THE SUMMER MEETING.

The Summer Meeting was conducted on a different plan from those of former years, owing to the experience proving that more than one meeting devoted to the reading and discussion of papers, was impracticable. The members after visiting mines during the day could not be induced to engage in the discussion of papers in the evening.

In accordance with the consent of the members present at the Winter meeting, your Secretary-Treasurer made arrangements for an excursion to the various coal fields in Ohio and West Virginia. Invitations were issued to the members, the mine operators, superintendents and mine bosses, their wives and sweethearts throughout the State.

Tuesday Morning, June 2.

The excursion party left the Union Passenger Depot at Columbus, on a train kindly provided by Mr. F. J. Picard, General Manager of the C., S. & H. R. R. under the charge of Mr. H. O. Pond, for Shawnee. At Fultonham, President Howells and family, H. S. Odbert, Evan J. Evans and wife and others joined the party. At Corning, District Mine Inspector Adam P. McDonald, W. C. Pierce, Secretary-Treasurer of the United Mine Workers of America, with the Corning Brass Band boarded the train, which by this time numbered one hundred and twenty-five people, about thirty of them being ladies.

The first halt was made at the Ohio & Western Coal Cos. mine, known as the XX, where the party under the escort of the Corning Band, were taken in charge by our veteran member, Mr. Thos. Corcoran, who superintends this mine. Here they boarded a train of mine cars and were drawn into the mine by a tail rope. After they had examined the coal which is seven feet in thickness (President Howells expressed it as looking like a vast quarry) and the manner in which it was worked, they returned to the double parting preparatory to return in the mine cars, but owing to the wreck on the road, they were compelled to walk out. While waiting at the parting they
were treated to a serenade by the band, a treat the oldest miner present had never enjoyed in a mine. The party then boarded the train and returned to Shawnee where dinner was served at the American and Obear hotels.

After an hour's rest the journey was resumed, the party going to the Upson mine, where our esteemed member, Mr. W. H. Upson, was in waiting with a train of mine cars to which was attached an electric motor. As the train rolled into the mine, the entry was illuminated its entire length by incandescent lights, making it as light as the streets of our cities. When the interior was reached the party alighted and witnessed the Jeffrey Electric Coal Cutting Machines at work; great interest was manifested in this mine as electricity was a new power in the mines to nearly all. Prof. B. F. Thomas and his class of young ladies from the O. S. U., were especially delighted. After a halt here of two hours, the party proceeded to Buckingham to visit mine No. 19 of the Sunday Creek Coal Co. Only a small portion of the party descended the shaft and returned by the manway as the mine was suspending for the day. This is a very extensive mine, the coal being unusually thick, thirteen feet being removed in many places. It is probably the largest mine in this valley in which no machinery is employed to remove the coal.

The party then proceeded to Corning where the citizens had made provisions to entertain them during their visit. On the arrival of the excursion train, our hosts were all on hand and the excursionists were distributed over the city as had been previously arranged. In the evening they were treated to a fantastic parade given by a local organization known as the "Orients." This furnished no small amount of amusement for the visitors. In the evening the people of Corning and their guests assembled at the opera house to listen to an illustrated lecture by Prof. B. F. Thomas of the Ohio State University, on the Law Governing Electrical Currents, in which he was assisted by Mr. Geo. Cole, one of his pupils.

Pres. Howells called the meeting to order, and after a few well chosen remarks, introduced His Honor, the mayor, Morris Donahue, who delivered a hearty address of welcome. At the
THE SUMMER MEETING.

conclusion, Pres. Howells thought it best, before the lecture begun, to have a few speeches, and introduced Lieut.-Gov. M. S. Marquis, Senator Brown, Hon. Andrew Roy, Prof. Sperr, the Secretary-Treasurer and Prof. N. W. Lord, all of whom made short speeches, but they collectively consumed so much time that Prof. Thomas' lecture was much shortened, though it was highly interesting and instructive, and was greatly appreciated by all. The audience unanimously pronounced the learned Professor the "Silver Tongued Orator" of the evening.

WEDNESDAY MORNING, JUNE 3RD.

The excursionists and their friends boarded the train on the Toledo & Ohio Central Railway, kindly provided by Mr. J. M. Ferris, the General Manager, who also placed Mr. T. M. Peeler, General Superintendent, in charge. The party then proceeded to mine No. 3, situated at Rendville, and operated by Col. W. P. Rend, of Chicago, where they alighted and many examined the hoppers while the others entered the mine by a very large and dry man-way provided for that purpose, and at the bottom of which is a large hauling plant of the tail rope system. After quite a thorough examination of the interior of the mine, and the plan of mining, the party returned to the surface where they boarded the train and proceeded to mine No. 8, owned by the Sunday Creek Coal Co. Here a portion alighted, while the remainder returned to Corning for dinner, and to rest up, preparatory for the afternoon's trip down the Sunday Creek Valley. Those who alighted entered the mine, and made a thorough examination of the combinations between the endless rope and tail rope hauling systems, which had been designed by Mr. Fred. Miller, the superintendent, and was then in course of erection. The ingenuity of its design excited great admiration by the visitors.

In the afternoon, the party again boarded the T. & O. C. train, which sped away down the valley. The first halt was made at the magic city of Glouster, where Mr. and Mrs. W. P. Rend, who had come from Chicago to welcome the party, joined the excursion, which then proceeded to the Republic, or mine No. 6, owned by Col. Rend, and located a few miles below,
where a careful examination of the outside plant, consisting of air compressors, hoisting and screening appliances, etc., were exhibited. A large number went inside to witness the air mining machines at work, which was of much interest to a large number. On their return, the party proceeded to the Sunday Creek Coal Company's mine No. 10, which is one of the largest and best equipped machine mines in the Sunday Creek Valley. The entire plant is built in the most substantial manner. The machinery is of a modern character, and systematically arranged. Those who visited the inside were highly pleased with the manner in which the mine was conducted. After the visitors had visited all the places they desired, the party returned to Corning to spend the night. During the evening many of the visitors attended the commencement exercises of the High School, which had been deferred for this occasion.

**On Thursday Morning,**

the excursionists bade adieu to those of their Corning friends who did not accompany them, and boarded a train on the Kanawha & Michigan R. R. for Charleston, the Capital of the little mountain State of West Virginia. A halt of two and one-half hours was made at mine No. 4, situated at Jacksonville, owned by Col. W. P. Rend. The party were met on their arrival by the Colonel and his wife, who welcomed them in that cordial manner for which the Colonel is famous.

The plant was decorated with evergreen and banners of welcome. The stars and stripes were unfurled to the breeze; the mules in the mine were covered with bunting, carrying national colors. On the whole, the works presented decidedly a holiday appearance. The entire party, which now numbered about one hundred and fifty-five, descended the mine, where a train of forty mine cars prepared for the occasion were in waiting. After all were seated, under charge of Mr. D. Williams, the superintendent, they were taken into the face of the mine by means of the tail rope system, which is used in removing the coal. Col. Rend secreted a brass band in the fore part of the train and to strains of a national air, mingled with the rattle of the cars, a jollier party never traveled in the bowels of the earth.
After a thorough examination of the mode of working the coal by the Jeffrey and Harrison mining machines, which are extensively used here, they returned to the surface. After bidding our host and hostess good-bye, the journey was renewed for Carver mine, at Plymouth, West Virginia. On the way a lunch, which had been prepared at Corning, was served. Mirth and general sociability reigned until Carver's mines were reached, which was about three o'clock in the afternoon, where a halt of half an hour was made to allow all to examine the river tipples and their mode of loading coal on the barges. It might not be out of place to state here that this is the famous Raymond City, or Splint coal which has rendered the Lower Kanawha coals famous in the market of the north-west, especial pains being taken in preparing it for market.

The next halt was at Lock Eight, the home of our esteemed member, Hon. Thos. B. Bancroft. Here the party scattered; some over the mountain sides, others to the river, where the Government is building a lock, while the remainder examined the mine and tipple. The party, now increased by Col. Bancroft, then proceeded to Charleston, which was reached by six o'clock, and where they were divided up between Hotel Ruffner and the St. Albert. The evening was spent in looking over the city. Gov. Fleming and other State officials called in the evening and invited Pres. Howells, Lieut.-Gov. Marquis, Senators Brown, Cochran and Marshall, Profs. Lord and Sperr, Ex-Mine Inspectors Bancroft and Roy, and the Sec'y-Treas. to take a drive around the city, which they all enjoyed. It was their universal opinion that Charleston was destined, in the near future, to become a large and prosperous city.

Friday Morning, June 5.

At 7 o'clock the party now numbering 165 (several having come in during the night) boarded a train on the Chesapeake & Ohio R. R., kindly provided by Mr. E. D. Hotchkiss, the General Freight Agent, Mr. J. W. Hopkins, the General Fuel Agent, kindly took charge, and with Mr. M. L. Akers, the chief clerk of J. M. Gill, Superintendent of the
Huntington Division, accompanied the party. Our distinguished guests and the ladies occupied the officers car which had been attached to the train for their accommodation. The first halt was made at the Robinson mine, at Coalburgh, where a careful examination was made of their tipple, it being constructed so as to load both rail and river coal. The outfit was the most complete of any that had yet been seen in the state. It is an excellent gas coal and lays high in the mountain. It was lowered to the schutes by means of an incline plain. Of the output, about three hundred tons are shipped by rail daily. After a stop of half an hour the excursion proceeded to the Faulkner mine, owned by the Carver Bros., at Edge Water, where another halt was made to examine their mode of handling the coal. At this plant two veins are mined, the Eagle and Gas veins. The output of each is lowered by separate inclines to their tipple which was most admirably arranged to load any grade of coal on either railroad or barges. Of the output, four hundred and fifty tons are shipped by rail daily. Several of the excursionists enjoyed a ride up the incline which was decidedly exciting, if not perilous. After spending an hour the party then proceeded to Kanawha Falls, formerly a summer resort, as well as an eating station on the C. & O. R. R., where a stop of an hour and a half was made for dinner and to enjoy the picturesque scenery for which this spot is famous. After dinner the excursionists scattered around the grounds and on the sides of the mountain to gather flowers, some to enjoy the beauty of the falls and stroll about wherever their tastes inclined them. The Ohio State University contingent embraced the opportunities to try their skill in taking photographs which they had been so industriously doing from the start. On leaving Kanawha Falls, the party renewed their trip up the New River canyon, only halting at several points of interest until Caperton was reached. The first mine visited is operated by William Beury, Cooper & Co. The daily output, which is five hundred tons, is all shipped by rail. The coal here is lowered to the schutes by an incline equipped in a manner that was new to many of the party. Each road had four rails, the two inside being
lighter than those on which the mine cars run. On these a small dummy run to which was attached the rope. When it was at the top of the plane it acted as a block preventing the cars from being pushed over the knuckle and when the train was ready to be lowered, it preceded them, holding the trip in check while at the foot of the incline it dropped into a hole, allowing the train to pass over it to the tipple. The plan was a miniature repetition of the Mahanoy R. R. plain in the Anthracite regions.

The New River's Coke Co's. mine at the same place was next visited. This is an extensive plant. One hundred and fifty ovens were in operation, producing one-hundred and fifty tons of coke daily; in addition thereto, six hundred tons of coal were shipped by rail. The incline is dispensed with here, the coal being dumped into large iron tubs from which it is drawn into the larrie and distributed to the ovens. The next stop was at the Longdale Iron Co's. mine, at Sewell. These mines are located some nine or ten miles back in the Big Sewell mountains and the coal, which is of a superior quality, is lowered in a similar manner to that at Caperton; the entire output being consumed in the one-hundred and twenty coke ovens which they had in operation. The party then proceeded to the Central mine at Fire Creek, where the output of two-hundred and fifty tons daily is shipped by rail. The coal here is loaded in large monitors and sent down the mountain to the railroad cars. A short halt was then made at Echo, where fifty ovens were in operation; the balance of the output of three hundred tons is shipped by rail.

The party then visited Stone Cliff, another coking plant consisting of sixty ovens. Here the coal at the bank mouth is dumped into large iron monitors holding several tons each and are lowered to a large bin from which it is drawn into larries. Several of the party enjoyed a very airy ride up the mountain on top of these monitors, while some of the more cautious ones climbed the mountain side. Others were contented with examining the works below. After the party had examined all they desired, it then being late in the afternoon and all being tired, it was decided to return to Charleston. At
this point our genial host, Mr. Hopkins, after placing us in charge of Mr. Akers, the superintendent's chief clerk, bade us good-bye and boarded the fast line to his home at Richmond, Va. The return run was made without stopping except for coal and water. The train at times attaining a speed of sixty miles an hour. Charleston was reached at 9 p. m., the party repairing to their hotels for the night, all feeling they had enjoyed a day long to be remembered. The scenery along the entire route is unsurpassed for grandeur. At this season of the year the mountains were dressed in their coat of green; the rain of the previous night had filled the streams, which were falling down the mountain sides in spray, lending additional grandeur to the scenery. During the forepart of the day the clouds hung on the mountain tops, forming a mist that made the views simply grand.

The Institute is under lasting obligations to the officers of the C. & O. R. R. for their kindness and generosity in furnishing them the magnificent train and courteous officials to convey them over this portion of the road.

Those of the party who make a specialty of engineering were filled with admiration at the skill exhibited by the engineer who located the line down this narrow gorge. The mechanical manner in which the road bed was ballasted and kept in order came in for its share of praise. Taking the location into consideration it is without doubt the finest piece of road that we had passed over.

In these mountains which cover the Eagle, Cedar Grove, Campbells Creek, Winifred, Coalburgh and Cannelton veins, there lies an inexhaustible supply of coal which will furnish to W. Va. untold wealth for centuries to come.

The city of Charleston lies in this valley in such a position that it will be the source of supplies for the mining and lumbering camps of that portion of the C. & O. R. R. over which the party passed. This fact will naturally make it the banking centre and being located where the opportunity for building can not be surpassed, there can be no doubt but in the near future it will become a large and prosperous city.
On Saturday morning the party with the exception of Lt. Gov. Marquis, Senators Brown, Cochran and Marshall who went to Cincinnati over the C. & O. R. R. boarded the regular train on the Kanawa and Michigan R. R. to return to their homes. The time was spent in visiting and discussing the various points of interest they had visited.

Near Glouster, a number left the train to witness the unique tipping appliances at the Phoenix No. 2 mine which we had passed in going down. When Corning was reached, Pres. Howells and those living in the eastern portion of the State, left us for their homes, while the remainder continued their journey over the Toledo and Ohio Central R. R. to Columbus, where the excursion party disbanded. All were enthusiastic over the enjoyable and instructive trip. Not a single accident occurred to mar the pleasure of the occasion; no vexatious delays were encountered at any point for which they expressed their gratitude to Mr. F. J. Picard, Gen'l. Manager, and Mr. H. O. Pond, Sup't. of the Columbus, Shawnee & Hocking R. R. Mr. J. M. Ferris, General Manager; Mr. T. M. Peeler, Sup't. and others of the Toledo and Ohio Central and the Kanawa and Michigan R. R's., and Mr. E. D. Hotchkiss, Gen'l. Freight Agent; Mr. J. W. Hopkins, Gen'l. Fuel Agent; Mr. M. L. Akers, Chief Clerk of the Sup't., J. M. Gill, of Huntington, and the train officials for their courteous treatment during their entire trip, for which the members of the Ohio Institute of Mining Engineers will always hold them in greatful remembrance.