

Vol. 1.

No. 1.

The Vermont

Medical

Monthly

47248



January, 1895.

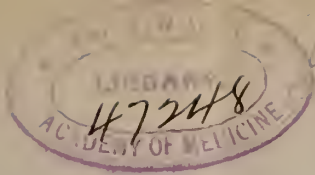
CONTENTS.

	PAGE
The Recent Typhoid Fever Epidemic at Windsor, Vt., by J. D. BREWSTER, M. D.	1
Car Sanitation, by G. P. CONN, M. D.	5
Vaccination, by C. S. CAVERLY, M. D.	14
The Use of Anti-Toxin in Rhode Island,	15
The Tuberculosis Law in Massachusetts,	16
The Vermont State Medical Society,	17
A New Sanatorium,	18
The Successful Treatment of Riggs' Disease	18
Editorial,	20
Medical Abstracts,	22
A New and Successful Treatment of Typhoid Fever,	26
News, Notes and Formula,	27
Book Reviews,	29
Publishers' Department,	31

Published at Burlington, Vt.

By the Vermont Medical Publishing Co.

Subscription price \$1.00 per year. 15 cents per copy.



The Vermont Medical Monthly,

*A Journal of Review, Reform and Progress in the
Medical Sciences.*

VOL. I.

JANUARY, 1895.

NO. 1.

(Original Papers.)

THE RECENT TYPHOID FEVER EPIDEMIC AT WINDSOR, VT.

Read at the Annual Meeting of the Vermont State Medical Society, October, 1894, by
J. D. BREWSTER, M. D., Windsor, Vt.

In compliance with the request of our secretary and others, I will endeavor to give a brief account of the epidemic of Typhoid fever which prevailed in Windsor last spring.

The first case was reported March 15th, and was in a family who resided at the extreme southern limit of the village, and at the time there could not be found any apparent cause for the disease.

No further case appeared until March 24th and 25th, at which time a large number of people were taken with high fever which soon showed itself to be unmistakably typhoid fever. These cases were among all classes of people, the rich and poor alike, but all within the village limits.

Observation soon showed the disease was confined entirely to families using the village water supply, those having wells being entirely exempt, except in cases of children who drank the water at school. This fact led immediately to the examination of the water system. Windsor was supplied by a series of springs situated about two miles or more from the centre of the village; these springs formed a small brook which ran along a valley for about a mile, passing six farms and dwelling houses and then emptying into a reservoir, from which iron pipes conveyed the water into the houses. Now about forty rods above the rise of the brook a farm house is situated, where it was ascertained a person had suffered the previous January from a feverish condition for

about four weeks ; it was supposed to be a non-infectious form of fever and was not reported to the local Board of Health and consequently no care was taken of the discharges of the patient and they were thrown into the vault ; to make matters worse, the sink drain was frozen at the time so all wash-water was thrown out upon the snow. During the very warm weather which we had the first week in March the snow melted and all this accumulation easily found its way into the brook and thence into the reservoir and our homes. This explanation was unanimously endorsed by the State Board, who made an official visit to the place soon after the outbreak. The local Board at once issued orders to have all water for cooking or drinking purposes boiled. At the same time the town provided a water cart to deliver water at the houses from an adjoining spring.

From March 24th to 30th about eighty cases were reported; from this date to April 27th the cases became less frequent, this time being probably the limit of the primary cases, the later ones being secondary and mostly occurred in families already suffering from the disease. Up to July 28th there were 130 cases, these occurring in 68 families; the largest number afflicted in one family being five, the majority only one. The ages ranged from 10 months to 92 years, but the majority were under 20 years of age and a large per cent. were children. These withstood the disease to a remarkable degree, even with a protracted evening temperature of 104. The population of Windsor is 1300, so about 10 per cent. of the inhabitants were affected. We were fortunate in having only 17 deaths, or 13 per cent.

Six of the fatal cases had intestinal hemorrhage.

One died from perforation.

S. H—, 44 years old, died from complication of erysipelas.

Mr. V—, had temperature of 106° at death, and there was a rise of a degree a short time after.

M. K., a girl 14 years of age, was afflicted with infantile paralysis. She died in the 10th week, and at death had seven bed sores, those on hips leaving bone exposed, which was also curious.

Three died before end of second week, the average fatality about end of third or beginning of fifth week.

I will now give a brief history of a few of the cases which have recovered. Perhaps the most remarkable one is Mrs. C—, about thirty years old. She showed all the symptoms of typhoid fever, coated tongue, enlarged spleen, rose spots on abdomen, etc., but developed *no*

fever until 51st day, when evening temperature was 99° , ranging from this to $99\frac{5}{10}$ until 63d day, convalescence being very protracted after 13th week.

A. A—, aged 70, had typhoid symptoms, with evening temperature of 103° - 105° , with croupous pneumonia, rusty sputa, which continued to 12th day; from 14th to 21st no fever; from 22d to 32d average temperature 102° . Symptoms wholly abdominal, rose spots present, temperature normal to 40th day, from 40th to 54th day fever, highest temperature, 101° . Symptoms catarrhal pneumonia. Convalescence protracted.

C. A— had relapse on 21st day with remarkable eruptions, some 30 or 40 large papules which soon became vesicula, and many of them pustular, while one was a true adenitis, which went on to suppuration, containing one-half dram of pus; this certainly was due to sepsis; this same case at beginning of convalescence had suppurative otitis media, and inflammation of mastoid, with one recurrence.

G. B— had evening temperature of 105° first week, delirium beginning on fourth day, on 21st had subsultus and picking of clothing, and insomnia, continuing for a week, temperature ranging from 103° - 104° at night; convalescence after seventh week, but delirium continued two weeks longer.

Two cases had phlebitis of the leg. Ten cases had intestinal hemorrhage, Mrs. B— was confined on fourth day, temperature 104° , the fever ran the usual course, recovery after fifth week.

Arthur K— aged 13, after a mild form of the fever, appeared convalescent when malaria made its appearance, temperature, 105° ; after second day same symptoms recurred with usual course of malaria; large dose of quinine prevented a return; his history showed he had malaria eight years before.

The most prolonged case was that of Henry S—, who had a temperature for 102 days. This case had very severe hemorrhages on 49th day, was not removed from his bed for 116 days. After convalescence gained 23 pounds in twelve days.

I could give many more interesting cases, if time would allow.

From July 28th to August 30th, only two cases were reported, but during the month of September there has been twenty cases, thus making 150 cases in all, since the beginning of the epidemic; all of these later cases, with two exceptions, have been among the poorer classes living in tenement houses; two of these have died of perforation, both

having been in a state of collapse for 48 hours before death. Temperature, 93°-97° and pulse 125—abdomen extremely distended, the accident in each case being sudden, when everything seemed progressing to a speedy convalescence. One fact is worthy of mention; in several cases there seemed to be secondary infection, appearing from four to six days after apparent convalescence, when there had been no change in diet or management of patient; they usually had a temperature for seven days, when true convalescence occurred.

Throughout the whole time the fever prevailed, all possible precaution was taken to disinfect discharges and the clothing of persons affected; the discharges were buried after disinfection with either corrosive sublimate or copper, and clothing put into boiling water. We all know how difficult it is to impress upon every one the importance of these precautions and doubtless among some of the more ignorant the instructions given were disregarded, thus causing the later outbreak of the disease among that class.

Windsor has for twelve years been remarkably free from the disease, not averaging more than 5 to 7 cases a year. I will here state that the Prison was entirely exempt, the water supply being from a different source.

The village voted to discontinue the old supply, except for motor purposes, and now the water comes from springs, which flow from the hill-side directly into a covered reservoir from which it is pumped into a stand pipe, also covered. The springs are distant from any dwellings and furnish no possible opportunity for pollution.

No water supply that is exposed to drainage from dwelling houses can be safe, for only the most untiring vigilance can prevent some accident which will involve its consumers in as sad an experience as Windsor, after using the water system for over fifty years. I can not close this paper without paying some tribute to the noble way in which our citizens responded to the needs arising from such a calamity. A mass meeting was held in one of the churches and a committee appointed to solicit money and clothing such as was needed for the sick, and to provide food for the needy ones. Many volunteered as watchers, and every day the village was canvassed to ascertain the needs of all. The sum of \$700 was raised to provide nurses for those who could not provide themselves. Twenty-eight nurses were employed, coming from Burlington, New York, Hartford, Ct., Worcester and Boston, Mass., thus aiding the physicians in no small degree. No disease needs

more careful watching than typhoid fever, and many owe their lives to the never-tiring care of the faithful nurse. Windsor may well be proud of her people as this test has proved them. May the time be far distant when any other town shall be called upon to prove herself her equal.

CAR SANITATION.

REPORT OF COMMITTEE AT THE ANNUAL MEETING OF
THE AMERICAN PUBLIC HEALTH ASSOCIATION AT
MONTREAL, 1894.

BY G. P. CONN, A. M., M. D., CONCORD, N. H., SECRETARY OF
NEW HAMPSHIRE MEDICAL SOCIETY.

A report upon this subject must include several topics; for in order to bring before the public a full realization of its importance, we must consider the construction, the heating, lighting and ventilation of coaches, as well as the methods of car cleaning now in use by the management of most roads.

This last is most essential, as it is the first principle of sanitation, without which nothing like a healthy standard can be assumed.

The problem of car sanitation is one of complex character and involves so many mechanical questions that one can hardly be expected to bring out the whole of the subject in a single paper. I have endeavored to get the opinions on this subject from other members of the committee, but have not succeeded in doing so, as for various reasons the different members have begged to be excused; therefore I have selected from the opinions of sanitarians and practical mechanics such quotations as seemed to have a concise, practical and unbiased bearing upon the conditions necessary to secure the sanitation of passenger coaches.

In the design of a car for the transportation of people it is important that it be constructed with a view to stability, safety and endurance. It must be constructed with a strength equal to the strain which is expected of it, in order that it may be safe to passenger and employe.