C. P. STEINMETZ DIES IN SUDDEN RELAPSE

Heart Attack Takes Electrical "Wizard" While the Nurse Goes for His Breakfast.

CALLED BIGLOSS TO SCIENCE

Edison and Others Pay Tributes to His Services and Discoveries.

SCHENECTADY, N. Y., Oct. 26 .-Death came suddenly today to Charles Proteus Steinmetz, the "wizard" of electricity, while he was alone in his sickroom, which he was counting on leaving soon, so far had his recovery progressed.

The scientist slept most soundly last night of any night since the breakdown which sent him to bed following his recent trip to the Pacific Coast. He asked his nurse to have his breakfast served to him in bed, and she left the room to have the meal prepared. William Hayden, one of his adopted grandsons, entered the room a short time after 8 o'clock with the breakfast and found the scientist dead.

The physicians gave out the following statement:

"Dr. Steinmetz died suddenly a few minutes after 8 o'clock this morning of acute dilation of the heart, following a chronic myocarditis of many years' standing, which is a weakening

of the heart muscles.'

Last night Dr. Steinmetz's improvement had been so marked that he left his bed and chatted for a short time with members of the Hayden family. The head of the family, J. L. R. Hayden, is his adopted son.

After returning to bed, he read a book, "The Physics of Air," and marked several passages which he wanted Mr. Hayden to read with him. He was bright and cheerful and remarked that he would soon be out again and back to work. He fell asleep about 10 o'clock, and for the first time since he had been ill slept through till 5 o'clock this morning.

The body will lie in state on Sunday afternoon from 4 until 8 o'clock at the Steinmetz home, 108 Wendell Avenue. On Monday afternoon the funeral service will be held at 2 o'clock.

While Dr. Steinmetz was reported to have received one of the greatest salaries ever paid to an electrical expert, his friends say he left a very modest fortune, probably not more than \$25,000. In fact it was said that he was not on the payroll of the General Electric Company, but that the company paid all of his living expenses and the expenses of his experiments. He held that sufficient.

The trip which Dr. Steinmetz had made to the West started Sept. 1, and proved much more strenuous than either he or members of his adopted family had planned. As a result he was forced to bed soon after his return, on Oct. 13. At the time his physicians announced that a rest was advisable, although it was emphasized that his condition was not serious.

Came to America When 24.

Charles Proteus Steinmetz was born in Breslau, Germany, on April 9, 1865. His father was in the Government railway service and was able to give him a good education. He studied in the universities at Breslau and Berlin, and the Polytechnic in Zurich, Switzerland, specializing in mathematics, electrical engineering and chemistry. In addition, he was deeply interested in politics and economics and became an active Socialist at a time when the German Government was taking drastic steps to stamp out socialism.

This led to conflicts with the authorities, which prevented him from taking a university degree. As a leading spirit in student Socialist clubs and an editor of Socialist papers, Steinmetz was regarded as a dangerous youth, and plans were made to prosecute him. Warned of this move in advance, he escaped to Austria and then to Switzerland, where he continued his studies, supporting himself by writing articles on political and scientific subjects. He intended to return to Breslau and become a professor in the university after the storm blew over, but he happened to meet an American student at Zurich who induced him to come to the United States.

In 1889, at the age of 24, Steinmetz arrived here with his American friend in the steerage of a French liner. Penntiess and unable to speak more than a few words of English, the youthful genius was under the additional handicap of an illness which left him with

a badly swollen face. The immigration authorities at Ellis Island refused to let him enter the country and sent him to the detention pen. Finally, however, he was allowed to enter as the result of the appeals of his American traveling companion.

Got First Job at \$2 a Day.

Steinmetz had letters to electricians in New York but was unable to find employment until he met Rudolph Eickemeyer, an inventor, manufacturer and pioneer in the field of electrical research in America. Eickemeyer gave him a job at \$2 a day in the drafting room of the Osterheld and Eickemeyer

search in America. Eickemeyer gave him a job at \$2 a day in the drafting room of the Osterheld and Eickemeyer factory at Yonkers. In a remarkably short time Steinmetz had made a name for himself. Besides working on inventions for electric motors and generators and electric street cars, Steinmetz attracted attention by articles he contributed to scientific papers here and in Germany, especially on the theory of alternating currents. He was put in charge of a research laboratory and began to specialize on magnetic testing.

Mr. Steinmetz eventually became the chief consulting engineer and head of the Consulting Engineering Department, which he organized, for the General Electric Company. He was probably the outstanding example in America of the close relationship between modern science and modern industry. His work did not consist merely of applying the results of scientific inventions to business. On the contrary, he was the exponent both of pure science and applied science, devoting himself to research and inventions which, with his far-seeing eye, he counted on to result in ultimate benefit to industry and through it to society as a whole, as well as dealing with problems of immediate importance to the company which employed him.

He was head of a magnificently equipped laboratory at Schenectady and the results of his work there were of such a nature that they even astounded his only rival as an electrical wizard in America—Thomas A. Edison, who recently paid a visit to the General Electric Company plant.

An example of his devotion to pure science was his invention of a lightning generator, which galned wide publicity last year. He was companed to a modern Jove sitting on his throne in the laboratory at Schenectady, when it was learned that he had succeeded in producing and controlling an "indoor thunderstorm," hurling a bolt of artificial lightning with the energy of 1,000,000 horsepower, and getting the shattering effect of real lightning. He did this in the hope of contributing to the development of lightn

Trom i n.y. Times 10/27/23

Believed Steam Locomotive Doomed.

The electrical wizard frequently said that the steam locomotive was doomed anyway because of the advances in electricity. He predicted that the railroads would do away with "archaic steam lo-comotives" and adopt electrification as soon as they could finance it, and that this change would mean the saving of two-thirds of the present consumption of coal for railway transportation. "Electricity is doing for the distribu-tion of energy what the railroads have done for the distribution of materials," he said.

Steinmetz was also interested in the electric motor as a means for transportation. Within a year of his death he perfected a design for an electric automobile, and organized a company called the Steinmetz Corporation to put it on the market. It was to run 200 miles without having its batteries recharged, to attain a speed of fifteen to forty miles an hour, to weigh only 2,000 pounds, and to sell for \$1,000 or less.

The interests of Steinmetz transcended the purely scientific. The facility with which he wrote scientific articles that made complex subjects plain to the lay reader was an example of his broad viewpoint. This led him to regard sci-

viewpoint. This led him to regard science as only one phase of human activity, and made him something of a philosopher as well as a scientist.

For example, he often spoke on the relation of science and religion, denying that they are necessarily incompatible. He declared that science had not disproved the beliefs on which religion is founded, and that the question was "still open." His interpretation of Einstein's theory of relativity was regarded as one of the most lucid articles written about that much-discussed scientist.

Steinmetz also took an active interest

Steinmetz also took an active interest in questions of politics and economics. As he became older he became more moderate in his Socialistic views. Less moderate in his Socialistic views. Less than a year ago he declared that while capitalism was gradually being abandoned, few people in this country believed in Socialism, and that the ideal economic system was the monistic plan, unifying capital and labor completely by letting both participate in the profits through dividends, and in the management through representation on the boards of directors.

Offered Lenin His Technical Skill.

After the war he believed that this country should do something to help in the reconstruction of Soviet Russia, and he wrote to Lenin, early in 1922, offering his help in the technical phase of the industrial reconstruction of the country. Lenin declined his offer on the ground that it would be hard to make use of his services unless relations were re-established between the United States and Russia. Later in the year the scientist accepted a position on the advisory committee of the Kuzbas colony in Siberia.

Steinmetz was a naturalized American citizen and was interested in politics in Schenectady. George R. Lunn, as the Socialist Mayor of that city, appointed him President of the Board of Education in 1912, and he held that position until his death. He was President of the Common Council from 1916 to his death. Last year he ran for State Engineers on the Socialist and Farmer. he wrote to Lenin, early in 1922, offer-

death. Last year he ran for State Engineer on the Socialist and Farmer-Labor tickets. Though defeated he received 200,000 votes, running 25,000 votes

ahead of his ticket.

Steinmetz was the author of the following books—"Theory and Calculation of Alternating-Current Phenomena," "Theoretical Elements of Electrical Engineering," "Theory and Calculation of Transient Electrical Phenomena and Oscillations," "General Lectures on Electrical Engineering," "Radiation, Light and Illumination," "Engineering Mathematics," "Electric Discharges, Waves and Impulses," "America and the New Epoch," "Theory and Calculation of Electric Circuits," "Theory and Calculation of Electrical Apparatus," He also contributed many articles in magazines, lation of Electrical Apparatus. He also contributed many articles in magazines, not only on his experiments in electrical engineering, but on pure mathematics. He was regarded as one of the leading mathematicians in the country.

He was a member and past President

of the American Institute of Elec-trical Engineers, an honorary member of the National Electric Light Associaof the National Electric Light Association and a fellow of the American Association for the Advancement of Science. He was also a member of the American Mathematical Society, the Quaternion Society, the Society of Mechanical Engineers, the Electrochemical Society, the Illuminating Engineering Society, the Physical Society, and other scientific bodies.

PAY TRIBUTE TO STEINMETZ.

Scientists and Industrialists Call His Death a Great Loss.

News of the death of C. P. Steinmetz was received in New York City with sorrow, and many tributes to his genius were paid by scientists. His loss was a shock to his friends here, as they had believed he was recovering from his illness, and would soon return to his desk.

A special meeting of the American Institute of Electrical Engineers was held yesterday afternoon, at 20 West Thirty-ninth Street. Professor W. I. Slichter of Columbia University presided, and was authorized to appoint a committee to draft resolutions expressing the sorrow of the Institute.

The following tributes were expressed

to the press on the death of Mr. Steinmetz:

metz:
Thomas A. Edison: "I regret very much to learn of the death of Mr. Steinmetz. The world has lost one of its greatest practical mathematicians, and the electrical industry will miss one of its shining lights."
Dr. Michael I. Pupin, professor of electro-mechanics, Columbia University: "The death of Mr. Steinmetz has caused a great loss to the electrical en-

caused a great loss to the electrical en-gineering profession and to the elec-

trical science. He was a splendid scientist and a splendid man. I have known him for thirty-four years personally, and I mourn his loss more than I can say."

Calvert Townley, Vice President of the Westinghouse Electric Company "Mr. Steinmetz was one of the most eminent and best known electrical engineers of his time. He was recognized as one of our foremost authorities on electrical development during the past twenty-five years, and his loss will

be deeply felt by the entire industry, including manufacturing, engineering and utility companies."

Frank B. Jewett, Vice President of the Western Electric Company: "In the death of Dr. Steinmetz the electrical industry, not alone of the United States but of the world at large, loses one of its consciously and distinguished memits conspicuous and distinguished members. Surmounting physical frailties which would have justified amply a quiet life, he brought to the support of a fertile brain and a vivid imagina-

of a fertile brain and a vivid imagina-tion an almost incredible energy.

Professor George B. Pegram, Dean of the School of Mines, Engineering and Chemistry, Columbia University: "Mr. Steinmetz was a remarkable organizer of electrical engineering design. He did a great deal to reduce the design of elec-trical machinery to a systematical and mathematical process

mathematical process.

Left Much in His Writings.

Walter I. Slichter, Professor of Electrical Engineering at Columbia University-"The death of Dr. Steinmetz is a great loss to the electrical engineering profession and to the American Institute of Electrical Engineers. His analytical mind and mathematical ability have enabled him to meet and solve many of the scientific and technical problems encountered in the rapid development of

General John J. Carty, Vice President, American Telephone and Telegraph Com-pany—"The loss of Mr. Steinmetz is a pany—The loss of Mr. Stellinetz is a severe blow to the entire electrical profession. He was one of our foremost electrical engineers. Despite certain physical handleaps, he had a brilliant mind and possessed a remarkable fundamental knowledge of the science of electricity which he brought to bear at the design of motors and sener. first in the design of motors and gener-

Charles F. Berkey, Professor of Geology at Columbia University—"Dr. Steinmetz was one of the most famous scientists in America. His loss will be keenly

tists in America. His loss will be keenly felt by the scientific field in general. He was known all over the world, and probably was as highly regarded as any man in his line in the whole of America."

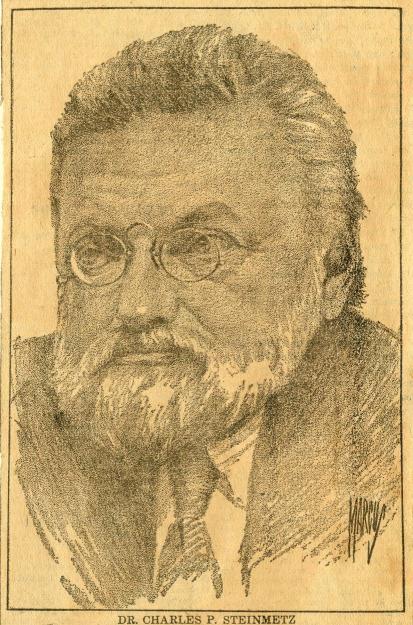
Professor John H. Morecroft of Columbia University—"The electrical engineering profession owes to Steinmetz the modern mathematical treatment of all alternating current problems. His great mathematical ability, combined with his keen perception of the phenomena which go on in electric circuits, made his congo on in electric circuits, made his con-tributions to this field of engineering problems more notable than those of any other engineer.

His Reputation was World Wide.

E. W. Rice Jr., Honorary Chairman, General Electric Company-"The sudden death of Dr. Steinmetz comes as a great shock to his friends in the General Electric organization, including the di-rectors, officers and every employe. He joined our ranks some thirty years ago and during all this time has rendered services of the most conspicuous char-

services of the most conspicuous character and extraordinary value.

E. M. Herr, President of the Westinghouse Electric Company—"All electrical engineers and others interested in electrical development were greatly shocked to hear this morning of the death of C. P. Steinmetz. This eminent electrical engineer interested himself so frequently in the latest development of this wondarful art that his writings and address and extended to the steel of the steel derful art that his writings and addresses had an especial public appeal. He will be sadly missed in the engineering profession, which has by his death lost a very eminent member."



DR. CHARLES P. STEINMETZ
Who Died Suddenly Yesterday at His Home in Schenectady, N. Y.

From, n.y. Tribune

EXAMINED AND APPROVED FOR FILING Q. J. R.

Dr. Steinmetz, Electric Genius. Dies Suddenly

Great Mathematician and **Engineer Suffered Strain** on Vitality on Trip to Pacific Coast Recently

Achievements Colossal

Most Important Inventions Made in General Electric Plant at Schenectady

SCHENECTADY, Oct. 26.—Charles Proteus Steinmetz, one of the world's greatest mathematicians and electricians, died of sudden heart failure this morning at his home in this city. He had recently returned from a trip to the Pacific coast, during which his physical vitality seems to have been overtaxed. For the last two weeks he had been under the care of a physician and nurse, but was regarded by them as doing well and as making progress toward complete recovery. A little after 8 o'clock this morning his breakfast was taken to him as he lay in his bed. Just as it was placed behim he expired, peacefully and

without warning.

The body of Dr. Steinmetz will lie in state at his home here to-morrow.

Burial will be on Monday afternoon, after private funeral services, at Vale Cemetery in a plot which the inventor acquired several years ago. The Rev. Ernest. T. Caldecott, pastor of All Souls' Unitarian Church, will officiate at the services, assisted by the Rev. Dr. A. W. Clark.

Charles Proteus Steinmetz, son of Carl' Heinrich and Caroline (Neubert) Steinmetz, was born in the old city of Breslau, in Silesia (which Frederick II of Prussia seized from Austria), on April 9, 1865. At the age of seven years he was sent to the best primary school his father could find and thence to the high school and university.

Studied Mathematics Early

From the first he was intensely interested in mathematics, to his thorough study of which he in after life always attributed all the success he attained in science and engineering. He was also interested in chemistry and electricity and had a small laboratory at home in which he spent much time. At the university he gave most attention to mathematics and astronomy, the science of electrical engineering having scarcely come into existence and arc and incandescent lights being as yet mere curiosities. His father was a government official and was able to let him spend as much time as he wished at his studies. He studied at the universities of Breslau and of Berlin, meanwhile also teaching mathematics. From the first he was intensely ining mathematics

While thus engaged he became interested in socialism and joined the Social Democratic party, which at that time was very much under the official ban. When the editor of a Socialist paper was arrested and imprisoned, young Steinmetz secretly assumed his duties, and for several months edited the paper and also two other periodicals, "Popular Science Leaflets" and "Popular Science Fortnightly."

Flees to Switzerland

Flees to Switzerland

While thus engaged, he had several narrow escapes from detection and arrest by the police. He fell under grave suspicion and attempts were made to have him excluded from the university. Finally, learning that his arrest had at last been ordered, he fled across the Austrian frontier and thence made his way to Switzerland. There he found himself almost penniless. But he managed to dispose of a manuscript book on astronomy to publishers, who paid him for it at the rate of thirty-seven francs a month, on which he was able to live. Also he wrote occasional articles on astronomy for a Socialist paper at Zurich and thus made from fifteen to twenty francs a month more.

This was in the summer of 1888

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This was in the summer of 1888.

That fall he entered the great polytechnic school at Zurich, and studied mechanical engineering, turbines, steam mechanical engineering, turbines, steam engines, bridge construction and other such subjects. The next year he and an American fellow student with whom he had roomed came to America in the steerage of a French liner, paying seventy-five francs each passage money. Some trifling illness on shipboard gave him a swollen face on landing, wherefore he was sent for a few days to the "detention pen" and threatened with deportation, but on the pleadings of

his companion was finally admitted to

his companion was finally admitted to this country.

Soon after landing he obtained employment at Yonkers, N. Y., as a draftsman, at \$12 a week, in the office of Rudolph Eickemeyer, electrician. One day his employer was much annoyed because he had spilled some aniline ink on his hands and could not get it off. Young Steinmetz promptly told him of a simple chemical mixture which would remove it and thus won the friendly interest of his employer, who promoted him to have oversight of all new and experimental work in the establishment. Meantime he pursued his studies, at night, and wrote scientific papers for the press.

A few years later, in 1892, the establishment for which he was working was acquired with various others by the General Electric Company, and he was sent to Lynn, Mass., by that concern to have charge of one of its plants there. Thence, on January 1, 1893, he was transferred to headquarters at Schenectady, as the chief consulting engineer of the General Electric Company, a place which he filled for the remainder of his life and in which his chief work was done and his most important inventions were made. In 1902 he became also professor of electrophysics ir. Union University, and continued in that office until his death. In 1912 he was appointed president of Schenectady Board of Education, and in 1915 was elected to the Common Council on the Socialist ticket. Last year he was the Socialist candidate for State Engineer and Surveyor.

He was for a time president of the American Institute of Electrical Engineers, and was a member of numerous scientific and educational organizations. Harvard gave him an honorary A. M. degree in 1902, and Union University a Ph.D. in 1903.

Inveterate Cigar Smoker

Inveterate Cigar Smoker

He never married. In stature he was almost a dwarf, but he had a massive head and brilliant eyes, commanding the attention of every one who saw him. He was an almost incessant smoker of cigars made expressly for him, which were very long and very mild, providing, he said, a maximum of smoke with a minimum of nicotine.

His special interests in electrical science were magnetics, the symbolic method of alternating current calculations, and transient phenomena; but there was scarcely a detail of any branch of electrical science, of astronomy or of mathematics with which he was not conversant in masterly was not conversant in masterly fashion. His writings were volumi-

Wizard's Death Mourned As Grave Loss to Science

Prominent persons throughout the city expressed deep regret yesterday on hearing of the death of Dr. Steinmetz and reviewed his remarkable list of achievements in electricity. Among them were Thomas A. Edison and Dr. F. P. Jewett, vice-president of the Western Electric Company and formerly president of the American Institute ly president of the American Institute of Electrical Engineers. Mr. Edison

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est practical matematicians and electrical industry will miss one of its shining lights.

"I regret very much to learn of the death of Mr. Steinmetz."

Mr. Jewett said:

"In the death of Dr. Steinmetz, the electrical industry, not alone of the United States but of the world at large, oses one of its conspicuous and distinguished members.

"Surmounting physical afflictions which would have justified a quiet life, he brought to the support of a fertile brain and a vivid imagination an almost incredible energy. For years he was a leader in the field of electrical research, particularly in matters pertaining to machine design and the transmission of energy, and his work in this direction has added much to our knowledge of the mathematical tools for solving complex electrical problems.

"As president of the American In-

problems.

"As president of the American Institute of Electrical Engineers in 1901-1902, and throughout his lifelong work in its behalf, he did much to bring it to its present high place as one of the greatest professional engineering societies of the world."

Acting Mayor Murray Hulbert said:

cieties of the world."

Acting Mayor Murray Hulbert said:
The death of Charles P. Steinmetz is an incalculable loss not only to the cople of this state and nation, but of the world. His wonderful intellect, deroted to the scientific study and development of electrical power, had already produced such beneficent results to warrant a belief in the public mind that had the life of this electrical wizard been spared a decade longer the results in the development of economical light, heat and power would have been well-nigh inestimable. Devoted as he was to industrial, scientific research and beneficial disscientific research and beneficial dis-coveries to mankind, his loss is uni-versal. His life was the arduous great-

ness of things done and the hope of still greater benefits to mankind." Arthur Williams, general commer-cial manager of the New York Edison Company and president of the Elec-trical Board of Trade of New York,

trical Board of Trade of New York, said:

"In the death of Dr. Steinmetz the scientific world loses one of the greatest minds it has ever known. His achievements and contributions to science and industry the world over, accomplished under the most trying physical conditions, will remain always an inspiration to those who are acquainted with his life's work. The great things he accomplished will always mean much for the betterment of the civilized world."

Throngs in Solid File Pay Tribute To Dr. Steinmetz

Dead Inventor's Life Extolled in Schenectady's Pulpits; Schools and College Close for Funeral

SCHENECTADY, N. Y., Oct. 28.—For four hours this afternoon an unbroken line of people filed past the body of Dr. Charles Proteus Steinmetz, genius of electricity, as it lay in state in the flower-filled sitting room of his Schenectady home. Delegations from the city government, the college, schools, industries and groups of children came to pay final homage to a man known internationally for his development of electric energy, and locally as a good citizen.

The room in which the casket was placed was filled with flowers, chiefly chrysanthemums. Conspicuous among them were orchids from Leroy Hayden and his family, the adopted "children" of the inventor. Another tribute of orchids came from a group of children in whom the inventor had been interested. A ribbon bore the inscription "To Daddy."

Private funeral services will be held in the home to-morrow afternoon and then the body will be borne to Vale Cemetery for burial. The schools and Union College will be closed all day to-morrow; the General Electric Works, in common with other plants of the

to-morrow; the General Electric Works, in common with other plants of the company throughout the country, will observe five minutes of silence, and city and county buildings will be closed for half the day. Tributes to Dr. Steinmetz were delivered from the pulpits of all city churches this morning. Next Wednesday a memorial service will he held in the All Saule! Unitarion Next Wednesday a memorial service will be held in the All Souls' Unitarian Church, of which Dr. Steinmetz was a member.

Electric Plant to Pay Silent

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Electric Plant to Pay Silent
Tribute To-day to Steinmetz
BRIDGEPORT, Conn., Oct. 28.—All
activity at the Bridgeport plant of the
General Electric Company will suspend
at 2 o'clock to-morrow afternoon for
a period of five minutes, at the time
the funeral of Dr. Charles P. Steinmetz, world famous electrical engineer
and scientist of the General Electric
Company, is being held in Schenectady. This is a tribute similar to that
paid by the company at the time of
President Harding's funeral.
Flags at the General plant will be
at half staff for a week, General
Manager W. S. Clark said to-night.

Charles P. Steinmetz, electrical wizard, who died last Friday, was hailed as "Comrade Steinmetz" by four Socialist speakers at a memorial meeting held last night in the Debs auditorium of the People's House, East Fifteenth Street. Another speaker, B. B. Rushmore, a consulting engineer and associate of Dr. Steinmetz in the General Electric Company, suggested a memorial scholarship be endowed in his honor at the Rand school. "Success in their chosen profession,"

honor at the Rand school.

"Success in their chosen profession," said Harry W. Laidler, director of the League for Industrial Democracy, "has alienated many from the Socialist movement, but it meant to Dr. Steinmetz only a larger opportunity for service. In an environment most conservative he fearlessly strove for fundamental change in the industrial system"

Mr. Rushmore, in recalling incidents

h. J. Juliene.

in the life of Dr. Steinmetz, said the dead inventor believed in a future life, was a very devout man, one of Schenectady's best citizens, a lover of children and had paid for the education of large numbers of young men and women.

Algernon Lee, director of the Rand School, of whose owning board Dr. Steinmetz was a member; Walter M. Polakoff, engineer, formerly at Cornell University, and Lena Morrow Lewis, of Los Angeles, national Socialist organizer, were other speakers. Two hundred persons were present.

Genius Does Have

he writes,

That STEINMETZ Was unlike other men in more than looks Pro-Peculiarities. fessor KARAPETOFF clearly and sympathetically reveals. "It was impossible,"

to make him do anything except what he himself desired to do. He stayed away from the works for days; he smoked in buildings in which the President himself did not dare to smoke; he used the clockwise rotation of vectors when everybody was using the opposite rotation; he insisted on saying "ze" for "the";; he wore a soft shirt and a shabby gray suit at formal functions, and he belonged to a political party which cussed his company and its principal customers for years.

Most notable is Professor KARAPETOFF'S article is the concluding paragraph, which deserves quotation in full, and one is glad that the final sentence is true-that America knew how to treat a man like this-a man whose life, instead of being happy and successful, so easily might have been a tragic failure:

Modest, thoughtful, a prodigious worker, always ready to discuss an electrical problem on equal terms with any cub engineer, he was the very impersonation of the principle of losing one's self so as to find it again in bigger things. His contribution to our welfare and knowledge is beyond measure or computation, and his life is a shining example of a quiet, straight and unswerving path amidst the turmoil of conflicting passions, avarice, extravagance, cure-alls, pseudo-science, pseudo-patriotism, pseudo-life itself. And yet, withal, his life is also a glowing tribute to this great, broad-minded country of ours which early recognized his genius, took him lovingly in her arms and carried him steadily to the pinnacle of his fame,

Of the many appre-He Understood ciations of CHARLES PROTEUS STEINMETZ the Man and His Work. printed since death, none, perhaps, has been written either with more sincerity of admiration or with a better knowledge of the man and his work than that contributed to The Cornell Sun by Professor VLADIMIR KARAPETOFF of the Cornell School of Electrical Engineering. To him, evidently, the "little cripple with the giant mind" who passed the turnstile at Ellis Island only "because of the laxness of our immigration laws (or officials)" and yet, ten years later, was President of the American Institute of Electrical Engineers, deserves high place among the country's

great men. That STEINMETZ was a Socialist his friend explains as due to the physical handicap which gave him active sympathy with those whom he believed to be handicapped economically. A better theory is that socialism was one of STEINMETZ'S many dreams, the others being those that enabled him to visualize before others could see them the enormous possibilities of science applied to electricity. The difference between the dreams that came true and the one that has not might be ascribed to the fact that as an engineer STEINMETZ started with a thorough training, while as a publicist and economist he had none at all.

To describe the freedom given to STEINMETZ by the General Electric Company Professor Karapetoff has evolved a happy phrase-"he was allowed to try to generate electricity out of the square root of minus one." That, doubtless, was what the man often seemed to be doing to those to whom mathematics as he knew it was equally incomprehensible and useless. Fortunately his employers-no genius ever had better and few as good-took a different view.

From-h. y. Times 11/1/23