

INTERESTING FACTS ABOUT ICELAND.

Concerning Iceland, Mr. Lock stated that the island, so far from being small, as it is erroneously called, is considerably larger than Ireland or Ceylon. Its situation is such that its whole northern coast is shut in nearly every year by the descent of masses of ice from the north. The southern and western shores are affected by ice in very exceptional instances only. The country is essentially volcanic and mountainous; but Hecla, which monopolizes the geographical knowledge of most students on the subject, does not possess a single characteristic to place it above its fellows. The whole central plateau is a wild waste of lava and volcanic sand, and the only habitable parts of the island are a narrow fringe of coast-land and a few of the larger river valleys. The great ridge of ice-clad hills, stretching across the island, acts as a refrigerator to the moisture-laden winds from the southwest, and produces two distinct climates; the northern, generally dry; and the southern, generally wet, and more temperate than the other. The fact that colonists from Great Britain participated in the settlement of Iceland more than a thousand years ago is attested by the identity of many words that are used by the people with British words. Ponies are the chief animal product of the island. From them the stocks of the "Black Country" of England are recruited. The sheep furnish a fine mutton, and a wool which is made up into excellent fabrics at home, or is exported. Profitable trades are driven in skins, catgut, fox-fur and eider-down; the cod-fisheries are very important, and considerable trade is carried on in cod-liver oil and shark-oil. The salmon-fishery has been shamefully abused by the excessive employment of barbarous methods of taking the fish. It, however, is the one great attraction the island offers to sportsmen; and more profit might be gained, directly and indirectly, by letting out the streams, as in Norway, to English fly-fishers, than by contracting with fish-curers. The island was at one time well wooded, and supplied itself largely, if not entirely, with cereals, but the climate has deteriorated and the soil become sterile in consequence of the cutting away of the trees, and every grain of corn is now imported from Denmark. The principal mineral product is sulphur, which is deposited in a very finely divided state around the volcanic vents by the vapors issuing through them. It is the custom to describe the sulphur mines of Sicily and the sulphur mines of Iceland as somewhat similar, but for all practical considerations they are as distinct as a coal-seam and a forest. The Sicilian mines consist of deposits formed in past geological ages, now lying at great depths, and utterly devoid of reproductive power; the Icelandic beds are the work of to-day, lie on the very surface of the ground, and live and grow with unabated energy, replacing the deposit as fast as it is removed. The area comprised in the Icelandic sulphur districts collectively amounts to, perhaps, a dozen square miles. The sulphur forms a layer of varying thickness, covered by an earthy crust and underlain by clays containing sulphur mixed with various acids and salts, and is invariably wet, in consequence of the steam condensed within it. The crystals are almost absolutely pure, but impurities are mechanically mixed with them. Other mineral products are gold and silver, which are found in minute quantities, Iceland-spar, pure specimens of which are valued for optical instruments and cabinets, coarse chalcodones and zeolites, lignite, basalt and volcanic products. The manufacturing industry of the country is confined to woolen fabrics, socks and stockings, gloves and a home-spun cloth, which are excellent.—*Mr. C. G. W. Lock in Popular Science Monthly.*

FLORIDA fruit growers are beginning to cultivate the lemon with care, and with such good results that it is believed the State will soon furnish almost as many lemons to the trade as she now does oranges.

PERTINENT FACTS ABOUT EATING.

In a recent number of the *London Standard* under the query, "do we eat too much?" the writer gives many interesting facts. He says, for instance that the amount of nourishment which a person needs greatly depends on his constitution, state of health, habits and work. A sedentary man requires less than one whose duties demand the exercise of his muscles, and a brain-worker needs more than an idler. But unquestionably the majority of us take more than we need. Indeed, food and work are distributed most unequally. The man of leisure is also the man of means, and accordingly, fares sumptuously every day; while the laborer toils for eight hours, and finds it difficult to get enough to repair the waste of his tissues. Yet a Chinaman or a Bengalee will toil under a tropical sun, and find a few pice worth of rice or jowrah sufficient to sustain his strength. A Frenchman will not eat half what an Englishman engaged in the same work will demand, and a Spanish laborer, content in ordinary times with a watermelon and a bit of black bread, will toil in the vineyards and grow fat on a diet of onion porridge and grapes. It is true that Mr. Brassey, when building the Continental railways, found that one English navy was worth a couple of spare-fed foreigners. But, on the other hand, the British Columbian and Californian gold-diggers, than whom a more magnificent set of athletes does not exist, live in the remote mountains of the Far West mainly on beans flavored with a few cubes of pork. But they also obtain the best of water and the purest of air, and their out-door life and active exercise enable them to digest every ounce of their frugal fare. The English soldiers, though better fed than those of any army except the American, do not get one-half the amount of solid nutriment which the idliest of club-loungers considers indispensable for his sustenance. An athlete in training is allowed even less food; yet he prospers on the limited fare, and prolongs his life by the regimen by which he has been subjected. King Victor Emmanuel was a monarch of the most robust physique; yet he only ate one meal per day, and it is manifestly absurd for any man to require three more or less weighty meals, and an afternoon cup of tea, to support the exertion of walking to the club, riding an hour in the park, writing a note or two, and dancing a couple of miles around a ball-room. The ancients had their "amethysts," or "sober stones," by which they regulated their indulgence at table. The moderns have not even this. But they have their gout and their livers to warn them, when it is too late, that nature has been overtaken.

IMPROVED LAMPS.—Mr. Sugg, the well-known gas engineer, has lately devised a form of compound Argand burner for street and out-door uses. It is now in use in London on several of the prominent thoroughfares, and is highly commended. Several of these gas lamps give an illumination of 200 candle-power each. The same inventor has likewise devised a very ingenious self-ventilating gas lamp for the special use of libraries. It is provided with a chimney in the form of a metallic tube, which delivers the products of combustion out at the roof, or to some other convenient place outside of the library room. This flue is surrounded by a second larger cylinder communicating with the base of the lamp, which is closed, and through which the lamp receives its air supply also from the outside of the room. The lamp, therefore, neither impoverishes nor vitiates the air of the room. It was designed to meet the objection that the sulphurous gases evolved in the combustion of coal gas have a deleterious action on the leather of the book bindings.

MERCURY AND LEAD.—If a piece of lead wire be hung perpendicularly over a vessel of mercury, the lower end immersed, the mercury will gradually permeate and ascend the wire to a height of three ft. in a few days.

THE FLAVOR OF MEAT.

M. Monclar, a noted agriculturist in France, has suggested a singular plan for varying the flavor of meat. He imagines that by feeding cattle, sheep, pigs and poultry in a particular way, or rather by flavoring their food in various ways, their flesh may be rendered much more agreeable to the palate than it often is; and there can be no doubt that he is substantially right. Thus, for instance, it is well known that poultry which have been fattened upon food containing a slight admixture of chopped truffles are far better eating than those chickens which have been stuffed or larded with truffles after they are killed. It is only natural that such should be the case, for the flavor of the truffle that is consumed by the chicken permeates the whole system, which it cannot do when simply placed in the carcass. M. Monclar instances cases in which hares killed in a wormwood field, larks shot in a cabbage field, and eggs laid by hens which had eaten diseased silkworms, had such a nauseous taste that no one could touch them; while upon the other hand some ducks and fieldfares which had fed upon sprigs of juniper had a delicious flavor. He has made several experiments—among others, three upon tame rabbits, which he fed with the waste of aniseed, with barley and bran containing a slight flavoring of juniper, and with barley and bran containing a little essence of thyme. In each case he found that the flesh of these animals was far better eating than that of rabbits fattened in the ordinary way, and yet that there was no trace of aniseed or juniper in the taste. His conclusion is that cattle, sheep and pigs might be fed in the same way, and that by varying the flavoring matter the beef, mutton and pork might be made to have several different tastes.—*Caterer.*

TO MAKE A STRONG PASTE.—To make a paste for fastening bills in a file book, or for any purpose where a very strong paste is desired, the following recipe is recommended: Rice or starch paste is the best. Four parts (by weight) of fine glue are allowed to soften in 15 parts of cold water, and then moderately heated until the solution becomes quite clear; 65 parts of boiling water are now added, with constant stirring. In another vessel 30 parts of starch paste are stirred up with 20 parts of cold water, so that a thin milky fluid is obtained without lumps. Into this the boiling glue solution is gradually stirred, and the whole kept at a boiling temperature for a short time. After cooling a few drops of carbolic acid are added to the paste. This paste is exceedingly adhesive, and may be used for leather as well as for paper and cardboard. It should be preserved in corked bottles to prevent evaporation, and in this way will keep good for years.

A DIFFICULT PIECE OF CASTING.—The Ames Co., Chicopee, Mass., have recently finished the most difficult piece of iron casting they have ever attempted. This is an iron tub for a rag engine, and was ordered by the Seymour Paper Co. of Windsor Locks, Conn. The job took eight and a half tons of metal, and the work preparing the mold occupied three weeks. The difficulty of the work consisted in the tub being so large and the sides and bottom so thin. Iron tubs for paper mills have been made before, but they have been cast in sections. They will be much better if they can be made in one piece, and when once in place will last as long as the mill does.

TO CUT SHEET BRASS.—Moderately thick plates may be cut chemically by drawing a line or mark with a solution of mercury in nitric acid. The acid attacks the copper, while mercury amalgamates with the zinc; this seems to be the explanation; at any rate, the brass becomes as brittle as glass on the place where the line is drawn, and is easily broken off.