

The Pittsburgh Gazette.

THE LAKE SUPERIOR IRON REGION.

NUMBER THREE.

(Correspondence of the Pittsburgh Gazette.)

In our last we gave some statistics of iron mining, cost of transportation to a foreign market, etc. We now propose to furnish some information regarding the manufacture of pig iron in Marquette county.

The metallurgical traditions and customs of New-England seem to predominate; the iron workers have migrated westward, on the line of their own parallel of latitude. Pennsylvania seems to have comparatively few representatives either among those who furnish capital, or those who furnish skill. The furnaces are mostly charcoal, driven in some cases by water, which is abundant, and in most cases by steam—taking the gas from the furnace for fuel. The blast is driven in at two pounds pressure per inch, and at a temperature of 650 degrees Fahrenheit. The charcoal is made almost entirely in kilns 25 to 30 feet in diameter, and 25 to 30 feet high, shaped like a straw-beehive, and having a capacity of 80 to 40 cords, which is reduced to charcoal in about seven days. About 25 of these kilns are required for each furnace. The kilns are usually scattered through the forest, skirting a railroad, in the vicinity of the heavy timber. Maple, birch, hemlock and pine are the principal woods produced, the latter producing 100 bushels. Charcoal is delivered at the furnaces at about 10¢ per bushel.

The present average cost of making Lake Superior pig iron is about \$30 per ton, and it is expected to rise to \$35 per ton.

From this it will be seen how important an element in the manufacture of pig iron fuel is; one-half of the entire cost. The net profit on Lake Superior pig iron, from the beginning of the present year to the present time, has varied from \$3 to over \$80, and are now about \$15 per ton. Assuming 18 tons per day for 800 days per year, as the average product for one furnace, and we have an annual profit of \$38,000—or for the fourteen furnaces of the district, annually, a profit of \$532,000.

The following is a list of the furnaces, with their location:

Table listing furnace names and locations: Pioneer, Marquette, Collingwood, etc.

Estimating one hundred and fifty bushels of charcoal, and smelting each ton of pig iron, and forty thousand tons of iron as an average yield per annum, will give an annual consumption of six million bushels of charcoal per annum, or about the product of about one thousand acres of timber, burned up by these furnaces every year.

THE FUEL QUESTION.

We know that scores of furnaces in our own region have gone out of blast, through the wastage of timber suitable for charcoal, and this, too, in a region of hard wood and heavy timber. Charcoal being too bulky for transportation by rail, the time required to stop all these Lake Superior charcoal furnaces can be mathematically demonstrated; it is a question of a few years; and the erection of these furnaces, with their necessary machinery, in this distant region, is no small matter. When wood becomes scarce and charcoal advances in price, say fifty cents a bushel, it is not surprising to find them we will find Youngheims coke taken from Pittsburgh to Escanaba, as a return cargo, by the vessels engaged in the iron ore trade—provided our iron and coal interests are not so completely engrossed by the required facilities. An inland transportation of some three hundred miles by rail will not tend to stimulate this interchange of ore and coal. It costs as much to day to freight a ton of iron ore from Cleveland to Pittsburgh, as the thousand miles of transportation by lake from Escanaba to Cleveland. We annex the actual cost of transportation, by the different routes of conveyance, as determined by McAlpine:

Table showing costs of transportation for iron ore and coal by different routes.

Now, if Pittsburgh desires to cultivate Marquette county, as a market for her coal and coke, and to obtain a share of the product of these mines, our capital must provide cheaper transportation from the Lakes. Mr. Roberts' estimate of the cost of the enlargement of the Erie Canal was \$2,000,000 in round numbers. In conversation with one of our most enterprising manufacturers, he stated that he would take stock in such an enterprise to the amount of \$200,000, and consider himself the gainer, when the enlargement was completed, even if his stock was then entirely lost, through the economy in his freight, with such a cheap channel of communication as this enlarged canal from Erie to Rochester, and the Ohio slackwater from thence to our Iron City, we could be able to command the trade of the Northwest. Without some such cheap route, for heavy freights, such as coal, iron ore, heavy machinery and castings, our heavy trade will be lost to us. Every manufacturing merchant can estimate for himself the probable advantages to himself of being able to ship to Chicago at about three dollars per ton, and to all Lake ports in proportion.

Are we not already building up formidable rivals in the iron trade, for lack of enterprise in this direction? We have no data later than 1884; in that year we find that of 33 furnaces, consuming 241,500 tons of Lake Superior iron ore, there were but 7 of the number in Pittsburgh, using with 25 rolling mills; 20,000 tons, while in the Shenandoah Valley there were 10 furnaces, using 55,000 tons; in the Mahoning Valley 15 furnaces, using 30,000 tons; in the Allegheny Valley 10 furnaces, using 20,000 tons; in Cleveland and vicinity 8 furnaces, using 7,500 tons. Since that date there has been a large increase in the same direction. At Alliance, Elmerville, Toledo, Cleveland and other points in Ohio, Detroit, Michigan, Chicago, Illinois, Brazil, Indiana, and at how many other points all through the West, we find rolling mills springing up. Just now we hear of late discoveries of the best block coal and pure iron ore in Green County, Indiana. So that, save to points which we can reach by river, we are rapidly being cut off from our hitherto chief source of iron trade. Let our mining and manufacturing interests combine and estimate what they could save in about ten years, had they a canal to the Lakes with a capacity for boats of, say, 250 tons burden, and unless we are greatly mistaken, you will find the figures ample to defray the cost of the improvement; and if so, are not our miners and manufacturers ready to advance their estimated savings on freight for a year or two, to aid in an improvement of such incalculable value to those interests?

Had we any eloquence, we should become eloquent in arguing this subject, as of

vital importance to our city, and of less importance to the entire valley through which it would pass; to our own beautiful port of Erie, where it would debouch upon the great inland seas of the North and West. The most casual reader of the facts already furnished, regarding the extent and importance of the Lake Superior iron interest, and the prospective demand for our own bituminous coal, will estimate for himself, the possibilities of the future, when these vast agencies of civilization are united by cheap water communication.

—In speaking of these kilns in our first paper, your compositor made us say they were lined with "five feet brick;" we had written "six brick."

WORK FOR WOMEN.

Probably our countrywomen talk more about the right to enter all departments of industry than do their sisters in any other part of the world. In the older countries the complaint, if any, would be that women are compelled to do more than their share of labor. In Britain, for example, outside of Liverpool and London, the hotels are commonly kept by women. A woman assigns quarters to guests; a woman attends to the accounts; a woman presides at the bar. The men are reduced to the positions of porters and waiters. In Britain, and in France and Italy, women are guards along the track of the railroads. On the coast generally; the traveler finds women conducting a large share of the business. In Belgium, and France, and Germany, and Northern Italy, the girls over the manufacturing process, the fair sex are not always subordinate. In some of the most important of the largest lace manufacturing in Brussels. "Widow" is a leading merchant. At Lyons one of the chief banking houses is that of "Widow Guerin & Son;" although the husband of the firm is not found attending to the details of money at the office. In Paris, the jewelry stores are commonly managed by women; and many of the smaller manufactories of various articles seem to be entirely conducted by them. Near the Tuilleries is a sign indicating that a store is carried on by "Miss" and the sisters of her mother. In Cologne, the leading manufacturer of the famous water is Miss Martin, a nun. At Milan, women compete with men in merchandise and trade on the principal streets, and in the finest apartments of the new palaces. Throughout Switzerland, women maintain their full share of many of the industries, manufacturing and agricultural. On the wharf at Havre, a railroad extension is in progress, and women, side by side with men, are shorting rails, and loading and unloading cars.

In this country, practically, all vocations are already open to women. They need not wait for the consent of anybody. They are equal, and which offers itself. No prohibitions, and prejudice itself has ceased to protect above a whisper. No argument is needed to open any vocation to them. Only example is requisite. The place once occupied by a woman, is free to any one of her sex forever afterwards. Unless it be the law, no profession in this country, and no vocation within their physical strength, falls even now to afford to women. They are admitted to compete with men on their own ground. The right of woman to labor, according to her gifts and capacities, with pen and pencil, with voice or hand, in shop or factory, or field or forum, can hardly be accounted as longer in dispute. (Vice Herald.)

THE ART OF ELOQUENCE.

Mr. Bright, in reply to an address by the Corporation of Edinburgh, said: "In the resolution of the town council, out of which the proceedings of the day have sprung, there are phrases which I do not make me think, and to which I find it difficult to refer. I am there described as an orator and a statesman. Now, more than thirty years ago, when I was very young indeed, in beginning to think of public affairs, in reading the prose writings of John Milton I found a passage which fixed itself in my mind, and which time has never been able to remove. He says, 'I have eloquence; I find to be more than serious and heavy love of truth,' and I have endeavored so far as I have had the opportunity of speaking in public, to abide by that opinion. So far as I am able to extend and improve myself during the thirty years that have been permitted to me at meetings of my countrymen, I am not conscious that I have ever used an argument which I did not believe to be sound, or have stated anything as a fact which I did not believe to be true. I have endeavored, further, always to abstain from speaking on subjects which I had not examined and well considered, and perhaps it is because I endeavored to attend to these rules, that what I have said has met with some acceptance, and perhaps in some quarters has been influential in the country."

This first passenger train passed over the Hooking Valley Railroad, from Columbus to Lancaster on the 6th inst. The road is said to be in splendid condition, about half completed, and for a road at such a stage of completion pronounced by the party on the best they had ever seen.

SPECIAL NOTICES.

MANHOOD AND THE VIGOR OF YOUTH restored in four weeks. Success guaranteed. Price, \$10.00. Address: Dr. J. C. McAlpine, 111 Broadway, New York.

PHILOSOPHY OF MARRIAGE. Young Man's Guide to Happy Marriage and Contented Family. The husband of a virtuous woman is the lord of the earth. Address: BOWEN & CO., 111 Broadway, New York.

HAIR DYE. RICHMOND'S HAIR DYE. The only true and perfect hair dye, reliable, harmless, and of long standing. Address: BOWEN & CO., 111 Broadway, New York.

GUIDE TO MARRIAGE. Young Man's Guide to Happy Marriage and Contented Family. The husband of a virtuous woman is the lord of the earth. Address: BOWEN & CO., 111 Broadway, New York.

FOR SALE.

A FARM OF 100 ACRES, situated in Allegheny county, Pa., on the line of the Pennsylvania Railroad, at Station No. 100, containing 100 acres of land, with a frame house, barn, and other outbuildings. The soil is rich and productive, and the water is pure and abundant. The property is offered at a very low price, and is a rare opportunity for an investor. Address: W. W. Martin, President, National Insurance Co., 100 Broad St., Pittsburgh, Pa.

A FARM OF 100 ACRES, situated in Allegheny county, Pa., on the line of the Pennsylvania Railroad, at Station No. 100, containing 100 acres of land, with a frame house, barn, and other outbuildings. The soil is rich and productive, and the water is pure and abundant. The property is offered at a very low price, and is a rare opportunity for an investor. Address: W. W. Martin, President, National Insurance Co., 100 Broad St., Pittsburgh, Pa.

A FARM OF 100 ACRES, situated in Allegheny county, Pa., on the line of the Pennsylvania Railroad, at Station No. 100, containing 100 acres of land, with a frame house, barn, and other outbuildings. The soil is rich and productive, and the water is pure and abundant. The property is offered at a very low price, and is a rare opportunity for an investor. Address: W. W. Martin, President, National Insurance Co., 100 Broad St., Pittsburgh, Pa.

A FARM OF 100 ACRES, situated in Allegheny county, Pa., on the line of the Pennsylvania Railroad, at Station No. 100, containing 100 acres of land, with a frame house, barn, and other outbuildings. The soil is rich and productive, and the water is pure and abundant. The property is offered at a very low price, and is a rare opportunity for an investor. Address: W. W. Martin, President, National Insurance Co., 100 Broad St., Pittsburgh, Pa.

A FARM OF 100 ACRES, situated in Allegheny county, Pa., on the line of the Pennsylvania Railroad, at Station No. 100, containing 100 acres of land, with a frame house, barn, and other outbuildings. The soil is rich and productive, and the water is pure and abundant. The property is offered at a very low price, and is a rare opportunity for an investor. Address: W. W. Martin, President, National Insurance Co., 100 Broad St., Pittsburgh, Pa.

A FARM OF 100 ACRES, situated in Allegheny county, Pa., on the line of the Pennsylvania Railroad, at Station No. 100, containing 100 acres of land, with a frame house, barn, and other outbuildings. The soil is rich and productive, and the water is pure and abundant. The property is offered at a very low price, and is a rare opportunity for an investor. Address: W. W. Martin, President, National Insurance Co., 100 Broad St., Pittsburgh, Pa.

A FARM OF 100 ACRES, situated in Allegheny county, Pa., on the line of the Pennsylvania Railroad, at Station No. 100, containing 100 acres of land, with a frame house, barn, and other outbuildings. The soil is rich and productive, and the water is pure and abundant. The property is offered at a very low price, and is a rare opportunity for an investor. Address: W. W. Martin, President, National Insurance Co., 100 Broad St., Pittsburgh, Pa.

A FARM OF 100 ACRES, situated in Allegheny county, Pa., on the line of the Pennsylvania Railroad, at Station No. 100, containing 100 acres of land, with a frame house, barn, and other outbuildings. The soil is rich and productive, and the water is pure and abundant. The property is offered at a very low price, and is a rare opportunity for an investor. Address: W. W. Martin, President, National Insurance Co., 100 Broad St., Pittsburgh, Pa.

A FARM OF 100 ACRES, situated in Allegheny county, Pa., on the line of the Pennsylvania Railroad, at Station No. 100, containing 100 acres of land, with a frame house, barn, and other outbuildings. The soil is rich and productive, and the water is pure and abundant. The property is offered at a very low price, and is a rare opportunity for an investor. Address: W. W. Martin, President, National Insurance Co., 100 Broad St., Pittsburgh, Pa.

A FARM OF 100 ACRES, situated in Allegheny county, Pa., on the line of the Pennsylvania Railroad, at Station No. 100, containing 100 acres of land, with a frame house, barn, and other outbuildings. The soil is rich and productive, and the water is pure and abundant. The property is offered at a very low price, and is a rare opportunity for an investor. Address: W. W. Martin, President, National Insurance Co., 100 Broad St., Pittsburgh, Pa.

A FARM OF 100 ACRES, situated in Allegheny county, Pa., on the line of the Pennsylvania Railroad, at Station No. 100, containing 100 acres of land, with a frame house, barn, and other outbuildings. The soil is rich and productive, and the water is pure and abundant. The property is offered at a very low price, and is a rare opportunity for an investor. Address: W. W. Martin, President, National Insurance Co., 100 Broad St., Pittsburgh, Pa.

A FARM OF 100 ACRES, situated in Allegheny county, Pa., on the line of the Pennsylvania Railroad, at Station No. 100, containing 100 acres of land, with a frame house, barn, and other outbuildings. The soil is rich and productive, and the water is pure and abundant. The property is offered at a very low price, and is a rare opportunity for an investor. Address: W. W. Martin, President, National Insurance Co., 100 Broad St., Pittsburgh, Pa.

A FARM OF 100 ACRES, situated in Allegheny county, Pa., on the line of the Pennsylvania Railroad, at Station No. 100, containing 100 acres of land, with a frame house, barn, and other outbuildings. The soil is rich and productive, and the water is pure and abundant. The property is offered at a very low price, and is a rare opportunity for an investor. Address: W. W. Martin, President, National Insurance Co., 100 Broad St., Pittsburgh, Pa.

A FARM OF 100 ACRES, situated in Allegheny county, Pa., on the line of the Pennsylvania Railroad, at Station No. 100, containing 100 acres of land, with a frame house, barn, and other outbuildings. The soil is rich and productive, and the water is pure and abundant. The property is offered at a very low price, and is a rare opportunity for an investor. Address: W. W. Martin, President, National Insurance Co., 100 Broad St., Pittsburgh, Pa.

A FARM OF 100 ACRES, situated in Allegheny county, Pa., on the line of the Pennsylvania Railroad, at Station No. 100, containing 100 acres of land, with a frame house, barn, and other outbuildings. The soil is rich and productive, and the water is pure and abundant. The property is offered at a very low price, and is a rare opportunity for an investor. Address: W. W. Martin, President, National Insurance Co., 100 Broad St., Pittsburgh, Pa.

INSURANCE.

MUTUAL LIFE INSURANCE CO. OF NEW YORK. No. 103 BROADWAY. ASSETS RAPIDLY INCREASING, OVER \$1,000,000.

All Approved Forms of Policies Issued. Liberal mode for the payment of Premiums. Policies Non-forfeiting by their terms. The entire profits of the Company divided equally among the insured. Last Return of Premium, FIFTY PER CENT.

Removal. NATIONAL INSURANCE CO. OF THE CITY OF ALLEGHENY. Office, No. 80 FEDERAL STREET, entrance on Stockton Avenue.

Removal. NATIONAL INSURANCE CO. OF THE CITY OF ALLEGHENY. Office, No. 80 FEDERAL STREET, entrance on Stockton Avenue.

Removal. NATIONAL INSURANCE CO. OF THE CITY OF ALLEGHENY. Office, No. 80 FEDERAL STREET, entrance on Stockton Avenue.

Removal. NATIONAL INSURANCE CO. OF THE CITY OF ALLEGHENY. Office, No. 80 FEDERAL STREET, entrance on Stockton Avenue.

Removal. NATIONAL INSURANCE CO. OF THE CITY OF ALLEGHENY. Office, No. 80 FEDERAL STREET, entrance on Stockton Avenue.

Removal. NATIONAL INSURANCE CO. OF THE CITY OF ALLEGHENY. Office, No. 80 FEDERAL STREET, entrance on Stockton Avenue.

Removal. NATIONAL INSURANCE CO. OF THE CITY OF ALLEGHENY. Office, No. 80 FEDERAL STREET, entrance on Stockton Avenue.

Removal. NATIONAL INSURANCE CO. OF THE CITY OF ALLEGHENY. Office, No. 80 FEDERAL STREET, entrance on Stockton Avenue.

Removal. NATIONAL INSURANCE CO. OF THE CITY OF ALLEGHENY. Office, No. 80 FEDERAL STREET, entrance on Stockton Avenue.

Removal. NATIONAL INSURANCE CO. OF THE CITY OF ALLEGHENY. Office, No. 80 FEDERAL STREET, entrance on Stockton Avenue.

Removal. NATIONAL INSURANCE CO. OF THE CITY OF ALLEGHENY. Office, No. 80 FEDERAL STREET, entrance on Stockton Avenue.

Removal. NATIONAL INSURANCE CO. OF THE CITY OF ALLEGHENY. Office, No. 80 FEDERAL STREET, entrance on Stockton Avenue.

Removal. NATIONAL INSURANCE CO. OF THE CITY OF ALLEGHENY. Office, No. 80 FEDERAL STREET, entrance on Stockton Avenue.

HERNIA OR RUPTURE.

Hernia or Rupture cured. Hernia or Rupture cured. Hernia or Rupture cured. Hernia or Rupture cured. Hernia or Rupture cured.

Hernia or Rupture cured. Hernia or Rupture cured. Hernia or Rupture cured. Hernia or Rupture cured. Hernia or Rupture cured.

Hernia or Rupture cured. Hernia or Rupture cured. Hernia or Rupture cured. Hernia or Rupture cured. Hernia or Rupture cured.

Hernia or Rupture cured. Hernia or Rupture cured. Hernia or Rupture cured. Hernia or Rupture cured. Hernia or Rupture cured.

Hernia or Rupture cured. Hernia or Rupture cured. Hernia or Rupture cured. Hernia or Rupture cured. Hernia or Rupture cured.

Hernia or Rupture cured. Hernia or Rupture cured. Hernia or Rupture cured. Hernia or Rupture cured. Hernia or Rupture cured.

Hernia or Rupture cured. Hernia or Rupture cured. Hernia or Rupture cured. Hernia or Rupture cured. Hernia or Rupture cured.

Hernia or Rupture cured. Hernia or Rupture cured. Hernia or Rupture cured. Hernia or Rupture cured. Hernia or Rupture cured.

Hernia or Rupture cured. Hernia or Rupture cured. Hernia or Rupture cured. Hernia or Rupture cured. Hernia or Rupture cured.

Hernia or Rupture cured. Hernia or Rupture cured. Hernia or Rupture cured. Hernia or Rupture cured. Hernia or Rupture cured.

Hernia or Rupture cured. Hernia or Rupture cured. Hernia or Rupture cured. Hernia or Rupture cured. Hernia or Rupture cured.

Hernia or Rupture cured. Hernia or Rupture cured. Hernia or Rupture cured. Hernia or Rupture cured. Hernia or Rupture cured.

Hernia or Rupture cured. Hernia or Rupture cured. Hernia or Rupture cured. Hernia or Rupture cured. Hernia or Rupture cured.

Hernia or Rupture cured. Hernia or Rupture cured. Hernia or Rupture cured. Hernia or Rupture cured. Hernia or Rupture cured.

Hernia or Rupture cured. Hernia or Rupture cured. Hernia or Rupture cured. Hernia or Rupture cured. Hernia or Rupture cured.

AMUSEMENTS.

THE PITTSBURGH THEATER. Saturday Evening, Nov. 21, 1886. P. S. CHAFFIN, Manager.

MISS KATE FISHER. In her great specialty of MAZEPPA, written by an entire New York company.

TRIMBLE'S VARIETIES THEATER. H. W. WILLIAMS, Lessee and Manager. Also, E. B. BROWN, Stage Manager.

MRS. ANNIE BUNDLE. In her Wonderful Vocal Representations. New dramatic sketches by F. W. BROWN, or One Hundred Years Hence.

BURNELL'S MUSEUM AND PARIOR MANAGERIE. The Great Family Reunion. FIFTH AVENUE, between Madison and Wood streets, opposite Old Theater.

LECTURES. GEORGE ALFRED TOWNSEND. Will deliver his Memorial Lecture on "THE PENNSYLVANIA DUTCH" AT THE ACADEMY OF MUSIC, TUESDAY EVENING, NOV. 23, 1886.

PROF. RUD. LEONHART. (LATE OF WESTERN UNIVERSITY.) Offers his services to the public as teacher of GERMAN, MUSIC AND DRAWING.

FASHIONABLE DANCING ACADEMY. No. 10 THIRD STREET. A new and complete description of popular "Gait and Posture" for Ladies, Men and Children. For Gentlemen—Tuesday and Friday, 8 o'clock P. M. For Gentlemen—Tuesday and Friday, 8 o'clock P. M. For Gentlemen—Tuesday and Friday, 8 o'clock P. M.

LUMBER. BUTLER AND LUMBER STREET. NINTH WARD. OFFICE AT FORT FIFTY SEVEN WOOD STREET, between Second and Third Streets.

LUMBER COMPANY. CAPITAL - \$125,000. BUTLER AND LUMBER STREET. NINTH WARD. OFFICE AT FORT FIFTY SEVEN WOOD STREET, between Second and Third Streets.

WINE, LIQUORS, & PITTSBURGH IMPORTING HOUSE. ESTABLISHED 1838. SCHMIDT & FRIDAY. IMPORTERS OF FOREIGN WINES AND LIQUORS.

WINE, LIQUORS, & PITTSBURGH IMPORTING HOUSE. ESTABLISHED 1838. SCHMIDT & FRIDAY. IMPORTERS OF FOREIGN WINES AND LIQUORS.

WINE, LIQUORS, & PITTSBURGH IMPORTING HOUSE. ESTABLISHED 1838. SCHMIDT & FRIDAY. IMPORTERS OF FOREIGN WINES AND LIQUORS.

WINE, LIQUORS, & PITTSBURGH IMPORTING HOUSE. ESTABLISHED 1838. SCHMIDT & FRIDAY. IMPORTERS OF FOREIGN WINES AND LIQUORS.

WINE, LIQUORS, & PITTSBURGH IMPORTING HOUSE. ESTABLISHED 1838. SCHMIDT & FRIDAY. IMPORTERS OF FOREIGN WINES AND LIQUORS.