SCIENTIFIC MUSEUM.

Anointing with Oil a Cure and Preventive of Disease.

The Scriptures speak of anointing the sick with oil, and throughout the whole of the Sacred Volume there is abundant evidence to show that oil was much used for the person by outward application. The employment of cod liver oil as a remedy for consumption has been a favorite panacea for twelve or fourteen years past, by thousands of eminent physicians, and there is plenty of testimony to prove that its virtues have not been overrated, but it has always been taken internally. Recent researches made by Dr. Simpson, of Edinburgh, the first applier of chloroform as an anesthetic agent, go far to prove that when oil is applied to the outside of the person it acts both as a curative and preventive of disease, and there is therefore some prospect of the ancient Oriental practice of oil-anointing being revived.

Having heard that none of the workers in the woolen factories of a neighboring town were attacked with cholera while it visited that place, and that consumption was not known among them, he paid a visit to the place (Galashiels), and by personal inquiry found his hear-say statements corroborated. He also learned that weakly children were frequently placed in such factories for the recovery of their health, which was usually effected. He then made inquiries respecting the health of the workers in woolen factories in a number of other places, and found the same immunity from disease to prevail among them, hence he came to the conclusion that the cause of this was the great amount of oil which is used in such factories—so great a quantity, indeed, that the clothes of the workers soon become saturated with it. In cotton factories the workers were found to be no more free from infection than other people, and he therefore now firmly believes that anointing with oil is an excellent thing for consumptive people. Cod liver oil is supposed to be the best because it is the strongest and only for its loathsome taste he believes it would be more abundantly used.

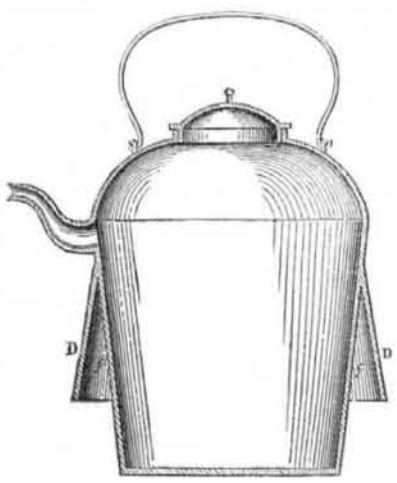
It is our opinion that sweet oil, and by this we mean nothing but *pure fresh olive oil*, is the best which can be used for such purposes. The ancient iron Romans used a great deal of oil, and we have no doubt but a more abundant use of it as an ointment, with frequent bathing, would be a great benefit to weakly persons, and tend greatly to render more vigorous the strong. We believe, however, that most of the oil sold under the name of olive oil in our cities, is not the genuine article.

We regret exceedingly that so little is said about this beautiful oil in the work of Dr. Pierce, of Cambridge, Mass., on the "Examinations of Drugs, Medicines, and Chemicals."

Chemical Testimony in Cases of Poisoning.

M. Orfila, in a capital case for poisoning in France, took occasion to represent to the court the reason why experts could not reply to the question so often put to them, as to whether a sufficient quantity of poison to cause death had been administered, and the danger, in reference to the suppression of crime, the insisting upon such a question gave rise to. The chemist may only be able to detect the thousandth, or the twenty-thousandth part that has been administered, when the poison has been evacuated, and the discharges have not been preserved. If all the poison has been thus expelled he may not be able to detect even a trace, and yet, although in the one case what he has detected has been insufficient to cause death, and in the other he has found none at all, so that the jury may pronounce that no poisoning has occurred, yet has the person died of such poisoning. To ascertain the whole amount of poison that remains in the body, the entire frame would have to be submitted to analysis, which is clearly impracticable; while calculations of the quantity existing in the whole body from that which has been obtained from a part, would give rise to the greatest errors, inasmuch as the poison is not equally distributed over the whole frame, some portions of this absorbing and retaining much more of it than others. Different processes also employed by the same hand afford very different quantities, as does the same process performed by chemists of different degrees of expertness. The French law, too, does not require any decision on this point, as it punishes the attempt to poison by any substance that may cause death—this applying not to the proportion employed, but to the substance used.

Improvement in making Kettles.



The annexed engraving is a vertical section of an improvement in kettles, invented by J. W. Hoard, of Providence, R. I., who has taken measures to secure a patent for the same. The improvement relates to making the kettle in such a manner that the heat, while the kettle is on the stove or furnace, will be applied to nearly the whole of the outside of the water. As kettles are commonly constructed, the heat is applied to only a small of the outside. Above the bottom, D, is a flange cast on a kettle of hollow ware, brazed on a copper kettle, or soldered to a tin kettle. The kettle otherwise is the same as any in use. The space, *f*, is hollow and open, so as to let the heat of the fire pass up between the flange, D, and the outside of the kettle containing water. If the flange, D, is soldered, as in a tin kettle, the water will have to be kept at the horizontal line above the spout, but if it is of hollow ware (cast-iron) it need not be above the apex of the conical flange. If this kettle is placed on a stove opening, which is of a larger diameter than the bottom, it will readily be seen how the heat will pass up and circulate round a great outer portion of that part of the kettle containing the water, so as to boil the vessel much sooner. When such a kettle is placed on an open furnace, the same effect is produced, as the heat from the charcoal fire will be compressed, as it were, around the portion of the kettle containing the water. The flange, D, may be cast on a stove to effect the same object; this embraces the same principle, but is not shown in the engraving.

More information respecting this improvement may be obtained by letter addressed to Mr. Hoard, at Providence.

Fermentation of Citric Acid.

The following extract from the "Chemical Gazette," by J. Personne, will serve to throw some light on the question at issue between Dr. Montague and J. Downs, which was discussed in our columns, respecting the quick ferments employed for bread, &c.

"The manufacturers of citric acid have long known the difficulty of keeping citrate of lime without its undergoing a change, but the nature of the products of this decomposition have hitherto been unknown. It was known merely that citrate of lime, kept for a certain length of time, would no longer furnish citric acid, and people were satisfied with saying that it was transformed into carbonic acid, or rather carbonate of lime. It is, however, difficult to rest upon this hypothesis, if we consider the formula of citric acid; the spontaneous decomposition of tartar, observed by MM. Noellner and Nickles, whilst augmenting the doubt as to our knowledge on this subject, serves also to attach a certain interest to the study of this decomposition.

If, after saturating clarified lemon-juice with chalk, the paste of citrate of lime is put into a flask surmounted by a tube fitted for collecting gases, a disengagement of gas will be perceived in a day or two, when the operation is carried on at a temperature of 86° to 95° Fah., and this continues until the transformation of the citrate is completed. When crude juice is employed in place of clarified, the decomposition proceeds more rapidly, as is shown by the more speedy appearance of the gases.

The Culture of Sea Kale.

Why the culture of the *crambe maritima*—this delicious vegetable should have been so long neglected, we do not know, but from the frequency with which it is met in the New York markets for two years past, it seems that its value is better appreciated now than it was a few years ago. The following directions for its cultivation will be of use, we believe, to many of our readers:—

The best soil for the successful production of sea kale is a rich deep sandy loam, though ordinary garden soils, if mixed with a good proportion of sand and well manured, will answer the purpose. Stiff or wet soils should be thoroughly prepared, by trenching to the depth of from two to two and a half feet and thoroughly mixing with good compost manure, thereby rendering top dressing sufficient for after culture, and saving the roots from disturbance.

Sea kale may be raised by seed, root-cuttings, or off-sets; but the seed is by far the most preferable. Sow in April or May, thinly in drills, three or four feet apart and two inches deep, ultimately thinning out to fifteen or twenty inches in the rows; which, in order to insure against injury the first winter, should not be done until the plants are one year old. In the fall the ground must be thoroughly cleaned from weeds, and the surface well stirred, either with a two pronged hoe or still better, with a fork, to the depth of four or five inches; after which a covering of fresh stable dung six inches in depth should be laid on, and left so until spring, when the rows should be dressed just before the plant comes through the ground, as follows, viz: after raking off the rough part of the covering, point-in with a fork the short part of it, taking particular care not to wound the roots; at the same time scatter a little earth upon the crowns of the plants.

In inland places salt may be used to advantage as an invigorator. The third year after sowing, it will be fit for use; and to prepare it for the table, blanching must be attended to as follows: As soon as the leaves appear above the ground a few inches, they should be earthed up and large flower-pots inverted over them, taking care to exclude light by stopping the hole in the bottom of the pot, and then to guard against sudden changes in the weather, cover the pots entirely with soil. When the sprouts have sprung up to the height of from eight to twelve inches, they are fit for use, and should be cut off with a knife without injuring the crown of the root; after which they may be prepared for the table in the same manner as asparagus.

In case pots cannot be had, other methods may be resorted to, such as earthing up, as the plants advance, once in four or five days, or by hooping over the beds or rows, and covering with mats; but if possible, the pots are decidedly preferable, and will repay the trouble or expense of procuring them. In blanching without pots, sand is sometimes recommended for earthing up; but it is difficult to clean the sand thoroughly out of it.

Throughout Great Britain and Ireland, sea kale is very extensiuely used; some think it not inferior to asparagus, others prefer it in soup to any other method of consuming it. They however, sow the seed early in the spring, and transplant in the month of May, as we do with cabbages. They take off the lower sprouts on the stock as it grows up, and use them in soup when tender, but not after the month of July, until the early frost which improves instead of injuring them. It is a hardy vegetable and may be kept in the garden all winter, and used as it is wanted. The treatment of it to blanch it, is quite an improvement—a gardeners discovery, which is well worthy of attention.

Properties of Charcoal.

Among the many properties of charcoal may be mentioned its power of destroying smell, taste, and color; and as a proof of its possessing the first quality, if it be rubbed over putrid meat, the smell will be destroyed. If a piece of charcoal be thrown into putrid water, the putrid taste or flavor will be destroyed, and the water be rendered completely fresh. Sailors are aware of this; for when water is bad at sea, they are in the habit of throwing pieces of burnt biscuits into it to purify it. Color is materially influenced by charcoal, and in numbers of instances in a very irregular way. If you take a dirty black syrup and filter it through burnt charcoal, the color will be removed. The charcoal of animal matter appears to be the best for this purpose. You may learn the influence of charcoal in destroying colors by filtering a bottle of port wine through it; in the filtration it will lose a great portion of this color and become tawny; repeat the process two or three times, and you have destroyed it altogether.

A syphon for dairymen is now in use in Scotland, by means of which the milk is drawn away from the cream instead of skimming the cream off the milk.

LITERARY NOTICES.

POETRY OF THE VEGETABLE WORLD—Being a popular exposition of the science of Botany and its relations to man; by M. J. Schleiden, M. D., Professor of Botany in the University of Jena; edited by Alphonso Wood, M. A., author of "The Class Book of Botany," etc., is a new work, just published by Moore, Anderson, Wilstach & Keys, Cincinnati, O., and Newman & Ivison, New York City. It contains nearly 400 pages, with several neatly executed lithographic plates. The work is interspersed with a great variety of incidents and curious facts designed to render examinations in Botany a pleasant pastime instead of an irksome study. The work is written in the form of essays, and is really a work of interest and utility to the general reader, as well as to the botanist and florist; it is of a somewhat novel character, and will no doubt meet with great favor by those who take an interest in this class of investigations.

THE WATER CURE JOURNAL—For May, No. 5, published by Fowlers & Wells, 131 Nassau st, N. Y., is received. Each number appears more spirited and sanguine than its predecessor of the success of the system it so ably advocates. If the directions contained in this journal were followed there would doubtless be far less disease than we now see. It is replete with that interest and ability which characterize all their publications. If the system they advocate be really true, certainly no family should be without it, as it would save many a physician's bill, and perhaps many a feeble constitution from destruction.

THE AMERICAN PHRENOLOGICAL JOURNAL—For May, published at the same place, is also a work of interest and useful instruction: each number is illustrated with engravings of eminent personages, with a description of their distinguishing traits of character; it is devoted to mental science, and is also, like the Water Cure Journal, conducted in an able and efficient manner.

THE NEW ENGLANDER—For May; published by F. W. Northrop, New Haven, Conn., contains an excellent article on "Fashionable Religion," and another on the "Influence of Great Men," each of which is worth the price of the work.

American Polytechnic Journal for May, just received, is an excellent number.