

order dated Nov. 9, 1848, we issued to the parochial boards of Scotland regulations requiring the immediate performance of such cleansings, and prescribing the mode in which they should be carried out. (See regulations of the General Board of Health, from 1 to 8).

#### LISTS OF PLACES WHERE EPIDEMIC DISEASES PREVAIL.

The seats and subjects of cholera and the seats and subjects of typhus being the same, we issued on the 3d of November, 1848, among other regulations, a special order to the boards of guardians (see regulations 9, 10 and 11), requiring them to desire their clerks to make out from the register of deaths, or from the district medical relief books, and from any public books or other sources, from which information might be obtained within the union or parish, a list of places where epidemic, endemic, and contagious diseases had of late been frequent. We further requested the guardians to cause their medical officers forthwith to visit and examine the localities contained in such list, and to certify in writing all such places as they might find in a state dangerous to health, or which needed frequent and effectual cleansing, together with all such nuisances and matters injurious to health as ought to be abated, cleansed, and removed.

This appeared to be an essential preventive regulation, experience having shown that unless express obligations of the nature stated are enforced, extended and effectual cleansings, or other sanitary improvements in the power of the local authorities to effect, are rarely carried into operation. We believed that by the observance of this order the medical officers would be guided at once to the worst conditioned places, where the inhabitants would be found to be in the greatest danger. This expectation has been realised, for wherever this order has been obeyed, the local authorities have been made cognisant of the most dangerous and filthy localities in their respective districts, and the medical officers have been directed where to search for the diseases which usually precede an outbreak of cholera, and for the premonitory stage of cholera itself.

We apprehend that this was an order founded upon such an extent of experience that no private medical practitioners and no lay persons would be justified in neglecting it, even if it were a simple recommendation. Yet upon the visits of the inspectors to the places in which cholera broke out—which we have shown commonly first came back to the same streets, and even to the same houses, as on its former invasion—it was found that these localities were still in the most filthy condition; that in general no lists had been made out, and that no inspections had taken place. In several conspicuous instances the owners of the ill-conditioned houses, the occupiers of which were the first victims of the disease, were members of the local boards by which these defaults were committed.

#### ORGANISATION FOR DETECTING PREMONITORY STAGE.

While directing the attention of the guardians to the most available means of prevention, we endeavored to prepare them for the measures which would be necessary if they should unhappily experience a visitation of the disease. Of these we regarded the organisation of the means for detecting the existence of the disease in its premonitory stage as among the most important. This stage being in general of short duration, in some instances not exceeding a few hours, and the symptoms which denote its commencement being commonly so slight as to appear trivial to those who are ignorant of their signification—an impression favored by the general absence of pain—no dependence could be placed on the information and prompt action of the individuals most in danger. It was necessary that the disease should be sought out in the localities in which it might be present and actively developing itself, though even its existence might be unperceived and unsuspected. The whole tenor of the

evidence presented to us showed that if the medical practitioner waited until the individuals affected applied of their own accord for assistance, in large numbers of instances, and especially before the extension and fatality of the disease had excited considerable alarm, his services would not be called for until they could be of no avail. Acting on this experience, we represented to the local authorities in our first notification, that in case of an outbreak of cholera it would be incumbent on them immediately to provide a sufficient medical staff to enable a daily house to house examination to be made of the infected locality.

But former experience, particularly at Edinburgh, where the expedient was first tried during the epidemic of 1832, had shown, that in some of the worst localities and in the most filthy and overcrowded houses in which cholera was actually prevailing, the removal of the inhabitants from their wretched abodes was absolutely necessary, the probability being, that if allowed to remain there they would become the next victims. The opening of houses of refuge for the temporary reception of such persons appeared therefore to be a highly-important auxiliary measure of prevention.

#### EXPERIENCE OF DUMFRIES.

The agency for carrying out an efficient system of house to house visitation necessarily involved some expense and trouble; but we came to the conclusion that it would be our duty to enforce the adoption of this system in any case in which it might seem to be required. The first place in which we were called upon to issue an order to this effect was in the town of Dumfries. Dumfries had suffered more severely from this pestilence, on its invasion in 1832, perhaps than any other town in Great Britain, and knowing that little sanitary improvement had been effected in the interval, and consequently that the inhabitants must be in as great danger as before, we called the attention of the authorities to the special regulations of the board. To our recommendations the parochial board paid no regard. The disease, meanwhile, went on committing its former ravages. Thus within the first 29 days after its outbreak, there occurred 269 deaths out of a population of 10,000. No efforts being made on the part of the local authorities to check this great mortality, it appeared to us that this was a case requiring a stringent enforcement of the regulations of the board, and we sent one of our medical inspectors (Dr. Sutherland) to organise a plan of house to house visitation, to open dispensaries for affording medical assistance by night as well as by day, and to provide houses of refuge for the temporary reception of persons living in filthy and overcrowded rooms where the disease was prevailing, and who, though not yet attacked, were likely to be the next victims. The result of the adoption of these measures was, that on the second day after they were brought into operation the attacks fell from 27, 38, and 23 daily, to 11; on the fifth day they diminished to 8; on the ninth day no new case occurred, and in another week the disease nearly disappeared.

That this remarkable and rapid cessation of the disease was not the consequence of the natural exhaustion and termination of the epidemic is proved by the fact that the premonitory diarrhœa did not diminish proportionally with the diminution of cholera, but that, on the contrary, while cholera steadily decreased diarrhœa went on and even increased, thus showing the continued action of the epidemic poison upon the system; while the true cause of the diminution of cholera was, that the visitors detected it in its diarrhœal stage, and at once arrested its further progress.

#### EXPERIENCE OF NORDELF.

A similar but still more rapid suppression of the disease was effected at the small village of Nordelf, in Norfolk, where out of a population of 150 souls, there occurred no less than 50 cases of cholera. When Mr. Bowie, whom we