

本邦鐵道橋ノ沿革ニ就テ

(第三卷第一號所載)

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土木學會誌第三卷第一號ニ掲載セラレタル工學士久保田敬一君編述ノ「本邦鐵道橋ノ沿革ニ就テ」ナル論文ハ鐵道創始ヨリ現今ニ至ル橋梁ノ設計製作架設等ニ係ル變遷ヲ詳述シタル獨創的著述ニシテ實ニ斯道研究ニ裨益鮮カラサル好資料タリ爰ニ久保田君編著ノ勞ヲ感謝シ尙ホ二三ノ所見ヲ左ニ記シ高教ヲ乞フ所アラントス

(一) 論文第九頁及三十一頁ニ日本鐵道會社線ノ荒川橋梁ニ關シ明治十八年二月ニ六郷川ト同形ノ鍊鐵製ワレん複線構桁ノ架設ヲ了シタル如ク記述アルモ十八年二月竣功ノ下キ架設セラレタルハ複線式ニアラスシテ大阪京都間ノ十三、神崎、桂ノ諸川ト同様ノ單線式鍊鐵ワレん構桁ナリシナリ而シテ後年赤羽川口間ヲ複線ト爲スニ方リ線路附換又ハ假線敷設等ヲ爲サス本線路ニ營業列車ヲ運轉シツ、現今ノ複線構桁ニ架換ヲ爲シ該竣功年月ハ明治二十八年三月ニシテ四月一日ヨリ新橋桁トナリタルヲ事實トス惟フニ該構桁ハ六郷川ノ如ク鍊鐵製ニハアラスシテ其ノ全部若クハ大部分鋼鐵製ナルヘキカ蓋シ其ノ製作ノ時代ヨリ推ストキハ然ラサルヲ得サルカ如シ

(二) 第十六頁ニ木桁ノ短日月ニ腐朽シタル原因ヲ乾燥セサル木材ヲ用ヒテ之レニこゝるたゝるヲ

厚ク塗抹セシ爲メ云々トアリ之レ主タル原因ニ相違ナカルヘキモ明治九年ノ横文鐵道年報 (Engineer's Yearly Report, 1st July 1875 to 30th June 1876) ニ建築師副長えんぐらんと氏 J. England, Deputy Engineer in Chief) ノ神戸大阪間線路ニ關スル報告中ニ左ノ一節アリ

Small Bridges:—Several of the Wooden Girders have been taken out and replaced by iron ones, and the whole of the girders in which "Matsu-no-ki" has been used, showing symptoms of rapid decay, have been to a great extent strengthened or supported in order to make them last until the iron which have been sent for from England to replace them shall arrive.

之ニ據リテ想フニ松材ヲ使用シタルコトモ亦腐朽ノ速カナル理由タリシニ非ラサル無キカ
 (三) 檜ノ尾川ノ鐵桁ニ付テ第二十頁ニ其ノ特殊ノ形狀ヲ有シタルコトノ記述アルモ其ノ神戸工場ニ於テ製作セラレタルコトノ記載無キハ遺憾ナリ前項ト同様ニ建築師副長えんぐらんと氏ノ大阪京都間ノ線路ニ關スル報告中ニ十三神崎桂其ノ他ノ鐵橋ニ就テ詳述セル次ニ左ノ一節アリ

The next largest bridge is that of the Hino-gawa, of 50 feet span, the road being carried on the cross bearers between two main plate girders with curved tops. The girders for this bridge were made at the Railway Works in Kobe and compare favourably in finish and workmanship with some work received from England.

(四) 第四十四頁ニ實際完備セル設計示方書ヲ用ヒタルハ本邦ニ於テハ明治二十八年云々トアルモ之ニ先ニスルコト數年北海道炭礦鐵道ニ於テハ新線建設ニ用フル橋桁ヲ "Specification for Design of Bridges and Viaducts." 及 "Specification for Material and Workmanship for Bridges and Viaducts" ナル二部ノ示方書ニ據リテ設計シタリキ該示方書ハ明治二十三年一月廣井博士ノ作製シタル所ニシテ前者ハ二十三箇條後者ハ三十四箇條ヨリ成レリ而シテ之ニ用ヒタル荷重ハ左記ノ如シ蓋シ本邦ニ

