

MEDICAL NOTES.

Erysipelas.

Professor D. M. Salazar, of Madrid, reports that he has cured eight cases of facial erysipelas in 48 hours by the use of glycerin of borax, without any ill effect following. He applies the solution to the diseased parts with a brush, and then covers them with a mask of raw cotton.

In erysipelas in general, tincture of muriate of iron, used internally and locally, has been the chief remedy of late, but it is found not to be proper in all cases. When the redness of the inflamed part is vivid and deep, and there is increased redness of tongue and mucous membranes, the iron tincture is the true remedy. Internally it may be given in doses of from 5 to 20 drops every three hours, and outwardly applied from full strength to a dilution of one part to 8 or 10 of water and glycerin. Erysipelas has been cured with veratrum alone, used internally and externally, when the cases were marked by high febrile action and a full pulse. In other cases of the zymotic type, when the cellular tissue is affected, the remedies should be taken from the group of antiseptics. Sulphite of soda is good when the tongue is pallid and dirty. The dose is 10 to 20 grains every four hours. Chlorate of potash has been tried with good effect. In phlegmonous erysipelas, permanganate of potash solution is the best outward application. In these cases the color is purplish or dusky. Carbolated glycerin is also a good dressing. It should not be forgotten that, in erysipelas of children or of adults where the skin is very sensitive, a simple dressing of fresh lard will often give the best results.

To conclude the subject of erysipelas, the collector of these notes would mention that he has observed the cause of the disease twice in himself and two or three times in others, where there was no doubt. That cause was animal fat, either fat fowls or, generally, lard and pork used to excess. It seems that the disease is very frequent in the West during winter, hog's fat being eaten there most extensively. Those who have never had the disorder can easily bring it on by persistence in such diet; and though it will trouble even when it is light, yet, if they try the remedies above mentioned, and especially the lard or bacon fat when the complaint ends with a ticklish itching in the palms of the hands and soles of the feet, they will be almost amused. In acute erysipelas, the bane and antidote are one, as a rule.

Iodide of Potassium.

This chemical is used to a vast extent; but after a thousand prose poems in its praise, many doubts begin to be expressed as to its value. Some of the best physicians of the old and new schools assert that the iodide is sometimes a failure, and sometimes much worse. The most discriminating doctor of the lot seems to us to be Dr. John M. Scudder. He says: "If your patient has a pallid tongue, especially of a dull leaden color, large, sodden, immobile, you have the indication for the drug, and then it becomes a remedy. If the color of the tongue is deeper than is natural, whether dusky red, purplish, violet, or bright red, if it be contracted, pinched, pointed, dry, then the iodide is contra-indicated, and will probably prove a poison."

Hypodermic Injections.

Subcutaneous or hypodermic injection of medicines, namely injection, by very fine pointed syringes, of liquids into the cellular tissue, form the grand new feature of medical practice. Until recently, these injections have been confined to narcotics or anesthetics, where they have accomplished their object better than by the old style of dosing or inhaling, but in some cases the amount has proved too great. At this time, the trials of new articles used in this way for a host of diseases would require a volume to give full account of. We condense a few of the more important experiments. Dr. Zülzer, after having used every other medication, without success, in exanthematic typhus, and finding the pulse imperceptible, the extremities cold, the voice inaudible, etc., employed the ammoniacal tincture of anise in injections, 15 to 30 drops, one injection for each limb. In a few minutes the pulse became fuller and stronger, the death-like appearance and collapsed condition disappeared, and a good number of patients who seemed hopeless owe their life to this means, not sufficiently used. In some cases it caused little abscesses at the point where the injection had been made, but these accidents have never had any serious consequences. The formula is as follows: Oil of anise, 1 fluid dram; alcohol of 85°, 24 drams; ammonia, 5 fluid drams; mix. This medication is indicated in cholera, grave fevers, and paroxysms, where it will permit one to wait the favorable moment for the administration of quinine. Dr. Hüter strongly recommends a two per cent solution of carbolic acid in water as an injection in all inflammations of the cellular tissue. According to his experience, the results are almost miraculous. He says there are no material impediments to the use of these injections in such organs as the lungs and spleen. If he is correct, and a solution of carbolic acid can reach and heal the ulcers in consumption—but it will not do to put entire faith in such a wonder until the experiment has been fully and successfully tried.

Dr. James B. Garrison, of De Witt, Ark., reports a curious case in his own practice, where a man had taken by mistake a large dose of sulphate of morphia. He was unconscious, cold and livid, and the pulse had ceased entirely at the wrist. The Doctor considered the case hopeless, but still went to work vigorously, causing the patient to be stripped, rubbed with dry mustard, then with water, which was poured on head and back, till a very strong decoction of coffee could be prepared; then almost a pint was injected into various parts of the patient's body during an hour, while rubbing with hot flannels and dashes of cold water were kept up. At the end of the first hour his pulse was per-

ceptible at the wrist. The hypodermic injections of coffee were continued for two hours, his skin being perforated in every part where it could be done with safety. The friction and cold water lasted four hours, when the patient could swallow. Then he was made to drink a quart or more of the strongest coffee; quinine and brandy followed, as his pulse was feeble. Finally the man recovered, and did not complain of soreness from all these punctures. The coffee caused no abscesses.

Hypodermic injections of one or two grains of ergotin every few days have cured varicose veins in pregnant women. The same substance, 10 parts to 100 of water, has cured *prolapsus ani*.

New Method for the Transformation of the Alcohols into Nitric Ethers.

This process, recently reported by M. Champion, allows of operation at the ordinary temperature and upon considerable quantities of alcohol. It is founded on the reciprocal action of a nitrosulphuric mixture and of sulphuric combinations of the alcohols; and as this action is progressive, but a small quantity of heat is disengaged. It is otherwise necessary to cause the concentration of nitric acid to vary. Thus, for example, for the alcohols derived from the fatty series, butylic amylic, etc., ordinary nitric acid with an excess of sulphuric acid should be employed: in other circumstances, fuming nitric acid at 118.4° Fah. The sulphuric combinations of the alcohols are obtained by 2 of acid to 1 of alcohol, care being taken to prevent elevation of temperature and the mixture being left to itself for several hours.

This process is possessed of particular interest from its application to the industrial production of nitroglycerin. To glycerin at 30° B., ordinary sulphuric acid is added, care being taken to keep the heat below 122° Fah. After cooling the liquid is turned into a light excess of nitrosulphuric acid. Two pounds or so of this mixture can be almost immediately used, without requiring cooling. Although the temperature rises, it in no case gives place, if the operation be properly conducted, to the violent reaction which results from the action of glycerin on the acids, an effect manifesting itself by a sudden increase of temperature and sometimes by explosion. After a time, which varies with the proportions employed, the oily drops appear. If the operation be performed on some few ounces, the temperature remains constant during several hours. The action continues for twenty hours.

Alcohol.

As the result of the chemical change which sugar undergoes in passing downwards towards a dead, inorganic condition, a substance is produced which has been the cause of more sorrow, crime, and suffering than all other evil agencies that have afflicted the world. It has caused tens of thousands of murders, and uncounted instances of robbery, theft, arson, incest, and suicide; it has brought misery and want into millions of households; it has filled almshouses and asylums with wretched victims; it sends a never ending procession of crime-stained men and women to prison and the gallows. What an awful indictment this is to bring against a substance which stands so closely allied in chemical relationship to innocent sugar! Alcohol is not a natural product; it can only result from a spontaneous change which is excited in saccharine liquids under the influence of a ferment. If in the order of things this chemical change had been impossible, the human race would have been saved from shedding tears, the aggregated volume of which reaches to that of a mighty river. But alas! atoms of carbon, hydrogen, and oxygen are permitted to group themselves in a way to form the maddening liquid; and the great enemy to human happiness confronts us in all our domestic, industrial, and commercial relations. If through disarrangement of Nature's laws, the vinous fermentative process should suddenly cease, and not another drop of any kind of spirituous liquors be produced, no sensible harm would come to any industrial or art process, and no absolute want in medicine would be encountered. Carefully viewing the matter from the standpoints of the chemist, physician, and artisan, we unhesitatingly declare that the world in its present advanced stage has no need of alcohol; it is simply convenient, but not necessary. Why not then make a determined effort to rid the country and the world of the monster? Although alcohol results, as we have said, from spontaneous changes, yet the aid of man is necessary to form the various liquids containing it into attractive and permanent beverages. The fermentation of the juices of grapes and other fruits produces alcohol; but if left alone, Nature will not allow the spirit to remain except for a brief space of time. Nature abhors not only a vacuum, but manifestly one of her products, for alcohol is so unstable in its attenuated combinations that, if left to itself, it speedily runs down into the harmless form of acetic acid.

If man ceases to interfere in the series of natural changes which saccharine liquids spontaneously undergo, alcohol will not survive long enough to do mischief. Why not then compel the great army of men, engaged in isolating and compounding the agent, to let it alone? Alcohol is a poison; it acts inharmoniously with vital processes in the animal organism. In its purest and best form, it slowly undermines the constitution, and hinders or arrests metamorphosis of tissues; in its vile associations, as presented in these modern times, it kills with the certainty and almost with the rapidity of strychnine and arsenic. We ask again, why not attempt to arrest its production, and thus strike a blow at the root of the evil? There is virtue and moral force enough in this country to compel Congress to pass laws prohibiting its importation in any form; and there is virtue and moral force enough in most, if not in all, the States to com-

pel legislatures to enact laws prohibiting its manufacture. This is the point to which we must, sooner or later, come. All the laws ever made, or that ever will be made, conjoined with all the prayers of all the well intentioned women of the country, will never stop the gnawings of human appetite, or prevent its gratification, so long as rum, whiekey, wine, malt liquors, etc., are imported and manufactured under the sanction of law. Alcoholic beverages must cease to exist, before the world will be released from the terrible thralldom which they exercise over human appetite. In making a remedy for the enormous evils caused by alcohol, nothing absurd or impracticable is associated with the suggestion, and the time is not far distant when the poison will be placed under a ban, as regards its importation and manufacture, which will give a forced emancipation to the tens of thousands of slaves now in subjugation to the monster.—*Boston Journal of Chemistry.*

Cold Applications to the Neck.

Dr. B. B. Richardson, in the *London Medical Times and Gazette*, recommends a neck bag of rubber, with a constant stream of cold water through it, as an efficient means of applying cold locally to the neck. He says:

"I have used this method of applying cold to the cervical region now several times, in pyrexia, with increasing confidence in its usefulness. In a case of apoplectic seizure, with convulsions, in a lady of middle age to whom I was summoned, I found a temperature of 102° Fah., with deep unconsciousness, rapid pulsation of the carotids, and intense fullness and tension of the jugular vein. In this extreme instance I had the cervical region enveloped in a bladder of crushed ice, with the result of a fall of temperature to the natural standard in six hours, a quiescent condition of the circulation, and subsidence of all the acute symptoms, so marked in character that it is, I think, impossible to doubt that cause and effect were in their true place. This patient made a good recovery, and, although I do not attribute the recovery solely to the special remedy now being considered, I am convinced the remedy was of good service.

I had an opportunity of trying the effect of this mode of applying cold on myself. I took a feverish catarrh, attended with a rise of animal temperature to 100° Fah. I had the bag neatly adjusted, and let pass freely through it water, taken simply from the cistern, the temperature of the day being at freezing point. As the water current began to pass over the front part of the neck, with a gentle pressure which I regulated myself by the stopcock, I felt the effect of the cold very deeply, and at first not pleasantly. In three or four minutes, however, though the skin over the throat was ten degrees lower than on the other parts of body, the sensation of cold was lost, and all unpleasantness was gone. Within a quarter of an hour I was conscious of a general reduction of fever, and of lessened vascular activity. The cold also had a soothing influence, producing desire for sleep. On this followed perspiration, and within two hours a reduction of the temperature to the national standard.

These effects were satisfactory, because no other mode of treatment was employed to complicate the experience.

I shall look out with interest for the results of the observations of other practitioners on this method of reducing pyrexia. It stands on a good physiological basis; I believe its practical worth is clear; and I would that its usefulness were tested by the independent observation of other workers in our common field of labor.

I would urge on those who may study the effect of cold, more or less extreme, applied to the cervical region, to observe the influence it exerts, in different classes of cases upon the heart. If I am correct that it reduces the action of the heart, and if I am also correct in the view that it promotes a tendency to sleep, this remedy, so simple, will prove useful in many other forms of disease than acute pyrexia. In acute mania, in cases of insomnia, in cases of palpitation and cardiac irritability, it deserves the test of experience."

A Good Education.

The late Edward Everett condensed into a single brief paragraph his estimation of what constituted a good education. Here it is: "To read the English language well, to write with dispatch a neat, legible hand, and be master of the first four rules of arithmetic, so as to dispose of at once, with accuracy, every question of figures which comes up in practice—I call this a good education. And if you add the ability to write pure, grammatical English, I regard it as an excellent education. These are the tools. You can do much with them, but you are hopeless without them. They are the foundation; and unless you begin with these, not with flashy attainments, a little geology, and all other ologies and ophies, are ostentatious rubbish."

EXPLORATIONS have recently been made into the mounds of Otumwa, Iowa. In one, a mass of charcoal, a bed of ashes, and some calcined human bones were found, showing that cremation was practiced by the people who erected them. As Indians never burn their dead, this adds another proof to the theory that they were not the original mound builders. The similarity of the mounds of Mexico and of Iowa point to the fact that they were constructed by the same race of ancient Mexicans.

A paragraph is going about the papers that the largest room in the world under a single roof, unbroken by pillars or other obstructions, is at St. Petersburg, in Russia, and is 650 feet long and 150 feet wide. It is said to be used for military display. The Grand Central Depot, in this city, is 800 feet long by 240 wide, covering about 4 acres; the roof is supported by the side walls.