Kaichi WATANABE (March 22 1858 – December 4 1932)

Kaichi Watanabe was born in Asahi Village of Ina County, Shinano (present Nagano prefecture) as a son of Yorihachi UJIHACHI. He started to learn at a cram school under the instruction of Genezo MISAWA at the age of 6. After he finished elementary school at Matsumoto, he moved to Tokyo for higher education to enter the Department of Civil Engineering, Imperial College of Technology (Present Department of Engineering of the University of Tokyo. The first principal was Henry Dyer a post he is understood to have been recommended for by Glasgow University Prof. W.J. Macquorn Rankine - d. Dec. 1872).

When he was a student at the College, he was engaged to the eldest daughter of Teizo Watanabe in 1882, the chief of Yokosuka Naval Shipyard. On becoming his son-in-law Kaichi changed his family name to Watanabe.

Watanabe graduated at the College in 1883 and took a job as an engineer in the Railway Department of the Ministry of Engineering of the Japanese Government. One year later, he resigned from the Department and went to Scotland and studied civil engineering at the University of Glasgow from 1884 to 86. After graduating a Bachelor of Science, Watanabe was hired as an assistant engineer by Fowler and Baker from March 1886 to August 1887 working on the construction of the Forth Bridge, during which time he featured in the well-known anthropomorphic model image demonstrating its basic structural principle.

After Watanabe returned to Japan in 1888, via the USA, he became a technical manager of the general contractor, Japan Civil Engineering Corporation, and mainly worked on early railway construction. After that Watanabe was involved in railway construction as a chief engineer and a manager in various railway companies such as Keihan Electric Railway Co., Tokyo Electric Railway Co., Nara Electric Railway Co., Keio Electric Railway Co., Hokuetu Railway Co., Korean Central Railway Sangu Railway etc. He also became a president of Kansai Gas Corporation, Tsukishima Iron Works Co., Toyo Electric Company etc. and Ishikawajima Shipyard (the present IHI).

At the age of 39, Watanabe obtained a patent for the combustor which greatly improved the fuel economy of the locomotives using the waste products of crude oil refining. He obtained the degree of Doctor of Engineering at the age of 41.

Watanabe was involved in the establishment of Japan Society of Civil Engineers (est.1914). His leading role in his profession was recognized by his appointment as the 7th president of the Imperial Railway Association, and also, by the honor of admittance to the Fifth Class Order of the Precious Crown.

Watanabe died of stomach cancer in 1932 at the age of 74.

[Translated into English from Japanese sources by Prof. Hiroshi Isohata, Nihon Univ., Tokyo, at the request of Prof. Paxton Heriot-Watt Univ. 17.12.15 following an enquiry by Sir William McAlpine]



Kaichi Wtanabe at around 40 years of age?



Kaichi Wtanabe in the last years