

(Wa); its use limited to the sacculated form (S). **Hydrastinine**, has a mild but enduring contractile action on the arteries, and is useful in acute and chronic aortitis and arterio-sclerosis, as a preventive against aneurism (Boix). **Gelatin**, by hypodermic injection to increase the coagulability of the blood; used successfully in 9 cases (O). **Electrolysis**, galvano-puncture in deep aneurisms; not very successful (B). The object sought is the coagulation of blood within the aneurismal sac; cures have not been attained by this treatment, but in many it has produced great amelioration of the most distressing symptoms (Petit). **Aliment**, milk regimen, for denutrition (B); a low diet, with absolute rest; Ergotin and Potassium Iodide for deep aneurisms beyond reach of surgical treatment (B). **Rest**, in recumbent posture, and light, unstimulating diet, are primary and essential elements in the treatment of aneurisms. **Surgical Treatment** includes ligation of the vessels, also pressure by a tourniquet or bags of shot, the operator's fingers, etc., applied to the main artery above the tumor and the introduction of fine wire into the sac to favor coagulation.

℞. Potassii Iodidi, ʒj.
Tinct. Veratri ʒjss.
Tr. Cinchonæ Co., ʒj.
Tr. Cardamomi Co., ʒjss.
Tr. Gentianæ Co., ʒss.
Syrupi Simplicis,
Alcoholis, āā ʒiv.
Aquæ, q. s. ad ʒxvj.
Miscæ. Sig.—ʒss thrice daily. Each
dose has gr. xv of Potassium Iodide.

℞. Acidi Gallici, ʒj.
Ext. Ergotæ,
Digitalis, āā gr. xx.
Fiat massa et div. in pil. xx.
Sig.—One every two hours.

℞. Plumbi Acetatis, gr. xxxvj.
Extracti Opii, gr. iv.
Confectionis Rosæ, q. s.
Ft. pil. xij. One every four hours.

Angina Pectoris.

Amyl Nitrite, as inhalation, affords signal relief (R); unsafe in advanced degeneration of cerebral vessels and fatty degeneration of heart (B); gives great relief during paroxysms (Br). **Sodium Nitrite**, is less rapid in action than Amyl Nitrite, but is more efficient in preventing return of symptoms (Br). **Nitroglycerin** $\text{C}_3\text{H}_5\text{N}_3\text{O}_9$ has been used with success (Pf, R). **Chamomile**, in pseudo-spasms of hysterical persons (P). **Ether**, aborts a mild attack (B); Sulphuric Ether in the nervous form, a spoonful immediately on commencement of attack will greatly mitigate it (Anstie). **Phosphorus**, often serviceable (R). **Morphine**, hypodermically, especially when cardiac dyspnea; strengthens the heart (R). **Strychnine**, in the milder forms of angina, very small doses (P). **Turpentine** applications, hot over chest, to mitigate severity of the paroxysms, especially in the aged (Wa). **Quinine**, when intermittent (Wa); or when any malarial taint present (Br). **Brandy**, in frequent small doses, with hot bran poultice over heart and warmth to extremities. **Cocaine**, in doses of gr. $\frac{1}{4}$ to $\frac{1}{2}$ thrice daily over heart and warmth to extremities. **Cocaine**, in doses of gr. $\frac{1}{4}$ to $\frac{1}{2}$ thrice daily over heart and warmth to extremities. **Cactus** is efficient in pseudo-angina pectoris. **Chloral**, may be well prescribed in pseudo-angina pectoris (De Holstein). **Cratægus Oxyacantha**, the English hawthorn, a fluid extract of the berries, used in 40 cases of true angina with remarkably good results (Jennings). **Aconite**, believed by Gubler to be appropriate, and by Fleming to have been curative in many severe cases resisting other remedies (P); in cardiac disease its action is uncertain (Br). **Arsenic**, lessens or prevents paroxysms, if used in the intervals (Anstie).

Anthrax.

Nitric Acid strong, applied steadily, after thorough cleansing and drying, to destroy the diseased mass (D). **Bromine**, to saturate the surface (D). **Nitric Acid** fuming, is the preferable caustic (Greenfield). **Quinine** and Phenol, used internally, are indicated in all forms, also stimulants, as Ammonia, Ether, and Alcohol (Greenfield). **Sodium Sulphite**, in doses of gr. x, has been recommended. **Collargolum** intravenously, produces a prompt and efficient cure (Fischer). **Morphine** for the diarrhea and insomnia. **Senega** and other expectorants when the lungs are affected. **Excision**

and **Cauterization** demanded, when from direct inoculation; the two most successful measures (Greenfield). **Phenol**, a 2 or 3 per cent. solution may be injected subcutaneously around the pustule thrice daily, and applied on compresses soaked in the solution (Jarnvosky); of 24 cases so treated 17 recovered (Matveieff). **Eschar** should be promptly destroyed, to prevent contagion. **Diet**, a plentiful supply of animal food, beef-tea, milk and eggs.

Antrum Disease.

Hydrogen Dioxide, the solution, 1 to 12 of water, injected through the ostium for diagnosis of empyema of the antrum; if pus be present it is driven out, and fills the nose as a white foam (Brown). **Chloroform**, by inhalation, small quantities frequently, for treatment of acute catarrh extending to the antrum, extremely efficient, both as a remedy therefor and as a preventive of suppuration therein (Potter). **Cocaine**, in 1 per cent. solution as nasal spray, to secure contraction of the swollen mucosa (Hickey). **Adrenalin Chloride**, in solution of 1 to 4,000, as nasal spray every 2 hours, to reduce the swollen mucosa about the hiatus semilunaris, and free the maxillary outlet of the antrum for drainage (Id). **Argyrol**, a 2 per cent. solution caused marked improvement in a long-standing case of empyema of the antrum (Fletcher). **Sulphaminol**, by insufflation, has been successful in diseases of the antrum and frontal sinuses. **Operative Measures**, that in most favor is to enter the antrum through the alveolus of the second molar tooth (Garretson); to give free drainage and enable medication of the diseased mucous membrane it is best to enter the antrum in its most dependent portion, through the upper part of the alveolus or immediately above it, between the roots of the 2d bicuspid and 1st molar; a gold tube then fitted to the opening, so as to project beyond the mucous membrane, will give free drainage, without sacrificing a sound or even diseased tooth (Brown). **Boric Acid**, in saturated solution, as wash to cavity twice a day, the after-treatment; occasionally injecting Iodine, Zinc Sulphate or Bismuth Subnitrate (Id).

Anus, Fissured.

Hydrastis, locally, promotes healing (B). **Rhatany**, as injection, night and morning, after enema in the morning to move the bowels (Pf, Tr). **Iodoform**, improves and relieves pain (B). **Iodo-tannin**, well applied, effective (B). **Belladonna**, locally of great service for painful spasms of sphincter (P). **Opium**, with gall-ointment for fissures of anus; mild purgatives should be simultaneously employed (R). **Sulphur**, as a mild purgative, to cause soft motions (R). **Ichthyol**, pure, applied daily after local anesthesia by cocaine, is very efficient, giving complete relief in a week or two (Conitzer); 10 to 20 applications cured several cases (Cheron). **Tannin**, ʒj in Glycerin ʒij, introduced on a tent, night and morning, with great advantage (Wa). **Collodion**, as protective covering (P). **Potassium Bromide**, with 5 parts of Glycerin, as local application (R). **Silver Nitrate**, in solution, to the ulcer after careful cleansing and applying a 4 per cent. solution of Cocaine, which prevents the pain due to the silver solution; followed by Iodoform oint. gr. xxx to the ʒ; this is most efficient (Adler). **Castor Oil**, as a mild purgative (R); to keep motions soft (Br). **Surgical Means**, the most efficient; forcible dilatation of sphincter or partial division in severe cases, through the mucous membrane and a few fibres of sphincter. Anal fissure, when uncomplicated with some other rectal affection, is curable in many cases by non-operative methods of treatment (Adler). **Mercury**, an ointment of the Oxide, 30 grains to the ʒ, has cured many cases (Id).

℞. Hydrarg. Chlor. Mitis, gr. iv.
Ext. Belladonnæ,
Pulv. Opii, āā gr. ij.
Ung. Sambuci, ʒj.
M. Sig.—To be applied frequently in
anal fissure. (Allingham.)

℞. Plumbi Acetatis,
Zinci Oxidi, āā gr. x.
Pulv. Calaminæ, gr. xx.
Adipis Benzoinat, ʒiv.
M. Sig.—Ointment for use in anal fissure.
(Allingham.)

Aphonia.

Ignatia, in aphonia of hysterical women (P). **Atropine**, in hysterical aphonia and for fatigue of vocal cords, gr. $\frac{1}{20}$ to $\frac{1}{80}$, morning and evening (B). **Ethyl Bromide**, for rapid anesthesia, during which it was suggested to the patients to shout out loudly their names, count numbers, etc.; this successful in 5 cases of hysterical aphonia in women (Arslan). **Nitric Acid**, $\text{m}v-x$ of the dilute acid, for hoarseness of singers, in fatigue of vocal cords, and when aphonia is stomachal (B). **Benzoin**, the tincture by inhalation in laryngeal catarrh (Br). **Oil of Rue**, as inhalation in chronic catarrh (Br). **Uranium Nitrate**, as spray in very chronic catarrh (Br). **Alum**, gr. $x-3j$ aquæ, as spray, in chronic coughs and hoarseness (R). **Borax**, a piece the size of a pea allowed to dissolve in the mouth (R). **Glycerite of Tannin**, locally in chronic inflammation of the throat (R). **Sulphurous Acid**, by inhalation, spray, or fumigation, in clergyman's aphonia (R). **Ipecacuanha** wine, as spray, when congestion of vocal cords (R); in laryngeal catarrh (Br). **Ammonium Chloride**, as vapor inhaled, of great value in catarrhal aphonia (Wa). **Turkish Bath**, at commencement of a feverish cold (R); in acute laryngeal catarrh (Br). **Galvanism**, localized, the best treatment for hysterical aphonia.

℞. Acidi Nitrici Dil.,..... ʒij.
Tinct. Calumbæ,..... ʒj.
Aquæ,..... ad ʒiv.

M. Sig.—A dessertsp. in a winegl. of water thrice daily.

℞. Aquæ Ammonia,..... āā ʒj.
Aquæ,..... āā ʒj.

M. Sig.—A teaspoonful in a pint of hot water for each inhalation.

Aphthæ.

Potassium Chlorate, the best remedy; a solution of gr. x to the $ʒ$ as wash, alone or with borax (Br); and gr. x to xx by the stomach (B). **Borax**, with honey, or as glycerite of borax, frequently used (R); crystals allowed to dissolve in the mouth (W). **Sulphurous Acid**, as solution, strong or diluted, locally (R), diluted as spray (B). **Mineral Acids**, formerly much used (B). **Mercury**, Hydr. cum Creta in small doses to remove the indigestion on which aphthæ often depend (B); Borax being used locally when aphthæ exist in the mouth (Wa). **Copper Sulphate**, a weak solution painted over mucous membrane (R). **Potassium Iodide**, gr. $j-v$ in ʒj aquæ, locally (B). **Salicylic Acid**, one part dissolved in alcohol to 250 of water (R). **Quinine**, gr. j every 2 or 3 hours, in infants (B), especially when consequent on diarrhea (Br). **Coptis**, the infusion has repute in New England (B). **Bismuth**, freely to the parts (B); as a local application (Br). **Glycerin**, will sometimes cure (R). **Rhubarb**, the compound powder to remove indigestion (Br); is highly useful in small doses (Wa). **Limewater**, as a mouth-wash, is much used.

℞. Acidi Sulphurosi,..... ʒij.
Aquæ,..... q. s. ad ʒij.

M. Sig.—Mouth-wash, or may be used as a spray.

℞. Pulv. Rhei Co.,..... ʒij.
Sacch. Lactis,..... q. s.

Triturat. et div. in pulv. xij. Sig.—One powder thrice daily.

Apoplexy.

Aconite, when full, strong pulse, hot, dry skin, plethoric cases, is the best remedy (P); to lower blood-pressure and prevent further hemorrhage, where the pulse is strong and arterial tension high (Br). **Elaterium**, as a purgative, a large dose (gr. ij) in suppository with soap; or as an injection into the large bowel (P). **Croton Oil**, as purgative, a drop may be put on the back of the tongue (Br); $\text{m} \frac{1}{4}$ or $\frac{1}{2}$ each hour (R). **Colocynth**, as a derivative purgative (Br); appears to act well (P). **Cold Water**, often harmful, though frequently used; is injurious when face pale, surface cool, circulation depressed (B). **Electricity**, very mild galvanic currents to promote absorption; caution necessary, especially if much headache and vertigo (B). **Diet and Hygiene**,

of great importance in patients subject to apoplexy; avoid stimulating food and drink, especially beer, over-eating, excitement, haste, exposure to hot sun, heated rooms, etc. At no subsequent period should a full animal diet or the use of undiluted wines be indulged in (A). **Diagnosis**. Should be carefully differentiated from alcoholism, with which it is often confounded. [Compare CEREBRAL CONGESTION.]

℞. Tinct. Aconiti,..... ℥x.
Aquæ Cinnamomi, .q. s. ad ʒij.

M. Sig.—A teasp. every $\frac{1}{2}$ hour for 2 hours, then every half-hour.

℞. Ext. Colocynthidis Co.,..... gr. xx.
Olei Tiglii,..... ℥ij.

Fiat massa et div. in pil. iv. Sig.—One pill as required. until free purgation.

Appendicitis.

Opium or **Morphine**, in small doses to relieve pain, but not to narcosis (Tirard); not in sufficient quantity to mask the symptoms, and is best avoided unless imperative by reason of pain and collapse (Bruce). **Calomel**, as a germicide and evacuant, gr. $\frac{1}{10}$ every half hour for 12 doses, followed by ʒj of Magnesium Sulphate every hour until the bowels move several times (Mitchell); with Opium, an old practice which should be revived (Bruce). **Purgation** by Calomel and Carlsbad salts, from the beginning of the third day or during the active stage (Wyeth); should be avoided during the first three days (Bruce); purgation disturbs the viscera and is liable to set up general peritonitis (Tirard); in my experience no acute case has terminated fatally in which neither food nor cathartics were given by the mouth from the beginning of the attack (Ochsner). **Salol**, as an intestinal antiseptic, gr. x with gr. xx of bismuth subnitrate every 4 to 6 hours (Mitchell). **Ichthoform** internally, to moderate the general abdominal and peritoneal symptoms (Polasco). **Cocaine** or **Chloretone**, for the nausea when excessive (Mitchell). **Boric Acid** in hot saturated solution, as fomentations to the abdomen in the stage of invasion (Bruce). **Heat** by fomentations to relieve pain (Tirard). **Ice-bag**, applied over the appendix, the most efficient measure to relieve pain and control inflammation, and has cured many cases. **Enemata**, of soap and water in large quantity, after 72 hours (Bruce); should be used at the commencement to unload the colon (Tirard). **Rest** in bed is essential and should be absolute, the patient not rising to the sitting posture for any purpose (Id). **Diet**, none by the mouth for at least four days after pain has ceased, not even water, in order to prevent peristalsis, which increases the area of infection (Ochsner); 416 cases so treated with mortality of less than 4 per cent. (Id); other methods showing mortality of 14.6 per cent. (Deaver), 33 per cent. (Broca) and even 50 per cent. (Kirmisson); rectal feeding should be used exclusively, and the stomach emptied at once by lavage (Ochsner). **Water** may be taken freely with ʒj of Hydrogen Dioxide solution in each glass (Mitchell); not by the mouth (Ochsner). **Milk** to be avoided, its casein being liable to fermentation causing gas in the intestines (Mitchell). **Operation** is indicated when there is exacerbation of symptoms (Park), early removal of the appendix will prevent extension of infection to the peritoneum (Ochsner); in 3 years when operating on all cases my mortality was 33 per cent., in 3 years and more of opportunist treatment it was only 10 per cent. (Broca); may usually be left open for decision until the fifth day or after, though demanded immediately in all ultra-acute cases and those in which suppuration is suspected (Treves); simple acute cases are generally best treated by internal medication (Wette); skilful medical treatment will take 95 per cent. of the cases through their first and second attacks safely (Mitchell). [Compare PERITONITIS, TYPHLLITIS.]

Appetite.

Ignatia, will correct diseased appetite (P); especially in hysterical subjects (Br). **Anthemis**, will stimulate the appetite. **Cannabis Indica**, produces a ravenous appetite. **Bitters**, to stimulate the appetite (R). **Calamus** chewed, is a good appetizer. **Orexin Tannate** is a powerful promoter of the appetite and efficient in the anorexia of many affections (Kölbl), especially valuable for children (Steiner), and in nervous

anorexia (Hüfler). **Condurango** is efficient for the anorexia of adults, but disappointing in children (Steiner). **Food** should be savory and well cooked. **Habits** require examining into, when lost appetite complained of. **Fluoride** of Sodium or Potassium will produce almost total anorexia, and may be employed with advantage in bulimia (Da C). [Compare **DYSPEPSIA**.]

℞. Gentianæ, Quassia, Cinnamomi, āā ʒij.
Sig.—Put into a pint of boiling water, and when cold strain; take a winegl. thrice daily as an appetizer.

℞. Anthemidis, Quassia, āā ʒj.
Sig.—Put in a pint of boiling water, and when cold strain; take a winegl. thrice daily before meals as an appetizer.

Arthritis Deformans.

Arsenic for the pain, anemia, rapid pulse, and mal-nutrition (Kolipinski); when referable to nervous affections (B); in large doses continued is sometimes of great benefit, but its action is capricious (R); is beneficial in small doses (Da C). **Sodium Arsenite** gr. ʒ and Sodium Chloride gr. jss in ʒj of boiled water, hypodermically in the gluteal region every third day for a year in severe forms of the disease (Kolipinski). **Antipyrine** gr. v for the pain in acute attacks, is often effective (McCrae). **Iodides**, often signally benefit, especially when due to syphilitic, mercurial, or mineral poisoning (B); large doses of Potassium Iodide sometimes required (R); combined with Guaiac, or Corrosive Sublimate, often curative in cases resisting these remedies given separately (Wa); Potassium Iodide should always be fairly tried (Da C). **Ferrum Iodide** holds the chief place in the treatment (Perry). **Guaiacol Carbonate** and Potassium Iodide are the most valuable drugs (Luff). **Formic Acid**, gtt. v. of a 2 per cent. solution, preceded by gtt. viij of a 1 per cent. solution of cocaine, hypodermically into the most painful locations, proves remarkably efficient (Couch). **Aurum**, the Bromide of Gold and Arsenic has proved curative (Wood). **Remedies** for articular rheumatism and gout are injurious in this disease. **Ichthyol** locally with friction, is of great benefit (Kölbl). **Cod-liver Oil** locally and internally, is of much value (R). **Electricity** by alternating currents from the induction coil, is a valuable treatment (Jones). **Exercise** though painful is beneficial, rest in bed aggravates the disease; self-massage of the joints (McCrae). **Massage** is of great value in any form (Perry); may be used to ameliorate the condition in chronic and incurable cases (Da C). **Dry Heat** by hot-air baking at 350° F. for 20 to 30 minutes only, longer exposure in many cases injurious (McCrae). **Diet** should be full, with meat, the patient should take as much nourishment as possible (Id); desserts, fruit, and alcohol injurious. **Baths**, Turkish or sulphur; the cold douche, slightly warmed in winter, used for one or two minutes, then rub dry (R). **Counter-irritation** by the actual cautery or flying blisters to the affected joints, passive movements thereof, sulphurous baths, also Potassium Iodide internally in doses of 10 to 30 grains in the 24 hours (Létulie).

Ascites.

Digitalis, when ascites is part of a general dropsy due to cardiac or renal diseases; is of the greatest service, except where aortic regurgitation and cardiac hypertrophy (P); a fresh infusion the best preparation (R); its action increased by combination with Squill and Mercury (Br). [See formula below.] **Jalap**, the most generally approved hydragogue purgative is compound powder of Jalap with Podophyllum (B); with Potassium Bitartrate, combined in form of electuary, may be persevered with daily though apt in some cases to cause gastric derangement (Saundby). **Stillingia**, in ascites due to hepatic changes (B). **Elaterium**, as hydragogue cathartic, gr. ʒ, with a grain of Ext. Hyoscyami, and a drop of some aromatic oil, is the most efficient of its class in ascites but its action is very exhausting (W); cautiously in debilitated subjects, and is contraindicated where gastro-intestinal irritation or inflammation present (B). **Arsenic**, when ascites is due to feeble heart, and in that of old age (B); did excellent

service after tapping in a woman aged 82, from whom the writer removed 6½ gallons of ascitic fluid at one tapping, when almost moribund, with the result that she lived ten years longer (Potter). **Theocine**, gr. iv thrice daily as a diuretic, to reduce effusion (Meinertz). **Diuretin** is often of marked benefit, especially in cases of cardiac and renal origin. [See under **DROPSY**.] **Aurum**, has an ancient reputation; is efficient in ascites due to chronic hepatic disease (Gœtzner), or induration of the abdominal organs (Schroff). **Diuretics**, are of little use when the accumulation is excessive, the venous pressure seems to be too great for them to act (Saundby). **Copaiba** is an excellent remedy in hepatic dropsy (Br); the resin in doses of 10 to 15 grains often serviceable in cases of moderate effusion (Saundby). **Milk-diet** in an ancient remedy for ascites, and often successful, causing profuse alvine and urinary discharges (B); is sometimes very serviceable when the renal action is inadequate (Br). **Surgical**, paracentesis abdominis should be done in all cases where excessive effusion; laparotomy and washing out of the peritoneal cavity, in cases of tubercular peritonitis with effusion, which has recently been treated successfully thereby (Saundby). [Compare **DROPSY**.]

℞. Potassii Bitart., ʒss.
Mellis, ʒj.
Sig.—A teasp. every 2 hours until bowels are freely moved.

℞. Potassii Bitart., ʒss.
Jalapæ (pulv.), ʒjss.
Mellis, ʒj.
Sig.—A teasp. every 2 hours until bowels are freely moved.

℞. Copaibæ, ʒij.
Alcoholis, ʒv.
Spt. Chloroformi, ʒj.
Mucil. Acaciæ, ʒij.
Aquæ, q. s. ad ʒxij.
M. Sig.—A tablesp. thrice daily.

℞. Hydrarg. Chlor. Mitis,
Digitalis, (pulv.)
Scillæ (pulv.), āā gr vj.
Fiat massa et div. in pil. vj.
Sig.—One pill thrice daily, in ascites from hepatic changes.

Asphyxia and Apnea.

Of the New-Born.—Clean the mucus out of nostrils and throat; catheterize the trachea, and suck up the mucus. Marshall Hall's method,—by placing child on abdomen, then bringing into lateral posture, repeating slowly and deliberately. Schultze's method,—by placing the thumbs upon the anterior surface of thorax, the indices in the axilla, and the other fingers along the back, the face of the child being from you; rotate the child, by swinging upward, so that the inferior extremities turn over toward you. In a moment re-rotate to the original position. Do not support head or legs in the forward rotation; their bending upon or toward the abdomen gives a forced expiration.

From Foreign Bodies in Air Passages.—If the foreign bodies are round and smooth, invert the patient head downwards and strike upon the back. The bristle-probang is a good instrument for the removal of fish bones, coins, etc., from the gullet; or a pair of curved forceps will often render good service. The writer removed a gold plate with three teeth attached, from the esophagus of an insane woman, by passing down a curved piece of stout wire, having the end bent upon itself to form a hook. After the hook was passed to one side of and below the obstruction, the wire was half rotated, so as to engage the plate, which came up on the second trial of the improvised instrument. Tracheotomy or Laryngotomy may be necessary, as a final resort.

From Drowning.—Remove the person from the water as rapidly and gently as possible, turn the face downward for a moment and depress the tongue, in order that water, mucus, etc., may be removed from immediately over the entrance of the wind-pipe. Give the patient plenty of fresh air, fully exposing neck and chest to the breeze, unless that be inclement. Turn gently on the face, one forearm being under the forehead, and raise the body up that the water may have free discharge from the mouth. Place the patient upon the side and apply stimulants (Ammonia, etc.) near to the nostrils; or the cold douche to the face and chest in order to excite respiration.

The above measures being ineffectual, convey the body to the nearest convenient

spot, strip it carefully and dry it, and place it on a warm bed, with head and shoulders slightly raised, and at once employ one of the following methods:—

Silvester's Method.—Pull the tongue forward, to prevent obstruction to entrance of air into the windpipe; produce expansion of the chest by drawing the arms from the sides of the body and upward until they almost meet over the head. Then bring the arms down to the sides again, causing the elbows almost to meet over the pit of the stomach, thus producing contraction of the chest. This imitation of the act of respiration should be continued at the rate of fifteen or sixteen times a minute, as in health.

Marshall Hall's Method.—The person should be placed flat on the face, gentle intermittent pressure being made with the hands on the back, the body turned on the side, or a little beyond, then on the face, and the same pressure, etc., continued as at first. The whole body must be worked simultaneously. The same number and frequency of these artificial processes of respiration should be employed as in the other method.

The Michigan Method.—Lay the body face down, the head upon the arm, and stand astride it; grasp it then about the shoulders and armpits, and raise the chest as high as you can without lifting the head quite off the arm, and hold it about three seconds, then replace the body upon the ground, and press the lower limbs downward and upward, with slowly-increasing force, for ten seconds; then suddenly let go, to perform the lifting process again.

Whichever process be employed, the effort to restore the temperature of the body must be maintained, the body being well rubbed in an upward direction with the hands, with warm flannels; bottles of hot water, hot bricks, etc., being applied to the stomach, the axillæ, and the soles of the feet, stimulants and beef tea being judiciously administered when restoration is about taking place. The attempts at resuscitation must be persevered in for several hours, if necessary. In artificial inflation, always press the larynx and trachea against the vertebral column, so as to close the esophagus and thus prevent the air entering the stomach. Laryngotomy or Tracheotomy, with or without catheterization, or forced insufflations of air or oxygen, have proved successful, as also has electro-puncture (Garratt).

After Long Submersion is Recovery Possible?—According to Harley, dogs kept under the water $1\frac{1}{2}$ minutes always died, if water had entered the lungs. If it had not, the trachea being plugged, they survived a submersion of 4 minutes. When persons rise after sinking they usually get some air, and less speedily come into a state from which recovery is impossible. The greatest period between the last inspiration and the stoppage of the heart is 4 minutes. Some think that no recovery has been made after complete cessation of the heart's action. We infer that after complete submersion for 5 minutes recovery is improbable, unless the person had been previously choked or in a fainting state, so that no water entered the lungs. But in Anderson's case, the patient had been under water at least 15 minutes, and in Garratt's the time was variously estimated at from 15 to 60 minutes.

When is a Case Hopeless?—If the eyes are open, the pupils dilated, the conjunctiva insensible, the countenance placid, the skin cold, frothy mucus round the nostrils and mouth, no attempt at respiration, and the heart's action is inaudible when the ear is applied to the chest, the case is hopeless (Harley).

Signs of Death.—The following have been suggested as methods of deciding whether death has occurred: Tie a string firmly about the finger; if the end of the finger becomes swollen and red, life is not extinct. Insert a bright steel needle into the flesh; if it tarnishes by oxidation in the course of half an hour, life may be considered not extinct. Inject a few drops of Liquor Ammoniacæ under the skin; during life a deep red or purple spot is formed. Moisten the eye with Atropine; during life the pupil will dilate. Look at a bright light or at the sun, through the fingers held closely side by side; during life the color is pink; after death a dead white. After death a dark spot is said to form gradually on the outer side of the white of the eye, from drying of

the sclerotic, so that the dark choroid shows through. Putrefaction is an absolute sign of death; better delay for it than run any risk of burying alive.

Asthenopia.

The proper glasses; cold douche; rest of eyes. **Atropine**, systematically instilled, to prevent strain, and control spasm of the accommodation (C); cautiously in persons over 35 or 40 years old. **Strychnine**, is especially valuable in preventing the development of asthenopia during the strain of student-life before examinations (Musser). [Compare AMAUROSIS, EYE DISEASES, MYOPIA.]

Asthma.

Potassium Iodide, when from acute bronchial catarrh, gr. xv–xx each 2, 3, or 4 hours (R); the best medicament to suppress the asthmatic attack, in bronchial asthma, is Potassium Iodide and Chloral (Lazarus); is the specific in asthma, if any drug can be so called; should be given with Lactucarium (Sée). **Iodipin** has cured bronchial asthma (Frese). **Belladonna**, relieves paroxysm when expectoration abundant, skin cool and moist (B); internally in large doses, also in cigarettes (Br). **Atropine**, is more efficient, gr. $\frac{1}{60}$ hypodermically at bedtime to abort morning paroxysm (B); large doses required but very satisfactory (R); very much valued by Salter and Sée (P). **Duboisine**, may be used instead of Atropine. **Stramonium**, twenty grains of the dried leaves or ten of the powdered root may be smoked; Datura is sometimes better; Stramonium preparations are often of bad quality, asthmatics advised to grow the drug themselves (R). **Hyoscine**, the Hydrobromate, gr. $\frac{1}{200}$, with Morphine Sulphate gr. $\frac{1}{4}$ and Strychnine Sulphate gr. $\frac{1}{60}$ – $\frac{1}{40}$, the best combination for the paroxysm (S. Solis-Cohen). **Morphine** hypodermically quickly aborts the paroxysm (B); in some cases will induce a paroxysm (R). **Apomorphine**, gr. $\frac{1}{10}$ hypodermically has proved effective; or gr. $\frac{1}{12}$ in camphor-water every 3 or 4 hours, with or without Morphine or Ipecac. **Heroin**, gr. $\frac{1}{12}$ hypodermically, a prompt and efficient respiratory anti-spasmodic (May); a valuable remedy with Potassium Iodide (Hyams). **Oxy-camphor**, the solution Oxyphor is a prompt palliative in doses of ʒss. **Adrenalin Chloride**, in 1 to 1,000 solution, by spray into the fauces with full inspiration, is very effective in the paroxysm (Savage); Adrenal extract is useful in bronchial asthma (Solis-Cohen). **Cocaine**, hypodermically, is used with the best results, even where other remedies failed to relieve (Mosler); the leaves of the coca-plant make the best cigarettes for asthma (Nachtigal). **Chloroform**, inhaled from warm water; anesthetics relieve, but increasing doses required, leading to habit (R). **Ether**, in full dose, may avert mild attack (B). **Amyl Nitrite**, inhaled, quickly checks spasmodic asthma (R). **Tetranitrin** gr. ss, to reduce the high arterial tension (Huchard). **Chloral**, is highly efficient in spasmodic asthma; may arrest a paroxysm (R). **Paraldehyde**, $\text{xxxlv}–\text{ʒj}$, used in 30 cases of asthma with rapid and complete relief in most and lessening of distress in the others (Hearder). **Nux Vomica**, in nervous subjects (B); often of great benefit in spasmodic asthma (P); the tincture in drop doses every five minutes has rendered extraordinary results in both cardiac and bronchial asthma, and in asthma of peripheral reflex origin, as from phimosia (Macfarlan). **Antipyrine**, is successfully employed in bronchial asthma. **Aconite**, in spasmodic (P); often averts the attack, if given at commencement; useful also in the asthma following coryza and sneezing in children (R). **Ipecacuanha**, the wine as spray to the fauces, sometimes useful in severe bronchial asthma, but not of much service in genuine asthma (R); nauseant and emetic doses in the spasmodic form (B). **Lobelia**, gtt. x of the tincture every $\frac{1}{2}$ hour during paroxysm; xxx ter die, with additional doses at night, in bronchitic asthma when worse at night; cautiously if heart disease (R); often gives permanent relief (B). **Pilocarpine Hydrochloride**, gr. $\frac{1}{4}$ in water, at bedtime, promptly and effectively relieves, in cases of bronchitic asthma with hypertrophic rhinitis; in some of nine years' standing it apparently gave permanent relief (Wyss). **Grindelia**, gives relief

in spasmodic form (B); three grains of extract thrice daily, to prevent attacks, or ℥xx-xxx of fluidextract every half-hour or hourly from the onset of paroxysm (R). **Arsenic**, as cigarettes, as well as by internal administration (B); ℥j of liquor arsenicalis ter die, in attacks from bronchitis, local irritation, etc., allied to hay fever (R). **Ethyl Iodide**, very valuable in spasmodic form, and lessens liability to subsequent attacks; ℥v-xx thrice daily by inhalation (B). **Cannabis Indica**, has been useful (R). **Sulphurous Acid**, by inhalation, spray, or fumigation (R). **Mustard**, as a counterirritant over the vagus, from beneath the right ear to the right sterno-clavicular articulation (Waugh).

Euphorbia Pilulifera, ℥ss-j of the fluidextract thrice daily, used with excellent results in asthma and asthmatic bronchitis (Dujardin-Beaumetz). **Bromides**, relieve but soon lose effect (R). **Eucalyptus**, smoked with Stramonium, Belladonna, Tobacco (B). **Quinine**, after acute symptoms subside, as antipyretic to succeeding fever and restorative tonic (B). **Potassium Nitrate**, the inhalation of fumes of burnt nitre paper will sometimes avert a paroxysm; different methods of preparation useful for different cases (R). **Silver Nitrate**, sometimes injected into trachea (R). **Chamomile Oil**, has been found very serviceable (P). **Sanguinaria**, is very useful in humid asthma, and occasionally so in the spasmodic form (R). **Antimony**, in an affection of children like asthma, dissolve a grain of Tartar Emetic in half a pint of water, and give a teaspoonful of this every ¼ hour for the first hour, then hourly; if vomiting induced, lessen the dose (R). **Coffee**, a small cup of very strong coffee often useful in a paroxysm (R); asthmatics should not use it as a beverage (P). **Tobacco**, smoking, sometimes relieves (R). **Pyridine**, the fumes are highly efficient (Sée). **Asafoetida**, has been recommended (R); palliative only (P). **Colchicum**, in gouty subjects (R). **Oxygen inhalations** are serviceable, but should not be used if heart disease is present (R). **Carbonic Acid**, in 5 to 10 per cent. solution, by inhalation, is well borne and renders good service (P). **Carburetted Hydrogen**, the inhalation of ordinary illuminating gas for 3 minutes never failed to abort a paroxysm in a lady who had sought professional assistance in vain (White). **Galvanism**, of pneumogastric often relieves, + pole beneath mastoid process, — pole to epigastrium; Faradism of no use (B). **Prophylaxis**, avoidance of exciting causes, especially indigestible food, wet, damp, and sudden changes of temperature. Attention to the stomach will do most for many asthmatic patients. An important point is to take the heaviest meal early in the day, and very little solid food after 2 P. M. Shower-bath and out-of-door exercise, not however to a fatiguing extent (R). In special cases of reflex origin from exposed nerve-filaments, operative treatment of the nose and naso-pharynx, by galvanic cautery or otherwise is required (Lazarus). [Compare DYS-PNEA.]

℞. Ammonii Bromidi,..... gr. clx.
Ammonii Chloridi,..... gr. xc.
Tinct. Lobeliae,..... ℥ij.
Spt. Ætheris Comp.,..... ℥j.
Syrupi Acaciae,..... q. s. ad ℥iv.
M. Sig.—A dessertspoonful in water,
every hour or two, for the paroxysm.
(Pepper.)

℞. Fluidextr. Grindeliae,..... ℥ss.
Fluidextr. Lobeliae,..... ℥ij.
Fluidextr. Belladonnae,..... ℥j.
Potassii Iodidi,..... ℥ij.
Glycerini,..... ℥ij.
M. Sig.—A dessertspoonful as required.

℞. Ext. Stramonii,..... gr. ij.
Potassii Iodidi,..... ℥jss.
Ammonii Carbonatis,..... ℥j.
Tinct. Lobeliae,..... ℥jss.
Aque Chloroformi, q. s. ad ℥viii.
Ft. mistura. Sig.—A tablespoonful every
four to six hours.

Arsenical Cigarettes.

℞. Sodii Arsenatis,..... ℥ss-j.
Aque Destillatae,..... ℥j.
Moisten unsized white paper, and roll into
cigarettes, each containing gr. ¼ to gr. j of the
salt. Two or three of these to be inhaled
daily.
(Bartholow.)

℞. Belladonnae Fol.,..... ℥j.
Stramonii Fol.,
Hyoscyami,..... āā ℥ss.
Extracti Opii,..... gr. iij.
Aque Laurocerasi,..... q. s.
Dissolve the opium in the water, and
moisten the leaves therewith. When dry,
roll into twelve cigarettes. Smoke two to
four daily.
(Trousseau.)

℞. Spt. Ætheris Compos.,
Liq. Morph. Sulph.,
(gr. j ad ℥j),..... āā ℥j.
M. Sig.—A teaspoonful every half-hour
or hour during the paroxysm.

Astigmatism.

Atropine, a weak solution to aid examination of the eye by dilating pupil and paralyzing accommodation (B). **Duboisine**, as substitute for atropine, has more rapid action, with shorter duration of effects and less conjunctival irritation. **Glasses**, of suitable form, cylindrical in simple astigmatism, bi-cylindrical in mixed astigmatism. **Pray's Test Letters**, to determine degree and direction of the defect (C). [Compare EYE DISEASES, MYOPIA.]

Atheroma.

Phosphorus, in minute doses, with cod-liver oil (B). **Arsenic**, often of great value in atheroma, especially where imperfect action of kidneys (Br); indicated when there are puffy eyes, drowsiness, intellectual torpor (B). **Lemon-juice**, daily used, is said to retard atheromatous degeneration of the vessels. **Aurum and Arsenic Bromide** is very efficient in atheroma and calcareous degeneration of the arteries (Barclay). **Quinine**, gr. iij-x daily, in atheroma, is used with advantage (B). **Ammonium Bromide**, to promote absorption of deposit (Wa). **Digitalis**, may be useful in general capillary atheroma if employed cautiously (W). **Tetranitrin**, in dose of gr. ss, to reduce high arterial tension in arterio-sclerosis (Huchard). **Hydrastinine** is an excellent agent in acute and chronic aortitis and arterio-sclerosis, by reason of its mild and enduring action on the vessels (Boix). **Cod-liver Oil**, with Phosphates, Hypophosphites, or Calcium Lactophosphate, in combination (B). [Compare ANEURISM.]

Atrophy.

Cod-liver Oil, has proved beneficial (Wa). **Olive Oil**, by inunction, every 12, 6, or 4 hours, successfully employed (Wa). **Arsenic**, has had remarkable success in muscular atrophy (Tr). **Electricity**, in progressive muscular atrophy, the induced current very strong at first, then weaker as improvement; interrupted currents from vertebral column and plexuses to nerves of affected muscles; in more extended forms, the constant current to the nerves, the induced to the muscles (Ros). **Massage**, removes the waste products and restores the muscular power (Br). [Compare EMACIATION, LOCOMOTOR ATAXIA.]

Balanitis.

Mercury, Hydr. Chlor. Corr. gr. j to ℥jss Aquæ Calcis, as lotion, if not much inflammation (Br). **Oil**, on linen, to inflamed part beneath foreskin, which must be again drawn forward; strict cleanliness. **Astringent Lotions**, of Alum or Zinc Sulphate, with warm water injections (Br). **Lime-water**, the best lotion if much inflammation (D). **Tannin**, in alcohol, equal parts, as dressing after washing with a weak solution of common salt. **Phenol**, a 5 per cent. solution, on cotton rag after washing, thrice daily, is generally sufficient. [Compare PHIMOSIS, GONORRHEA.]

Bed-sores.

Alcohol, Brandy, or Eau-de-Cologne, to harden skin of parts exposed to pressure (R); as wash to parts threatened (B). **Glycerin**, or glycerin cream, rubbed over the parts exposed to pressure, after washing, morning and evening, is one of the best preventives (R). **Alum**, ℥ss, whites of four eggs, Tinct. Camphoræ ℥ij, an excellent application (B). **Thymol Iodide** dusted over the part, an excellent application. **Zinc Stearate** with Tannic Acid, is very efficient. **Zinol**, in 3 per 1,000 aqueous solution, an excellent application (Günther). **Charcoal** sprinkled over the black slough, which then should be covered with a poultice (R). **Galvanic Couplet**, of zinc and silver, connected by a copper wire; one element on sore, the other on the adjacent part (B). **Silver Nitrate**, a solution (gr. xx ad ℥j) to be painted on the threatened but unbroken