

## OUR COMMON SALT.



HERE is an article in daily use on even the humblest tables all over the world, but about which many of us could not answer many questions; yet it has scientific, historic and social associations of the deepest interest. We refer to "common salt."

If we were asked, What is salt? we would all unhesitatingly reply, "It is a mineral," and singularly enough it is the only mineral in use as food. But many of us would pause before we would care to say where it comes from, or by what process it finds the form in which we know it.

The salt which we use in England now is procured from fossil beds and brine springs in Cheshire and Worcestershire. "A rocky bed is the source of nearly all our inland salt." A good deal of salt was formerly made by the evaporation of sea water in salt pans. The water is exposed in a series of shallow pools, called salt-gardens or salterns, protected from the influence of the tides. These salterns now only flourish in countries which have no natural deposits of salt or brine, and where foreign salt is excluded by a high protective duty. The brine springs of Cheshire were worked as early as the time of Edward the Confessor, but the deposits of fossil or rock salt were not discovered till the year 1670. The rock salt pits now open in the United Kingdom are about twenty-five. Some of those in Cheshire are of vast extent. Excursionists from Manchester often visit them, and as many as four hundred people have been known to join in one dance in these subterranean halls of crystal. As a proof of the usual purity and coolness of the air, butcher's meat will keep good in the mine for weeks, even in the hottest time in summer.

The process of evaporating salt from the brine springs is, on the whole, very simple. "The brine, on being pumped from the pits, is run into large cisterns, or into reservoirs made sufficiently high for it to flow by gravitation through pipes, as it is required, into the evaporating pans. . . . The heat is usually supplied from coal fires underneath, but sometimes the spare heat from a steam boiler or the discharged steam from an engine is used; and occasionally there are pipes with steam in them, amongst the brine in the pans. In this way, according to the degrees of heat, the product is small or large grained salt; the simple rule being, that the greater the heat employed and the less time in the pan, the finer the salt made; while the less heat and the longer the time in the pan, the coarser the salt. . . . Fine salt, as taken wet from the pans, is generally put into 'tubs' or moulds which are placed at the edge of the pans, their shape being that of the lumps of salt seen in our shop-windows." It is said that the principle of evaporation is so perfect that there has been no room for improvement since the days of the Romans, and possibly of the Druids.

The workmen in the salt mines are reported to be, on the whole, very healthy. During epidemics of cholera they often enjoy complete immunity. In the height of summer they complain of headache, but the saltiness of the atmosphere in which they work is a protection

against neuralgia, rheumatism and other similar ailments, though, on the other hand, the high degree of temperature is an inducement to intemperance. A good workman clears about 35s. per week after paying all his expenses.

An interesting circumstance connected with the salt districts of Cheshire is the constant recurrence of landslips and the gradual subsidence of the ground. This appears to have begun many centuries ago. Leyland records that "part of a hill, with trees upon it, suddenly sank down, and was covered with salt water." In one place near Northwich, a depression of about seventy feet has occurred within the memory of man. The little Cheshire town of Northwich itself seems to have been a special sufferer, almost everything being out of the perpendicular or horizontal. A visitor says "it would only be to a person in a state of inebriety that the place would look natural." The Town Hall had to be abandoned not many years after it was built. Within the memory of many living persons a certain cottage has sunk so deep that what were once the bedrooms on the first floor are now the parlours, the whilom sitting rooms on the ground floor having subsided into underground cellars. Some years ago a steam engine and eight men were swallowed up, and on another occasion a cottage and some women were entombed, and ducks are now sailing in a pond where the building disappeared. Yet such is the force of habit that Northwich is a prosperous town, whose inhabitants do not dream of forsaking it. The town of Winsford has also suffered, and so has the pretty town of Droitwich, well known for the efficacy of its baths to sufferers from gout and chronic rheumatism.

We will not here say anything about the great salt-beds of the Continent or of America. British India, considering its extent, is not well supplied with inland salt, and heavy taxation used to make it a very costly luxury in that country. It can now be bought there for one penny a pound, or double the price it fetches in England; but even a penny a pound is a heavy charge for the poor native, whose whole weekly income is but a few pence. In consequence, it is said that a deficiency of salt is found in the blood of poor Hindoos, and in justice to the health of the millions they have taken in charge, our legislators would do well to look to this matter.

Salt is known all over the world, being used as a matter of course, in the same way as water. Animals crave for it, and will traverse great distances for it. Little children in some districts of Africa will suck it in preference to sugar. On the Gold Coast a handful of salt will purchase a slave or two.

There are but few exceptions to this universal use. One tribe in South-Western Africa, the Damaras, never touch salt, and Europeans travelling in their country do not miss it. New Zealanders of a certain district do not use it, and the same holds true of a province in Siberia. The explanation of these exceptions is found in an instinct of the human frame. When the food usually eaten conveys a sufficiency of salt into the body, it has no occasion for more, and it is well known that the water-springs in Damara land are nearly always brackish or saline.

The Germans call salt the special "gift of God," and had a quaint belief that prayers were better answered when offered near salt. In the East, salt is held as a sacred thing; an oath taken over it is inviolable. During the great Indian mutiny many Sepoys were held in restraint by being reminded that they had sworn fealty to England "by their salt."

Offered in hospitality by an Arab, salt is a sign that his guest is safe. Even a Bedouin robber will not violate this law, and it seems to have been regarded in the same light in classic times, since Cassandra intensifies the crime of Paris in carrying off Helen from her husband's house by the consideration that "he has contemned the salt, and overturned the hospitable table." The Romans held it a bad omen if the salt placed upon an intended sacrifice accidentally fell off—probably this is the origin of the belief that "bad luck" attends the spilling of salt; though it is true enough that "bad luck" is not far off wherever there are careless, slovenly, or wasteful habits! German housewives tell children that they will have to weep a tear for every grain they have spilled. In Leonardo da Vinci's great picture of the Last Supper, we recognise Judas Iscariot by the salt cellar upset by his arm.

In the baptismal service of the Latin Church a pinch of salt is put into the child's mouth, while the priest says, "Receive the salt of wisdom, and may it be a propitiation to thee for eternal life." There is an old Yorkshire custom that when children shed their teeth the tooth is wrapped in salt and thrown into a quick fire. In Leicestershire, Lancashire, and some other counties, salt is put into the hand of a child when it first leaves its mother's house; and in Scotland, "bread and salt" are carried beforehand into a new home, and occasionally presented in lieu of a gift by the "first foot" on New Year's Day.

In olden times the salt-cellar, or salt-vat as it was then called, often an article of some magnitude and great magnificence, was placed about the centre of the table to mark the point below which it was proper for tenants and dependents to sit. This custom was general in England and Scotland, and also in France, and contemporary literature gives us an idea of the social bitterness often engendered thereby. Even clerical tutors seem to have been expected to submit to this rule, since Bishop Hall satirically enumerates as among the "good conditions" on which a "gentle squire" would "gladly entertain some willing man that might instruct his sons,"

"First, that he lie upon the truckle bed,  
Whiles his young master lieth o'er his head.  
Second, that he do, on no default,  
*Ever presume to sit above the salt.*"

In connection with the first "condition" we have quoted, we cannot help narrating a good story of a young Scotch laird of the last century, of uncultured and somewhat weak intellect, who set out on his travels accompanied by a favourite servant. The lad was not accustomed to stand upon his dignity, and before he started his relatives thought it best to give him certain instructions.

"You must keep your servant in his place," they said.

"But what is his place?" naïvely inquired the young laird.

"Why, beneath you," they replied, "remember that; he must be always below you."

Then the hopeful pair set forth. The earliest stage of the journey was Edinburgh, where they slept the first night, sharing a bedroom in a crowded inn. Early next morning, an old friend of the laird's family called on him, and was shown upstairs into the sleeping apartment. The laird's voice gave noisy welcome, but where was the laird? Looking round in bewilderment, the guest at last saw an unshaven, sleepy face peering over the top of the huge, funereal "four-poster" of those days.

"Why, laird, what are you doing up there?" he cried.

"I'm keeping my place," rejoined the laird.



"Ye see, I'm to be always above *him*," and he pointed a downward finger at his servant peacefully slumbering *in* the bed!

This story has led us somewhat from our subject, and now reminds us of another, more to the purpose, of the bitterness and ill-feeling always likely to be engendered by arbitrary and invidious distinctions. Its scene is a Scottish garrison town, its time shortly after the last rebellion, and its hero a Highland chieftain who had rendered a somewhat dubious and tardy fealty to the victorious powers. I forget his clan, so we will call him the Mac Scot. He had been invited to dine with the English officers, who seem to have wished to irritate his sensitive temper, with which most inhospitable intention they placed him low at their table. To their surprise, he maintained perfect good humour. Surely the savage did not understand the insult! So one or two of them proceeded to explain and emphasise it,

by expressions of mock sympathy and indignation.

"It is a great shame," they said. "You should have been placed close to the head of the table."

The chieftain turned quietly to his tormentors. "What are you talking about?" he asked. "Wherever the Mac Scot sits is the head of the table."

Of course his persecutors were ignominiously defeated.

And, indeed, we cannot doubt that among those who sat "below the salt" at the tables of mediæval royalty and rank, must have been many whose figures, in the eyes of posterity, now make their lowly place "the head of the table."

We hope that our considerations of the nature, processes, universal use, and incalculable value of salt will help to give meaning to Scriptural allusions thereto, as when St. Paul

says, "Let your speech be always with grace, seasoned with salt;" and above all when the Master declares of those who follow Him, "Ye are the salt of the world"—the means of preventing and curing the growth of its corruptions. One of the great salt-masters has thoughtfully shed a light on the passage, "If the salt have lost its savour," etc., of which some scientific men rashly asserted "Salt never does lose its savour." Mr. Busted exhibited at the "Healtheries" a sample which *had* lost its savour, and took pains to explain that the salt which the evangelists used is almost sure to have been the salt made all round the sea in tropical countries from sea water, and that probably our Saviour had seen, or perhaps was actually in sight of, a great heap of this, which, having been exposed to a downpour of rain, would have at its margin a quantity of "savoursless salt."

May we never deserve the epithet!

## GO ON WORKING—DON'T BE AFRAID.



THESE are words we often use ourselves and hear others using; and it is well we do, for they are words of deep import. They do no less than separate the whole world of workers into two radically distinct classes—namely, those who can receive them and those who cannot. They are a great touchstone of character, but a touchstone that does not yield an immediate result; indeed, it may be years before it shows whether the metal is pure gold or coin of inferior value.

But in order to see how it applies we must first divide the world of workers into two great orders: (1) Those who are engaged in the industrial arts and common tasks of daily life. (2) Those who are workers in science, philosophy, and the fine arts, since to the second order it applies with more significance than to the first; and there is also a cross division, some of the first rising to the rank of originators, some of the latter sinking to the rank of mere mechanical workers.

What, then, does it import with regard to the first order? This, that all those who can receive it and go on working amid sorrow and discouragement, must at the least have some qualities of sterling worth. It may be only the solid determination not to give in, to maintain the fight till the last, or it may be the heroism of devoted love; but whatever it be that gives the strength to "go on working" constantly, steadily, perseveringly, the "Don't be afraid" will have the cheery ring to which they will respond with an earnest "No, we are not afraid; we know what work has done for us; it has made men of us—some especially earnest and true, some tender and patient, some strong and brave, but all of us it has made to know what true pleasure is; we feel satisfaction in our work; a glow of honest pride kindles in our hearts when we look at it, and this gives a zest to our leisure. No, we are not afraid." They are words of cheer. Go on working manfully, and half the ills of life will disappear, while its pleasures will be more than doubled. The happy results of work give a power of endurance that nothing can equal, for labour is the God-given restorer of peace to the troubled spirit.

But what of those who cannot receive the message these words convey? Alas! there are

many who cannot; and we cannot but feel more sorry for them than for any other sufferers whatever. The inability may result from feeble health, depressed vitality, want of a well-knit moral frame; but whatever the cause, the result is saddening, and the best help we can give is to encourage these to try the tonic of steady work.

The words must not be misunderstood. Their very tone of calm encouragement forbids the thought that they would urge any one to fitful, anxious, spasmodic work. Periods of fevered work alternating with languor will not brace the nerves of character. But let any one try an hour or two of steady work "persevered in," as the doctors say, and see if the world will not soon wear a different aspect, and the sufferer feel that all things have become new. Contrast the days that one has idled away, perhaps feeling too ill to do anything, or merely tried to read an amusing book, or some other means of whiling away the time, and those days on which some satisfactory piece of work has been done; the world seems a different place. On the former we feel restless, discontented, hopeless—life a burden; on the latter, full of hope and energy, able to bear the troubles that come while we look on the bright side and wait patiently for things to right themselves, as Emerson has said they always do, if, instead of bemoaning them, we set about our appointed work.

There is an apparent exception—days of enforced idleness, when perhaps we have to lie still for hours doing nothing, or may only wander about the house and garden; then we do not get into that listless frame of mind. But the explanation is this. In enforced idleness we feel we are obeying our Father's will, and an energy of patient endurance is called forth, and even those who realise that their heavenly Father orders all things, do it either in obedience to some command, or from their own sense of duty and right; so in either case resolute patience is called into play, and the trust that good will ensue. So it is truly a kind of work, and to many, probably to most, the hardest work of all. But now, as to the second great order of workers. In what particular sense does it apply to them, and how are the two classes differentiated in a further degree from those of the first? The distinction consists in the power of seeing what one is aiming at, and the difference between those who can and those who cannot see this is very great. Watch two students drawing from a cast; one makes the lines which he thinks represent the figure; the master comes round and points out where it is out of drawing; the student tries

again, again faults are pointed out, and again he tries, and at length perhaps succeeds in producing a tolerably correct copy of the original. But now look at the other; he can criticise his own work, knows where it is wrong, and keeps on rubbing out and correcting till he can satisfy himself. No need to tell him to go on working, he cannot do otherwise, though the "Don't be afraid" may cheer and help him; but failure, disappointment—nothing can prevent his working. We say, "He has got it in him."

Again, observe two mathematical students. They are trying to solve the same problem. To one, one probable solution after another occurs; he feels he can do it, though as yet baffled again and again; and it is so alluring he cannot give it up. But he must lay aside his work and attend to other things. Still in every spare moment he broods over it—then, in an instant, when he is thinking of something else, some new suggestion flashes into his mind; he tries again and has conquered. The other tries to apply one rule after another; can see no way, and after a few vain attempts gives up in despair. Then he is shown the key to the puzzle, and this helps him on some steps further; he attains a certain kind of skill, but he will never be a mathematician.

But it may be asked, if this is so, what use is your exhortation? We answer, in two important respects it is of great use. We cannot always tell at the first glance who are endowed with the power of original work, for even if our insight is true, the power itself may in some cases be a late development, and though skill generally gives its possessor power to recognise its existence in another, it is always wiser not to take for granted its non-existence, since the possibilities of any human life stand revealed to God alone; and it is always well to encourage one another to earnest effort, for even if this particular good gift has not been bestowed, still, the best of all, the moral results of steadfast, patient, faithful work will unfailingly be granted to each earnest worker as well as its many other rewards, which though the days may seem to fail in bringing, the years, we have abundant evidence, rarely fail to bestow; but should they also seem to fail, we have the firm assurance that God is keeping them for us in the more distant future; for He has joined the reaping to the sowing, and His word cannot fail us. So we may trustfully bid all, "Go on working, and not be afraid," for labour has God's seal of blessing indelibly stamped upon it.

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