expectoration, and they simply exhaust the patient. In inflammation of the stomach also such continuous vomiting occasionally occurs that the patient’s life is in danger by his inability to retain food; and similar danger also occurs from inflammation of the intestines and consequent diarrhoea.

We will next take the various parts of the body, and consider more in detail the therapeutic measures most commonly em­ployed in the treatment of their diseases. The de­fensive powers of the body against microbes, when actually on or in it, may be classed as means (1) of passive de­fence, (2) of active defence, and (3) of repair. Besides these, however, we must consider the protection of the whole body from injury caused by (a) inaction, or (b) overaction, or (c) weakness of any one of its parts. The means of passive and active defence are sometimes so closely associated that it is difficult to distinguish between them. Thus if a little diphtheritic sputum were coughed into a person’s eye, or some blood con­taining anthrax bacilli were to touch a raw spot upon the hand, the removal of microbes in either case by washing with simple water might be regarded as a means of passive defence, whilst washing them away with an antiseptic lotion might be regarded as active defence, because the antiseptic would tend not only to remove but to destroy the microbes. In the same way, washing the skin with spirit would tend to harden the epidermis and thus prevent the entrance of microbes; and the application of an ointment to an abrasion would have a similar action. But by the addition of some antiseptic to the ointment its de­fensive action would be converted from passive to active, and its power to prevent infection would become greater; and if inflammation had already set up in the skin, the addition of opium, belladonna, or cocaine would lessen local pain; and an astringent, either metallic or organic, would restrain inflamma­tion and accelerate repair. The thickening of the epidermis in the hands and feet, which occurs from constant use, is nature's provision for meeting the extra wear to which these parts are subjected by much use; but pressure is apt to cause the de­fensive process to be carried too far, and to lead to coms, which give rise to much pain and annoyance. To remove these salicylic acid dissolved in flexible collodion is now generally employed. When this is painted upon the part the corn usually peels off in a day or two, and the patient is cured.

But the object of therapeutics is not merely to cure. It is, in the words of the old formula, *Curare, cito, tuto, et jucunde,* to cure quickly, safely, and pleasantly. There are therefore in most prescriptions (1) a basis or chief ingredient intended to cure *(curare),* (2) an adjuvant to assist its action and make it cure quickly *(cito),* (3) a corrective to prevent or lessen any undesirable effect *(tuto),* and (4) a vehicle or excipient to make it suitable for administration and pleasant to the patient *(jucunde).* In the remedy just mentioned the salicylic acid forms the basis; but sometimes chloride of zinc or lactic acid is added to it to make it act more quickly, and these are the adjuvants. Extract of belladonna is added to lessen the pain which might occur during the removal of the com, and this acts as a corrective, while the flexible collodion forms a means of applying it conveniently, and constitutes the vehicle.

The surface of the skin may be invaded by parasitic organisms and may exhibit spots, which are removed by something which will destroy the parasite, such as ointments containing mercurial salts. In psoriasis the epidermis separates in flakes at various spots which have not been subjected to pressure, - and to cure it ointment containing tar or other pro­ducts of the dry distillation of wood is employed. When the true skin is inflamed various appearances may arise, according to the intensity and extent of the inflammation, and the erup­tion may be papular, vesicular, pustular, tubercular, bulbous or ulcerative. To lessen irritation the skin is protected by dusting powders, such as oxide of zinc, starch, fuller’s earth, &c., or by ointments. Irritation is lessened by lotions containing substances that will diminish irritability of the nerve-endings and skin, such as carbolic acid, hydrocyanic acid, morphine or opium, cocaine, belladonna or atropine. Where the surface is ulcerated it may be protected from external violence and placed under favourable conditions for healing by covering it with lint moistened with water and with oil-silk, over it to pre­vent evaporation. If the granulations tend to become too abundant, some astringent, such as sulphate of copper or sulphate of zinc, is added to the water. On the other hand, ■when the ulceration is old and the circulation through it poor, the aim of the therapeutist is to reawaken the normal reparative process, to bring about increased circulation and increased tissue change, and thereby insure healing. For this reason a blister is placed upon the callous ulcer, which heals with the fresh inflammation thus excited.

The treatment of inflammation of mucous membrane is based upon the same principles as inflammation of the skin, and there too we usually associate means (1) for removing microbes, (2) for destroying them, (3) for lessening the irritation they produce, and (4) for repairing any mischief they have done. Thus in the eye and ear, lotions containing an antiseptic, a sedative and an astringent are very generally used. For inflammation of the mouth a similar combination is used as a mouth wash, in the throat as a gargle, and in the nose as a wash and sometimes as an ointment or spray, the ointment possessing the advantage of protecting the delicate nasal mucous membrane from irritation by stopping the entrance of irritant dust into the nasal cavities. In the stomach we aid the vomiting by which microbes or the products of decomposition of food are usually eliminated by giving to the patient repeated draughts of hot water so as to wash the stomach clean. Frequently this is sufficient; but if the stomach refuses to eject its objectionable contents, we may either give an emetic or wash it out by means of a stomach-pump or siphon. Similar procedures are used for the intestine, and one of the best methods of treating the diarrhoea consequent upon the presence of irritating substances in the intestinal canal is to give a dose of castor-oil together with a few drops of laudanum. By means of the castor-oil the irritating substances are removed, and the laudanum which is mixed with the purgative soothes the intestine. Even in cases of very acute intestinal diseases similar treatment is now pursued, and instead of treating dysentery simply by sedatives or astringents, an eliminative treatment by means of sulphate of magnesia is largely employed. After the irritant has been removed cither from the stomach or intestine, a feeling of irri­tation of the mucous membrane may remain, and sickness, diarrhoea or pain may continue in the stomach and intestine although the irritant is no longer present within them, just as the flow of tears and desire to rub may remain in the eye after the piece of grit which has occasioned it may have been re­moved. The condition which remains after the irritant has been removed is one of inflammation more or less intense. The process of inflammation is a defensive one, but if carried too far may prove injurious.

For the purpose of checking the inflammatory processes and lessening discharge from mucous membranes astringents are employed. Some of these are of mineral and some of vegetable origin, but they almost all possess one chemical property in common, namely, they precipitate albumin. This power is possessed alike by a glass of brandy, by solution of lime, soluble salts of zinc, copper, or silver, by tannic and gallic acids, as well as vegetable juices and extracts which contain them. The strength of the astringent application and the mode of its ad­ministration are varied according to the delicacy and position of the mucous membrane affected. Thus to the eye we may use a solution of sulphate of zinc of half a grain to the ounce, while to the ear, urethra or vagina a solution of four to eight grains or even more may be applied. For the stomach and intestines we employ the same drug in the form of a pill; and when it is desired to act especially upon the intestines, the pills are made of a harder consistence or less soluble preparation, or are covered with keratin, so that they may not act much, if at all, upon the stomach while passing through it before reaching the intestines. The heat which occurs in inflamed parts is chiefly due to the