

practicable always to await the cessation of pain brought about by the cure of the disease or injury. So a host of remedies are applied to assuage suffering apart from the actual treatment of the diseased condition. Those remedies may be divided into mechanical measures. Local applications, and drugs for internal administration. The following examples may be given in each class :

Among mechanical remedies there are splints and padding, bandages, strapping, and extension apparatus, all of which alleviate pain by controlling movement, and maintaining a position of ease. Such applications should give comfort and not irritate the patient. If they do they are not fulfilling one of their chief functions, except in occasional, special instances, where to gain a certain end it is necessary to use irksome appliances temporarily. Patients sometimes tolerate a great deal of discomfort from a badly applied splint or dressing in the belief that it must be so for their good ; but continued discomfort mostly means that one has not hit upon the best way of dealing with the condition.

Less obvious mechanical measures are those which relieve pain by removing tension or congestion, or pressure, such as an incision, a posture, removal of a foreign body, or the accurate setting of a fracture or dislocation. For example, in any suppurative condition the opening of the abscess gives immediate ease by removing the tension ; an aching finger that throbs while hanging down becomes more comfortable when elevated in a sling, thus diminishing the congestion of blood in it. The extreme irritation of an eye vanishes on the removal of an offending speck ; and the patient groaning with the pain of a dislocated shoulder becomes immediately cheerful when the bones slip in position. Gentle pressure and massage are mechanical means of treatment often soothing in painful conditions, provided they are not inflammatory.

Of local applications there is no end. They consist of heat, cold, local sedatives, and counter-irritants. Heat is one of the very best pain relievers, and may be applied dry or moist. For pain in the abdomen nothing is more comforting than a hot water bag or a hot fomentation. For pain in the chest a large hot poultice rarely

fails to give considerable relief. Dry hot sand or salt applied in a loosely filled bag to painful joints are excellent. In lumbago nothing is more effective than the ancient remedy of ironing the back with a hot flat-iron over a layer or two of blanket. Menstrual pain may obtain relief from a hot hip bath ; and a jet of hot air played over the part gives comfort in chronic rheumatism and sciatica.

Cold is more limited in its application than heat. It alleviates pain, but diminishes circulation in the part, and if continuously applied for any length of time tends perhaps to devitalise. In inflammatory conditions it is not to be recommended ; but for pain in the head it is a more acceptable application than heat. For this reason, in meningitis a coiled tube fitting the head like a cap, through which cold water is kept running, is sometimes used. It is called Leiter's coil. Cold produced by evaporation, as by spirituous lotions, is sometimes useful. An icebag is the most common form of cold application.

Local sedatives are applied in the form of various liniments, lotions, plasters, and ointments, which act partly by softening and moistening, and partly by the pain reducing properties of the drugs incorporated in them. Examples of such applications are liniment of opium, lead and opium lotion, Belladonna plaster, and ointment of cocaine.

Counter-irritants act in a manner which is not clearly understood, though the method has been instinctively employed ever since man had pain to relieve. They are applied to the skin over the site of pain, and possibly relieve congestion of the deeper parts by causing increased flow of blood to the overlying superficial parts ; or perhaps they act in some way reflexly through the nerves, diminishing pain conversely as referred pain is produced.

There are all degrees of counter-irritation, from the mildest reddening of the skin to actual cautery. Iodine, turpentine, mustard, blisters, cupping, and red-hot iron are examples of counter-irritants in an order of increasing strength. Painting with a strong solution of iodine once had great vogue in all chronically painful conditions. Turpentine in the form of stupes is very useful in acute pain. Mustard poultices are particularly useful in painful inflamma-