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## Original Communications.

*Comminuted Fracture of left Elbow, previously Anchylosed, resulting in Gangrene of Arm. Amputation. Recovery.* By A. ANSELL, M.D., of Falmouth, Jamaica.

Francisco Aguilero, a Mexican, laborer, ætatis 48, of intemperate habits, slender stature, previous health good, was admitted to surgical ward of St. Mary's Hospital, San Antonio, Texas, on the 17th September, 1873, under charge of surgeon A. Ansell. On admission his condition was as follows: Left arm exceedingly tumefied from elbow to shoulder, of a dark brown hue, *vesicated* throughout its entire extent, tense, hot and painful; countenance anxious, desirous of having "something done for him," tongue coated, bowels constipated, urine scanty, high colored; pulse, 120; thermometer, 101 F.; respirations, 30. Gave the following

### HISTORY.

About seventeen days ago was thrown from off the top of a load of wood (which he was conveying in a cart) to the ground, and fell striking full upon his elbow; the joint had been fractured thirteen years before, from a similar cause; he had had no medical attention, being poor, could not afford to send for a doctor, but had had the limb adjusted to a board, and had applied lead water, fever having supervened, and the pain in the limb becoming so intense he determined to seek medical aid. Coming to town he was admitted as an inmate to the pauper hospital. He judges the height from which he fell to be from ten to twelve feet.

In consultation with George Cuppels, Esq., M.D., M.R.C.S.E., it was decided, in view of the gangrenous condition of the limb, and the rapid the disease was making on the patient's constitution, to amputate at the shoulder joint, without delay. The necessary means being in readiness, I proceeded to disarticulate by the method of Baron Larny, by making a straight incision from the acromion process down to insertion of deltoid, then two other incisions, either at right angles from the first: then opening up the capsule of the joint, released the head of the humerus from the glenoid cavity of the scapula; next passing a catline behind the humerus, severed the soft parts, at same time seizing the flap in such a manner as to control the axillary artery, which was soon ligated, as well as two smaller vessels, a smaller branch or so were twisted. In consequence of an insufficiency of assistance, there

was no possibility of controlling the subclavian artery, the result was, there was considerable hæmorrhage. The anæsthetic used was "Squibb's" chloroform. At the completion of the operation, but prior to applying the sutures, it was discovered the patient was narcotized, but a powerful galvanic battery being at hand, it was applied, and with the usual proceeding in such cases the man was restored in about an hour, though reaction was slow. Patient was removed to his bed, where hot bricks and bottles of hot water were applied, and half an ounce of brandy with egg administered every half hour for nine hours; the patient remained with a pulse hardly perceptible, with respiration slow, accompanied with sighing, but by assiduously keeping up stimulation and ammonia, at the end of the period just named, reaction was fully established. 18th.—Flap united by eight silver wire sutures, and wound dressed with carbolic oil (1 to 40) applied on cotton batting. 19th.—Patient arose from his bed, feeling well enough and strong enough to occupy a chair outside the ward, and only occupied the bed to sleep in at night. The case progresses favorably, the ligatures being thrown off about the 18th day; three-fourths of the wound united by primary intention firmly by the fifth day after the operation, and the man was discharged well on the 23rd day, or October 10th.

The specimen preserved of this case, contains much instruction; first, it should be remarked, that a dissection of the limb after amputation revealed an amount of disorganization showing that another line of treatment, tending in a conservative direction, would undoubtedly have ended in the death of the patient; the soft parts were infiltrated throughout the entire length of arm and forearm, the flaps even were of dubious appearance, but chloride of zinc and alcohol, and the carbolic dressing restored them to a healthy condition; pus was seen throughout the limb at various points, even in the vessels. The bones accompanying this history bears evidence of an extensive fracture having taken place many years previously (patient states 13); they evidence the absorption and obliteration of the condyles of the humerus, the round head of the radius, the olecranon process, and part of the ulna, while a solidification of the entire articular surface shows how extensive must have been the previous injury. The subsequent injury was none the less extensive, the loss of bone substance shows that the fracture was comminuted, while by a survey part of the bone is seen to have been driven into the cancellus

structure. Some of these fragments, in our opinion, acted as an impediment to the circulation, hence the gangrenous condition, resulting in the subsequent amputation.

It was thought advisable to treat this case expectantly, and therefore he took daily 15 grains of quinine with 30 grains of chlorate of potash for seven or eight days.

*Notes of case of Caries of the Rib.* By A. ANSELL, M.D., Falmouth, Jamaica.

*Result—Cured.*

Zeferina Cortes, ætat. 5½ years; nativity, Mexico; family history evidenced marked syphilis; the child was of the diathesis syphilo-scrofulous; her appearance was extremely emaciated, and bore evidence of neglected care.

I was consulted for a large abscess which had formed over the anterior costal region, covering the ribs from the fourth to the seventh; there was slight fluctuation clearly discernible over the sternal end of the sixth rib, and extending back for about 1½ inches; the fluid, however, was deep. The child was fretful, and was in apparent pain; she could not bear the part touched, flinching at the slightest touch. I was told she had had severe fever for several days; the tongue was thickly coated, the pulse soft, but full, compressible, complete anorexia; bowels inclined to be too solvent; the child's condition was generally æsthenic.

My first act was to give exit to contained fluid. I therefore made a free incision, in the doing of which my bistoury came in contact with a hard substance. Not knowing what this might be, I ænesthetised the child, and examined the cavity carefully; this resulted in the extraction of the sternal end of the sixth rib, following which there was a considerable exudation of dark fetid pus, the characteristic pus of dead bone. I injected the cavity with a weak carbolic acid solution; this with the double purpose of deodorising the wound, and assisting in the exfoliation of the end of the bone.

My internal treatment of this case was by the syrup of triple phosphates, of iron, quinine and strychnia. The case progressed favorably and terminated successfully. It was under my care from the 11th of June, until the 4th of August, 1874.

**DEODORIZED IODOFORM.** Dissolve iodoform in ether and apply to the diseased parts. On evaporation an odorless coating of iodoform is left.—(*Druggists' Circular.*)

## Progress of Medical Science.

### ON THE TREATMENT OF CHRONIC THROAT-CATARRH WITH NITRATE OF SILVER.

Dr. Dawosky lays down the proposition (*Betz's Memorabilien*, vol. xxii, part 12) that in the treatment of diseases of mucous membranes, where external applications are possible, nitrate of silver is a remedy useful before all others. Brought into contact with a mucous surface, it coagulates the mucus; and if applied in excess it unites chemically with the tissue of the membrane beneath, forming a more or less thick crust. If the nitrate be applied to an actively secreting mucous membrane, it first irritates the distended blood vessels and capillaries, and also stimulates their contractility, so that they unload themselves and cause an onward flow of the blood accumulated in them. Hence it becomes necessary to the efficient use of nitrate of silver to form an accurate estimate of the quantity to be applied in each case, and also that it should be applied by the physician himself. In chronic throat catarrh, we have a congested condition of the mucous membrane, and a consequent abundant secretion, with swelling and redness occurring in unequally distributed patches. If these patches become denuded of epithelium, they appear yet more deeply reddened. In such cases, the nitrate should not be applied otherwise than in a solution of definite strength. It is convenient to have a concentrated solution, which may then be diluted with water or glycerine. After applying it with a brush to the affected parts, these should be painted over with a solution of glycerine, and the application is repeated so long as there is any swelling, unhealthy secretion, etc. At the same time, the food and drink taken should be cold, and smoking discontinued. Should the larynx be also affected, it should be brushed with the caustic solution of a strength of one to eight, repeated three or four times a day. A large number of cases of laryngeal catarrh thus treated have uniformly yielded the best results.

### LIQUOR BISMUTHI FOR NASAL CATARRH.

Dr. Q. C. Smith writes to the *Pacific Med. and S. J.* recommending for nasal catarrh liquor bismuthi and water, equal parts, applied one to three times a day, to nostrils, pharynx and naso-pharyngeal cavity, freely, with a spray producer. He has found this, during an experience of several months, to produce very satisfactory results. Sulpho-carbolate of zinc, in weak solution, as before published, he regards also as a very efficient remedy; applied in the same manner.

## LECTURE ON ABSCESS IN THE NEIGHBORHOOD OF THE ANUS AND RECTUM.

BY W. H. VAN BUREN, M.D.,

Professor of Surgery in Belleville Hospital Medical College.

(Delivered at the College in the Spring Course, April, 1878.)

Abscess in the neighborhood of the rectum and anus is a very common affection, although it is often borne in silence, especially by women, through dislike of exposure and dread of the surgeon's knife. The practitioner who is familiar with the different phases of the disease has it in his power to prevent great inconvenience and suffering, and not unfrequently even to save life. Recognizing it by the description of characteristic symptoms, he can often say confidently to his patient, "Take a little ether and let me save you much trouble hereafter." There is no class of cases in which anæsthesia adds so largely to our power as in the surgery of the rectum; and here, in this country, where it was first discovered, the duty would seem to devolve upon us to demonstrate its practical utility in everyday surgery, for abroad, and especially on the Continent, the tendency is very strong to continue in the beaten track, and reserve it for the greater operations.

I shall assume that you know something of the general pathology of abscess. Here, as elsewhere, it takes its origin in the alteration or actual death of a portion of tissue, possibly very minute, which thus becomes a source of irritation sufficient to provoke an effort for its elimination or floating out from the organism by pus formation. This necrosis or change in quality of tissue—the ultimate cause of every abscess not due to the presence of an actual foreign body introduced into the tissues from without—may originate in *local traumatism*, or in *failure of local textural nutrition from general causes*. Thus, in answer to the question why abscesses should form in this region, we find amongst clearly substantiated antecedents the following: Perforation, immediate or ulcerative, by hard substances which have been swallowed and afterwards actually found in abscesses near the rectum, *e.g.*, pins, needles, fish-bones, sharp fragments of chicken and other bones—the pelvis of a snipe, an apple core, etc.; abrasions caused by impacted and hardened fæces, or by foreign bodies introduced through the anus, leading in some instances to perforating ulcer; violent stretching of the parts in forced efforts at defecation; contusions, as from kicks, or riding on horseback; mechanical or chemical irritation by contact of substances used for cleanliness, by scratching to relieve pruritus or eczema, or by the contact of strong perspiration after much walking, or of acrid secretions from the vagina; strangulated or irritated hæmorrhoids; the presence of stricture or cancer of the gut—of which the formation of abscess in the neighborhood is not an unfrequent complication; local chilling, as by sitting on a cold stone or a wet seat; finally, the tubercular diathesis, and also, in persons of good constitution, a temporarily vitiated condition of the

blood and consequent depression of the vital powers.

We must not lose sight of the facts that chronic abscess of remote origin in necrosis of bone, and psoas abscess, sometimes gravitate to this region and point near the anus, and that the vicinity of an enlarged prostate, or a diseased bladder or seminal vesicles, may cause perineal abscess, and encroach upon the rectum. I have punctured an abscess seated between the prostatic urethra and rectum and projecting into the latter—to relieve retention of urine; and Gooch relates the case of an old gentleman long subject to gravel who, after a perineal abscess and much subsequent complaint of pain at the anus, was found, on examination (which had been unwisely deferred), with a urinary calculus of a slender, tapering shape, and over an inch long, projecting more than a third of its length into the rectum. Its removal was followed by cure. (*Chirurg. Works*, London, 1792, vol. iii., p. 216.)

I am disposed to emphasize the subject of etiology, because the more thoroughly we grasp the causes of disease the greater the chances of success by hygienic and preventive measures, and the more direct and rational our treatment.

Before describing any of the various forms in which we encounter them in practice, it is important to observe that *all abscesses near the lower end of the rectum have certain characteristic features in common*, viz.:—

1. They can be rarely made to abort, going on almost inevitably to suppuration.
2. They do not heal readily, but as a rule tend to degenerate into chronic sinuses and fistulæ.
3. The pus which they discharge is offensive in odor, in consequence of the exosmosis of gases from the bowel.

From what I have said thus far you will already understand, I think, why it is a received rule of surgical practice that *these abscesses should always be opened, and opened early*, even without waiting for unequivocal evidences of fluctuation. It is another good rule, to be mentioned in this connection, that *all incisions for this purpose should radiate from the anus as a centre*; we thus avoid cutting across the general course of blood-vessels, and we escape, also, possible bad effects of subsequent contraction in healing.

Abscesses in this region vary in situation as well as in size, and they vary widely in gravity, as we shall see.

Often a little round lump will form just at the verge of the orifice of the anus, taking its origin from a hard stool, or an external pile, or the chafing of the napkin of a menstruating woman. It becomes hot, and exquisitely painful. This is, naturally, one of the most sensitive spots in the body; the sphincter is provoked to spasmodic contraction by the presence of the painful little tumor, which is therefore constantly pinched, and for four or five days, or until it bursts, life is a burden.

If abortion cannot be effected in twenty-four hours by a pig's bladder partially filled with ice and moulded accurately to the part, then the tumor should be

freely incised. Freezing with ice or ether-spray might replace general anaesthesia. Afterwards a piece of fine sponge, cut to fit the part and moistened with laudanum or comp. tinct. benzoin, may be kept in contact with it. These little anal abscesses, which, like those of the eyelids (*hordeoli*), often originate in glandular follicles, cause an amount of pain out of all proportion to their size. They occur more frequently before middle life, and in some individuals show a tendency to habitual recurrence. The regular use of an astringent or alcoholic lotion to harden the skin is often of service in such cases. One form of this marginal abscess undoubtedly takes its source in a little varicose venous pouch—one of the varieties of origin of the external hæmorrhoid; this, when left to itself, is likely to leave behind it a minute "blind external fistula," often associated with a little flap of shrivelled integument.

A *painless* variety of marginal abscess sometimes forms insidiously, generally in a delicate, perhaps phthisical subject, it may discharge itself and leave a little fistula without its existence having been suspected. This is more of the nature of what is known as the "dermoid" abscess, and it requires decided local stimulants to make it heal after incision.

Where the focus of pus formation is situated further from the verge of the anus and beyond the grip of the sphincter, the pain, even of the acutest grade of abscess, although from its greater size very considerable, is not so constant and intolerable as in the first variety. There is more or less extensive redness of the skin, followed by central softening, and accompanied by febrile reaction. Entire rest, narcotic and sedative poultices, with early and free opening, are the remedies. Such a case, if not promptly met, might linger a fortnight or longer. One of its prominent difficulties is to provide for defecation without great temporary increase of pain. It is better that this should be done daily, or every other day, than to run the risk of faecal accumulation and its consequences, which might interfere with subsequent prompt repair. The best means to use for this purpose are a moderate dose of some mild, reliable laxative, such as castor oil, sulphur and cream of tartar, or fluid extract buckthorn, assisted at the right moment by an enema of warm water and sweet oil.

The introduction of the nozzle of the injecting tube is not painful under these circumstances, if rightly managed, and it is usually wise to overrule the objections of a patient who has no experience of this remedy. The obstruction to the local circulation from a loaded rectum constitutes a positive aggravation of the malady.

This is the more common form of acute abscess near the anus. When left to itself the complete relief from pain which follows spontaneous discharge leads the patient to dismiss the trouble from his mind and consider himself cured. It is only some weeks later that the fact forces itself upon his attention, in consequence of finding his clothing more or less constantly soiled by a watery and perhaps offensive discharge, that a fistula has formed.

It happens, occasionally, that a collection of pus forms outside of the rectum, in most cases just on a level with the upper limit of the sphincter, and, failing to reach the surface externally, and in most cases causing no very urgent pain, finally discharges itself into the bowel, so that the patient after voiding some matter at stool, finds himself relieved. It is in this matter that which is called the "blind internal fistula" forms—a variety of fistula which is not very common. The relief, however, in a case like this, is not usually permanent; a hard lump remains somewhere on the buttock, near the anus, and continues somewhat tender on external pressure; sooner or later it becomes the seat of another abscess, which may break externally, and thus the complete process of repair failing, the "blind internal fistula" is converted into a "complete fistula."

In both this and the last variety of abscess the exciting cause is undoubtedly, in most instances, a perforating ulcer at the bottom of one of the lacunæ of the rectum, which are situated just above the external sphincter, the ulceration having been provoked by the lodgment in the little pocket of some source of irritation derived from the passing faeces. Hence an explanation of the fact that when a complete fistula follows one of these abscesses its communication with the bowel is found most frequently just above the upper limit of the external sphincter. Not rarely the starting-point of the abscess is in the substance of this muscle, so that the resulting fistula actually traverses the muscular mass. When the abscess extends entirely outside of the sphincter muscle, it then occupies the ischio-rectal fossa, and, in the loose connective tissue and fat of this region provided to accommodate the varying bulk of the rectal pouch, finds room for rapid development.

It is a much more grave form of rectal abscess, that which takes its origin, at first, deep in the ischio-rectal fossa. It is caused in some cases, doubtless, by ulcerative perforation of the rectal pouch; in others as a direct result of constitutional dyscrasia. The progress of these cases is often slow, insidious, and depressing, because the pus tends to travel inwards—in the direction of least resistance rather than towards the surface. The dense integument and subcutaneous cushion of the buttock become thickened and brawny, often over a considerable extent of surface. There is not, necessarily, any very urgent pain or throbbing; but fever is present, and frequently there are evidences of septicæmic depression. When the surgeon is not familiar with these cases, and waits for evidences of fluctuation before interfering, extensive destruction of pelvic connective tissue may occur, involving danger to life. A finger in the rectum will recognize increased heat and an œdematous, doughy feel. The indications are those of phlegmonous erysipelas; the surgeon should make an early and free opening with the knife through the integument, and follow it with his finger, so as to secure a direct and sufficient outlet—not only for pus, but for sloughy débris. This affords the only assurance of safety. When it is neglected there is liable to be extensive surface ulceration.

tion and sloughing, with an amount of destruction of pelvic connective tissue around the lower end of the gut, which is often irreparable; and when the patient does recover he is liable to permanent disability.

I was consulted recently by a healthy-looking Western gentleman, in middle life, who was about to marry a second time, for occasional inability to prevent escape of flatus from the anus, and when his bowels were loose he was also liable to incontinence of fæces. He had been operated upon twenty years before for fistula, but, through his own neglect, the disease was not cured. Other abscesses followed, one of which was very severe and extensive, and it left, after long convalescence, several new fistulous tracts. These were subsequently laid open at different operations, and all healed soundly. On examination I found the anal orifice retracted much more deeply between the nates than usual; indeed, vigorous pulling asunder of the buttocks was required to bring it into view. It was formed posteriorly by a dense cicatrix, and a slight protrusion of mucous membrane presented. There was no grip to the sphincter, which had evidently been seriously damaged. There had been also, pretty certainly, extensive loss of substance of the pelvic connective tissue around the lower end of the rectum, and powerful contraction of the granulation tissue during repair. The excessive retraction of the anus was also in part due to the constant use of the *levatores* in efforts to aid the weakened sphincter in retaining the contents of the bowel. The parts presented the appearance which might have followed entire removal of two inches of the lower end of the rectum, including the anus. Recognizing no prospect of benefit from operative interference, I advised palliative measures, amongst others the wearing of a small plug of prepared oakum moulded to the part.

The result of another case which I saw some years ago was even less favorable.

A gentleman of 47, of good constitution, but sedentary, luxurious, and self-indulgent in his habits, developed a deep ischio-rectal abscess without any obvious cause. The symptoms were serious, and the surface induration excessive. His usual attendant, who watched the patient assiduously, discovered some soft, imperfectly fluctuating points towards the end of the third week, and made small punctures. Ulceration and sloughing followed, and when I saw the case later there was a gap several inches deep extending pretty much from the coccyx to the base of the scrotum, and this was being dressed in daily with lint. The granulations were feeble, and the patient's vitality very much depressed. Syringing with aromatic wine and painting with balsam Peru and compound tinct. of benzoin were substituted for the lint dressing, and a general supporting treatment adopted. Under this course the patient gained, but very slowly, and declining the advice to take a sea voyage as offering the best chance to stimulate his flagging powers of repair, went to the country at the end of six weeks to avoid the summer heats, where some months later I saw a notice of his death—from exhaustion. In

this case I formed the opinion, in consequence of the utter lack of vital force of the patient, that a depraved condition of the blood, and, in fact, of the whole organism, from a long-continued, faulty mode of living, was the cause of his attack, and I feel confident that this form of abscess comes often in a similar way.

There is, plainly, a wide interval between the little, round, painful abscess of the margin of the anus and the grave forms of disease just described, and in practice we encounter many varieties of abscess intermediate with these which I have brought forward as typical examples; but it is worthy of being always borne in mind that the same rule of treatment is imperative in all abscesses near the anus or rectum, viz., to open early and freely, with the double object of shortening the period of pain and tissue destruction, and of securing a cure, if possible, without fistula.

Troublesome bleeding from opening these abscesses rarely occurs. Pressure applied in the usual method, by compresses and a T bandage, or strips of adhesive plaster, is always available, but I prefer the sub-sulphate of iron—used either in solution, or as a dry powder. I have found this substance entirely efficient as a hæmostatic, and it makes a good dressing—possessing no irritating or escharotic properties, but, on the contrary, being an excellent disinfectant, and a salutary local stimulant. It forms a scab under which healing goes on without pus formation. I have filled the cavity of an abscess with the dry powder, blowing it in through a tube, after the manner recommended by Marcus Aurelius Severinus for his famous “catagmatic powder,” with excellent effect. There is no reason, therefore, why the abscess should not be opened so freely as to render any subsequent retention of pus impossible, and this is the condition on which prompt healing and escape from the formation of a fistula depend. I have little doubt, after the results I have seen from the antiseptic method, that if it were faithfully used in opening and dressing these abscesses, and accurate drainage secured by means of caoutchouc tubes or horse-hair, healing without fistula would be the rule, instead of the rare exception, as at present. The striking success of Volkmann, as set forth in his recently published operations upon the rectum, certainly justifies this hope. But even with the aid of antiseptics in insuring prompt repair, early and free opening cannot be dispensed with.

There is a variety of abscess properly mentioned here which constitutes an exception to the rule I have just laid down, and our knowledge of it is both recent and valuable. The cavity beside the rectum, familiarly known as the *ischio-rectal fossa*, was first accurately described, and this name given to it, by Velpeau, in 1829. In 1856 Richet first pointed out and described formally a region lying beside the rectum, but *above* the ischio-rectal fossa, and separated from it by the levator ani muscle and the *faciæ* which line its surfaces. This musculo-membranous diaphragm forms at the same time the roof of the old fossa and the floor of the newly-described

space which, in fact, lies between it and the parietal aspect of the peritoneum as the latter is reflected from the walls of the pelvis over the rectum and bladder. In the loose connective tissue which occupies this "superior *pelvi-rectal space*," as Richet has named it, abscess occasionally forms.\*

The symptoms which accompany the formation of an abscess in this region are obscure, and its progress slow, in consequence of the difficulty with which the pus finds an outlet. The musculo-membranous layer of the levator is not easy to penetrate. Ultimately the pus discharges, either by ulcerating into the rectum—high up, of course—or by working backwards through a partial opening which exists normally in the median line near the sacrum. It now escapes from the pelvis through the upper sacro-sciatic opening, or gravitates downwards beside the rectum, and points externally near the anus, constituting a variety of fistula which requires a special treatment for its cure, and this we shall consider hereafter. The route by which the pus of an abscess of the upper pelvi-rectal space escapes is the same which is followed by an abscess taking its origin near the vertebral bodies, when it makes an opening near the anus, simulating fistula in ano.

These, then, are examples of varieties belonging to our category of abscesses near the anus and rectum, which we cannot open early, simply because they cannot be reached, even if accurately diagnosed. I could not have covered the subject of the present lecture without mentioning them, nor could I have completed the etiology of fistula—as far as fistula takes its origin in abscess—which I also had in view.

Some years ago I watched with much interest the case of an eminent lawyer, who ultimately died exhausted from the effects of what I afterwards recognized as an abscess of the upper pelvi-rectal space. He was of delicate constitution, but not manifestly tubercular. The disease appeared at 55, after failure of the general health. Pus presented at the sacro-sciatic foramen, where I gave it vent, and the sinus, which communicated with the interior of the pelvis, never healed. Another abscess formed later on the buttock. The functions of the pelvic viscera were not seriously deranged. There was no evidence of diseased bone.

What are the chances of cure, without fistula, of abscesses near the rectum or anus? Allingham's table (*Disease of Rectum*, London, 1873, p. 19) of 4,000 consecutive cases of rectal disease observed at St. Mark's Hospital (out-patients) includes 196 abscesses, with the remark added that "of these 151 became fistula, and the rest were probably cured." This would give nearly twenty-three per cent., or about one in four, which I should consider somewhat too favorable a prognosis. It remains for us to improve the chances of cure by our methods of treatment, and the points I have sought to make look to this end. The following case, which illus-

trates still another variety of abscess, is of interest in this connection:

A lady of 28, of good constitution and well nourished, under treatment for a syphilitic taint communicated by her husband, rather suddenly failed in health, and soon after became conscious of pain and swelling near the anus. When I saw her there was a dat, fluctuating tumor, as large as a pullet's egg, extending from the left buttock to the anus. The pus was evidently just beneath the skin, but there was no redness at any point. It was opened freely, giving vent to a quantity of dark-colored and very fetid matter. Under quinine and wine this abscess healed entirely within six weeks, without any local treatment beyond a poultice leaving no fistula. I verified the cure by subsequent examination, for I had told her, before opening the abscess, as I always do, that it would not probably heal without another operation, and she was, therefore, suspicious. Three years afterwards this patient had another abscess of the same character, but on the opposite side of the anus, which was treated in the same way, and it also got well within the month. I have examined this lady since, and found the cure perfect.—*N. Y. Medical Record*.

#### COD-LIVER OIL.

Mr. L. Monrad Krohn, apothecary in Bergen (Norway), who has been for many years a dealer in cod-liver oil at the most important market in Northern Europe, furnishes the following interesting information to the *Pharmaceutische Handelsblatt* (No. 105):

Properly speaking the shore of Norway is not rich in fish. The immense extent of coast, however, and the extent of the surrounding ocean, bring it about that the thinly-scattered population obtains a larger harvest of fish than might be expected, especially at particular seasons of the year.

During spring, summer and autumn the catch of herrings of different kinds and sizes, and during winter the haul of dorsch is exceedingly large. The latter (also known as skrei, cabillau, *Gadus morrhuus*, Linn.) occurs during January and February along the coast near Bergen and northwards, particularly about Sindmer and Romsdalen, where in one season between six and eight millions of fish are usually taken. Sometimes during the same months, but generally later, the catch begins at the Lofoden islands (67–69° N. lat.) with a very high average yield. For instance, during last winter no less than 24 millions of fish were taken. Later still begins the catch in Finmarken, where it is often as abundant as at the Lofoden islands. The yield during last winter, however, amounted to only 10 millions.

In order to properly understand the manufacture of the various products obtained from these fish, it is important to remember that the fisheries extend for a distance of nearly 200 geographical miles, in the midst of winter, the days

\*Anatomie Méd. Chirurg., Paris, 1873, 4th ed., p. 93.

being very short and the weather rainy or stormy, and often snowy and cold. The fishermen do not reside near their fishing grounds, but assemble in large numbers at the latter (as many as 16,000 sometimes at the Lofoden islands); nor are there any accommodations to be had for housing the men on shore any more than for storing or properly manipulating the captured fish.

As soon as caught, the dorsch are brought on shore, cleaned, their livers, roes, and intestines removed, and either sold to dealers or manufacturers, or utilized by the fishermen themselves for the preparation of the oil. There are five grades of the latter:

1. Steam-ried cod-liver oil,  
Oleum jecoris album vapore paratum.
2. Ordinary medicinal cod-liver oil,  
Oleum jecoris flavum.
3. Light-yellow cod-liver oil.
4. Light-brown cod-liver oil,  
Oleum jecoris flavum fuscum, for medicinal and industrial purposes.
5. Brown tanner's oil.

The method of manufacturing the first of the above grades is in principle the same everywhere. The livers are delivered at the factory as fresh as possible, as they are liable, in common with all oily bodies, to become rancid on exposure to air. They are placed into large tinned-iron kettles, exposed to direct or indirect steam-heat, and the exuding oil is removed into closed receptacles as speedily as possible. It was customary, formerly, to pass the oil through linen, woollen, or other filters (a custom which still prevails in Scotland and some parts of North America), but this practice has been abandoned, the oil being transferred, while still warm, into *leaden* tanks, where the stearin and accidental impurities (shreads of liver, etc.,) are gradually deposited. Treated in this manner the oil is much less prone to become rancid than when passed through filters. According as the livers have been exposed to more or less heat and pressure, the quantity of stearin contained in it varies in proportion. After having stood at rest one or two months, the oil is drawn off clear. At this time, however, the temperature is of great importance. If it be drawn off at 4° C. (39.2° F.) it will not deposit any stearin when cooling down to this point; while if it be drawn at 12° C. (53.6° F.) it will certainly do so if exposed afterwards to a colder temperature. Whether an excess of stearin in cod-liver oil diminishes its medicinal value, is a question which need not be discussed here, but it certainly makes a considerable difference to the manufacturer as well as to the dealer, whether he sells oil nearly deprived of stearin, or such as contains notable quantities of it. A good deal of the variation in price of otherwise fine cod-

liver oil depends upon this difference. The above method was introduced by P. Möller; but as it is so simple and used by all manufacturers, it makes no difference whether the oil be obtained from Möller himself or from other large firms, as H. Meyer, Ibenfeldt, F. Hausen, or others.

Accidental circumstances will sometimes furnish to one or the other manufacturer the freshest livers, and therefore yield the freshest oil. Generally the factories are situated near the established fishing grounds. The proprietors make contracts with the fishermen for a supply of fish, and it may sometimes happen that the yield of a haul is too small, and has to be kept until supplemented by a second supply before it is worth while to begin operations, thereby endangering the quality of the product.

The name of the manufacturer is no criterion whatever as to the quality of the oil; it is necessary to judge from the oil itself. The best is made upon Sindmer, in the Lofoden islands, and in Finnmarken; the latter, however, generally requires a second clarifying process before being as handsome as the other.

The price of the oil depends in the first place upon the proportion of the stearin it contains, and in the second place upon the yield of the season. In some years the harvest is everywhere abundant, in other years stormy weather may interfere with fishing operations, and besides the Newfoundland fisheries exercise a considerable influence upon the price. In seasons where the yield of the latter fishing grounds is below the average, England, France, and America draw large supplies of cod-liver oil from Norway, and often cause a rise of the price by 50 per cent.

The second grade of cod-liver oil is that prepared by the old method: namely, by allowing the livers to stand in the cold, whereby the oil exudes spontaneously. Owing, however, to the long exposure to air, this oil has a more fishy odor, and a coarser taste than the first quality. Still it may be obtained of good color and agreeable taste by keeping the livers in new oaken tubs, and removing the oil as soon as separated. Unfortunately, the methods of manufacture and the appliances vary greatly; sometimes the livers are placed into wooden tubs, which have been used for years for the same purpose, and is moreover often drawn off into casks lined with paraffin or tar, whereby it acquires a most disgusting odor or taste. There is no remedy for this drawback as long as this quality of oil is inquired for upon the drug market at an advance, over the most ordinary oil, of only one or two thalers per ton of about 1,000 kilos.

Producers receive the same price at the spot for the first grade of oil as for the second; foreign purchasers, however, are compelled to buy the finer oil from the commission dealers at a slightly advanced price. In general, the price of good cod-liver oil depends upon the general



oil market. Whenever there is a scarcity of rasp, or olive oil or of seal-blubber, cod-liver oil takes their place. With an abundance of other oils, the price of cod-liver oil falls. It is said that as much as 1,500,000 kilos (about 3,275,000 lbs.) of this grade of oil are used annually for medicinal purposes.

The next grade of oil, which exudes from the livers by long standing or by fermentation, is mostly used for technical purposes, as in soap, candle, and chamois-leather factories.

Sometimes the purchasers of the livers do not have time to try out the oil, from one cause or another; and in this case the livers are left in the vats where they have been first thrown. Fermentation then sets in, and the oil, when afterwards removed, has a browner color, but a still palatable taste. This is the so-called *Oleum jecoris flavum fuscum* (light-brown cod-liver oil), the fourth grade, of which a good deal is exported to France, and which is the kind introduced by Dr. de Jongh, who was the first to make the traffic in cod-liver oil a personal lucrative undertaking. He purchases his oil, like other houses, allows it to clarify thoroughly, fills it into bottles, and charges a very handsome price. Of this quality 11,000,000 kilos were exported from Bergen in 1877; how much of it was used for medicinal purposes exclusively, it is impossible to say.

After the livers have been treated by one or the other methods, as detailed above, the residues are more or less roasted in large iron kettles and then expressed. A thick pyroligneous, greenish-brown to black oil is thereby obtained, being the fifth and last grade, which is used for tanning purposes.

The exports from Bergen during 1877 amounted to about 1,700 tons of the first and second grade, 1,400 tons of the third, 1,100 tons of the fourth, and 3,600 tons of the fifth.

Adulterations of cod-liver oil in Norway are unheard of, and besides are entirely uncalled for as the price of fish oils is so much inferior to other animal or to vegetable oils. The only foreign admixtures likely to occur are impurities from careless manufacture, as animal tissues (from the liver, etc.) and water. The oils obtained from other fish, although occurring in the market, are obtainable only in limited quantities, and at prices equal to that of cod-liver oil, so as to make the substitution for cod-liver oil unprofitable.

Only in the case of the first grade of cod-liver oil, *Oleum jecoris album*, is it necessary to be cautious, not on account of adulteration, but of accidental substitution. During the dorsch season, but more particularly after its conclusion, at the coast of Finnmarken, large quantities of the so-called *hoalkjarring* (*Seymnus borealis*) a large fish, 12 to 15 feet long, are caught. The liver of a single fish yields from 230 to 350 lbs. of oil, and since a fishing-boat may return, after

an absence of two or three days, with about two tons of liver, it is evident that a profuse supply of this oil may be placed upon the market. A good deal of this is now offered for sale, and being bright and clear, nearly free from stearin, and cheaper than genuine cod-liver oil, it is often palmed off on ignorant purchasers. This oil has mostly an acid reaction, a peculiarly disagreeable odor, and is very difficult to digest. Purchasers who are unacquainted with this oil, and who only look to external appearance and low price, may easily be imposed upon.

#### TREATMENT OF DISEASES OF CHILDREN.

Dr. P. Brynberg Porter, in the April number of *American Journal of Obstetrics*, makes a report of two thousand cases of disease in children treated at Demilt Dispensary, from which we make the following extracts:

**CERVICAL ADENITIS.**—"In certain instances the glandular trouble seemed plainly due to some local source of irritation, but for the most part it was associated with a scrofulous or otherwise cachectic condition. In some instances the careful use of mercurial ointment, almost always accompanied with the internal administration of tonic and alterant remedies seemed to act quite happily. No attempt was made to reduce the size of chronically enlarged glands by the injection into their structure of acetic acid or tincture of iodine.

**ANÆMIA.**—"Of course there were a vastly larger number of patients than twenty-nine who were anæmic; but in these the anæmia seemed to be the principle or only trouble, while in the others it was merely one of the manifestations of some general constitutional condition, like rachitis or malaria. In two cases the anæmia appeared to be the result of repeated epistaxis, from which the children had been suffering for some time, and in another the debilitated state of the system (without appreciable disease of the lungs or other organs) gave rise to cold night-sweats of considerable severity. In the latter case the patient, a girl of six years, soon recovered her health and strength under a better hygienic regimen and the use of cod-liver oil and iron, with fifteen minims of tincture of belladonna at bed-time, in accordance with the teachings of Ringer and Fothergill. In an article on Anhydrotics, published in the *Practitioner* a little more than a year ago, Dr. Fothergill says: 'The most potent of all anhydrotics, in my experience, is unquestionably belladonna. We are indebted to Dr. Sidney Ringer for our knowledge of this property of belladonna; and I have no hesitation in saying that the use of this agent completely changes the aspect of many cases of pulmonary phthisis. For the arrest of the exhausting night perspirations of phthisis belladonna is as potent as digitalis is in giving tone to a feeble heart. . . . My

experience of the use of belladonna in the treatment of hydrosis is not a very limited one, and it enables me to say that belladonna or atropine may be freely used without apprehensions as to any serious toxic effects appearing. It is not a treacherous drug by any means, and may be used with confidence.

**ASCARIDES.**—"The symptoms of ascarides are succinctly given in the following manner by Heller, in Zeimssen's *Cyclopaedia*. (The description refers particularly to *lumbrici*, but is equally applicable to *oxyurides*, except that, when the latter are present, we have in addition the intolerable irritation about the anus, which renders them, 'in spite of their small size, the very worst tormentors of man.')

'Foremost among these phenomena we have itching of the nose, colic-like pains around the navel, boring and tearing pains in the abdomen, inflation of the region of the stomach, changeable appetite, and diarrhoea, with the expulsion of masses of mucous, which are occasionally tinged with blood. As external symptoms, we not infrequently see swelling of the face, darkening of the eyelids, unequal dilatation of the pupil, foul breath, and general wasting. Nervous symptoms, such as irregular pulse, unpleasant dreams, grinding the teeth during sleep, and starting out of it in a fright, with pains in the limbs, are all said to be caused by the presence of the worm. These symptoms are all very indefinite, and but little characteristic; still, when taken together, they are especially valuable as not belonging to any other disease.' To these signs I may add a marked craving for bread in a certain proportion of cases, and nausea in a few instances. In one or two of my cases there was epistaxis, which was no doubt induced by the constant picking at the nose, and in two or three convulsions, for which there seemed to be no other assignable cause than the nervous disturbances produced by the presence of the worms. The statement of Heller, that round and thread worms are even more frequent in adults than in children, seems almost incredible, though apparently supported by the statistics which he gives. Certainly, if this is the case, they very rarely produce any symptoms at all in the adult. No attempt was made in my observation to show the relative frequency of the *lumbricoïdes* and the *vermicularis*; but, in a number of instances, it was found that both varieties of ascarides were present in the same child.

**TREATMENT OF ASCARIDES.**—"As regards treatment, santonin has been my unfailing resource in both forms of worms, and the longer I employ it the more implicit confidence do I place in it. My method is that adopted by the late Dr. John S. Parry (in whose service in the children's wards of the Philadelphia Hospital, I first saw santonin administered), viz., to give one grain for every year of the child's age, though seldom increasing the dose beyond five

grains. I am usually in the habit of ordering five powders made with an equal quantity of pulverized sugar, which may be placed dry upon the tongue, and which children swallow with great avidity. One of these is to be taken every night and morning until all are gone, when a dose of castor-oil or other simple purgative is given. Heller recommends it in doses of from one-third to one and a half grains, the latter dose only to a grown-up person; but these, I think, too small to get the full effect of the drug, and he himself acknowledges that, except in large doses, it is quite innocuous. I remember one case in which he ordered it in four or five grain doses, when the German druggist, to whom the prescription was taken, brought it back to me in great consternation, fearing that I had made some frightful mistake, and that the child would surely be killed if it took the medicine.

**BRONCHITIS.**—"I have nothing new to offer on this subject, but will merely say that in the early stages of acute bronchitis I have found tincture of aconite and muriate of ammonia of very great service; and that the old-fashioned brown mixture, usually combined with one or more appropriate expectorants, has proved of the most universal application of any remedy that I have employed. In chronic bronchitis cod-liver oil, either alone or in combination, has been my great stand-by. Where the cough is very annoying at night, chloral often acts in the happiest manner. There were a few cases of capillary bronchitis, but none accompanied by pulmonary collapse or of very alarming seriousness.

**CHOLERA INFANTUM.**—"In the treatment of this dangerous affection the most rigid attention to diet, at first allowing no food whatever to be given, and the early and free use of stimulus I have found to be the most important points. I have sometimes ordered as much as a teaspoonful of brandy (though not to be given all at once) every hour until the system rallied, if it could be borne by the stomach. To allay vomiting both in cholera infantum and ordinary infantile diarrhoea, I sometimes resort to wine of ipecac. in drop doses repeated every hour, as recommended by my friend Dr. S. Henry Dessau. J. Lewis Smith employs one-tenth to one-sixth of a drop of the tincture, but it seems to me that such doses are too small to have any appreciable effect.

**CONSTIPATION.**—"Of course there was a very much larger number of patients than eight suffering from constipation, but in the eight cases recorded under this head it seemed to be the only difficulty present. In the constipation of young infants I have found the use of oatmeal, suggested to me by my friend Dr. B. F. Dawson, frequently of service; but sometimes it has entirely failed to relieve it. Where I have found it necessary to resort to the use of drugs, pod-

phyllin in small and repeated doses has been quite a favorite one with me."

#### TRACHEOTOMY IN DIPHThERITIC CROUP.

The true value of tracheotomy in diphtheritic croup is a question for the decision of which more accurate and reliable data is required than we as yet possess. As a contribution to this literature, comes a report, by Dr. Bogue, of Chicago, of fifteen cases in which he operated, six of them successfully. This is not a large percentage of recoveries, but attention is called to the fact that, if left alone, these six successful cases would, in all probability, have shared the fate of their companions. After a careful analysis of these cases, Dr. Bogue draws the following conclusions:—

1. The so-called membranous croup and diphtheritic croup are the same disease, differing only in situation, amenable to the same treatment.

2. Tracheotomy should be resorted to in all cases where death is threatened by suffocation from obstruction in the larynx, and as soon as the breathing has become insufficient to sustain the vital powers. It should be performed during the second stage of the disease.

3. It is best to use an anæsthetic; it renders respiration easier by controlling spasm of the larynx.

4. The operation should be done by careful dissection, and, if possible, the trachea should not be opened until all bleeding has ceased.

5. A tube should be used. It causes as little irritation as anything else would, and keeps the wound open better.

6. The room should have a temperature of not less than 75° F., and should be free from currents of air. The atmosphere should be saturated with moisture, by means of boiling water, or the atomizer, and this water may be variously medicated to suit individual fancy. In these cases a solution of glycerine in water (1-6) was used, chlorat of potash or carbolic acid being sometimes added.

7. The patient must be *fed*, artificially if necessary. There may be, during the first night, after the removal of the tube, some difficulty in breathing from spasm of the larynx, which will usually be relieved by an anodyne, such as a full dose of paregoric.

In none of the recovered cases has there been any impairment of the voice.—*Chicago Medical Journal and Examiner*, February, 1878.

#### IODOFORM.

The yellow but strong-smelling crystals of iodoform are soluble in ether, and, as our readers were long ago informed, the solution in that fluid leaves much less odor behind than any other way of employing it. Oils, fixed and

volatile, are not pleasant or useful solvents. Chloroform is suitable for many purposes. Some give a mixture, and use a mucilage to suspend it. Bartholow thinks this will do, but the result is nauseous. Mr. Berkeley Hill and Dr. Prosser James both give pills, the best way of taking it internally. The former gives a grain-and-a-half, the latter one grain, in each pill, which we should think enough in ordinary cases. Externally it may be dusted over sloughing or ill-conditioned wounds, chancreoids, irritable ulcer, rodent ulcer, phagedæna, and syphilitic ulcers. Fissure of the anus, hemorrhoids, and hypertrophy of the prostate, are said to have been relieved by suppositories. It is an anodyne, too, and relieves the pain of cancer, while at the same time it seems to partially disinfect the discharge. It is in syphilis it has been most used. It was discovered about the year 1824 by Serullas, and its properties have long been known to chemists. It is readily obtained by adding an alcoholic solution of potash to tincture of iodine, and crystallizes as a yellow lustrous coarse-grained powder of a peculiar pungent penetrating odor. It stands in the same relation to its analogues, chloroform and bromoform, as hydriodic acid does to hydrochloric and hydrobromic. It may be regarded as chloroform ( $\text{CHCl}_3$ ), in which the three atoms of chlorine are replaced by three of iodine ( $\text{CHI}_3$ ). It also forms substitution compounds with chlorine and bromine. It is sparingly soluble in water and glycerine, less sparingly so in alcohol and warm oil, but readily soluble in ether, and to a still greater degree in chloroform.

Solutions of iodoform in alcohol and ether soon turn of a dark iodine tint; perhaps some substitution product or decomposition takes place. Chloroform seems a better solvent. Iodoform can readily, by trituration, be made into an ointment with either lard or vaseline. Its odor is only partially disguised by the addition of essential oils. As a powder, it can be employed alone or diluted with fuller's earth, magnesia or tannin; the last mentioned body is said to remove, in some measure, its powerful and disagreeable odor.

Mr. Berkeley Hill has used iodoform as a dry powder, brushed lightly over the surface with a moistened camel-hair pencil, for three years. During the last few months he has often substituted for the dry powder an ethereal solution, one part of iodoform in six or eight of ether. The sore is touched or dabbed with a pencil dipped in the ethereal solution, according to its size and depth, lightly or copiously. The ether quickly evaporates, leaving a thin pellicle of iodoform, that as effectually stays the spread, and produces healing of chancres, as does the more copiously applied dry powder. Thus the surface is covered more exactly, and the disagreeable smell of the iodoform is too faint to

attract attention. The sore is well washed with water and dried before the iodoform is applied, and the surface is lastly protected by a bit of dry lint. When the secretion is abundant, the dressing must be renewed twice daily, but in three or four days the amount of discharge becomes so scant that one dressing per diem suffices. In this way Mr. Hill finds venereal sores heal quickly. Pain subsides at once; the sore is well in a week or ten days, and the chances of consecutive inoculation or bubo greatly lessened.—*The Doctor.*

CLINICAL LECTURE ON BRIGHT'S DISEASE CURED  
BY JABORANDI.

Delivered at the Pennsylvania Hospital, by  
J. M. DA COSTA, M.D.,

Professor of Practice of Medicine in Jefferson Medical  
School.

A. W., æt. 55, single. Admitted on March 20th. Has never suffered from rheumatism, and has never had any specific disease. Has always been regular in her courses. The patient states, most positively, that she has been perfectly well all winter, and that her illness only began one week prior to her admission. She then noticed that being exposed to the vicissitudes of the weather, her feet and then her face began to swell. Finally, a general anasarca came on. She had, at the same time, some loss of appetite, with gastric pain and cough. When she was admitted to the hospital, her whole body was greatly swollen, and she was somewhat feverish; the temperature in the mouth being 99°. The heart was beating feebly, or rather the sounds of the heart were feeble. She complained of pain and weight in the pit of her stomach, and of considerable dyspnoea. She passed but little urine. There was no heart murmur to be heard, although we made a very careful examination of that organ. The tongue was clear, and the digestive disturbance not much marked.

What was the cause of the dropsy? A clue was at once afforded us by an examination of the urine, which was found to contain an enormous amount of albumen; the albumen, when precipitated, filling at least one-third of the test-tube. The microscope taught us that the urine also contained blood corpuscles, epithelial and hyaline casts and a few oil drops. Most of the casts were, however, epithelial.

I at once diagnosed the case as one of acute Bright's disease—Bright's disease complicating acute renal dropsy. All this was self-evident. Only one doubtful point remained to be cleared up. Was, or was there not, prior organic disease of the kidneys? This was at first hard to determine off-hand. We had to wait until the acute attack had passed away under the proper treatment. The presence of casts and blood corpuscles in the urine seemed

to answer the question in the affirmative at that time.

To-day we have the best of reasons for concluding that no disease of the kidneys pre-existed. The case has ended in perfect recovery. The abnormal constituents of the urine have almost entirely disappeared. This case has been an extraordinary one, on account of the patient's very rapid recovery.

And now you will, of course, want to know what our treatment has been. How we have brought it about that in the course of two weeks after her admission the patient is entirely recovered. The general dropsy, albumen in her urine, and dyspnoea all gone together. I ascribe all my success in the treatment of this case to the free use of jaborandi. Five days after the jaborandi treatment was begun, the whole face of the case was changed. The dose I ordered was one drachm of the fluid extract of jaborandi thrice daily. This dose produced excessive diuresis and diaphoresis. I am convinced that in jaborandi we possess a most valuable agent for combating the dropsical complications of Bright's disease. It should be given either in the form of the infusion, or the fluid extract. In cases where uræmic poisoning is a factor, and where the drug is consequently not well borne by the stomach, I have administered jaborandi by injecting it into the bowel. Though the effects of the drug when injected were not so striking as in the present case, I yet see no reason why it should not be given by the bowel as well as by the mouth. I have also tried the drug hypodermically, but I prefer not to speak positively at present of its effects when so used. In one instance I will say that it did produce considerable irritation of the skin.

How are we treating this woman, now that the dropsy has all gone? She is taking dialyzed iron internally and hypodermically. This treatment is improving vastly her general health and nutrition.

The origin of the disease in the present case is a very common one. It was brought on by cold and exposure. In children, acute Bright's disease generally follows scarlet fever. In adults it usually comes on immediately after exposure to dampness and vicissitudes of weather.—*New York Hospital Gazette.*

HOW TO GET RID OF A BLACKENED EYE.

If one is so unfortunate as to get hit on a peeper, it is said that the effects can be removed within two or three days in the following manner: If there is much pain, foment the parts continuously with simple hot water until it ceases, and then keep the contusion constantly wet with the following lotion:

R. Muriate of ammonia.....2 drachms.  
Vinegar.....2 ounces.  
Water.....2 ounces. M.

## GUAIAIACUM IN SORE THROAT.

Dr. Frikzinger, in the *Philadelphia Reporter*, commends guaiacum in all forms of sore throat. He says:—

By contact guaiacum has the quality of causing the viscid secretions to become more consistent, and thus facilitate their removal, either by expulsive efforts of the patient or by gargles. Although this primary action locally is most unquestionably highly beneficial, it is owing to its secondary physiological effect upon the engorged capillaries, ramifying in the body of the gland, that the resolution is immediately accomplished. It is unquestionably owing to these peculiar properties of coagulative astringency locally, and the tonic action upon the walls of the over-distended capillaries, giving them force to expel the superabundant blood they contain, that gives guaiacum its specific virtues in curing quinsy.

As there is thirst and fever, and dryness and burning of the throat, the addition of nitre and potas. chlor. will meet the indications, and will modify the formula so as to be more agreeable for the patient. The following is a combination that has been used quite extensively for several years, and will be found as agreeable to take as any:—

R. Potass. chlor., ʒj;  
Spts. æth. nit., ʒiv;  
Tr. guaiac. ʒvj;  
Syr. aurant. cort., ʒvj.

Sig.—A teaspoonful every two hours, in water.

This should be taken in about a teaspoonful of water, or a sufficient quantity to allow the warming and constringent effect of the guaiac to be felt in the act of swallowing, and it is desirable that this should be done slowly. In case the bowels should move too freely the dose should be diminished, and as the disease ameliorates it should be administered at longer intervals.

If there is permanent enlargement, of not too long standing, the application of a solution of tannin in tincture of iodine and glycerine, applied to the gland, with a course of guaiacum internally, will prove of good service.

## HYOSCYAMINE.

Dr. H. Clifford Gill, in the *London Practitioner*, thus sums up his experience with hyoscyamine:—

"1. That a noisy, violent, dangerous, and troublesome lunatic can easily and certainly be rendered calm for some hours, and probably though not certainly, unless the dose be increased, be sent into a profound sleep lasting many hours. 2. That I have never seen any ill consequences follow the administration of hyoscyamine. 3. That the drug is most useful in acute delirious mania, in the various forms of remittent mania, and it is said also in the congestive (?) stage of G. P. 5. That in melancholia, and where there is much depression with brain irritation, little or no good is gained, and it is in

these cases, I am inclined to believe, that great dilatation of pupil is met with.

"Many doctors in general practice must frequently be called to cases of acute mania in their early stages, when it is that extreme violence in a private house is so fraught with danger both to the friends as well as to the patient. In such cases I think great benefit would be derived by the administration of a full dose of hyoscyamine; and even if, as is most likely the case, the attack is not cut short, yet the patient is calmed and sleeps quietly until other steps are taken for his after treatment. So, again, many patients suffering from dementia, who are for the most part harmless, and who live with their friends, are now and then liable to attacks of acute brain irritation and become very troublesome, noisy, violent, and dirty. In such as these I think much benefit will be found from this drug given at first in a full dose, three-eighths or three-quarters of a grain, and continued afterward in one-sixteenth to one-eighth of a grain dose. As a suggestion it might be quite worth trying in delirium tremens."

## CARBOLATE OF SODA IN WHOOPING-COUGH.

M. Pernot (*Lyon Medicale*, Sept. 23, 1877,) considers that he has discovered a specific for this troublesome affection in "phénate de soude," and gives details of cases in which, after other means had completely failed, he was able, by the use of it, to effect a complete cure in from ten to fourteen days. He places about 40 grammes of the crude salt in a porcelain capsule, and heats it over a spirit lamp so as to disengage carbolic vapours, the child being kept in the vapour a short time at first, and a longer time as he becomes more accustomed to it. In the most rebellious cases he has not required to use the treatment more than three times a day, and in most cases it has only been necessary to use it night and morning. He discusses the mode of preparation of carbolic acid and its salts, and ascribes the curative properties of the phenate of soda to the tarry compounds which it contains. "My observations," he says, "are now numerous; they, for the most part, resemble each other, and, speaking generally, we may sum up the results in the following words: 1st. There is a notable diminution in the number of 'kinks' after two to ten days' treatment. 2nd. The respiration is less painful, less anxious. 3rd. The 'kinks' are of shorter duration. 4th. There is less vomiting, possibly because the 'kinks' are shorter. 5th. Finally, the most stubborn cases, if I may so express myself, cease to advance from the commencement of the treatment, then diminish in intensity, little by little, and afterwards more rapidly."—*Glasgow Med. Journal*, Jan., 1878.

## ON ABSORPTION OF MEDICAL SUBSTANCES BY THE VAGINAL MUCOUS MEMBRANE.

Dr. E. W. Hamburger describes (*Prager Vierteljahreschrift*, Band cxxx.) a series of experiments performed by him to ascertain the absorbent power of the vaginal mucous membrane. He used solutions of the following substances, of the strengths indicated: Iodide of potassium, 15 per cent.; ferrocyanide of potassium, 5 per cent.; ferricyanide of potassium, 9 per cent.; salicylic acid, 2 per cent.; bromide of potassium, 6 per cent.; and lithia, 10 per cent. A plug of purified cotton-wool soaked in the solution was placed in the vagina, and over it two dry tampons. The bladder was first emptied, and afterwards the urine was drawn off by the catheter and examined at intervals of two or three hours. All the above-mentioned substances were found in the urine. Iodide of potassium was found two hours after the introduction of the tampon, and traces of it remained twenty-four hours after removal. Ferrocyanide of potassium, salicylic acid, and bromide of potassium appeared three hours after they were given. Hamburger believes that the administration of drugs by the vagina can be employed in all cases of obstruction of the normal passages, and that it will be specially useful in gynecological practice.—*London Med. Record*, Feb. 15, 1878.

## MEDICAL PROPERTIES OF COLLINSONIA CANADENSIS (STONE ROOT).

An extract from "New Medicines" written by I. J. M. Goss, and published by Chas E. Ware, St. Louis, Mo.

Collinsonia was first used by the natives of America for sprains, bruises, contusions and ulcers; then by some root-doctors in colic, dysentery and diarrhoea; but while it may help such conditions by its direct tonic effects upon the capillary and mucous systems yet that is not its main sphere of action. It is now a settled fact that it acts directly upon the venous circulation, very similarly to that of arsculus, arnica, hamamelis, hydrastis, and also ignatius bean. It exerts a direct influence over the portal circulation, having the power to contract the coats of the veins, thereby lessening their calibre. And it influences the heart itself, consequently, the whole circulatory apparatus. When applied to a contused wound or an inflamed surface the vessels of the part soon contract, and the tumefaction is soon thereby lessened and finally relieved. This fact is conclusive evidence that this remedy has specific power over the capillary vessels. It has a favorable influence over mucous tissues, consequently it often cures leucorrhoea and catarrh of the bladder. I have used it internally, in connection with hamamelis, in cases of varix with very prompt success. This shows that collinsonia has a specific action upon the coats of the veins. But its most valuable properties are its direct action upon the vessels of

the rectum. I have often derived prompt results from it in cases of hemorrhoids. Where the tumors are small it often removes them. The dose is 5 to 15 drops three or four times a day. It possesses remarkable tonic powers also.

## A SOVEREIGN REMEDY IN SUMMER COMPLAINT.

By WM. M. GROSS, CLYDE, ILL.

The very best remedy in my judgment, for Cholera Infantum or Summer Complaint in children is Calcined Radix Rhei.

My attention was called to it incidentally, during last August. I was treating a little patient, aged six months, affected with this dreaded trouble—had used all the reputed remedies for this disease, but with little or no effect. When my attention was called to it, I prepared some by putting a portion of the root in an iron vessel and burning it until it was easily pulverized. Of this I gave about five grains; the child became quiet and seemed free from pain, and in about three hours the bowels moved again, passing a changed and even larger evacuation than at any previous time; and from that moment it began to get better and in a few days was entirely free from the disease. The success attained in this case led to the use of the same drug in a number of similar cases and with the same results.

In the forms of summer complaint incident to debility of the bowels, either when this condition depends upon general causes alone, or is the immediate effect of irritating ingesta or biliary derangement, Rhubarb, in this form, is superior to almost every other medicine.—*Medical Brief*, St. Louis.

## CONTRA-INDICATION OF IRON.

There are two different states found in women where iron is either totally contra-indicated or to be given with great caution. The first is a condition of amenorrhoea in florid, plethoric persons. The other is the opposite condition of menorrhagia in certain females. There are cases of menorrhagia associated with pallor and debility, where the usual compound of iron and extract of ergot is not so useful as a non-chalybeate treatment. In these cases it is not any imperfection in the process of blood manufacture which is to be remedied, for the blood is made rapidly and quickly, only to be lost at each menstrual period. It is here desirable rather to limit the rapidity of the blood formation, so that when the several vascular turgescence of the menstrual period comes, it will not find the blood vessels too distended with blood. This will lead to diminished catamenial loss, and so the blood waste will be economised. According to the experience of Dr. Brown Séquard and Dr. Hughlings Jackson, iron does not suit epileptics. It increases the tendency to fits. It may improve the general condition, but it aggravates the epilepsy.—(*Dublin Medical Press*, Oct. 3.)—*Chicago Med. Jour. & Ex.*

THE LOCAL USE OF SOLUTION OF QUININE IN  
CHRONIC IRRITATION OF THE BLADDER.

Mr. T. W. Nunn has been using quinia locally for some years as an antiseptic, a bactericide, and in some forms of venereal sores. He says, however, that so far as its local use is concerned, the most striking result is obtained by injecting the solution of quinine into the bladder in those cases where the urine is loaded with pus and is *intensely offensive*, the bladder being irritable, the desire to urinate recurring every hour, or more often, for example, where the bladder only imperfectly empties itself, or when the continual use of the catheter is called for in enlarged prostate, or in atony of the organ. Mr. Nunn has recently been informed by a patient who has habitually had recourse to the catheter,—the urine voided being alkaline and highly offensive,—that the injection of the quinine solution has been followed by such an abatement of the sensitiveness of the neck of the bladder that the desire to micturate comes on now only after the lapse of six or seven hours, in place of after the lapse of every hour or every hour and a half.

The following is the method of using the quinine as a bladder injection: Dissolve twenty grains of disulphate of quinine in twenty-five ounces of water by the aid of a few drops of dilute sulphuric acid or a teaspoonful of *common brown vinegar*. Of this solution inject into the bladder two or three ounces, and let it remain.—*The Lancet*, Feb. 23, 1878.

TREATMENT OF INFANTILE CONVULSIONS BY  
HYPODERMIC INJECTION OF ETHER.

We must not be surprised at anything we hear respecting the use of hypodermic injection, considering the rage there is just now for administering medicine in this fashion. In a recent number of *La Presse Médicale*, Dr. Gellé cites a case in which the above treatment was successful, and in which the method adopted was called for by the urgency of the symptom, and the impossibility of administering any remedies by the natural channel. Besides, the exact quantity of the medicine used could be estimated, which cannot be done when inhalation of chloroform or ether are employed. The infant was only seven months old, and, owing to improper feeding and the irritation of dentition, was suffering from continual vomiting and purging pain in the bowels, fever and fits of general convulsion alternating with a comatose condition. The chief indications were to arrest the vomiting and convulsions, then to bring on a crisis by sweatings, and lastly, to watch for the approach of a threatened attack of pneumonia. Ten drops of sulphuric ether were injected hypodermically into each leg of the child. The insertion of the instrument did not arouse the little patient. The convulsions ceased and did not return after the injection of the ether, the vomiting also ceased, and a period of repose was succeeded by a natural sleep.

The subcutaneous introduction of volatile anaesthetics is now frequently resorted to in France, and the object of Dr. Gellé in publishing the above case is to give his experience of this method of treating some forms of infantile convulsions.—*Medical Press and Circular*.

TREATMENT OF EPILEPSY BY BROMIDE OF ZINC.

Experiments have been going on for some time in M. Charcot's wards at the Salpêtrière Hospital with bromide of zinc as a remedy for epilepsy. It can be administered either in the form of pills or as a syrup. The pills contain each three quarters of a grain of bromide of zinc. Commencing with one pill daily, the dose may be increased to twenty-five grains, increasing the quantity of bromide contained in each pill. The drug can be given in syrup according to the following formula: Bromide of zinc, 15 *grammes*; syrup of bitter orange-peel, 150 *grammes*; four, five, or six teaspoonfuls to be taken in the course of the day. The results obtained from the administration of these pills have been satisfactory.—*British Med. Journal*, Nov. 24, 1877.

EUCALYPTUS GLOBULUS AS A DISINFECTANT.

In the course of some remarks upon the utility of infusions of eucalyptus, Sir John Rose Cormack, in his *Clinical Studies*, proceeds as follows:

I may here add my experience of the remarkable power of eucalyptus of destroying the fetid odor of morbid discharges without the substitution of another unpleasant smell. I have found that in hospital practice and in private sickrooms, patients and attendants often complain of the vapor of creosote and other deodorizing agents. No such complaints are or can be made of the eucalyptus however freely it may be used. I speak from an extensive trial of eucalyptus lotions in cases of ozœna, cancer of the tongue and throat, cancer of the uterus, gangrene and other affection attended by fœtor.

HOW TO INTRODUCE THE HYPODERMIC NEEDLE.

Dr. Allen writes: "Placing the palm of the left hand beneath the patient's arm or leg, with the thumb and fingers draw the skin tight over the upper aspects of the limb, in which state you have an unyielding integument. Then holding the instrument with the thumb and index finger of the right hand, place the beveled side of the point upon the place you have selected, at a proper angle with the surface; and, with a quick forward movement of the thumb and index finger only, keeping the hand immovable, thrust the point through the skin into the subcutaneous tissue.

This manœuvre, if done quickly, will inflict little if any pain, and the patient will thank you, especially if he has previously been subjected to the almost universal method of pinching up a fold of skin for the puncture.—*Med. Record*.

## ACUTE ECZEMA VESICULOSUM OF THE TRUNK AND ARMS.

Patrick C., laborer, forty-five years of age, was admitted to the hospital March 9th. Excepting that he was subject to occasional attacks of dyspepsia, he had always enjoyed good health up to last summer. At that time he suffered from a skin disease apparently similar to that about to be described, but much less extensive. He recovered from this in about a month, and remained well until three weeks previous to his admission. During the winter he had undergone considerable privation, and about the middle of February he was attacked by a skin affection, which spread steadily up to the time he sought relief at the hospital. The disease, which was purely vesicular, and of a very marked type, was chiefly distributed over the flexor surface of both arms and forearms, especially about the elbows, and on the trunk (lower axillary and hypochondriac regions and buttocks). It was peculiarly symmetrical, the buttocks, sides of the thorax and abdomen, and arms showing almost precisely the same appearance on either side. The vesicles, which were rather larger than common, were situated on red and inflamed bases, and were usually quite discrete, though on the buttocks they were aggregated into large patches; in the flexure of the elbows they had coalesced, and had broken down, so as to constitute an eczema rubrum, consisting of a red, raw, weeping and crusted surface. The eruption itched and burned severely, causing the patient great discomfort. He also complained of slight general malaise, with occasional chilliness.

The patient was placed upon the following alkaline saline aperient:—

R. Sodii sulphatis,	ʒj
Potassii sulphatis,	ʒj
Potassii bicarbonat.,	ʒj
Lithii carbonat.,	gr.xv. M.
Ft. pulv.	

Sig.—One teaspoonful in a tumblerful of water, before breakfast.

In addition, he was ordered ten grains of the bicarbonate of potassium with water, thrice daily. As an external application, a powder composed of starch alone was directed to be dusted upon one lateral half of the body over the seat of the eruption, while a similar powder, with the addition of finely powdered camphor in the proportion of one drachm to the ounce of starch, was to be dusted over the other half of the body. The object in adopting this plan of treatment was to ascertain what advantages, if any, were to be gained by the camphor over the starch alone.

The result was striking. Already by the next day a great change for the better had taken place on both sides of the body; but it was found that the side on which the camphor

and starch were applied not only looked, but felt decidedly better than the other side. The moist patch about the flexure of the elbow had ceased oozing and looked less red and angry. The camphorated starch powder was now directed to be used exclusively, and to be spread upon cloths and bound on. No special diet was ordered. At the end of five days the patient had recovered sufficiently to be able to leave the hospital, though he remained under treatment as an out-patient for several days longer. At the time of his discharge from the ward, examination showed the eruption to be rapidly drying up, crusting and disappearing. Itching and burning were still present, but were not of such severity as to cause the patient to scratch. His general health had somewhat improved.—*Philadelphia Medical Reporter.*

## CHRYSOPHANIC ACID OINTMENT IN PSORIASIS.

Professor Neumann, the eminent dermatologist of Vienna (*Weiner Mediz Presse*, No. 14-16, 1878) having made extensive trials with this ointment at the General Hospital, Vienna, in the treatment of psoriasis, as first recommended by Mr. Balmanno Squire in this country at the latter end of 1876, is very favourably impressed with the results.

After giving due credit to Mr. Squire, and to the other English observers who followed him in this research, the Professor winds up an able paper with the following summary:—

1. That chrysophanic acid derived from goa-powder is an excellent remedy for herpes tonsurans, pityriasis versicolor, and psoriasis vulgaris.

2. Psoriasis in its earlier stages begins to disappear after a few applications of the drug, and in a far more unequivocal manner than under any other remedy that has ever yet been used against psoriasis.

3. Even inveterate forms of the disease can be abolished by means of chrysophanic acid, and it is quite the exception to find them oppose any protracted resistance to it.

4. Chrysophanic acid is a perfectly painless application to the diseased skin. The morbid phenomena occasioned by it on the healthy skin result apparently from the admixture of resinous matter with the acid.

5. As a result of this mode of treatment psoriasis belongs no more to those skin diseases which in so high a degree are a source of misery to the patient, and it has now become an easy matter to cure relapses. Every patient with psoriasis that I have as yet treated by this means gives the palm, without hesitation, to this method of treatment in preference to others. In any case, this, at the least, is emphatically true, namely, that the therapeutics of skin diseases have for the last ten years been enriched by but few remedies which have been



crowned by so eminent a success as the one in question.

6. There are other skin diseases also which are curable by chrysophanic acid, but upon these I will not report until I have accumulated more material.

7. Lastly, I desire to express a hope that this method, which I am the first to promulgate in this, my country, may be examined by other observers, and I do not doubt but that it will soon permanently assume its due rank amongst the treasures of therapeutics.—*Dublin Medical Press.*

#### THE TREATMENT OF EARACHE.

Dr. W. Cheatham, of Louisville, says, in a recent paper:—

When a patient complains of earache, and on examination with the speculum the drum is seen to be red, it is good practice to turn into the ear a stream of water as warm as it can be borne. This is best done by the aural douche. Where this is not at hand, a Davidson's syringe may be substituted, first converting it, however, into a siphon. To do this, the vessel containing the water must be raised a short distance above the patient's head; the syringe then filled by compressing the bulb a few times, when, by lowering the tube, the water will continue to flow in a gentle stream, which is to be turned on the inflamed parts. A small rubber tube may be made to answer the same purpose. The douche, by whatever means effected, should be prolonged and often repeated.

Many cases of earache are met with, especially among children, which are relieved by having the patient turn the head well to the sound side, and pouring the ear full of very warm water. This may require to be repeated a number of times before relief is obtained, but in any event is always to be preferred to the various ear-drops, composed of laudanum, onion juice and the like. If this fails to relieve the pain, a leech should be applied a short distance inside the auditory canal, on its anterior wall; and when it falls away, the bleeding is to be encouraged by the hot water douche, or by flannels wrung from boiling water, industriously used for half an hour after. When the drum is found to be red and bulging, denoting fluid in the tympanic cavity, paracentesis should be immediately performed. The operation is exceedingly simple, and gives almost instantaneous relief. Should the fluid not flow as freely as may be desired, the patient is directed to practice Valsalva; or inflation should be made by Politzer's bag. In cases where the Eustachian tube is so entirely closed that air cannot be made to enter the middle ear, Seigel's otoscope, with very gentle suction, should be applied.

#### CHLORATE OF POTASH IN CATARRH OF THE BLADDER.

Prof. G. Edlefsen, of Kiel, publishes in the *Deutsch. Archiv. Klin. Med.*, xix., 1, 1877, an essay on the treatment of catarrh of the bladder by chlorate of potash. The view lately advanced that the best method of treating cystitis, even acute cases of it, consists in the introduction into the bladder, through the urethra, of water or medicated fluids, is not in accordance with his observation. The remedy he recommends is chlorate of potash, which never damages the stomach or any other organ, and substitutes turpentine perfectly in cases where turpentine cannot be given.

That the chloric acid salts, when administered internally, pass into the urine, was demonstrated in 1856 by Lambert. The value of the chlorate of potash in affections of the mouth and pharynx leads the author to their administration in affections of the bladder, the epithelium being in both cases alike of the pavement variety. The action of this remedy seems confined to this variety, as it has no effect upon the trachea or bronchial tubes. Its action is not to be explained by simple contraction of the muscular coat of the vessels, as it not only reduces the hyperæmia and catarrh, but also closes ulcers over quickly as if it exercised a specific action in the reproduction of epithelium. The author's results were extraordinary; still there are cases in which he failed with it, and was compelled to resort to turpentine and copaiba. He orders for adults usually: Potass., chlorat. 15.0, aqua dist., 300.0, of which a tablespoonful every two or three hours. He lays stress upon the prescription because it is necessary to bring the patient under the influence of the remedy quickly. Should the taste of the drug after long administration become insipid or sickening, it may be corrected by using cherry laurel as a vehicle (10.0—300.0); any syrup should be avoided. The puss begins to disappear from the urine after its use very quickly—an important difference from the action of salicylic acid—and the subjective distress is lessened or disappears even before the pus has entirely vanished.

#### TREATMENT OF GANGLION.

Dr. Bidder (*Abh. f. Chir.*) recommends the injection of carbolic acid. An ordinary hypodermic syringe, having a sharp needle with a cutting edge near the point, is filled with a two or three-per-cent. solution of carbolic acid. A fold of the skin being pinched up, the needle of the syringe is thrust under it until the point reaches the capsule of the ganglion. A little slit is made through this with the sharp-edged point of the needle, and then, the latter being slightly withdrawn, the contents of the ganglion are expressed into the surrounding tissues. The point of the needle is then once more inserted into the now emptied ganglion, and a few drops of the carbolic acid solution are injected, and a simple water dressing is afterwards applied.

## BLOOD-LETTING IN PUERPERAL CONVULSIONS.

About twelve months ago we draw attention to the fact of there being some signs that this old-fashioned and almost obsolete remedy would again come into use, although of course not to the extent to which it was formerly employed, for it is only under special circumstances or in certain exceptional cases that we should venture to recommend the practice of general blood-letting. Among those practitioners who still think that with regard to this practice we have gone from one extreme to the other may be mentioned Dr. J. G. Swayne, Consulting Physician-Accoucher to the Bristol General Hospital, whose experience of blood-letting in the treatment of puerperal convulsions certainly justifies the confidence which, in certain cases, he places in this remedy. He has from time to time brought forward his cases at the meetings of the Bath and Bristol Branch of the British Medical Association, and in the current number of the *Obstetrical Journal* is recorded one case in which the withdrawal of  $\frac{3}{4}$ xxx. of blood in a full stream from a large orifice was followed by immediate and permanent relief of all the symptoms. The convulsions had gone on for twelve hours before bleeding was resorted to. They had increased in frequency, until at last as many as three took place in an hour, notwithstanding that a full trial had been given to anæsthetics, in the form of hydrate of chloral and bromide of potassium, three-half drachms of the former and three drachms of the latter having been given. The bleeding appeared at once to produce a decided constitutional effect. The swollen livid face became pale, the breathing less stertorous, and the pulse soft and feeble, instead of full and throbbing. From that time the fits, which were recurring three times in an hour previously, only returned four times during the next ten hours, and were much mitigated in severity. Signs of labor also came on, and delivery was soon completed with the forceps. Dr. Swayne's experience of puerperal convulsions comprises thirty cases. In twenty-two of these bleeding was resorted to, the quantity of blood varying from ten to thirty ounces. In sixteen it was decidedly beneficial, and appeared to be the most efficacious remedy employed. In nearly every case it was speedily followed by a great diminution in the amount of albumen contained in the urine; and to this cause Dr. Swayne believes that blood-letting owes its great power as a remedy.

If the experience of Dr. Swayne were the only evidence in favour of our occasionally resorting to the lancet in the treatment of this terrible complaint, we should not perhaps have drawn particular attention to it. But it should be borne in mind that this was long the orthodox plan of treatment, and that even at the present day the occasional use of the lancet is recom-

mended by high authorities both in this and other diseases. All the great accoucheurs who practiced in the beginning of this century were unanimous as to the utility of bleeding in puerperal convulsions. As late as 1855, we are told in one of the most popular text books of obstetric medicine, to take away blood from the arm or temporal artery, largely, and in a full stream, provided the convulsions are of a sthenic form, with the head hot, face flushed, and the pulse full, firm, and frequent. We are even told to repeat the blood-letting if the paroxysms continue. Prof. Depaul even ventures in 1877 to say that copious bleeding from the arm is the only method of treating the disease which meets with success, and refers to an experience of two hundred and fifty cases in support of his opinion. Moreover, in respect of other diseases not more likely to be benefited by venesection than puerperal convulsions, there are some eminent authorities who are by no means so ready to wholly discard the use of the lancet as is now the case with the profession in general. In the volume of Ziemssen's "Cyclopædia of the Practice of Medicine" devoted to the consideration of Diseases of the Brain and its Membranes, we find that Nothnagel is by no means averse to the employment of blood-letting in certain forms of cerebral hyperæmia, or even apoplexy. Speaking of hyperæmia, he says that "the evidence afforded by the diminution in the severity of the symptoms, which follows, for example, an accidental nose-bleeding, seems to point too clearly to the propriety of this treatment; under certain conditions we could not get on without it." General indications, he remarks, for the use of the lancet are furnished by the presence of marked *turgor faciei*, strong cardiac impulse, and abnormal fulness and tension of the arteries. The same writer in speaking of the practice of blood-letting formerly universally adopted, and now almost as universally abandoned, in the treatment of hæmorrhagic apoplexy, very judiciously observes "that the true path which is followed by the majority of good practitioners lies evidently between the two extremes." The value of venesection in cases of cerebral hæmorrhage lies, in the opinion of Nothnagel, "in the fact that it brings about a diminution of the intracranial pressure (i.e., indirectly, of course, by diminishing the arterial tension), and in this way its influence may be at times of capital importance. Where, in consequence of the intracranial pressure, and of the cerebral hyperæmia that accompanies the attack, paralysis of the respiratory or of the vagus centre is threatened, the rapid reduction of the quantity of the circulating blood may, by diminishing this pressure, have the effect of actually prolonging life, and this indication can only be fulfilled by venesection." We have made the above quotations not only because Ziemssen's "Cyclopædia" is

justly considered to be the most recent and most authoritative exposition of modern medicine, but because the above observations are far from being inapplicable to some forms of puerperal convulsions. It will be generally admitted that in many cases of this affection we have present those conditions which, in the opinion of Nothnagel, justify the use of the lancet— intra-cranial pressure, great arterial tension, congestion of the cerebral vessels, impeded return of the blood through the cerebral sinuses, overloading of the blood with carbonic acid gas, &c. These conditions are particularly prominent in the worst cases of the epileptic form of puerperal convulsions, as well as in those cases which are more of an apopleptic than of an epileptic nature; and although it very rarely happens that the disturbance in the cerebral circulation gives rise to actual extravasation of blood, the effect of that disturbance upon the brain and medulla oblongata is such as to predispose the system to a repetition of the convulsive paroxysms, and to the persistence of that comatose condition, the removal of which is one of the chief indications in the treatment. Owing to the age at which these convulsions generally occur, the coats of the cerebral vessels will bear a great deal of tension, and effusion into any part of the brain rarely takes place; yet sometimes this accident does occur, and at the meeting of the Dublin Obstetrical Society, Dr. Denham mentioned a case in which cerebral hæmorrhage was found after death, and in which he thought life might have been saved if the patient had been bled early in the convulsions.

In the foregoing observations we have merely mentioned one way in which bleeding may prove useful in the treatment of puerperal convulsions, but as respects this disease more especially, there is another light in which we may view the *modus operandi* of blood-letting, and which shows that this remedy may be found useful in other convulsions than those which occur in connection with childbirth. As we have just seen, Dr. Swayne attributes the efficacy of bleeding in puerperal convulsions to the effect it had of diminishing the amount of albumen contained in the urine; and the truth of this opinion is strongly corroborated by the result which has followed the treatment of a number of cases of uræmic convulsions and scarlatinal dropsy by copious venesection. Some of these cases will be found detailed by Dr. Robert Kirk, in the May or June number of the *Glasgow Medical Journal*, 1877, and others by Dr. Bramwell, of Perth, in the *Edinburgh Medical Journal* for July, 1875. In Dr. Kirk's cases the convulsions were severe, other means had been tried in vain, the convulsions ceased immediately after the bleeding, and the urinary secretion was restored, with or without the use of diuretics. For example, a girl aged nine,

was comatose after scarlatina, with puffed, pallid face, teeth clenched, a little foaming at the mouth, pulse 140, pupils moderately contracted and insensible, and rapid oscillation of the eyeballs. The case appeared a very unfavourable one, but about twelve ounces of blood were drawn from the arm, and in four or five hours afterwards the pulse had fallen from 160 to 80, she fell into a natural sleep, and ultimately recovered. In every case in which Dr. Kirk tried blood-letting in scarlatinal dropsy, the treatment proved eminently successful; while in thirty-two cases of the same disease in which Dr. Bramwell had recourse to general abstraction of blood, there was only one death, and that a case which was seen too late for treatment to be of any service. Amongst his cases were some of both pulmonary œdema and convulsions, and he also found that free diuresis set in forty-eight hours or less after blood-letting.

These facts, and we might have mentioned others of a still more striking nature, taken in connection with those that have been adduced by Dr. Swayne and other practitioners, must convince the most sceptical mind that, in properly selected cases, blood-letting is far from being such a perilous or useless remedy as many are now-a-days led to suppose, and that puerperal convulsions is not the only affection in which the judicious employment of that remedy may, under certain circumstances, be followed by the most beneficial results. At all events, the experience of those physicians to whose opinions we have just drawn attention, and the well-balanced judgment of so recent and eminent a writer as Nothnagel, are sufficient to inspire the young practitioner with some confidence in this remedy whenever he meets with cases in which a fair trial of it appears to be particularly indicated. — *Dublin Medical Press.*

#### THE VALUE OF SPONGES IN SURGERY.

Mr. Furneaux Jordan writes in the *British Medical Journal*:—

A sponge conveys, renews, or maintains antisepticity with signal convenience and efficiency. A soft, cleansed, moist, antiseptic, and sufficiently large sponge may be put over, or occasionally even within, the parts which have been recently injured or operated upon, with benefits so marked as to deserve pointed commendation. Such a dressing apparently secures all the conditions which favor the healing process; and all that we can do is to control conditions. We have no surgical charms, royal touch, or prayers which are able to heal.

A sponge exerts a soft, uniform, diffused, elastic, and measurable pressure. Slight pressure will keep a wound clean; moderate pressure keeps up efficient drainage of all deep-seated fluids, and renders the ordinary drainage tube, as a rule, unnecessary. The

drainage (and pressure) of a sponge is diffused and complete; the drainage of a tube is local and incomplete. In many cases, where I have used a tube with a subjacent sponge, I have found, on removing the first sponge, after some days, all the parts healed, except the locality of the tube. In similar cases, where the tube has not been used, the healing has been complete. There is one structure which, in my experience, strongly resents the presence of an india-rubber tube passed through its substance; it is the female breast, multiple abscesses arising in the vicinity of its tract.

Moderate sponge pressure also keeps the deep parts in apposition, and thus promotes the deeper solid union; a greater virtue no dressing can possess. A little more, though not at all severe, pressure arrests hemorrhage from all except the larger vessels; even the latter might, if necessary, be held in check for a considerable time. In operations and injuries where hemorrhage is free, and from many and not large vessels, as in wounds of the palm, indeed, in any operation or injury involving the hands and feet, the advantages of a sponge and bandage are clearly seen. In operations on the breast, especially where axillary glands require removal, I look on a large sponge as my best friend. In some cases such as these a bit of sponge put inside the wound (Mr. Lister's writings first suggested this to me), the margins being drawn together, or a large sponge placed thereon, instantly stops all bleeding. Here I should change the first dressing as soon as the probability of primary and reactionary hemorrhage had passed away, so that deep union might not be hindered. There is probably some physical peculiarity in sponge which tends to arrest hemorrhage, independently of mere pressure. Protracted pressure with lint or cotton, sufficient to arrest hemorrhage, would cause sloughing; it is not so with sponge pressure. Sponge "bites" the skin, and thus keeps the superficial parts in place, while its elastic pressure keeps the deep parts together. I will now merely hint at some other of its qualities. Sponge may be kept very wet or slightly damp, hot or cold, small or large, by merely altering the character and the amount of the fluids which may be applied to it; all this is possible without removing the sponge. The lotion may be nearly boiling, or it may be constantly iced. Fluid may be applied with any frequency; it may be medicated with any approved agent. Lotions which give deposits, as those containing lead, are not so suitable, as they harden the sponge—a condition which can rarely, if ever, be necessary. If the sponge dressing require to be prolonged more than a few days, the lotion must not be of a character or a strength to unduly irritate the skin.

Turkey sponge is better for smaller wounds and operations; in larger lesions the honeycomb is more manageable. Sponge dressings may be removed frequently, or, which is much more important, very infrequently. The softness and bulk of damp sponge protect from movement, friction, blows, or

other injury. Sponges take any shape, may be adapted to any surface, or cut to any size. Two or more (stitched together or not) may be used when one is not large enough or only small ones are available.

It is well to have separate suitably-shaped and prepared sponges for dressing; but if this be overlooked or be inconvenient, the operation sponges may be used. Sponges which have been used, if completely cleaned and disinfected, are even better than new ones.

How long should we continue the sponge-dressing? Not long; until all danger of primary and recurrent bleeding has ceased; until deep union is fairly established, and there is little fear of the separation of parts; until (which is much the same thing) the discharges have become slight and the wound is mainly superficial. All these results I very frequently find on removing the first dressing, which has remained some days—three, four, six, eight, or ten.

In amputations of the limbs, sponges, one or two, may be readily made to cover the incisions, support the deep parts, check hemorrhage, drain, and act as splints. In removal of the breast and tumors generally, the sponge dressing has special advantages. The sponge should be large; say, in a woman of medium size, ten or eleven inches long, five or six wide, and four or five thick. It should be placed directly over the stitches or strapping; indeed, it is one of the merits of the sponge that it can be placed over any other contrivance. If strips of plaster be needed to relieve tension, they should be long, say from over the shoulder to near the groin, when the slight moisture of the sponge will not spoil their adhesion. A few neat and firm turns of wide, thin, smooth bandage are better than a large number in several ways, especially in the medication or antiseptication (may I say?) of the sponge. During the few years I have used sponge dressing, I have not had a single instance of early recurrent or later reactionary, or of secondary hemorrhage. I scarcely ever tie a vessel. One or two may be twisted or compressed a few minutes by spring forceps; but patient pressure for a time, with relays of well-wrung sponges within the wound, rarely fails to stop primary hemorrhage.

In the deep excision of cancers from mucous outlets—a branch of surgery in which it falls to my lot to have much experience—I should be much at a loss if I had not at hand my large sponge with its antiseptic, styptic, compressing and draining properties. A few months ago I removed a cancerous penis as far down as the triangular ligament in the perineum (splitting the scrotum to do so, the man preferring to retain the testes); a sponge with a catheter passed through its centre, stopped the bleeding, dressed the wound, and kept it antiseptic, all at once.

I need not detail every operation in which sponge dressing is of benefit; I will briefly refer to a few only. I have just had striking evidence of its utility in trephining. Twenty-one days ago a young man

was brought into the Queen's Hospital with a cut, and therefore a comminuted and depressed fracture of the right parietal bone, caused by a falling slate. Brain was oozing out, and as much as would fill a walnut-shell escaped. Left hemiplegia was marked, but not complete. I trephined, and removed numerous fragments and a bit of felt hat, leaving a gap two inches long and an inch and a half wide. The soft parts were very loosely adjusted, and well covered and overlapped by a soft sponge kept constantly moist with terebene, and fixed by one strip of adhesive plaster twenty inches long and three inches wide. On this, the fourteenth day, his state could not be more favorable.

In wounds generally, in compound fractures, after operations for caries or necrosis, after opening abscesses, superficial or deep, the sponge dressing is of ready utility.

After operations for hernia, a large antiseptic sponge, under a few turns of spica bandage, forms an ideal dressing, which at once gives elastic truss pressure, cleanliness, drainage and antisepticity.

After lithotomy, when there is free bleeding, there is no mechanism which equals in accessibility, simplicity and efficiency, an elongated bit of sponge, a kind of sponge tent, passed by the side of an elastic tube or catheter. I have now in the hospital a man, aged seventy-five, who is convalescent from lithotomy. The stone was very large, the incision necessarily free, the hemorrhage great, and the patient naturally feeble; after a few spoonfuls of iced water, I put a large elastic catheter through the wound, and by its side a sponge tent of the size of my finger. In a few moments the bleeding ceased, not to return, and the urine shortly came through the catheter. All went on well, save that severe signs of senile exhaustion appeared after seven or eight days; these were successfully checked by repeated alteration in position, and even partially clothing the patient; the risk of a permanent fistula from getting up too soon seemed better than death. In lithotomy wounds, as elsewhere, when the sponge is put within the wound, it speedily creeps into every corner, crevice or recess from which blood may flow. It is on this principle that an ordinary uterine sponge-tent, passed along the floor of the nose, as recorded by a surgeon whose name I forget, checks epistaxis immediately, without time, trouble or apparatus.

—  
**AFTER-TREATMENT OF TRACHEOTOMY CASES.**—Vogt (*Cbl. f. Chir.*, 1878, p. 158; from *Deutsche Med. Wochens.*), proceeding from the fact that with the present methods of treating tracheal croup most children perish, even after operation, from continued formation of false membrane, suggests glycerin as a means of hindering the formation of the membrane. It is known that when this substance is applied to the mucous membrane a profuse watery serous secretion is excited; and this is relied upon by Vogt to remove or prevent the adhesion of the false membrane. In the case of a little six-year-old girl treated in this way a cure resulted. Glycerin mixed

with an equal quantity of water was inhaled, by means of an inhalation apparatus connected with the tracheal tube, every half hour. Vogt has also used this treatment in recent cases of croup, where tracheotomy has been thought unnecessary or unadvisable. Disinfection of the original patch in the pharynx by means of chlorine or bromine water preceded the use of inhalation. X.

#### THE TREATMENT OF NEURALGIA.

The following cases and treatment of neuralgia are given by Mr. E. M. Boddy, in the *Medical Times and Gazette*, London:—

**CASE 1.**—John S., aged fifty-five. Patient, a farmer, had been troubled with obstinate recurrent attacks of facial or definite neuralgia, and had tried various remedies, but had obtained no relief. He was in robust health, and there was nothing to be seen or felt on either the upper or lower jaw, and there were no decayed teeth. The attacks would come on violently and without any warning, and the pain was so excruciating that he said it made him "feel mad." After taking the opium and arsenic he fell into a profound sleep, and on awaking the pain had entirely left him. Now, in this case, relief was almost immediately afforded, and no further treatment was necessary, for the attack no doubt depended upon "some obscure irritation of the fifth pair of nerves," and was not caused by the health being out of gear.

**CASE 2.**—Henry H., aged forty, had been suffering some weeks previous to my seeing him, from the most excruciating attacks, and there were no carious teeth to account for them. As he was out of health, I treated it as a case of anæmic neuralgia, and so I put him on a course of quinine and iron, which gave him no relief. At last he had such a severe attack that he was like one bereft; but the pain was immediately alleviated by the opium and arsenic, and left him, he said, "like a miracle." I now recommenced the tonic treatment, and he very soon regained his ordinary health. In this case the neuralgia simply resulted from an "obscure irritation of the fifth pair of nerves," accompanied with debility.

**CASE 3.**—Charlotte B., aged eighteen. Patient was what one might term in first-rate health, and strange to say, had never had the toothache. One evening, without any assignable cause, she was attacked with the most "horrible pain" in the face; had never experienced it before. I administered the opium and arsenic, and the pain at once left her. The next day she had another attack, which immediately succumbed to the remedy.

**CASE 4.**—Annie H., aged twenty-two. Patient had been irregular from puberty, and for the last six years had been subject to facial or definite neuralgia, and no remedy had afforded her the slightest relief. She was a well-formed

girl, but was decidedly chlorotic and anæmic. The first dose relieved the pain slightly; the second entirely removed it, for she slept soundly, and there was no vestige of it on awaking. I now treated her general health by administering purgatives and tonics, such as iron and quinine. When I last saw her she had had no recurrence of the neuralgia, the catamenia were regular, and her general health had greatly improved.

These four cases which I have selected from many others of which I have notes, are quite sufficient to shew the efficacy of the combination of opium and arsenic in the treatment of this disease. Three of them are very good specimens of what I call definite neuralgia, and the last was of the same kind, though partly owing its origin to some uterine derangement. There is one very noticeable fact: they all derived marked benefit from the remedy; it also quickly relieved them of an agonizing pain, prevented its return, and no ill consequences resulted; and what is greatly in its favor, the opium promotes rest, which is so necessary, and the sufferer awakes up feeling almost a new being, especially if the pain has been of long continuance.

The form of definite neuralgia which arises from hysteria is also amenable to opium and arsenic; but then it is desirable to give the patient a nervine sedative, such as the bromide of potassium or the tincture of valerian, after the neuralgic pain has subsided. The following is the mixture I always give:

℞. Liq. arsen.,	3 ss		
Tinc. opii,	iss		
Aquæ,	ad. ʒiij	M.	

Sig.—One tablespoonful to be taken when required.

The strength may be increased in very violent cases, but I have generally found the above sufficiently strong.

#### GLYCERIN IN THE TREATMENT OF INTERNAL HEMORRHOIDS.

Dr. George B. Powell writes in the *Practitioner*, April, 1878:—

The results of the administration of glycerin have been striking and satisfactory. My first case was so extraordinarily rapid and successful, that I hesitated to publish it till further trials had convinced me that the results obtained were due, undoubtedly, to the drug.

Mrs. B., aged fifty-eight, requested my attendance on January 16th, to prescribe for a troublesome cough, to which she had been of late years subject at this particular season; there was simple catarrh of the larger bronchi, with scanty expectoration; she likewise intimated, parenthetically, that she had been for years affected with the "bleeding piles," and for the last two years the tenesmus and discharge of slimy mucus

mixed with blood, had been particularly severe, running from her in bed, and "shooting from her when she coughed." She did not expect any relief from the latter affection, but thought if her cough was improved it would give her a modicum of comfort. From her own statement, she had had no proper sleep for two years, in consequence of the tenesmus and constant irritation in the lower bowel. I may add, from her own report, everything had been tried to relieve the tenesmus, suppositories included, without effect. I prescribed the following:—

℞. Glycerinæ,	ʒjss	
Acid. citric.,	ʒij	
Morph. acet.,	gr.ij	
Vin. ipec.,	ʒij	
Aquæ	ad. ʒviij.	M.

One ounce ter die.

My next visit was on the 19th, and I was agreeably surprised to find the tenesmus and discharge entirely ceased, and although the cough had not improved, she could pass a comfortable night, and "felt better than she had done for years." The cough continuing distressing, she desired to discontinue the medicine which had exercised so beneficial an influence over the lower bowel, as she considered the sudden stoppage of the discharge made her cough worse. To a certain extent she was right, for as the cough improved, all the former painful symptoms reappeared, though in a minor degree. She then returned to the use of the glycerin, and after two bottles she expressed herself as well as ever she was, and up to this date, March 9, she has continued well.

My next experience was in a case of a man of intemperate habits, who, "after a spree," invariably suffered from bleeding piles, with great pain on defecation. I prescribed the glycerin with citric acid and tincture cardam. co., and saw nothing more of him for three weeks, when I met him accidentally, and on enquiry found he had been completely cured by the one bottle. In two other cases of hemorrhoids, one occurring in pregnancy, great relief was afforded.

I am convinced we have in glycerin a therapeutic agent of great value. I am inclined to believe its action to be of a specific nature, but its *modus operandi* I am unable to speculate upon with my present experience.

In the hemorrhoids of drunkard's it will be found perfectly reliable and effective, and administered with citric acid and tincture cardam. co. forms a pleasant and agreeable mixture.

#### THE USE OF OPIUM IN CEREBRAL ANÆMIA AND AFFECTIONS OF THE HEART.

M. Huchard has pointed out, in the *Journal de Thérapeutique*, the good results obtained by the administration of opium, in patients suffering from insufficiency or aortic obstruction. In the course of certain affections of the heart, when

the attacks of suffocation and dyspnoea have acquired an extreme intensity, injections of morphia are of the greatest service.

To support this view, M. Huchard, besides his own personal observations, quotes the facts published by Levy, of Vienna, 1867, by Renaud, in 1874, and by Vibert, in 1875. The communication of M. Huchard presents two points deserving of attention:—

1st. The popularization of the employment of opium in affections of the heart.

2nd. The theory by which the good results are explained.

M. Huchard recognizes that other medical men have perscribed morphia in affections of the heart, but his desire has been to fix the indications and contraindications of the method.

It has been known for a long time that opium in doses of from one to two centigrammes, among other physiological effects, produces slight excitement of the circulation, exhilaration of the spirits, animation of the face, and an increase of muscular power; but if, after the appearance of well-marked phenomena of excitement, the dose be increased from five to ten centigrammes, depression of the circulation and tendency to sleep supervene. Professor Gubler, in his *Commentaries*, insists on the utility of opium in want of stimulation of the nerve centres, due to impoverished or altered blood; and Dr. Vibert, at the end of a memoir published in the *Journal de Thérapeutique*, 1876, concludes that the previous employment of injections of morphia in the operation of thoracentesis, and even in all operations giving rise to syncope, prevents the occurrence of such accidents. M. Huchard employs opium in the hope of utilizing its hyperæmic properties on the nerve centres, and particularly on the brain. In patients suffering from aortic obstruction or insufficiency, with symptoms of suffocation, dyspnoea, cold sweats, pallor of the face, etc., he has seen these formidable symptoms disappear after the injection of one centigramme of morphia.

If opium be useful in cases of aortic affection accompanied by vertigo, buzzing in the ears, tendency to giddiness, cephalalgia, it is because such symptoms are those of cerebral anæmia, and that cerebral ischemia is a frequent complication, not only of aortic insufficiency, but of aortic lesions in general. Hence, the administration of opium is indicated in the course of affections in which cerebral ischemia is equally met with.

In M. Huchard's opinion, as in that of Professor Gubler, opium may be used in certain forms of anæmia, as it acts as an excellent tonic owing to its congestive action on the brain. It may be prescribed for cachectic or phthisical patients, for in such cases, besides the tonic action of opium recognized by Sydenham, we also utilize the power of this medicine to calm the dyspnoea and the cough.

**HISTORICAL ITEM.**—Most persons regard Homœopathy as a system of modern origin, dating back only to Hahnemann, who brought it into notice about seventy-five years since; Dr. Meryon's History of Medicine furnishes us, however, with the following:—"Gregory I. (surnamed the Great), who filled the papal throne A.D. 590 to 604, and whose name is celebrated in English history from his mission for the conversion of our Islands, affected the most supreme contempt for profane literature, as well as for the arts and sciences; but curiously enough, it was his fate to help most materially the cause to which he was so vehemently hostile; for, although he cared not for science, he endeavored to propagate his faith in Christianity by sending missionaries to all parts of Europe, many of whom, like Theodoric in England, encouraged the study of literature and medicine. A most remarkable passage occurs in the writings of Gregory, which is probably the earliest, and certainly the most unequivocal enunciation of one great dogma of the system of Homœopathy, and tends to confirm the notion that that system was practised at this early period. It runs thus:—'*Mos medicinæ est ut aliquando similia similibus, aliquando contraria contrariis curet. Nam sæpe calida calidis, frigida frigidis, sæpe autem frigida calidis, calida frigidis sanare consuevit.*' The identity of words renders it impossible to read the above paragraph without a suspicion that an old and obsolete tenet may have been reproduced to the world under the garb of a new discovery; but if it be not *absolutely* true that human nature is destined to renew its acquaintance from time to time with exploded doctrines, just as we renew our acquaintance with by-gone diseases, it is an apt illustration of the proverb advanced by an authority far more unerring than we can pretend to, that 'there is no new thing under the sun.'"

#### THE TREATMENT OF ULCERS.

Dr. Mandelbaum, of Odessa, says (*Berl. Klin. Wochenschrift*, No. 10, 1878) all ulcers of the leg and elsewhere, can be cured by the following method:—If they are very deep, with much loss of tissue, and with undermined, uneven, callous edges, they are first to be scraped away until healthy tissue is reached, with the modification of Volkmann's spoon as suggested by Hebra; they are then to be covered for several days with a thick layer of iodoform until fresh granulations spring up (as they are certain to do), and until the base of the ulcer has reached the level of the surrounding skin. When this point in the healing process is reached, the ulcer is to be strapped daily with equal parts of mercurial and soap plaster of rather soft consistence, and carefully and evenly applied. Shallow ulcers, covered only with pus, require no scraping, but can be at once treated with iodoform.

## CHLORAL HYDRATE IN UTERINE CANCER.

This agent has recently been highly lauded as an antiseptic in the puerperal state when used in the form of a vaginal wash. Dr. Dunster calls attention (*Michigan Med. News*) to its great value in uterine cancer. A solution 10 to 30 grains to the ounce, or used by saturating a cotton-wool plug, with a string attached, not only corrects the intolerable stench, but relieves the stinging pains so common in these cases.

## OXALATE OF CERIUM IN CHRONIC COUGH.

Mr. Thomas Clark (*Practitioner*, May, 1878) has for some time used the oxalate of cerium in cases of chronic cough with shortness of breathing, with very marked success.

One case under observation is a proof of its good effects as a sedative.

A lady has suffered for some years with cough and difficulty of breathing on the least exertion, "the outcome of an acute attack of pneumonia," the cough being most troublesome in the morning on getting up; so bad as to cause sickness. Mr. Clark prescribed 5 gr. half an hour before rising.

The physical signs observed in her case have been loud bronchial breathing, with great abdominal action, impaired resonance over lungs, with a slight dulness at the apex of left lung. The most marked physical changes since taking the ox. cerium, are less noise in breathing, less abdominal action, no cough in the morning, and increased strength.

Mr. Clark could relate other cases, but only mentions one other, it being under his care in the village hospital; a case of consolidation of the right lung. The rest given to the lung by the ox. cerium in gr. 5 doses is observable in the comfort in breathing and the cessation of cough for twenty-four hours after each dose.

The medicinal properties of ox. cerium Mr. Clark believes to be purely sedative, a great desideratum in the treatment of lung diseases, the difficulty being to find a drug that will not upset the digestive organs. In all cases wherein he has used the ox. cerium the only symptom observable from its use is a slight dryness of mouth.

## HOW TO TAKE THE TEMPERATURE.

Dr. Oertmann (*Archiv. f. Phys. and Centrabl. f. Nervenheilk*) proposes a new method of determining the body heat. It is to have the urine projected in a strong current against the mercurial bulb of the thermometer. He claims that a stream so directed for seven seconds will suffice.

## TREATMENT OF CROUP.

Dr. S. Odoini relates in the *Annali Universali* for March five cases of croup observed during the epidemic of Spezzia, in which he successfully employed copaiba and cubebs. His plan was to give to adults, every two hours, a dessertspoonful of a syrup composed of  $3\frac{1}{2}$  drachms of balsam of copaiba, about 5 drachms of powdered gum,  $1\frac{1}{2}$  ounces of water, and 14 drops of essence of mint; and also, every two hours, a tablespoonful of a mixture consisting of 186 grains of recently powdered cubebs and 8 ounces of syrup. For children the dose was reduced. The malady disappeared in a period of two or three days, rarely extended to seven.

Four or five cases were children under four years of age, some affected with simple croup, others with croup complicated with diphtheria. The condition of the patients when first put under treatment was very grave; there was high fever, the submaxillary glands were engorged, the voice and crying were weak, cough hoarse, and there was marked dyspnoea. The beneficial effects of the medicine above described occurred without the use of emetics, mercurials, or any other treatment.

## EXOPHTHALMIC GOITRE CURED BY GALVANISATION OF THE SYMPATHETIC TRUNK OF THE NECK.

Ancona (*Giornale Veneto delle Scienze Mediche*) reports a case of this kind. Stöbrer's machine (10 elements) was used during from three to five minutes daily. The cure was effected in five months.

## FORMULÆ.

*In Chronic Adenitis.*

℞ Emplast. hydrarg .....  $\frac{3}{4}$  ss;  
Pulv. opii,  
Pulv. camphoræ, aa gr. xiiij.—M.

To be spread as a plaster and applied to the tumefied ganglions.—*Dict. de Méd. et de Thérapeutique.*

*Iodoform in Indolent Venereal Ulcers.*

℞ Iodoform..... 3vj;  
Glycerin..... f $\frac{3}{4}$  ij;  
Alcoholis..... f $\frac{3}{4}$  i.—M.

To be applied on lint, and changed not oftener than twice daily.—(Klink: *Vierteljahrschr. f. Derm. u. Syph.*, 1877, p. 397.)

## THE CANADA MEDICAL RECORD

A Monthly Journal of Medicine and Science.

EDITOR:

FRANCIS W. CAMPBELL, M.A., M.D. L.R.C.P., LOND  
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## AN EXPLANATION.

Very many of our readers did not receive our last number till far on in June. This was



owing to the fact that by some most unaccountable negligence one bagfull was detained in the Montreal Post-office till the 18th of June, for non-payment of postage. On that day we were notified of the fact, and at once set the matter right. This we will take good care does not occur again.

TO OUR SUBSCRIBERS.

We beg to direct attention to the following notice regarding the terms of the *Record*, which we published in the first number (October, 1877) of the present volume :

*"To all who pay for the Record previous to the end of the volume, the price will remain as now, two dollars a year ; after that it will be charged at the rate of three dollars a year."*

We intend strictly to carry out these terms. As we have more than once stated, the subscription of two dollars makes the *Record* the cheapest Medical Journal in Canada, and we might almost say in America. We placed it at this very low rate, believing that it would ensure prompt payment. We find that we have been mistaken, and that we have leaned on a broken reed. We have, therefore, been compelled to offer some inducement, and we now plainly give notice that the subscription price of the *Record*, is three dollars a year, unless paid before the end of the volume, when the two dollars a year will be accepted. In our last issue we enclosed accounts to every one of our country subscribers, so that each is aware exactly of the condition of his account. *We hope to have a prompt response from them during the ensuing month.*

Commencing with the present number, our subscribers will notice that we have adopted printed addresses on the wrappers of the *Record*. This method, besides facilitating our dispatching, enables every one each month to see how his account stands. The date following the name, is the date to which the subscription is paid. Subscribers will have the kindness to notice that the change is made in the month following his remittance. If the alteration is not made he should notify us by postal card.

VICTORIA MEDICAL SCHOOL AND LAVAL UNIVERSITY.

It is currently reported that harmony has not prevailed among those who have been named Professors in the new medical branch

of Laval in Montreal. It will be remembered that, in the early negotiations with reference to the establishment of the new Medical School in Montreal, certain members of Victoria Medical School were, it was said, intended to be dropped. The possibility of their still continuing to exist, re-inforced, under their charter, together with much pressure, induced Laval to consent to take the old Faculty of Victoria in a body, and make them Professors in Laval. This was done, and many thought that all would be well. Not so, however, for hardly had the arrangement of details commenced, when difficulties arose, and we know that for a time the sky was far from clear. It is said Laval has, through its Rector, called upon three, if not more, of her recently appointed Professors, to resign. Whether they have, or will do so, time will tell. If they do, it is not unlikely they will re-form the old school and *L'Ecole de Medicine et Chirurgie de Montreal*, may for years be among our medical schools.

PERSONAL.

Dr. Molson, Assistant Demonstrator of Anatomy, McGill College, has returned from Europe.

Dr. Craik, Professor of Chemistry in McGill University, sailed for Europe by the *Sarmatian* on the 22nd of June. He proposes being absent some two or three months.

Dr. Major, of Montreal, has returned to Montreal, after nearly a year's sojourn in Europe.

Dr. Brodie, (M.D., McGill College, 1877) has returned after an extended stay in Europe, and has commenced practice in Montreal.

Dr. Sutherland, (M.D., McGill College, 1876) is practising in Valleyfield, Que.

Dr. Neilson, Surgeon B Battery, Quebec, has rejoined his corps, after a course at Netley, England.

The following medical officers served with their corps during the recent riots at Quebec: Surgeon F. W. Campbell, and Assistant-Surgeon McConnell 1st Batt. (Prince of Wales Rifles); Surgeon Sewell, 3rd Batt. (Victoria Rifles); Assistant Surgeon Burland, 5th Batt. (Royal Fusiliers); Surgeon Parke, 8th Batt. (Royal Rifles); Surgeon Neilson, B Battery; Surgeon Stancliffe, Canadian Hussars.

BIRTH.

At Simcoe, Ont., on the 12th of May, the wife of James Hayes, M.D., of a son.

## Pharmaceutical Department.

A. H. KOLLYMER, M.A., M.D., Editor.

### PHARMACEUTICAL NOTES.

By H. R. GRAY, MONTREAL.

Physicians keeping drug stores in this Province, although at present exempted from payment of the annual license fee paid by all Licentiates of Pharmacy, are, nevertheless, so far as their clerks and apprentices, and the sale of poisons are concerned, obliged to conform in every respect to the Pharmacy Act. Medical students cannot be employed in drug stores, unless they are registered according to law; neither may apprentices be taken until they have passed the preliminary examination, and have had their names placed on the Register. It would therefore seem advisable for medico-pharmacists to make themselves acquainted with the provisions of the Pharmacy Act, as it has happened that apprentices have been employed without ever having been informed of the necessity of being registered, thus rendering both apprentice and employer amenable to the law.

The writer of these notes has been informed that a druggist of this city recently sent to a physician an ounce of Cyanide of Potassium and a package of Compound Jalap Powder, without labelling either the one or the other. Such carelessness or recklessness is inexcusable. Accidents will and do happen to all, both physicians and pharmacists, neither of whom are more infallible than other people; nevertheless, every possible precaution that human ingenuity can suggest should be taken to prevent them.

It has often been suggested that the easily cultivated and prolific pumpkin might be utilized to a much greater extent than at present. Prof. Storer states that the rind of this vegetable is nearly three and a half times as rich in Albuminoids as the flesh; the seeds contain a large proportion of nitrogen and a high percentage of oil. The seeds are eaten by the Chinese and also by the Egyptians.

It is just possible that the despised Cockroach (*Blatta Orientalis*) will be bought and sold by pharmacists before long, and perhaps be canonized in the next pharmacopœia. In Russia it is becoming a favorite remedy for dropsy. Dr. Bojomolow says, in nine cases of dropsy resulting from Bright's disease, heart disease, &c., there was an increase in the secretion of urine and perspiration, rapid disappearance of œdema, and that albumen and renal derivatives disappeared from the urine. The active principle which has been extracted from them has been called by Doctor Bojomolow, "Antihydropin." Five to ten grains of pulv. *Blatta Orientalis* in the 24 hours is the dose.

The following extracts from an article on "the Profession of Pharmacy," by G. M. Baker, in the "Philadelphia Druggist and Chemist," is very applicable to Montreal: "Another cause of demoralization the practice on the part of wholesale dealers retailing at wholesale prices. \* \* \* There is

no need of demonstration to show how injurious this must be to the interest of the retail pharmacist, or how strong a pressure it is toward demoralization." In reference to educational standards he says:—"Fairly and candidly weighed, the profession, as a whole, is already, in respect to attainments and qualifications, in advance of its material prosperity."

An exchange states that the mosquito gum of Western Texas and Mexico is almost identical with gum arabic. During the past year it has become an article of export, some 12,000 pounds having been gathered in Bexar county, and as much more between that and the coast.

Castoreum is becoming scarce and dear. It is quoted at \$1.50 per lb. in New York. The Siberian at 10 cts. per grain. Why there should be any demand for this latter is a mystery.

### NOTES ON HYDROBROMIC ACID.

By H. R. GRAY, MONTREAL.

Hydrobromic Acid, or Bromide of Hydrogen, is a colorless gas, with an acid reaction, very soluble in cold water, and giving off fumes in a damp atmosphere.

Its formula is H. Br. molecular weight 81., or 80 parts Bromine and one part Hydrogen. It bears the closest resemblance to Hydriodic Acid, and may be prepared by means precisely similar, substituting Bromine for Iodine. It is made by decomposing bromide of phosphorus by water.

The solution of this gas in water forms the liquid known pharmaceutically as Hydrobromic Acid, but which might more correctly be termed Diluted Hydrobromic Acid, or solution of Hydrobromic Acid.

It may be made of any strength until such time as it becomes an official article of the pharmacopœia.

Dr. Squibb, the celebrated manufacturing pharmacist of Brooklyn, in a paper read before the Medical Society of New York State, proposes to take the potassium salt, as being the most commonly used of all the Bromides, as a standard for adjusting the strength of this acid.

As the potassium salt contains 68 per cent. of Bromine, a solution of Hydrobromic Acid containing also 68 per cent. of Bromine, would necessarily have the same Bromine value, but as an Acid of this strength would be difficult to make and dispense, therefore, it would be more practicable to have it of only half the strength of the salt, or 34 per cent., thus representing the Bromine of the Bromide of Potassium in the proportion of 2 to 1.

The equivalent of 20 grains of Bromide of Potassium would be 40 grains by weight of the Acid thus prepared. Dr. Squibb proposes the following formula:—

Pot. Bromidum—6 parts.....  
Acid Sulph. sp. gr. 1.838—7 parts.....  
Water—9 parts.....

The process given by Squibb for carrying out this formula is very tedious and complicated, and the only object in suggesting it, when other and simpler forms

are extant, seems to be to place Hydrobromic Acid among the list of chemicals only obtainable from manufacturing chemists.

Solution of Hydrobromic Acid thus prepared is a limpid, colorless odorless liquid having a *very* strong acid taste and the specific gravity of 1.274. Fifty measured minims would be the Bromine equivalent of 30 grains of Bromide of potassium. Fothergill and Wade both state, however, that in practice the Acid is effective in much smaller doses than its equivalence to the Bromides would indicate, which corroborates the opinion previously formed by Dr. Squibb. Dr. Squibb, speaking from the limited experience of the physicians in contact with him, says it would appear that the dose needed for a prompt sedative effect is from 15 to 25 measured minims and even larger. This dose, it must be borne in mind, only refers to the acid when prepared by Dr. Squibb's process, which being so concentrated, has the very great disadvantage of being extremely acid; in fact, so much so, that 15 or 20 minims require at least 2 ounces of water with syrup to make it agreeable.

Dr. Wade, of Holly, Michigan, who may justly claim to have introduced this chemical to the practical notice of pharmacists and physicians, differs from Dr. Squibb as to the best formula, stating with justice there is no necessity for complicated formulæ requiring special apparatus and time, when simple ones will do quite as well, and reiterates in a recent letter to a New York Pharmacy Journal the assertion, that many physicians not only use this acid, to the exclusion of the Bromine Salts, but also for many purposes where the latter would not produce similar results.

The following is the formula which was originally proposed by Dr. Wade, and to which he alludes in his letter of March last:—

℞ Potassii Bromidum, ʒi oz. avoirdupois.

Acid Tart. Crystals, ʒi oz. “

Water, 40 fluid oz. ....

Dissolve the Bromide and then the Acid in the water; keep in a cold place until precipitation ceases and decant. This contains 10 grains of Bromine in each fluid dram, and as an unobjectionable impurity about 1/4th of a grain of Potass. Bitart. in each dose.

The Acid, thus prepared, is the kind in general use in this city, and it has been found to answer the expectations of prescribers. The average dose for an adult, according to Dr. Wade, is half a fluid drachm well diluted. A mixture containing one ounce of Hydrobromic Acid (Dr. Wade's formula) with two ounces of syrup of orange and sufficient rose water to fill an eight-ounce vial, makes a very pleasant acid mixture, and why should not prescribers always make their medicines pleasant to take? Assafœtida, skilfully coated with sugar, is at once converted into a bonbon, while numerous formulæ attest the ease with which Valerianate of Ammonia may be converted into a very pleasant elixir.

Dr. Wade, in his letter, states as a reason for introducing Hydrobromic Acid to the notice of the profession as a substitute for the Bromine Salts, that the effect always depends upon the amount of Hy-

drobromic Acid produced in the stomach by the decomposition of the Salt, and it is probable that generally a part of the salt becomes absorbed before being broken up, and the effect of the Bromine of such part lost, owing to the variable amount of free acid present in the stomach at the time of the administration of the salt. He further asserts it is found clinically, as well as in theory, that a smaller amount of Bromine, in the form of Hydrobromic Acid, will produce the specific effects of this halogen upon the system, than when administered chemically united to a base.

Dr. Squibb, in his paper above alluded to, differs on several important points from Dr. Wade, but as Dr. Wade speaks from much practical experience in the use of this Acid, his opinions must necessarily carry the greater weight.

PHARMACOGRAPHIA.—We have the pleasure of announcing that arrangements are being completed, whereby Prof. Fiuckiger will publish through Wm. Wood & Co. an edition of the Pharmacographia specially adapted to the materia medica of the United States, Canada, and the West Indies.

SALICYLIC ACID FOR KEEPING LEECHES.—A correspondent of the *Pharmaceutische Zeitung* writes thus: “I have with much interest prepared all the compounds of salicylic acid, and made every imaginable experiment with it. As I was one day examining my leeches the idea occurred to me to ascertain how these animals were affected by salicylic acid. Accordingly, I placed two apart, and added water and the acid; too much of the latter being employed, the leeches expelled blood and died. Another was placed in water containing a very minute proportion of the acid; the animal remained quite lively, excreted mucus in the usual natural manner, and at the end of a month the water was free from any disagreeable smell and remained tasteless. After a month I placed two leeches in about 100 c.c. of water to which had been added four drops of an aqueous solution of .33 per cent. salicylic acid. Having kept the first leech three months, and the latter two two months, in unchanged water, they remain quite healthy, and the water is fresh and clear. Eight days ago I found the water in a litre vessel, in which I had placed 100 leeches, turbid and slimy, and of a foul smell, with three dead leeches at the bottom. I removed the dead animals, added to the water 30 drops of the above solution of salicylic acid, and set the vessel aside. Next morning the foul smell had quite gone, and the animals were very lively. I poured forth the water, well-washed the leeches, rinsed the vessel, and supplied it with fresh water containing 20 drops of the solution. Since then the animals have been healthy, no death has occurred, and the water remains fresh and clean. This observation must certainly be of the highest interest to pharmacists, especially as summer is now at hand, when it is very difficult to keep these delicate creatures alive and in good condition. I would recommend, therefore, to all who are obliged to keep leeches the use of salicylic acid, and am confident they will be pleased with the result.”

**SOME PROPERTIES OF SALICYLIC ACID.**—BY M. HENRI LAJOUX.—SALICYLIC acid has already obtained an important place in therapeutics and the arts, though it is not long since its manufacture was rendered practicable by Kolbe. The author's experiments show that the elimination of salicylic acid by the kidneys is more rapid than is generally supposed: its presence in the urine may be detected half an hour after ingestion. This differs from the conclusion of German writers who allow two hours from the time of absorption for the appearance of the acid in the excretæ. Twenty hours are required for its total elimination. The antiseptic properties of the alkaline salicylates are greatly inferior to those of salicylic acid. Kolbe has shown that salicylic acid forms alkaline salicylates when added to fresh venous blood. Very pronounced effects, therefore, should not be expected from the administration of the acid if means are not taken to prevent neutralization by the alkalis present in the blood, and, as citric acid replaces salicylic in its combinations, M. Lajoux advises the employment of a syrup containing citric acid and 0.25 per cent. of salicylic acid. To preserve syrups liable to ferment, such as those of cherries, mulberries, gentian, capillaire, and ipecacuanha, he finds that a minimum of one tenth per cent. of the sugar contained in the syrup is necessary. His experiments were conducted in a laboratory having a temperature of about 17° C., in test tubes loosely covered with paper. At the end of two months they were still perfectly fresh, although other samples not treated with the acid were completely decomposed.

J. Muller has remarked that  $\frac{1}{500}$  of salicylic acid does not prevent the formation of mould in urine, which, however, still remains acid and free from bacteria. According to the same experiments, half this proportion of carbolic acid preserves urine from every kind of change. It is well known that salicylic acid paralyzes much more energetically than carbolic acid the action of yeast and ptyaline, the transformation of glycogen into sugar, and the gastric fermentation; it prevents also both the lactic and sinapic fermentation. In other cases it is carbolic acid which produces the more intense effect. It seems, indeed, as if the action of carbolic acid were directed specially against the development of mould, and that of salicylic acid against fermentation. M. Lajoux is of opinion that it would be highly interesting to study the effects of these two bodies upon the grainy matter studied by M. Baudrimont under the name of *pseudo-organised body*, which precedes the formation of algae (*oscillaria thermalis*) in Vichy water under the influence of light and atmospheric oxygen. Those who, with Berthelot, do not see in fermentation a phenomenon correlative to life and the development of an organised being, and those who, with Fremy, attribute to semi-organised bodies the production of the organisms which characterise the true fermentations of Pasteur, will find in the difference of action of salicylic acid on mould and on ferments, one argument the more in favour of their doctrines.

M. Lajoux has observed, as also have M. M. Millon and Leweran, that salicine, in passing through the

animal organism, is transformed into salicylic acid. If salicylic acid exerts a febrifuge action, this observation should explain the similar action of salicine.

**FORMIC ACID AS AN ANTISEPTIC.**—The number of antiseptics is now so considerable that it seems almost hazardous to wish to increase it. Each new antiseptic that appears is extolled as the only saviour, and page after page of testimonials proves its excellence and infallibility. As the people may easily be distracted if every "discoverer" pours forth the abundance of his paternal joy over his offspring, which is frequently far from ripe, it is easy to see that the series of experiments made without prejudice by disinterested persons is of great value. In the experiments, made and published recently by Bidwell and others, they overlook, says G. Feyerabendt, one substance, which for certain purposes cannot be replaced by any other, namely, formic acid. He does not lay claim to priority, for Dammer, in his excellent dictionary, mentions its antiseptic properties, nor is he a manufacturer of the article; so he does not speak in his own interest, but in that of the subject.

In acid solutions formic acid far surpasses carbolic acid, and is especially adapted to the preservation of fruit syrups. Experiments made by Feyerabendt in his own household for two years have, without exception, been crowned with success. He has two jars of pickles made with vinegar and sugar from the year 1875, that have only been covered with a loose glass cover, yet they have preserved their freshness, and show no trace of mould or decay. The taste of formic acid is pure, acid, and pleasant, the price low, and its use very simple. He has employed from  $\frac{1}{4}$  to  $\frac{1}{2}$  per cent. of it in vinegar, fruit-juice, glue, ink, etc., and is convinced that even smaller quantities will answer the purpose.

He especially seeks to excite the attention of housekeepers, and feels confident that they will be satisfied with the results, and introduce formic acid as a good and true friend in pantry and kitchen.

Ordinary formic acid is made by heating together to 110° C. equal parts of dry oxalic acid and glycerine until no carbonic acid is evolved. The pure concentrated acid is obtained by decomposing the formate of lead by sulphuretted hydrogen, and might contain lead. (*Scientific American.*)

**SALICYLIC ACID FOR PRESERVING LIME JUICE.**—The following, which will be both new and interesting to many, is communicated to the *Pharmaceutische Zeitung* by Niemer, a pharmacist of Münster. It is too well known that the preservation of recently expressed lime juice is a great difficulty to pharmacists. According to two experiments, 0.25 of a gramme of salicylic acid will prevent the development of fungi in three pounds of fresh lime juice, the latter being in a half-filled flask. A trial made under similar conditions, but without the salicylic acid, resulted in the formation of mould in ten days. It was also found that cream which refused to churn could readily be made to do so by the addition of a very small quantity of this acid.

**TEST FOR TARTARIC IN CITRIC ACID.**—A ready method of detecting the admixture of tartaric with citric acid is described by M. Cailletet in the *Répertoire de Pharmacie*. One gramme (say 15 grains) of the acid to be tested is introduced into a test tube and mixed by a glass rod with ten cubic centimetres (say  $2\frac{1}{2}$  fl. drachms) of a saturated solution of bichromate of potash. If after, standing for about ten minutes, the mixture shows the orange color of the bichromate, the acid may be considered pure. With one per cent. of tartaric acid the mixture assumes a coffee-color; with five per cent., a distinct blackish-brown.

**FRECKLES, AND HOW TO TREAT THEM.**—Many remedial preparations of a more complicated character have been recommended, of which New Remedies gives the following:

R̄ Zinci sulpho-carbol.....	2 parts;
Glycerine.....	25 "
Aq. rosæ.....	25 "
Spiritus vini rect.....	5 "

Dissolve and mix. The freckled skin is to be anointed with this twice daily, the ointment being allowed to stay on from one-half to one hour, and then washed off with cold water. Anæmic persons should also take a mild ferruginous tonic. In the sunlight a dark veil should be worn.

A French journal recommends a collodion containing ten per cent. of its weight of sulpho-carbolate of zinc, as giving excellent results. The solutions of corrosive sublimate and other mercurial salts, often used for the purpose, are more or less dangerous, and should be avoided. The following lotion, which contains only a minute proportion of mercury, is harmless and well recommended:

R̄ Hydrarg. perchlor. ....	gr. v;
Acid hydrochlor.....	gtt. xxx;
Sacch. alb. ....	ʒj;
Spt. vin, rect.....	ʒij;
Aquæ rosæ.....	ʒviij.

The following formula is also highly recommended:

R̄ Sulpho-carbolate of zinc....	1 part;
Collodion.....	45 parts;
Oil of lemon.....	1 part;
Absolute alcohol .....	5 parts.

The sulpho-carbolate of zinc should be reduced to an extremely fine powder, and should then be thoroughly incorporated with the fluid mixture.

Here is another, in which white mustard-seed and lemon juice are the chief ingredients:

R̄ Pulv. sinapis alb.....	ʒijj;
Olei amygdal.....	ʒss.

Succi limonum, enough to make a thick paste. Mix. To be applied as an ointment.

It is also said that powdered nitre moistened with water, and applied night and morning, will soon remove all traces of freckles. An old-fashioned school prescription is sour milk or buttermilk, mixed with honey and water, and applied to the face.

**DISPENSING MEMORANDA.**—The duties of a pharmacist are two-fold. In the first place he has to satisfy himself that every preparation is properly made, and also properly preserved for use. In the second place, that these preparations be accurately dispensed in accordance with the prescriptions of the several branches of the medical profession. If the former be neglected no amount of accuracy in dispensing will secure uniform results, and if the latter be carelessly attended to, or conducted without a fair amount of intelligence, all the advantages of scientific training which may have been reasonably expected to result in success will be neutralized.

The February number of the *American Journal of Pharmacy* contains a report of an incident that is worth mentioning in connection with the subject of explosive mixtures. A druggist having dispensed a prescription for nitro-hydrochloric acid and tincture of cardamoms, handed the mixture to the messenger, who was in the act of putting it into his pocket, when he was startled by the bursting of the bottle, and the scattering of the contents over his clothes. Like Bruce's spider, the druggist tried again, and handed his second product to the messenger with the caution that he was not to shake it. This injunction, intensified by the bearer's own experience, postponed the *dénouement* until the bottle reached the patient's hands, when the cork was violently expelled, and acid and fumes spurted up into her face, nearly destroying her eyesight, and causing several days suffering. It is conjectured that the acids were mixed and put into the bottle without waiting for the consequent reaction to take place.

**POISONING BY POTASSIUM CHLORATE.** The April number of the *Druggists Circular* furnishes us with the particulars of a second case of poisoning by this salt, which has hitherto been considered, both by the medical and pharmaceutical professions generally, as rather an innocuous remedy, comparatively speaking. The first recorded case is that of Dr. Fountain, of Davenport, Iowa, who took one ounce at a dose, and fell a victim to his temerity. The second was that of a little daughter of Dr. Kauffman, of Minersville, Schuylkill county, aged two and half years, who chewed and swallowed about half an ounce of the crystalline salt, and died seven hours afterwards, with symptoms of gastric-enteritis, vomiting and purging; diluents and cathartics had been freely used, and all other appropriate measures adopted, but without avail. The child gave no indications of pain, but was apparently in a stupor all the time; there was a marked tendency to slumber.

**REPertoire de Pharmacie.**—J. CLOUET: "Arsenical Glucose." [In view of the fact that glucose is used at present in very large quantities by brewers, confectioners, and others, and that its consumption is likely to assume immense proportions, the author warns from the use of *glucose containing arsenic*, the presence of which is owing to impure sulphuric acid used in its preparation. He has met with samples of glucose containing from 0.015 to 0.109 gm. of arsenic in 100 gms. of glucose.]