

## THE GATHERER.

## The Neglected South Pole.

Compared with the North Pole, that of the South has received but little attention at the hands of explorers. It lies, for one thing, at the far end of the earth from the home of enterprise, but the chief reason for its neglect, no doubt, is that, whilst bold adventurers have been tempted to navigate Arctic seas in hopes of finding a passage to India and China, no such temptation ever existed in the case of the Antarctic Ocean; by sailing southwards mariners had no difficulty in reaching these profitable regions. The neighbourhood of the South Pole, however, has not been quite overlooked; and now that the North Pole has proved much more difficult of approach than was imagined, if not actually inaccessible, it may have occurred to some that perhaps the South Pole might become the goal of rivalry among nations. Sir Wyville Thomson, in a recent lecture on the Antarctic regions, states his conviction that an attempt to reach the South Pole would not have the ghost of a chance of success. The farthest south point attained by Ross was more than 700 miles from the Pole; Graham's Land is 1,200 miles distant. The intervening space appears to be a desolate region of ice, without shelter, and a great portion of it subject to high winds and incessant falls of snow.

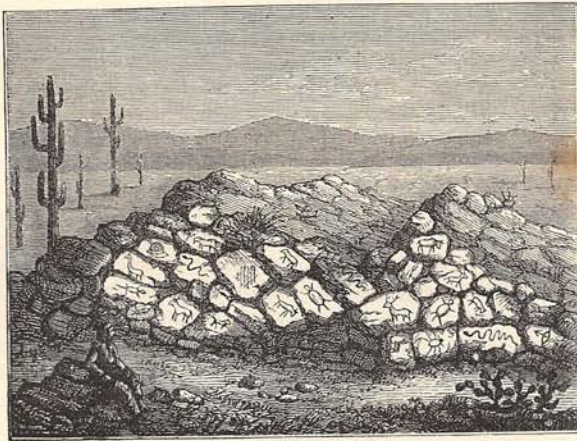
## The Painted Rocks of Arizona.

The territory of Arizona originally formed part of Mexico, but was ceded to the United States in 1848. It is a marvellous country, with a delightful climate and many districts of fertile soil. Nowhere, perhaps, in the whole world is there to be found more wonderful natural scenery than in the deep "canyons" or ravines, through which the rivers of Arizona cut their way from the elevated table-land of the interior down to the western sea. One of the great curiosities of this romantic region is what is called "The Painted Rocks," a relic of the inhabitants of the land long before Cortes and his Spaniards made their appearance in Mexico. To call them "painted" is hardly correct: the various figures have been ground or abraded into the stone, a sort of red gritty sandstone. This was done most likely by means of sand and water, much in the same way as the Maories of New Zealand contrive to fashion their greenstone axes and clubs. The most remarkable feature about the various

animals represented in this rude way, is that "several of them do not at present inhabit that part of the country, nor do any local traditions, or the accounts of the early Spaniards, lead us to suppose that they were ever found there." Such, for example, is the alpaca, peculiar to the high mountain-land of the west coast of North America; and the buffalo, which is only found very much further to the north-east. It is impossible to look at these Painted Rocks without a strong feeling of curiosity, not only as to the artists, but as to the reason for their existence. But, as with many another thing in the world, we can do little more than look and wonder.

## Domestic Account-keeping.

The unsuspected extravagances and unintentional wastefulness which render so many poor households even more poor than they need be, are largely due to the custom of making purchases without any previous thought as to how money can be best spent. In the same way even in the houses of the wealthy, domestic expenditure is unthriftily increased from a want of arithmetical knowledge. Every girl should be taught how to keep a ledger, balance a cash-book, check accounts, and calculate averages, in order to estimate rates of expenditure. Even where there is the urgent



PAINTED ROCKS.

necessity, and every desire, to limit outlay on the part of wives and daughters, for want of some knowledge of the usual relative proportions of domestic expenditure, it usually finds expression in petty excitements and annoyances, and a waste of precious time thereby, which might have been far more placidly, pleasantly, and profitably employed in making the most of a given sum by the legitimate processes of arithmetic.

## A Bold Agricultural Experiment.

If that man is a benefactor to the world who causes two grains of wheat to grow where only one had grown before, what will be said of him who makes grain grow where previously none was ever seen? This is precisely the case of the Duke of Sutherland, who has lately set a spirited example to all modern agriculturists. Four years ago the duke projected a great scheme of land improvement on his Sutherland estates. He proposed to bring under cultivation, by steam-power, 2,000 acres of wild and useless moorland, lay it out in sizeable farms, erect farm-steadings,

lay down the first crop, and then, should the experiment succeed, extend the operations by taking in other wastes, and offering the new farms on terms which would bring them within the reach of intelligent and enterprising farmers. A piece of moorland on the north bank of Loch Shin was accordingly selected to make a beginning upon, and enough time has now elapsed to enable us to judge of the value of the experiment.

The moor was swampy and stony, and to cultivate it by ordinary appliances, including even the common steam-plough, was quite impossible. A plough, however, was constructed of a special character, and capable of tearing its way through almost anything: 1,500 acres were taken in, and of these 1,200 were under crop last autumn. The fields were drained, fenced, and made accessible by good roads, and neat and comfortable farmhouses and labourers' cottages were built. One of the great drawbacks to successful cultivation in these parts has, hitherto, been the want of defence from the cold north and north-east winds which sweep across the moors. The Duke of Sutherland has, therefore, included the planting of hundreds of acres of wood in his scheme of improvements, so that in a few years the district will be well wooded as it is well watered, while the drainage is sure in the long run to improve the temperature.

The first of the four farms has now been for two years under crop, and most unmistakable proofs have been exhibited of the success of this great undertaking. One who has gone over the ground reports that nowhere could be found a more suggestive or more encouraging demonstration of the power of mind over matter, or of science as the life and hope of agricultural progress.

#### What Station is this?

It is one of the many grievances of railway travellers that the names of stations are not made conspicuous enough. They manage things better in Belgium. There the name of the station is posted up in large letters on each end of the premises, or on some blank wall at right angles to the line of rail. The traveller may put his head out of the carriage-window and read the name a quarter of a mile off. In this country it is often difficult even to catch a hasty glance of a name-board fixed up parallel to the rails. Of course the Belgian plan would have to be adopted only in moderation; it would be easy to spoil a landscape by painting huge letters on a white-washed wall. But something should be done to improve our present system. Whatever Juliet might think, there is a good deal in a name, especially when it is the name of a station.

#### Our Diet.

An excessive use of animal food must certainly be acknowledged to be one of our national weaknesses. Many persons make it the main article of diet at breakfast, luncheon, and dinner, and often at supper as well, to the detriment of their health and their

purses. Now, for the consolation of those who cannot afford to eat meat in this wholesale manner, it cannot be too widely known that all the conditions of a good nutritious diet may be found in what is much cheaper. In oatmeal porridge and milk, for example, they are to be met with just as well as in beef or mutton. It is not asserted that one should not eat meat if he can afford it, but that our former abundance has given it an importance which it does not deserve.

"We are neither," says a high authority, "better fed nor stronger because our average consumption of meat is, even at its present price, greater than that of any other European nation. The chief food of the Roman gladiator was barley-cakes and oil; and this diet, Hippocrates says, is eminently fitted to give muscular strength and endurance. The Roman soldier, too, seems to have had little or no meat. His daily rations were one pound of barley, three ounces of oil, and a pint of thin wine."

#### Sprinkling Salt on Ice and Snow.

When snow falls over-night in a city, and in the morning lies two or three feet deep, nothing can be more beautiful. But it is only a fair beginning to a few days of misery. We feel before long that ice and snow are enemies to the public peace and comfort. Then comes the question: Shall we treat these foes to a sprinkling of salt? for such a proceeding has the effect of decidedly thawing them. Now it cannot be too widely known that salting the public roads in winter-time is attended with consequences the most injurious to the health of the community. When ice and snow are melted by being mixed with salt, they are made much colder than before; the brine, which is the result, having a temperature thirty degrees below that of either. Any one stepping into this sloppy ice-water might receive a severe chill. The robust may make light of such danger, but the weak, the aged, and the ill-shod may be excused if they tremble at it.

There is another fact to be considered: boots saturated with brine are dried with the greatest difficulty, and when once dried they readily become damp again by absorbing moisture from the atmosphere. If the public during a frost have to step upon briny, slushy roads, they will have to go about in damp boots, and this cannot fail to do harm.

There is but one way in which salt can be used safely for thawing ice-bound roads in large towns—that is, to remove the liquid slush immediately afterwards, and coat the roads with sufficient sand to render them dry again.

#### Coloured Lights for Dark Nights.

All coloured lights are not visible at the same distance: some have such feeble rays as not to penetrate darkness anything like so far as others. A curious experiment has recently been made in connection with this subject at Trieste. Several lanterns, with care-

fully selected glass of different colours, and furnished with wicks and oil of the same quality, were lighted, and set up on the beach. A party then got into a boat, and rowed out to sea. By the time they had rowed half a league the light blue lantern was invisible, and the dark blue one just fading out of sight. They rowed a little further: the dark blue became quite lost, then the green lantern disappeared, after that the red one, and last of all the white.

From this experiment we may draw several useful conclusions in connection with the use of coloured lights for lighthouses and signals. But in addition to the question of visibility, there are some peculiarities to be taken into account, one of the most important being, that at a short distance a green light begins to look blue, and often deceives the observer. It has therefore been suggested that, as a signal, a green light should never be used except in conjunction with red and white.

Another matter to be taken into account when dealing with coloured lights is the existence of what is known as colour-blindness, a defect of vision by which many persons cannot distinguish between one colour and another. This defect is much more prevalent than is commonly supposed. Among 1,154 persons examined several years ago, sixty-five—almost one in eighteen—were colour-blind. They were in a hopeless state of confusion regarding red, brown, blue, and green. Engine-drivers and others employed on railways should be tested for colour-blindness; for to mistake the hue of a signal might be worse than having it invisible.

#### Water, Pure and Soft.

The microscope has done one mischief: it has destroyed our confiding nature, and made us eye water with suspicion. In every drop we drink imagination pictures myriads of miniature sharks and whales, and nondescript creatures with many legs and arms. When these living organisms really do exist, the best way, be it understood, to destroy them is to boil the water. If we are to swallow such creatures at all, it is as well that they should be cooked.

But boiling will not always make water what it should be: it will not remove sewage, for example, or lead, or arsenic, or other mineral poisons. So it is best to adopt a plan by which we may get a plentiful supply of pure and soft water for all uses, and that is, set up a cistern and catch the rains of heaven. The rainfall of our country is quite abundant enough for the purpose. The cistern should be of slate, or brick lined with cement, or galvanised iron—never of lead. The piping in connection with it should be of tin, or iron, or gutta-percha. Where it is practicable, the water should flow through a large filter into the cistern. Before using the water for drinking purposes, it should be drawn off a few hours before it is wanted, and exposed to the open air. If these arrangements were carried out, we should hear few complaints of a want of pure water, and microscopic investigation would no longer render us nervously uncomfortable.

#### Interesting to the Ladies.

A suggestion has been made in the columns of a daily paper, by the well-known naturalist, Mr. Frank Buckland, which is likely to be of great interest.

Mr. Buckland says that the skins of snakes, if dried and properly purified, might be made into trimmings of a very attractive character for ladies' dresses. Certainly the colours of snakes are beautiful in the extreme, and the inhabitants of the countries wherein the snakes are found would be only too glad to be rid of them, almost at any cost short of actual cruelty.

#### Welcome News for Housekeepers.

The trade with America for the importation of fresh meat, which began fifteen months ago, has so far exceeded the expectations of our Liverpool merchants that they are taking active measures for extending the supply, which at present is by no means equal to the demand.

We may soon congratulate ourselves on being able to purchase good and wholesome food at a reduction of twopence and threepence in the pound on the present price of butcher's meat. Her Majesty the Queen, with the Prince of Wales and the Lord Mayor, have sent letters of approval to the American shippers, expressing their entire satisfaction with the specimen joints forwarded to them for trial.

#### A Hidden Quotation.

In the following lines will be found a well-known quotation from Goldsmith—one word in each line:—

HORACE, *Satire VI.*, *Book ii.*

Why should I ask ten thousand pounds a year?

The man of money's oft a man of care;  
The happiest man I knew was he who here

Was weighted but with wealth he well could bear.

And would you know the life most dear to me,

The life I've held full sweet through all my days?  
'Tis thus to lie beneath the canopy

Of heaven, and revel in the country ways.

For dear indeed to me is rural life,

And sweet the fragrant breath of new-mown fields,  
And passing rich am I, since free from strife,  
Rich in the wealth my little garden yields.

Tempt me not then with all the joys of town,

For each has forty cares at least, I know.  
The merchant with his pounds mayhap looks down  
On me, a husbandman; but, ruddy brown  
With glad good health, each year I happier grow.

W.

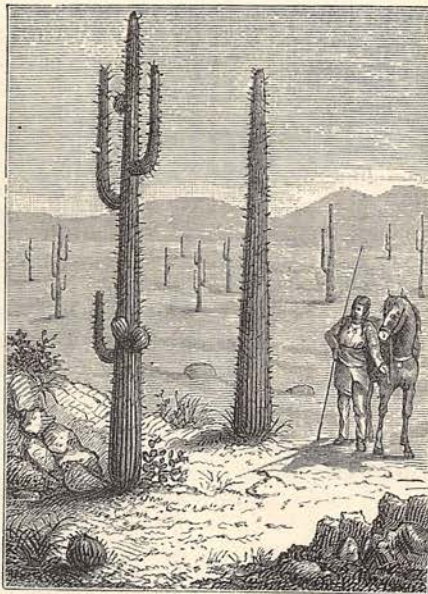
#### Flowers for the Sick Poor.

"I shall never forget," says Florence Nightingale, "the rapture of fever patients over a bunch of bright-coloured flowers. I remember, in my own case, a nosegay of wild flowers being sent to me, and from that moment my recovery became rapid." We have quoted these words in order to introduce to the reader

the "Flower Mission," one of the most interesting features of philanthropic London. Its object is to distribute flowers among the patients of the metropolitan hospitals, and the sick poor of the East-end. Similar institutions might be started all over the country, and those who have flowers at command would turn them to good account, by culling an occasional bouquet to gladden the hearts and aid in the recovery of their less fortunate fellow-men. At Hull, we understand, a "Flower Mission" has been established for some time, and has met with great success. In London, two central depôts were opened in March last, at Mildmay Park and Spitalfields, to which flowers might be forwarded by kindly-disposed persons. The flowers, on being received, are arranged, and then sent to their destination in neat little paper bouquet-holders, bearing a text of Scripture. Amongst ladies especially the "Mission" has attracted much attention, and it is well worthy the notice of all who desire to do good in a simple way. If any should chance to think that the poor, pent up in cities, do not care for such things as plants or flowers, they are mistaken. "People write," says the authority with whom we began this paragraph—"People write poetry about the 'charms of nature.' I question whether the intensest pleasure ever felt in nature is not that of the sick man raising a forest-tree six inches high from an acorn or a horse-chestnut in a London back court."

#### A Weird-looking Plant.

In the accompanying engraving we show the Pitahiya, or Giant Cactus. It is found in different parts of New Mexico, where it towers conspicuously above the plains to the height, sometimes, of seventy feet; and, as may readily be believed, forms a most remarkable feature of the landscape. When the traveller first beholds it with its huge pronged branches looming in the distance, it appears to him like a vegetable nightmare. The fruit of the Giant Cactus is much esteemed by the natives of New Mexico as food; they knock it off the plant by shooting at it with arrows. The fibres of the trunk are also used to roof their houses. The order of plants to which the Giant Cactus belongs is an extraordinary one, exhibiting a multiplicity of forms that exceeds imagination. Without exception cactuses are natives of the New World; but they have been much cultivated in our hot-houses and green-houses for the last thirty years.



THE GIANT CACTUS.

#### Something about Servia.

The national religion of Servia is that of the Greek Church, but it is independent of the Patriarchate of Constantinople. The bishops are chosen by the Synod, and consecrated by the Servian Metropolitan, the Metropolitan himself being chosen by the Synod. The country is divided into four dioceses—those of Belgrade, Schabatz, Negotin, and Ousheetza. There are several monasteries, the most interesting of which are those of Studeniza, built by the first Servian king, Nemandia, about the end of the twelfth, and Manassia, built by Lazarus in the fourteenth century. The government pays the archbishop, the bishops, and the rectors; the other priests are remunerated for their services by the people. There is a special Ministry of National Education, and a law passed in the reign of the late Prince Michael obliges the government to supply and pay a qualified master for an elementary national school, to every community which declares itself prepared to send thirty boys as scholars, and provides at the same time a building suitable for a school. The population is about 1,300,000. The soil is very fertile and productive, but the greater part is uncultivated. The peasants are averse to manual labour, and rather than work, they employ itinerant labourers, who flock yearly to Servia in large numbers from the adjacent provinces of Albania and Macedonia. The principal grain is maize, but hemp, flax, tobacco, and cotton are also produced in large quantities. One striking peculiarity of the vegetation is the similarity of the wild flowers and weeds to those of England.

Daisies, violets, spurge, oxlips, primroses, pansies, meadow saffron, forget-me-nots, cuckoo-flowers, yellow broom, clematis, honeysuckle, and dog-roses are to be met with everywhere.

#### Indelible Writing for Bank Cheques.

An exceedingly simple method of rendering paper so retentive of ink that it—the ink namely—cannot be removed without leaving plainly visible marks of its presence, has been recently adopted in France for bank cheques, &c. The plan (without giving details) is to pass the paper through a very weak solution of tannic acid in distilled water, the proportion being given as one milligram of the acid (0.01543 of a grain) to about as much water as will cover an ordinary soup-plate to a moderate depth.

