

Temperature in Disease.

Average Normal Temperature, of adults, 98.6° F.; of children, 99°; of the aged, 98.8°. Diurnal variation 1° to 1.5° F., highest from 9 A. M. to 2 P. M. Above 108° F. is a fatal sign, which issue may be averted by cold baths, reduced by ice from 96° to about 60° F. (A). The clinical thermometer placed in the mouth, axilla or rectum, and retained *in situ* for five minutes, should go hand in hand with Aconite in the treatment of inflammations (R). [For Antipyretics see the articles on FEVER AND INFLAMMATION.]

Clinical Thermometry is one of the principal means of positive diagnosis. The thermometer should be self-registering, certified, and accurately marked according to the Fahrenheit scale, to which scale all the temperatures mentioned in this article refer. The most reliable temperature is that in the rectum or vagina; less so in the axilla and folds of skin, and still less reliable in the mouth. A correct reading of the ordinary thermometer cannot be obtained in less time than five to seven minutes (Da Costa); but quicker-reading instruments may be obtained from the trade.

The Average Normal Temperature of the body is 98.6°, and, like the pulse, will vary somewhat in individual cases; as a general practical result it is agreed that in temperate regions the normal temperature at completely sheltered parts of the surface of the human body amounts to 98.4° Fahr., or a few tenths more or less; and a rising above 99.5°, or a depression below 97.3° F., is a sure indication of some kind of disease, if the increase or depression is persistent. The temperature is increased at the prime of life, is raised and depressed temporarily by the influence of diet, stimulants, exercise, etc. The minimum diurnal temperature is observed at 2 A. M., the maximum at 4 to 6 P. M. The greatest recorded range of temperature in disease is 50.4°; the minimum is 71.6° in a case of sclerema neonatorum (Quain's Dict.), the maximum 122°. In severe and fatal cases it rarely exceeds 107°, and rarely falls below 92°, even in fatal collapse. It may rise 3° to 4° after death, as observed in a case of typhoid fever in which death occurred with a temperature of 107°, which increased shortly afterwards to 110.5°. A temperature of 107° indicates malignancy, and when met with for two consecutive days in typhus, scarlatina, measles, pneumonia, pyemia, meningitis or rheumatism, death may be expected shortly. In relapsing, remittent and intermittent fevers, and in the initial chill of an abortion, the temperature may reach 107° without indicating great danger. During the last hours of life in many diseases, the temperature rises to 109°-111°; for example in tetanus, sunstroke, and typhus. With a temperature of 96° collapse is imminent.

Abnormally High Temperatures reported in the British Medical Journal, by Dr. Donkin, include those of eight cases, all but one in females, and none proved fatal. Pain was a prominent symptom in all. (1) 111.6°; convalescing from enteric fever. (2) 108°; no organic lesions; ovarian pain. (3) 115.8°; great abdominal pain and excitement. (4) 111°; convalescing from enteric fever. (5) 113°; enteric fever and double pneumonia. (6) 112°; synovitis; this was the only male. (7) 112°; painful stump, with necrosis. (8) 117°; pyonephrosis. Dr. Jacobi of New York reported a case of injury in which the temperature taken in the mouth, axilla, rectum and urethra, before many witnesses and with many thermometers, was 148° F. and yet the patient did not die. Dr. Welch mentioned as a well-known case, one Galbraith of Omaha, in whom the temperature went to 171° F. for some hours.

High Average Temperature (above 104°), is found in severe pneumonia, scarlatina, remittent, typhus, typhoid and relapsing fevers, pyemia, etc. Moderate High Temperature (102° and above), is seen in peritonitis, acute rheumatism, pericarditis, pleurisy, dysentery, cerebro-spinal meningitis, catarrhs, etc. A temperature of 100° and above is found in chronic affections, incipient inflammations and mild fevers. When, in effervescence, the heat increases rapidly, it will in defervescence decline proportionately fast and *vice versa*. Look for a grave affection when high temperature is continuous. A distinct interval between the morning and evening temperature is a favorable sign. A slow and gradual increase indicates typhoid fever; in rheumatism and anomalous fevers the increase is more rapid, and still more so in acute inflamma-

tory disease, as pneumonia, pleurisy, typhus, scarlatina, rubeola, etc. The rise is usually rapid in intermittent fever, febricula, and ephemeral fevers. A rapid effervescence and slow defervescence indicates some complication of disease; the reverse order indicates great danger. When the temperature begins to fall from the evening to the morning, it is an indication of improvement; while a rise of temperature from the evening to the morning is a sure indication that the patient is worse. Stability of temperature from morning to evening is a good sign, but from evening to the morning is unfavorable.

Decrease of Temperature below the normal point is rare. It occurs sometimes transitorily, announcing a favorable crisis, and preceding return to the normal temperature. It is also met with occasionally during the morning remission of remittent fever; also during the apyrexia of intermittents; in acute collapse, preceded or not by fever; in chronic wasting diseases, and sometimes also on the approach of death, especially in typhus fever.

In Phthisis, the temperature is higher in the evening than in the morning; later, higher at early bedtime than at noon, and high again at dusk. This is a valuable and delicate test of the progress of tuberculation.

In Typhoid Fever, the accession is by a rise of one degree each day, with the diurnal variation. If the evening temperature does not exceed 103.5°, the disease will probably be mild: but a temperature of 105° in the evening indicates a severe type and much danger. A sudden reduction to 95° in the third week denotes intestinal hemorrhage; a lingering temperature of 101°-102° in the fourth and fifth weeks indicates non-cicatization of the intestinal ulceration.

In Scarlatina, the rise of temperature is rapid, 104.7° may be reached in a few hours and 105° by the second day. It seldom rises above 105° and almost never above 106°; is continuous until the eruption begins to fade, when remissions take place unless complications arise.

In Measles, 103° is the usual temperature, with daily variations, increasing with the eruption and catarrhal symptoms. A high temperature lasting beyond the tenth day denotes complications.

In Diphtheria, the temperature by the end of the third day will, in uncomplicated cases, not exceed 103°-104°. It falls temporarily when the exudation appears. Defervescence occurs in the severe but favorable cases, from the twelfth to the fourteenth day; in the milder cases not before the sixth. In some fatal cases it occurs early, from the third to the fourth day. In asthenic cases the temperature of the surface falls, while that of the interior remains high, 100° in the axilla and 103° in the rectum. During convalescence, the temperature is low and readily depressed, but may be raised by intercurrent maladies. Any increase after the first five days, or a continuous high temperature after the first ten days, is unfavorable. A sudden rise may indicate complications.

Co-Relation of Pulse and Temperature.—As a general rule the co-relation of pulse and temperature may be stated as follows, namely:—an increase of temperature of one degree above 98° F. corresponds with an increase of ten beats of the pulse per minute.

Testicles.

Mercury, the ointment, locally in indurations and enlargements of testes (Wa); Corrosive Sublimate, with Cinchona or Sarsaparilla in sarcocele (D). **Camphorated Naphthol**, used hypodermically in tuberculosis of the testis with very gratifying results (Reboul). **Aurum**, is highly recommended in hypochondriasis accompanying testicular disease, and as a tonic for low-spirited, pining boys with undeveloped testes. **Water**, cold applications in neuralgia of testes with tonics and neuralgic treatment generally (D). **Suspensory Bandage**, with rest, in many affections of the testes (D). [Compare HYDROCELE, ORCHITIS, VARICOCELE.]

Tetanus.

Antitoxin used in more than 100 cases with a mortality of about 30 per cent. (W). [This treatment is discussed under the title Sera in Part I.] **Phenol** used by parenchymatous injection, is fully as efficient as the serum treatment (Babes); used in 40 cases with one death (Bacelli); in 33 cases with one death (Ascoli); in 42 cases with 16 deaths (Symmers). **Creosote** in large doses hypodermically, gave good results in a traumatic case, after antitoxin and phenol had failed (Higginson). **Potassium Bromide** is one of the best suited remedies, as indicated by its physiological action, not less than ʒss should be given in the day and Chloral at night as a hypnotic; used in 34 cases with but 4 deaths (W); in large doses, ʒj every 3 or 4 hours has given better results than any other remedy (B). **Chloral**, in full doses, gr. xx, no remedy more effectual (B); has sometimes cured (R); best used in combination with Potassium Bromide (W). **Chloroform**, in small and frequently repeated inhalations, also by friction, has been useful in many instances (Wa); anesthetics give temporary relief (B); four cases of acute tetanus treated successfully by chloroform inhalations, the daily dose varying from ʒij to iv (Preobrajensky). **Paraldehyde**, promises well, in full doses, ʒij-ijss; does not depress the heart, as chloral and the bromides do (B). **Strychnine**, of decided service (P); cured 8 cases of traumatic form in doses of gr. $\frac{1}{16}$ to $\frac{1}{8}$ (S); the evidence as to its curative power is of doubtful credence, but it is most successful in spontaneous and chronic cases rather than in the traumatic form (B). **Aconite**, has benefited many cases (P); its success warrants further trial (W). **Belladonna**, successfully used in many cases; the extract internally, and locally to wound (Wa); Atropine, gr. $\frac{1}{125}$ injected into muscle (B); bleeding, vapor-baths, and large doses of Belladonna have cured tetanus (Tr). **Hyoscyamine**, also Duboisine, in gradually increasing doses, have proved very efficient (Oulmont). **Morphine**, hypodermically, deeply into tetanized muscles, and if possible to the point of entrance of the nerves, used with successful results (Demarquay); as ordinarily used is of no value (Wa). **Apomorphine** may prove antagonistic (P). **Cocaine** and Morphine, of each a 5 per cent. solution, 3 syringesful hypodermically, immediately relieved and finally cured a bad case of idiopathic tetanus unrelieved for 3 days by chloral, morphine, etc. (Lopez). **Gelsemium**, has cured several cases (P); its spinal action is opposed to that of tetanus (B). **Camphor** is strongly indicated, as it causes both nervous sedation and cardiac stimulation (Bacelli). **Physostigma** has been used with excellent results (P); the fluid extract by mouth if possible, at the very beginning, and must be pushed until just short of arresting breathing (B); evidence is discrepant (W). **Curare**, hypodermically, has much evidence for its power (P). **Cannabis Indica**, used with marked success in traumatic form (P); should be used to intoxication, which is not dangerous (W). **Antipyrine** is worthy of trial, especially when hyperpyrexia (W); it antagonizes excitability of the motor nerve centres, and has been used with benefit. **Amyl Nitrite**, used in 3 cases with marked benefit as spinal sedative (W); has been used with success (R). **Nicotine**, by rectum or hypodermically, appears to be useful in many cases (R); much evidence for it as the best remedy (P); effective but dangerous (B); Physostigma better (Wa). **Conium** is indicated but has not proved successful (B). **Oxygen** is deadly to the bacillus, and should be freely admitted to the wound (Symmers). **Water** as warm baths, also cold applications as ice, afford temporary amelioration (B); the spinal ice-bag is very useful (R). **Cold** by placing the patient in a cold-storage room at freezing-point for several days, cured a severe case in a boy of 10 years (McGrann). **Division**, or stretching of any nerve-trunk connecting the wound with the spinal cord. [Compare SPASMODIC AFFECTIONS, TRISMUS.]

Thirst.

Acid Drinks, allay thirst by promoting the secretion of the alkaline saliva; but excessively used will derange the stomach (R); Citric Acid with Sodium Bicarbonate and flavoring substances, form the thirst tabloids of certain English druggists. **Bitters**, in drinks with acids slake thirst most effectually (R); a weak infusion of Cascarella or

Orange-peel, acidulated slightly with HCl acid, an efficient thirst-quelling drink for fever patients (Graves). **Ice**, sucked, is very grateful, and allays thirst in fevers (R). **Tepid Drinks**, are useful in the thirst of diabetes (Prout). **Fruit Juices**, or these made into drinks, but the most harmless agents must be used in moderation, and their consumption has to be checked, otherwise patients will take them to excess and may thus do themselves considerable injury (Fenwick).

Throat, Sore.

Aconite, when temperature high, half-drop doses of the tincture, every $\frac{1}{4}$ hour for 2 hours, then every hour, will almost certainly prove efficacious (R); valuable in ordinary sore throat (P). **Belladonna**, is admirably adapted to the treatment of ordinary sore throat; when much fever combine with Aconite (R). **Potassium Nitrate** dissolved in the mouth, to abort a sore throat (Wa). **Tannic Acid**, as powder, gargle, spray (P); the Glycerite of Tannin, after acute inflammation; in ulceration of aphthous sore throat daily when tendency to catarrh (R). **Ipecacuanha**, the wine as spray, in non-inflammatory sore throats and hoarseness from congestion of vocal cords (R). **Capsicum**, ʒj of tincture to O $\frac{1}{2}$ aquæ as gargle, in some sore and malignant sore throats (R, P). **Potassium Chlorate**, in grain doses every half-hour (Smith); is valuable locally in sore throat (Mastin). **Alum** dry or in solution (R); should not be used in the mouth as it is destructive to the teeth (W). **Myrrh** the tincture as a gargle for ulcerated sore throat (P). **Salicylates** do good in rheumatic angina and quinsy (W). **Ichthyol** in 2 or 3 per cent. solution as a gargle for inflammations of the throat (Herz); in 40 cases of ordinary sore throat removed symptoms in 24 hours (Sonnenberg). **Hydrogen Dioxide** as a disinfectant and deodorant gargle in various affections of the throat and mouth (Courtin). **Guaiac**, the compound guaiac gargle is often very efficient in simple sore throat and commencing tonsillitis. **Chloral**, internally and locally, is an excellent remedy for ulcerated sore throat (Brodnaax). **Cimicifuga**, in simple sore throat (P); also in malignant forms when the mucous membrane is dry and spotted with inspissated mucus (R). **Mercury**, in acute tonsillitis, which see (R); the Bichloride as a gargle [formula below], in ulcerated forms of syphilitic sore throat (Sir Chas. Bell). **Rhus Glabra**, a decoction, ʒj to Oj boiled to O $\frac{1}{2}$, with Potassium Chlorate ʒss, is a very efficient gargle (W). **Arsenic**, in medicinal doses, for sloughing of throat or malignant sores (R): the Iodide is an excellent remedy for the so-called diphtheritic sore throat, gr. iij triturated with gr. xx of sugar of milk, one-half of which is dissolved in ʒiv of water, and a teasp. given every hour or so. **Methylene Blue**, in simple, non-diphtheritic ulceration of the throat, patients have expressed themselves with delight as being cured, after one or two applications of the solution (Rose). **Iodine**, the tincture, locally to sores, whether syphilitic or not (R). **Nitric Acid**, undiluted, to sloughs (R). **Silver Nitrate**, locally, in early stage of inflammation, may cut it short (R). **Sulphurous Acid**, by inhalation, spray, or fumigations for malignant sore throat, scarlatinal or otherwise (R). **Water**, cold compress nightly, to harden the throat when tendency to catarrh (R). **Ice**, constantly sucked (R). [Compare DYPHTHERIA, PHARYNGITIS, TONSILLITIS.]

℞. Tinct. Guaiaci Ammon.,
Liq. Potassii Hydroxidi, aa ʒiij.
Tinct. Opii, ʒij.
Aq. Cinnamomi, q. s. ad ʒviiij.
M. ft. gargarisma.
Sig.—To be used as a gargle, every hour,
in clergyman's sore throat. (Garner.)

℞. Hydrarg. Chlor. Corros. gr. iv.
Alcoholis, ʒij.
Solve, et adde—
Decocti Cinchonæ, Mellis Rosæ,
Tinct. Myrrhæ, aa ʒij.
M. ft. gargarisma. Sig.—Gargle, to be
diluted if too severe. (Sir Chas. Bell.)

Tic Douloureux.

Croton-Chloral, has special effect on the 5th nerve (B); is palliative in doses of gr. v every $\frac{1}{2}$ hour till gr. xxx are taken (W). **Salicylates**, in large doses, cured a case of 12 years' standing. **Stramonium**, gr. $\frac{1}{4}$ to $\frac{1}{2}$ of the extract every 3 or 4 hours for 4 or 5 doses, often affords decided relief; stop if narcotic symptoms appear (P). **Arsenic**,

cures by influencing nutrition (B). **Phosphorus**, is useful in doses of gr. $\frac{1}{100}$ to gr. $\frac{1}{12}$ every 3 hours (R). **Morphine**, with Atropine, hypodermically, gives relief (B). **Aconitine**, has lately been given with good results (B). **Antipyrine**, and **Acetanilide**, are sufficiently analgesic to relieve pain in many cases. **Iodides**, are promptly curative when tic is due to syphiloma of the nervous system, the pain being nocturnal chiefly (B). **Cimicifuga**, is frequently very effective (B). **Turpentine**, when rheumatic in origin or produced by fecal accumulations (B). **Quinine**, holds a foremost place in the list of remedies (Wa). **Gelsemium** has strong evidence in favor of its value (W). **Ammonium Chloride**, in doses of 30 grains 4 times daily, is of great service in numerous cases, especially when the pain partakes more of a rheumatic than of a neuralgic character (Sir Thos. Watson). **Cannabis Indica**, gr. $\frac{1}{4}$ to $\frac{1}{2}$ rarely gr. j, of a good extract, is very effective and ranks in value next to morphine and atropine (Reynolds). **Physostigma**, a few drops of a solution of the extract, 1 in 30, or one or more gelatine discs of Physostigmine introduced within the eyelids of the affected side, effectively relieved or cured several cases (Munro). **Chloroform**, the liniment applied with friction is sometimes serviceable (Wa); a few drops by deep injection in the vicinity of the nerve trunk (B). **Galvanization** of the fifth nerve, gives decided relief to the pain, and frequently results in permanent cures in cases which belong to the category of the so-called essential neuralgiae (B). [Compare HEMICRANIA, NEURALGIA, NEURITIS, ODONTALGIA.]

Tinea Circinata—Ringworm of the Body.

Mercury, the Bichloride, 1 part in 250 of water, as parasiticide application after depilation (A); Calomel, as ointment, ʒj to the ʒ, is useful (B); strong Citrine ointment rubbed in twice daily is often effectual (Wa); the ointment of the red Oxide often cures ringworm on the body or limbs when other remedies fail (Wa). **Phenol** pure, ʒj to the ʒ of glycerin, or equal parts of each, is a very efficient application (B). **Boric Acid**, is an excellent topical application, especially in that form affecting the scrotum and inner side of the thigh (Watson). **Copper Acetate**, in ointment, gr. x to the ʒ, is a very effective application (B). **Sulphites**, are used in parasitic skin diseases to destroy the parasites (B). **Sulphurous Acid**, is better than Phenol and safer (A); must be fresh to be of use (Bulkley). **Cocculus Indicus**, the decoction locally, after washing the skin well (P). **Oil of Cade**, the best depilatory known (A). **Arsenic** will not cure, but may do service as a nerve tonic or an improver of nutrition, in connection with other remedies (Bulkley). **Iodine**, as liniment once applied (R); with Oil of Tar, 1 to 4, is excellent (Wa). **Kamala**, used locally by the Hindoos (P). **Tar Ointment**, is used with good effect (P). **Acetic Acid**, strong, applied to ringworm of any part of the body except the scalp; no treatment easier, more speedy or certain in its action (R). **Sodium Chloride**, in ointment is a very effective remedy [see under TINEA TONSURANS]. **Cod-liver Oil**, is a powerful auxiliary in weakly and cachectic subjects (Wa). **Diet and Hygiene**, are important; the food should be nutritive and abundant, especially animal fats; daily baths, out-of-door exercise. **Fungus**, the *Trichophyton tonsurans* (A). [Compare DHOBBIE ITCH.]

Tinea Decalvans—Alopecia Areata.

Parasiticide Lotions, must be used after epilation and washing of head daily with soft or black soap. **Collodion**, with Cantharidal Ether, equal parts, as a stimulant after the fungus is destroyed (A). **Oxygen**, locally applied to the scalp by a close-fitting rubber bag, to restore the hair [see under ALOPECIA]. **Tonics**, are necessary, especially for the nervous system (Bulkley). **Fungus**—the *Microsporon Audouini* (A); but I have never seen it, though having made repeated and thorough searches (Bulkley). [Compare ALOPECIA.]

Tinea Favosa—Favus.

Mercury, is efficient when used early; the Bichloride, gr. xx to ʒj of simple cerate (B); or gr. ij to the ʒ of water applied after each epilation (R). **Myrtol**, is curative

of favus (B). **Phenol** pure, in glycerin or cod-liver oil, as a local application (B). **Sulphurous Acid**, as a parasiticide, Acidi Sulphurosi Dil. ʒss, Sodii Thiosulphatis ʒij, Aquæ q. s. ad ʒxvj (Startin); is useful in favus, but when cases are unusually obstinate its action should be assisted by epilation (R). **Simple Oils**, to soften and facilitate the removal of scabs (R). **Poultices**, are useful preparatory to epilation (R). **Iron**, the tincture of the Chloride, internally in doses of ʒx thrice daily for a child ten years old; combined with cod-liver oil if the disease is associated with scrofula (Sir E. Wilson). **Sulphur Iodide**, in weak ointment, gr. xx to the ʒ, well rubbed in after removal of crusts, is the most reliable preparation of its class (Whitla). **Epilation**, must be resorted to and carried out with care and patience (Id). All the remedies useful for ringworm of the scalp may be used against favus, and success depends rather upon the judicious way in which these agents are used one after the other than on the persistent use of any one of them (Id). It is clearly demonstrated that the disease is conveyed from the mouse to the cat and then to the children who play with the affected cat (Id). **Fungus**—the *Achorion Schönleinii* (A); a very rare affection in this country (Bulkley).

Tinea Imbricata—Tokelau Ringworm.

Iodine, the double strength liniment, freely applied, is the best treatment for natives (Mn). **Chrysarobin**, as ointment, gr. xx to the ʒ of vaselin, for limited patches (Id); [see under DHOBBIE ITCH]. **Cassia Alata**, the bruised leaves well rubbed in over the affected area (Id). **Sulphur**, as fumes or ointment, acts very slowly and unsatisfactorily (Id). **Oiling the Body**, is believed to be a preventive (Daniels). **Cleanliness** of the skin and boiling or destruction of the clothing worn next it, to prevent recurrence (Mn). The disease is a form of body ringworm peculiar to certain eastern tropical climates, is produced by a *trichophyton*, and is characterized by a concentric arrangement of closely set rings of scaling epidermis (Mn). [Compare DHOBBIE ITCH.]

Tinea Sycosis—Ringworm of the Beard.

Mercury Bichloride gr. j to the ʒ of water, locally after each epilation. **Sulphur**, ʒj to the ʒ of Petrolatum, as a parasiticide application, after epilation. **Sodium Thiosulphate** ʒj to the ʒ of water, applied 3 or 4 times a day. **Sodium Sulphite** ʒj, Glycerin ʒj, water ʒij, applied locally (Wa). **Bland Oils** to soften the crusts which should be removed with soap and warm water, then the part should be shaved and a parasiticide application made every 6 to 8 hours; shaving and epilation of the diseased hairs should be done on alternate days. **Fungus**—the *Trichophyton tonsurans*. [Compare SYCOSIS, TINEA TONSURANS.]

Tinea Tonsurans—Ringworm of the Scalp.

Mercury, the Bichloride, gr. xx to the ʒ of simple ointment, is an effective application when used early (B); must be used with caution. **Phenol** pure, ʒj to the ʒ of glycerin (B). **Sulphurous Acid**, the acid of the B. P. with an equal part of glycerin, is useful; must be assisted by epilation when the affection is obstinate (R); or Startin's formula (see under TINEA FAVOSA). **Potassium Sulpho-cyanide**, ʒss in glycerin ʒj and water ʒvij, as lotion applied on lint covered with oiled silk, after washing the patches twice daily with warm water and soap and drying (Gee). **Sodium Chloride**, in ointment, equal parts of common salt finely powdered and vaselin, thoroughly mixed, and well rubbed in night and morning after shaving the part, until the skin becomes very sore; is most efficient even in apparently intractable cases (Perkins). **Iodine**, ʒij to the ʒ of the oil of wood tar, is an efficient application, producing no pain and preventing the extension of the disease (R); ʒj or more to the ʒ of true goose-grease, the latter being a bland and penetrating excipient, makes a most effective remedy (Jackson). **Oleum Tigllii** ʒss-j to the ʒ of Sulphur ointment, is effective in obstinate cases; it causes dermatitis and alopecia, but the hair grows again in time (Id). **Acetone** cured a very obstinate case which had resisted all other treatment (MacDonald).

Copper Stearate is an excellent application. **Limewater** as a wash (W). **Resorcinol** said to be a valuable application for the various parasitic skin diseases especially tinea (W). **Arsenous Iodide**, is the best constitutional remedy; gr. $\frac{1}{10}$ increased to gr. $\frac{1}{4}$ for an adult, gr. $\frac{1}{20}$ to $\frac{1}{15}$ for children, with alkaline lotions locally (Wa). **Viola Tricolor**, the leaves are employed in Italy for tinea capitis (P). **Cocculus Indicus**, a decoction locally applied after washing the part well, is efficient (P). **Quinine**, dissolved in glycerin, or a mild mercurial pomade, as grease to the hair of the patient and uncontaminated members of the family, to prevent the sporules reaching unaffected parts (R). **Oils**, may be used to facilitate the removal of the scabs (R). **Cleanliness**, and free use of soap and water, is a *sine qua non*, and in some cases of tinea may be alone sufficient to produce curative results. Isolation of person, and brushes, towels, etc., necessary to prevent infection. **Fungus**—the *Trichophyton tonsurans* (A).

Tinea Versicolor—Chromophytosis.

Iodine locally, preceded by washing with soft soap and warm water (Morris). **Sulphurous Acid**, diluted to one-fourth with water, or a strong solution of Sodium Thiosulphate, as local applications (Id). **Benzol** and lavender water, equal parts of each (Id). **Salicylic Acid** gr. xx, Precipitated Sulphur $\bar{3}$ j, Benzoinated Lard $\bar{3}$ j rubbed in twice daily. **Mercury**, the Bichloride, in solution, gr. j-iv to the $\bar{3}$, applied locally after washing with soft soap and water and a stiff brush. **Chrysarobin** and **Salicylic Acid**, dissolved in Traumaticin or Collodion (Morrow); [see under ДНОВИЕ ИТЧ for formula]. **Fungus**—the *Microsporon furfur*.

Tongue.

Potassium Chlorate, gr. v internally and $\bar{3}$ j-ij ad Oj aquæ locally; in ulcers of tongue (Wa); also for rawness of tongue in advanced phthisis. **Potassium Iodide**, in syphilitic ulcers of tongue (D); and in hypertrophy (A). **Potassium Bromide**, $\bar{3}$ j to $\bar{5}$ vj water as wash, may soothe morbid sensibility of the tongue (A). **Borax**, Sodii Boratis gr. xl, Glycerini $\bar{3}$ j, Aquæ $\bar{3}$ iv, as application in cracked tongue (Wa). **Iodine**, the tincture locally by a fine brush, or as a gargle with 7 or 10 parts of water and some honey, has given uniform success in malignant ulcers (Wa). **Aurum**, internally and locally, has cured hypertrophy of the tongue with induration thereof in scrofulous subjects, also strumous ulceration of the tongue. **Conium**, is thought to act specifically with benefit in ulcer of the tongue (Wa). **Cinnamon**, the oil as a powerful stimulant in paralysis of tongue (P). **Ginger**, **Cochlearia**, **Pyrethrum**, as gargles. **Cloves**, **Mezereon**, **Pepper**, as masticatories, in paralysis (P). **Frenum**, should be divided in tongue-tie; use blunt-pointed scissors, directing the points down close to the jaw, so as to avoid wounding the ranine artery (D); better to cut as little as possible, and directly backwards, as the artery of the frenum may proceed from the sublingual (Holmes). [Compare GLOSSITIS.]

Tonsillitis.

Aconite, when high fever and elevated arterial tension, relieves greatly, gtt. ss-j of tincture every $\frac{1}{2}$ -hour or hour (B); every $\frac{1}{4}$ -hour for 2 hours, then every hour, will almost certainly prove efficacious (R). **Belladonna**, of surprising efficacy, gtt. v of tinct. every 3 hours in $\bar{5}$ ss aquæ (P). **Mercury**, often speedily removes; Calomel, gr. $\frac{1}{20}$, or Hydr. cum Creta, gr. $\frac{1}{2}$ every 2 hours; not in chronic forms (B); gr. $\frac{1}{4}$ of Gray Powder every hour when tonsils almost meet, has marked effect; the Oleate of Mercury and Morphine in obstinate and painful tonsillitis (R). **Silver Nitrate**, locally may abort, if applied early (R); the solid stick, once thoroughly applied in the first stage, rarely fails to prevent suppuration (Howard). **Guaiaic**, disagreeable, but very effective (P); $\bar{5}$ ss doses of tincture every 4 hours has remarkable power; should be given in emulsion with mucilage or yolk of an egg (B); makes an excellent gargle, the tincture of Guaiaic and glycerin, equal parts, in $\bar{3}$ doses every hour or two, gives excellent results in acute tonsillitis. **Opium**, gr. v-x of Dover's powder at bedtime, is in many cases curative (Shoemaker). **Salicylates** often do good in rheumatic angina and in quinsy,

which seems to have some relation to the rheumatic diathesis (W). **Cocaine** in 10 per cent. solution, locally, at intervals of 15 minutes, removes pain at once and promotes resolution; a very efficient application in 5 or 10 per cent. solution, but causes temporary paralysis of palatal muscles, so that liquids regurgitate through the nose (Boeckel): a strong solution painted freely over the affected tonsil in cases which commence on one side of the fauces, will cut short the attack in most cases and prevent suppuration. **Emetics**, at the very onset of the disorder, will sometimes succeed in cutting it short (Sir Thomas Watson). **Potassium Chlorate** internally is valuable (Kerley); in grain doses every half-hour is very efficient (Smith). **Potassium Iodide** in solution locally, gr. j-v to the $\bar{3}$, is useful (B). **Picratol** in 2 per cent. glycerin solution, applied by a swab, is very efficient (Yale). **Ichthyol** in 30 per cent. aqueous solution as a paint, applied twice daily after cleansing with an alkaline solution (Kyle); will abort abscess of the tonsil (Unna). **Ammonium Benzoate**, large doses in whiskey every two hours, is the best treatment (Seiler); checking the disease within 24 to 36 hours (Coston). **Tannic Acid** as an astringent gargle is useful (P). **Hydrogen Dioxide**, the solution is used as a gargle with great benefit. **Quinine** in a dose of gr. x-xv, will sometimes abort the disease (B). **Capsicum** in powder applied on a swab, or the diluted tincture in a gargle, is useful in severe tonsillitis, especially that accompanying scarlet fever (W). **Sodium Bicarbonate** locally by a wet swab or finger to the surface of the tonsils every five minutes for half an hour, then every hour during the same day, will often prevent a tonsillar abscess. **Water** as ice and wet pack around the neck, extremely grateful (B); a cold wet compress covered with oiled silk and a dry bandage, to the neck at night, is very serviceable. **Scarification** of the tonsils gives immediate and marked relief in all cases, especially those which are not amenable to ordinary treatment.

R. Tinct. Aconiti,..... $\bar{3}$ ss.
Tinct. Guaiaci,
Syr. Zingiberis,..... āā $\bar{3}$ ss.
Syr. Simplicis,..... $\bar{3}$ ij.

M. Sig.— $\bar{3}$ ss-ij every 2 hours, according to age. In severe cases, with high fever, bounding pulse, severe headache.
(Shoemaker.)

Tonsils, Enlarged.

Ammonium Iodide, $\bar{3}$ ss in $\bar{3}$ j of glycerin, applied every night by a camel's-hair brush, very efficacious (Wa). **Barium Iodide**, in hypertrophy of the tonsils, effects a rapid diminution in their size, even when indurated for years (Hale). **Liquor Ferri Chloridi**, diluted, $\bar{3}$ j-ij to the $\bar{3}$, painted over tonsils twice daily, is one of the most effective astringents (Mackenzie). **Aluminum Sulphate**, a saturated solution applied daily by a brush, as a mild caustic (W). **Ergot** or **Ergotin**, by injections into tonsils (Meigs). **Zinc Chloride**, as caustic, the most efficient and least annoying method; a saturated solution applied on a wire cotton-holder to each crypt and held there a few seconds; a few applications will shrink the gland in a week. **Tannin**, a strong solution touched daily to tonsils (H); a few sips of a saturated solution, $\bar{3}$ ss in $\bar{3}$ ij aquæ, slowly sipped, will stop bleeding, if profuse (A); gr. xx to $\bar{3}$ j aquæ, hypodermically, as in nasal polypus. **Silver Nitrate**, touched daily to tonsils, will sometimes make them shrink (H). **Catechu**, a serviceable astringent gargle; the infusion $\bar{3}$ vj with tincture of Kino $\bar{3}$ ij, as gargle (Wa). **Oxgall**, locally, is praised (Wa); is of real utility (Wa). **Citric Acid**, rubbed daily to the tonsils, is highly praised in enlargement thereof. **Excision** of a part of the tonsil (H): Mackenzie's double guillotine removes both tonsils at once; hemorrhage seldom happens, ice will generally check it (A). Surgical measures should receive unprejudiced consideration, as the medical treatment is tedious in the extreme.

Tonsils, Ulcerated.

Coptis, the infusion as a gargle (B). **Sulphurous Acid**, dilute, locally by spray, or a solution of Sodium Sulphite $\bar{3}$ j in water $\bar{3}$ j (B). **Potassium Iodide**, will arrest syphilitic ulcerations at once (B). **Phenol**, in a 5 per cent. wash with tincture

of Myrrh, a good application by sponge to throat (Wa). **Cimicifuga**, a decoction of the root as a gargle (Wa). [Compare ULCERS.]

Torticollis.

Atropine relaxes spasm and has been especially useful in rheumatic torticollis (W); hypodermically into the affected muscle in increasing doses until the limit is reached, which is sometimes as much as gr. $\frac{1}{8}$ (Leszynsky); used successfully in spasmodic torticollis, up to gr. $\frac{1}{15}$ (Potts). **Guaiacol**, a few drops rubbed in gently, immediately relieves the pain (Brodnax). **Cimicifuga**, has curative efficacy (P). **Capsicum**, a handful of the crushed pods infused for 36 hours in a pint of hot or cold water, and applied on lint covered with gutta-percha (R); gives striking results (Wa). **Opium**, as liniment with friction, or in opium plaster, is often serviceable (Wa). **Potassium Bromide**, in large doses with Arsenic, may always be tried in the spasmodic form, which is sometimes one of the most obstinate complaints (Whitla). **Gelsemium**, some cases have been reported as cured by its hypodermic administration after tenotomy or myotomy had failed (Id); very large doses, \mathfrak{mij} of Wyeth's fluidextract thrice daily, increased until eight times this amount is taken, so as to produce very pronounced physiological symptoms, in spasmodic torticollis (Weir Mitchell). **Surgical Treatment**, by stretching or resection of a portion of the spinal accessory nerve, has succeeded sometimes in spasmodic torticollis, but it has also failed, and being so unsatisfactory should not be tried except as a last resort (Whitla). **Electricity**, galvanization of the affected muscles and faradization of the opposed ones, quickly relieves (B); has given excellent results in spasmodic torticollis, and if resorted to early may succeed, but must be persisted in for some time (Whitla).

Toxemia.

Alcohol as an arterial and nervous stimulant, may be used with signal advantage in threatened cardiac failure from poisoning by toxins or similarly acting toxic agents which are not so closely allied to alcohol that the latter becomes a reinforcing depressant (W). **Hypodermoclysis** aids the elimination of toxic products by the kidneys (Kemp); saline injections hypodermically and intravenously, are used successfully in various forms of toxemia. If the patient is robust and his condition sthenic, with venous infusion on one side may be conjoined venesection upon the other. The object is to hasten the dilution and elimination of the poison, both directly and through the skin and the kidneys particularly. The results are good in a certain proportion of cases and sometimes extraordinary, while the procedure is practically harmless. The normal salt solution injected into a vein and filling the rectum with a saturated solution of Magnesium Sulphate (McKeown). [Compare SEPTICEMIA, SHOCK, UREMIA.]

Tremor.

Hyoscyamus, the tincture in full doses will palliate mercurial tremor; or Hyoscyamine, gr. $\frac{1}{32}$ gradually increased to $\frac{1}{16}$ (B). **Hyoscine**, is a useful drug in diseases having tremor as a marked symptom, as disseminated sclerosis, delirium tremens, and is usually safe (Weatherly); quiets the tremor of paralysis agitans and chorea, also senile trembling (Robin). **Conium** controls excessive tremor temporarily; has been used in chorea and paralysis agitans (W). **Gelsemium** in full doses; or a combination of Hyoscyamus, Conium and Gelsemium, the first to keep the brain quiet, the latter to quiet the nervous irritation at both the central and peripheral extremities (Lavers). **Cocaine**, influences alcoholic and senile tremor more favorably than any other remedy; large doses and frequent administration are unnecessary (B). **Veratrine**, has been used successfully in alcoholic tremor and that of disseminated sclerosis, also in the trembling weakness of typhoid fever (Ferris). **Calcium Salts**, were given by me in one case of tremor at the beginning of general paralysis, resulting in its cessation for several months (Br). **Arsenic**, \mathfrak{mij} - \mathfrak{ij} of Fowler's solution, diluted with two parts

of water and given hypodermically, was successful in several cases (Eulenberg). **Phosphorus**, in alcoholic and mercurial tremor (De Mussy). **Silver Nitrate**, gr. $\frac{1}{8}$ - \mathfrak{ij} daily, used in six cases of mercurial palsy with fairly rapid recovery (Sementini). **Zinc Phosphide**, is effective in the tremor of mercurial and arsenical poisoning (De Mussy); not so in the tremor of sclerosis (P). [Compare CHOREA, DELIRIUM TREMENS, PARALYSIS AGITANS.]

Trichiniasis.

Benzol, in doses of \mathfrak{xxx} , every hour or two, up to \mathfrak{zjss} daily, followed by a brisk laxative, was very successful in 27 cases, treated simultaneously (Putter). **Purgatives**, as Rhubarb and Senna, or an occasional dose of Calomel, to thoroughly evacuate the gastro-intestinal canal. **Ammonium Picrate** is said to be an efficient remedy (W); experiments show that it has no effect on the trichinæ (Erb). **Glycerin** in large doses, to destroy the worm by its hygroscopic qualities, has been recommended. The indications, in the stage of invasion, are to relieve the pains, to secure sleep, to combat the fever, and to support the patient's strength; there are no medicines which have any influence upon the embryos in their migration through the muscles (O).

Trismus.

Chloral is valuable in trismus neonatorum, gr. j-ij by the mouth or double that amount by the rectum, to a young babe (W). **Physostigma** has been used, but with no more encouraging results than in tetanus (W). **Atropine** hypodermically, has been used with benefit (R). **Opium** in doses of $\mathfrak{m}\frac{1}{2}$ of the tincture, with castor oil and a warm bath, in infantile trismus. **Cannabis Indica** has been used successfully in trismus of the new-born (B). **Turpentine** locally to the cord, is highly esteemed in the southern states, for trismus neonatorum. **Aseptic Dressing** of the cord as a prophylactic, to prevent the entrance of Nicolaier's bacillus. Treatment of any kind is seldom effectual (D); is never effective (E). Trismus neonatorum, lock-jaw of the new-born infant, may be due to many causes, one of which is bathing in very hot water. A certain midwife, whose hands could not distinguish the differences in temperature of the bath, sent me over 100 cases (Weber). [Compare TETANUS.]

Tuberculosis, Acute.

Quinine, to subdue the fever, also **Salicylic Acid** for the same purpose, with repeated blistering over different parts of the chest and many dry cuppings of the lower limbs and the trunk morning and evening; this, with wine and alcohol, broths, jellies, milk and peptonized foods, is my plan of treatment for acute miliary tuberculosis, by which one case was absolutely cured (Jaccoud). **Arsenic**, appears to reduce the temperature gradually and is useful in many ways (R). **Cold**, to the surface of the abdomen, with ice sucked freely, the body sponged with iced vinegar and water, food and drinks to be iced, and even iced enemata sometimes; with Quinine, gr. x-xxx once in 48 hours, or the pill of Quinine gr. j, Digitalis gr. ss, and Opium gr. $\frac{1}{4}$, every 4 hours, fluid food every hour or half hour day and night, in acute miliary tuberculosis, may bring about a cure if energetically followed from the beginning (McCall Anderson). **Treatment** of acute pulmonary tuberculosis, either the miliary form or acute pneumonic phthisis, is only palliative (Bruce). [Compare PHTHISIS.]

Tuberculous Affections.

Arsenic, children affected with tuberculosis involving the lungs, intestines and peritoneum, have steadily and slowly improved and finally recovered under Arsenic treatment (R). **Salicylic Acid**, Unna's strongest plaster, applied repeatedly for several days, to remove the horny covering in tuberculosis verrucosa cutis; this will remove much, and the rest is destroyed by the fuming Acid Mercuric Nitrate, applied to a small

portion of the growth at a time, as it is painful (Crocker). **Camphorated Naphthol**, hypodermically in tuberculous adenitis, tuberculosis of the testis and of the bladder. **Potassium Cantharidinate**, gr. $\frac{1}{30}$ to gr. $\frac{1}{20}$ hypodermically, produces an exudation of serum throughout the body, and may cause a concentration at an affected spot of efficacious substances which would not ordinarily find their way there, but it should not be employed when kidney disease exists (Liebrich). **Hydrargyrum Thymol-aceticum**, in solution injected into the glutei muscles every eight days, followed after a few injections by Potassium Iodide, gr. iij thrice daily by the mouth, as a cure for tuberculosis (Tranjen, Ewald). **Zinc Chloride**, in dilute solution, deeply injected into the tissues surrounding tubercular deposits, in order to induce a condition of sclerosis fatal to the growth or existence of the bacilli: in tuberculosis of the epididymis and in spina ventosa a $\frac{1}{2}$ in 20 solution; for tuberculous disease of the joints, ribs and glands a $\frac{1}{2}$ in 10 solution, of which 20 drops to be injected in a number of places around the periphery of the diseased part (Lannelongue). **Iodoform** seems to have a specific influence on the bacillus, and its value as a local application in surgical tuberculosis seems to be firmly established (W); in 10 per cent. emulsion filled into the cavity after free opening and scraping, the cavity being then sewn up, gives excellent results in tuberculous abscesses (Billroth); a sterilized 10 per cent. emulsion made with glycerin or olive oil, injected every 14 days or oftener into tuberculous joints and abscesses after thorough aspiration, also in tuberculous empyema (Bruns); this may be well employed for all forms of local tuberculosis of soft parts, as the glands, testes and lungs (Trendelenburg). **Guaiaicol** by inunction, is of great value in tuberculosis of infants and children (Rachford). **Thiocol** is serviceable in surgical tuberculosis, and has a decidedly effective influence on the process (Schnirer). **Ferrisol** in doses of gr. xv by the mouth, also in 10 per cent. solution by intramuscular injection, is a useful remedy (Secreti). **Ichthyol** gr. xx increased to gr. lxx thrice daily internally, has given excellent results in tuberculosis of the bladder and kidneys (Richter). **Ichthoform** proves satisfactory for the diarrhea and pain of intestinal tuberculosis (Schæfer); in 1 to 2,000 solution by irrigation in that of the bladder (Lohnstein). **Phenosalyl** as a bactericide, used in 16 cases of laryngeal tuberculosis with curative results (Stein). **Cod-liver Oil** is the remedy from which most good is to be expected in the tuberculous diathesis (Wa). **Serum-treatment** and the use of Tuberculin as a diagnostic agent are discussed under the title SERA in Part I. [Compare LARYNGITIS TUBERCULOUS, LUPUS, MENINGITIS TUBERCULOUS, PERITONITIS TUBERCULOUS, PHTHISIS, SCROFULOSIS, TABES MESENTERICA.]

Tumors.

Mercuric Bromide, in $\frac{1}{2}$ grain doses, has benefited abdominal tumors (Wa). **Chloroform**, to aid in diagnosis of abdominal tumors when deep-seated, and when walls of the belly are hard and rigid; also in phantom tumors (R). **Pepsin** hypodermically into the substance of morbid growths which are homologous to the tissues, especially fatty tumors, to arrest their growth and cause their absorption. **Hyoscyamus**, the leaves as cataplasm or fomentations to painful tumors, afford great relief (Wa). **Iron**, the Liquor Ferri Chloridi is found to be valuable as a curative application to fungous or hemorrhoidal tumors (Wa). **Galbanum**, as plaster to indolent, non-malignant tumors, to diminish or cause their absorption (Wa). **Electrolysis**, is employed with more or less benefit in sebaceous tumors, lipoma, bronchocele, enlarged glands, etc. (Wa): solid tumors, as goitre, enlarged glands and similar growths have been repeatedly cured by electrolysis (B). [Compare CANCER, CYSTS, GLANDULAR ENLARGEMENT, GOITRE, POLYPUS, UTERINE TUMORS, WEN.]

Tympanites.

Turpentine, often greatly benefits (P, Wa); \mathfrak{z} j every 6 hours in tympanites of typhoid, with prostration but without diarrhea (R). **Asafœtida**, in hysterical tympanites, internally or as enema, beneficial (P); also in that of fever (Wa). **Capsicum**, gr. ss-ij, every 4 hours (P). **Cocculus Indicus**, a few doses of the tincture will often

succeed in the tympanites of peritonitis and enteric fever (P). **Ginger**, with drastic purgatives (P). **Posture**, relieves many bad cases promptly; inversion or partial inversion of the patient, as in the knee-chest position, for 10 or 15 minutes, to cause the gravitation of the bowels upwards, thus straightening out the rectum; or if this is not practicable, place the patient on one side and elevate the foot of the bed two or three feet (Sweetnam). **Surgical Measures**, by celiotomy and incision of the gut, should be done promptly, when cathartics, posture, enemata and the use of the rectal tube have failed to give relief (Porter). **Puncture or Aspiration** only in extreme cases and as a last resort, and then only in such cases which present no other cause for celiotomy than the tympany itself, as typhoid fever without perforation, pneumonia (Id). [Compare PERITONITIS, TYPHOID FEVER.]

Typhlitis.

Opium has undoubted curative power (B); for great pain but not in doses sufficient to mask the symptoms. **Saline Purgatives** to remove impacted feces, the cause of the trouble in most cases. Drastic purgatives should not be used (B). **Enemata** of soap and warm water to aid in the removal of impacted fecal matter. **Lime-water** with milk, also ice and champagne, for the vomiting. **Leeches**, should never be omitted when tenderness and fever begin (B). **Ice-bag**, over the swelling (B); has conquered many cases which the surgeons would operate on for appendicitis. [Compare APPENDICITIS, INTESTINAL OBSTRUCTION.]

Typhoid Fever.

Acetozone, the solution may be given internally ad libitum; used early and regularly it shortens the course of the disease and ameliorates all the symptoms, used in 128 cases with mortality of 8½ per cent. (Harris); in 40 cases, no death (Westinghouse); in 24 cases, no death (Wasdin); in 40 cases with 2 deaths (Abt); in 53 cases with no death (Woods). **Guaiaicol** \mathfrak{m} ij, or the Carbonate gr. iij, every 2 hours as an intestinal antiseptic, was used in 408 cases with a mortality of 5½ per cent., against 13 per cent. in 1998 cases treated otherwise (McCormick); \mathfrak{m} x-xv painted over the skin where it is readily absorbed, is efficient in reducing the temperature (Montagnon); the Carbonate gr. xxv-xxx twice daily, is highly efficient, used in 60 cases with no deaths (Hoelscher). **Thiocol** is an ideal intestinal antiseptic in this disease (Johnston). **Salol** is of great value as an intestinal disinfectant, promoting healing and preventing reinfection; given in 5 to 10 grain doses, according to age, every 4 hours until the urine is tinged, then reducing the amount and frequency, but maintaining a faint coloration of the urine, has for ten years afforded me the most gratifying results (Bramwell): it should not be given in the compressed tablet form for many reasons. **Salophen** has proved equally efficient. **Copper Arsenite**, in divided daily doses of gr. $\frac{1}{100}$, commenced early and continuously used, will maintain a moderately low temperature, a good pulse rate, comparative freedom from great abdominal pain and tympanites, and will lessen materially the number of stools, while it greatly improves their character and consistence (Aulde); used in 90 cases with but one death; leaves an excellent condition of the alimentary tract after the fever is over (Thomas). **Phenol** pure, \mathfrak{z} j with tincture of Iodine \mathfrak{z} ij, of which mixture 1 to 3 drops every two or three hours, is a very good plan of treatment (Da C); all cases during an entire year were treated with a mixture of Phenol and Chloroform, without the loss of a single case, by Dr. Quill of the Indian army. **Chloroform**, the spirit in mixture with Phenol, as above; a ½ per cent. solution of Chloroform will kill the bacillus of enteric fever (Werner). **Mercury** as Calomel in small doses at the onset (R); to move the bowels at first (McCormick); gr. x in one dose the first day, then gr. iij daily for 3 or 4 days, the German specific treatment (B); with Guaiaicol etc., the two chief agents in a specific treatment which aims at aborting the disease by intestinal antiseptics and elimination (Woodbridge). **Potassium Bromide** is as much of a specific for this disease as quinine is for ague, aborting the fever in 8 or 10 days (McCormick). **Cinnamon**, the Oil as an internal germi-