

Why is the Sea salt?

According to Professor Chapman, of University College, Toronto, the object of the salting of sea water is to regulate evaporation (see page 98, current volume). This suggestion does not answer the question: why, or by what cause, the sea becomes so salt; but it assumes to tell us wherefore or for what object the sea is salt. The cause of the saltness should be answered first, and if, after we have ascertained this, it is proved that the salting accomplishes a secondary ultimate purpose, the other question arises. But we believe that a careful consideration of the Professor's hypothesis will quickly expose its fallacy. In the first place, then, the sea is salt as a simple and necessary consequence of the fact that it must contain all the soluble matter which the rains have washed out of the most exposed portions of the earth's crust, and which the rivers have carried, and are still carrying, to the ocean. And as the rivers do not carry water as pure as that which evaporates from the sea, because they all, without any exception, carry various salts in solution, which can never be raised from the ocean by evaporation, the sea has, in the course of ages, become more and more salt; and the process is still going on. Such a nice regulation of the amount of evaporation as the Professor suggests is quite unnecessary, as it is well known that the regions under the influence of the evaporation of our large fresh water lakes are not much different in agricultural value or sanitary conditions from those under the influence of salt water evaporation, the sole conditions for agricultural success being, next to the nature of the soil, a liberal supply of moisture and solar heat; while in a sanitary point of view, a moderate supply of both is more desirable.

We must, however, give credit to Professor Chapman for his experiments; he proved that the amount of evaporation of fresh water, compared with that of salt water under the same circumstances, may differ largely; so that the evaporation becomes less and less, in proportion as the relative amount of salt increases. But we would give this fact an interpretation different from that of the Professor. In the condition of things preceding the carboniferous era, when the rivers had not yet dissolved so much saline matter out of the exposed earth's surface, nor the rivers carried it to the seas, the ocean necessarily contained much less salt than at present; therefore the amount of evaporation must have been much larger. This condition of things was not favorable to animal existence, but it was to vegetable life; and this may partly explain the excessive luxuriant vegetable growth which was the parent of our coal deposits. When in the course of ages the ocean became more salt, the evaporation became less; the air was not so continually overcharged with moisture, and was more favourable to animal life. If the saltiness has since increased continually, and the dryness of the air has augmented in proportion, we must not be surprised that regions of the earth, once fertile and inhabitable, have become dry deserts. We know this to be the case with the lands on which Babylon, and Palmyra, and other cities, were situated, which, as well as the whole of Upper Egypt, Palestine, etc., were formerly more fertile than they now are, considering the dryness of their atmosphere. In order to become convinced of the influence of moisture on vegetation, one needs only to visit the dry highlands of New Mexico and Colorado, and compare the vegetation there with the moist southern part of Louisiana. If we take the former in summer, and the latter in winter, so as to have the same temperature in both, the difference will be obvious and remarkable.

Pernicious Sayings.

There are some common sayings that are so plainly conceived in sin, that one cannot help wondering how they ever came to pass into adages. Still they are heard from the lips of men making high professions of morality and even of religion, and are handed down from generation to generation as precious heirlooms of language.

One of the most common of these and one of the wickedest is: "It will make no difference a hundred years hence," applied to some error that might have been avoided, some sin that need never have been committed, or some word uttered that had better have been left unspoken. Now, if we stop and think, there is no simplest act but that will make a difference a hundred years hence, and perhaps a great difference. The cackling of a flock of geese is a very simple thing, but it saved Rome, and had its influence upon succeeding years of a nation's existence. The impulse of one conspirator to save a friend saved the Gunpowder Plot from destroying a whole parliament, and perhaps changed the whole future of English history. A burnt finger may delay a journey that would have cost a life and turned the path of whole generations. It is an insult to the good God, who does not let a sparrow fall without his cognizance, to say that any act, however simple, may not have its influence on following years and ages.

There is another saying touching the sowing of wild oats, that is, perhaps, the worst of the lot. It has driven many a lad to destruction, furnishing him with an easily-spoken excuse for youthful follies and youthful sins sure to bring misery in their wake. That Christian statesman and author, Thomas Hughes, has spoken most eloquently against the use of this saying. "In all the range of accepted British maxims," he exclaims, "there is none, take it for all in all, more thoroughly abominable than this one as to the sowing of wild oats. Look at it on what side you will, and I will defy you to make anything but a devil's maxim of it. What a man—be he young, old, or middle-aged—sows, that, and nothing else, shall he reap."

Was there ever anything truer? We see boys sowing wild oats every day—and we see them as men reaping the crop they have sown. These wild oats bear bitter grain. Sometimes their fruitage is disgrace that is paraded out to the world as Satan's victory. Sometimes it is the dishonoring of a parent's tender love, and its

fruitage is "grey hair brought to the grave in sorrow;" lines of suffering on the faces of loved ones; and bitter remorse that we have turned the sweetest thing on earth to gall. Oh, these wild oats, they are like the witch-grass and the white-weed in the farmer's land—they cannot be rooted out, and they taint every good crop that follows after the sowing. Boys need not sow wild oats; the ground is waiting for good sweet seed that will thrive and bring forth teeming harvests of goodness—and God is ready to care for the crop with the sunshine of his love and the tender rains that fall from his hand.

There is another saying that we hear now, that seems to me strikingly untrue in view of the lessons taught us by the world's history: "The voice of the people is the voice of God." We swam all true progress by such a saying. Was it the voice of the people that called first for the Reformation? No, it was the voice of heaven-endowed, defiant, impetuous Martin Luther—and he was in a very small minority indeed when he began. The voice of the people and the hand of the people, saving some strong spirits, were against him—and had he listened to either as the voice of God, he had accomplished no revolution against corrupt and thriving popes.

Oh, no—the voice of the people is not always the voice of God—or Lot would have stayed in Sodom, and Lot's wife would not have been transformed into a pillar of salt. Was the voice of the people the voice of God when the people cried out "Crucify him! Crucify him!" and shouted in derision as he climbed Calvary with his burden of the cross? No, this Vox populi, vox Dei is a stumbling-block to progress—for through man's proneness to error it is often the cry of sin and oppression, of persecution and shame.

Let us be careful with these and other sayings, lest by uttering them, we be guilty of light words and harmful words—which may injure our fellow-men and displease God.

The Social Science Congress.

The evils of society and the remedy or remedies for them are approached in a great variety of ways, and with a large number of different specifics. A vast quantity of clever talking is often expended upon the subject, and if that would either probe the evils or cure them, the thing would, most assuredly, soon be done. The Church Congress in Plymouth was still discussing the different phases of unbelief, the effect of its principles on society, and the paramount importance of education, temperance, home mission work, and similar questions when the Social Science Congress assembled in Liverpool, in order to discuss educational and sanitary matters, from a somewhat lower stand-point.

It is twenty years since the first of these Congresses was held under the presidency of the late Lord Brougham; and the object then made most prominent is that still professedly sought. This object is to ameliorate and improve the social condition of the community by the advancement of education, the diminution of crime, the reform of jurisprudence, the better regulation of trade, and the enforcement of wiser sanitary laws. In keeping with these objects the papers read and the discussions which followed chiefly related to questions which bear upon the health, the education, the morality, and the comfort of the people—subjects these, which although not calculated to create a large amount of excitement or enthusiasm, yet such as are eminently calculated to produce considerable benefit to mankind. And doubtless if the practical suggestions which are made were also carried out, an improved condition of things would be witnessed in the world generally. It is not every paper that is read or every subject introduced, which can secure the charm of originality or novelty. Yet it would appear that at the last Congress especially there was a practical common sense air about the whole proceedings, and a subdued earnestness of spirit which is vastly more important than any speculative theories however brilliant, or any exciting debates, however skillfully conducted. The Marquis of Huntly in his opening address descended upon the subject of education, in which he urged the importance of a better classification of scholars, insisted on a better provision for both elementary and higher class schools, and for a more efficient training of the teachers themselves. Dr. Pattison of Oxford brought up the same subject again in a comprehensive paper, in which he reviewed the state of education. Another paper was introduced as the best mode of training teachers. This appears to have been one of the most valuable papers read. Many excellent ideas were expressed in each discussion, and the practical result gained appears to indicate that although much has been done to improve the education of the people, yet there is abundant need of greater effort and that of a more systematic kind.

One of the subjects introduced this year was the department of Art, an address being delivered by Mr. Poynter, R.A., taking for his motto:—"The very essence of good art is to be found in honest and good workmanship." He remarked that the British workman never had a high sense of art, but once excelled in workmanship; and he is fast losing one faculty without gaining the other, and without the prospect of improving in it. Machinery has superseded manual dexterity, and destroys the school in which the ingenious workman

might become imbued with many of the principles of art. But the workman must make something for which there is a demand; and therefore the diffusion of a better standard of taste in connection with the ordinary requirements of life would tend to the improvement of art by giving it a commercial value. In England especially, much training and education are required for the purpose, while in France and Germany, the art of design seems to be very extensively inborn, just as the appreciation of beautiful coloring is in Spain and Italy.

Increasing population invited attention from Mr. Hawksley's address in connection with the department of public health. He discussed the dangers arising from an increasing population depending upon foreign supplies of food. In England one third of the articles of subsistence are imported, and they say they shall soon have to look about for two-thirds of it. In reference to this, we would recommend the bonds between the Colonies and the mother country to be drawn much closer than they are at present, even to the extent of confederation in some shape or other, and then it will be many a year before the population will overtake the supplies which could be furnished by the whole empire. The late Sir William Denison thought the whole earth would be over-peopled in little more than a century, founding his conclusions on arguments similar to those of Malthus and Miss Martineau. The process however allows nothing for social perturbation, and to it may be applied the aphorism that, There are no figures so fallacious as arithmetical figures. Mr. Hawksley contends that sanitary reform has not increased, nor is likely to increase, the extreme duration of life. He thinks the waste of life is to be sought, not in the water pipes and sewers, but chiefly in the homes and habits of the industrial classes.

In addition to the improvement of health and education, a prominent place is due to papers on the repression of crime, on the reform of law, and on the relations of trade. In all these it was attempted to be shown that crime might be repressed, not by severe penal enactments, but by more gentle moral suasion; that temperance would diminish both disease and crime; and that a better understanding between the different classes of society would ensure more permanent harmony and prosperity. The Congress did not propound any new theory, or add much to the information on the old familiar themes. But it enforced afresh these subjects on the public attention. The main civilizing and humanizing influence of all, Christianity, did not come within the range of subjects belonging to the Congress; but the treatment its various sections received, being of a decidedly practical character, will doubtless be productive of considerable benefit.—Dominion Churchman.

Cardinal Antonelli.

The Cardinal Giacomo Antonelli, whose death on the 6th inst., we announced last week, was member of an Italian family of the middle class, and was born at Sonimio, April 2, 1806. Having been educated in Rome for the Church, and distinguished himself for his ability, he entered Holy orders; and after holding several posts under Gregory XVI., among which was that of Minister of Finance, he was, June 11, 1847, raised to the dignity of Cardinal Deacon by Pope Pius IX., under the title of St. Agatha. In 1848 he became Primo Minister, in which position he at first won the favor of the popular party. He continued to be the Pope's political adviser; although when the Romans desired to join the King of Sardinia against the Austrians, the Pope hesitated, and Antonelli's ministry resigned, the opponents of innovation compelling him to make way for Mamiani; but after the assassination of Mamiani's successor, Rossi, Antonelli urged Pius to leave Rome and join him at Gaeta in November, 1848, where he conducted the negotiations which resulted in the Pope's return to his capital in April, 1850, under the protection of a French Army of occupation. In that year he drew up and countersigned the famous bull for establishing a Roman Catholic hierarchy in England. From that time till his death he held the uninterrupted confidence of the Pope, and was the moving spirit in every diplomatic or spiritual act of the Papal court. His policy became so retrogressive, that it exasperated the liberals, and even led to remonstrances from foreign powers. He was unusually skilful in the arts of manoeuvring, and in virtue thereof was able to maintain his position in spite of his colleagues, some of whom opposed his absolute policy. His protests however against the progress of events in Italy were without avail, as was his appeal to foreign powers for assistance. An interval of nearly ten years' peace was succeeded in 1859 by the insurrection of the Romagna country. In 1860, he issued warrants of excommunication against all the opposers of the Pope's temporal power. After the evacuation of Rome by the French, he protested against the formal entry into Rome by Victor Emmanuel, but without effect. In fact his public life was a constant struggle with Italian statesmen from

Convour to Guelmini. He was not out-maneuvred nor over-matched in diplomatic skill, but had to account to physical force. He unquestionably had great influence over the mind of the Pope, and his death will doubtless be severely felt by him.

No lesson is so hard to learn as that of charity towards those who differ from us on debatable questions. Having made up our minds, after diligent study, and perhaps earnest prayer, we conclude that any one who sees things some other way is either laboring under a strong delusion to believe a lie, or that he is willfully fighting against the plainest truth. We do not stop to reflect that he has probably given the subject as deep thought as we, that his prayers have been as fervent, and that, whatever may be our qualifications for arriving at good judgments, his may be better. Much debate, and nearly all the inconsiderateness of those who forget to think it is impossible for them to be in the wrong.—United Presbyterian.

Special Notices.

A DOCTOR'S OPINION.

Messrs. Craddock & Co., 1082 Race Street, Philadelphia.

You will perhaps remember that I sent for three bottles of East India Hemp about ten years ago, when I had a severe cough, and every one thought I was fast going into Consumption, especially as my physician told me I could never get well. After taking your medicine I found myself cured. Lately I have not been feeling well, and, having good faith in the Cannabis India from what it did ten years ago, I again order three bottles.

Respectfully,  
HENRY U. SPANGLER.  
MONTROSEVILLE, Lycoming Co., Pa.,  
Sept. 20, 1876.

N.B.—This remedy speaks for itself. A single bottle will satisfy the most skeptical. There is not a single symptom of Consumption that it does not dissipate. \$2.50 per bottle, or three bottles for \$6.50. Pills and Ointment, \$1.25 each. Sent at our risk. Address, Craddock & Co., 1082 Race Street Philadelphia.

BREAD MADE WITHOUT HANDLING.

AERATED BREAD,  
Buns, Rolls, Cakes, Pastry, and Domestic Bread of superior quality.  
BREAD DELIVERED DAILY.  
J. D. NASHMITH'S STEAM BAKERY,  
Cor. Jarvis and Adelaide Streets.

1877.

CAMPAIGN OPENED!  
WESTERN ADVERTISER  
& WEEKLY LIBERAL.  
A \$6 PREMIUM GIVEN AWAY!

Balance of Year Free!  
READ! READ! READ!

In opening the Annual Advertiser Fall Campaign for 1877, we do with the full intention of making it the most successful one yet entered upon. We want to add at least 10,000 new subscribers to our roll this year.

WHAT WE OFFER.

- 1. The best 8-page family newspaper in Canada
- 2. We pay postage.
- 3. New type, new presses, good paper
- 4. Balance of this year free to new subscribers
- 5. A magnificent steel plate engraving free
- 6. A Ladies and Children's department
- 7. Songs, music and words, pictures, chess, &c
- 8. W. F. Clark edits our Farmers' department.

ALL FOR \$1.60,

Either singly or in clubs.  
To clergymen, postmasters and school teachers, \$1 per annum.  
We want Agents everywhere.

Sent for sample and Agents' Package, containing miniature fac-simile of picture, premium list, club headings, terms, etc. Sent free to any address.  
Address all communications to  
JOHN CAMERON & CO.,  
"Advertiser" office,  
London, Ont.

Alexander & Stark,  
STOCK BROKERS.

(Members of the Toronto Stock Exchange.)  
LOANS MADE

AND  
EXISTING MORTGAGES PURCHASED.

Orders for sale or purchase of  
Stocks, Shares, etc.,  
promptly attended to.  
10 KING STREET EAST, TORONTO.

ANGUS G. MACKAY,  
INSURANCE, LOAN  
AND  
REAL ESTATE AGENT.  
Port Huron, Michigan.

Collocated Farms and Wild Lands for sale in St. Clair, Washteno, and Huron Counties, Michigan, at fair prices and on the most favorable terms.  
Can obtain a high rate of interest and the best of Real Estate Security for Loans entrusted to me.

REFERENCES:  
First National Bank, J. J. Boyce & Co. Bankers,  
and Adams B. O'Connell, Attorney at Law, Port Huron, Michigan.

D'ARY'S  
Curative Galvanic Belts, Bands  
AND INSOLES.

are made on the most approved scientific principles, and will certainly cure all diseases of the sexual organs, nervous disorder,

RHEUMATIC AFFECTIONS, NEURALGIA  
weak back, and joints, indigestion, constipation, liver complaint, consumption and diseases of the kidneys and bladder. All these yield to the mild but powerful application of Electricity. Send for circular to A. MORRIS, 118 King Street West, Toronto.

D. S. KEITH & CO.,  
PLUMBERS, GAS & STEAM FITTERS BRASS  
FOUNDERS AND FINISHERS  
Manufacturers of

PETROLEUM GAS WORKS  
Engineers and Plumbers' Brass Work, &c., Conservatory and Green House Heating.  
Importers and Wholesale Dealers in Iron and Lead Pipes and Plumbers' Materials.  
109 KING STREET WEST, TORONTO

CANADA  
STAINED GLASS WORKS,  
ESTABLISHED 1856.

Ecclesiastical and Domestic Stained Glass Work done executed in the best style.

BANNERS AND FLAGS PAINTED TO ORDER  
JOSEPH McCausland Proprietor,  
8 King Street West, Toronto.



EFFECTUALLY DESTROYS TICKS  
penetrating to the vermin in all grades of development, extinguishing both hatched and unhatched life. It also improves the growth and quality of the wool, adding weight and lustre, and enables sheep to rest well and thrive. No stock master who values his stock should be without it. Price 30c, 70c, and \$1.00 per tin. A 50c. tin will clean about 20 sheep or 30 lambs. Sold everywhere.

HUGH MILLER & CO.,  
Agricultural Chemists,  
187 King Street East, Toronto.

CONSTITUTIONAL  
CATARRH REMEDY.

LITTLEFIELD & CO.,  
PROPRIETORS.  
CATARRH

Cannot be cured by snuffs, washes or local applications. It is a weakness of the constitution, developing itself in the nasal organs first, afterwards extending to the throat and lungs, ending generally in Consumption, if not checked by proper remedies. Pains in head, back, joints, and weakness of kidneys are its attendant diseases. More people have Catarrh than any other disease. It is easily cured. Thousands of cases, some of forty years standing, have been entirely cured in New Hampshire and the Dominion of Wales the past three years, by the Constitutional Catarrh Remedy. Certificates to back the above, and a treatise on Catarrh sent free on application to T. J. Harrington, Chemist, Brockville, Ont. Send name on postal card, and it will cost only a cent. Price, \$1 per bottle, or six bottles for \$5. Sent to any address on receipt of money.

10  
DECALOGUES  
of THIRTY PICTURES, with book of 50 pp., giving full instructions in this new and beautiful art, sent postage free for 25 cts.  
100 galleo pictures, 64 cts. They are: Heads, Landscapes, Animals, Birds, Insects, Flowers, Animals, Cosmic Figures, Ac. They can be easily transferred to paper, and are most beautiful. Also, a beautiful GEM CHROMO! 100 10c. 100 10c. Ac. Agents wanted.  
Address J. L. PATTON & Co., 103 William Street, New York.

AGENTS. Investigate the merits of The Illustrated Weekly before determining upon your work for this fall and winter. The compensation for this season surpasses any thing heretofore attempted. Terms sent free on application. Address CHAS. CLUCAS & Co., 14 Warren St., N.Y.

AGENTS WANTED for the STORY of  
CHARLEY ROSS

Written by his Father. A complete account of this most mysterious Abduction and Exciting Search. With Fac-simile Letters and Illustrations. Outlets all other Books. One Agent took 50 orders in one day. Terms liberal. Address, JOHN E. PORTER & Co., Publishers, Philadelphia.

WHAT NEXT?  
A CONSUMPTIVE CURED.—When death was hourly expected, all remedies having failed, and Dr. H. JAMES was experimenting he accidentally made a preparation of his own, which cured his only child of consumption. He now gives this recipe free on receipt of two stamps to pay expenses. HENRY also cures night sweats, nervousness, the stomach, and will break a fresh start to the weary. Send for circular to Messrs. Craddock & Co., 1082 Race Street, Philadelphia, naming this paper.