President Howells' Address.

Gentlemen and fellow members of the Ohio Institute of Mining Engineers, first let me cordially and heartily welcome you to the city of Massillon. For the reason of severe sickness I was unable to attend the meeting of the Institute, which was held at Columbus in January last; but notwithstanding my non-appearance you deemed it proper to elect me to the position of President of the Institute for the coming year. Believing as I do, that other members are more worthy and more competent to fill the position and not having had the opportunity until now to acknowledge the compliment, I certainly would be ungrateful and devoid of human feeling under such circumstances if I did not now do so, hence, gentlemen, please accept my heartfelt thanks.

By the programme I see that we have several interesting papers to be read and discussed, and believing these papers will be more interesting and instructive to the members than anything that I can say, I shall not detain you with very extended remarks. However, having been a resident of Massillon for about twenty years as well as having some pride in my adopted home, I can't refrain from saying a few words on this occasion. Massillon is called after a Frenchman, one of the most noted as well as most eloquent pulpit orators of modern times. It was also known for about twenty years (from 1830 to 1850) as the Wheat City of Northern Ohio, for the reason that it was the depot for wheat for Stark, Columbiana, Wayne and other counties. To it, all wheat that was for sale in this vast region of the State was brought, sold and then exported via the raging canal to all the then known markets of consumption. For many years it was also known as the producer of that famous pig iron, Massillon Black Band, or American Scotch pig; but for the last twenty years Massillon has been best known for the reason of its popular and splendid quality of coal; and the great agricultural works of Russell & Co., one of the largest (if not the largest) works of the kind in the state of Ohio. It is also noted for its sandstone quarries, producing, as I am told, the best dry grinding stone in the country. We also have our rolling mill, glass works, paper mill, fire brick works, and some of the best wheat growing lands in this or any other state in the Union. But gentlemen, you as miners and mining engineers, are more interested in minerals than perhaps anything else, and we, the people of Massillon, have great pride in the quality, superiority and reputation of the Massillon coal.
Massillon coal is found in troughs or basins, containing in each basin anywhere from twenty to seventy-five acres of coal. Such basins being isolated and apart, it requires much drilling to find the coal. Hence, only a few years ago, it looked as if the Massillon coal had all been found; consequently, its life was of very short duration. But I am happy to say to you that more of our coal was produced in the last year than in any previous year; and that there are more mines in operation (perhaps more than are profitable to either operators or miners) than at any other time in the history of the Massillon district. And there is positiveness of continuation of this condition for many years to come.

The Massillon mines are also noted for the great expense in opening, as well as in producing the coal, much more so I think, than any other district in the state; costing anywhere from $25,000 to $65,000 each; and, withal, the life of the mine is very short, ranging from three to seven years, when running to its full capacity. Hence it is not necessary for me to say to you who understand the coal mining business, that if it was not for the superior quality of the Massillon coal, for both steam and domestic use, it could not be produced and placed on the market with a profit.

Gentlemen, we propose to take you to visit some of these mines, and I may safely say to you that at one of them you will see more water discharged than you have ever before seen from any one mine in this state, if not in any coal district in the Union, the amount being not less than 3,000,000 gallons every 24 hours—more water than is required for consumption in a city of 40,000 inhabitants or more.

Gentlemen, for reasons beyond my control and not because it was my wish, I have been unable to meet with you at any summer meeting before, excepting the one held at Ironton some three years ago, where we were so handsomely and bounteously entertained; and if that is a criterion to go by of how you were entertained at other places, I am sorely afraid that we here in Massillon, in that respect, will have to take a back seat. But, gentlemen, we will do our utmost to make you feel at home; and trust that you will enjoy yourselves while among us; and that something that you may see and hear will in the future be recalled to your mind in a pleasant manner; and that no member present will ever have cause to regret his coming to the meeting in the city of Massillon.
citizens and members of the Institute, fully two hundred in all being present. Of the meeting the Massillon Independent says:

"Last night the Institute did not enjoy alone the rich treat that was spread out before it, for a large section of the High School and a considerable number of citizens took advantage of the occasion."

The President's address was greeted with rounds of applause. At its conclusion he introduced Prof. Edward Orton, the State Geologist of Ohio, who preceded his paper on the Geology of Ohio, with a few well chosen words of response to the hearty address of welcome by the President, of which the Massillon Independent makes the following comment:

"Prof. Edward Orton, of the Ohio survey, is as widely known among scientists as any man in his profession. He was assisted in his talk by an immense geological map of the State, showing in colors the different rock formations. He briefly responded to President Howell's welcome and added that Stark and Tuscarawas counties had combined advantages not always united—a fruitful soil covering immense mineral treasures. We had no finer fuel than Massillon coal within the limits of the State.

With this brief local allusion, Prof. Orton introduced his argument as to the age of the earth. He said geology had done for time what astronomy had done for space, and yet the conclusions of geology were looked upon with doubt, although as indisputable as the rule of three. The earth was so old, that years were inadequate to measure, as were miles to measure the distances between the stars.

It took ten feet of limestone, decomposed by the processes of time, to make a foot of soil, and in portions of the State, this limestone soil was several yards deep. The speaker referred to the centuries required to reduce this stone to earth, to show that if it took such immeasurable periods to cover the earth with soil, how much greater must have been the time in which were created the rocks themselves. Ohio, said Prof. Orton, was built upon limestone, one story after another. The Trenton lime rock was the lowest in the series, and had its single out-crop in the south-western portion of Ohio. Then upon the map he showed the outcrops of the other strata, and from his crowded mental store-house gave data concerning each. The last layer in the geological formation was the coal seams, underlaid with beds of clay, in which could be found the roots of trees, while the vegetable substances showed that they had been subjected
to open air decay. There were neither hills nor mountains in Ohio, said Prof. Orton, and the only relief from a level plane were the valleys that broke it up. Having treated of the facts as they were recorded, in a few words he spoke of the time that had been required to build the world. He ventured no statement of his own, only remarking that some placed it at 100,000,000 years, while others produced reasons to show why it should be half that number. At best, observed Prof. Orton, it only showed that we mocked ourselves with words wholly incapable of picturing the ages that reached back to the beginning.

The Institute then adjourned till morning.

At 9 o'clock on the 12th the members assembled at Music Hall and in a body visited the shops of Russell & Co., where the party was taken in charge by Pres. J. W. McClymonds, V. S. Russell, C. A. Gates, C. O. Heggem and shown through almost the entire establishment.