the shore areas in Rhode Island and Massachusetts, but the experiments of the fish commission show that such areas may be rendered productive again at a cheap rate. Nor is it necessary that there should be abstention from clam hunting for any great length of time, inasmuch as a clam hatched in the spring will be full-grown in a single year. In this respect the long clam has a great advantage over the oyster, which requires five years to reach marketable size.

Old American Bottles.

In early American glassware the history of our national art progress has been written. Choice and precious indeed are the crude blue-green and brown amber bottles made early in the mineteenth century—the portrait bottles bearing busts of Washington, Franklin, Lafayette, De Witt Clinton, Zachary Taylor, Kossuth, and Jenny Lind. Local decorative subjects on many lines of idea were treated by the the first American bottle-makers; and the most exquisite Venetian bottle cannot outrank in value, to a patriotic American collector, the primitive old flasks ornamented with Indians, masonic emblems, the eagle, stars, flags, log cabins, cannon, and steamships, or such outdoor themes as the liseasons, birds, fruits, frees, sheaves of wheat, the fisherman, deer, the gunner and his hounds, and the first bicycle. The earliest American railway, with a car drawn by a horse, is historically celebrated on a glass flask, as well as the bold Pike's Peak pilgrim, with his staff and bundle,-April Century.

British Increase in Height, No nation is increasing in height and weight so rapidly as the English, says a British statistician. The proof of this is shown in statistics recently collected of the height of 10,000 boys and men. At the age of 17 these averaged five feet eight inches; at the age of 22, five feet nine inches. In 50 years the average has gone up for the whole nation from five feet seven and one-half inches to five feet eight and one-half inches. Chicago Inter Ocean.

Went One Better,

Jimson-Scared! Why, the poor woman was so badly frightened that it surned her hair white in 24 hours. Jeser-Huh! I know several girls who have turned their hair yellow in less time than that .- Ohio State Jour.

The part of the pa

PERSONAL AND-IMPERSONAL.

In France there are 2,685,000 married women who are forced to work outside their own houses.

For sending a congratulatory telegram to the kaiser on his birthday several sergeants of a Prussian infantry regiment were placed under arrest for five days.

Of 14 young men and women who sang in the Zion German Evangelical Lutheran church on the Hudson county boulevard in Greenville, N. J., less than a year ago, the sixth couple has been married and the seventh couple are engaged.

Angina pictoris, from which Cecit Rhodes suffered, is a disease of great men. It carried off Matthew Arnold, it killed Lord Clarendon, Dr. Chalmers, John Leech, Dr. John Hunter, the famous physician; Thorwaldsen, the sculptor, and Sumner, the American statesman. It seems to have a predilection for those in whom there is a high development of the nervous system.

Gen. T. M. Buffington, the governor of the Cherokee nation, measures six feet six inches in his stockings and weighs 275 nounds and is not overburdened with superflows flesh. He wears a No. 8 hat, No. 12 shoe and dresses after the most approved business fashion. His one-eighth Cherokee blood gives him the ruddy appearance characteristic of the race of which he is so proud.

In one of the Philadelphia colleges, a professor of chemistry asked a student the other day: "Now, suppose you were called to a patient who had swallowed a heavy dose of oxalic acid, what would you administer?" "I would administer the sacrament." replied the student, who, by the way, is said to be studying for the ministry, and takes chemistry because it is ob-

The other day Senator Pettus arose as if to address his fellow members and a hush of expectancy at once fell upon the chamber. Every eye was upon the venerable statesman, who with great deliberation reached around into the tail pocket of his long frock coat and drew forth a plug of tobacco. Unconscious of the attention he was attracting, he bit off a chew and sat down without saying a word. Everybody smiled.

AUSTRALIAN OPAL DIGGING.

Method of Mining for the Silicions in That Country Interestingly Described,

Mining is carried on in the most primitive fashion, the prospector not being able to carry heavy tools in his traveling outfit. The first process after arriving on any field is pegging out a claim, a square of 50 feet being allowed each man. This is accomplished by inserting four mulga stumps at the corners, after doing which the shaft is started, its position in the claim generally being determined—as most things are -by the side of a coin which comes down uppermost. The first three feet or so consists of soft drift sand-the deposit of countless willy-willies," or Australian desert tornadoes. Occasionally detached ironstone boulders are met with in this, which are carefully examined for signs of opal matrix—a substance always associated with the gem, and supposed to be very immature opal, says Blackwood's Magazine. A hard conglomeration of ironstone pebbles is next encountered, in which "colors"-little flery specks of opal-are frequently found. This usually proves about four feet in thickness, after which an extremely hard, porous and red formation is struck, which turns white on exposure to air. This latter substance-"citrified mud" the miners call it-extends downward further than anyone has yet pierced, and in some of the iron leaders running through its vast body the miner hopes to find his long looked-for

"rise." The miners have a superstitious dread of the ubiquitous potch, and will often leave a field if the potch is too plentiful. Potch is simply opal without the living fire, or, as the miners say, "opal a million years too young." It is of all colors, often in the same seam, and has been found in sheets up to three inches in thickness. Occasionally a vertical ironstone bar may intercept the potch seam, in which case the potch dips, and generally "makes" into the firstclass or gem opal at a deeper level. The best opal is invariably found between two parallel bands of ironstone; but beyond the fact that the existence of the silicious gem is largely due to enormous compression, and is usually more exquisitely colored when taken from hard country, nothing is actually known as to its causes.

The Canr's Possessions.

The czar's possessions in Asia embrace more than twice as much land as the United States proper. They are about as large as the whole of South America and almost twice as much as Europe. The Russian possessions in Central Asia alone, including the regions now being opened up by the Trans-Caspian railroad, are half as large as the whole of our country, and the czar is now claiming the right to all concessions in Chinese Turkestan, a territory twice as big as the empire of Germany. Siberia is 25 times as big as Germany or France. It is a million square miles bigger than Europe, and bigger than the United States, Central America and Mexico combined. Manchuria, which is now practically annexed to Siberia, is bigger than any country in Europe outside Russia, and Mongolia, which will follow suit, is one-third the size of the United States.-Detroit Free Press.

THEY WHO GO DOWN IN SHIPS.

Recent Tragedy Brings to Eight the Bravery and Endurance of Life-Savera

The loss of 12 lives off the treacherous shoals of Monomoy is said to be the worst disaster of its class that has occurred since the life-saving service was established. And what a magnificent service it has been and is; how rich in human achievement, how glorious in its record of daring and sacrifice, how modest in its pretensions and its claims! Its field of operations is the angry and tumultuous sea. It is attended by no mortal pomp; it is stimulated by no artificial excitements. Those who enlist in it have to rely upon their own stoutness of heart and steadfastness of purpose. They endure almost constant hardships; their life & an almost constant struggle with the elements and their battles are always to save and never to destroy their fellowmen. When they succeed, as they so often do, the names of these heroes are rarely mentioned, says the Boston Transcript. The papers tell us that the life-saving station at such a point went to the relief of the distressed

Yet epics have been built upon less than is covered by such a bald and bare statement. The casual reader looks upon it all as a matter of course. The rescuers have done what they were engaged to do. A skirmish in the bush, a successful fight with savages will set his blood tingling, but he looks with indifference upon a battle with angry waves through icy waters. His imagination is not kindled by these homely exploits, and he goes home to dinner without another thought of the terrible struggles and splendid achievements of these devoted men who seem to find their reward in doing and not in glory or in gear.

It is only when we contemplate totals that we get a truly realizing sense of what this service means to our country, to our humanity and to the interests of those who go down to the sea in ships or trust their ventures to its fickle mercies. It is a little over 30 years since this service was established. In that time it has saved in various portions of the country about 90,000 lives, and property enough to pay several times over the cost of maintenance. These 90,000 witnesses have known something of the true worth of these men, and their gratitude to them has doubtless been greater than that which they feel toward any other class in the world. They have known the dangers involved, the bravery and the skill that carried them through their perilous duty. The saviors are constantly facing dangers which the saved perhaps experience only once in

a lifetime. And some of the best and most genuine types of this noble class were the men who went down at Monomy. They knew what they had to encounter better than anyone else; but they did not finch for an instant. Whether life or death awaited them they would make the attempt, and the men who still survive would face an equal peril to-day with as little hesitation should the occasion arise.

SPEAKERS OF GAELIC. In Scotland There Are No Fewer

the Language. A parliamentary paper has been published presenting some interesting results with reference to Scotland

.Than 28,000 Persons Who Use

of the census of 1901. The population, 2,173,755 males, 2,-298,348 females, total 4,472,103, divided by the number of separate families, yields an average of five persons to a family. The statistics in reference to housing are very satisfactory. Thus there are nearly 1,600,000 houses for nearly 4,500,000 people, which suggests a very liberal allowance of house room. which Londoners may well envy. In 1891, when the population was 4,925,-647, the inhabited houses were 817,-

568, and the number of separate families 876,089-working out then as now, one family one house. One house in 16 is uninhabited. The figures are: Houses, 926,814 inhabited; 59,420 uninhabited; 9,062 building. Then we are told how many rooms there are with one or more windows. The number is 3,022,598, which means about three rooms for every four persons, says the London Chronicle.

Is Gaelic dying out? The register general has set himself to answer this question by introducing into the returns columns for "persons speaking Gaelic only," and "persons speaking Gaelic and English." It will come as a surprise to many that in Scotland there are no fewer than 28,106 persons who speak Gaelic only. Most of these, of course, are in the counties; in the burghs they number only 348, and on board ships in Scottish waters, only 6. Highlanders will be interested to learn that 202,700 Scots speak Gaelic in addition to the language of Scott and

Keen Sense of Smell.

One of the sorrows of childhood is the slowness of some older people to take a hint. It is often quite a strain on good manners to be obliged to reenforce a suggestion that should have been adequate in itself.

A little girl, calling at a neighbor's house, sat near a plate containing some . apple parings. At last, unable to keep silence any longer, she said:"4" smell apples."

"Yes," returned her hostess, "it's those parings." "No'm," said the little girl, solemnly. "I smell whole apples."-Youth's Com-

Charitable, Nobbs--Scribbles has had a book published.

Numskull--Suppose he has; I don't think you ought to hold that against hlm .-- Ohió State Journal.

SOULS OF MILLIONAIRES.

New York Bank President, Whose Two Daughters Have Joined Salvation Army, Pleads for Them.

Warner Van Norden, president of the Bank of North America, whose two daughters descried the circles of the 400 to become Salvation Army lassies, appeals to the churches to save the souls of millionaires. He chided modern preachers at a meeting of the Presbyterian union, and he is quoted in the same strain in an afternoon paper. He is reported as eaving:

"Whoever has heard of a sinner being converted in one of our big churches? I mean a real sinnersome big millionaire, purse proud and hardhearted, or some crimetainted, hardened criminal? Not one of you. What we ought to strive for is to convert millionaires and take them out of their wretched, selfish lives, and the women, those foolish butterflies, who are wasting their lives. We speak of sin in the abstract, and Russell Sage smiles and rubs his hands and says: "That's right.' "It has become nothing less than

a scandal that so many millionaires leave their work for three or four months of the year. There are many of the rich laity who take a vacation from church activities, not merely for three months, but for the whole year. If poor people come to a fashionable church, among wealthy persons, they are made to feel uncomfortable, and so they stay away.

"Creed is not the all-important question confronting the Presbyterian church. The problem is to find a way to cure the rich of their coldness and indifference."

AUTOS FOR USE IN WAR.

The British and German Governments at Work Testing the Armor-Clad Machines.

Utilization of the armor-clad automobile in the German army has led the war officials of Great Britain and other countries to investigate the practicability of the same appliance. Great Britain, however, will attempt to take a step in advance of any of the other nations by making use of airships as well as automobiles.

An armor-plated automobile has already been completed for experimental purposes by the British government. It is desined principally for coast defense, but can be put into service for carrying supplies to camps or men to the line of battle over almost any kind of country.

The machine looks like a steel fort on wheels. Its length is 28 feet, width eight feet and height ten feet. It is capable of carrying a load of 12 guns in addition to its supply of fuel, one tank of which will run the machine 200 miles. Its armament consists of two pompoms, two automatic quick-firing guns and 10,men can operate the guns and one man the automobile.

The army airship is now in course of construction. This will weigh 600 pounds. Its mode of construction is kept secret for the present.

MUCH PRAISE FOR CONSUELO.

The London Papers Point Out the Successes of the American Wife of the Duke of Marlborough,

The current number of the London Tatler leads its society department with the following paragraph, accompanied by a portrait:

"The duchess of Marlborough (Miss Consuelo Vanderbilt), when she was married to the duke of Marlborough. had the desire to become the best type of English chatelaine without abandoning her national characteristics, and she has certainly succeeded,

"Within a very short time of her marriage she entertained the then second royalties of the kingdom as to the manor born. She has restored the fortunes of the house of Spencer Churchill. She has embarked eagerly on politics and is a dame of the Primrose league. In common with so many English wives she spared her husband to the country for service in South Africa. She keeps Christmas at Blenheim in good old-fashioned style. She hunts without aping masculine manners. A charming lady."

Judge of a Baby Show. Sir Alfred Milner made himself a little unpopular on a trip between England and South Africa by acting as judge in a baby show given on board the ship on which he sailed. "The place of judge in a show of babies," he remarked on landing, "defies the skill

not feel particularly ashamed." Education of Pueblo Indiana, There are about 8,000 self-supporting Peublo Indians, in 26 villages, 20 of which have day schools, costing the United States not less than \$20,000 annually, besides a much larger sum expended upon the boarding schools.

of the greatest diplomat, so that I need

Rather Odd, Come to Think of It. It seems a trifle odd that the prince of Wales did not permit us to entertain him when he was last on this side, savs the Chicago Inter Ocean. Still, maybe he did not know then that we could entertain so well.

The Metric System. Surgeon General Sternberg says that the metric system had been established in the army and had given entire satisfaction. He commends the system and urges its universal adoption.

Petroleum for Fiskermen. The German government will probably make experiments with petroleum for fishing smacks.

RUSSIAN PEASANTS.

Exhibit Given by Them Surprises Society People at St. Petersburg.

Great Display of Both Useful and Beautiful Articles at the Tuuride Palace-Nearty Every Province is Represented.

Russian society is amazed to find in the national exposition of cottage industries such a wealth of characteristic, beautiful and useful objects. Within a week after its opening in the great Tauride palace, in St. Petersburg, every article in many departments had been sold. Nearly every province in European Russia is represented. There is furniture in both ancient, national and modern styles, and there are embroideries, laces. Oriental fabries, carpets, and metal goods-indeed, almost everything that is needed for utility or desirable for decoration in a home.

The crare for foreign goods has been so strong that few Russians knew what the peasants around them were producing. One example will suffice. Factory-made embroideries bring a better price in St. Petersburg than Russian hand-made laces, which command a considerable market in England and the United States. The government has turned its attention earneatly to the oottage industries, which are regarded as necessary to afford the peasants lucrative employment during their long winters. Permanent salesrooms have been organized in St. Petersburg and London for fabrics and decorative articles.

The present exposition is the first of its kind ever held that ranked above a Christman bazear. In connection with it a congress of friends of cottage industries has been opened. The minister of agriculture, M. Yermoloff, emphasized the necessity of three things: Cheap credit, supply of raw materials without the aid of usurious and exploiting middlemen, and a permanent market. Another speaker discussed the educational requirements of the peasant workers.

AMERICANS INVADE RUSSIA.

American Agricultural Machinery Syndicate Requests Permission to Erect Warehouses in Country.

It is reported that an American agricultural machinery syndicate has requested permission to erect warehouses in Russia and to sell directly to the peasants.

A commission has been sitting to discover what articles the various branches of the administration procure from abroad, and to elaborate a law more stringently forbidding foreign contracts for articles that can be produced in Russia. Army and navy reports showed that their budgets would have to be enlarged at least 50 per cent. if this drastic measure was donted. The imperial comptroller demanded a maximum limit of price difference between domestic and foreign articles.

Assistant Finance Minister Kovalevsky, the chairman, coollly brushed all these objections aside, declaring there was no sacrifice too large for the country to make in favor of its in-

dustries. BLUE-COAT BOYS TO MOVE.

The Famous London School Founded by Edward VI. to Be Transferred to Horsham, Essex,

The Blue Coat Boys went to the Mansion house, London, for bun money for the last time the other day, as the famous school known as "Christ's Hospital," founded by Edward VI. 350 years ago, is to be removed in a few weeks to Horsham, Sussex, and bareheaded youngsters in yellow stockings will cease to be a familiar sight in Fleet street and the Strand. Six hundred boys marched to the Mansion house. After a speech by the lord mayor, each received two buns. Some managed to get four. Most of the lads received a shilling each, while some who stood high in their classes got as much as a guinea. This custom has been observed practically without intermission since the founding of the school.

FEW NATIVE PARISIANS.

Poreign Countries and the Provinces of France Furnish the Bulk of the Population.

A Parisian editor complains that the real Parisian native born is fast disappearing. Out of the 2,650,000 inhabitanta 1,200,000 were born either in the provinces or in foreign countries. Many come from the provinces of Auvergne, and Paris, according to the writer, is in danger of being "auvergnized." The Auvergnat is one of the most unpolished specimens in all France, a sort of rough diamond.

"Barnum and Bailey," says the journalist, "would do well on their departure for America to attach to their establishment an authentic Parisian before the race disappears. On their return to Parisian soil after a brief absence they would be able to exhibit him as a phenomenon."

To Take His Wife This Time. Prince Henry is going to take his wife with him when he attends the coronation of King Edward. This is no more than right, says the Chicago Becord-Herald, seeing that women are such hands to enjoy fuse and feathers.

Was a Pleasant Thought, Cecil Rhodes must have smiled in his sleeve occasionally, says the Chicago Tribune, when he thought of the good things that would be said of him after he was dead.

NAVY NEEDS SHIPS.

Training of Recruits Is Hindered by Lack of Proper Facilities.

Problem with Which the Navy Department is Wrestling at Present Time-Ways in Which Diffi-

culty May Be Overcome.

The navy department is wrestling with a troublesome problem involving the training of enlisted men of the mavy. The government has adopted a policy which contemplates an annual increase in the culisted force of not less than 3,000 men, in order that in 1910 the service may have approximately 50,000 men. The navy has now 21,-202, and, with the increase likely to be authorized during the present session, the department must provide for training between now and July 1, 1903, of 6.798 men.

This is the problem which is the more difficult on account of the lack of training ships and the means of housing and instructing these new sailors. It is the intention of the bureau of navigation to send the Richmond, which is now at League island, to Portsmouth, Va., and to detail the Minneapolis to take its place as receiving ship at League island. It is proposed to use the Franklin and Richmond at Portsmouth as quarters for training landsmen, fitting up and old shellhouse and storehouse at St. Helena as mess halls and cookhouse. The Indiana is to be used for service with the naval cadets as soon as it comes north about May 1. The Lancaster is not in condition to cruise except in fine weather, and cannot be used beyond home waters, so that in a short time that vessel must be taken from the list of cruising training ves-

It is also the intention of the bureau to fit out for training purposes the Yankee for 450 men, the Panther for 350 men, the Rene Merceder for 275 men, the Texas for 250 men, and the Adams for 150 men. The Rene Mercedes, Panther, and Adams are to be fitted out for training purposes as soon as funds are available, but the latter ship cannot be made ready for the present, and there are no officers or petty officers available to commission the other ships. There are now six receiving ships in use capable of accommodating 590 landsmen. The eight training ships carry 2.560 landsmen, not including the Cincinnati, which is used for training men for the engineer force. It looks as if congress would not appropriate money for additional training stations, and even Port Royal may be abandoned. Something will have to be done to train the new men, the existing facilities being inadequate.

TO RAISE THE STANDARD.

Columbia College of Physicians and Surgeons to Require More of

With a view to increasing the standard of scholarship among the students in the Columbia College of Physicians and Surgeons the university trustees have decided to raise the entrance requirements to the "P. and S." next year. Heretofore admission to the first year class of the college has been open to any student who complied with the minimum requirements for a medical student's certificate as those requirements are defined by the laws of the state of New York. The law provides that a student who obtains 36 of the 48 necessary counts may enter upon the study of medicine, with one year in which to make up the remaining 12 counts.

After July 1, 1902, no student who has not the full 48 counts to his credit will be admitted to the first year class. A year later further restrictions will go into effect.

WEDS PRETTY INDIAN GIRL.

French Explorer Contracts a Romantic Marriage with an Aborigine Who Nursed Him.

A few days ago at the town hall of Paltlers, France, Jean Eugene Jules Robushon, the explorer, contracted a marriage replete with romance. He set out from Fontenay Le Comte

in 1893, and journeyed over the mafority of the South American states on foot and without any resources except fishing and hunting.

Mr. Bobushon fell ill in the Madre de Dios and would certainly have died had it not been for the devoted care of a pretty Indian girl, 15 years old. After his restoration she asked to share his future adventures. He consented and became so attached to hislittle companion, Maria Guamiri, that he brought her to France with him. Here they were married. They will return to South America in a year.

Book Disclosed Their Ages, A curious lawsuit is being brought by two artists belonging to the Parisstage against M. Jules Martin, author of a theatrical handbook, entitled "Nos Artistes." The volume contains portraits of all the actresses on the Paris. stage and gives the dates of their births. The two ladies declare it an I act of defamation to reveal their ages. One of them claims \$2,000 damages.

. : Has the Price, J. Pierpont Morgan says he will attend the coronation of King Edward. save the Chicago Record-Herald. If. he likes it real well he may hire the king to do it over two or three times.

A Fatal Calling in Turkey. It is said that the average life of a cartoonist in Turkey is one week. Evidently, says the Chicago Record-Herald, the Turkish cartoonists can't give up the sultan as a subject.

L'ABEILLE DE LA NOUVELLE-ORLÉANS