

ous tumors of the breast, those which involve but a limited portion of it, where the skin is soft and yielding, and of natural color, not unfrequently yield to electrical treatment. Not only is the pain relieved, but the tumors grow softer and smaller. Sometimes their growth is arrested, and they remain stationary for years. Even in the worst forms of cancer the surgeon is frequently able to relieve the terrible pain that accompanies it by galvanization. "It is not sufficiently understood what a magic influence an intelligently-directed application of the constant current exercises, as a rule, over the throbbing pain of schirrhus."

The electrolytic treatment of malignant tumors has also been carefully studied by Dr. WILLIAM B. NEFTEL, of New York. He sums up his researches with the positive declaration that the most malignant tumors, such as true cancer, "at a certain stage of their development, can be radically cured by electrolysis, employed according to certain methods." The method he employs is by inserting needles around the mass, and increasing gradually and slowly the current intensity. The treatment is comparatively painless, and may be applied to cases which are quite far advanced. Little reaction follows it, and with judicious after-treatment a fair percentage of success may be expected. Dr. NEFTEL'S cases have been published in *Virchow's Archives*, and elsewhere, and deserve careful consideration.

Pressure. (See page 470.) A recent writer in the *Lancet*, 1878, remarks that it is obvious if pressure is to be effective it must be applied around the periphery of the growth, where the cell proliferation is most active. This must be obtained, it is said, by the careful adjustment of pads of cotton-wool. The neatest plan would seem to be the employment of compressed sponges, which might be bandaged firmly around a tumor of the breast, and then allowed to swell by imbibition of water. The constriction of the chest would of course be great, and thoracic respiration seriously interfered with. But the patient might be kept in bed, where abdominal respiration might suffice.

XV. THE TREATMENT OF SCROFULA.

PROF. S. D. GROSS, OF PHILADELPHIA.

This writer observes that few practitioners really understand the nature of strumous diseases. They seem not to know that they occur under the most varied forms, and that the treatment must be varied to meet each case.

For practical purposes it is sufficient to consider scrofulous patients divided into two great classes, the vigorous and the weak. The former are no doubt in the minority, but are nevertheless a well-marked and not infrequent class.

As a general rule, it is well to begin the treatment with a mild yet efficient aperient, to clear out the bowels and improve the secretion. After this, if the patient is feeble and exhausted, a tonic course should be instituted; but if, on the other hand, he is strong and plethoric, as denoted by the state of his pulse and complexion, much time will be gained and structure saved by the use of antiphlogistics, especially tartar emetic and Epsom salts, in the form of the saline and antimonial mixture (F. 5), properly guarded with tincture of opium. While the lancet must be employed with great care, Dr. GROSS is satisfied that it is often of immense benefit in arresting the morbid action. In scrofulous inflammation of the eye, throat and lymphatic glands, its effects are often marked and permanent. But these active measures must ere long in the case be superseded by other remedies, similar to those generally applicable in the more common form of the disease.

Among these, *iodine* may be regarded as the most important. When a purely alterative effect is desired, it is best given in the form of

LUGOL'S CONCENTRATED SOLUTION.

712. R. Iodinii, ℞i.
Potassii iodidi, ℞ij.
Aquæ destillatæ, ℥vij. M.

From five to ten drops every eight hours, in a wineglassful of sweetened water, gradually increased to fifteen, twenty, twenty-five or thirty drops, according to the tolerance of the system.

When scrofula is associated with constitutional syphilis, rheumatism or mercurial disease, *iodide of potassium* is best given alone, in some aromatic syrup, or, if there is much nervous irritation, in hop tea.

The *iodide of iron* is one of the most valuable scrofulous remedies we possess. It is particularly beneficial in disease of the cervical glands, upper lip, eyes and joints. It may be given in pill, in union with quinine and opium. If undue vascular action is present, gr. $\frac{1}{16}$ – $\frac{1}{8}$ of tartrate of antimony and potassa may be added to each dose.

In whatever form iodine is used, during its exhibition the system should be free from vascular excitement; and after it has been given for a fortnight, it should be omitted for several days, when it may be resumed and given as before. The initial doses should be small and gradually increased. If it acts as an irritant, the doses must be reduced, or else combined with opium or hyoscyamus. If these rules are observed, it exerts a much happier influence on the disease, while their neglect often results in great mischief.

Barium is a remedy of great value in scrofula, often succeeding where iodine fails. It is particularly serviceable in chronic enlargement of the cervical glands, both before and after the establishment of suppuration. It is chiefly adapted to patients with a languid circulation, a pale, tallow-like complexion, a flabby tongue, indigestion, and cold extremities. Its use is contra-indicated where there is inflammatory excitement, or congestion of any important organ.

713. R. Liquoris barii chloridi, q. s.
Six to eight drops at a dose, cautiously increased to ten or fifteen drops, three times daily, in a wineglassful of hop tea or a half ounce of syrup of orange peel.

Exhibited in large quantities, it produces symptoms of mineral poisoning.

Of the preparations of *mercury*, the bichloride is the best, gr. $\frac{1}{20}$ – $\frac{1}{10}$ thrice daily, in pill or solution. Thus administered, it yields hardly in efficacy to iodine, and is probably superior to barium. The system should be properly prepared for its reception, and if it act as an irritant to the intestinal canal, its use must be suspended, or it must be guarded with opium. Needless to add that salivation should never be induced.

Cod-liver Oil, though not infrequently prescribed indiscriminately and where it does no good, is especially valuable where there is a decided tendency to emaciation. The dose is f. $\frac{3}{4}$ ss, thrice daily, in good

ale or along with a little brandy. Its use must be continued steadily and persistently for a long time.

Whatever remedies are employed, the closest attention should always be paid to maintaining the bowels regular and active; to providing the patient with a light and nutritious diet; moderate and regular exercise in the open air; and warm and comfortable clothing.

PROF. H. H. TOLAND, M. D., OF SAN FRANCISCO.*

This author recommends warm clothing, a light and nutritious diet, moderate exercise, warm salt-water baths, and, where practicable, a change of air.

When the digestive organs of scrofulous children are deranged, especially if diarrhoea exists, and the tongue is furrowed with red edges, half a grain of *calomel* should be given at night until the secretion of the intestinal tract becomes healthy. After that the following preparation will prove extremely beneficial:

714. R. Bismuthi subcarbonatis, ℥ij.
Tincturæ nucis vomicæ, f. $\frac{3}{4}$ iss.
Syrupi zingiberis, f. $\frac{3}{4}$ j.
Syrupi simplicis, f. $\frac{3}{4}$ iij. M.

A teaspoonful four times a day for a child four years old.

When scrofulous children have swollen lymphatic glands about the neck, constipated bowels and strumous ophthalmia, the following combination will be found superior to perhaps any other that can be devised:

715. R. Extracti sennæ fluidi, f. $\frac{3}{4}$ iv.
Tincturæ nucis vomicæ, f. $\frac{3}{4}$ iss.
Tincturæ aconiti radiceis, āā
Acidi hydrocyanici, gtt. xv.
Syrupi zingiberis, f. $\frac{3}{4}$ iss.
Syrupi simplicis, f. $\frac{3}{4}$ ij. M.

A teaspoonful four times a day for a child four years old.

Should the bowels remain constipated, the quantity of the senna may be increased. It acts on the liver, and exerts a decidedly beneficial effect on the general disease. When this has been continued for some time, it is often well to change it for the following, which will be found an excellent substitute:

* *Lectures on Practical Surgery.* Phila., 1877.

716. R. Quiniæ sulphatis, ʒj.
 Syrupi rhei aromatici, āā f. ʒj.
 Syrupi zingiberis, f. ʒj.
 Syrupi simplicis, f. ʒij. M.
 One teaspoonful three times daily.

When the child is pale and emaciated, without the existence of intestinal irritation, ʒij of the precipitated carbonate of iron may be added to either of the above mixtures, with, in many cases, the happiest result.

When the lymphatic ganglions, submaxillary glands or testicles become enlarged, the *iodide of potassium* is preferable to any other remedy. By far the best form when the patient is near the age of puberty is Blanchard's pills, *pilulæ ferri iodidi*, U. S. Ph. The worst case of ganglionic enlargement will yield in three months to the use of these pills. Dr. TOLAND has not found cod-liver oil of much value in this disease.

Locally, to scrofulous enlargements and indurations, an excellent application is :

717. R. Tincturæ arnicæ,
 Tincturæ iodinii, āā f. ʒ ss. M.
 Paint the parts morning and evening.

When the skin is delicate, as in children, we may use :

718. R. Potassii iodidi, ʒj.
 Alcoholis, f. ʒj.
 Aquæ, f. ʒ xj. M.
 Apply on saturated lint to the part, and cover with oiled silk.

Operations for scrofulous affections should be confined to the bones, and should not be performed until the periosteum is detached and the whole of the disease removed; then the bone is speedily reproduced, and the result in many cases extraordinarily successful.

MR. WILLIAM SCOVELL SAVORY, OF LONDON.*

Before a course of any medicine is commenced, the condition of the digestive apparatus should be carefully examined, and any disorder present rectified if practicable. Strict attention to diet, and the regular use of a mild aperient, is most commonly sufficient to effect this. A few grains of rhubarb and soda, for some nights in succession, occasionally combined with a little gray powder, and then followed by

* Contributed to Holmes' *System of Surgery*, Vol. I., London.

a dose of castor oil the next morning, in order to clear out the canal, usually succeeded well.

This premised, it is now proper to begin the systematic exhibition of tonics. Of these, there is a great variety, appropriate to different conditions.

Iodine.—The preparations of iodine are most likely to prove serviceable in the absence of all fever and vascular excitement. If these are present, they often only increase the mischief. They may usually be prescribed with advantage in simple, but concentrated decoction of sarsaparilla.

Iron.—The use of iron is especially indicated when the symptoms of anæmia predominate; when the blood seems poor in red cells; especially when this is combined with a feeble circulation and general want of tone. The *potassio-tartrate* is especially useful in children, and has the additional advantage of combining with alkalies. The *vinum ferri* is a mild and simple preparation, and often a most valuable one. But the *sulphate*, when it can be borne, is sometimes much more efficacious; and the *tincture of the perchloride* is perhaps the most powerful of all. All cases of debility are, however, not suited by iron. When the lips and conjunctivæ are florid, it is least likely to agree.

Iron and iodine may often profitably be prescribed in combination. The syrup of the iodide of iron is a convenient officinal form.

Quinine, or other form of bark, is especially called for when the flesh is flabby, when there is great debility, when the appetite is bad and the excretions tolerably healthy. It may often be advantageously combined with iron.

The *mineral acids* are generally given in similar conditions. They are especially useful in checking the profuse perspiration of hectic fever.

The *alkalies* and their carbonates are valuable in scrofulous dyspepsia. They are more particularly indicated when the urine is highly acid, and contains an excess of the lithates, or still more, any free lithic acid. For children, lime-water, either in milk or in sarsaparilla, is often serviceable.

Emetics.—When there is much local disturbance about a tuberculous deposit; when the inflammation appears to be independent of any change in the mass itself, and more especially if this be combined with

any gastric disturbance, the operation of an emetic will often be followed by signal improvement.

Aperients are generally required from time to time during the course of tonics, and always when the state of the tongue and the excretions indicate a loaded condition of the intestinal canal, or the presence of morbid matter.

Cod-liver Oil.—No other remedy in scrofula enjoys so high a reputation as this. That the best effects may be obtained from its use, it must be taken for a long time, for months, or even years. A teaspoonful to begin with, twice or thrice daily, gradually increased, for adults, to a tablespoonful, may be considered a proper dose. When the stomach is weak, and there is a tendency to nausea, a solution containing $\frac{1}{40}$ to $\frac{1}{30}$ of a grain of strychnia acidulated with nitric acid, often proves a most useful vehicle. The oil can be taken in larger quantities and for a longer period in cold than in warm weather. In cold weather the oil should be slightly warmed before it is taken.

Hygiene.—All medicines should be only accessory to hygienics. The food should be nutritious and abundant. Stimulants in moderation are allowable. A scrofulous mother should not suckle her children. The child should not be weaned until after "teething." Flannel should always be worn next the skin.

PROF. J. LEWIS SMITH, M. D., NEW YORK.

As scrofula is an essentially hereditary disease, its treatment must commence in infancy. The most enlightened rules of diet and hygiene must be observed. Of the strictly medicinal agents, cod-liver oil is the most useful. It possesses real value in the erethitic form of the diathesis, but none in the torpid form. Iodine, internally, is especially serviceable in glandular hyperplasia. The iodides of iron and starch are the best forms. The latter may be given by dropping one to five drops of the officinal tincture of iodine on a little powdered starch, and giving it in syrup.

For the *swollen glands* the officinal preparations of iodine are too stimulating. The following is better:

719. R. Potassii iodidi, $\frac{\text{ʒi.}}{\text{ʒj.}}$ M.
 Extracti stramonii,
 To be rubbed over the gland several times daily.

Or:

720. R. Liquoris iodinii compositi, $\text{āā} \frac{\text{ʒ}}{\text{ss.}}$ M.
 Glycerinæ,
 To be applied three times daily, with thorough friction, till the skin is irritated

When the glands become actively inflamed, iodine applications should no longer be employed. Poultices should be applied, and resolution hastened.

DR. F. P. PORCHER, CHARLESTON.

721. R. Decocti stillingiæ, Oj.
 Acidi nitrici, gtt. xvj. M.
 Two ounces, thrice daily, in scrofulous and syphilitic cachexia.

A neater formula for administering this popular anti-scrofulous remedy is:

722. R. Fluidi extracti stillingiæ, $f. \frac{\text{ʒ}}{\text{ss.}}$
 Syrupi sarsaparillæ, $f. \frac{\text{ʒ}}{\text{viij.}}$ M.
 A tablespoonful three times a day. This is undoubtedly an efficacious remedy.

SCROFULOUS DISEASE OF THE JOINTS.

The propriety of operating on scrofulous subjects with these complaints, when it can by any means be postponed or avoided, has been much discussed, and there is no unanimity upon it at present.

M. VERNEUIL, an eminent authority, has, not long since, very strongly pronounced against it. He states that while the immediate results are very favorable, often more so than in healthy constitutions, the disease is almost sure to re-appear, either at the same spot in other joints, or in some of the viscera. The wound produced by the surgeon heals up, but the patient dies before long with albuminuria, general œdema, fatty degeneration of the liver, or tubercle. M. LARRY coincided in this view, and believed that he had witnessed it amply confirmed from his own experience. (*Gazette des Hopitaux*, June, 1875.)

The experience of Sir JAMES PAGET leads him to a different conclusion. (*Clinical Lectures and Essays*.) He believes that scrofulous patients have no special liability to the fatal consequences of operations, except in so far as they are feeble. The relief from pain and the removal of irritation more than compensate the shock they are subjected to. In the large majority of cases, especially of chronic cases, the removal of a scrofulous part is followed by improved health.

Yet he acknowledges that such are liable to have the disease break out elsewhere, or to become tuberculous; and that also sometimes the wounds heal very slowly, and are apt to become like scrofulous ulcers.

In order to overcome this last-mentioned difficulty, which is by no means of infrequent occurrence, and exceedingly annoying to both patient and surgeon, Mr. CAMPBELL DE MORGAN adopted the use of *chloride of zinc*. As employed by him, he states that in amputations for abscess of the joints in scrofulous subjects, the wounds heal as rapidly and in all respects as satisfactorily as in healthy ones. His plan is to open the abscess freely, clean it from pus, and then to sponge it "repeatedly and roughly" with a solution of chloride of zinc, gr. xl to aquæ f. ʒj. He has seen no instance where the lotion has done harm, and in nearly every case manifest and great advantage comes from its use. (*Transactions of the Clinical Society of London*, 1868.)

SCROFULOUS OPHTHALMIA.

3. R. Coniæ, gr. v.
Alcoholis, āā f. ʒ ss. M.
Aquæ,

Used with advantage in some cases of scrofulous ophthalmia with photophobia, by rubbing near the eyelid several times daily.

In the spasmodic contraction of the orbicularis in scrofulous children, Professor MAUTHER, of Vienna, has recommended penciling the eyelids twice or thrice daily with the following:

724. R. Coniæ, gr. j.
Olei olivæ, f. ʒ ij. M.
For local use.

DR. JAMES BRAITHWAITE, OF LEEDS, ENGLAND.

725. R. Extracti belladonnæ, gr. iv-v.
Potassii iodidi, ʒ ss-j.
Syrupi aurantii, f. ʒ j.
Aquæ, f. ʒ vij. M.

Two teaspoonfuls every four hours to a child two years old.

Dr. BRAITHWAITE thinks iron is injurious in strumous ophthalmia, and trusts to belladonna, given under the following conditions (*Practitioner*, October, 1872): It should be given early, without waiting till other means fail; extract of belladonna rubbed up with glycerine should be applied over the eyelids, eyebrows and temples (atropine is liable to produce irritation.) Hardly a case but improves rapidly under this treatment.

Mr. J. WARRINGTON HOWARD strongly recommends, in obstinate cases of this complaint, to apply a *blister* the size of a sixpence behind the ears. Locally, he washes the eyes with a weak solution of alum, and at night smears the edges with olive oil. This is aided by the administration internally of cod-liver oil and iron. (*St. George's Hospital Reports*, 1871.)

When the *cornea* is involved through chronic scrofulous ulceration, especially when the disease has progressed into its later stages in strumous children, Mr. JONATHAN HUTCHINSON has derived great advantage from the insertion of a *seton*. He takes two threads of thick silk, and places them in the integument over the temple, among the hair, so that they will cause no deformity.

Dr. H. H. TOLAND has found the best collyrium to remove the excessive photophobia that always exists in strumous ophthalmia to be a solution of *nitrate of silver*, gr. ij to f. ʒj of distilled water. Its use should be abandoned as soon as possible, and a solution of alum, gr. v to aquæ f. ʒj, be substituted, for fear of staining the conjunctiva. Constitutional treatment is always demanded in addition.

SCROFULOUS ENLARGEMENTS.

Dr. KARL STOERK, of Vienna, has tried various intercellular injections in some two hundred cases of vascular, fibrous and cystic struma.* In some instances he employed the following:

726. R. Alcoholis, f. ʒ j.
Tinct. iodinii, gutt. xx. M.

Adding the iodine in order to prevent the acetous fermentation in the alcohol in consequence of its mingling with the degenerating tissue of the tumor. He believes, however, that a more efficient preparation is:

727. R. Alcoholis, f. ʒ ijss.
Iodinii, gr. xxx. M.

Of either of these sufficient should be used for the parenchymatous injection, and a second not be given until all signs of the action of the first had disappeared. By observing this precaution, he had never seen bad consequences from this treatment. When the struma is cystic, the contents of the cyst should first be removed.

* *Beiträge zur Heilung des Parenchym. und Cysten Kropfes*. Erlangen, 1874.

SCROFULOUS ULCERS.

The propriety of attempting to heal and close up scrofulous ulcers is not yet decided upon among surgeons. Some believe that they act as natural outlets for an exudation which might otherwise be deposited in more important parts—the lungs, for example—and that, therefore, they should not be interfered with. This opinion is maintained by Dr. GEORGE B. WOOD and others, while the contrary is asserted by Sir JAMES PAGET, etc.

In regard to the plan of cure, Professor GROSS remarks they should be treated rudely at first and gently afterwards. The undermined edges are cut away with the knife or scissors, and the surface is thoroughly touched with the dilute acid *nitrate of mercury*, the solid *nitrate of silver* or *sulphate of copper*, the application being repeated every other day until there is an appearance of healthy granulations, when milder means, such as opium cerate or the dilute ointment of nitrate of mercury, takes its place. If disintegrated glands are present, they are removed with the knife or destroyed with Vienna paste; for so long as they remain no substantial progress can be made toward a cure. Sinuses are traced out with a bistoury, unless they involve important structures, when stimulating injections or the seton must be used. The application of dilute tincture of iodine on the surface around the ulcer will often expedite the cure.

RÉSUMÉ OF REMEDIES.

Alcohol, in the form of wine, beer or distilled spirits, has often an excellent effect. Professor GROSS says that many emaciated, scrofulous patients rapidly become fat under the use of small quantities of whisky taken frequently through the day. Dr. ALEXANDER STEEL, of New York, recommends gentle, moderate stimulation, by means of malt beverages, as corrective of the scrofulous condition of the blood. (*Medical Gazette*, Jan., 1871.)

Alkalies. In scrofulosis, when oxaluria is present, soda or potassa alkalies should be administered, and saccharine food avoided.

Ammonii Iodidum is useful in scrofula attended with glandular enlargement. The dose is gr. iij.

Aqua Picis is pronounced by Dr. COPELAND to be one of the most efficacious means we possess against scrofulous affections, when aided by a suitable diet and regimen. He administers it freely, and uses it externally as a lotion and dressing to ulcerated glands, etc.

Arsenicum deservedly occupies a high place among the internal remedies in scrofula. DONOVAN'S solution is an appropriate form.

Auri Pulvis. Powdered gold has been highly praised as an alterative in scrofulous affections and strumous glandular enlargements. The dose is gr. $\frac{1}{4}$ – $\frac{1}{2}$, gradually increased to gr. iij, thrice daily, in pill form.

Barii Chloridum is especially valuable when languid circulation and irritability of the mucous surfaces are present. It is said to be particularly adapted for females with menstrual irregularity. The following formula may be employed:

728. R. Barii chloridii, gr. x.
Tincturæ ferri chloridi, f. ℥ ij–iv.
Syrupi aurantii, f. ℥ x. M.

One or two tablespoonfuls two or three times a day.

Bromine is a useful remedy. The following solution is a good one for internal administration:

729. R. Brominii, m. x.
Aquæ, f. ℥ vij. M.

To commence with, gtt. vj, three or four times daily.

Calcii Chloridum. In scrofula with glandular enlargement of the neck, Dr. WARBURTON BEGBIE has extolled chloride of calcium, gr. x–xx for one dose, given in milk after food, and continued for some time, its good effects in many cases not at once becoming apparent. Dr. COPELAND also recommends it strongly.

Calcii Iodidum, gr. $\frac{1}{2}$, thrice daily, used as the last-mentioned substance.

Calcii Sulphidum. Dr. RINGER has found the sulphides extremely valuable in scrofulous glands and in chronic strumous sores and abscesses. A favorite formula with him for children is:

730. R. Calcii sulphidi, gr. j.
Aquæ, Oss. M.

Dose, a tablespoonful every hour.

It is essential that the medicine be compounded daily, as the salt rapidly becomes oxydized or changed into a sulphate. Or:

731. R. Calcii sulphidi, gr. $\frac{1}{10}$ – $\frac{1}{2}$.
Sacchari lactis, gr. x. M.

Four to six of these doses a day for an adult.

The treatment must be continued several weeks in order to effect a cure.

Calcis Aquæ is sometimes productive of benefit in long-standing scrofula, when gland after gland is attacked. A tablespoonful should be given in milk three or four times a day.

Calcis Phosphas Præcipitata has been recommended as an excellent palliative. In scrofulous ulcers it is given with benefit, in doses of gr. viij–xx daily, taken with the meals, so as to be thoroughly mixed with the food. In scrofulous diarrhœa good results are obtained from doses of gr. vj–x daily.

Conium has been strongly advocated in scrofulous affections. Its effects are most marked in favoring the absorption and removal of enlarged glands and in

promoting the healing of scrofulous sores. Dr. BAUDELLOCQUE, of Paris, obtained excellent results from its use in the treatment of children so affected; and more recently, also, Dr. ALEXANDER FLEMING, Sr., Physician to the Queen's Hospital, Birmingham. (*British Medical Journal*, February, 1871.) He says for twenty years he has adopted the following plan of administering it, with good results: The fresh green fruit is mixed with its own weight of white sugar, and reduced to a pulp. Five grains or more of this conserve are given three times a day. It loses its activity in three or four weeks, and must be renewed. *Conia* has been recommended in strumous ophthalmia. (Page 498.)

Ferri Carbonas. Dr. BYFORD prefers this form of iron to all others in scrofulous affections. He gives it pure, gr. x-xij, thrice a day, suspended in thick mucilage.

Ferri et Ammonice Citras is a useful remedy, particularly recommended by its mild taste, which adapts it for administration to children.

Ferri Bromidum has been recommended in ointment, as an application to scrofulous swellings:

732. R.	Ferri bromidi,			
	Glycerinæ,	āā	1 part	
	Adipis,		14 parts.	M.

**Ferri Iodidum*, in the form of the officinal syrup, is a powerful remedy in all forms of scrofula.

Hydrargyrum. In infantile scrofula, especially during the first three years of life, Dr. WILLIAM H. BYFORD considers mercury the most efficacious of all remedies. He prefers to give calomel or the corrosive chloride in very small doses, combined with taraxacum (which see.) The undoubted value of mercurials in many cases is no doubt owing, as has been suggested by Dr. JACOB, to the presence of a syphilitic taint in the child, frequently putting on scrofulous forms. As this taint is probably present in half the children born in large cities, its early detection and treatment are of first importance. The best preparation is probably the bichloride. (Page 492.)

**Iodinium* and its compounds are the most efficient remedies we possess in scrofulous affections. They are employed both externally and internally. It may be administered alone or in combination. An excellent method is *iodized milk*:

733. R.	Iodine,	1 part.	
	Alcohol,	10 parts.	
	Fresh, warm milk,	90 parts.	M.

Its external use as an absorbent is often disappointing, unless backed by an appropriate internal and hygienic treatment. Mr. FURNEAUX JORDAN states that it should not be applied directly to the enlarged gland, but a short distance from it, as to the nape of the neck when the cervical glands are involved. Thus applied, in his hands it never fails to bring about reduction.

Juglans Regia. The common European walnut has a high reputation in France and Germany for its specific action in scrofula. Professor NEGRIER, of Angiers, recommends that children so affected take a teacupful of an infusion of the

leaves, two, three or four times a day; or, as an equivalent, gr. vj of the aqueous extract. At the same time, a strong decoction is applied to the ulcers, and to the eyes as a collyrium.

Lappa. The burdock has an extensive popular reputation in scrofulosis. The root is used as a decoction, (℥j to Oj,) a fluid ounce thrice daily, or the fluid extract, which may readily be made into a syrup. It is said to be particularly useful in scrofulous skin diseases.

**Morrhua Oleum* is of the greatest benefit in the scrofulous or tuberculous diathesis, but scrofulous glandular enlargements are generally but slightly influenced by it. After, however, suppuration has taken place, the action of the oil is more manifest. Discharges from scrofulous abscesses often speedily disappear under its use. In scrofulous diseases of the skin, joints and bones, as well as in scrofulous ozæna, otorrhœa and ophthalmia, it is productive of excellent results, when persevered in and accompanied by good hygienic treatment. (Pages 492, 496.)

Phosphoricum Acidum Dilutum has been strongly recommended, in doses of ℥v, gradually increased to ℥xx or more, in infusion of calumba. Thus given it may be continued for a long time without unpleasant effects.

Pipsisiva, or *Chimaphila*, has been much lauded by Professor GEORGE B. WOOD, in external forms of scrofula. He states that a long experience with it leads him to place it, in regard to its power over the disease, next to cod-liver oil, iron and iodine.

Phytolacca Decandra. This is by many American practitioners esteemed a valuable remedy in general scrofulous cachexia. Dr. C. H. FORT, of Tennessee, has obtained excellent results in treating numerous scrofulous cases among the negroes and half-breeds with the following. (*Med. and Surg. Reporter*, March, 1877):

734. R.	Tinct. phytolacæ decandræ,	f. ℥ ij.	
	Tinct. iodinii,		
	Acidi nitro-muriatici,	āā	f. ℥ j.
	Aquæ,		f. ℥ ij. M.

Shake, and take one teaspoonful three times a day.

Of course proper hygienic regulations must be insisted upon. Dr. WM. H. BARRY, ex-president of the Arkansas State Medical Association, has also reported extraordinarily good results from this agent. (*St. Louis Clinical Record*, June, 1877.) He generally uses the following formula:

735. R.	Fl. ex. phytolacæ decandræ,	℥ ij.	
	Syrupi sarsaparillæ,	℥ v.	M.

Tablespoonful three times daily.

Tincture of the fresh root, he thinks, is better than the fluid extract.

736. R.	Radici phytolacæ,	℥ ij.	
	Spiritus frumenti,	O ij.	M.

Digest eight days. Take a tablespoonful thrice daily.

Potassii Chloras, in doses of gr. v-xx, four times daily, in pure water, is highly spoken of as a remedy in scrofulous enlargements and ulcerations. As a local application to swellings and enlarged scrofulous joints, the following ointment may be used :

737. R. Potassii chloratis, $\frac{\text{ʒ}}{2}$ ij. M.
Adipis, $\frac{\text{ʒ}}{3}$ j.

Potassii Iodidum. For removing strumous enlargements and deposits of aplastic and tuberculous matter, Mr. ERICHSEN has found the following formula extremely useful for adults, the dose being proportionally diminished in the case of children :

738. R. Potassii iodidi, $\frac{\text{ʒ}}{2}$ ij. M.
Potassii chloratis, āā $\frac{\text{ʒ}}{2}$ ij.
Potassii bicarbonatis, $\frac{\text{ʒ}}{2}$ ij.

Divide into twelve powders, of which one is to be taken night and morning in a half-pint of warm milk.

Drs. MEIGS and PEPPER recommend the following combination in children :

739. R. Potassii iodidi, gr. xlviij. M.
Syrupi ferri iodidi, f. $\frac{\text{ʒ}}{2}$ ij.
Syrupi zingiberis, f. $\frac{\text{ʒ}}{2}$ x.
Aquaë, f. $\frac{\text{ʒ}}{2}$ iss.

A teaspoonful, thrice daily, in water, at five years of age.

Potasse Liquor, in doses of ℥xxx-lx, three times a day, is said to frequently diminish scrofulous tumors, without, however, exerting any influence on the diathesis.

Sarsaparilla for generations has had a high reputation in scrofulous diseases. There is, nevertheless, a wide diversity of opinion about it, many careful observers rejecting it as of no value whatever.

Stillingia has long been a popular remedy in the various forms of scrofula. In children with enlarged cervical glands, muco-purulent discharge from the nose, tumid abdomen, pasty complexion, scrofulides on the skin, and white stools, its steady use will be found very serviceable. It is best given in fluid extract, dose gtt. x-xx, thrice daily, after eating, to a child.

Sulphur formerly enjoyed a good reputation in the treatment of scrofula, but it has fallen into disuse. Attention has lately been called to it as a valuable remedy.

740. R. Sulphuris, $\frac{\text{ʒ}}{2}$ ij-iv. M.
Syrupi, f. $\frac{\text{ʒ}}{2}$ j.
Aquaë, f. $\frac{\text{ʒ}}{2}$ vij.

Two tablespoonfuls, once or twice a day, in a tumblerful of milk.

Taraxacum. Dr. WM. H. BYFORD, of Chicago, in a report on scrofula, (*Trans. Am. Med. Association*, 1855,) says that taraxacum, of all the vegetable alteratives, is the most efficacious in removing scrofulous indigestion in both children and adults. It should not be given by grains, but as much as the stomach will bear.

Tayuya has had considerable testimony, as an anti-scrofulous agent, from Italian physicians.

Veiria, a bitter principle from the bark of the royal *Remigia ferruginea*, has been introduced recently in the treatment of scrofula. It appears to be at least an efficient tonic in such cases.

Zinci Iodidum has been used externally in enlarged lymphatic glands.

741. R. Zinci iodidi, $\frac{\text{ʒ}}{2}$ j. M.
Adipis, $\frac{\text{ʒ}}{3}$ j.

DIETETIC AND HYGIENIC REMEDIES.

The Grape Cure. In all the dyscrasie, but especially in scrofula, the *grape cure* is popular in France, Switzerland and Southern Germany. It consists of confining the diet exclusively to fresh ripe grapes, and is necessarily limited to the fall season.

The first meal is taken in the house in the early morning, and is made up of from one to six pounds of grapes. The others, at noon and at evening, should be less in quantity, and eaten in the vineyard; and finally a moderate amount may be consumed before retiring.

Bread and water are usually allowed in addition, but no other food or drink whatever; and this strict diet must be persevered in from four to six weeks. Very favorable results are reported from it, both in cases of scrofulosis where there is an unhealthy deposit of fat, and those where there are emaciation and swollen or suppurated glands.

There would be no difficulty in carrying it out in many districts of this country, where the vine flourishes abundantly.

Malt Extract. This is a very valuable adjuvant in the treatment of scrofula and tubercle. It improves the nutrition and often arrests the progress of the disease. It accomplishes the good results of stimulants without their injurious period of reaction and other baneful effects.

Mineral Waters. The most appropriate mineral waters in scrofula are the *saline* group, especially those containing iodine. In England, Cheltenham; in Germany, Kreuznach, Kissingen, Hombourg and Wiesbaden; in France, Balaruc, Bourbonne and Lamotte, are especially celebrated in strumous complaints. In America, the St. Catherine's Wells, Canada; Spring Lake Well, Michigan; the Saratoga waters and the Ballston Spa waters, are similar in composition and use.

Sea-water, which is closely akin to the saline mineral waters, will be spoken of separately.

The Sulphur Waters have by some physicians been heartily recommended, by others as much condemned, in strumous affections. According to the authors of the *Dictionnaire des Eaux Minerales* (Paris, 1860,) their employment will generally give very satisfactory results if confined to those cases where the disease manifests itself by superficial lesions of the skin, and by obstinate catarrhal affections, strumous ozæna, and the like. They are distinctly contra-indicated where inflammatory excitement or congestion is present.

For particular cases, where anæmia and impoverishment of the blood are marked symptoms, the *chalybeate* waters are useful.

In all cases the use of these agents must be long continued; and it is better to take them at the springs, as patients more willingly submit themselves to proper regimen there than at home.

Sea-air and Water. Few agents exert a more happy influence on the strumous diathesis than sea-water. In France a large institution has been established at Berck, where annually several hundred scrofulous children are sent for treatment. In its earlier years, from sixty to seventy per cent. were cured, but since experience has taught a more just discrimination of cases, yet more favorable reports have been made.

According to Dr. BERGERON (*Annales d'Hygiène Publique*, 1868,) the marine treatment is especially indicated where there are ganglionic enlargements not yet passed to the state of suppuration, cold abscesses, gummata, or white swellings of the joints.

Hardened cervical glands not unfrequently are completely resolved.

On the other hand, where the prominent symptoms are chronic strumous blepharitis and ophthalmia, scrofulides of the skin, otorrhœas, deep-seated caries of the bone, and open, obstinate sores, this method of treatment produces little benefit.

The plan adopted is to have the patients bathe twice daily in sea-water, and to drink a small quantity daily, moderate exercise in the open air, substantial food and warm clothing. No drugs whatever are given, and in favorable weather patients are advised to spend most of the time out of doors. The treatment should be continued from three to fifteen months.

XVI. DISEASES OF THE SKIN.

General Therapeutics of Skin Diseases—Acne—Alopecia—Eczema—Erythema—Herpes—Impetigo—Lepra—Lichen—Phtheiriasis (Pediculi)—Pityriasis (Seborrhea)—Prurigo and Pruritus—Psoriasis—Rosacea—Scabies—Sycosis (Mentagra, Barber's Itch)—Tinea (Ring-worm)—Urticaria.

GENERAL THERAPEUTICS OF SKIN DISEASES.

DR. LOUIS A. DUHRING, OF PHILADELPHIA.*

Both constitutional and local remedies are generally necessary in the treatment of diseases of the skin.

Among *constitutional* measures, much is gained by a well-ordered *hygiene*, out-door exercise, cleanliness, and often by change of climate. A well-regulated and suitable *diet* must be looked to. Of medicinal agents, *cod-liver oil* is especially useful when the general health is run down. The dose should always be liberal—from a teaspoonful to a half-ounce or more. The preparations of *iron* are given with particular benefit in diseases dependent upon chlorosis, and in exudative diseases connected with general impoverishment, as in certain forms of eczema, psoriasis and the like. *Quinine* is of particular value in the neurosis, (dermatalgia, pruritus,) and in other diseases complicated by a well-defined nervous element. *Arsenic* is the most valuable of all remedies in the treatment of a number of skin diseases, especially in those involving the most superficial part of the skin. Its action is slow, weeks and months being required to produce its effects. It should never be given in the acute inflammatory stage of any disease of the skin, nor where there is great heat, burning, intense itching or rapid cell change. The most desirable form for ordinary use is Fowler's solution. It may also be given in pill form, as in the "Asiatic pill," a modified and improved formula of which is:

* *A Treatise on Diseases of the Skin.* 2d Ed. Phila., 1881.