

E.**SUMMARY OF STATISTICS.**

FOR THE YEAR ENDING DECEMBER 31, 1908.

In form recommended by the New England Water Works Association.

CONCORD WATER WORKS.

CITY OF CONCORD, COUNTY OF MERRIMACK, STATE OF NEW HAMPSHIRE.

GENERAL STATISTICS.

Population by census of 1900—19,632.

Date of construction—1872.

By whom owned—City of Concord.

Source of supply—Penacook Lake.

Mode of supply—Gravity, also pumping to reservoir for high service and fire protection.

PUMPING STATISTICS.

1. Builders of pumping machinery—Henry R. Worthington, Harrison, N. J.
2. Description of fuel used—*a.* Kind—bituminous.
 - b.* Brand of coal—Anderson's Forge and George's Creek Big Vein.
 - c.* Average price of coal per gross ton delivered, \$4.72.

3. Coal consumed for the year—258.435 tons.
4. (Pounds of wood consumed) ÷ 3=equivalent amount of coal.
5. Total equivalent coal consumed for the year for pumping purposes—
6. Total pumpage for the year without allowance for slip—315,175,742 gallons.
7. Average static head against which pump works—200.46 feet.
8. Average dynamic head against which pumps work—205.07 feet.
9. Number of gallons pumped per pound of equivalent coal—544.44.
10. Duty=
$$\frac{315,175,742 \text{ gallons pumped} \times 8.34 \text{ (lbs)} \times 100 \times \text{dynamic head, } 205}{\text{Total fuel consumed, } 578,890 \text{ pounds}} = 92,986,344$$
Cost of pumping, figured on pumping station expenses, \$3,279.02.
11. Per million gallons pumped—\$10.404.
12. Per million gallons raised one foot (dynamic)—\$0.051.

STATISTICS RELATING TO DISTRIBUTION
SYSTEM.

MAINS.

1. Kind of pipe—cast iron and cement-lined.
2. Sizes—from two-inch to twenty-four-inch.
3. Extended—4,900 feet during year.
4. Renewed—12,549 feet during year.
5. Discontinued—13,467 feet during year.
6. Total now in use—67.28 miles.
7. Number of leaks per mile for year—
8. Length of pipes two and three inches diameter—3.19 miles.

9. Number of hydrants added during year—public, 16; private, 1.
10. Number of hydrants now in use—public, 372; private, 63.
11. Number of stop gates added during year—19.
12. Number of stop gates now in use, 928.
13. Number of stop gates smaller than four-inch—none.
14. Number of blow-off gates—82.
15. Range of pressure on mains at centre of city—88 pounds high service and 48 pounds low service.

SERVICES.

16. Kind of pipe—cement-lined.
17. Sizes—three-fourth-inch to ten-inch.
18. Extended—1,102 feet.
19. Discontinued—295 feet.
20. Total now in use—84,126 feet.
21. Number of service taps added during year, 37.
22. Number now in use—3,627.
23. Average length of service—23.19 feet.
24. Average cost of service for the year—\$11.17.
25. Number of meters added during year—48.
26. Number now in use—1,532.
27. Percentage of services metered—42.23.
28. Percentage of receipts from metered water—59.
29. Number of elevators added—none.
30. Number now in use—10.
31. Number of standpipes for street watering—37.

HEALTH DEPARTMENT.

BOARD OF HEALTH REPORT.

To the City Council:

We have the honor to submit the following report of the Board of Health for the year ending December 31, 1908.

MEETINGS.

Regular monthly meetings have been held throughout the year and some business of a routine nature was transacted at nearly every meeting. We have been frequently interrogated by the sanitary officer as to the best method of handling certain contingencies and we have taken pleasure in the discussions which have been provoked in this manner.

CONTAGIOUS DISEASES.

The city has been singularly free from contagious diseases during the past year. Such cases as have appeared have been promptly quarantined either at their homes or at the hospital. On the recovery or death of the patient the premises and all books, clothing, furniture, etc., are thoroughly fumigated by formaldehyde gas.

This gas, in concentrated form, is very deadly to all forms of germ life and effectually sterilizes all articles with which it is brought into intimate contact.

The method approved and adopted by this board is the one now generally conceded to be the most effectual. We refer to the potassium permanganate and formalin method which has the advantage of almost instantaneously liberat-

ing immense volumes of gas insuring good and efficient action even though the cracks around doors and windows are not sealed.

The liberal use of antitoxin in diphtheria cases has, of course, been the most important factor in the holding of that dread malady in check.

For a detailed statement of contagious diseases as well as of other matters of interest we refer you to the report of the sanitary officer which is transmitted herewith.

VACCINATION.

We are pleased to be able to report that our crusade for the better enforcement of the vaccination law has borne fruit with the result that there are now very few unvaccinated school children.

MILK INSPECTION.

The inspection of milk and dairies has gone steadily on by the milk inspector assisted by the sanitary officer. Your body has been kept in touch with the work by monthly reports, for a general summing up of which, as well as for other information pertinent to this matter, I refer you to the milk inspector's report which is hereby transmitted.

At a meeting held November 2 this board adopted the Dairy Score Card of the United States Department of Agriculture for the purpose of keeping the records of dairy and milk inspections.

This action serves to make our records uniform with, and comparable to, those of many other communities using the same methods.

It is probable that commerce, guided by science, will eventually solve the clean milk problem here as it has already done in many other places. The relentless law of the survival of the fittest is sure to gradually eliminate the unclean. The propaganda for reform should be an educa-

tional movement, teaching the public what it is entitled to have.

The laboratory and field work of the inspector should be addressed to the instruction of the producer and handler of milk primarily, and to informing the public as to which sources of supply nearest conform to our standards secondarily. It would seem as though a quarterly bulletin in the public prints, showing the score-card rating of all producers could not fail to be productive of much good. Perhaps a better method would be to publish the names of all those whose scores were equal to, or above a certain fixed minimum. This would naturally stimulate the producer as it seems likely that in the course of time those whose names habitually appeared on the "roll of honor" would receive the bulk of the most desirable patronage.

The rest would be simple. Forced by this "bloodless warfare of commerce" the delinquents must either retire from the business or adjust their methods and product to the standard demanded by the people.

From time to time the "fixed minimum score" should be raised a few points and thus the improvement would go on constantly all along the line.

WATER SUPPLY.

Our city is fortunate in having a never-failing source of pure water so near at hand. Every effort should be made to preserve its purity. The policy of the city in acquiring the shore property around Penacook Lake cannot be too highly commended. No doubt the forests which will eventually surround this charming body of water can be made to yield a constant supply of merchantable timber which in years to come will pay fair interest on the money invested.

The multiplication of power boats on the lake has raised the question as to the effect upon the water for

drinking purposes. It would seem as though there is no cause for fear in that direction.

The engine exhausts throws out some oil in the form of a spray. This settles *on the water* but does not mix with it. It must all be washed ashore in the course of time.

This film of oil on the water near the shore no doubt prevents the breeding of mosquitoes to a certain extent, as oiling the surface of ponds and swamps is a well known method of exterminating this pest.

The drainage of the various cottages and camps around the lake might be a menace did not rigid inspection by the sanitary officer reduce this danger to a minimum.

Mr. Howard, the state chemist, reports favorably on the water after a long series of analyses, covering every season of the year.

The faint vegetable odor and taste at certain times is due to the presence of certain *algae* or microscopic water plants. They are harmless.

In conclusion, the board wishes to express its thanks to the sanitary officer, Mr. Palmer, for his hearty and intelligent co-operation.

Respectfully submitted,

CHARLES R. CORNING, *Mayor,*

CHARLES H. COOK, JR.,

GEORGE COOK,

Board of Health.

REPORT OF MILK INSPECTOR.

The adoption of the new milk ordinance, one year ago, was a distinct innovation in the methods of producing and handling milk in our city.

Previous to this time little thought was given to the care of this very important product, when, with a fat and solid of sufficient standard, everybody rested content. Now, however, we have begun to learn that the fat and solid content of a milk are of very little importance and that a clean, wholesome milk is what we want and that such a milk is of vital moment to the health of every consumer.

There is still much to be done in our city on this problem of clean milk, but all has been done as far as time and opportunity would allow to *educate* both consumer and producer. This has been accomplished in the main, as Mr. Palmer's report shows, by personal work, talks, etc., with both the producer and consumer, with the results that many methods have been changed and much equipment abandoned or improved.

The greatest difficulty in the production of clean milk is that the consumer is not willing to pay the price which will enable the producer to sell his milk of pure quality at a reasonable amount of profit.

We all know that milk as a universal food enters every home and is the principal food of infants, children and invalids, but few realize that every quart of milk at seven cents is equivalent in food value to a pound of beef at eighteen cents.

Clean milk is a safe and valuable article of food with nutritive value unimpaired, hard to produce and cheap at any price. Dirty milk is dangerous as a food with nutritive value very much impaired, easy to produce and dear at any price.

To produce clean, wholesome milk requires great care and considerable expense; the producer must learn this, and having learned it, he necessarily expects the consumer to pay him for his time and care.

Concord does not pay for the cleanest of milk—few cities do for that matter. There are some men in Concord now who can furnish you a very creditable milk and a milk that stands out above most of the others. These men deserve encouragement by increased patronage, and I think they are getting it. These men are encouraged to do still better and all men are stimulated by just pride to raise their standard to that of the very best milk plant in our city, as shown by the records.

How high the standard will be raised depends entirely on how much Concord citizens are willing to pay for their milk.

The consumer, as well as the inspector, is the stimulant to make the producer bring to our door a clean, wholesome milk.

Mr. Weld, a Washington expert, estimated in a sample of Concord milk a teaspoonful of dirt to one eight-quart can. This man's milk is going into the homes of hundreds of Concord's citizens and unless the bacteriological count is over 500,000 or the temperature higher than fifty degrees Fahrenheit, no law can reach him.

Insist that your milk is left at your door in glass jars and refuse to pay for all milk which on standing shows dirt in the bottom of the jar. Don't pay for a milk that tastes bitter, or one that has a peculiar color, or is sour when received; all these characteristics are due to bacteria, which means carelessness in handling and might easily have been avoided.

In closing, will say that, with few exceptions, the attitude of the producer has been all that could be desired, and we feel that improvement will be steady and permanent.

CHARLES DUNCAN,
Milk Inspector.

REPORT OF SANITARY OFFICER.

To the Board of Health:

GENTLEMEN: As Sanitary Officer I herewith submit to you my annual report for the year ending December 31, 1908, detailing the general character of the work of the Health Department.

MORTALITY.

There were reported 428 deaths during the year, compared with the same number for the previous year. The death rate was 15.25 per 1,000, compared with 15.2 in 1907. There were 138 bodies sent out of town for interment and 95 bodies were brought to Concord from other places for burial; in each case a transmit permit issued by the proper authorities accompanied the body.

CONTAGIOUS DISEASES.

The record of 1908 shows that there was a decrease in the number of cases of contagious diseases in Concord, the total being less than for any year during the last four. There were reported to this office during the year, 100 cases of measles, 7 cases of scarlet fever, 44 cases of diphtheria, with 4 deaths, and 6 cases of typhoid fever, with 1 death, making a total of 157 cases and 5 deaths.

Houses containing cases of contagious diseases were placarded and quarantine established. A number of cases of diphtheria and scarlet fever were cared for at the contagious disease ward of the Margaret Pillsbury General Hospital, the indigent patients being provided for at the expense of the Board of Health.

INSPECTIONS.

I have inspected the different school buildings of the city and found them in good sanitary condition. Inspections were also made at different times during the year of the stables and alleyways in the business portion of the city and of all premises complained of.

WATER SUPPLY.

Concord is to be congratulated on its water supply. During the year samples have been analyzed and the results were satisfactory, also through the drought the latter part of the year samples showed upon analysis to be of good quality. I have inspected the lake and found that many improvements have been made by the Water Board in the removal of decayed stumps and other objectionable matter. Inspections were also made of the reservoir, and found to be in good condition.

RABIES.

Several dogs suspected of having rabies were called to our attention and in two instances the animals were killed and the heads were sent to Hanover for analysis, with the results being reported as positive.

FUMIGATION.

The cost of the supplies for fumigation was \$50.52. Formaldehyde gas liberated by potassium permanganate was used with the same good results as in former years.

INSPECTION OF DAIRY FARMS.

January 1, 1908, an ordinance regulating the sale and care of milk went into effect, and during the year Dr. Duncan, our milk inspector, and myself have inspected 100

dairies where milk is supplied to our city. I am sorry to state that many of the conditions were not what they should be or what the ordinance requires.

In October, in company with Professor Ivan C. Weld, assistant in the United States Department of Agriculture at Washington, we inspected twelve of our best milk producing dairies and used the United States government dairy score card, and I am sorry to state that the scores ranged from 29 to 56 points, or an average of 40 per cent. The average should be twice that figure.

We have visited dairies where the conditions were filthy: the walls and ceilings were covered with cobwebs and dust, the large, flaring milk pails were used and the dirt dropping from above into the milk pail or can contaminated the milk. The particles might be strained out but the germs remained in the sensitive product to multiply.

Suggestions have been made to the dairymen for the better sanitary condition of the barns and greater cleanliness in the care of the milk and milk utensils. Many of our suggestions have been carried out, and others are to follow, and we hope during the coming year to make greater progress along these lines with the co-operation of our citizens in demanding and knowing they have a pure and clean milk. The dairy score cards that are made from time to time will be on file as a public record.

Expenditures of the Board of Health of the city of Concord for the year ending December 31, 1908:

SALARIES.

Charles E. Palmer, health officer, salary,	\$1,400.00
Charles Duncan, M. D., milk inspector, salary,	300.00

FUMIGATION SUPPLIES.

A. Perley Fitch, formaldehyde and permanganate,	41.20
George A. Berry & Co., formaldehyde,	8.32

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Orr & Rolfe, repairing pump,	\$1.00
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INCIDENTAL EXPENSES.

Helen O. Monier, clerk, services,	396.00
Charles H. Cook, M. D., supplying for health officer,	53.85
Rumford Printing Co., mortuary reports,	26.00
New England Telephone & Telegraph Co., rental,	25.85
Ira C. Evans Co., office supplies,	40.50
Edson C. Eastman, office supplies,	6.46
Charles E. Palmer, postage, etc.,	16.47
George A. Place, repairing typewriter,	1.75
J. M. Stewart & Sons Co., reseating chair,	1.10
Morrill Bros., clock,	1.00
N. A. Dunklee, horse hire,	6.00
J. E. Randlett, use of stereopticon, milk lecture,	5.00
Trustees E. E. Sturtevant Post, No. 2, use of G. A. R. hall, milk lecture,	3.00
John J. Dooning, burying horse,	2.00
Charles E. Palmer, money advanced C. H. Moody for burying dead animals,	2.00
C. H. Fellows, burying dead animals,	2.00
Benj. A. Foote, burying dead animals,	2.00
George C. Foote, burying dead animals,	1.20
Arthur J. Foote, burying dead animals,	1.20
Lee Morgan, burying dead animals,	1.20
George A. Berry & Co., antitoxin, etc., diphtheria cases,	69.19
C. H. Martin & Co., antitoxin, etc., diphtheria cases,	9.85
A. H. Knowlton & Co., drugs, diphtheria cases,	4.77
Margaret Pillsbury Hospital, care of Edward Dougherty, diphtheria,	21.43
Margaret Pillsbury Hospital, care of James Dougherty, diphtheria,	25.71
Margaret Pillsbury Hospital, care of Patrick Dougherty, diphtheria,	25.71

Margaret Pillsbury Hospital, care of John O'Brien, diphtheria,	\$21.43
Margaret Pillsbury Hospital, care of Walter Goodwin, diphtheria,	21.43
Margaret Pillsbury Hospital, care of Mary Haley, scarlet fever,	96.43
Margaret Pillsbury Hospital, care of William Willard, scarlet fever,	32.14
Margaret Pillsbury Hospital, care of Josephine Veasey, scarlet fever,	42.28
Margaret Pillsbury Hospital, care of Emma King, diphtheria,	25.71
Laura A. Dolloff, nursing Wilmot family, diphtheria,	9.00
Mary H. Burleigh, nursing Mrs. Fitzgerald, diphtheria,	37.95
Amelia J. Bullock, nursing Mrs. Fitzgerald, diphtheria,	10.50
E. S. Tenney Co., coal and wood, Dow family, diphtheria,	7.70
Concord Coal Co., wood, Wilmot family, diphtheria,	1.00
Concord Coal Co., coal and wood, Fitzgerald family, diphtheria,	6.25
C. R. Dame, provisions, Dow family, diphtheria,	26.12
Dennis Green, provisions, Wilmot family, diphtheria,	7.65
Gale & Brown, provisions, Fitzgerald family, diphtheria,	15.58
John Jordan, milk, Fitzgerald family, diphtheria,	4.48
P. LeC. Towle, milk, Dow family, diphtheria,	3.15
Mrs. J. H. Robbins, meals served nurse at Wilmot family, diphtheria,	1.00
C. T. Huntoon, rent, Royce family, diphtheria,	3.00
Total,	<hr/> \$2,874.56

CONTAGIOUS DISEASES.

The following table shows the number of contagious diseases reported during each month of the year and the deaths resulting therefrom:

MONTHS.	Diphtheria.		Scarlet fever.		Typhoid fever.		Smallpox.		Measles.	
	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.
January	7								1	
February	10	2	2						1	
March									8	
April	3		2		1				4	
May	1	1	1			1			13	
June	1								29	
July									28	
August			1		2				15	
September	4								1	
October	4				3					
November	5	1	1							
December	9									
Totals	44	4	7		6	1			100	

REPORT OF CONTAGIOUS DISEASES BY WARDS.

WARDS.	1	2	3	4	5	6	7	8	9	Totals.
Diphtheria	5		5	5	7	4	11	3	4	44
Scarlet fever					3	2	1		1	7
Typhoid fever						3			3	6
Smallpox										
Measles			4	22	3	10	14	10	37	100

COMPARATIVE TABLE.

The following table contains the number of cases of contagious diseases and the deaths resulting therefrom for the years since and including 1890:

Years.	Diphtheria.		Scarlet fever.		Typhoid fever.		Measles.		Small-pox.		Totals.	
	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.
1890.....	6	2	9	.....	17	5	6	.....	.....	.....	38	7
1891.....	12	3	7	.....	14	6	2	.....	.....	.....	35	9
1892.....	13	3	37	3	7	1	2	.....	.....	.....	59	7
1893.....	48	.....	41	.....	13	.....	300	.....	.....	.....	402	.....
1894.....	17	3	113	6	13	3	21	.....	.....	.....	164	12
1895.....	55	8	4	.....	15	5	452	.....	.....	.....	526	13
1896.....	38	8	44	8	21	3	158	.....	.....	.....	261	19
1897.....	13	1	22	1	17	2	138	.....	.....	.....	190	4
1898.....	4	.....	8	.....	8	4	120	.....	.....	.....	146	4
1899.....	9	5	99	1	14	1	299	.....	.....	.....	421	7
1900.....	29	5	39	.....	18	1	476	1	.....	.....	562	.....
1901.....	65	4	11	.....	13	3	40	.....	1	1	130	8
1902.....	29	2	6	.....	23	3	27	.....	2	.....	87	5
1903.....	42	4	39	.....	17	3	582	4	2	.....	682	11
1904.....	55	3	18	.....	12	1	31	.....	.....	.....	116	4
1905.....	15	1	80	.....	23	3	181	1	.....	.....	299	5
1906.....	14	2	27	.....	32	3	101	1	1	.....	175	6
1907.....	63	2	26	1	11	.....	118	.....	.....	.....	218	3
1908.....	44	4	7	.....	6	1	100	.....	.....	.....	157	5

NUISANCES, COMPLAINTS AND INSPECTIONS.

A statement of the number and character of the nuisances which have been abated by this department during the year, appears below:

Accumulation of ashes,	4
Adulteration of food,	1
Catch-basin traps broken,	5
Collecting garbage without license,	4
Complaints made without cause,	5
Contamination of Long Pond,	2
Dead animals,	40
Decayed fruit,	3
Decayed meat and fish,	2
Defective plumbing,	1
Dogs suspected of having rabies,	7
Drinking water questionable,	4
Dumping rubbish,	14
Filthy premises,	11
Keeping hens,	6
Keeping hogs,	10
Milkmen not complying with law,	8
Odor from cesspools,	1
Odor from dumps,	4
Odor from fish markets,	2
Odor from garbage cans,	7
Odor from manure heaps,	4
Odor from privy vaults,	12
Odor from sewage,	1
Odor from stables,	12
Odor in houses,	17
Odor in offices,	2
Other nuisances,	9
Plumbers doing work in violation of law,	3
Sewers obstructed,	2
Sewer-traps broken,	4

Sinks with imperfect drainage,	2
Throwing out ashes,	4
Throwing out slops,	2
Throwing out swill,	5
Washing ice at watering trough,	1
Water-closets foul and offensive,	6
Water-closets out of repair,	5
Water-closets without water supply,	5
Water in cellars,	6
Watering trough in unsanitary condition,	1
Well in cellar,	1
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Total,	245

INSPECTION OF PLUMBING.

The number of inspections will be found in the table herewith annexed:

Plumbing permits granted,	102
Water-closets put in,	144
Sinks put in,	62
Bath-tubs put in,	70
Wash-bowls put in,	86
Wash-trays put in,	15
Slop-sinks put in,	1
Urinals put in,	1
Drinking fountains put in,	2
Number of sewers inspected,	27
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Total number inspections of plumbing,	204

FUMIGATION.

Rooms fumigated,	512
Schoolrooms fumigated,	3
Cellars fumigated,	8

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Wards at hospitals fumigated,	15
Cars fumigated,	1
Books fumigated,	93
Pieces of clothing and bedding fumigated,	128
Pieces burned,	100

REPORT OF INSPECTION OF MILK FARMS AND MILK
EXAMINATIONS.

Number of milk farms visited,	100
Conditions good,	56
Conditions fair,	33
Conditions poor,	11
Improvements suggested,	71
Warning notices sent ordering compliance with state law and city milk ordinance,	12
Number of milk examinations made,	184
Examinations above standard,	171
Examinations below standard,	13
Notices sent that milk was below standard,	8

SUMMARY.

Houses placarded in cases of contagious diseases,	74
Placards removed,	74
Visits made to contagious diseases,	537
Burial permits issued,	428
Burial permits issued to non-residents,	95
Transfer permits issued,	138
Garbage licenses issued,	49
Milk licenses issued,	187
Milk license fees received,	\$187.50
Number of reports of contagious diseases sent to State Board of Health,	52
Number of reports of contagious diseases sent to the surgeon-general, public health and marine- hospital service,	12

Number of mortuary reports issued,	1,164
Number of vaccination certificates issued for children to attend school,	805
Number of permits issued for children to return to school,	54
Number of samples of water collected for analysis,	7
Number of collections of food for analysis,	2
Number of inspections of barber shops,	10

In conclusion I desire to thank the members of the Board of Health and the City Council for their interest and support in all matters relative to this department.

CHARLES E. PALMER,
Sanitary Officer.

DEATHS DURING 1908, BY SEX, CONDITION AND
NATIVITY, BY MONTHS.

	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Totals.
SEX.													
Males	20	15	19	21	22	7	18	26	15	18	24	31	236
Females	12	18	17	25	15	22	6	13	12	15	20	17	192
CONDITION.													
Married	16	17	11	16	9	11	6	7	10	16	15	20	154
Single	8	6	15	12	11	7	12	17	8	10	18	17	141
Widowed	8	9	9	16	17	9	6	14	9	6	11	11	125
Divorced.....	.....	1	.....	2	.....	2	.....	.....	.....	1	.....	.....	6
Not stated.....	.....	.....	1	.....	.....	.....	.....	1	.....	.....	.....	.....	2
NATIVITY.													
Concord.....	8	8	11	13	9	10	10	14	9	11	15	11	129
New Hampshire	15	16	12	14	16	8	7	11	8	10	12	18	147
Other states.....	4	3	8	10	5	5	2	7	3	3	8	7	65
Foreign	3	5	5	8	7	6	5	5	6	9	8	9	76
Not stated.....	2	1	.....	1	.....	.....	.....	2	1	.....	1	3	11

DEATHS REPORTED BY WARDS AND PUBLIC INSTITUTIONS.

MONTHS.	WARDS.										New Hampshire State Hospital.	Margaret Pillsbury General Hospital.	New Hampshire Memorial Hospital.	New Hampshire Odd Fellows Home.	Home for the Aged.	New Hampshire State Prison.	Totals.	
	1	2	3	4	5	6	7	8	9									
January	2	2	.....	2	3	5	5	1	2	3	6	.....	1	.....	.....	.....	.....	32
February	3	.....	.....	2	6	4	5	1	2	4	4	1	1	.....	.....	.....	.....	33
March	3	1	.....	4	3	3	4	2	3	7	4	1	.....	.....	.....	1	.....	36
April .....	.....	2	4	5	.....	5	12	.....	2	8	4	2	1	.....	.....	1	.....	40
May	1	.....	2	4	2	2	3	1	1	12	8	1	.....	.....	.....	.....	.....	37
June	2	.....	.....	6	7	1	4	1	.....	5	2	1	.....	.....	.....	.....	.....	29
July .....	.....	1	1	1	2	4	2	2	3	6	2	.....	.....	.....	.....	.....	.....	24
August	4	1	.....	4	1	3	4	4	4	9	3	1	1	.....	.....	.....	.....	30
September	1	2	.....	2	3	5	1	3	.....	6	3	1	.....	.....	.....	.....	.....	27
October	2	1	.....	3	3	5	3	1	1	9	2	.....	1	2	.....	.....	.....	33
November	4	2	2	4	3	3	7	.....	2	8	5	3	.....	1	.....	.....	.....	44
December	2	2	1	6	3	1	2	7	4	11	6	2	1	.....	.....	.....	.....	48
Totals	24	14	10	43	36	41	52	23	24	88	49	13	6	4	1	.....	.....	428

MORTALITY REPORT.

MORTALITY REPORT.—Continued.

Sex.	Months.												CAUSES OF DEATH.			Whole number.			Ages.																
	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Unknown.	Totals.	Males.	Females.	Unknown.	Under 1.	1 to 5.	5 to 10.	10 to 15.	15 to 20.	20 to 30.	30 to 40.	40 to 50.	50 to 60.	60 to 70.	70 to 80.	Over 80.	Unknown.					
M.					1		1		1			2		Old age.....																					
F.	1	1		1	1			1		1		1		Old age.....	12	5	7											2	5						
M.														Papilloma of uterus.....																					
F.												1		Papilloma of uterus.....	1		1										1								
M.			1	1	1	1	2							Paralysis.....													1	4	1						
F.				1										Paralysis.....	7	6	1																		
M.			1	1	3		2		1	1	1			Paresis.....												1	5	1	3						
F.	1					1						1		Paresis.....	13	10	3									1	1								
M.												1		Pericarditis.....														1							
F.														Pericarditis.....			1																		
M.					1									Peritonitis, tubercular.....																					
F.														Peritonitis, tubercular.....			1																		
M.	1	2	1		1				1					Pneumonia.....														1	2	1	2	1			
F.	1	1	1	3	1				1	3	1			Pneumonia.....	22	11	11									2	1	1	1	1	6				

REPORT OF CITY PHYSICIAN.

To the City Council:

I have the honor of submitting the following report for the year ending December 31, 1908:

Number of calls on city poor,	115
Office consultations city poor,	75
Confinement case city poor,	1
Number of calls at police station,	8
Number of calls made on contagious cases quarantined by Board of Health,	35
Office consultations, Board of Health cases,	15
Number of cases vaccinated and vaccination certificates given,	141

A considerable number (perhaps one hundred and fifty) of school children were examined for contagious diseases at the request of the sanitary officer. This was done as a matter of routine when a contagious disease made its appearance in a school.

Respectfully submitted,

CHARLES H. COOK, JR.,
City Physician.

FIRE DEPARTMENT.

REPORT OF CHIEF ENGINEER.

To the Honorable Mayor and City Council:

I herewith submit for your consideration the following report of the Fire Department for the year 1908:

The department responded to 74 bell alarms and 199 still alarms.

	Bell.	Still.	Total.
Precinct,	45	166	211
Penacook,	11	21	32
East Concord,	10	3	13
West Concord,	8	9	17
	<hr/>	<hr/>	<hr/>
	74	199	273

This report will be found to contain statements in detail embracing the amount of expenditures, a complete roll of the department, with residence and occupation of each member, a record of all fires and alarms which have occurred during the year and the causes thereof, as nearly as could be ascertained, with the names of the owners or occupants and the value, loss, insurance and insurance recovered in each case.

The apparatus is in good condition, with the exception of Pioneer Engine, No. 3, which will have to be repaired or replaced in the near future.

The Pioneer, Cataract and Good Will wagons were thoroughly repaired, retouched and varnished.

One Eastman Jumbo Deluge set was added to the equipment.

One horse was purchased and one placed on a farm, conditionally.

The test of hose resulted in the condemning of 300 feet and the laying aside for relining of 500 feet.

I respectfully recommend the purchase of 500 feet of hose during the coming year, as was done in the year preceding.

This policy continued, will, under ordinary circumstances, keep the complement of hose intact and avoid the necessity of purchasing a large amount at one time. The fire alarm telegraph system is in good condition.

The storage battery plates, 244 in number, were renewed.

A Gamewell electric alarm system was installed in Penacook, and, as will be seen by the report of Assistant Engineer F. M. Dodge, in whose charge it rests, has given most satisfactory service. The regrettable excess of expenditures over appropriations is in part explained by the advantageous purchase of extra fuel, the abnormal number of brush fires and attendant expense, and the high price of forage which prevailed throughout the entire year.

I wish to return my sincere thanks to your honorable body for the opportunity afforded me to attend the convention of the International Association of Fire Engineers held at Columbus, Ohio, in August.

Respectfully submitted,

W. C. GREEN,

Chief Engineer.

APPROPRIATIONS.

Appropriation,	\$22,250.00
Joint resolution, Penacook fire alarm system,	1,700.00
hose,	500.00

FIRE DEPARTMENT.

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Joint resolution, horse,	\$300.00
Penacook gong,	40.00
outstanding claims,	1,322.27
	<hr/>
	\$26,112.27

DISBURSEMENTS.

Permanent men,	\$7,218.00
Vacation,	628.50
Rent, Veterans' Association,	150.00
Call men,	6,960.00
Forage,	1,903.86
Fuel,	1,391.13
Lights,	729.78
Incidentals,	2,434.31
Horse shoeing,	343.10
Horse purchased,	265.00
Horse hire,	758.30
Laundry,	52.00
Fire alarm,	751.47
Supplies chemical engine,	49.32
Hose,	500.00
Water,	119.50
House man,	80.00
Penacook fire alarm system,	1,700.00
Plains extinguishers,	43.00
Penacook gong,	35.00
	<hr/>
	\$26,112.27

ALARMS.

PRECINCT.

STILL. January 1, 3.39 p. m. Chimney fire in residence of Robert Buchanan, 25 Pine Street. Extinguished by Chemical Company. No loss.

STILL. January 1, 5.28 p. m. Chimney fire in residence of J. Lemoine; 89 Washington Street. Extinguished by Chemical Company. No loss.

STILL. January 5, 10.40 a. m. Chimney fire in residence of Emmett Roy, 40 Downing Street. Extinguished by Chemical Company. No loss.

STILL. January 5, 10.41 a. m. Chimney fire in residence of W. J. Berryman, 32 Thorndike Street. Extinguished by detail from Central Station. No loss.

11-11-2. January 5, 11.18 a. m. A call for assistance from the Plains. Chapel owned and occupied by the Willing Workers' Society discovered to be on fire during the morning service. Caused by overheated furnace. Chemical Company and detail from the department sent under command of Engineer W. J. Coffin.

	Value.	Loss.	Insurance.	Ins. paid.
Building,	\$1,500.00	\$236.00	\$1,000.00	\$236.00
Contents,	500.00	25.00	300.00	25.00

STILL. January 5, 4.54 p. m. Chimney fire in residence of L. M. Philbrook, 23 Pierce Street. Extinguished by Chemical Company. No loss.

STILL. January 6, 7.18 p. m. Chimney fire in residence of Dr. A. P. Chesley, 1 South State Street. Extinguished by Chemical Company. No loss.

STILL. January 7, 9.08 a. m. Chimney fire in residence of A. C. Morse, 35 South Spring Street. Extinguished by Chemical Company. No loss.

STILL. January 13, 3.27 p. m. Chimney fire in residence of Miss M. M. Farrar, 87 North Spring Street. Extinguished by Chemical Company. No loss.

Box 55. January 15, 5.49 p. m. Fire in cab of locomotive owned by B. & M. R. R., in round-house, railroad yard. Caused by torch coming in contact with waste. One thousand and fifty feet of hose wet. Recall, 6.05 p. m. Loss trifling.

STILL. January 20, 2.29 p. m. Chimney fire in residence of W. S. Kidder, 60 Pillsbury Street. Extinguished by Chemical Company. No loss.

STILL. January 22, 5.41 p. m. Chimney fire in residence of W. M. Dyer, 17 Pitman Street. Extinguished by Chemical Company. No loss.

STILL. January 24, 6.31 a. m. Chimney fire in residence of A. L. Maher, 127 South State Street. Extinguished by Chemical Company. No loss.

STILL. January 24, 7.21 a. m. Chimney fire in residence of Mrs. S. S. Ellis, 5 Perry Avenue. Chemical Company responded but no assistance was required. No loss.

Box 51. January 27, 5.15 a. m. Crossed wires of local fire alarm system in B. & M. R. R. plant caused an alarm to be given on said system. The watchman, in pursuance of orders, immediately pulled the city box. Recall, 5.25 a. m.

STILL. January 28, 11.43 a. m. Chimney fire in residence of J. J. Kibbey, 14 Walker Street. Extinguished by Chemical Company. No loss.

STILL. January 28, 1.39 p. m. Slight fire on outside of residence of J. R. Johns, 17 Charles Street. Caused by throwing hot ashes against building. Extinguished by Chemical Company. Loss, trifling.

Box 48. January —, 1.59 p. m. Fire in stable in rear of 60 South Street, owned by Anna F. G. Gatecomb and George H. Goodwin. Cause unknown. Five hundred feet of hose wet. Recall, 2.31 p. m.

	Value.	Loss.	Insurance.	Ins. paid.
Building,	\$3,500.00	\$1,000.00	\$2,500.00	\$1,000.00
Contents,	300.00	150.00	None.	None.

STILL. January 30, 8.11 a. m. Chimney fire in residence of J. E. Hill, 27½ Washington Street. Extinguished by Chemical Company. No loss.

STILL. January 30, 11.41 a. m. Chimney fire in residence of D. H. Leavitt, 47 Green Street. Extinguished by Chemical Company. No loss.

STILL. January 30, 6.29 p. m. Chimney fire in residence of F. L. Cass, 72 West Street. Extinguished by Chemical Company. No loss.

Box 25. January 31, 6.34 p. m. Slight fire in ash can in vacant store, 11 Capitol Street. Extinguished with pony extinguisher. Recall, 6.42 p. m.

STILL. January 31, 9.39 p. m. Chimney fire in residence of M. L. Tucker, 27 Jackson Street. Extinguished by Chemical Company. No loss.

STILL. February 1, 7.01 p. m. Slight fire in tenement occupied by D. Murphy, 6 Avery Block, rear 95 South Main Street. Caused by over-turned oil stove. Extinguished by Chemical Company. No loss.

STILL. February 2, 1.23 p. m. Chimney fire in Stickney Block, 148 North Main Street. Extinguished by Chemical Company. No loss.

STILL. February 2, 8.23 p. m. Chimney fire in Stickney Block, 148 North Main Street. Owned by Carolyn F. Stickney. Extinguished by Chemical Company.

	Value.	Loss.	Insurance.	Ins. paid.
Building,	\$35,000.00	\$20.00	\$25,000.00	\$20.00

STILL. February 4, 9.25 a. m. Chimney fire in residence of H. S. George, 7 Green Street. Extinguished by Chemical Company. No loss.

STILL. February 4, 2.36 p. m. Chimney fire in residence of J. H. Willcox, 286 Pleasant Street. Extinguished by Chemical Company. No loss.

STILL. February 4, 4.50 p. m. Chimney fire in residence of C. E. Koehler, 43 Stone Street. Extinguished by Chemical Company. No loss.

STILL. February 6, 11.29 a. m. Chimney fire in resi-

dence of E. C. Rines, 106 Warren Street. Extinguished by Chemical Company. No loss.

STILL. February 7, 1.29 p. m. Chimney fire in residence of A. J. Nichols, 124 South Street. Extinguished by Chemical Company. No loss.

STILL. February 8, 7.19 p. m. Chimney fire in residence of J. Williams, 59 Concord Street. Extinguished by Chemical Company. No loss.

STILL. February 9, 1.04 p. m. Chimney fire in residence of C. H. Bresnahan, 94 Rumford Street. Extinguished by Chemical Company. No loss.

STILL. February 10, 7.45 a. m. Chimney fire in residence of J. King, 117 South Main Street. Extinguished by Chemical Company. No loss.

STILL. February 16, 8.30 a. m. Chimney fire in residence of Robert Marshall, 246 North State Street. Extinguished by Chemical Company. No loss.

STILL. February 17, 9.02 a. m. Chimney fire in residence of W. G. Fletcher, 2 North Spring Street. Extinguished by Chemical Company. No loss.

STILL. February 18, 5.45 p. m. Chimney fire in residence of Mrs. F. E. Burnham, 64 Rumford Street. Extinguished by Chemical Company. No loss.

STILL. February 25, 10.38 a. m. Chimney fire in the W. F. Thompson billiard parlor, 123 North Main Street. Extinguished by Chemical Company. No loss.

STILL. February 26, 8.23 a. m. Chimney fire in residence of C. H. Hayes, 27 Downing Street. Extinguished by Chemical Company. No loss.

STILL. February 29, 9.31 a. m. Alarm occasioned by explosion of heater in basement of tenement block, 12 Perley Street. Chemical Company responded but no assistance was required other than shutting off the gas. No fire.

STILL. March 2, 12.59 p. m. Chimney fire in residence of W. H. Ash, 81 Broadway. Extinguished by Chemical Company. No loss.

STILL. March 2, 4.20 p. m. Chimney fire in Exchange Block, 98 North Main Street. Extinguished by Chemical Company. No loss.

STILL. March 4, 4.45 p. m. Chimney fire in Merchants Block, 82 North Main Street. Extinguished by Chemical Company. No loss.

Box 55. March 5, 6.29 a. m. Fire in building in railroad yard, south of round-house, owned and occupied by B. & M. R. R. Used as coal-shed office. Cause of fire unknown. Eight hundred feet of hose wet. Recall, 6.49 a. m.

	Value.	Loss.	Insurance.	Ins. paid.
Building,	\$3,000.00	\$109.90	\$2,000.00	\$109.90

STILL. March 6, 4.56 a. m. Fire in residence 4 Summer Street, owned by Georgia L. Ring and occupied by John W. Lynch. Fire originated in wood-box from some cause unknown. Chemical Company responded but no assistance was required. Extinguished by occupants.

	Value.	Loss.	Insurance.	Ins. paid.
Building,	\$2,500.00	\$47.50	\$1,500.00	\$47.50

STILL. March 6, 10.15 a. m. Chimney fire in residence of Mrs. T. H. Jameson, 18 Short Street. Extinguished by Chemical Company. No loss.

STILL. March 10, 6.34 p. m. Chimney fire in residence of G. P. Young, 47 Laurel Street. Extinguished by Chemical Company. No loss.

STILL. March 11, 7.13 a. m. Chimney fire in residence of R. H. Potter, 232 North Main Street. Extinguished by Chemical Company. No loss.

STILL. March 16, 1.21 p. m. Chimney fire in residence of Charles H. Thompson, 51 Franklin Street. Extinguished by members of Alert Hose Company. No loss.

STILL. March 17, 1.09 p. m. Chimney fire in residence of F. E. Woods, 3 Chandler Street. Extinguished by Chemical Company. No loss.

STILL. March 17, 6.18 p. m. Chimney fire in residence of D. A. Lucia, 1 Foster Street. Extinguished by Chemical Company. No loss.

STILL. March 18, 6.01 p. m. Chimney fire in residence of D. A. Lucia, 1 Foster Street. Extinguished by Chemical Company. No loss.

STILL. March 23, 11.58 a. m. Grass fire, 23 Tremont Street. Chemical Company responded but no assistance was required. No loss.

STILL. March 25, 9.27 a. m. Chimney fire in residence of Ann O. Robinson, 45 West Street. Extinguished by Chemical Company. No loss.

STILL. March 25, 10.32 a. m. Chimney fire in residence of C. H. Stone, 17 Pitman Street. Extinguished by Chemical Company. No loss.

STILL. March 25, 11.21 a. m. Chimney fire in unoccupied residence, 3 North State Street. Chemical Company responded but no assistance was required. No loss.

STILL. March 30, 3.40 p. m. Fire in building 32 Warren Street. Still alarm followed by box alarm. See next alarm.

Box 34. March 30, 3.42 p. m. Fire in frame building 32 Warren Street, owned by J. D. Perkins, and occupied by Perley E. Holmes as a dye-house and clothes cleaning establishment, and Wilfred Cote as residence and barber shop. Caused by ignition of gasoline vapor. Brick block adjoining, owned by the Home Realty Company and occupied as a mercantile and residential building, slightly damaged. One thousand seven hundred and fifty feet of hose wet. Recall, 4.13 p. m.

	Value.	Loss.	Insurance.	Ins. paid.
Building,	\$3,000.00	\$658.60	\$2,000.00	\$658.60
Contents:				
P. E. Holmes:				
Machinery,	1,000.00	441.00	400.00	400.00

	Value.	Loss.	Insurance.	Ins. paid.
Stock,	\$200.00	\$86.25	\$100.00	\$86.25
W. Cote,	2,000.00	12.50	800.00	12.50
H. R. Building,	20,000.00	58.15	8,000.00	58.15
Contents:				
H. L. Peacock,	1,000.00	20.00	500.00	20.00
C. W. Dadmun,	600.00	10.00	500.00	10.00

STILL. April 2, 2.42 p. m. Chimney fire in residence of Mrs. A. C. Morse, 35 South Spring Street. Extinguished by Chemical Company. No loss.

STILL. April 3, 6.59 p. m. Chimney fire in residence of Miss Mary Robinson, 28 Union Street. Extinguished by Chemical Company. No loss.

STILL. April 7, 3.00 p. m. Chimney fire in residence of George Woodward, 35 Clinton Street. Extinguished by Chemical Company. No loss.

4-4-4. April 10, 4.08 p. m. Brush fire on Plains near camp ground. Detail from the department sent under command of Engineer W. J. Coffin. Needless alarm. No loss.

4-4-4. April 11, 2.06 p. m. Brush fire on Plains near camp ground. Detail from the department sent under command of Engineer J. J. McNulty. Needless alarm. No loss.

STILL. April 17, 7.30 a. m. Chimney fire in residence of Peter Clarke, 297 Pleasant Street. Extinguished by Chemical Company. No loss.

STILL. April 17, 5.02 p. m. Grass fire corner Giles and Woodman Streets. Chemical Company responded but no assistance was required. No loss.

STILL. April 21, 10.08 a. m. Chimney fire in residence of Bennett Batchelder, 102 School Street. Extinguished by Chemical Company. No loss.

STILL. April 22, 10.47 a. m. Chimney fire in Eagle Hotel, 110 North Main Street. Extinguished by Chemical Company. No loss.

STILL. April 23, 11.56 a. m. Grass fire corner Giles and

Centre Streets. Extinguished by Chemical Company. No loss.

STILL. April 24, 1.55 p. m. Grass fire in White Park, corner High and Auburn Streets. Chemical Company responded but no assistance was required. No loss.

4-4-4. April 26, 12.01 p. m. Brush fire on Auburn Street. Detail from the department sent under command of Engineer W. J. Coffin. At 12.30 p. m. the reserve reel was sent. Eight hundred feet of hose wet. At 4.18 p. m. the fire was reported as having crossed the road, threatening residences on Penacook Street. Chemical Company immediately sent to that locality. At 4.58 p. m. the fire had assumed such proportions that it was feared that the Chemical Company would not be able to hold it and an alarm from Box 14 was ordered. Kearsarge engine, Kearsarge and Eagle wagons responded. Fortunately the wind changed and the situation was relieved. Apparatus not used but kept on guard. Recall, 7.34 p. m. Detail not dismissed until two hours later. Labored nine hours. Loss trifling.

STILL. April 26, 12.30 p. m. See alarm same date, 12.01 p. m.

STILL. April 26, 4.18 p. m. See alarm same date, 12.01 p. m.

Box 14. April 26, 4.58 p. m. See alarm same date, 12.01 p. m. Recall, 7.34 p. m.

4-4-4. April 27, 5.33 a. m. Brush fire on Auburn Street. Detail from the department sent under command of Engineer J. J. McNulty. Labored two hours. No loss.

4-4-4. April 27, 11.59 a. m. Brush fire on Silver Hill. Detail from the department sent under command of Engineer W. J. Coffin. Labored one hour. No loss.

STILL. April 27, 2.17 p. m. Chimney fire in residence of George Parkhurst, 232 North State Street. Extinguished by Chemical Company. No loss.

STILL. May 4, 5.15 p. m. Chimney fire in residence of Rev. Thomas A. Stacey, 41 South Spring Street. Extinguished by Chemical Company. No loss.

STILL. May 8, 9.40 p. m. Reported chimney in residence of M. Meehan, 104 Pleasant Street. Chemical Company responded but no assistance was required. No loss.

STILL. May 11, 7.50 p. m. Slight fire in rubbish in unoccupied store 7 Centre Street. Extinguished by Chemical Company. No loss.

STILL. May 12, 1.40 p. m. Chimney fire in residence of Gilbert Clifford, 171 North Main Street. Extinguished by Chemical Company. No loss.

4-4-4. May 13, 12.45 p. m. Brush fire between the reservoir and Auburn Street. Detail from the department sent under command of Engineer J. J. McNulty. Labored three hours. No loss.

Box 13. May 13, 2.05 p. m. False alarm. Recall, 2.11 p. m.

STILL. May 14, 7.45 a. m. Fire in charcoal in basement of grocery store, 22 Warren Street, occupied by H. C. Sturtevant & Son. Cause unknown. Extinguished by Chemical Company.

	Value.	Loss.	Insurance.	Ins. paid.
Contents,	\$4,000.00	\$30.00	\$3,500.00	\$30.00

STILL. May 18, 5.35 a. m. Chimney fire in residence of John Cilley, 14 Walker Street. Extinguished by Chemical Company. No loss.

STILL. May 22, 12.14 p. m. Chimney fire in residence of Edward Gurthier, 51 Concord Street. Extinguished by Chemical Company. No loss.

STILL. June 2, 4.40 p. m. Chimney fire in residence of J. Opie, 20 Tahanto Street. Extinguished by Chemical Company. No loss.

STILL. June 2, 5.02 p. m. Fire in debris in cellar of