Secretary’s Report.

We have now 100 names upon our list of active members, and four of honorary members. Of the active members one, Professor Orton, was transferred at the last annual meeting to the list of honorary members; and one, Isaac Brown, has withdrawn, leaving our active members at 98. But one new member, John Dinkle, of Hanging Rock, has been added to our list this year. Of the 98 active members, 41 are fully paid up and 57 are delinquent. Since the last annual meeting, I have written to all the delinquents and succeeded in getting some favorable responses, but not as many as I desired.

The summer meeting was held at Ironton, O., June 28, 29 and 30, 1887, and a very enjoyable time was had; a full report of which was furnished each member through the Ironton papers, containing pretty full account of the meetings. A supply of these papers were purchased by me, and one copy sent to each member. The proceedings have also been published in the Journal.

R. S. Weitzell, Secretary.

January 12, 1888.
Received from W. H. Jennings, ex-Treasurer... $ 40 94
Fees membership........................................... 48 00
Dues............................................................... 167 00
Subscription.................................................... 1 40

Total.............................................................. $257 34

Paid out on vouchers Nos. 11, 13, 14, 15, 16, 17, 18... 232 15

Balance........................................................... $ 25 19

There are due and owing by the Institute, or will be at the close of this meeting, some small bills amounting to about the sum now in the Treasury.

R. S. Weitzell, Treasurer.

January 12, 1888.

REPORT OF COMMITTEE ON DEPARTMENT OF MINES OF THE OHIO STATE UNIVERSITY.

Mr. President:—The Committee to whom was assigned the duty of inquiring into the condition of the Department of Mining and Metallurgy in the Ohio State University, respectfully submit the following report:

During the summer some of the Committee made visits to the State University and met Professor Lord in charge of the Department of Mines, whom we found in full sympathy with the movement of the Institute in regard to enlarging the sphere of mining education in his department.

On the 7th of October last the Committee held a meeting in Columbus, and after discussing the matter, concluded to report the paper on "Mining Education at the State University" and send it, together with a letter and a copy of the resolutions under which the Committee was acting, to all the leading mine operators, mining superintendents and graduates of the Department of Mining and Metallurgy in the State.

The following is a copy of the letter and resolutions:

COLUMBUS, O., October 7, 1887.

Dear Sir:—Enclosed please find copy of paper read before the Ironton meeting, in June last, of the Ohio Institute of Mining Engineers. Also, a copy of resolutions passed relating to the school of mines in the Ohio State University. Hoping this will meet with your approval, we ask for an answer upon receipt of this. Any suggestions you may offer in addition will be gladly received.

Andrew Roy,
T. B. Bancroft,
W. H. Jennings, 

Address
W. H. Jennings,
Engineer C., H. V. & T. R'y,
Columbus, Ohio.

Committee.
The following is the resolution:

Resolved, That the Department of Mining and Metallurgy in the State University requires more liberal appropriations from the General Assembly to carry out the letter and spirit of the law creating the school of mines.

Resolved, That a committee of three be appointed to visit the Department of Mining and Metallurgy to examine and inquire into the wants and necessities of the same, and that said committee report the facts to this institute at the January meeting, to be held in Columbus.

Andrew Roy,
T. B. Bancroft,
W. H. Jennings,
Committee.

Replies were very generally received from those addressed, favorable to the movement. In no single case was there any opposition, and these replies form an appendix to this report marked "B."

In view of the encouragement thus given from so large and influential a number of mining operators, mining Superintendents and others interested, the Committee concluded to wait upon the Board of Trustees when they would meet in November, and present a statement and the letters in question before the Board.

Accordingly the Committee met again in Columbus, on Monday November 15, and visited the school of mines on that day to confer with Prof. Lord in charge. On Tuesday, Nov. 15, the Committee appeared before the Trustees of the University, who were then in session and addressed the Board, as follows:

To the Honorable Board of Trustees of the Ohio State University:

Gentlemen:—The undersigned, the committee appointed at the Ironton meeting of the Ohio Institute of Mining Engineers, in June last, to examine and inquire into the wants and necessities of the Department of Mining and Metallurgy in the State University, in accordance with resolutions which we herewith submit, marked "A," would respectfully represent to your honorable Board that after having visited the Department of Mining, and examined into the work done there, we are of the opinion that the mining interests of the State require that more elaborate instruction is necessary in said department to fit graduates of Mining and Metallurgy for the responsible and ever increasing duties of Mining Engineers in this State.

We have no fault to find with the work done by Prof. Lord in charge of the Department; on the contrary, his work is very satisfactory, but he has neither the time nor the means to provide needed instruction as thoroughly as the law and the profession of Mining Engineering require.

The school of mines which was established in the State University, by law, ten years ago, contemplated the means of studying
scientifically and experimentally the survey, opening, ventilation, care and working of mines; also models of the most improved machinery for ventilating and opening mines, and instruction in all of the above branches as well, but for lack of needed appropriations and instructors these all important branches of Mining Engineering science have been largely neglected.

We respectfully submit to your honorable Board the paper of the Ohio Institute of Mining Engineers, also letters from leading operators, engineers and graduates of the Department of Mining, showing the views of those interested.

Coal mining with its collateral industries is annually growing in magnitude, and the ever-increasing problems of the mine and the mining engineers' lot, require that, unless we are content to be left behind in the race, the Department of Mines should be thoroughly equipped with all the appliances and means of imparting instruction which modern mining engineering science demands.

The following is a partial list of the needed requirements for immediate use:

1. A collection of drawings illustrating Ohio mining practice, such as the manner of draining mines, raising coal, laying out the underground workings, the various methods of ventilating mines, &c.

2. A collection of mining engineering instruments, anemometers, safety lamps, &c.

3. Models of systems of timbering in drift and shaft mines, in sinking for coal and carrying forward the underground excavations.

4. Models illustrating underground haulage by mine locomotives, by tail rope and by horse power.

And lastly, such assistance to Prof. Lord in the way of instructors as will cover the needs of his department.

Andrew Roy,
Thos. B. Bancroft,
W. H. Jennings,
Committee.

A number of the letters received by the committee were also read before the Board, and a statement made of a practical character in regard to the pressing needs of the School of Mines to make it what it was intended to be by the law creating the department.

The Trustees were favorably impressed with the work which the committee had on hand, and requested that the address of the committee be left with the Board in order that it might be spread upon the minutes of their meeting, which was done. In returning the address to the committee Mr. Alexis Cope, secretary of the Board of Trustees, sent the following communication explaining the action of the Board with reference to our visit:

ANDREW ROY,
THOS. B. BANCROFT,
W. H. JENNINGS,
Committee.
Columbus, O., Nov. 30, 1887.

Dear Mr. Roy:—In compliance with request contained in your polite letter, I enclose the address of your Committee to the Board of Trustees O. S. U., the same having been spread upon the minutes of the Board. The Trustees did not take up the subject of said address while they were in session. There were a number of things to consider, and they concluded to hold an adjourned meeting on Wednesday, December 7, when they will take action on the business left over. I can only say that the Trustees were much pleased with the manner in which your Committee presented the subject of expanding the mining department, and will be glad to have the Institute of Mining Engineers cooperate in an effort to increase the efficiency of this important branch of industrial education. I am of the opinion that the Board will very cordially adopt your recommendations. Very truly yours,

Alexis Cope.

Hon. Andrew Roy, Glen Roy, O.

At the adjourned meeting of the Board of Trustees, December 7, all the recommendations of the Committee were cordially and specifically endorsed, and in the report of the Trustees to the Governor an appropriation of $3,500 was asked for, together with the recommendation that the law creating the School of Mines in the State University be so amended that section 3 will read: "There is hereby appropriated, annually, out of the general revenue fund the sum of $3,500, for the support of said School of Mines and Mining Engineering." This will provide a permanent fund for the department.

In conclusion, the Committee desire to return thanks to Professor Lord, in charge of the department, to the Board of Trustees, and to the Secretary of the Board, Mr. Alexis Cope, for the kind and cordial manner in which they received and assisted the Committee.

Andrew Roy,
W. H. Jennings,
T. B. Bancroft,
Committee.

Morning Session.

Mr. Roy: I will read a bill that has been drafted with a view to having it introduced by the General Assembly, and it might be well to give it the indorsement of the Institute. The law creating the school of mines is in a very crude state, and certain things should be done to make it effective. It was thought if it was revised, and placed in better form, that it would be better for the school and better for engineering. After looking the matter over, and consulting with Prof. Lord and some others, here is what was gotten up:
A BILL

To amend an act entitled "an act to establish a school of mines and mine engineering in the Ohio agricultural and mechanical college," passed May 7, 1877.

SECTION 1. Be it enacted by the General Assembly of the State of Ohio, That the trustees of the Ohio State University be and they are hereby required to establish in said University, a school of mines and mine engineering, in which shall be provided the means for studying scientifically and experimentally the survey, opening, ventilation, care and working of mines; and said school shall be provided with collection of drawings, illustrating the manner of opening, working and ventilating mines, and with the necessary instruments for surveying, measuring air, examining and testing the noxious and poisonous gases of mines, and (also) with (the) models of the most improved machinery for ventilating and operating (all the various kinds of) mines with safety to the lives and health of those engaged. Said school shall also be provided with complete mining laboratories for the analysis of coals, ores, fire-clays and other minerals, and with all the necessary apparatus for testing the various coals, ores, fire-clays, oils, gases, and other minerals.

SECTION 2. Said trustees shall employ competent persons to give instruction in the most (improved and) successful methods of opening, (and operating) surveying and inspecting mines, including the methods and machinery employed for extracting coal, ore, fire-clay, oil, gas and other minerals from the pit's mouth and for facilitating the ascent and decent of workmen, the draining and freeing of mines from water, the causes of the vitiation of air, the quantities of fresh air required under various circumstances, natural ventilation, mechanical ventilation by flues and fans, and other ventilating machinery, the use of air engines, air compressors and coal cutting machinery; also instruction in the various uses of coals, ores, fire-clays, oils, gases and other minerals, and the methods of testing, analyzing and assaying such minerals; also the methods employed in metallurgical and other processes in the reduction of ores and in determining the qualities of metals, particularly iron and steel, as shown by practical and laboratory tests; and there shall be kept in a cabinet properly arranged for ready reference and examination, suitably connected with said school of mines, (samples of the) specimens from the various mines in the state, which may be sent for analysis, together with the names of the mines and their locality in the counties from which they were sent, and the analysis and a statement of their properties attached (it shall also be his duty to furnish analysis of all minerals found in the state and sent to him for that purpose by residents of this state).
SEC. 3. There shall be appropriated annually out of the general revenue fund the sum of four thousand five hundred dollars ($4,500) to be expended in the equipment support and maintenance of said school of mines, as provided for in the first and second sections of this act.

SEC. 4. Said original act as passed May 7, 1877, is hereby repealed; and this act shall take effect and be in force from and after its passage.

Prof. Lord—It would perhaps be as well for me to state that the question before the Institute is on the requirements of the bill that the Committee have prepared, and the subject we wish to discuss is whether it covers the entire ground.

A lengthy discussion took place upon the merits of the bill, and at its close Mr. McMillin moved that the report of the committee be accepted, and that the work of the Committee be endorsed by the Institute, and that the Institute tender the Committee a vote of thanks.

The bill introduced by Mr. Kitchen having passed the General Assembly, the following circular was sent to the members of the Institute, and their replies have been placed in the hands of the Board of Trustees of the Ohio State University:

COLUMBUS, O., April 3d, 1888.

To the Members of the Ohio Institute of Mining Engineers:

The Committee appointed to draw and secure the passage of a Bill extending and developing the Department of Mining at the State University, report the successful outcome of their work. The Bill has passed both Houses, and is now a law. Thirty-five hundred dollars has been appropriated for the support of the new department, but nothing done to make this permanent. The continuance of the appropriation from year to year must be secured by the continued interest of the members of the Institute, and other friends of the Department.

In view of the fact that it now will be possible for the Board of Trustees to begin at once to take steps toward selecting an associate Professor of Mining Engineering, and in other ways enlarge the field of the school, an expression of opinion from members of the Institute on these points is desirable, as it would undoubtedly have great influence on the result.

In conversation with some of the Committee and other members of the Institute, it appears to be the general opinion that the person employed should be a graduate of the University, or some other mining school of reputation, who should also be a man of practical experience as an engineer in the development and superintendence of mines, as this actual knowledge of the needs of the profession will alone enable him to give the proper practical character to the mining course proposed.
If this suggestion meets your approval, you will aid the object of this circular by signing and returning it, together with any added suggestions or comments, to the President, who will, in connection with the Committee, act with the Board of Trustees of the University.

Please sign and return this at once, as it is of the utmost importance.

W. H. Jennings,
President.