

These Are Islands of Isolation

When you feel the complications of society bearing too heavily and the roar of civilization too grievous to be borne, pack your luggage and hie to Baker's Island. There, 3,725 miles off from San Francisco, you'll find solitude such as even Robinson Crusoe failed to enjoy, for there will not be even a Man Friday to bother you. As a matter of fact there is little of anything on or off the island but gulls and rock.

Out in the mid-Pacific is another island, Fanning, which will appeal to the person of more sociable habits. It is of atoll formation inhabited by some 200 persons, who doze and eat and doze again in the equable climate and only bestir themselves when the larder is empty. Fish are plentiful and duck and snipe abound, which, taken with tropical fruits, go to make up the native's menu.

In the British Empire the loneliest spot is said to be Tristan da Cunha, a volcano-formed island in the South Atlantic which rises to an altitude of 8000.

There are only 119 inhabitants on the island living in its twenty-two stone thatched-roofed houses. Their wood is that which drifts in to them on the tide, they raise potatoes as the food staple, they make their moccasins of soft bullock hide, they obtain a few clothes from an occasional ship which calls there in exchange for geese, fowls, milk sheep, eggs and cured albatross and penguin skins, and for months in succession they do without bread, tea, coffee and sugar. The people are fast deteriorating in type due to interbreeding.

The nearest inhabited island to Tristan da Cunha is St. Helena. This rugged bit of earth is 1200 miles from the nearest part of the African coast. Before the days of the Suez Canal it had some commercial importance, but today its excellent harbor shelters vessels only while they are coaling. Its 10,000 inhabitants enjoy a most equable climate, the mean temperature ranging throughout the whole year from 65 to 71 degrees.

Nauru, though only twelve miles in circumference, with its many beautiful lagoons which mirror its tall coral pinnacles and coconut palms in life-like perfection, is a treasure house of millions of tons of rich phosphate of lime. It is perhaps one of the most livable of the Pacific islands, as the promoters of the phosphate industry have established free laundries, ice, electric lights and refrigerators for the preservation of fresh foods. Employees have their own homes and there is an almost endless succession of social functions to keep them alive and happy.

If there is a skeleton in your closet, rest assured that the few inhabitants of Easter Island, 2300 miles off the coast of Chile and the easternmost inhabited Polynesian island, will make no effort to bring it forth into the light, as one traveller says of them that they are not curious enough to turn around on the dock to look at the boat that calls there about once in eighteen months. Gigantic statues, stone houses and sculptured rocks, relics of an ancient people, are found on the island.

The Worlds Highest Bridges.

Work has been started on the world's biggest bridge. It will span the Hudson River from New York to Jersey City, and its total length will be 3,300 ft.

The central span will be 1,000 yards, suspended from two steel towers, each 300 ft. high, by steel cables 5 ft. thick. The bridge will carry eight railway lines and two footpaths, and its construction will cost something like £40,000,000.

Although, when completed, it will be the biggest and most solidly-constructed bridge in the world, it will not be by any means the longest. This distinction belongs to the one built by British engineers over the river Ganges at Sara, in the Bengal Presidency of India. Covering a distance of about fifteen miles, this bridge cost \$20,000,000.

Next to it, in point of length, comes the Gernavoda Bridge, over the Danube, which is nearly twelve miles long, about the distance between Waterloo and Surbiton. It was designed by a Frenchman, built by an Englishman, and bought by the Roumanian Government in 1882.

The world's loftiest bridge is that spanning the Zambesi River, in South Africa, close to the Victoria Falls. It is 400 ft. above the river-bed.

Here's the Answer.

Little Girl (looking over newspaper advertisements): "Mamma, why do all these boarding houses object to children?"

Fond Mamma: "I'm sure I don't know. Go and see what the baby is howling about, and tell Johnny to stop throwing things at people in the street, and make George and Kate stop fighting, and tell Dick if he does not stop hanging that drum so hard I'll take it away from him."

What's the Use.

Doris (aged seven, just going to her music lesson): "Mummy, they only play harps in Heaven, don't they?"
Mother: "Yes, dearie, only harps."
Doris: "Then what's the use of my learning to play the piano?"

Penniless Millionaires

Mark Twain once wrote a delightful story, called "The \$3,000,000 Bank-note," in which he described the miserable lot of a man who wandered about a big city, starving and homeless, though all the time he had in his pocket the biggest banknote ever printed, one for five million dollars.

You see, the poor fellow had no other money, and no one who could do so would change the big note.

It has often been said that novelists are prophets. In this instance, at any rate, Mark Twain proved to be one, for years after he wrote that tale, a millionaire, a countryman of his own, actually got into a similar trouble.

Helip Brandreth, a young American millionaire, was staying at an hotel in Brussels, when he found that he had run short of cash, and had nothing but a cheque for a very large sum.

The hotel-keeper asked him to pay up or leave, but refused to have anything to do with the cheque. Mr. Brandreth thereupon left the hotel to find a friend who, he knew, could identify him. On the way he managed to lose his identification papers, and when he got to his journey's end it was only to find that his friend had left.

Coming back to Brussels, Mr. Brandreth spoke of his dilemma to the police, but since he had no papers, they refused to believe him, and placed him in the St. Gilles Prison, on a charge of vagrancy. And there he stayed for three long weeks, until cables from New York released him.

"Millionaire" in these days is a very elastic term. There are heaps of people who live in expensive flats or hotels, who dress perfectly, and do themselves extremely well, men who have the reputation of being immensely wealthy, and who yet could hardly hope to get a cheque for five hundred dollars cashed at their bank.

There was such a case recorded in the daily papers quite lately. A certain Irish-American financier had to admit to a meeting of his creditors that his only cash assets were \$10 in the bank.

Yet this man went to England a few years ago with a big fortune, and has since put through deals, literally in millions. One trading company which he organized had a capital of five millions.

The debtor himself declared that he was only temporarily embarrassed, and, if given time, could pay in full. He is only one of many. Some are men of straw, who pose as millionaires without ever having owned a hundredth of that sum. They carry on simply by brag and bluff. But there are others, good if bold business men, whose whole capital is constantly invested in all sorts of enterprises. If any check occurs, if there is a financial panic, and the millionaire is suddenly called upon to pay big sums in cash, then comes the crash.

A man may be a millionaire on paper, yet be worrying his soul how to pay the month's rent, or the demands of the income-tax collector.

and the worst is yet to come



SOLVING NATURE'S WONDROUS SECRETS

NAMES THAT WILL LIVE FOR EVER.

Scientists and Physicians Devote Their Lives to Promote Welfare of Mankind.

Most people know the names of some of the scientists who made the great discoveries of half a century ago and more; but few could say much about those who are working to-day.

Yet the discoveries now being made in medicine, electricity, chemistry, and the thousand and one other departments of science are far more wonderful than those made in earlier years.

Who are the great scientists of today?

We shall not go far wrong if we begin with the famous Englishman, Sir Joseph Thomson. Born in 1856, he went, at the age of twenty, to Cambridge University, where he took a particularly brilliant degree in mathematics. Since then he has remained at Cambridge, working ceaselessly at the problems of chemistry and electricity.

Every important modern electrical undertaking owes a large measure of its success to Sir Joseph Thomson. In 1906 he was awarded the Nobel Prize for Physics, the highest honor that can fall to any scientist.

Another Nobel Prize won. The same prize was won in 1908 by another Cambridge man of an entirely different type—Sir Ernest Rutherford, who has been described as a great, shaggy, Newfoundland dog of a man. He hails from New Zealand, where he was born in 1871, and he obtained a degree with the highest possible honors.

Though he has done splendid work as a chemist, he has specialized for the last few years on radio-active substances and electricity. His work has always been marked by the originality of his methods, and we owe to him a great deal of what we now know about radium.

But the greatest of his triumphs is his investigation of the nature of electricity. He has succeeded in answering a question that has perplexed philosophers and scientists for more than two thousand years. Sir Ernest Rutherford has shown that the electric current consists of a stream of the most minute particles moving at speeds that are almost incredible. This discovery entirely revolutionizes our ideas about electricity, and its effect on the future development of electrical power will be tremendous.

The first man to give to the world any useful facts about radium was Professor Curie, of Paris, whose brilliant career was cut short by a street accident in 1906. His work, however, was destined to continue, for he had always been assisted by his wife, who, after his death, devoted herself to carrying out the task which he had set himself.

Famous Woman Scientist.

Mme. Curie, who is a Pole by birth, is recognized everywhere as one of the cleverest scientists of the day. She is modest and retiring, and no one would guess from the conversation of this slight, grey-eyed little woman that she is one of the world's greatest benefactors. It is owing to her courageous experiments that we are now able to use radium to cure diseases previously considered incurable.

Radium does not give up its secrets without taking toll of those who pry into them. The rays it emits have a very harmful effect upon the human body if it is continually submitted to their action.

Like radium, the X-rays are a source of constant danger to those who are

working upon them, for if they fall for any considerable time on living flesh they kill the tissues of which it is composed. Investigators know the danger to which they are exposed; but that does not deter them in their work for humanity.

Within the last few weeks X-rays have claimed two victims—Dr. Ironside Bruce and Dr. Leray. These men willingly gave up their lives in order to help cure the sufferings of humanity. Each was experimenting with a new and improved apparatus, whose perfection meant an important advance in the great science of healing. Each felt the warning symptoms which told him that if he persisted in his work he was doomed. Yet neither hesitated for a moment; they performed their task and laid down their lives.

Another great name amongst English doctors is that of Professor C. S. Sherrington. You would not find his great book easy to read; its very title—"The Integrative Action of the Nervous System"—is quite sufficient to frighten most people. But every time you pay a visit to the doctor you are benefiting by Professor Sherrington's services. He has made a particular study of the human brain.

The Miracle Gland.

His researches have brought to light all kinds of previously unsuspected facts about the way in which the nervous system acts upon the health of the body. They have given medicine an entirely new outlook. Besides helping the doctor to deal with the more ordinary ailments of mind and body, his work is of incalculable value to those who suffered, or are still suffering, from the effects of shell-shock.

Among the youngest men of science at the present time in England is Mr. Julian Sorel Huxley, a worthy grandson of the great Huxley whose name is a household word. His work so far has been to investigate the peculiar action of certain glands of the body.

Medical men have known for years of the existence of a vast number of glands whose development is essential to health. But just what these glands do, and how they do it, were mysteries. In the lower part of the front of the neck is a gland called the thyroid, which has long puzzled those who sought to discover its purpose. In some cases the gland became enlarged, producing the disease we call goitre. In others it did not develop properly, and where the gland was too small stunted bodies or feeble minds were often the result.

A year or two ago Julian Huxley began a series of experiments upon a South African reeve, called the axolotl. This creature, like the common frog, passes through a tadpole stage in its young days. Huxley found that if he dosed tadpoles with extract of thyroid they developed into perfect newts with amazing rapidity. On the other hand, if the thyroid gland of a tadpole was removed it never became a newt. The purpose of the gland was thus found to be to assist development. Though thyroid extract is not, as some would have us believe, the elixir of perpetual youth, the discovery was of tremendous importance. Already it has enabled us to deal with cases of undeveloped minds and bodies, and we shall make still more use of it in the future.

Laugh It Off.

Are you worried in a fight?
Are you cheated of your right?
Laugh it off.
Don't make tragedy of trifles,
Don't shoot butterflies with rifles—
Laugh it off.
Does your work get into kinks?
Are you near all sorts of brinks?
Laugh it off.
If it's sanity you're after
Here's no recipe like laughter,
Laugh it off.

THE AUTOMOBILE

Items of Interest.

Patching all tubes every three months, removing with gasoline all old patches, and sticking on new fabric patches on all vents, will add dollars' worth of service to the casing, as well as to the tube.

It cost me \$7.25 in cash for brake lining, and a half-day's time putting the lining where it belonged, to learn that in stopping a truck it is not absolutely necessary to apply the brake each time. Coasting to a stop is a wise practice.

Good tires for trucks and autos are more important than low prices. Get the most service for your dollar. This same is true in buying belts, cylinder-oil, brake linings, bearings—anything, in fact.

When I see a man coming toward me driving an automobile, I am not half so much concerned whether he has non-skid tires as I am whether there is a non-skid man at the wheel. If he acts like skidding, my move is over the fence and out.

Nail punctures in casings let in water and mud. These punctures should be plugged with gum-gum and covered with a patch of fabric before putting the tube in again for inflation. This prevents the seeping of soft mud, and the tire wears longer.

Small cocoa mats for running-boards on autos save floor mats and carpets. These mats can be tacked to the running-board and will prevent much dirt being carried to the car floor whenever you get in. They can be taken off, cleaned, and then put back.

Under-inflation ruins tires. A soft tire will not bounce like a full one, and more readily invites rim-cutting and gashes or cuts that may go clear through the casing and tube. The soft tire also takes more gasoline and makes the engine work harder. You can prove that the engine works hard under these conditions by letting out the air completely in one tire and then driving the car for a quarter of a mile or more to note the effect on the engine. Keep the tires inflated to the pressure indicated on the casings. Use a pressure gauge.

Weak valve springs: When the motor of an old car seems to have lost its pep, and numerous remedies have been tried without success, examine the valve springs. These, especially the exhaust springs, may have lost some of their tension, allowing the valves to remain partially open when firing. This will naturally result in a loss of power. If not convenient to replace the old springs with new, which is the best thing to do, the trouble may be overcome by removing the lock-pins and washers and adding one or more washers to each, thus shortening the spring length and increasing the tension.

Spring bearings are very much neglected on the average car or truck. The man who has never thought of these bearings as being important, should examine his car or truck and see if new bushings and toggle bolts are not needed. If there is as much as an eighth-inch of play, they should certainly be replaced. Often replacing the bushings alone is sufficient. In renewing bushings, the mechanic should be careful to see that grease holes are drilled in all bushings and that these correspond with grease-cup openings. I recently had occasion to have a garage man replace the bushings in the front wheel steering knuckles of my car. No holes were drilled in the bushings—to admit grease, so the job had to be done over—at my expense.

Old Age Signs.

When numerous small slits and cracks appear in a tire it is a sign of the approach of old age. Auto casings in this respect are like men and women. Although they don't get

gray-haired, they do become wrinkled and cracked, often chalky white in appearance.

The fabric in an old tire gradually becomes brittle and hard, so that it breaks easily. Like the bones of old people, it is difficult to knit. The tire surgeon's work increases in difficulty with the age of the casing.

Those whose strength is conserved do not so readily show their age. The best way to preserve their usefulness is to take care of them. To hide the effects of age and wear motorists frequently "doll them up," painting the side walls and washing with cleaning solutions. Others pay no attention to their appearance and permit them to go shabby.

Ordinarily the small cracks appearing on the side walls do little harm unless they penetrate through the rubber covering to the fabric underneath. It is well worth the motorist's attention to have his casings regularly inspected.

Tires age fastest when lying around. They are kept in best condition in actual service. If it is necessary to store them they will retain their life longest in an even and moderate temperature and light.

Motor Truck Tips.

Investigate Immediately—Truck drivers should be taught to investigate any unusual noises immediately they are heard. Neglect or delay may make later investigation useless. For instance, an immediate investigation of a noisy differential, followed by a thorough cleaning and filling with fresh oil, may save the cost of new gears and bearings. And this applies in a hundred other parts of the mechanism.

Spring Wisdom—To repair a broken valve stem the fittings should be removed and the stem slipped back in the tube. Now make a small hole in the tube a short distance from the valve stem, bring the valve out again through this hole, and in so doing the fabric in the original valve hole will not be injured. The small cut formerly occupied by the valve stem can be vulcanized easily.

If the valve is battered so that no fittings can be removed the valve can be sawed off across to the cut with a hack saw and the nut can then be easily taken off.

Repair Broken Valve Stem—When a spring plate breaks it is important to have it repaired or replaced at once by a skilled spring maker, not by any chance blacksmith. Often a break in a plate occurs at a place where it does not immediately cripple the entire spring, but it is obvious that the breaking of one plate throws extra work on the other plates, which may in turn suffer breakage. If the intermediate plates should break at the centre bolt, the spring clips should be tightened down until it is possible to have the break repaired. Very often rebound clips are loose or broken. Missing rebound clips may result in broken main plates.

Often Seen It Before.

Impressionistic Lady Artist (proudly to Farmer Hick, watching her work): "Did you ever see such glorious colors; such a blood-tinted sunset; such a fiery dancing sun breaking its way through these sulphur-colored clouds?"

Farmer Hicks: "No, lady. I ain't seen sitch since I became a teetotaler."

Her Memory.

Servant (returned from an errand): "Please, ma'am, I couldn't get it."
Missus: "Get what?"
Servant: "They said they didn't keep it, ma'am."
Missus: "Keep what?"
Servant: "What was told me to fetch, ma'am."
Missus: "What was that?"
Servant: "Dunno, ma'am—I forget."

On Appreciating Our Privileges

Summer-cottage existence has many pleasures, as the advertising of any result will explain in full detail. But there is one advantage in a few weeks of lakeside life which is not often mentioned, namely, the nightly use of coal-oil lamps and the daily task of cleaning and filling them. A short course in coal-oil illumination is bound to show by contrast the great convenience and efficiency of electric light.

In the city or town, people get used to their comforts and often forget all about them. They turn taps and press buttons in calm confidence that the consequences of the action are as much in the course of nature as the sunrise or as the phases of the moon. Then they encamp upon a lonely sandbank, just beyond the outskirts of nowhere, and begin to remember. When the holiday is over, the prospect of going back to work is less dreary because of the ordinary comforts of home.

There is a distinct advantage to the citizen in thus being reminded of the great work done for the people of this Province by the Hydro-Electric System. By the advice of resolute, far-seeing leaders, Ontario folk were persuaded to enter upon a course of practical conservation. When inventors

had demonstrated the possibility of transmitting electrical energy for long distances, Niagara Falls and other cataracts suddenly became economically important. Private capitalists perceived the fact and hastened to secure possession of the tumbling streams.

If there had been no popular leaders to argue incessantly against the alienation of such important property and to urge the necessity of retaining the sources of energy for the advantage of all the people, rates for electrical service in Ontario would have been no cheaper than they are today in New York State and in California. Under private ownership dividends are of prime importance. Service is a secondary thing. The Hydro-Electric System eliminates all dividends and gives a perfected service at cost, and without discrimination.

The man who presses a button and floods his rooms with radiance is paying about \$1 per month for that high privilege. The woman who sets the vacuum cleaner humming, and permits a small motor to rock the washing machine, shares with her husband an obligation of gratitude to the man who fought for "Hydro" in the early days, and to the twelve municipalities which first pledged their credit to make the dream come true.