The Summer Excursion of the Ohio Institute of Mining Engineers of Ohio in 1892, left Columbus, Ohio, Tuesday morning, August 2nd, and was joined by members of the Institute at numerous places all the way across the state to Bellaire. The route was over the picturesque Baltimore & Ohio Railroad from Columbus to Connellsville, center of the Coke Region of Pennsylvania and thence through to Uniontown. And here I must say that there were no deadheads in the crowd, as I believe every one of them paid his fare which was $5.25 for the round trip, and as all of you know, was very cheap, and while in the coke region the company treated us royally, giving us a special car and engine to take us wherever we wanted to go.

Now that is about all you want to know concerning the trip. The next thing is, what did I see in the coke region?

On Wednesday morning, August 3rd, we wended our way on one of the branches of the B. & O., through the town of Mt. Pleasant, about ten miles distant, and landed at the Standard Mine of the Frick Coke Company. This is the finest plant in the coke region. The mine supplies 907 ovens with coal, the daily output of coal being 2,500 tons, employing about 500 men. Mr. Robert Ramsey, the superintendent, showed us through the works and gave me all the details in regard to the hoisting machinery.

There I saw one of the finest hoisting engines of six hundred horse power, and everything working as fine as silk. Among other features of these works is an electric plant which supplies light to a part of the mine. The superintendent very kindly showed me into a building where a set of expert workmen were engaged in making a complete miniature model of this entire works, includidg the buildings, engines, hoisting towers, and everything pertaining to the works, for exhibition at the World’s Fair and no doubt some of you saw it there. This model, when complete cost five thousand dollars. It was a perfect miniature of the Standard plant.
After I saw this model I went down into the coal mine 300 feet underneath the ground and then started from the bottom of the shaft and went to the pump-house where one of the finest pumps I ever saw was in operation, pumping on an average of 3,000 tons of water every 24 hours; considerable more in weight than the output of coal is during that time.

I then went from here and came to the stables which are model underground stables, as fine as can be seen in a mine with their wooden stables, hay racks and everything complete. After seeing one of the most complete plants in the coke region I returned to Connellsville to get my dinner which was very essential after such a trip.

After dinner I went to the Morrell Mine which is a slope mine. I went down the man way and went along the tunnel until we were nearing the main entry from the foot of the slope where we had to put out our mining lamps and take a safety lamp, as all in the mine worked by safety lamps.

A gentleman who was not accustomed to be in mines turned to me and said: "Captain, mightn't we be on our way to the Bottomless Pit?" and before I could answer the gentleman another one of the crowd answered: "Oh no, we have a pit over at Uniontown that is 500 feet deep and now we are only 200 feet here", which made me laugh heartily, thinking that my friend might think that we were a set of beings who were leading him to his fate. Considerable gas generates in this mine. While in this mine I came across two old and intimate friends who had worked for me twenty years ago. I was very glad to meet them though I only had a minute to talk to them as I had to pass on and get out of the mine.

On my way out there was a very fine gentleman walking by my side conversing with me and we had to cross an air bridge which had ten steps on each side. On the top step there was water dripping which made it very slippery. The gentleman followed me down the steps but when I was down three steps my friend slipped and rolled past me to the bottom and I asked him: "Hallo, what is your hurry?" He answered me: "You say hurry. I am not in a hurry, but I fell down," which caused some ladies who were standing at the foot of the stairs to laugh. So after I saw all of this mine I left.

Next I came to the far famed Hill Farm Mine. This is the mine which had the terrible calamity two years before this time. I feel that it would not be prudent to make any remarks concerning the terrible disaster as I am not well enough acquainted with the details, only I can say that it is a very desolate looking place. I have in my possession a piece of coke that was coked
by the heat after the explosion, at a point one thousand feet from the mouth of the pit so you can judge what the heat was in the mine at that time.

Thursday morning, August 4th, I started to see the three mines known as Leisenring No. 1, 2 and 3, situated within a few miles of Connellsville. These mines take the name of their former owner, Mr. Leisenring, but are now owned and operated by H. C. Frick & Co., by whom they were purchased a few years ago, for, they say three million of dollars. The property includes nine thousand acres of land, good coal land and three splendidly equipped mines. I went first to the No. 3 mine. Here I met my old friend Hon. Austin King, who was district inspector in Ohio the same time as myself and who has since been inspector in Pennsylvania, but at this time superintendent of Leisenring No. 3.

After I saw the electric plant and all the engines and outside machinery. This is the deepest mine in the coke region, the shaft being 541 feet in depth. At the bottom everything looked bright and cheery as every one of the Frick Mines did. I then visited the lamp room which was 16 feet square with good wooden floor and nicely white-washed walls and ceiling, with desk, writing materials, etc., and brilliantly lighted by electricity.

About two miles from this point at one of the working places I saw a lamp full of gas in an obscure hole in the roof of the mine. There were two gentlemen near me at the time who involuntarily stepped back, as you know a laugh was raised on one of them when he remarked: "I hope we are not going to have an explosion, now as I have a wife and two children at home I would like to see once more."

So we returned to the pit bottom and were hoisted to the surface where I was more than surprised. It was a splendid lunch prepared by our old friend Austin King, superintendent of the mine, and it was here on this occasion our worthy Chief Inspector of Mines Haseltine made his best record of the whole trip. The speeches made at this lunch counter were all very appropriate and of a scientific nature. We then left for Leisenring No. 1 and No. 2. In No. 1, I rode on a very fine rope haulage, everything connected with which worked like a charm. That same night I left for Uniontown and put up for the night.

The next morning I visited the Oliver Mines No. 1 and 2, under the management of Hon. F. C. Kleigley, an Ohio boy. Here I saw something new. All tressels and fixtures around the shaft were of steel and stone which naturally would be very strong and permanent.
I thought a few words concerning the early manufacture of coke in this region would not be out of place in my paper.

The region gets its name from the town of Connellsville, Fayette County, Pa., which is on the bank of the Youghiogheny River, and is about the center of the Connellsville Basin and was the nearest town to the location of the first ovens that were built in the region. In round numbers there are 17,250 ovens here, the aggregate of eighty-five plants, the smallest the “Great Bluff” of sixteen ovens; the largest the Standard Plant of the H. C. Frick Coke Company 905 ovens are supplied with coal from 80 mines (30 drifts, 32 slopes and 21 shafts), the latter vary in depth from 50 to 541 feet; slopes vary from 180 to 6,000 feet, horizontal depth, and some of the drifts extend over two miles underground. Iron larries are used for conveying the coal from the bins to the mouth of the ovens and have a capacity of from six to eight tons, drawn by small locomotives over the tops of the ovens.

When the ovens are first started the coal is ignited by means of wood, red hot coals, etc., just as a coal fire is started in a stove. After repeated charging and drawing, however, the ovens become hot and the coal is ignited by the heat retained in the oven walls by the last charge. For cooling the coke, pure water is absolutely necessary to insure the purest coke.

The early history of coke-making in the United States is enveloped in considerable doubt. It is claimed coke was used in this country in the manufacture of pig-iron a few years before the Revolution. While this is possible it is not probable that coke was used in this country at so early a date. It was not until 1735 that coke was successfully used in England, and it did not come into anything like general use in that country as a Blast Furnace Fuel until 1750. All the early coke was made on the ground. The first coke made in ovens was about 1841. In that year Provance McCormick and James Campbell, two carpenters, and John Taylor a stone-mason, and the owner of a farm on the Youghiogheny River, including a coal mine which he operated in a small way commenced making coke with two ovens and in the spring of 1842 had enough coke stocked to fill two boats, or about 800 bushels.

Campbell and McCormick built the boats which they took down the Ohio River on a high stage of water to Cincinnati, O. On reaching that city they found that the demand for coke was not as brisk as they had hoped to find it. The new fuel was unknown there. Foundary men regarded it with suspicion, calling it “Cinders”. Campbell who went with the boats remained at the landing three weeks retailing it out, one boat load in small lots at 8 cents per bushel. He traded the balance for a patent
Iron Grist Mill. The mill was brought to Connellsville, Pa., and when put in operation was found to be a failure.

This ends a brief history of the first operation in coke in the Coke Region of Pennsylvania.

**THE CHAIR:** Ladies and gentlemen and members of the institute: The members of the institute will see that on the programmes, the next thing in order is miscellaneous business and election of officers. We will take a recess for a minute or two in case any desire to withdraw before we proceed with the business meeting.

**SECRETARY HASELTINE:** We want to know before you go how many are going with the excursion day after tomorrow. The excursion to Congo on Friday.

**THE CHAIR:** Now every person in the audience who wishes to go on that excursion will please hold up their hand and be counted.

The chair announced that about 40 had signified their intention of going.

At this point a recess of five minutes was taken, after which the convention was again called to order by the chair.

**THE CHAIR:** There is more or less miscellaneous business that should be attended to. That is the first thing in order for to-night. Now in talking matters over with the secretary we found that there were one or two matters that the institute ought to act upon as a body and I think the sooner the action is taken the better. One is in regard to the journals. We have number 21 of our series of journals in the hands of the printer. The secretary tells me the journal will be ready for distribution among the members on the 25th. We have also the manuscript, practically complete for another journal which will be issued shortly after No. 21.

**SECRETARY HASELTINE:** That is the journal for 1893.

**THE CHAIR:** Yes. Now our membership includes about 119 names, a large majority of them may be considered active
members of the institute. To all this list of members, under our rules, journals will be sent. The question that has been raised in discussion and which I have been requested to bring before the institute is in regard to increasing the distribution of our journals. We publish a journal which contains a good deal of valuable matter and distribute it to our members. The experiment of offering it for sale was tried as shown by the report of the secretary, but it did not appear to be successful. Now when we print a journal of this kind it costs very little more to print 500 than 100 and the question is whether it would not be wise to put a certain number of these journals in the hands of our members for distribution among some of their friends; who if their attention was brought to it in this way, would become useful members of the institute. Another point was in regard to a certain amount of dead weight or dead timber in our list of membership. We have gone over our books and we have the names of several members that have been on our books for several years but who pay no dues and in no way have signified their desire to continue with the institute. Now we have, as I understand it, though I may be misinformed, no means for eliminating these delinquent members. Their names remain on the books and the dues accumulate and I presume many of them have forgotten all about it and have lost track of the institute. Some of them I think might be induced to renew active membership, but they are met with the fact that under our rules they are charged with four, five or six years back dues. They have not been to a meeting perhaps of the institute for six years. That is of course their fault, but it has been due to carelessness on their part. A sort of neglect which they have construed to mean forfeiture of membership in the institute. The question has been raised whether we should not make some provision to meet this class of delinquencies and whether it would not be better to pass some by-law by which failure to pay dues for a certain length of time would forfeit membership in the institute. Then if anyone wished to get back at any future time, only hold him liable for the amount of dues up to the time when his membership lapsed for non-payment. I offer that as a suggestion under
the head of miscellaneous business. Has any one any propositions to offer in regard to this matter or any other.

MR. MCDONALD: Mr. Chairman, I beg leave to suggest that a committee be appointed to provide a limited time within which membership should be lost, say six or seven or perhaps twelve months.

THE CHAIR: In other words, to investigate the subject and report to the society a rule.

MR. MCDONALD: Yes, and fix the limited time within which a member can be removed for non-payment of dues. I move that a committee of three be appointed to report to the society at the next June meeting.

THE CHAIR: Is there any discussion?

SECRETARY HASELTINE: I think that committee ought to report right here to-morrow.

MR. MCDONALD: I accept that suggestion and embody that in my motion.

The motion being seconded, then prevailed.

THE CHAIR: How shall that committee be appointed.

VOICES: By the chair.

THE CHAIR: The chair will appoint as that committee Mr. Jennings, and the secretary, Mr. Haseltine, as having the books and figures, and Mr. McDonald. Is their any other miscellaneous business? Would it be well to appoint a committee to consider the question of journals. The question being whether it would be wise to consider a plan for increasing the distribution of these journals in places where they would do the most good.

MR. MCDONALD: I would make a motion that a committee of three be appointed by the chair on the subject of journals.

The motion being seconded. prevailed.
THE CHAIR: The chair will appoint Mr. McDonald, Mr. Cain and Mr. Edward Orton, jr. Is there any further business to be brought before the institute. This is our last chance for miscellaneous business. I would like to ask the secretary if there are any committees to report at this meeting.

SECRETARY HASELTINE: There was a committee appointed at the last meeting to revise the report of the committee on the revision of the constitution. I don't remember who the committee was.

THE CHAIR: Have you the minutes?

SECRETARY HASELTINE: No, not here.

THE CHAIR: Well, we can pass that over until to-morrow.

The next event on the programme, is the election of officers. We have to-morrow, at the close of the morning session, the election of members and I would suggest that it might be well to appoint a committee now to nominate officers for the coming year to report at the time of the election of members.

SECRETARY HASELTINE: I move that a committee of three be appointed to nominate officers to report to-morrow at the time of the election of members.

The motion being seconded, prevailed.

THE CHAIR: The chair will appoint Captain Morris, Mr. Jennings and Mr. Ray as that committee. This committee will report the nominations for officers for the ensuing year at the close of the session to-morrow morning. Is there any other business to come before the society. The morning session commences to-morrow at 9:30 A.M. when we wi'll have a list of papers. If we have no further business before the society, a motion to adjourn is in order.

On motion of Secretary Haseltine, the institute adjourned to meet at 9:30 A.M. on January 18th, 1894.
THE OHIO MINING JOURNAL.

MORNING SESSION, 9:30 A. M.

The institute was called to order by the chair, who said:

The first paper on the programme is by Mr. Philips, of Akron, Ohio. My impression is that he is not in the city yet, but he will be here and have a paper. So we will pass Mr. Philips paper and give him a place on the programme later when he arrives.

The next paper is by Mr. Middleton. Mr. Middleton has sent word that he will not be here, being unavoidably detained, but his paper is here and will be read by the secretary later on the programme, as the secretary wishes to familiarize himself further with the manuscript. We have with us the Hon. Frederick Keighley, of Uniontown, Pa., and I am going to ask him to take the first place on the programme this morning on the subject, "Experience with Mines Which Generate Fire Damp in The Connellsville Coke Regions." Gentlemen, I have great pleasure in introducing Mr. Keighley.