NOTICE.

Mr. V. HAROLD MYERS, No. 156 South Fourth Street, Philadelphia, is the sole agent of the AMERICAN GAS-LIGHT JOURNAL for the State of Pennsylvania.

Mr. MYERS has "opened the ball" since January 1st, with several desirable advertisements and subscribers, and we cordially recommend him to the enterprising manufacturers of that state as our intelligent and energetic agent, through whose hands orders will reach us safely and be satisfactorily filled.

Our Agents in London, England, are Messrs TRUBNER & Co., 80 Paternoster Row, who are authorised to obtain subscriptions and advertisements for us. Single copies of the AMERICAN GAS-LIGHT JOURNAL will be always on sale at Messrs. TRUBNER & Co's. counter.

We want a first class active agent in Cincinnati, O.

BUSINESS DEPARTMENT.

MESSRS. C. A. VANKIRK & Co., of Frankford, near Philadelphia, have taken a prominent place on our first page to offer their varied manufactures to the trade. Messrs. Vankirk & Co's. establishment is well known as being on an extensive scale and they have recently opened a warehouse and sales-room in the city of Philadelphia.

MESSRS. W. J. GRIFFITHS & Co., also of Philadelphia, enter our columns to day, for the first time, their extensive tube-works, to which particular attention is called.

GAS THERMOMETERS are advertised to-day; also a Photometer Apparatus and room, with fittings complete.

The disastrous effect of our political follies upon general business has not touched the gas and water apparatus to a serious extent, showing their freedom from the ordinary distressing influences of trade. We await patiently a settlement of this wicked quarrel before presenting to our readers an improved and enlarged JOURNAL. Until that desirable time we shall go along at half speed.

THE HONORABLE THE LIGHTHOUSE BOARD advertise a new light on the south-east coast of Africa.

THE STREET DEPARTMENT invite proposals for repairing the public lamps.

Attention is called to the announcement that Mr. V. HAROLD MYERS is an agent in Philadelphia, and Messrs. TRUBNER & Co. in London.

VISIT TO THE BROOKLYN, N. Y., WATER-WORKS.—The Commissioners of the Brooklyn Water-Works, with a number of invited guests, including in the number the Mayor of Brooklyn, members of Assembly elect for Kings County, the President of the Board of Aldermen, members of the Water Committee of the Common Council, Aldermen, and last, but not least, the Press, proceeded on Friday, Dec. 28, on a visit of inspection to the water-works belonging to the city of Brooklyn, and the sources of supply.

The company, seated in seven hacks, started from City Hall-square at 9 o'clock A. M.—one hour beyond the time appointed for starting having been sacrificed to inexorable custom. At a gentle trot the party passed through Myrtle-avenue and the Cypress Hill Plank-road to the Ridgewood Reservoir. Here they alighted and commenced a tour of inspection on foot. By the officers in charge the party were informed that the reservoir covers an area of 27 acres, and is capable of holding 173,000,000 gallons of water. At the present time, however, there are only 116,000,000 gallons in it, making a depth of 25 feet. The average quantity of water furnished the city during the week days is 4,600,000 gallons per day. On Sunday the quantity is reduced to 4,000,000 gallons.

The examination concluded here, the visitors re-entered their carriages, and proceeded to the engine-house, near East New York, where they again alighted. The pumping machinery here elicited the admiration of all present. There is but one Cornish engine at work yet. This is capable of throwing into the reservoir at Ridgewood at least 10,000,000 gallons of water per day. The material for another of the same size is on the ground, and will be put in place next summer. The engine now in use lifts at one stroke 1,054 gallons. Since it was first put in operation, one year ago last June, 1,831,500 strokes have been made. From this point, the party visited in succession Baisley's, Cornwell's Clear Stream, P. Cornwell's and Smith & Pines' ponds. A lunch was partaken of at Baisley's Pond, and the party partook of a dinner at Smith & Pines' ponds. Having inspected the whole line of works, the party returned to the city at about 8 o'clock in the evening, all well pleased with what they had seen and heard, and more than ever convinced that there is an abundant supply of pure water, and that the Brooklyn Water Works are fully equal, if not superior, to anything of the kind in the United States.

During the first year after these works went into operation, ending July 1, 1860, the receipts for water reached to $292,689 18.

PROPOSED WATER SUPPLY FOR ROCHESTER, N. Y.

Allusion has been already made in the columns of this JOURNAL to an able report by Mr. Daniel Marsh, C. E., to the Mayor and Common Council of Rochester, N. Y., on the proposed introduction of a supply of pure water into that city. To this end an advertisement has appeared in the columns of this JOURNAL, inviting proposals for the erection of the works; and by a circular from the Commissioners, it is announced that the design of the city of Rochester, in soliciting proposals for a supply of water from Hemlock Lake, is simply to effect an arrangement with a water works company, or other contractors, by which water for public purposes may be obtained on the most advantageous terms. The contractors will acquire the right to use the water of the Lake, the right of way for conveying the water-supply to the city, construct the requisite works, lay the mains, and undertake the entire work on their own responsibility. The city will contract to pay a certain sum per annum for the use of water for fire and other public purposes, to the Company who construct the works.

The city have already procured a full survey of routes, estimates of cost, and other data, which are published in a pamphlet of 68 pages, to which the attention of those interested is directed for further and more complete information on the subject of water-supply for the city of Rochester.

The report of Mr. Marsh is evidently the work of a competent, intelligent and practical engineer. First obtaining the results of the experience of other cities, he proceeds to apply that information to the full development of the material at his command.

Among the sources of supply from which that city may be abundantly furnished with water, as we learn from the report, are the Genesee River, Lake Ontario, Irondequoit Creek, Black Creek, Little Black Creek, or the Basin in which it rises, Caledonia Spring, the Mendon Ponds, Honeoye Outlet, at West Rush, Honeoye Outlet, at Smithtown, Conesus Lake, Hemlock Lake. Of these bodies and streams of water, the most obvious and important characteristics may be stated as follows:

The Genesee River which flows through the centre of the city, with a volume of water, one-fiftieth part of which, at lowest water, would be more that sufficient to supply the city, would furnish the most simple and cheap mode of meeting this great want of our population, were it not objectionable on account of the quality of the water. Besides its proverbial hardness, the water of this river is frequently rendered turbid and unfit for use, by the effects of floods in the river. At such times the fine mould from the alluvial formation of the valley above, is borne along, mechanically suspended in such quantities that it does not wholly subside until the waters of the river are intimately mingled with those of Lake Ontario.

By means of subsiding or filtering reservoirs, this impurity might probably be removed. The quality termed hardness, is principally owing to the presence of lime too intimately combined to be separated by filtration, and is derived principally from the tributaries which flow into the river upon the west side, below Mount Morris, and although not invariable in its proportion to the whole quantity of water in the river, it is a serious objection to the use of this, as a source of supply for Rochester, unless reservoirs were to be constructed of such capacity that resort to the river itself could be dispensed with, except at times of high water. When the volume of the water is increased many fold by recent rains, the quantity of lime-bearing water, in the whole quantity, remains almost invariable, and thereby the degree of hardness is greatly diminished. There can be little doubt that the water of this river may be rendered as good as that which is now supplied to many cities in this country, and much better than that which is furnished to several cities of Europe. The unoccupied water power at the Rapids affords a convenient and economical means of elevating the water to the proposed distributing reservoir.

Lake Ontario presents the purest and most copious supply of water in the vicinity of Rochester. The distance of this Lake from any suitable site for a distributing reservoir, and the elevation to which the water must be raised by either steam or water power, although very serious objections to this plan of supplying the city would not be deemed insurmountable, if the water of the lake could at all times be obtained in the purity which it presents at a distance from the shore, and out of the range of admixture with the waters of the Genesee River. A supply from this source would be subject, like that distributed to Cleveland and Chicago, and perhaps in somewhat less degree, to Buffalo and Detroit, to become turbid and unpleasant at the time of every storm on the lake, and if taken from the lake within the distance of from 1 to 3 miles from the mouth of the Genesee River, it would at times be deteriorated in quality, by the presence of the river water, which may always be traced to a considerable distance in the direction of a prevalent wind.

By either steam power to be located at the Lake Shore, or water power at the Lower Falls, on the river, a sufficient quantity of water may, with certainty and success, be elevated to the distributing reservoir, and thence conveyed through the city by gravity.

From Black Creek, in the town of Chili, at a point about 5 miles south-west of the distributing reservoir—from the Irondequoit Creek in Penfield, at a point where the stream in its winding course approaches within 4½ miles of the reservoir, and from the Honeoye outlet at West Rush, about 14 miles from the reservoir, the requisite quantity of water could, at the lowest stage in these streams, be obtained to supply the city. In each case pumping machinery would be required. For a supply from Black Creek, the most economical plan would be to conduct the water from the Creek to the Rapids in either a pipe or a conduit of brick, and from that point to elevate the supply by water-power to the reservoir. From the Irondequoit Creek, the supply should be elevated by steam power, to be located near the creek, through pipe directly to the reservoir. From the outlet at Rush, an open channel would convey the water to the Rapids, and thence by water-power it could be elevated to the reservoir.

Near the village of Caledonia, about 19 miles from Rochester, there is found a copious and beautiful spring, discharging from 2 to 4,000,000 gallons of transparent water each day. This water might be conveyed in pipe to this city, but, on account of the distance, not at an elevation sufficient for its distribution by gravity.

Both the quality of the water from all the sources just named, and the cost of the works which would be required to convey the water to a suitable distributing reservoir, together with the continual expense of pumping, are considerations which render these sources of supply for Rochester objectionable, compared with the outlet of Hemlock Lake, at Smithtown.

In the west part of the town of Mendon are several ponds of considerable size, and of sufficient elevation for their waters to be conducted in pipe, by the force of gravity to the distributing reservoir—but the quantity of water flowing from them is quite insufficient to supply the city, being only about 500,000 gallons per day.

These ponds, and the valley in which they are situated, are important only as they are located on a feasible route for pipe, or other conduit from Hemlock Lake, or its outlet to the city, and may become the site of a large storing reservoir for the waters of this lake.

It may be interesting to note the extent and capacity of the lakes, as exhibited in the following table:

Table showing the Extent and Capacity of the Lakes, their Depth, Drainage and other Characteristics.

	Honeoye.	Canadice.	Hemlock.	Conesus.
Length miles.....	4 1-5	3 1-10	6 7-10	7 4-5
Width "	⅘	½	6-10	⅘
Depth—feet	10 to 25	50-80	45-80	55-70
Area—acres	1727	648	1828	3,330
Drainage—acres....	36,100	8,883	27,554	39,980
Swamp at head of Lake, acres.....	715	45	100	0
Dist. from Rochest'r	26	28	26	29
Minimum discharge in cubic feet per minute	300	200	300	110
Same in gal's p. day	3,240,000	2,160,000	3,240,000	1,620,000
No. of gal's in 1 foot depth at surface..	560,290,000	178,376,000	506,731,600	1,078,926,750
Eq. to gal's p. day	1,535,042	488,707	1 388,566	2,955,963
Add min'm flow..	3,240,000	2,160,000	3,240,000	1,620,000
Total daily discharge of each Lake.....	4,775,042	2,648,707	4,628,566	4 575,963

In the above table, the quantity of water which may be furnished from Hemlock Lake, by making a draught upon the same, as upon a reservoir one foot deep, is shown to be for the whole year, as stated in gallons per day 1,385,566

Do. of Canadice Lake, 1½ feet deep, 733,060

2,118,626

This for four months only, would be 6,355,878

Should Hemlock Lake be drawn down 2 feet, and Canadice 3 feet, the quantity would be 4,237,252 gallons per day, for the year, and 12,711,756 gallons for 4 months.

For the remaining part of the year, the natural discharge of these two lakes would be ample both for the wants of Rochester, and for the mills situated upon the outlet.

As the purity of the water supply is a subject of great importance, as affecting the health of a community, it may be well to note the comparative content of solid matter per gallon which the various streams and ponds in the vicinity of Rochester hold in solution.

	Source of Locality.	Grains of solid matter per gallon.
1.	Lake Ontario, mouth of Genesee, w. of piers,.....	4 16
2.	Do. in front of piers, ¼ mile out in the Lake	10·00
3.	Do. north-east of piers and beyond the stream discharged from Genesee River.....	6·40
4.	Genesee River at Rapids	11·21
5.	Do. at high water, April, 1860.....	6·40
6.	Do. at low water, June, 1860.....	9·80
7.	Do. at high water, August, 1860.....	7·46
8.	Do. at a higher state of water subsequent to the above, August, 1860.....	5·60
9.	Do. high water subsiding.....	4·53
10.	Irondequoit Creek, Penfield.....	24·68
11.	Black Creek, Chili.....	72·60
12.	Little Black Creek, Chili.....	9 40
13.	Tonawonda Creek, Batavia.....	12·67
14.	Caledonia spring.....	44·60
15.	Mendon Ponds.....	8·00
16.	Honeoye Outlet, West Rush.....	6·13
17.	Do. Smithtown, (1853,) taken at a moderate rate of water.....	4·31
18.	Do. at low water.....	2·40
19.	Honeoye Lake.....	4 00
20.	Hemlock Lake.....	1·83
21.	Erie Canal at Rochester, July, 1860.....	9·00
22.	Auld Spring, ¾ mile west of Rochester.....	19 20
23.	Well, North Fitzhugh Street.....	28 00
24.	Do. South do.	16·74
25.	Do. North Washington Street.....	44·11
26.	Do. Third Ward Tavern, Cornhill.....	41·00
27.	Do. East Avenue, near Gibbs Street.....	32·16
28.	Do. South Avenue.....	20·54
29.	Average of Wells in Rochester	28·33
30.	Cistern Water, soon after rain.....	6·40
31.	Rain Water taken in an open vessel.....	1·00
32.	Filtered Rain Water.....	14·10
33.	Do. do. second sample.....	6·40
34.	Rain Water from a cistern.....	2·16
35.	Do. from same cistern, filtered.....	4·32
36.	Filtered Rain Water.....	1·92
37.	Do. do.	5·07
38.	Black Creek, second sample.....	14·00

From this table it will be seen that while the waters from many of the above named sources contain much foreign matter in solution, rendering their utility questionable in many instances, the waters of Honeoye and Hemlock Lakes evince a remarkable purity, which eminently qualifies them for supplying the wants of a growing community.

In either of the plans proposing the elevation of water to the distributing reservoir, an extensive storing and subsiding reservoir is an essential feature. If taken at low water, both the waters of the Genesee River and of Little Black Creek are objectionable, and subsiding and filtering reservoirs would be requisite, and the reservoir should be of sufficient capacity to supply the city for 100 days.

Although the history of such reservoirs has been for the last few years rather unfavorable to such a project, the difficulties encountered at Boston, New York, and other cities, owing to the putrefactive action of decaying vegetable matter in the bottom of the reservoirs can be satisfactorily explained and remedied. From the reports of several eminent chemists, these effects are not considered lasting, nor as imparting any unwholesome quality to the water, and the unpleasant effects would be avoided by forming reservoirs of greater depth, with their inner surfaces free from perishable matter.

As regards pipes for distributing the water, estimates are furnished only for those made of cast iron, sheet iron and cement, and wood and cement. Cast iron water-pipes were first laid in London in 1810, and although they have been generally adopted since then, they are objectionable on several accounts. Pipes may be made of this material of any desired strength, and may be made more readily to assume any required form and dimensions; but since this material has no uniform modulus of strength, it becomes necessary to give to the castings an extra thickness, to compensate for the deficiency. This form of pipe should never be laid without being first subjected to a pressure of 300 lbs to the square inch, which will generally disclose its defects. Although it may be made of a thickness sufficient to resist any uniform pressure, when subjected to irregular pressure or rapid concussion it often bursts. Another great objection to its use is the "tendency to the absorbtion of the iron and the gradual formation of concretions or tubercles in the interior of the pipes, by which their capacity is diminished and the flow of water impeded."

Another form of pipe is made from sheet iron, of guage of No. 16 to 23, riveted together and lined with hydraulic cement, the elbows and connections being riveted or soldered together, and the service cocks being soldered to the street pipe. When well constructed, this has been found to be substantial, and has been made to stand a pressure of 240 feet head of water.

The pipe formed of banded wood and cement forms a cleanly conductor of water, and is stiff and firm from any stress from without. It is constructed of cylinders of wood, bored by machinery in sections of 8 feet in length, coated externally with hydraulic cement, and wrapped from one end spirally to the other with bands of iron coated with heated coal tar. With a band of iron ¼ inch thick, and the spiral windings 4 inches apart, they have withstood a pressure of 400 lbs. to the square inch.

The daily amount which it is estimated will be required for the present population of Rochester (50,000) is 2,000,000 gallons, which is equal to 40 gallons for each person.

In the able report of Mr. Marsh, estimates of the cost of five different plans of furnishing the proposed supply are furnished, and we regret that their length precludes the possibility of publishing them here. Those who feel an interest in the matter would do well to obtain a copy of this report, which will amply repay a careful perusal.

The construction of a permanent system of water-works, and the introduction of an abundant supply of pure water into Rochester, will benefit all the public and and private interests, much beyond the amount of income, which may be derived from water rates. So important an element of prosperity added to its present advantages of position, soil and climate, will be felt through almost all the relations of industry, enterprise and capital, increasing to some extent the value of all kinds of property. To what extent the opinions of the most judicious would vary, and there are no sure data from which a reliable estimate of the amount can be made. The amount of the assessed valuation of real and personal estate in Rochester is $11,250,157, and perhaps the real value is not less than $20,000,000. The lowest rate at which, in the judgment of the least sanguine of its citizens, this amount would be increased, would afford a very considerable proportion, if not the whole amount, required to construct water-works for the city.

From sources which are deemed entirely reliable the amount of the premiums paid in Rochester the last year for insurance, is found to be not less than $1.0,000, and it is believed that not more than one half the property exposed to loss by fires, and which would be benefitted by a full supply of water, is now insured.

The difference in the rates of insurance in Boston and Charlestown, cities adjacent to each other, the one having an abundant supply of water, and the other no foreign supply, as ascertained from authentic sources, is nearly ½ of 1 per cent. The Croton Water Board, soon after the introduction of the Croton water into the city of New York, stated the reduction in the rates of insurance in that city to be higher than this. It is believed that the reduction of the rates in Rochester would be at least 15 cents on $100. Citizens will thus at least save $19,500 in the amount of premiums paid annually for insurance, and also be benefitted by an equal amount in the protection afforded by a full supply of water, and an adequate number of fire hydrants, to property not now insured, making an aggregate of $39,000.

The above strong argument in favor of the introduction of water, applies no less to other towns than to the city of Rochester; and many other reasons might be adduced to prove the innumerable advantages affecting the health and happiness of a community, resulting from a plentiful supply of pure water. There are a large number of cities in our country which are very backward in this respect, and which would be pursuing a wise course in imitating the example of Rochester, in making the effort to obtain this valuable treasure. We hope we will soon have the pleasure of congratulating this rising city of our State, on the accomplishment of her wishes, and trust that the anticipations of her inhabitants regarding the benefits to be derived from the proposed supply will be more than realized.

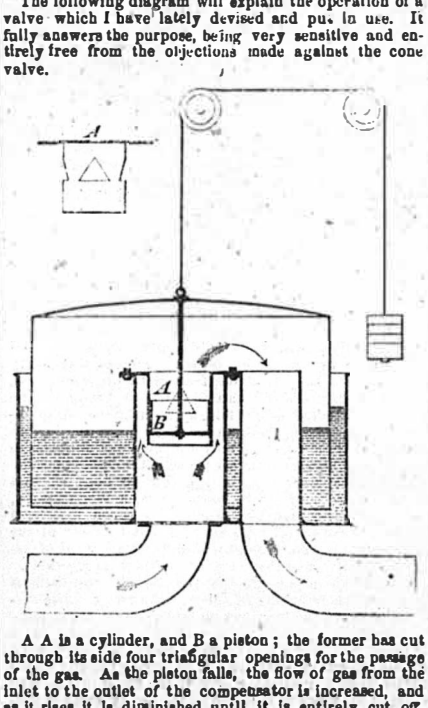
CORRESPONDENCE.

NEW COMPENSATOR VALVE.

To the Editor of the AMERICAN GAS-LIGHT JOURNAL:

Engineers who have used, in connection with an exhauster, a compensator with a cone-valve attached, have, I presume, found it impossible, where there is a heavy back pressure, to keep the valve closed and at the same time maintain it in equilibrium with the balance-weights without causing a violent jar, occasioned by the valve coming in contact with its seat. To remove this evil, it is customary to arrange the balance-weights so that the valve will remain partially open, thus allowing a continuous flow of gas from the outlet to the inlet pipes of the exhauster; in which case that machine must be driven at a much greater speed than would be required if the compensator valve were entirely closed. An exhaustor should pass the gas that may be delivered from the retorts only, and should not draw it *back* through the compensator, excepting when the speed of the exhauster is suddenly increased, when the valve should fall and allow the gas to pass to the inlet pipe, thus preventing the formation of a vacuum in the mains between the retorts and the exhauster.

The following diagram will explain the operation of a valve which I have lately devised and put in use. It fully answers the purpose, being very sensitive and entirely free from the objections made against the cone valve.



A A is a cylinder, and B a piston; the former has cut through its side four triangular openings for the passage of the gas. As the piston falls, the flow of gas from the inlet to the outlet of the compensator is increased, and as it rises it is diminished until it is entirely cut off. The cylinder should be bored and the piston turned, so as to work freely and yet be nearly gas tight. J. A. H.

NEW YORK, January, 1861.

BATTIN, DUNGAN & CO.'S GAS-WORKS.

PHILADELPHIA, Dec. 27, 1860.

To the Editor of the AMERICAN GAS-LIGHT JOURNAL:

I observe a statement, in your number for December 15, that Mr. S. S. Batlin has been "identified with the construction of some thirty or forty gas-works, among them, Albany, N. Y., Charleston, S. C., Newark, N. J., Reading, Pa., Rochester, N. Y., and Syracuse, N. Y."

Having been a partner in the firms who constructed all these works, I have a right to say that Mr. S. S. Battin was not identified with either of them. I should add that Mr. B. is no doubt a very respectable gentleman, but the article in question claims for him entirely too much.

Yours, truly,

C. B. DUNGAN.

We find that the builders of the works above referred to, were Battin, Dungan & Co., composed of our esteemed correspondent and the father of S. S. Battin; our information came from the son, who, it appears, stole his father's thunder.

LOUISVILLE, KY.—All the reports from this company are prompt, full and accurate, and we take this occasion to return to Mr. Robert G. Courtenay, the able and obliging president, our thanks for his always courteous and gratifying responses to our enquiries. It is hardly possible to appreciate the aid and value of such attention in labors of statistics and compilation. These gas-works have been enlarged and improved within a few years. We have concluded, on re perusing the report, to print our questions and Mr Courtenay's answers in full. They are a model for other companies to follow, and we will gratefully acknowledge similar attentions, in reply to our last circular of enquiry.

OFFICE OF THE AMERICAN GAS-LIGHT JOURNAL,
254 Canal street, New-York City.

REPORT TO BE DATED AND SIGNED BY SECRETARY.

Year of organization? 15th February, 1838.
Chartered name of Company? (Originally, Gas & Water Co.) Now Louisville Gas Company.
In what city or town? Louisville, State of Kentucky.
Chartered capital? $600,000; capital in use, $481,400.
Shares? $50 each, at par.
Last semi-annual dividend? 6 per cent.
Usual months of declaring dividends? January and July.
Name of President? Robert G. Courtenay.
Do. of Secretary? None; John S. Cain, Cashier and Book-keeper.
Name of Engineer? None; President acts in all construction.
Name of Superintendent? Thomas Rankin; John Walton, Inspector.
Are the works for Coal, or Rosin, or Rosin Oil? Coal.
Name of builders or patentee of the Works? See pamphlet referred to in letter.
How do you like the Works—are they satisfactory? Works of the best construction.
If you have changed Rosin Works for Coal Works, or otherwise, please state in what year such change was made—and why? Originally for Coal; no change, except additional works on an improved plan, all made in Louisville, Ky.
Number of Clay Retorts—whose make? None; ordered 33 from Belgium.
Number of Iron Retorts? 66 set.
Whose make? Roach & Long, Louisville, Ky.
Number of Station-Meters? 3.
Whose make? 2 Crosley, England; 1 Code, Hopper & Gratz.
Number of Wet Private Meters? 2,433.
Whose make? Samuel Crosley; England; Colton, Code & Co., and Code, Hopper & Gratz, Philadelphia.
Number of Dry Private Meters? 695.
Whose make? Thomas Glover, England; Code, Hopper & Gratz, Philadelphia; Samuel Down, and G. Pritchard, New York.
Number and sizes of Gas-holders? See pamphlet as above.
Whose make? Made at Gas works, by Louisville mechanics.
Do you use a Photometer? Yes—Munson's Screen, Ritchie's.
Number of Exhausters? None. Intend to connect Exhausters.
Total length of Mains, in miles or feet? 36 miles, 2,933 feet.
Sizes ranging from—

	2 in.	3 in.	4 in.	6 in.	10 in.	12 in.
Feet....	49,086	35,525	93,395	2,950	8,521	3,536

We are now laying more pipe.
Are your Mains joined with Lead, Cement, or Lime, and which do you find, or think, the best? Please give your reasons for your opinions. Lead joints. We know of no other material that can be relied on for a tight joint in street mains. Lead will permit the pipes to contract and expand slightly, and still keep the joint gas tight.
Number of Private Consumers? 2,866.
Number of Public Lamps? 951.
What kind of Coal do you use? Pittsburg and Virginia Cannel.
In what proportion mixed? In winter, ¾ Cannel.
Cost of the various Coals delivered at your Works? Please state carefully the price, and for what weight or measure. We purchase 2,688 cubic inches for a bush el of 76 pounds. In the year—

1855.....	Coal cost	$3.12	for 2,000 lbs.
1856.....	" "	4.02	"
1857.....	" "	3.73	"
1858.....	" "	2.98	"
1859.....	" "	2.80	"

Number of cubic feet gas made in 1858? 47,611,100 cubic feet.
What rent do you charge for Meters? See section 4 of terms.
Population of your Gas District? Don't know.
How do you cleanse your Gas—by Lime or Water? Both are used.
Bonded indebtedness? None. Owe no debts. We hold the Bonds of the City of Louisville for $66,000, received for her subscription for stock in the company.
☞ Please send us a copy of your Charter; also, one of each of your Reports. We have no regular Reports. Also, your form of keeping accounts.
☞ Please state how many boxes there are in your Post Office. (See below.) We wish to place a JOURNAL in each.
☞ Please give us a succinct history of your Company on the back of this page—if anything else of interest occurs to you.
Post-Office, Louisville—

1,440 boxes, numbered from	1 to....	1,440	
216 small drawers.	"	1 to....	216
28 large	"	1 to....	28 for Edit'rs.

We are now constructing the fourth section of our works, 12 ovens for 36 retorts, with the purifying apparatus. We expect to set these ovens with clay retorts. We have ordered 33 through Ellman Brothers, New York, from A. Keller, Ghent, Belgium; and 3 clay retorts from Hoadley, Cleveland, Ohio.
The pamphlet, "Louisville, &c.," page 58, sent you with our letter of 11th July, Contains a concise sketch of our Gas Works.
Our reports are but seldom published. I send you our charter, copy of rules (see Sec. 4, for meter rents) and three other pamphlets.

ROBT. G. COURTENAY, Pres.

CHICAGO, ILL.—Works built by George F. Lee & Co., Philadelphia, and are highly approved of. They use between 300 and 400 iron retorts, made by J. W. & J. F. Starr, of Camden, N. J. and R. D. Wood & Co., Philadelphia; meters from Code, Hopper & Gratz, chiefly, and from Thomas Glover, London; gas-holders built by Messrs. Starr, Mason & McArthur and P. Delly. Use no photometer (they ought to) nor exhauster. Have introduced a few clay retorts made by Thomas Hoadley, Cleveland, O. Mains are about 45 miles in length ranging from 3 to 16 inches diameter. Use Mount Carbon coal, costing $3 85 per 2,000 lbs. Made over 90,000,000 c. f. gas last year. The opposition company if not dead out are quiescent, as the regular has lately obtained the contract for the city lamps for a number of years to come.

DUBUQUE, IOWA.—Called the Julien Gas-Light Co. Works built by Samuel Rose; iron retorts from Pennock & Hart, Pittsburg; use wet and dry meters from Code, Hopper & Gratz, Philadelphia; Geo. Stacey's gas-holder seven miles of mains; Illuminating at 8½ per 2,000 lbs.