THE INSTITUTE OF ELECTRICAL ENGINEERS OF JAPAN (THE DENKI-GAKKWAI) ENGINEERS OF THE JAPAN (THE DENKI-GAKKWAI) ENGINEERS OF THE



NO. 3, 1-CHOME, YURAKU-CHO, KOJIMACHI-KU TOKYO, JAPAN

Telephone: Marunouchi (23) 0756 Cable: DENKIGAKKWAI TOKYO

December 7, 1934.

Mr. H. H. Henline, National Secretary, American Institute of Electrical Engineers, 33 West 39th Street, New York, N. Y., U. S. A.

Dear Sir:

We have been asked by Dr. Motoji Shibusawa of Tokyo Imperial University to forward you the following:

A copy of the report of "Dr. Harris J. Ryan Memorial Meeting" held in Tokyo.

Yours very truly,

THE DENKI-GAKKWAI.

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Mr. Henline

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arris J. Ryan Memorial Meeting

A gathering to pay last tribute to Dr. Harris J. Ryan, who had passed away on July 3, 1934, was held at the Electrical Club, Hibiya, Tokyo, Japan, on the evening of October 3rd.

The gathering, sponsored by Dr. Shibusawa of Tokyo Imperial University, Mr. Kawahara, Stanford E.E. '07, and Mr. S. Motomura, Stanford E.E. '09, was attended by twenty electrical engineers, composed of Stanford graduates and leading educators from Japanese universities who had studied under Dr. Ryan.

After dinner together, the group adjourned to a separate room where a photograph of the late Dr. Ryan was placed in front of a wreath donated by the Stanford Alumni Association of Japan. Reminiscences of their days at Stanford were given by many, in which the greatness of Dr. Ryan as both scientist and man was brought out. That the electrical industry in Japan, especially in fields of high voltage, owes a tremendous debt to him was emphasized. A memorial photograph of the group was taken, and after all had silently bowed before the photographic likeness of Dr. Ryan, as a last tribute, the meeting adjourned at 10 P. M.

The list of speakers follow:

Chairman, Mr. S. Motomura
Prof. M. Shibusawa
Mr. Y. Fukukita
Prof. T. Nishi
Mr. M. Kawahara

VII. S. Yamasaki
Prof. T. Ohtsuki
Mr. T. Maeda
Mr. T. Murata
Prof. H. Tsutsumi
Mr. T. Akahira

E. E. '09
Tokyo Imperial University
'04
Tokyo Imperial University
E. E. '07
Engineering College
Tokyo Kogyo Daigaku (Toley Sug. College)
E. E. '31
E. E. '29
Waseda University
Scientific Research Laboratory

Prof. R. Usui of Kobe Higher Technical School (E. E. '24) sent a telegram of regret that he could not be present.

The names of those present at the meeting were :-

Mr. T. Akahira Mr. K. Egami Mr. Y. Fukukita Mr. Y. Fujimoto Mr. S. Furui Mr. T. Hongo Mr. S. Imokawa Mr. M. Kawara Mr. Koga Mr. T. Murata Mr. T. Mayeda Mr. T. Mitoma Mr. S. Motomura Prof. I. Nishi Mr. G. Okada Prof. T. Ohtsuki Prof. M. Shibusawa Mr. S. Tsuchiya Prof. H. Tsutsumi Mr. S. Yamasaki Mr. K. Yoshida

Scientific Research Laboratory Rising Sun Petroleum Co. Oji Paper Manufacturing Co.

Japan Victor Talking Machine Co. Shibaura Engineering Works Tokyo Electric Light Co. Teikoku Spring Works Ohm Publishing Co. Japan Victor Talking Machine Co. Toyo Otis Elevator Co.

Mitsui Bussan Kaisha
Tokyo Imperial University
Tokyo Electric Co.
Tokyo Engineering College
Tokyo Imperial University
Electrical Association of Japan
Waseda University
Enoshima Electric Railway Co.
Sanshin Railway Co.

Professor Motoji Shibusawa:

I greet you this evening as one of the sponsors of this memorial meeting to the late Dr. Ryan. Having known him for thirty years and wishing to fully express my grief upon the loss of this noted scientist to whom the electrical industry in Japan is so greatly indebted, this gathering was planned. Since Dr. Ryan himself disliked elaborate, ceremonious affairs, we gathered together this small group, consisting of electrical engineering graduates of Stanford and those from our country who were taught in his laboratory - those who really knew him and who truly mourned his passing away. Fortunately, practically all those asked are present and Dr. Ryan's spirit must doubtless be content.

Thirty years ago, in 1904, after a tour of Europe, indending to attend the World's Fair at St. Louis, I stopped over at that city. There I was appointed juror, representing our nation. My duties as juror were not very much, but I had the opportunity of meeting leading figures from various nations at the electrical convention which was held in St. Louis at that time. Among them were Professor Nichols of Cornell University to whom my former instructor, Professor Nakano, had been greatly indebted. I also met Professor and Mrs. Ryan who knew Professor Nakano intimately. This started a friendship which was to brighten my whole future. In a speech at the banquet, I said:

"I am here with my grandfather and uncle" and evoked much applause. It was at this time that I became acquainted with those two Professors.

In December, 1905, when I reached San Francisco, I wrote to Professor Ryan, who had transferred his teaching post to Stanford University, saying that I wished to visit the school. He urged me to come at once, and upon immediately going, I found him hardly settled in his new quarters, which was half of a tiny house separated by a partition, with the other half occupied by a fellow professor. Although I demurred, he insisted so much that I agreed to encroach upon his hospitality. Every day, upon his Ford car - the object of his pride and affection - we went out driving and although it was winter in Japan, we enjoyed glorious days in the vicinity of San Francisco.

There was at the time a movement to exclude Japanese school children from the public schools and he earnestly explained that this did not show the true spirit of the American people, but only that of self-seeking, selfish laborers, and that the will of true Americans would prevail in the end.

I can still remember him as one who really understood the Japanese people. The scholarly and quiet manner in which he conducted his researches was admirable.

Since returning to Japan, I unfailingly introduced to Dr. Ryan those who were about to visit America to study high voltage electrical engineering. The following noted professors of Japanese universities have studied under him:

Prof. Arakawa of Kyushu Imperial University Prof. Nishi of Tokyo Imperial University Prof. Tsutumi of Waseda University Prof. Nukiyama of Tohoku Imperial University

Prof. Shibusawa (3)

Prof. Usui of Kobe Higher Technical School Prof. Sato of Ryojun University Prof. Ohtsuki of Tokyo Engineering University

Several decades ago when the great electrical power transmission network was about to be constructed in this country, to those who visited America to survey similar systems and to purchase equipment I gave letters of introduction to Dr. Ryan and urged them to visit his laboratory. His hospitality to these visitors made such an impression that every one of them, upon their return to Japan, came to express their gratitude and appreciation.

In 1918 and again in 1921, I passed through San Francisco and on both occasions I visited Dr. Ryan to renew our old friendship and became more than ever indebted to his hospitality. Thus, I was most anxious to invite him to Japan and several years ago when the Iwadare Foundation of the Institute of Electrical Engineers of Japan unanimously agreed that the first noted scientist to be invited from America was Dr. Ryan, I was the chairman of the reception committee. Unfortunately, ill health caused him to cancel the trip. Since then, he recovered, but his untimely death prevented our plans from being realized, and I hardly know how to express my disappointment and sorrow,

In conclusion, let me repeat - the debt that electrical Japan owes to the late Dr. Ryan cannot be overestimated, and it was with much sorrow that learned that he is lost to us forever.

Mr. Yasunosuke Fukukita

Although I have been asked to attend this evening, representing the Stanford Alumni Association, it seems that I am somewhat out of place in this gathering of electrical engineers. However, to have so many of those who received training under Dr. Ryan assemble here this evening must surely gladden his spirit.

I have heard of him often, but have never had the opportunity of meeting him. However, having heard this evening from Professor Shibusawa about Dr. Ryan, and having read his magazine article, I have learned much about him and what a warmly sympathetic, friendly personality he was.

In America, according to their custom, I wonder if a similar gathering would be held to mourn the passing of an educator? It is characteristic of the Japanese that there is much attachment between student and teacher, and a report of this gathering will show not only to those of Stanford University, but to all others, that be it ten or twenty or thirty years or more, a Japanese does not forget his gratitude to his teacher. This particular incident is but another link in the chain binding us in friendship between Japan and America.

großsor Ken Nishi

Immediately after graduating from the Imperial University of Tokyo, I was engaged to teach there and since a high voltage research room was completed, from the first I was engaged in high voltage work and naturally followed Dr. Ryan's work with keen interest. After Professor Arakawa of Kyushu had gone abroad, I was ordered to go in 1919 and came to study under Dr. Rayn. I had introductions from Professor Shibusawa and Mr. Tsuruda, and was received with great kindness.

Dr. Ryan wished me to continue the line of investigation I had been following in my laboratory, saying that he would like to publish the results in technical journals. He advised me to attend lectures to train my hearing knowledge of English, and also assisted him in his work. I was not of much assistance, as Dr. Ryan walked around in his wooden shoes, making clicking sounds on the floor. To measure the voltage distribution in an insulator string, he used a very simple method. He used a helix of garden hose filled with water, having equidistantly spaced spikes for points of contact, for a potentiometer. Instead of a galvanometer, he connected the cap of insulator tested with various points on the helix, judging the voltage from the spark between the connecting wire and the spike. The most dangerous parts of the experiment he would perform himself, leaving the safe parts to others. My duty was to take down data, turn the lights on and off. When making readings, Dr. Ryan gave his figures to three places, which caused me to doubt their accuracy, but when plotted, the data would give a smooth curve. This taught me that using very simple devices, he succeeded in obtaining accurate

results. Moreover, he constructed many of the apparatus
himself, and often I would see him planing a piece of wood.
I believe this is a significant lesson to those of us in Japan,
who lack research funds.

Dr. Ryan would often make puns, most of which I could not understand. However, there is one that I can remember. In front of the high voltage laboratory, there were some currant bushes. One side had only white flowers, and the other side had both red and white flowers, to which he referred as "continuous current" for the former and "alternating current" for the latter.

Ers. Ryan was very kind and would lead the conversation into channels where I would feel at home. At one time the Ryans had some fish and Mrs. Ryan asked me numerous questions regarding the varieties and methods of cooking, and I believe this is the incident to which Dr. Shibusawa referred.

During a conversation about "tansu" (Japanese dresser for storing away clothing) she inquired as to the wood used. I knew the Japanese common name for it - "kiri" -, but not knowing the English equivalent, looked it up in my pocket dictionary and found the scientific name. She immediately recalled that there was a specimen of that tree in the Arboretum and the next day I saw the tree for myself in the very spot she named. That she took much interest in botany is proved by this incident.

I was at Stanford from January 1920 to the middle of August of the same year, and then went east. Not being a

prolific letter writer, after returning to Japan I sent only
my greetings at Christmas. This year, when Mr. Takahashi was
sent by the Iwadare Foundation to America, I gave him an
introduction to Dr. Ryan and due to the fact that he was the
very first to be invited to Japan by that Foundation, knew
much about the scholarship. I wrote but a brief letter of
introduction, but in March I received from him a copy of a
letter he had written to Mr. Takahashi. According to this
letter, he had given Mr. Takahashi letters of introduction
to the heads of the electrical engineering department
of the University of California, and the California Institute of
Technology. He also gave very detailed instructions as to
how he should visit various places. This showed, even in
his invalided condition, how kind he was in every minute detail.

the Iwadare Foundation by the Institute of Electrical Engineers of Japan, he was overjoyed, but he could not recover his health and declined. Dr. Skinner was then chosen, and visited Japan.

A copy of the photograph taken at a garden party to Dr. Skinner upon that occasion was sent to Dr. Ryan and I received a letter of appreciation from Mrs. Ryan. This was on May 22, and in that letter she said he was suffering from cerebral hemmorhage, but was gradually recovering. The cause of his death was said to be heart disease, but it was so sudden that I was surprised.

Although I cannot say definitely to what extent we in Japan are indebted to Dry Ray, but his influence must have far reaching. To have passed away without once visiting our shores is very regrettable.

Tam very proud to have been a student of Dr. Ryan. Thirty years ago, when I was at Stanford, he had just assumed his teaching post there. Physically small, white haired, he seemed about fifty years of age, and was not imposing in appearance as some of the other professors. But I learned to appreciate his guidance as the days passed. He always started his lectures with "Gentlemen" whereas other professors said "Boys" and at first I had a peculiar feeling of having attained manhood suddenly. I can never forget his kindness. With a classmate from Australia, I constructed a transformer for use in electrical steel manufacture. Although he was extremely busy, he dropped in every day to make suggestions and when it was completed we received much praise, saying that the experience derived from actual construction was more valuable then many lectures. For his students he would do anything.

Under Dr. Ryan, we never had an examination. Up to this time, we suffered from many examinations, but the worst was Descriptive Geometry, taught by a Prof. Fish, who gave an examination each week. Dr. Ryan said, "I dislike giving examinations. Rather, I try to inspire my students to take a real interest in what I teach". I had hoped to meet him again, but I am indeed sad that this opportunity is gone forever.

Mr. Shiro Yamasaki:

I received instruction from Professor Ryan at Cornell University before he went to Stanford. Although Professor Shibusawa has known him for thirty years, I met Dr. Ryan thirty three years ago in 1901. With the exception of a few lapses we continued corresponding. When Dr. Ryan was in good health, he wrote the letters himself, but for the last few years Mrs. Ryan has taken over the letter writing. Dr. and Mrs. Ryan were devoted to each other and all of their letters were signed by both. One could sense the spirit of unity between them, which may have been strengthened by the fact that they were childless. Even their handwriting was similar. Without a doubt, Japanese womanhood would acclaim this example of perfect harmony.

In the last letter received from Mrs. Ryan, she said, "Dr. Ryan is very weak and is resting very quietly. The slightest exertion tires him and he has stopped making trips in his beloved Ford car. The acacia blossoms are at their best now and the peach and cherry trees are about to bloom, but he is shut in." Thus, I learned how feeble he has become, but it was a shock to hear that he had passed away on July 3rd.

In the letters from Dr. Ryan, he wrote a great deal about Japan, and the names of Professor Shibusawa and Professor Nishi were often mentioned. Professor Nakano has known him the longest and the next is Mr. Norimaro Takatsuji. I believe I am the third oldest in length of acquaintance.

Wishing to study independently, armed with a letter of introduction from Professor Nakano, I went to Professor Ryan. The entrance rules required a knowledge of two foreign languages. Professor Ryan inquired, " Of course you understand Japanese?". to which I couldn't very well say "No". Next, he asked, "Can you read Chinese?", and upon answering in the affirmative. he said, "Your foreign language requirements are fulfilled", and allowed me to enter the university. It was thirty three years ago that he taught "Corona" and "Dielectrics" and at that time I thought it would not amount to much. It was not until eighteen years later that I realized the need for high voltage engineering. When I wrote a thesis on high voltage generation and transmission and also when the project for hydroelectric power transmission from Lake Biwa to Osaka was being developed, under his guidance I engaged in research. It was at this time that I learned the basic principles of high voltage electrical engineering.

Dr. Ryan was sixty eight years old this year.

At the age of thirty three he was already professor. To have attained the rank of professor in his thirties proved that he was a genius and none but a scholar of great ability could have accomplished this. Last year, when he was to have visited Japan as lecturer to the Institute of Electrical Engineers of Japan, I was to have assisted Dr. Shibusawa in the reception committee, but because of Dr. Ryan's illness we were much disappointed that this trip could not be realized.

Professor Hideo Tsutsumi

I went abroad immediately after Professor Nishi. At this time Dr. Ryan, collaborating with Mr. Wood of the Southern California Edison Co., was doing research work in shields for porcelain insulator strings. Dr. Ryan always maintained that actual experimental results were more accurate than those obtained by computation. He said, "The Germans have a habit of toying with huge iron pipes in their libraries." This is a remark that we Japanese should think over seriously. When I called on Professor Hoover (Mining and Metallurgy), and saw his laboratory, in conclusion he said with great pride, "Stanford does not try to make men with laboratory equipment". These two remarks made a deep impression which remains with me to this day.

Dr. Ryan drove about a great deal in his automobile, as has been mentioned already, and I recall that his car's license number was in the neighborhood of 58,300. He would often express himself humorously and speaking of his automobile, he referred to it as his suit case. In it were repair tools, of course, camera, scale, and almost everything else. He said, "I don't have to carry my suit case; on the contrary my suit case carries me". The story of Alternating "Current" I heard from Mrs. Ryan.

To have known Dr. Ryan is an unforgettable episode of my life and I cannot fully express my appreciation.

Tomio Murata

Laboratory. At this time, the high voltage laboratory had just been completed and was named after Dr. Ryan. As you know, this great laboratory was provided for Dr. Ryan's research work by leading electrical power companies of the country who were greatly indebted to him for his work along that line. The laboratory was well equipped and contained a two million volt transformer and many came to study the enormous twenty foot arcs that were thrown across the laboratory by this high voltage.

Having commuted from San Francisco, I was in contact with him only during school hours, but I am proud to have been a student of his. He was extremely popular among his students. When handing in reports, he would accept them as though they were extremely valuable and was courtesy personified. Often in recitation, when a student gave the wrong answer, he would remark that although according to such and such a theory it could be so, the generally accepted theory was the opposite. This showed us the depth and breadth of his knowledge.

Learning of his passing away, and thinking back to my days at Stanford under him and his sympathetic, thoroughly human character, I hardly know how to express my grief.

Mr. Tadashi Maeda

I have been requested to speak as one who had most recently studied under Dr. Ryan. However, I had little opportunity to study under him, having attended only the general seminar where he spoke once a week. I believe Mr. Murata is more qualified for your purpose.

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Professor Takashi Ohtsuki

After I had completed my studies in Germany, I returned by way of America, stopping at Stanford University to study under Dr. Ryan. Fortunately, I had letters of introduction from Professor Shibusawa and Professor Yamasaki and was received with great kindness.

As we were about to start our work, he said, "America is composed of a mixture of many nationalities and has no tradition. Therefore any modern device that is of benefit and convenience to every day existence is utilized. To that end, we make every effort to plan and devise anything that will make life more comfortable. Theoretical study is important, but experimental research is the shortest and surest way."

I studied under him from the latter part of 1923 to the middle of the following year and the scientific and spiritual guidance received was indeed great, for which I am grateful.

In his Ford car, which he referred to as his movable study, we went out for drives with Mrs. Ryan, and once we went to the Redwood Park about sixty miles away. Other professors of lower rank drove around in more expensive cars, but Dr. Ryan preferred his Ford, saying no matter where he went, he could find spare parts for repair. His home was small but comfortable, but he said that with his Ford, the whole country side became his garden. which was quite an extension to his home. Thus, he always avoided showiness and laid stress on practicability, a spirit which I have always admired. In conclusion, to have lost forever the opportunity of having him visit Japan is a fact that I deeply regret.

Mr. Takeo Akahira:

Before I first met Professor Ryan on June 8, 1931, through what I had read in newspapers and the magazines I was prejudiced against the American people. Although the people were originally immigrants themselves, they persecuted Japanese immigrants. I thought they interfered too much with oriental affairs. I landed in San Francisco and with these opinions in my mind the first person whom I called upon was Professor Ryan, and I wondered if this unusual personality with such high moral character could be a typical American. I was particularly impressed with his kindness to Japanese visitors and had to revise my opinion of the American people. At the same time I thought that Professor Ryan was a very valuable connecting link between America and Japan. I called on Professor Ryan twice; the first time was at the high voltage research laboratory and the second was at his home. When I went to his laboratory he personally guided me and kindly explained the nature of work carried on there. That he was a careful, percise scientist I learned from his conversation and his attitude. After the visit, when I told him what a wonderful research laboratory it was, he said that when it came to matters of science and research the various American electrical companies forgot that they were competitors and offered much in materials and funds to educational institutions for research work. This, he said, was an ideal state of affairs. That this was realized was in no little measure due to their high regard for Professor Ryan. He said cooperation between those engaged in research and those in actual practice was a very fine thing. That Japanese industry made such progress in such a short space of time was due no doubt to similar cooperation, he said.

When I visited Professor Ryan's home, I met Mrs. Ryan and found her to be very kind, and an interesting conversationalist with a very likeable personality. She took careful care of gifts received from visitors from Japan and had many of them on display. Among them were a "tansu" (chiffonier) and a sculpture of "hichifuku jin" (seven gods of happiness) which she loved to gaze upon. Despite the fact that Dr. Ryan was a great scientist, there was not even a single book to be seen in his home. Out in the garden was a round table, painted white, on which she had written three Japanese characters: "fuku" (happiness), "roku" (fortune), and "ju" (long life). She was much pleased when I explained the meaning of these characters. The three of us took a souvenir photograph near it, which I believe was published in the "OHM". The Ryans were very much in sympathy with Japanese and when I met them it was at the time the Institute of Electrical Engineers of Japan had invited Dr. Ryan to Japan. I told him how eagerly everyone was awaiting their arrival. He said that he had a very great desire to see Japan, but being in ill health, he was forbidden by his physician from making such a long trip and was about to send a cablegram declining the invitation. I am deeply disappointed that we could not be favored by a visit from such a true friend of the Japanese.

Mr. Seize Motemura

In conclusion, as one of the sponsors of this gathering,
I would like to express my sincere appreciation.

I studied under Dr. Ryan for four years commencing from the fall of 1905. Truly we regard him as a parent who molded an important phase of our lives.

It makes me very happy to have had such a large attendance, despite the rain, to this gathering in memory of the late Dr. Ryan, to have heard from so many of you reminiscences in praise of his sterling character, and to grieve together the loss of a great and kind teacher.

Those of us from Stanford are especially grateful to the many noted educators from Japanese universities who have so kindly joined us in our last tribute to Dr. Ryan.

Finally, I would like to thank Mr. Fukukita, President of the Stanford Alumni Association of Japan for his presence, and for the beautiful floral wreath from that organization.

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Dr. Motoji Shibusawa Tokyo Imperial University 72 Haramachi, Koishikawa Tokyo, Japan

Dear Sir:

We sincerely appreciate the report of the Dr. Harris

J. Ryan memorial meeting held in Tokyo, which was sent to us at
your request. It presents in a very vivid manner the deep
feelings of admiration and respect which Dr. Ryan's students
and friends from Japan have exhibited.

With best regards and best wishes for the New Year,

I am

Sincerely yours,

National Secretary