substances to the seat of the diphtheritic exudations, when this is practicable. The probable fungoid origin of the contagium gives a rational foundation for such treatment, while the results of actual experience alike commend it.

"If the disease is seen quite at its onset, or when only a few circumscribed patches of the characteristic exudation can be seen on the tonsils, uvula, soft palate, or their neighbourbood, a good application consists of equal parts of solutions of perchloride of iron and glycerine, which should be applied by means of a small piece of cotton-wool tied firmly to a piece of stick, the whole of which can be burnt after using it. Equal parts of carbolic acid and glycerine is also a good local application, used in precisely the same manner. These applications should be made twice or three times in the day, and in the interval the patient, if able to use a gargle, should wash out the throat and mouth frequently with a solution of permanganate of potash, or one of chlorate of potash (10 grains to the ounce), to which a few drops of hydrochloric acid have been added.

"But it often happens that we do not see these cases until the diphtheritic exudation has become too diffused to render these means effectual in arresting the process of continuous self-infection, which is one of their great objects. These agents obviously cannot be applied in this manner when the larynx and trachea are invaded. In such cases, I am in the habit of prescribing the use of a warm spray, containing half an ounce of glycerine of carbolic acid, and 80 grains of borax to 8 ounces of warm water. This should be freely and almost constantly used, by means of a large Siegle's sprayproducer; and, in the case of children, this spray should be so directed as to be continuously playing over the mouth and nose of the patient, and diffused through the atmosphere which he breathes. A strong solution of tartaric acid is said to have remarkably solvent action on the diphtheritic membranes, and has been used with advantage in France; but I have no personal experience of its use."

Dr. Frederick Roberts sums up for us the objects to be held in view in the use of local remedies, and the mode by which these objects may be attained; his words form a fitting con-

clusion to this report. "Local applications are," he says, "in my opinion, of more or less value in most cases of diphtheria, but they require to be used with judgment, and with a definite idea as to the purpose or purposes for which they are employed. Taking these purposes in order, the first is to prevent the spread of diphtheritic deposit at an early period of the disease, by the direct application of some strong agent upon and around the deposit. It is doubtful how far such an object can be attained, but in some cases, perhaps, it may be. The applications which can be used for this purpose are either the solid stick, or a strong solution of nitrate of silver (3i to 3i); equal proportions of hydrochloric acid and water; or tincture or solution of sesquichloride of iron, strong, or mixed with an equal quantity of water or glycerine. The liquids must be applied efficiently once for all, by means of a suitable throatbrush. The repeated application of strong agents is to be decidedly deprecated.

"The second object is to dissolve or remove the diphtheritic material, or to alter its characters, so as to render it innocuous. The frequent inhalation of steam is probably of service in some of these ways. What agents are capable of dissolving diphtheritic membrane, is a matter to which more attention might well be directed; but it seems that lactic acid, phosphate of soda, and other agents have this power. Chlorate of potash, diluted tincture of iron, and other applications are also useful for some of these purposes.

"The third, and certainly in many cases the most important purpose, is to prevent putrefactive and gangrenous changes, or to remove or act upon the products of these changes, so as to prevent their absorption into the system, and consequent septicæmia, the infective properties of the materials being probably at the same time destroyed. Here various applications may be used, such as chlorate of potash with dilute hydrochloric acid, chlorinated soda and carbolic acid, Condy's fluid, sulphurous acid, borax, tincture of iron, etc. All these, of course, must be properly diluted. As a subsidiary object, the relief of throat-symptoms must be kept in view, and this is more or less effected by the use of some of the agents already