

from death, one sovereign method of prevention (rather radical, it is true), was practised; and that was to close the hospitals. Nowadays the atmosphere of a lying-in hospital is no longer pestilential, labour takes place under normal conditions, the mortality rate is similar to that of rural districts, and epidemics are a thing of the past.

In diseases of the medical order, however, prophylaxis is incontestably more difficult. The surgeon and the accoucheur have only to watch over the individuals whom they are attending, they have present before them the limited surface of the wound, which they have to defend from attack, and as this is the only vulnerable part of their patient, from the moment that it is thoroughly protected, they do not feel any further anxiety as to the result. In medicine it is not so; the physician has also a patient to treat, perhaps to cure; but this patient is an active centre for the production and diffusion of microbes. His medical attendant upon whom the task devolves of warding off the danger does not know all the persons, who are threatened with attack, an individual is attacked often though no particular attention has been directed to his case. To put the question briefly, antisepsis concerns the individual, disinfection aims at the people collectively.

And the difficulty increases from the fact, that we rarely know the route, by which contagia penetrate into the organism. At one time it is by a perhaps imperceptible wound of the integuments, at another by inhalation of the inspired air, at still other times by what we drink or eat, or as the sequel of direct contact. The glass from which we drink, the garment which covers us may conceal the dreaded germs on their surfaces.

As the methods which have succeeded so well in surgery and obstetrical practice do not apply to these conditions, it has been found necessary to seek for a solu-

tion elsewhere. Nature's laws are ever uniform; the seeds of plants are often carried to great distances by the wind, by running waters, birds, etc., but they do not grow unless their vitality is intact: a dead seed is an inert body: a dead microbe is powerless to harm. Hence the necessity of destroying the microbes at a certain point of the route they take before penetrating into the human economy.

Then, again, even the most volatile contagia do not travel far when they are held in suspension in quiet air. For some reason or another they soon fall and attach themselves to furniture, clothing, the floors of apartments, or the soil, etc.

Direct contagion through the single medium of the air is infrequent, and when it does happen to occur it only operates at short distances. One runs some risk in occupying the same room with and breathing the emanations from a patient affected with smallpox, diphtheria or scarlatina, although contact is avoided; but there is no serious danger at 100 yards and still less at 500 yards. Contagia do not travel such distances unless when attached to different bodies.

Hence the necessity of isolation, which is carried out in special hospitals, or in hospitals with pavilions devoted to a single disease.

Isolation has, however, not overcome all the difficulties which meet the practitioner at every step.

In a large city where can one get all the room necessary for a real isolation? The indispensable special attendants cannot be procured, and frequently the strictest orders will be violated; as such isolation is only relative, its effects cannot be absolute.

Then there is the difficulty of removing a patient from home and friends, and placing him in the hands of strangers. Knowing therefore, as we do, that isolation is insufficient to remove all the difficulties,