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# SIXTH ANNUAL REPORT

U. S. DEPARTMENT OF EDUCATION

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APR 28 1878

# State Board of Health

OF

# MINNESOTA,

JANUARY, 1878.

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MINNESOTA STATE BOARD OF HEALTH,  
SECRETARY'S OFFICE,  
RED WING, Jan. 1, 1878. }

*To His Excellency Hon. John S. Pillsbury,*  
*Governor of Minnesota.*

SIR:—I have the honor herewith to transmit the sixth annual  
report of the State Board of Health.

Very respectfully,

Your obedient servant,

CHARLES N. HEWITT,  
Secretary.

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## MEMBERS STATE BOARD OF HEALTH

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D. W. HAND, M. D., St. Paul.

V. SMITH, M. D., Duluth.

CHARLES N. HEWITT, M. D., Red Wing.

FRANKLIN STAPLES, M. D., Winona.

W. H. LEONARD, M. D., Minneapolis.

E. J. DAVIS, M. D., Mankato.

CH. GRONVALD, M. D., Holden.

**NOTE.**—All communications for the Board should be addressed to

SECRETARY STATE BOARD OF HEALTH

Red Wing

## GENERAL REPORT FOR 1878.

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The State Board of Health and Vital Statistics respectfully report :

That during the year 1877, there has been no general or epidemic prevalence of any form of disease, and the average health of the population of the State has been fully equal to that for 1876, which was above the average of preceding years.

### SMALL POX.

This disease has been epidemic for more than a year in the adjoining State of Wisconsin, where there have been nearly 2,000 persons attacked by it, of whom more than 400, have died. The population of Minnesota have escaped up to date any general attack, and there have been, during the year, but two endemics. The first, in the southern part of the State, in Viola, Olmsted County, occurred in the spring. As soon as the character of the disease was recognized in May, 1877, the Chairman of the Town Board of Health, Hon. M. L. Sawyer, applied to this Board for advice and assistance. He was immediately supplied with vaccine virus, and directions for controlling the disease, and Dr. N. S. Teft, of Plainview was requested to act for this Board and to call upon the Secretary for any assistance required. Both Mr. Sawyer, and Dr. Teft, acted promptly and confined the disease to the locality in which it broke out. Their reports are submitted. (Appendix.)

Drs. E. C. Cross, of Rochester, and N. Eugh, of Elgin, did good service in the use of vaccination in the sections of Viola, adjoining those towns.

The other endemic broke out in Wadena, Wadena County, in the northern part of the State, in June, 1877. The Local Board of Health applied to this Board for vaccine, and a physician, and by request of the Board, Dr. John C. Rosser, of Brainard went to Wa-

dena, and vaccinated about 75 persons, supplying them with disinfectant and advice.

On the 25th of June, the Secretary of this Board went there to consult with the Local Board as to the measures to be taken. He found them discouraged by the lack of efficient co-operation on the part of the citizens in their efforts, and advised that the people be called together. He met them in the depot building and did what he could to inform and reassure them and to induce them to assist the Board. Dr. Rosser of Brainerd, and Dr. Kurtz of Moorhead, being unable to take charge of the sick in Wadena, Dr. Wilson of Moorhead, (recommended by Dr. Kurtz,) was at the suggestion of the Secretary employed by the Local Board to take charge of the hospital, and to act as health officer. The history of the outbreak and action of local authorities with expenses and results are given in a report hereto appended. (Appendix.)

Outside the resident population of the village and town of Wadena four persons stopped at the hotel long enough to take the contagion away on their persons—once a commercial traveler, went thence to Winnipeg, and came down with confluent small pox there, where he was visited by the Secretary of this Board. Another went to the Yellowstone and died of the disease, another went thence to home (via St. Paul) in Litchfield, where under the management of Dr. F. E. Bissell, health officer, the disease was confined to his own case alone. Still another case, a young lady school teacher in an adjoining town, after sleeping in an infected bed, became an inmate of the Wadena hospital, with confluent small pox.

The Secretary of this Board visited White Earth Reservation, vaccinated the agent, missionaries and some of the half breeds and received the promise of the agent and physician that the wandering bands of Indians belonging to this reservation, and who were exposed to small pox from Wadena, should be called in and thoroughly protected by vaccination. The agent also promised to keep this Board informed of any cases of the disease.

The Secretary of the Board went to Winnipeg and arranged with the health authorities of Manitoba for co-operation in case the disease broke out in the lines of travel or in adjoining districts. By the kindness of U. S. Consul Hon. J. W. Taylor, he was given introduction to the Lieutenant Governor and to the health officers of the province. The thanks of this Board are due to Drs. Alfred Codd and J. S. Lynch, the treasurer and secretary of the Manitoba Board of Health, for courtesies extended to our Secretary. Returning, the medical officer at Fort Pembina (Asst. Surg. Gourley) assured the secretary of his willingness to care for any cases of

small pox which should occur in his neighborhood and to vaccinate all who should apply. The same promise was given by Dr. G. A. Hoeston, of Grand Forks. The steamboat employes were offered vaccination on the steamer *Minnesota*, of the Kittson company, and many accepted the opportunity.

This Board has furnished fresh animal vaccine virus at less than cost to all who would accept and use it. Vaccination and re-vaccination have been more general throughout the State, in town and county, than ever before.

We attribute the happy exemption of Minnesota from an epidemic of small pox chiefly to the precautions above described, in which we have had the cordial co-operation of the medical profession, and of many intelligent citizens who have procured and used virus on their own account. But it can only be by increasing watchfulness that we can hope to escape it in the future.

#### EDUCATIONAL WORK.

The Secretary of this Board, as non-resident Professor of Public Health at the University, gave a course of eight lectures during the spring term, to the Senior Class upon "*Some of the Problems of our Civilization in the View of Hygiene.*"

- I. Health and Hygiene--Public and Private.
- II. Disease. Causes and Prevention.
- III. Poverty and Pauperism.
- IV. Addressed to Young Men.
- V. Crime and Criminals.
- VI. Hygiene and Education.
- VII. *The Family and the Home.*
- VIII. Success in Life.

It was attempted to show by practical illustration the aims and methods of Hygiene, and the necessity and worth of a knowledge of its principles and practice to all men--especially is this true of those whose scholastic opportunities and obligations should make active co-operators in sanitary work in the every day life of our population. It is there that such work is greatly needed, and it is also there that the intelligent sympathy and active co-operation of the educated classes can do much to aid local health boards and physicians, in sanitary efforts.

## THE RELATIONS OF SCHOLASTIC METHODS TO THE HEALTH OF PUPILS IN THE PUBLIC SCHOOLS.

The *facts* of these relations in Minnesota, have never been collected. There is an earnest desire that they should be sought out and presented by competent authority.

This Board, at the request of physicians and teachers all through the State, have undertaken such an investigation. The work is a very practical one. It is the only way to get at the facts as to the influence upon the physical, mental, and moral health of pupils, of co-education of the sexes; of hours and methods of study and school attendance; of existing systems of rating scholastic standing; of the construction, furniture, ventilation, warming and lighting of school houses and rooms, etc. These and similar influences incidental to our schools are alternately praised or blamed with too little knowledge of the exact truth. The report of a visiting committee upon co-education in the University of Wisconsin has renewed the discussion of that question. The substance of that report and the replies of the Regents and President are given elsewhere in this report. As preliminary to the work to be done and to ascertain the present opinions of teachers and medical men upon these subjects, a series of questions was distributed to the leading teachers of the State and some of the vital statistics of the University, Carleton College, two of the Normal schools, the high schools of St. Paul, Winona and Red Wing, as also of the Institution for Deaf and Dumb, were collated by medical men. The result is submitted in the paper on "The Relations of Schoolistic Methods to the Health of pupils." (Appendix.)

It will be seen that there is everywhere a lively interest and that the example of the University in ordering stated examinations to collect and correct the vital statistics of pupils will be followed in every leading school in the State. To assist in this work this Board will immediately prepare and distribute tests for sight, hearing, respiratory capacity, height, weight, and other facts sought for, with instructions for their use, and blanks for sending results.

If the methods adopted at the University can be made general through the State, we shall secure during the coming year, a record of well ascertained and reliable facts of the utmost practical value. This record so begun, will increase in value with years. It is only by such systematic and impartial search for facts that the question referred to can be conclusively answered. A reference to the preliminary report will show how valuable and necessary such work really is.



## REPORT ON THE METEOROLOGY OF MINNESOTA.

Compiled by Dr. Wm. H. Leonard, of Minneapolis, from the monthly reports of nine observers in as many parts of the State.

This work sustained by the scientific devotion of the medical and other gentlemen who are carrying it on, is of yearly increasing importance. It will be continued and enlarged.

## HOSPITAL FOR THE INSANE.

*This Institution is full,* and speedy provision must be made for more accommodation, here, or elsewhere for the insane. The success of the treatment of this increasing class of unfortunates, depends very largely upon the use of hospital care at the earliest practicable moment after attack.

In view of the fact that what is further done, will decide for years to come the general policy of the State in this direction, this Board advises the appointment of a commission of thoroughly competent men, to collect and report to the legislature all the data necessary for a conclusion as to the best methods of meeting the admitted necessity for more provision for the insane.

## FEEBLE MENDED CHILDREN.

There are (20) twenty Idiots and Imbeciles in the Hospital for the Insane and applications are constantly received at the Institution for the Deaf, Dumb, and Blind, for the admission of such children. There is no provision for their care in the State, public or private. We repeat our suggestion of last year that a school for such children be organized. We believe competent private parties will undertake it if the State will pay them what it now costs to maintain these children in the State Institutions.

The proposition of the Trustees of the Institution for the Education of the Deaf, Dumb, and Blind, in this year's report, is worthy of serious consideration. They will organize such a school if the State will allow them the salary of an expert to conduct it.

## BLIND ASYLUM.

As a small proportion of this class in the State avail themselves of this Institution, we repeat our recommendation that Prof. Noyes or other competent person be sent out to visit such cases and remove the objections, now so common to Asylum care and education for the blind.

## STATE PRISON.

We repeat the recommendation for the erection of a new prison in a better location with larger grounds, and with the occupation of the prisoners so determined by the Warden that he may be as responsible for every effort at their reformation as he now is for their care and punishment.

The number of convicts for life is already large and increasing. There are no adequate means of separating the hopelessly vicious from those who may be reformed, and the influence of the present arrangements cannot but be bad upon the younger and less hardened prisoners. Two prisons will in time be necessary. Rather than further enlarge the present one, it will be far better to begin another, more in accord with the demands of modern prison reform. Let it be so constructed and organized that the reformation and education of prisoners will be as well provided for as their confinement and labor. *It is only so that, with the increasing number of convicts for life and for long terms, the State can avoid educating the younger and short term prisoners, for a life of crime after their discharge.* In the present prison this result is under existing arrangements almost unavoidable, and the Warden is practically helpless to prevent.

## THE EFFECTS OF THE EMIGRATION ON THE NORWEGIAN IMMIGRANTS.

Attention is called to this paper on page 17. It is the first attempt in this country to study the effect of immigration upon one of the great nationalities who have cast their lot in our State. Dr. Gronvald collects and collates the experience of himself and several other thoroughly educated Norwegian physicians upon this important subject. The paper is a very original and interesting one. It is to be followed by others of a similar character.

## THE SANITARY WATER SURVEY OF THE STATE.

The work done this year was a preliminary survey of the water supply of the Red River Valley. In this investigation this Board asked the regents of the University to permit the co-operation of the Geological Survey. They did so, and Professors Winchell and Peckham accompanied the Secretary of this Board. Together they visited that valley from Breckenridge to Fort Garry, and the samples of water and clay agreed upon were analyzed by Prof. Peckham, whose report ( appendix "C.") will repay careful study. One result

unexpected to all was the discovery that the water of the Bois de Sion, Otter Tail, and Red Rivers are good drinking waters, better than any well water examined by the survey. The cause of trouble with many of the wells of that valley is as yet unascertained, but this Board repeat our suggestions of previous reports. A further examination of the well water of this region will be made.

#### POVERTY AND PAUPERISM.

The increased demand for charitable relief during the fall and winter, the probability that the demand will be still greater before spring, induced the Board to ask a paper from Rev. E. W. Chase, the indefatigable City Missionary and Relief Secretary, of St. Paul, on this subject.

He gives, besides, the methods of the St. Paul Society for the Relief of the Poor. They have given such satisfactory results there, that they are worthy of the consideration of those who find a system necessary in the distribution of charity in other cities, towns, or even in counties. It is to be hoped that the St. Paul society will, with their present work, collect and arrange their statistics of pauperism, with reference to the age, sex, nationality, occupation and history of applicants, and the relation of their condition to vice, crime, or heridity. Many of these facts are best collected by a medical man of whom, we venture to believe, there are some in St. Paul, willing and ready to assist. If this is not done much valuable knowledge and experience will be lost, not only to local, but to other students and workers in this direction.

#### SANITARY EXHIBIT AT THE EXPOSITION INTERNATIONALE, PARIS.

This Board have received a cordial invitation from the Section of Anthropology and Sanitary Science to make an exhibition of the Meteorology Life and Death rate, Disease prevalence, etc. of Minnesota: This will be done by other States, and certainly, no more convincing evidence of the opportunities offered by our State for Health, and Labor, could be offered than by a truthful exhibit, by statistics and charts, of the facts in our possession and by the distribution of a Report specially prepared for the purpose. If the Legislature will authorize the work and provide for its cost, we will undertake it immediately, as there is no time to be lost. The volumes of the Reports for previous years are nearly or wholly exhausted, and the call for the present Report is three times greater than the number, which we have to distribute (300 copies.) This demand is constantly increasing.

ANNUAL REPORT.

We respectfully ask for an edition of 1,500 copies of succeeding Reports.

The appropriation for the Board will be exhausted when all outstanding accounts are paid.

The statement of expenditure is appended hereto.

All which is respectfully submitted.

CHARLES N. HEWITT,

D. W. HAND,

V. SMITH,

FRANKLIN STAPLES,

W. H. LEONARD,

E. J. DAVIS,

CH. GRONVALD,

Members State Board of Health.