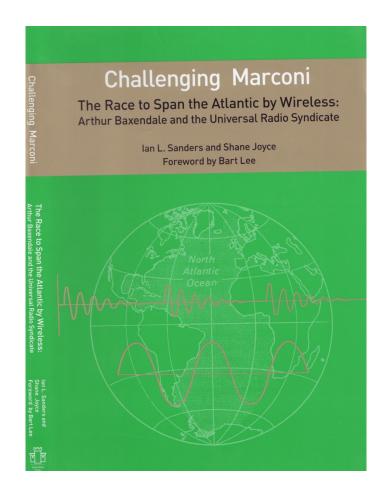
Foreword by Bart Lee to a new book about wireless telegraphy and its technologies.

The following text is my foreword to a new book about wireless, "Challenging Marconi," by Ian L. Sanders and Shane Joyce. It has just been published:



"You can't fight City Hall" is an Americanism that Arthur Baxendale would have grasped -- in depth. Taking on Marconi meant taking on the Marconi interests. The British establishment had quickly seen the benefits of wireless telegraphy despite the cable industry's oppositions. Its wired transatlantic telegraphy had given it a lucrative monopoly. Marconi's wireless challenged this monopoly, the stakes being the monopoly revenues, high stakes indeed. As Marconi succeeded, more and more of the British establishment aligned itself with this brash young man with an Italian name but a posh English accent. An efficient stock market helped to spread the new wealth. The British government saw the benefits of wireless in Imperial administration. The British Navy may have ruled the seas, but that could only continue with a wireless telegraphy communications infrastructure.

Success can lead to a narrow vision, even a technological arrogance. Few Britons concerned themselves with developments in the "Colonies." Canada was loyal and the Americans were just cowboys, albeit there were some rich ones. Perhaps more Britons concerned themselves with European developments, because many a war had required attention to these areas. Yet while Marconi succeeded, around the world, its "Spark" technology, dating from the late 19th Century, improved but just lumbered on. By 1910, in California, a better wireless system could put spark to shame: the "Arc." A Danish invention, made viable by an Australian out of Stanford, concentrated power in a narrow radio frequency. The spark systems, however improved, could never quite do this, and rarely even approach this goal. The dinosaur of spark faced a quicker, leaner competitor, the arc. In the end, an arc could project a million watts of clean radio energy across an ocean. The early arc held only promise, but great promise. Arthur Baxendale saw his main chance.

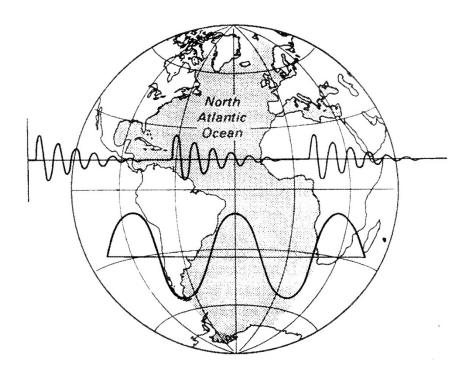
This excellent, granular, book of technological and social history tells that story. From Colonial India to the London bankruptcy courts, a saga of competing technologies plays out in the mores of the times. The incentives of public and private revenues drove the new technology as they had driven the older system. In the retrospect of digital communications, laser-light undersea cables and communications satellites, we are here looking upon two fossils, spark and arc. But what magnificent beasts they were in their own time. Arthur Baxendale sought to tame the newer of them to corral the older of the two, Marconi's spark system, to the dustbin of history. He did not succeed, but then neither did spark and arc survive the thermionic Fleming valve as it evolved, within a decade, into the triode of Lee de Forest and others. The Great War to "End all Wars" also put paid to all pre-war technology. The western world marched on into the era of vacuum tube technology, in communications and then computing. It would have been bitter-sweet to Baxendale had he been able to see it all, but he would

have understood the processes at work, because he lived them in his own *floruit*.

Challenging Marconi

The Race to Span the Atlantic by Wireless: Arthur Baxendale and the Universal Radio Syndicate

> Ian L. Sanders and Shane Joyce Foreword by Bart Lee



Bart Lee, K6VK, San Francisco, Archivist - California Historical Radio Society [15 X '20] ##