

area. It would be hard to discover a region in which a disorder had less license to become epidemic; the whole district lies upon a series of terraces, and increased safety did not come with elevation. Indeed, four cases occurred on the very ridge of the Green Mountains, at an elevation of 1,500 feet, and the line of the four dwellings extended over half a mile. The water supply was different in each of the four cases, namely, from springs out of the mountains. The range referred to definitely limited the infected area, which occurred in a region with faults and dislocations in the earth's crust and profound breaks in the whole strata, while on the other side of the mountains the country is level and unfaulted. Neither overcrowding of habitations nor any of the evils usually accompanying or flowing from this condition were factors in the present case, since only in four families was more than one member affected. It was quite usual for children to sleep with those who were affected and themselves remain entirely free from the disease. No isolation was practised, nor did such precaution appear to be of the slightest value. Indeed, the brunt of the disease fell upon the purely rural portion of the community. There was nothing discoverable in the domestic and personal hygiene of those attacked. The houses were all detached, and in most cases there was nothing in the nature of privy or cess pool. Nor had penury any part in the epidemic. The district is one of the most thriving in the United States, and has been settled for a century and a half. The food, water and milk supply were examined and were found above reproach. The food and milk is drawn from the neighboring farms or from the farms in which the patients lived. The veterinary surgeons have remarked no unusual occurrence amongst the cattle, but twelve horses died of what was called cerebro-spinal meningitis. I was unable to procure any reliable account of these cases. The summer was dry and hot, the springs scanty and the surface water low. The rainfall for the three months was only 6.58 inches, against 11.95 last year, and 15.04 the year before, or an average of 11.2 for the last 47 years. The average temperature was 64.3 degrees, last year 64.4, the year before 65.2, and 65.4 on an average for the last 47 years. Cases were found amongst children of American, Swedish, Italian, French, Irish and Jewish parentage, so that nationality appeared to have no bearing. There is in one place a colony of a thousand Italian marble cutters, but amongst them there were only two cases.

The following table shows the results reduced to percentages:

Fatal cases.....	13.
Recovered.....	25.

Improved	30.
Unimproved.....	32.

CONCLUSIONS.

In the outset one has to make the humiliating admission that no useful pathological results were obtained. In no case was an autopsy permitted, and there is no authority in the State of Vermont to enforce the demand. The examination of the blood and excreta was negative.

The diagnosis is yet uncertain, as most diagnoses are which are based upon clinical considerations alone and unsupported by the results of a pathological examination.

It must rest between cerebro-spinal meningitis, multiple neuritis, poliomyelitis, or a combination of the last two.

1. Cerebro-spinal meningitis may, I think, be set aside at once under the force of the facts already alluded to. Epidemics of this disease are common enough, and its general course is definite with a special symptomatology. In the present case there was an almost entire lack of those symptoms, and there were, besides, manifestations which have never been noticed in epidemics of cerebro-spinal meningitis.

2. H. Openheim, Berlin, in his work on diseases of the nervous system, emphasizes the view that poliomyelitis is due to an infective micro-organism, and in the present epidemic there was much evidence pointing in the same direction. Indeed, Medin, of Stockholm, has reported what he considers as an undoubted epidemic of poliomyelitis, there being 44 cases. There is a strong temptation to regard the present outbreak as of a similar nature. Clinically the course of the disease much resembled poliomyelitis, as a reference to the cases makes clear. There was the initial feverishness, aching pains, abrupt paralysis of the nature commonly known as "infantile," indeed the distribution of the paralysis is highly characteristic. If it were not for the disturbance in the vagus, one would have no hesitation, on clinical grounds, in pronouncing the epidemic one of poliomyelitis. The mode of onset, the paralysis itself, the age of patients, the season at which the epidemic occurred, the distribution of the paralysis and the subsequent behavior of the muscles, all point to this disease. Besides, it is not uncommon to have cerebral disturbance in poliomyelitis, convulsions and coma, and even diplopia has been noted. In the cord of a child dead of this disease, the lesion is not confined to the cells of the anterior horn; there may be a general hæmorrhagic myelitis and even obvious meningeal involvement. There may also be pain referred occasionally to the course of the nerves and simulating a peripheral neuritis. In an epidemic, including so many cases, it is not probable