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MR. ECKLEY B. COXE.

IN connection with the outline of proceedings of the approaching convention of the American Society of Mechanical Engineers in Montreal, which is printed elsewhere in this paper, we have the pleasure of presenting to our readers a portrait and sketch of the President of the Society, Mr. Eckley B. Coxé, of Drifton, Pa. For the data employed in this sketch we are largely indebted to an article by Mr. Wm. Kent, M.E., in Cassiers' Magazine.

The newly-elected president of the American Society of Mechanical Engineers, Eckley Brinton Coxé, has been for many years one of the leading spirits in the engineering profession. In April, 1871, his name was the first signature to a circular issued by a committee consisting of R. P. Rothwell, Martin Coryell, and himself, calling a meeting of mining engineers, to be held at Wilkesbarre in May, to organize the American Institute of Mining Engineers. At this first meeting of the Institute he was elected one of its vice-presidents and in 1878 and again in 1879 he was elected president. Being a frequent contributor to the "Transactions of the Mining Engineers," and a constant attendant at its meetings, and being head of the well-known firm of Coxé Bros. & Co., the largest private corporation producing anthracite coal, his name and face are more familiar to the mining than to the mechanical branch of the profession, but since his work has been pre-eminently in the mechanical line, as in the invention and construction of machinery for mining, conveying, and separating of coal, and since the mechanical branch is indebted to him for the translating and editing of Part I. of Weisbach's Mechanics, the American Society of Mechanical Engineers has as much right to claim him and to elect him its president as had the older society.

Eckley Brinton Coxé was born in Philadelphia, June 4th, 1839. He graduated from the University of Pennsylvania in 1858. After completing a course in the scientific department of that institution, he was engaged six months in topographical geological work, in the anthracite coal region of Pennsylvania. In 1860 he went abroad to continue his studies. The next two years were spent at the Ecoles des Mines, in Paris, and then a year in the Bergakademie at Freiberg, Saxony. He subsequently spent two years in visiting and studying the practical operation of the mines of England and the Continent. With his brothers he inherited large coal estates in Pennsylvania, and his entire education had been directed with the special object of preparing him for their management. Consequently upon his return to the United States in 1865, Mr. Coxé, in company with his brother, under the firm name of Coxé Bros. & Co., began the business of mining anthracite coal in the Lehigh region. Since that time he has been engaged in the operation of his company's collieries.

In the operation of these mines he has won a high reputation as one of the most progressive, able and honorable representatives of the great coal mining industry.

In 1880 Mr. Coxé was elected to the Senate of Pennsylvania. Mr. Coxé is a member of other engineering and scientific bodies besides the two of which he has been chosen president, among them the American Society of Civil Engineers, the Engineers' Club, and the American Association for the Advancement of Science. He was one of the vice-presidents of the last named at its New York meeting in 1887.



THE LONG DISTANCE TELEPHONE.

A FEW weeks ago a business man in New York city telegraphed to the owner of a big poultry farm in a small town in Illinois to go to Chicago and "meet" him at a certain hour on the long-distance telephone line that now places New York on speaking terms with Chicago. The Illinois farmer kept the appointment, and the two conversed together over the wires for half an hour.

At the end of the conversation, the Illinois man emerged from the telephone booth, paid his \$54 with entire satisfaction, and exclaimed with great glee: "'Great Scott' I've just sold a hundred thousand chickens!" This little episode "points a moral and adorns a tale."

Such a text needs little expounding to a circle of business men, such as comprise the majority of the readers of this magazine. Take the first point.

Correspondent No. 1 telegraphs from New York to Chicago to correspondent No. 2 at some provincial town in Illinois, to go to Chicago in order that he may talk to him. Point the second. They talk for half an hour at a cost of \$54. If a personal meeting had had to be arranged, they would probably have talked for several hours before coming to a settlement, the time spent in traveling by one of them would have been from three to four days at a minimum and the actual expense about \$100.

Point the third. A sale amounting to, say at least, \$20,000, was effected with great promptness, and without the intervention of any middleman. Surely no better illustration of the business possibilities of the long-distance telephone could be desired. Engineering Magazine.

CUTTING MICA.

At the glass house the mica is put into shape for shipment. The blocks vary greatly in size. One from the Wiseman mine, near Spruce Pine, is reported to have been six feet long by three wide.

Pieces a yard in diameter have been obtained at the Ray mine, in Yancey county, and similarly plates have been found in Siberia, but these are exceptional. The average block is a little larger than the page of a magazine, and is generally less than six inches in thickness. It separates very readily into sheets parallel to the base of the prism. It is estimated, says C. H. Henderson, in the Popular Science Monthly, that this cleavage may be carried so far that it would take three hundred thousand of the mica plates to make an inch. It is needless to say, however, that such a thickness is not suitable for service in stoves and furnaces. The mica is generally split into plates varying from about $\frac{1}{8}$ to $\frac{1}{64}$ of an inch in thickness. In preparing these plates for market, the first step is to cut them into suitable sizes. Women are frequently employed in this work, and do it as well as, if not better than the men. The cutter sits on a special bench which is provided with a huge pair of shears, one leg of which is firmly fixed to the bench itself, while the movable leg is within convenient grasp. It is requisite that the shears shall be sharp and true, for otherwise they will tear the mica.

The patterns according to which the mica is cut are arranged in a case near at hand. They are made of tin, wood, or paste board, according to the preference of the establishment. Generally they are simple rectangles, varying in size from about four square inches to eighty.

A telegraph line is in process of construction by the P. R. Telegraph Co., from Kingston to Ottawa, via the Rideau Canal route.