MINUTES OF SIXTH ANNUAL MEETING.

COLUMBUS, O., Jan. 13, 1886.

The Sixth Annual Meeting of the Institute met in the office of Chief Inspector of Mines and was called to order by the President at 7:30 p.m.

The Secretary called the roll and read the minutes of Jackson meeting, which, on motion, were amended so as to show that Sec. 1, Art. 9, of Constitution, was amended by omitting all after the word "present."

Treasurer W. H. Jennings presented his report which was adopted.

Secretary's report was, on motion, received and filed.

The President read his annual address, giving a concise statement of the affairs of the Institute.

The applications of T. E. Knauss and John Thompson for membership, properly filed and vouched for, were presented, and on motion, the Secretary cast the vote of the Institute in favor of their election.

The programme was then taken up, and a paper on Mine Furnace Ventilation was read by the author, John Baillie, of Shawnee, O., and briefly discussed by Messrs. Edward Orton, Jr., Ezra D. Shreve and others.

At 8:30 the President was obliged to retire to meet an important business engagement and Vice President Shreve occupied the chair the balance of the evening.

Anthony Howells not being present with his paper, it was, of necessity passed, and William Smurthwaite's read by W. H. Jennings in the absence of the author, and discussed by Cobb, Prof. Orton, R. M. Hazeltine, Baillie, Edward Orton, Jr., and Mitchell. Prof. Orton then gave a short talk instead of a formal paper on the subject assigned him in the programme.

The thanks of the Institute was, on motion, tendered Prof. Orton and others presenting papers.

Meeting adjourned at 10 p.m.

JANUARY 14, 1886.

The Institute convened at 10 a.m. in a room belonging to State Auditor department. The papers of
Howells, Roy, Chamberlain, Mitchell, Hemingway were passed, and at the request of the President, suggested by some of the members, the subject of Exhaustive Mining was taken up by W. H. Jennings, who in the course of his remarks, referred to the map of the Morris Coal Co., at Sand Run, which was on exhibition. Mr. Jennings also submitted some statistics of the amount of coal taken from this mine, as determined by monthly measurements of the mine by H. B. VanAtta, his assistant engineer, and the weights of the coal company, and the weights of the railway company, which showed a remarkable closeness in the results obtained from these three sources. The subject was further discussed by Messrs. Cobb, Hazeltine, VanAtta, Edward Orton, Jr., Middleton, Morris and others.

Moved that the Chair appoint a committee to put in nomination officers for the ensuing year. Before being put W. H. Jennings suggested an informal ballot be taken to test the preferences of the members, the motion upon being put was lost. An informal ballot, as suggested by Mr. Jennings, was then on motion ordered.

The applications of Austin King, Jr., George B. Parmelee and W. J. McManigal, properly filed and vouched for, were presented and the Secretary instructed by motion to cast the vote for the Institute in favor of their election which was done.

President appointed Edward Orton, Jr., and John Baillie as tellers on the informal ballot, which was then proceeded with. For President the result was: E. McMillen, 8; R. M. Hazeltine, 6; W. H. Jennings, 3; R. S. Weitzell, 2. Mr. McMillen positively declined a re-election, and on motion another ballot was taken resulting: Hazeltine, 12; Jennings, 6; Weitzell, 1.

President J. B. Strawn, of the Ohio Society of Surveyors and Civil Engineers, was presented to the Institute, and extended to it an invitation to visit the Columbus Sewer Pipe Works this afternoon in company with the Ohio Society of Surveyors and Civil Engineers. Mr. T. E. Knauss also extended an invitation to the Institute to visit the works of P. Hayden & Son, corner Broadway and Scioto streets, and inspect some ventilating fans constructed by them.

President ordered the informal ballot for Vice President taken, which resulted as follows: Chamberlain, 6; McMillen, 3; Jennings, 10.

The informal ballot for Secretary resulted as follows: Weitzell, 16; Edward Orton, Jr., 1; W. B. Hanlen, 1.

Pending the counting of the above the applications of A. J. Norton, of Bellaire and William J. Hester, of Cambridge, were presented and the Secretary instructed to cast the vote of the Institute in favor of their election which was done.

Moved that the Secretary be made Treasurer also, and there being no constitutional objections, the motion was carried.

For members of the Executive Committee, Edward Orton, Jr., Thomas B. Bancroft, Emerson McMillen and Thomas Middleton were suggested.

On motion the election of officers for the ensuing year was proceeded with and resulted as follows:
President, R. M. Hazeltine, Youngstown, O.; Vice President, W. H. Jennings, Columbus, O.; Secretary and Treasurer, R. S. Weitzell, Starr, O.; Executive Committee, T. B. Bancroft, Columbus, O., Edward Orton, Jr., Buchtel, O., Emerson McMillen, Columbus, O.

The matter of compensating the Secretary for services, as suggested and recommended by the President, was taken up and discussed, and on motion of Mr. Cobb, the Secretary was to be allowed $10 per quarter for services.

The Institute then adjourned until 1:30 p.m.

**AFTERNOON SESSION.**

The meeting came to order again at 2 p.m., and a paper by J. L. Mitchell was read by the author, and discussed by him, J. C. Allen and others, and a vote of thanks tendered Mr. Mitchell for his paper. Business was suspended at the suggestion of Mr. Hester to permit Mr. Beckman to exhibit his engineering instruments. Andrew Roy's paper was then read by the President and discussed by Cobb, Bancroft, Shreve and Morris, and a vote of thanks tendered Mr. Roy for the paper.

While awaiting the action of the committee to amend the constitution, the place of holding the Summer Meeting was informally discussed and Cambridge suggested by William J. Hester, who set forth the advantages of the location and cordially invited the Institute to come and sojourn with them and enjoy their hospitality. Steubenville was suggested by Austin King, Jr., J. C. Allen and Dawson. A vote, which was authorized by motion, resulted in Cambridge receiving 2 and Steubenville 10 votes.

The following persons were then elected to membership, they having properly filled the blanks and were duly vouched for: W. H. Gaffney and P. H. Doyle, Logan, O., and R. B. Collier, Columbus, O.

R. M. Hazeltine was elected as the member of the Board of Publishers and Edward Orton as the member from the Executive Committee.

The following persons were tendered votes of thanks: Mr. Bancroft, for courtesies; Mr. Keiswetter, for use of room in which to meet, and retiring President McMillen for his dignified, gentlemanly and courteous manners as presiding officer.

Institute then adjourned.

R. S. Weitzell, Sec'y.