

WE MAY RAISE SILK.

Immense Consumption Encourages Its Introduction.

Climate and Soil Favorable to Culture in Middle and Southern States—An Enormous Trade to Supply.

Dr. Edward Bellon, who lately returned from Japan, where he investigated the silk culture with special reference to its introduction and propagation in the United States, according to a Washington paper, says:

"The people of the United States consume practically half of the world's silk output, and it means an enormous gain to us if we can keep this money in the country. We have made a few attempts in a small way to grow silk, but it is well worth the greatest effort, we have not yet tried seriously. We want to give our home farmers and manufacturers the benefit of that immense trade if we can, and we are the proper agents."

"In the middle and southern states and on the Pacific slope we have all the most favorable varieties of climate and soil; in fact, we have conditions far superior to the rest of the world for growing the mulberry and cultivating all the best species of silkworm by the best methods."

"The early settlers of Pennsylvania and other of the original states gave much attention to silk culture, but other pursuits have rather crowded it out. Now, by the aid of the government, the industry is being revived in several sections of the country. Results of careful and systematic experiments, conducted on the most practical and scientific basis, by the department of agriculture, have demonstrated the possibilities, and given some tangible idea of profits to the American farmer."

"A family can make more money in eight weeks by silk culture than the same family would make in a whole year by raising a crop of cotton. The farmer may still have the cotton crop and add the silk to it without inconvenience. One does not interfere with the other. Mulberry trees, the leaves of which form the natural and only food of the silkworms, can be grown along the fences of the cotton fields, and in odd corners of the farm, to provide for the worms. There is involved no great outlay for plant or stock for the production of raw silk."

"It is a business in which the farmer of limited means may engage as well as his wealthy neighbor, and there is no practical possibility of market prices ever coming down so as to cut profits close; there is always a very ample margin, more than in most crops. Moreover, the silk industry can be made a side issue, as it were, to be attended to by the wife and children, like the poultry rearing."

"During Mr. Bellon's stay in Yokohama the Japan Gazette published an article in reference to his visit and investigation, of which the following is an extract:

"There is at present a movement in the United States to compete with Japan in silk culture, which is one of the principal sources of this country's revenue. America is a wealthy country to have a rival in anything, and has shown sufficient power to materially affect some of the big industries of Great Britain."

"There was a time when the United States had to depend chiefly on Great Britain for iron and steel, and many other manufactured goods, but the vigorous protectionist policy of the Americans has made a vast change."

"Some of the southern states have for years competed in the rice growing business, and America bids fair to attain in course of time a position of pre-eminence in that as in corn and flour."

"If now she is to do the same with silk, it will be a far more serious matter to Japan than the absolute loss of Korea could be. It would not profit Japan to dominate half the territory of Asia and lose all her trade. Her silk is more to her than her continental ambitions. The menace of her staple industry is a greater danger than the Russian."

SCARCITY OF RADIUM.

At the present time we possess only about a gram of the pure salts of radium. However great may be the care taken in such researches, small losses are inevitable, and serious losses have at times resulted from unforeseen accidents brought on by the disconcerting properties of radium. Research in all branches of experimental science—physics, chemistry, physiology, medicine—is impeded, and a whole evolution in science is retarded, by the lack of this precious and unique material, which can now be obtained only at great expense. We must now look to individual initiative to come to the aid of science, as it has so often done in the past, and to facilitate and expedite by generous gifts the success of researches the influences of which may be far-reaching.—From an Article on Radium by Its Discoverer, Mme. Curie, in Century.

WHAT IS SKY BLUE?

The blue color of the sky on a bright clear day has been constantly noticed by the individual from childhood. To the primitive lay mind the azure tint of the firmament is simply its natural color. But our daily experience shows that the visible dome of the heavens is only an appearance, and science teaches us to inquire critically into the nature of things. The cause of this color viewed from a distance is a phenomenon which has been at most as elusive as the fabled philosopher's stone, which during the middle ages was for centuries an object of profound research. The same may be said of the familiar color of the deep-blue sea, which has elicited the admiration of dwellers on the ocean shores from the earliest ages of mankind, and yet probably no great number of individuals have inquired into the cause of this color.—T. J. J. See, in Atlantic.

ESKIMO GIRLS ARE SLAVES.

Rich Whites in the Far North Make Orphan Children Toll Away Their Lives.

Slavery, even worse than that which existed within the United States before the civil war is carried on beneath the flag of American independence in our possessions in the far north, says a Washington report.

In Unalaska, Alaska, there are a number of pitiful forlorn little Eskimo girls held in bondage. They are the slaves of rich families, made to labor as drudges, deprived of association with free children and forbidden the first vestige of education.

These children are poor orphans, whose means of support have been taken away and who are sold out to families, not for ordinary service like working girls in other parts of the country, but as common slaves. They are permitted to have no playmates nor to enjoy any of the privileges or the delights of childhood.

Their lives are the lives of a drudge. From the slave child they grow into the slave woman, and no matter what the finer feelings of the child may be she must put them away and pay for her orphanage and her poverty at the cost of her health and all hope of happiness or relief from her life of drudgery.

This appalling condition of affairs has been brought to public notice in a letter to the interior department from William A. Davis, principal of the United States public schools in Unalaska, Alaska.

Mr. Davis' personal experiences there form the basis of his communication. The letter states: "While canvassing this village for scholars a few days since, I found a number of families holding Alut children as slaves. Inquiry developed the fact that it has been the custom from time immemorial to make slaves of poor children, especially girls, and that the custom still prevails, not only here, but in other portions of the country."

"A German, whose wife is a Russian Creole, has a slave girl nine years old; a Russian Creole, whose wife is a native, has a slave girl 14 years old; a Scotchman, whose wife is a native, has two little slave girls about seven and eight years old, respectively; a Russian priest has a slave girl 12 or 13 years old, and others whose names I did not learn, also hold slaves."

"Nearly all, if not all, of these children were secured in the Atka islands, the westernmost of the Aleutian chain. They are made to do all the drudgery and dirty work of the families, are not allowed to attend school or associate with free children, are poorly clothed and fed and are treated generally as slaves."

THE ELEPHANT ON THE ROAD.

Darkies in the South Watch Him Closely to See Him Trip on His Trunk.

"When an elephant is wide awake and feeling chipper," said an old showman, "he carries his trunk pretty well curled up, like a great hook, with the end of it up toward his mouth; but when he gets tired and sleepy his trunk hangs limp and all but straight, with the end of it pretty near the ground; and then, when he walks, the elephant seems to be all the time in danger of stepping on it."

"In the south, when we've been moving from one town to another, and the elephant was tired and was carrying his trunk low down like that, I've seen darkies follow along on the road near him for miles to see if he wouldn't trip himself on it and fall."

"The ponderous beast plops along with his trunk hanging straight except for, maybe, the lightest bit of a kink right at the end, and all but touching the earth. Then, first you know, the tip of his trunk actually does touch, and then the elephant throws his head up the way a man that has dozed off throws his head back when it drops forward. Then the elephant dozes off again, and his head drops the way it was before, and his limp trunk all but trails on the ground as he walks."

"And then, sometimes, as he lifts his great foot and is about to set it down, the dangling trunk swings back in such a way that it seems sure to be caught under it this time. It never is, but sometimes it comes very near it. And then:

"'Hi! dere!' says one of darkies following along the road and watching him, 'he done come mighty near steppin' on it dat time, suah.'"

"But still the foot just misses it. Fast asleep as the elephant seems to be, and with his feet going forward mechanically and his trunk hanging and swinging around any way it will and always in danger of being stepped on, it never actually is, and so he never does actually trip himself; but the sight of the great beast going along the road like that, and apparently all the time in danger of tripping itself up, makes a fascinating attraction for the darkies."

NOTHING TO TROUBLE ABOUT.

Two Irishmen who had not met for many years came face to face with each other, and after a period of handshaking one said:

"Long time since we met, Clancy, isn't it? Lots of things have happened since then."

"Yes, indeed, look at my face, there it's married I am," replied the other.

"You don't tell me! Have you any family?" asked the first speaker.

"Faith, and I have that. I've a fine, healthy boy, and the neighbors say he's just the picture of me."

OCEAN CABLE LINES.

Owned in Twenty-Two Countries and 252,436 Miles Long.

Only 15 Per Cent. Are the Property of Governments, the Remainder Being in the Hands of Private Owners.

Denmark has a more prominent place among countries whose capitalists have engaged in laying ocean cable lines than might be expected from her inferior commercial importance. She ranks fourth on the list, even surpassing Germany.

The reason is, states the New York Sun, that the Great Northern Telegraph company, with its offices at Copenhagen, laid and operated one of the most important cable systems in the orient—that which connects Vladivostok with Nagasaki, Shanghai and Hong-Kong.

There are in operation to-day 252,436 miles of ocean cables, of which only 38,797 miles, or about 15 per cent., are owned by governments, the remainder being in the hands of private owners.

Englishmen opened the first cable line—across the narrow channel between Dover and Calais on August 23, 1850—and Englishmen still control a larger mileage than the capitalists of any other country, and more than half the total length of the submarine lines.

The British cables which connect London with all parts of the world have a length of 154,099 miles, of which 14,963 miles are owned by the government. Of the 139,136 miles owned by private companies, the longest mileage is in the Australian and oriental lines. The Eastern Extension, Australasia and China Telegraph company controls 27,699 miles and the Western Telegraph company 19,830 miles.

The most important of the British cable lines are the five that stretch across the North Atlantic, and also the first line stretched across the Pacific, which connects Vancouver with the Fiji Islands, Norfolk Island, Queensland and New Zealand, and which was opened on December 8, 1903. Among the many British lines also are cables to South America and along both of its coasts.

Our country is second on the list with 44,470 miles of cable, nearly all in private hands, the government controlling only a short mileage in Alaskan waters. The most important are the five lines across the Atlantic and the second great Pacific cable, completed on July 25, 1903, by the Commercial Pacific Cable company, between San Francisco, Honolulu, Midway Island, Guam and the Philippines. Another great line laid down by American capitalists is that on the Pacific coast between the Isthmus of Tehuantepec and Valparaiso, Chile.

France has the third place with a total length of 24,010 miles, of which 10,092 are the property of the state. The most important of the submarine connections of France are the two lines which connect Brest with the United States.

As already mentioned, Denmark is fourth on the list with 5,488 miles. Germany lags behind with 9,228 miles of cable of which more than one-third is owned by the government. Its most important cable service is that between the islands of Borkum, Foyal and New York city.

The 17 other countries which take a financial interest in cables have altogether only 11,131 miles of lines, nearly all of them owned by the various governments.

The country which figures to the smallest extent in this list is Bulgaria with an ocean cable about three-fourths of a mile long. Roumania bears her neighbor with a cable four and one-third miles long.

A Roman Meet. Rome has a delightful climate the whole year round, and from the end of November to the middle of March is an ideal time for hunting; then the hounds meet twice a week. On such mornings the riders leave Rome, or the villas around about it, in time to be on the field and ready by 11 o'clock, for the hunt is always several miles from Rome, sometimes on the rolling, partly timbered land to the northward, but more often on the level plain. Such a meet is to Rome what a Meadow Brook meet is to New York. It means a morning gathering of fashionables, with time and money and distinction to its credit. Swift-moving motor cars, lumbering drags and four-in-hands, smart phaetons, barouches, victorias and dogcarts hurry out from the city. From the estates of noblemen in the vicinity of the hunt come more carriages, and men on the hunters which they will ride in the day's chase.—Outing.

Animal Diggers. A writer on natural history has the following to say of badgers: "In hard winter weather the badger lies much in its earth, hibernating for long periods much after the fashion of the bear, and sleeping, like that animal, with one paw in its mouth. At this season the beast closes up the mouth of its den and slumbers away its time for many days, even weeks together. In milder weather it ventures forth again in search of food. In the business of digging the badger is one of the finest engineers in the world, making its way underground, even amid the greatest obstacles, with a strength, energy and perseverance that are truly marvelous. I have always regarded the sardvark, the ant-eater of South Africa, as the champion digger of the animal kingdom, but the badger takes a very high place in the art of getting under ground."

INDEPENDENT SEA SERVANTS.

Stewards on Ocean Liners Are Becoming Troublemakers on Account of Demands.

The servant question has spread to the sea. Within the last few months the demands of steamship stewards have become so great as to give the impression that the men are organizing for some purpose not beneficial to the companies, reports the New York Sun.

A former steward of the Hamburg-American line has just sued for and recovered 400 marks for extra work, and the steward of an English line who was employed to wait on passengers is seeking damage for being compelled to serve the officers and clean port hole deadlights. He has estimated what he lost in tips through being deprived of the pleasure of serving passengers, and has put this in the bill, too.

The steward who has just won his suit from the Hamburg line was engaged by the band master as first violin. On this company's ships all the musicians play the dual part of providing music and making beds. This steward sued the line for 756 marks for extra work because he was obliged when not fiddling to polish brass and clean dishes.

Some of the stewards of an English line are awaiting trial in London for giving steerage passengers better food than they were entitled to. The charge is admitted by several of the men. They insist that it has always been a custom for stewards to get scraps from the salon table, which, instead of being absolutely wasted by being thrown overboard, have been sold to the steerage passengers anxious for better food than is usually given to the third-class passengers.

The company admits that the practice has been in vogue for years, but points to the fact that the food in question was not taken from the first class salon, but from the ship's storehouse. In other words, it was not a perquisite, but a theft.

A line running to the continent recently had 11 stewards leave one vessel at the other end because the chief steward found fault with them for entertaining guests in the kitchen after hours. One of them, who had been in the service of the line for nine years, wrote a letter to the captain of the vessel complaining against the chief steward, and adding that it might be possible for shore folk to make such rules for servant girls and house maids, but that a steward had rights that even a steamship company was bound to respect.

Good stewards, like good shore domestics, are hard to get, and the companies close their eyes to a good deal of their nonsense. Many stewards have fine incomes, and the deck steward of one of the White Star line steamers owns four houses in Liverpool, and has an interest in a public house as well.

ADDS TO COTTON AREA.

Paraguay Is About to Engage in the Culture on an Extensive Scale.

The recent advance in the price of cotton in this country and in England has stimulated the culture of the plant in other countries. The possibility that the cotton manufacturers of the world are facing the prospect of a dearth of raw material seems to have excited the people of Paraguay. Cotton grows wild in that country, and the cultivated product, though different from ours, has a long and fine staple.

As in Peru, the plant is a small tree rather than bush, and it lives and produces for several years. European manufacturers have reported good results from its use. The Paraguayans, however, have never given much attention to its cultivation.

The newspapers of Asuncion have suddenly awakened to the opportunities presented, and have risen to the occasion. They are offering many suggestions to the government, and assert that cotton will yet place Paraguay on the high road to prosperity.

They ask the government to employ the services of men of science, like Dr. Bertoni, to prepare pamphlets for distribution in the cotton trade of Great Britain, France and Germany, descriptive of the nature and qualities of Paraguayan cotton and the facilities for producing large supplies of it. They ask that Dr. Bertoni, Mr. Anista and other experts be engaged to make a survey of the lands adapted for cotton cultivation in the republic; also that the government print and distribute among the farmers of the lowlands the best information as to the methods of cotton-raising.

"We may in a short time export \$100,000,000 worth of cotton in a year," announces the enthusiastic Paraguay-Rundschau, a German weekly published at Asuncion.

A ROMAN MEET.

Rome has a delightful climate the whole year round, and from the end of November to the middle of March is an ideal time for hunting; then the hounds meet twice a week. On such mornings the riders leave Rome, or the villas around about it, in time to be on the field and ready by 11 o'clock; for the hunt is always several miles from Rome, sometimes on the rolling, partly timbered land to the northward, but more often on the level plain. Such a meet is to Rome what a Meadow Brook meet is to New York. It means a morning gathering of fashionables, with time and money and distinction to its credit. Swift moving motor cars, lumbering drags and four-in-hands, smart phaetons, barouches, victorias and dogcarts hurry out from the city. From the estates of noblemen in the vicinity of the hunt come more carriages, and men on the hunters which they will ride in the day's chase.—P. D. Zabriske, in Outing.

RISKS ON RAILWAYS.

Likelihood of Disaster in Consequence of Fast Travel.

Contingencies Which Cannot Be Guarded Against May Arise at Any Moment with Horrible Effects.

It may be agreeable to some travelers to speed along a railway at the breathtaking rate of two miles a minute, the velocity attained at a recent trial on a German railway, but it can hardly be considered safe under present conditions, says a railway authority. German engineers are spending a large amount of time and money on experiments whose aim is the production of an electric or steam locomotive which can run 100 miles an hour. According to a cable dispatch they succeeded a few weeks ago for the first time in reaching 100 miles an hour speed, but the question which naturally suggests itself to railway engineers in the United States is: "Who wants to travel at such speed?" Side by side with the speed records of this German experiment we would set the discussion which took place on the location of distant signals at the recent meeting of the Railway Signaling club, reported a short time ago.

The signal engineer of a leading railroad there stated that he had not been able to work satisfactorily a mechanical signal with a greater length of wire than 2,000 feet.

It is well known that if trains are to be run with safety under the block signal system the spacing of the distant signal from the home must be proportioned to the speed of the fastest train. The distant signal, tells the engine runner that the home signal stands at danger and that he must stop his train before reaching it—and the faster the train is running the further back must this information be given him. With present train speeds it is not uncommon to place the distant signal 2,500 feet back of the home and if this is a proper distance for 60-mile-an-hour trains, then for 100 miles an hour the distant signal ought to be placed at least 7,500 feet back.

But trains are run a large share of the time when the signal cannot be made out at 1,000 feet or anything like that distance. They are often run when a semaphore cannot be clearly seen till one is within, say, 200 feet. Under such conditions the engine runner would have just one and a half seconds to decide whether his train was dashing on to safety or destruction.

Numerous other considerations might be cited to show that whether it be practicable or not to attain 100 miles an hour in a burst of speed it is not practicable on railways carrying a general traffic to run trains at speeds much in excess of the highest now attained. If it were to be run at 100 miles an hour, then it must be on a road built for that purpose, from which all other traffic is excluded. Numerous attempts have been made to show that such a railway would be a paying enterprise, but the capitalists never have been convinced. The mere fact that the Germans have attained over 100 miles an hour on their experimental road, therefore, proves nothing as to the practicability of adopting such speeds.

A BADGE OF STATEHOOD.

How Your Designation of Measures Indicates the Section Whence You Come.

There were two women standing side by side at a stall in the Terminal market awaiting their turn to be served. Each carried a big willow basket on her arm, says the Philadelphia Press, and as the proprietor finished with one customer one of the women lifted the cover from her basket and said:

"Two quarts of those white onions, please."

The man looked at her somewhat stupidly for a moment and then said: "Oh, you mean a quarter peck."

The woman assented and the other woman with the basket looked at her curiously for a moment and then asked: "You're from New York or the eastern states, aren't you?"

"Yes, from New York state," said the other woman.

"I know it! They always figure by quarts in those states until they get up to a full peck, and here, and in New Jersey and Ohio I know, it is all 'quarter peck' and 'half peck.'"

"Isn't it funny," said the other woman. "But were you ever south or in the Washington markets?"

"No," said the other, "I never have been."

"Well," said the New York state woman, "that's the most curious of all. Everything goes by 'small measure' and 'large measure.' It has such a delightful indefinite sound, like a prize package or a lottery in which you may draw something big or nothing at all."

THE WORLD'S KNOWLEDGE.

In a recent dissertation, President Eliot, of Harvard, states that "the whole store of knowledge now available is too vast for any man to master, though he had a hundred lives instead of one, and its growth in the nineteenth century was greater than in all the 30 preceding centuries put together. \* \* \* Culture, therefore, can no longer imply a knowledge of everything—not even a little knowledge of everything. It must be content with general knowledge of some things, and a real mastery of some small portion of the human store."

NOT THE GOON, BUT—

"Tess—I'm afraid this gown doesn't become my complexion at all." "Jess—Well, why don't you change it?" "How can I? It's made up now, and they won't exchange—" "But you can wash it off, and make up differently."—Philadelphia Press.

YOUNGEST PATRIOTIC SOCIETY.

United States Daughters of 1812 Seek to Reproduce the Spirit of the Founders of America.

Though youngest of the patriotic societies of American women, the National Society of United States Daughters of 1812 as valorously advances as did their illustrious ancestors on sea. The annual meeting occurs in the metropolis under the national president, Mrs. William Gerry Slade, of New York. With gavel made of the old ship Constitution, which in the first naval battle caused the British Guerriere to strike colors in 30 minutes, she calls the convention to order on January 8, the memorable day when Andrew Jackson, with a handful of sharpshooters stationed behind cotton bales, won the Battle of New Orleans from picked British soldiers who had served under Wellington. This national convocation, says Woman's Home Companion, is largely executive, though on-the-side social functions at Belmont's scintillate both with gold straps of naval officers and speeches by the ladies in remembrance of Hull, Perry, Lawrence and Decatur, who made the War of 1812 glorious on sea, and of Macomb's and Jackson's achievements on land.

The sole survivor of the war, Hiram Cronk, of northeastern New York, who is 105 years old, is solicitously watched by the official eye of the society, his pension being increased through its intercession with Uncle Sam.

Fortunately enough, these women who perpetuate the period resplendent with the birth of the navy and the birth of the national flag, owe their official life to the refusal of the "Sons of 1812" to take them into their organization. "Sons," said a member recently in a speech, "we daughters owe you a debt of gratitude for turning the cold shoulder." Thereupon these women—women, as supposed to have more time to preserve the history men have made—started a society of their own nearly ten years ago. An unsatisfactory season of reconstruction followed, however, and not until Mrs. Slade became national president in 1897, having subsequently served as eastern organizer and president of the New York state society, was the national organization squarely on its feet. After several years of launching and the spirit of 1812, Mrs. Slade, being assisted by the late Mrs. Louis J. Hall of Harrisburg, Pa., as western organizer, and gaining a national charter from congress in 1901, the steadily spreading National Society of United States Daughters of 1812 promises to stand as a foremost patriotic society of American women.

RACE OF THE CITIES.

Changing Fortunes of the Principal Big Communities of America, Europe and Asia.

There is almost a touch of personality in the way American cities have moved in relative position during the nineteenth century. Their changing fortunes are full of suggestiveness, says Younus Companion.

New York, which had become the largest city by 1790, has sold its place in front in every census up to the present time, and now, with a population more than double that of its next competitor, is not in immediate danger of losing pre-eminence. Chicago first appeared on the list in 1850 as the twenty-fifth American city. At each census it made a brisk stride and passed many competitors until it reached second place in 1900.

St. Louis appeared one decade earlier than Chicago, and by 1850 had jumped to the eighth place, a sensational advance. Philadelphia started in second place, has never been below the fourth, and is to-day the third American city. Boston started as the third, and stands to-day the fifth. Charleston, the fourth city in the original list, lost steadily in relative position, until in 1880 it appeared for the last time among the first 50. Baltimore has kept its place very evenly. Northern Liberties, the sixth city in the first census, and Southwark, the tenth, are now parts of Philadelphia.

It is interesting to study the influences that make cities powerful the world over. The greatest gathering of the Chinese is at Canton. Hong-Kong island, at the mouth of the Canton river, was well-nigh deserted until European commercial interests found their way into Asia, formed a new center of population, and founded a city which is already great.

European cities have not had so many ups and downs as those of America, although the population of Rome has shown extraordinary fluctuations. Careful estimates put it at more than 2,000,000 in the fourth century, and at less than 140,000 in the eighteenth. It is now about 500,000. For many centuries London and Paris have been the largest cities in Europe. St. Petersburg, Berlin and Liverpool are comparatively modern.

For the dwellers in the towns left behind in the race, it is well to remember that quality, and not quantity, is the important consideration.

WHERE HIS INTEREST LAY.

At the end of a day's journey a traveler stopped for the night at a small rancher's shack in Montana. As he sat on the doorstep with his host a troop of children began playing about them and he asked: "These—all yours?"

"Yes."

"How many?"

"Let's see," and the rancher hesitatingly began counting them up on his fingers.

"Pretty soon a drove of hogs came into view. 'Yours?' asked the traveler.

"Yes."

"How many?"

"Just 560 to a pig," was the instant response.