

COAL IN AUSTRALIA.

There is Plenty of It But of Such Poor Quality That It Cannot Be Used for Steamers.

The remark of an expert marine engineer, that "not one of the mammoth modern steamships could possibly go at full speed from Australia to Ceylon while using any sort of coal hitherto discovered in Australia," hits on the coal-mining situation in the colonies to a nicety, says the London Engineer. But if there is anything in recent reports from Queensland, this remark is soon to be wiped out. Mr. Benjamin Donatan, P. G. S., assistant government geologist, has discovered important so-called "anthracite" seams in the Dawson and Mackenzie in the central district, and has, it is said, demonstrated the fuel to be equal to the highest quality of steam coal the world produces. A sample from the seam at its outcrop gave the following result: Moisture, 2.52; volatile hydrocarbons, 11.15; fixed carbon 81.67; ash, 4.16. The seam is 11 feet thick, and the coal is very heavy and compact. As the coal country extends westerly from the Dawson for many miles, the quantity is enormous. No other coal of the same character has been found in Australia, so that the deposit should be a material factor in the development of the colonies, though the aspiration that it may become of "international importance" seems a little sanguine. Queensland possesses other fields yielding less valuable fuel. It is estimated that within the area of the Blair-Atchul coal field—about five square miles—there are 7,000,000 tons of the finest quality of Clermont coal, and about 50,000,000 tons of a slightly inferior quality in a lower seam not yet mined, to say nothing of other seams that may exist at greater depths. At present Queensland is not a great coal producer, by reason of the remoteness of the beds from water carriage, and last year the output was only 494,000 tons, an increase of 80,000 tons in 1899. New South Wales is an easy first among the colonial coal producers, and a cable tells us that in 1900 the yield was 5,507,497 tons, an increase of 542,515 tons.

Both these figures constitute easy records. New South Wales supplies the home supplies of all the other colonies, and it exports quite large quantities to the west coast of North and South America, to the Pacific and elsewhere. Japan and India have injured its trade with the eastern markets, but compensation has been found in other directions, and great expectations of increased consumption at home are entertained from the development of an iron manufacturing industry in the colony itself. In Victoria good accounts are given of the coal measures of Gippsland. The Victorian mining representative stated toward the end of last year in the course of a lecture at the Imperial institute that he had proved that at several localities within the area of 3,000 square miles of coal-bearing rocks there were several seams of good black coal, ranging from two feet to five feet in thickness, and at a number of these localities—Korumburra, Jumbunna, Ostrim, Cape Paterson, Kilcunda, Berry's Creek, Basavally and Halkwood—no less a quantity than 50,000,000 tons were available for local production. The absence of railway communication and the dense forests made transit almost impossible, and conflicting interests of coal importers retarded development for a few years. But now that railways had been extended into the area, there are quite half a dozen collieries at work, employing nearly 1,000 miners and giving an annual output of over 250,000 tons. The total output to date is 1,150,000 tons, of the value of £1,000,000. There are three well-defined coal-bearing areas in Victoria—the Gippsland, the Cape Otway and the Wannon districts, covering an area of 7,000 square miles. There are two distinct classes of coal, the Jurassic black coal and the Tertiary brown coal, the latter in deposits of enormous thickness. Western Australia possesses coal beds at Collie and other places of which we are likely to hear in the future.

Sanitation and the Water Meter. At first one might naturally suppose that as a free supply of water is so necessary to cleanliness, the meter, by lessening the use of water, would increase disease. In some cases and temporarily this might be true, but in the long run there would doubtless be a lessening death rate, due to the fact that according to the wise suggestion of the Yale Medical Journal, by means of the water meter we could secure a purer if not so copious a supply of water. The method whereby this may be brought about is through sand filtration. With our present lavish wastefulness of water sand filtration is an enormously expensive thing, almost amounting to preventing its general introduction. The water meter would not prevent the use of a healthful and necessary supply, but would check the present absurd extravagance. The meter would therefore permit of universal sand filtration.—American Medicine.

Pleasant Theory. Lawyer—Where were you on the afternoon in question? Witness—I was at a ball game with a couple of friends. "Friends, huh! A couple of thieves, no doubt." "Very likely, sir; they were both lawyers."—Chicago Daily News.

The Outrigger and the Woman. The outrigger can tickle any woman with his feathers.—Chicago Daily News.

REGARDING CORPULENCE.

An Excessive Increase of Flesh and Its Attendant Discomforts.

The amount of fat normally present in the body varies with age. It is considerable in infancy, slight in childhood, least of all from the fifteenth to the twentieth year, increases gradually from this time to about the fortieth year, increases more rapidly for a few years, then remains stationary for a time, and finally diminishes again in old age. Generally speaking, an increase of fat within moderate limits is a sign of health, just as a decrease may be the reverse, but when the increase is excessive it constitutes a true disease, says Youth's Companion. It is difficult to define the limit where a healthy embonpoint ends and abnormal corpulence begins. Life insurance companies have tables showing the proper ratio of weight to height at the different ages, but the figures are of course only averages. In general it may be said that when the accumulation of fat causes discomfort, short breath on moderate exertion, and a feeling of fullness in the head on stooping, it constitutes obesity or corpulence. The trouble is a disorder of nutrition characterized by faulty elaboration and deficient oxidation of the food, in consequence of which an undue amount of fat is formed and deposited in various parts of the body. It is as often hereditary as acquired. The treatment of obesity is not so simple as it was thought to be when the so-called banting system was originated. This system consists in the exclusion from the diet of all starches, sweets and fats. It is usually successful in reducing the weight; but unless carried out under careful medical supervision it may seriously affect the general health. The same is true, perhaps even to a greater degree, of other systems in which the amount of fluids is greatly restricted. The management of a case of obesity is in general similar to that of gout in the intervals of the acute attacks, or of the uric acid diathesis, with some slight modification in the diet necessitated by the altered conditions. The patient should live much in the open air, drink freely of water between meals and at bedtime, and exercise systematically. Red meats should be partaken of sparingly, or better not at all, and starchy foods and sweets should also be excluded for the most part.

VENTILATE THE HAIR. Frequent Alings and Subsequent Braiding Said to Be Very Beneficial. A woman who will make a habit of brushing and combing the hair at night and rigorously rubbing the scalp, rubbing till the blood tingles, may be sure, if she inaugurates this habit before her hair has begun to fall, that her hair will keep its color and youthful quality. Even falling hair will often be brought back to vigor by such treatment, says the Cincinnati Enquirer. A good deal is said in favor of brushing the hair. Brushing cleans the hair itself, but it does not invigorate the scalp, as does combing, and neither is half so good as vigorous rubbing. When one begins she will find it takes a lot of rubbing to make the head tingle, but in a few weeks the first rub will start the blood. That tells its own story, for where the circulation is sluggish there deterioration of vitality has begun. Where the blood runs freely there life renews itself. It is good to let the hair hang loosely at night, especially if one sleeps in a room in which outside air circulates freely. The roots need air. Twice a week braid the hair into little braids all over the head. Hair thus treated will keep a glossy look, yet not hang together, and it will turn back prettier in a pompadour with better effect than as if the curling irons are used. Besides, curling irons are ruinous to the health of the hair.

In Hanging Pictures. An old rule for hanging pictures was that water-colors, black-and-whites, and oils should not be hung in the same room; but this rule is rarely regarded now. It is, however, inartistic to see them arranged in the same group, and a little care will easily avoid it. It has come to be pretty well understood that pictures should not be hung on a level, though this rule does not mean that there should be no symmetry or plan in their grouping. Too heavy pictures should not top very light ones; a natural sense of proportion must be regarded. With this general idea in mind, square, oblong and oval pictures may be satisfactorily arranged, always premising that the pictures are worth hanging in any event. Some of the modern bargain counter art departments have to answer for serious sins of taste. N. Y. Post.

Fruit Sorbet. Add a cupful of water to a cupful of sugar, stir until dissolved, and boil five minutes. Remove from fire and add a cupful of orange juice, juice of one lemon, a grating of nutmeg and half a pint of kitro. Freeze for 15 minutes, then add a meringue made of the whites of two eggs and two tablespoonfuls of powdered sugar. Orange pulp may be used instead of meringue.—Indianapolis News.

Tandem Habit. "Why do Mr. Paintbrush and his wife promenade in single file?" "They used to ride a tandem, and they can't get over the tandem habit."—Niagara Blatter.

THE AMATEUR REFORMER.

Allows His Indignation to Lead Him Into an Exhibition of Temper.

"If you don't mind my mentioning it," mildly suggested the tall passenger sitting opposite, relates the Chicago Tribune. "It is a rather dangerous practice to spit out through the window of a train on an elevated railway." "I don't see any danger," said the other passenger, a light-complexioned man with a dyed chin beard and a short black pipe. "No danger to you, perhaps," rejoined the first speaker, "but decidedly dangerous and unpleasant to anybody who might happen to be walking on the sidewalk below." "That's his lookout, and not mine." "Just so. But if you had looked out perhaps you wouldn't have done it."

"Maybe I wouldn't and maybe I would." "It's more comforting to believe you wouldn't. I hate to think a man will knowingly and intentionally make a hog, or worse than a hog, of himself, even if he does ride in a smoking car." "What difference does it make to you? If you don't like it, you know, you don't have to stay here." "If I were to stay here or stand up, I don't consider you entitled to any explanation of my being here, but in the interests of historical accuracy I thought I'd tell you." "That's all right. But you'd better be a bit careful how you call people hogs, just the same." "It was a thoughtless comparison, I confess. A hog wouldn't do such a thing." "You seem to be hunting for trouble, old chap, and you're likely to get it in chunks if you don't go slow."

"I should regret that exceedingly. To get into a muss with a man like you would be an experience I would go miles to avoid." "Then you'd better keep your mouth shut, if you know what's good for you. That's my advice." "My friend, I see you are getting angry. You ought always to avoid that. It places you at a disadvantage, you know. How much better it would be if you could emulate my example, and—"

"You blank old rubberneck, I've the greatest notion in the world to—"

"But wait a minute, my good sir. There's plenty of time yet. I was going to say that a man never ought to allow himself to become angry and excited over trifles. Bless your soul, if I see a fellow making a disgusting spectacle of himself I may take the liberty sometimes of telling him so, but I do it calmly and without any excitement, while, at the same time—what! Are you doing it again, you infernal beast? Haven't you the first instincts of a gentleman?" "I'm doing it again, and I'll do it all I please, you blank old idiot. We'll see it—"

Why You Should Eat Spinach. Prominent specialists claim that spinach is the most precious of vegetables, on account of its medicinal and strengthening properties. The emollient and laxative virtues of spinach, owing probably to the salts of potassium it contains, have been long known. It is excellent for the liver, and as a consequence, freshens the complexion. Some vegetables contain a relatively large dose of iron. According to Boussingault, the proportion is 0.00074 of iron in 100 parts of French beans, 0.00081 in 100 parts of lentils, and in spinach very much larger. The chemist Binze has proved that spinach and yolk of egg are proportionately richer in digestible and assimilable iron than all the most renowned ferruginous remedies. Its great value and growing importance are shown in the fact that spinach is already an active ingredient in several new and very valuable tonics.—Good Literature.

Cherry Salad. Stone half a pound of cherries and save all the juice. Take the whitest cava of a nice head of lettuce and wash them thoroughly. Slice a small cucumber and chop fine a dozen blanched almonds. Mix all gently together, arrange on the lettuce leaves, and pour over a dressing made of a gill of cherry juice, two tablespoonfuls of lemon juice, a drop or two of almond extract and four tablespoonfuls of sugar. Serve very cold.—Good Housekeeping.

PUEBLO POTTERY.

Wonderful Specimens of Work Done by the Ancient Cliff Dwellers.

A fine lot of Pueblo pottery and relics of different sorts is shown in the Ethnology building of the Pan-American exposition. The Pueblos, who were dwellers in the plains and in the cliffs as well, are one of the most interesting, from an archaeological point of view, of all prehistoric people. Their civilization was remarkable, and their ingenuity in pottery making, basket weaving, bead work and many other things, very great, says the exposition bulletin. They had many peculiar customs, ceremonies and symbolic rites, and their pottery is ornamented with figures the significance of which puzzles the novice and expert alike. One of these peculiar symbols was a broken instead of a continuous line drawn about a bowl or other dish, suggesting perhaps the finite character of life. A bowl shown in the exhibit of Pueblo pottery has the reproduction of two feet upon the bottom of it, inside, suggesting possibly the transitory and insignificant character of terrestrial existence.

Fine specimens of the famous "black and white ware," most of which is black on the inside. A number of specimens finished so as to give the outside a corrugated appearance are shown. Many ingenious fine tools, finished stone implements, ornamental trinkets, presumably having religious significance, are on exhibition in the cases. The basket work of the Indians is very wonderful. Baskets made by comparatively modern Indians are shown. Water-tight baskets in large numbers and in many varieties are seen in the exhibit. All are ornamented with figures woven in when the basket was made. The Pima Indians are those most famous for basket making. They even use baskets for cooking utensils, covering them with a thin layer of clay to keep them from being destroyed by contact with the fire.

THE VALUE OF FLAVORS. We Could Not Get Along Very Well Without Their Presence in Our Food. Chemists tell us that cheese is one of the most nutritious, and, at the same time, one of the cheapest foods. Its nutritive value is greater than meat, while its cost is much less. But this chemical aspect of the matter does not express the real value of the cheese as a food. Cheese is eaten, not because of its nutritive value as expressed by the amount of proteins, fats and carbohydrates that it contains, but always because of its flavor. Now physiologists do not find that flavor has any food value, says a writer in the Popular Science Monthly. They teach over and over again that our foodstuffs are proteins, fats and carbohydrates, and that as food flavor plays absolutely no part. But, at the same time, they tell us that the body would be unable to live upon these foodstuffs were it not for the flavors.

If one were compelled to eat pure food without flavors, like the pure white of an egg, it is doubtful whether one could, for a week at a time, consume a sufficiency of food to supply his bodily needs. Flavor is as necessary as nutriment. It gives a zest to the food and thus enables us to consume it properly, and, secondly, it stimulates the glands to secrete, so that the foods may be satisfactorily digested and assimilated. The whole art of cooking, the great development of flavoring products, the high prices paid for special foods like lobsters and oysters—these and numerous other factors connected with the food supply and production are based solely upon the demand for flavor. Flavor is a necessity, but it is not particularly important what the flavor may be. This is shown by the fact that different peoples have such different tastes in this respect. The garlic of the Italian and the red pepper of the Mexican serve the same purpose as the vanilla which we put in our ice cream; and all play the part of giving relish to the food and stimulating the digestive organs to proper activity.

England's Old Common Field System. A "Common Field" is quite distinct from a "Common." It is a field belonging to numerous owners. The land consists of long narrow strips, perhaps not more than ten yards wide and running parallel with an another. What are the exact rules of cultivation that obtain in Kent today we do not know, but of old it was usual to have a regular rotation, such as wheat one year, barley or oats the second and fallow the third. When the crops were harvested, each member of the community getting his or her share, all could put in their cattle, which roamed over the whole field, feeding on the stubble, etc. And this was termed the "right of sack." The "Common Field" system was gradually done away with by statutes in the reigns of George III. and William IV.—London Express.

Forests in Patagonia. The numerous islands of the Patagonian archipelago are covered with evergreen forests capable of supplying immense quantities of valuable timber, while the mountain ranges, being of the same geographical formation as those of Chili and Peru, are probably rich in mineral resources.—N. Y. Sun.

A Point to Remember. It is better to make good use of what little you know than it is to know a great deal that is of no earthly use.—Chicago Daily News.

STRANGE SEA FIGHT.

Thrilling Encounter of an English Cruiser with a Violent Sea Elephant.

One of the strangest sea fights on record is that which the crew of the British warship had lately with a sea elephant near the Falkland Islands, off the coast of Patagonia, says a London exchange. H. M. S. Flora is a second-class protected cruiser. She had just arrived at Port Stanley, in the Falkland Islands, and the commander, desiring to go ashore, ordered the gig to be lowered and manned. The sea was comparatively smooth, and the boat shot along rapidly, propelled by six stalwart blue-jackets. On nearing the shore, however, they saw a strange creature in the water. What it was they did not know. It churned and beat the water into the whiteness of snow within a few fathoms of the boat.

Then the splashing and beating ceased, and from the hissing foam arose what seemed to be the dark head of an infuriated elephant. For a second the creature glared at the astonished boat's crew; then, with an ear-splitting scream, lowered its head and like an arrow came for the boat. There was no time to do anything, to jump or even think. Crash! and the frail craft rose bodily into the air, while the bruised and half-stunned occupants were thrown violently into the sea. Fortunately for them, the monster's attention seemed exclusively riveted upon the boat, the fragments of which it literally smashed into matchwood. Neither the commander nor his men seem to know very well how they reached land, so exhausted and unstrung had the experience left them.

Returning later to the cruiser on a shore boat, the commander determined pluckily to organize a party for the hunting down and, if possible, the capture of their assailant. On the following day nine boats went forth, each containing the full complement of men, armed with rifles, and among whom were several harpooners. Advancing in a semicircle, the boats drew across the small bay which had been the scene of the previous day's incident. Till within 50 yards from the shore nothing unusual occurred. Then suddenly a huge black mass rose threateningly in a circle of foam and quite close to the center boats. Two harpooners poised their weapons, which in another instant struck quivering in the monster's body, while a shower of bullets followed in a volley. With an angry snort of pain, the creature darted toward the nearest boat, only to be met by another deadly volley, fired at very close range, which ripped and tore it unmercifully.azed by such a reception, the monster appeared to hesitate. Another volley followed, and when the smoke cleared away there was nothing visible on the surface save a streaking of blood-red foam. Whirl went the harpoon lines, while the men sat excitedly waiting a reappearance of the foe.

"He's making in for the shore now, sir!" shouted one of the officers to the commander, and the boats were signalled to close in. For nearly two minutes the brute remained below, swimming slowly back and forward; then, on reappearing, it lay quietly, as though exhausted. The boats approached cautiously, and when quite close five more harpoons were transfixed; then instantly dividing, the boats pulled rapidly for the shore.

Now commenced a tug-of-war lasting for nearly three hours, till at last, weak with struggling and loss of blood, the huge monster was hauled into shallow water to await the receding tide. Not one of the party, from the commander down to the little midship, but was thankful for the rest. In about an hour's time the tide had gone out sufficiently, and the battle began again, but now all the advantage lay with the sailors. After a vicious struggle in which several blue-jackets were severely injured by fragments of rock hurled about by the monster in its death throes, it lay battered, silent and motionless. This gigantic specimen of sea life is macrochirus elephantinus, or proboscideous, measuring just about 40 feet long, and weighing over 13 tons. It has a trunk four feet long, and a general conformation closely resembling that of the ordinary elephant, save that there are huge fins in place of legs. It is found only in Antarctic waters.

Cheers and Songs at College Games. It is apparently an impossibility to invent a new cheer so as to vary the monotonous repetition of the present one. For the last four years vain attempts have been made to do this. But if we cannot vary our cheering we can at least intersperse it with songs. This also has been tried repeatedly, but it has been more or less unsuccessful. The reason for this lack of success has been that the college has had no practice in singing the songs before the games. But we think that if this year the glee club, at frequent yard concerns, makes it a point to teach the songs in the college, the singing at the games will be a decided success, and will be very encouraging to the team. Last year a song was taken in the right direction, when a mass meeting was held at which two new songs were learned. But the words of both songs were such that when sung the next day at a losing game they were more ridiculous than effective.—Harvard Crimson.

An Appreciative Visitor. "Did you have a good time at the world's fair?" "I should say so! Never ate better sausage than I got there."—Meggendorfer Blatter.

FOREIGN GOSSIP.

Mexico's jurisdiction extends to more than 30 islands.

Smoking among women in France is on the increase, both in town and country. In the City of Mexico there are 1,071 private artesian wells and 11 public ones. Berlin has on the average only 15 days a year when no clouds at all are seen in the sky. On an average for 50 years the coldest day in Berlin has been January 13, the warmest July 23. In 1898, 66,000 Italian emigrants, half of them agricultural laborers, returned to the port of Genoa. A parliamentary return shows that the total number of registered electors in the United Kingdom, at the present time, is 6,822,545, as compared with 6,736,955 last year.

On approaching Mt Oebel, the capital of Kordofan, during his tour of inspection recently the sirdar was met by the remnants of the khalifa's cavalry—300 horsemen clad in coats of mail. It is the custom on the birth of a Japanese baby to plant a tree. This is carefully tended until the party is about to be married, when it is cut down and made into an article of furniture for the new home. The municipal council of Paris has hit upon a capital idea for encouraging citizens to beautify the city. They give an annual prize to the architect and the builder of the most beautiful building erected during the year, and allow the owner to deduct 50 per cent, when he pays his taxes.

HENRIQUEN FIBER. Much interest is an Experiment to Grow It for Binder Twine in Lower California. The annual importation of henriquen, which is used to make binder twine, amounts to about 500,000 bales of 365 pounds each. It comes from Yucatan, and is landed here at about 20 cents a hundred pounds. The purchase by American capitalists of land in Lower California, for which they hope to raise enough of the fiber to supply the American market is an agricultural venture in which thousands of farmers in the United States are interested. The land covers an area of about 500,000 acres, and much of it has already been planted by the men in the employ of a farm machinery company, of Chicago, which now owns the property. It will take some years to produce the quantity required for binders for American crops, says the New-York Tribune.

A dealer in twines said: "Henriquen, or sisal, as it is called in the trade, is an important item with the western farmer. It takes about 75,000 tons of it to bind a crop, and flaring it at \$160 a ton it costs the farmer the nice sum of \$12,000,000. If we can keep that amount of money in this country it will do us no harm. By raising the fiber here we may also be able to prevent the fluctuation in price, of which we have had sad experience in the last few years. Between the outbreak of the war with Spain and this time the price of sisal has varied from two to twelve cents a pound. If the reports from Lower California as to the richness of the soil on the land purchased by the western manufacturers are true, the crop will be small. Rich soil makes the plants supple and heavy, but poor, stony land, like that of Yucatan, produces the tough fiber which makes henriquen, or sisal, a valuable product."

HE HADN'T LOST A BURGLAR. Consequently Didn't Want to Get Tangled Up with Other People's Property. "John," she said, suddenly waking him, "there is a burglar in the house." "Are you sure?" he asked. "Positive," she replied. "Don't you hear him?" He got up and began to dress hastily, but quietly, says the Chicago Post. "What are you going to do, John?" she inquired. "I am going to sneak out the back way and get a policeman," he answered. "But if you go right downstairs now," she said, "you'll find him in the dining-room." "Oh, I'll find him will I?" he retorted, sarcastically. "Well, now, you just look me over carefully." "Yes, John, what of it?" "Do I look like a man who has lost a burglar anywhere?" "No, of course not, but—"

"Do I have the reputation of being an impertinent fellow who is always interfering with other people's business? Do I in any way resemble the lost and found department of a daily newspaper?" "No." "Then why should I get tangled up with other people's property?" "You're afraid, John." "Afraid nothing!" he retorted, indignantly. "I am looking at it from an ethical point of view. This burglar undoubtedly has been lost by the police, and if I took charge of him they might think I was trying to steal him, and make a lot of trouble for me. Besides, I'm no searching party. You women don't understand the ethics of business at all."

Cotton from Egypt. We purchase from Egypt over 44,000,000 pounds of cotton annually. Efforts are being made to produce substitutes for this cotton by hybridizing. There is every prospect that we are succeeding in producing the long, fine staple that now comes from the land of the Pharaohs, and for which we pay over \$6,000,000 annually.—Industrial Journal.