

The Lancaster Intelligencer.

Volume XVII—No. 156.

LANCASTER, PA., THURSDAY, MARCH 3, 1881

Price Two Cents.

CLOTHING.

GREAT REDUCTION IN CLOTHING.

Gentlemen, we are now closing out a heavy stock of Winter Clothing at greatly reduced prices. We have a large line of elegant piece goods that must be closed out to make room for our heavy Spring Stock. In order to do this we will offer special bargains for the next forty days. We have also a fine lot of Ready-Made Overcoats in plain and fancy backs, which must be closed out in forty days. Anyone in search of a bargain will find it profitable to examine our immense stock.

MYERS & RATHFON,

POPULAR TAILORS AND CLOTHIERS,

No. 12 EAST KING STREET, LANCASTER, PENN'A.

IRON BITTERS.

IRON BITTERS. IRON BITTERS.

IRON BITTERS!

A TRUE TONIC. SURE APPETISER.

IRON BITTERS are highly recommended for all diseases requiring a certain and efficient tonic, especially:

INDIGESTION, DYSPEPSIA, INTERMITTENT FEVERS, WANT OF APETITE, LOSS OF STRENGTH, LACK OF ENERGY, &c.

It enriches the blood, strengthens the muscles, and gives new life to the nerves. It acts like a charm on the digestive organs, removing all dyspeptic symptoms, such as *Tearing the Food, Belching, Heartburn, Headache, etc.* The only Iron Preparation that will not blacken the teeth or give headache. Sold by all druggists. Write for the A B C Book, 32 pp. of useful and amusing reading—sent free.

BROWN CHEMICAL COMPANY,

BALTIMORE, MD.

NOTICE.

ATTENTION, HOUSEKEEPERS!

MOVING! MOVING! MOVING!

Personal attention given to all kind of MOVINGS this Spring.

BEST OF CARE AND REASONABLE PRICES.

Leave orders for day and date of moving, or address to

J. C. HOUGHTON,

CARE OF—

M. A. HOUGHTON,

No. 25 NORTH QUEEN STREET, LANCASTER, PA.

FURNITURE.

BUYERS! BUYERS!

HEINITSH

HAIR MATTRESS FROM \$10.00 TO \$40.00
Wool " " 7.00 TO 11.00
Bunk " " 4.50 TO 6.00
Woven Wire Mattress from 10.00 TO 20.00
Spring Beds " " 2.50 TO 7.00

Boilers and Pillows Made to Order.

Call and see my assortment and be convinced of the fact that my prices are all right.

Picture Framing a Specialty.

Regliding and Repairing all short notices.

HEINITSH,

15 1/2 EAST KING STREET,

Over China Hall.

FOR RELIABLE

FURNITURE

Call at the Old Established Stand of

Widmyer & Ricksecker,

S. E. Cor. E. King and Duke Sts.

PARLOR, CHAMBER AND LIBRARY SUITS.

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MATTRESSES AND BED SPRINGS.

The Largest and Finest Assortment, and most of them HOME-MADE WORK.

Personal Attention given to

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BOOKS AND STATIONERY.

NEW AND CHOICE

STATIONERY,

NEW BOOKS AND MAGAZINES,

—AT—

L. M. FLYNN'S,

No. 42 WEST KING STREET.

BLANK BOOKS.

JOHN BAER'S SONS,

15 and 17 NORTH QUEEN STREET,

LANCASTER, PA.,

Have for sale, at the Lowest Prices,

BLANK BOOKS,

Comprising Day Books, Ledgers, Cash Books, Sales Books, Bill Books, Minute Books, Receipt Books, Memoranda, Copying Books, Pass Books, Invoice Books, &c.

WRITING PAPERS.

Footscap, Letter, Note, Bill, Sermon, Counting House, Drawing Papers, Paperies, &c.

ENVELOPES AND STATIONERY of all kinds, Wholesale and Retail.

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Prayer Books, Devotional Books, Sunday-school Music Books, Sunday-school Libraries, Commentaries, &c.

Lancaster Intelligencer.

THURSDAY EVENING, MAR. 3, 1881.

THE WATER WORKS.

THEIR CONDITION AND WANTS.

THE REPAIRS RECENTLY MADE.

THE WORKING OF THE PUMPS.

A VERY COMPLETE EXHIBIT.

Superintendent Kitch's Report to Councils.

To the Honorable the Select and Common Councils of the City of Lancaster:

GENTLEMEN: In accordance with the ordinance which provides that an annual report shall be made by the heads of the several city departments, I herewith submit to your honorable bodies the following report of the water department for the year ending February 28, 1881:

I assumed the duties of the office of superintendent of the water works on April 6, 1880, the day following my election by your joint convention. In this report I present to you a statement of the operations of the water department for the year past, the present condition of the different pumping engines, works, reservoirs, forcing and distributing mains, valves, stops and the plugs, together with tables showing the amount of water forced into the reservoirs each month of the year and many other items of general interest to the taxpayer. I also present for your consideration the wants of the department and recommend what I consider to be for the best interests of the city.

The water department with all its outlay fails to keep pace with the rapid growth of the city, the consumption being enormous and greater than it should be, as I shall show further on in this report. The water question is a special attention of members of council. All of our citizens are interested in it; all want an abundant supply of pure water, for on it rests in a great measure the health, safety and prosperity of every one in the city.

Complaint of Lack of Water.

The day of appeal was April 16, 1880, and while the water committee was in session on that occasion there were many complaints from citizens living on the high grounds of the Fifth, Sixth, Seventh, Eighth and Ninth wards that they did not receive an adequate supply of water. On that day the height of water in the western reservoir was 11 feet 2 inches, and in the eastern reservoir 12 feet 10 inches. It was directed by the water committee to raise the water to the highest point in the reservoir consistent with safety, which I did.

The eastern reservoir was in a leaky condition when assumed charge of the water department. The report of my predecessor, of February, 1878, shows that he called the attention of councils to the dangerous condition of the reservoir as early as 1878, but no attention was paid by councils to his recommendations to have the same repaired, and it is not to be supposed that the reservoir would get any better with constant use. In May, 1880, I informed the committee of the dangerous condition of the reservoir and told them that it was not immediately repaired the whole tank would be abandoned. The committee visited the reservoir on May 21 and found it to be in a very unsafe condition. In their opinion if the water was kept up in the reservoir to the height required to supply the high portions of the city, the tank would be a very extensive nature of the work to be done until the bottom and sides were torn up and thoroughly examined and tested. Work was commenced May 31st, and completed August 16th. Water was turned into the reservoir on August 18th. The total cost of the repairs was \$8153.20. The reservoir has now been full nearly seven months and has been exposed to a severe test, owing to the hard winter, and has shown no signs of leaking up to the present time. On the completion of the work in August, I made a full report of the same, which was printed for the use of members of council.

Low Water.

The months of June, July, August and September, the water being low in the creek, the Worthington pump, although taxed to its utmost capacity to keep up the supply, lost during the business portion of the day from one to two inches per hour, and there was nothing left for me to do but to run the duplex pumping engine 23 or 24 hours and sometimes the day away, continuously, before the water in the reservoir was forced to the point where the signal stand, signifying that the reservoir was filled to a height consistent with the safety of the tanks.

Water Pumping Power.

The Geylin pump was operated during my term 3748 hours, making in that time 2,923,410 revolutions and pumping 54,641,712 gallons of water. The Birkinbine pump, No. 1, was operated 2,757 hours, making 3,804,580 revolutions and pumping 88,538,355 gallons of water. The Birkinbine pump, No. 2, was operated 4,057 hours, making 4,808,400 revolutions and pumping 125,975,500 gallons of water. Total pumping by water power 269,084,567 gallons, costing \$3.57 per million gallons delivered into the reservoir.

The Worthington High Service engine was operated during my term 95 hours, making 236,500 revolutions and pumping into the reservoir 2,076,300 gallons of water.

The Worthington Duplex engine was operated during the term 3319 hours, making 18,631,300 revolutions and pumping into the reservoir 698,677,150 gallons of water. The amount of coal used was 2,458,662 lbs. and the cost \$3,732.85, making cost 70 cents per hour. Including pay of engineers and fireman, oil, packing, etc., the cost was \$7.74 per million gallons of water.

The following table shows in detail the working of the several pumps during my term:

Results of Water Power Pumps for the Year ending February 28, 1881.

MONTHS 1880 and 1881.	GEYLIN PUMP.		BIRKINBINE No. 1.		BIRKINBINE No. 2.		Total Gallons Pumped.
	No. of hours.	No. of revolutions.	No. of hours.	No. of revolutions.	No. of hours.	No. of revolutions.	
April.....	707	557,790	605	931,910	617	744,000	2,233,700
May.....	267	449,280	478	620,190	666	727,200	1,806,670
June.....	368	387,740	426	542,810	547	636,000	1,566,550
July.....	375	387,740	426	542,810	547	636,000	1,566,550
August.....	176	18,840	250	32,500	312	35,400	116,740
September.....	329	287,100	354	458,580	307	354,000	1,100,680
October.....	312	328,800	354	458,580	307	354,000	1,141,380
November.....	287	287,100	354	458,580	307	354,000	1,141,380
December.....	312	328,800	354	458,580	307	354,000	1,141,380
January.....	312	328,800	354	458,580	307	354,000	1,141,380
February.....	312	328,800	354	458,580	307	354,000	1,141,380
Totals.....	3319	3,319,000	3319	3,319,000	3319	3,319,000	9,957,000

Result of Worthington Duplex Engine.

No. of hours.	No. of revolutions.	No. of hours.	No. of revolutions.		
May.....	319	1,191,000	413,000	1,219,100	1,710,100
June.....	319	1,191,000	413,000	1,219,100	1,710,100
July.....	319	1,191,000	413,000	1,219,100	1,710,100
August.....	319	1,191,000	413,000	1,219,100	1,710,100
September.....	319	1,191,000	413,000	1,219,100	1,710,100
October.....	319	1,191,000	413,000	1,219,100	1,710,100
November.....	319	1,191,000	413,000	1,219,100	1,710,100
December.....	319	1,191,000	413,000	1,219,100	1,710,100
January.....	319	1,191,000	413,000	1,219,100	1,710,100
February.....	319	1,191,000	413,000	1,219,100	1,710,100
Totals.....	3319	3,319,000	3319	3,319,000	9,957,000

The reservoirs were frozen over November 23, 1880, and remained so until February 16, 1881.

The Worthington Duplex Engine, &c.

The Worthington engines are in first class condition. The Geylin pump is just as I received it; no repairs were made on it, and none needed. No 1 Birkinbine has been repaired and is now in good condition. Birkinbine No. 2, needs slight repairs. The boilers from being kept too constantly at full pressure are in excellent condition. The walls supporting the boilers have been repaired three times this winter, the last time on this (Monday) February 28th. The small Worthington feed pump needs slight repairs.

Damaged by the Ice.

The ice a few weeks ago damaged the water works slightly. The wing wall on the east and the abutment on the west have been damaged, but can be repaired at slight expense. The ice on the reservoirs has damaged the brick work making it necessary to take up four feet of brick the whole way around and have it re-laid and re-laid. I attribute the damage to the brick work to the great thickness of the ice. I would recommend councils to have the lease with Mr. Hartman so amended that he would be compelled to cut the ice when it gets to a thickness of 3 inches.

Connections at Certain Points.

At nearly all our crossings, our water pipes cross under the streets, where connections should be made. I would recommend connections to be made at Orange and North Queen, Duke and East King, Lime and Orange, Vine and North Queen streets, and several other points. By having these connections the pressure would be equalized and when a heavy draw is made in summer time it will be distributed all around. The high points of the city will then all be on an equality and when one has water, all will have it.

For the Relief of the Sixth Ward.

To give the Sixth ward a better supply of water, I would recommend a pipe of not less than 16 inches in diameter to be laid over the Duke, Lime and Shippen streets railroad bridges. The Sixth ward is now supplied with water from the pipe on Plum street, by a 4 inch pipe running from Chestnut and Christian streets across the railroad, through the hook and ladder house on Duke street, and the back pressure from the North Queen street main, which does not furnish an adequate supply. By adopting the above recommendation the Sixth ward would get all the water they require, and the numerous complaints of lack of water from that section of the city will cease.

To Prevent Inconvenience.

Stops or valves should be inserted in the mains supplying the most populous portions of the city, so that when a break occurs, the business portion of the city will not be cut off from a supply of water, as was the case some time ago, when the water was stopped off at North Queen and Orange streets, and East King and Lime streets. There are now sections of the city in 4 squares that have no valves or stops. This should be remedied by councils without delay, and prevent the inconvenience that may at any time deprive citizens of water when it is most needed. When the proper valves or stops are put in the water has to be shut off, few will be inconvenienced, where now hundreds are subject to the annoyance of being without water, when repairs are being made to the main.

A Telephone Connection.

There should be a telephone connection established between the mayor's office, station house, reservoirs and water works. In case of a sudden break at the works or reservoir, many times the cost of having the telephone connection made could be saved if word could be sent to the mayors office or station house, where the necessary repairs can be made, and the necessary help could be sent to repair the damage.

Receipts from Water Rates.

The following are the receipts from water rates for the last several years, together with those of the coming year: 1874, \$24,000; 1875, \$24,500; 1876, \$26,492.56; 1877, \$29,256.89; 1878, \$30,126.85; 1879, \$31,378.97; 1880, \$35,930.19; 1881, \$39,000. (estimated).

The mayor, as chairman of the water committee, in a special message to councils in December, set forth at large the needs of the water department. I cannot add anything to what he has already so well said, but can repeat that there is a necessity for a new six million gallon pump, four forty-horse power boilers, boiler house accommodations, and a main on Orange street from Lime to Charlotte, a 16-inch main on Duke street, from Orange street, northward to James, and a 16-inch main on Charlotte street from West King to James. About the necessity of the meeting of councils, and after an investigation he frankly admitted that he was in error in opposing the purchase of new boilers.

The revenue from the water department, as will be seen from the table above, has rapidly increased, the receipts now being 60 per cent. greater than in 1874. There is not to-day in the United States a city running so great a risk of a water famine as we are. With but one set of pumps and boilers to depend on, all that is to happen is the giving out of either the one or the other, and the reservoirs hold but a 48 hours supply. Then

it will be too late to remedy the matter. Now is the proper time to prepare for an emergency. With duplicate pumps and boilers our citizens can rest easy. They cannot if they depend upon water power alone furnishing an adequate supply of water.

A Stand Pipe.

Financially think that the city is not now financially able to purchase a new pump, a stand pipe, as a temporary relief, might be considered by councils, if they desire it. I will furnish estimate of cost of erection of same.

Water Meters.

I would recommend the adoption of the water meter as the only proper method by which to assess water rents. If meters are introduced and the consumption of water is the same as it is to-day, and the city were to charge one cent per hundred gallons, the revenue from water rents would be \$90,000 a year, or over \$50,000 more than at present. If the meter system is adopted, the water would be more easily and saving, possibly 33 per cent. in the water consumed, still leaving a revenue to the city of \$90,000. By this system the small family economical in the use of water would have a nominal water rent to pay, while the heavy manufacturers and corporations, who use millions of gallons of water annually will pay for just what they use or waste and no more. The greatest advantage of their introduction would be, that for years to come you save a vast outlay for improvements at the water works, which cannot be avoided if the increase in water in the next seven years is as great as it was in the last seven years. The only thing that can be urged against the system is that it is expensive. A trial should be given by the introduction of a few and if it is found that the system is advantageous to the city, then meters should be furnished to all users. The following table shows the meters required and cost of the same.

18 four inch meters to be placed as follows:

Particulars	Quantity	Estimated Cost
Printing Office	1	\$20.00
City Hall	1	20.00
City Jail	1	20.00
City Court	1	20.00
City Police Station	1	20.00
City Fire Station	1	20.00
City Gas Station	1	20.00
City Water Station	1	20.00
City Sewer Station	1	20.00
City Electric Station	1	20.00
City Telephone Station	1	20.00
City Post Office	1	20.00
City Police Station	1	20.00
City Fire Station	1	20.00
City Gas Station	1	20.00
City Water Station	1	20.00
City Sewer Station	1	20.00
City Electric Station	1	20.00
City Telephone Station	1	20.00
City Post Office	1	20.00
City Police Station	1	20.00
City Fire Station	1	20.00
City Gas Station	1	20.00
City Water Station	1	20.00
City Sewer Station	1	20.00
City Electric Station	1	20.00
City Telephone Station	1	20.00
City Post Office	1	20.00
City Police Station	1	20.00
City Fire Station	1	20.00
City Gas Station	1	20.00
City Water Station	1	20.00
City Sewer Station	1	20.00
City Electric Station	1	20.00
City Telephone Station	1	20.00
City Post Office	1	20.00
City Police Station	1	20.00
City Fire Station	1	20.00
City Gas Station	1	20.00
City Water Station	1	20.00
City Sewer Station	1	20.00
City Electric Station	1	20.00
City Telephone Station	1	20.00
City Post Office	1	20.00
City Police Station	1	20.00
City Fire Station	1	20.00
City Gas Station	1	20.00
City Water Station	1	20.00
City Sewer Station	1	20.00
City Electric Station	1	20.00
City Telephone Station	1	20.00
City Post Office	1	20.00
City Police Station	1	20.00
City Fire Station	1	20.00
City Gas Station	1	20.00
City Water Station	1	20.00
City Sewer Station	1	20.00
City Electric Station	1	20.00
City Telephone Station	1	20.00
City Post Office	1	20.00
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