Telegraphy and the downfall of the Kelly Gang – and other vignettes from the Telegraph Society of Victoria

Simon Moorhead
Ericsson Australia & New Zealand

Summary: Four historical vignettes are provided from the period 1875 to 1880 from the Proceedings of the Telegraph Electrical Society of Victoria – the lineal antecedent of today’s TelSoc (Australian Telecommunications Society). The extracts cover Alexander Graham Bell’s invention of the telephone, Telegraphy at the downfall of the Kelly Gang, the speed of the Morse system, and the curious phenomenon of ‘Fighting by Telegraph’.

Introduction to the historical extracts

Peter Gerrand’s article in the June issue of the Australian Journal of Telecommunications and the Digital Economy (Gerrand 2014) traced the opening of the first telegraph office in the Southern Hemisphere back to Melbourne, Australia on 3rd March 1854.

Twenty years later in 1874 (and two years before Alexander Graham Bell patented the telephone), several like-minded telegraph workers and country postmasters formed the Telegraph Electrical Society of Victoria. The purpose was for mutual discussion of day to day telegraph problems and the advancement of their technical and practical knowledge (Credlin 1938).

The Proceedings of the Society were published on a quarterly basis and lecture pamphlets were reproduced in newspapers of the day such as The Argus. This paper features four extracts from those Proceedings, which resonate into the modern era.

The first extract, entitled ‘Novel Telegraphy in Canada’, was published in 1876. It perspicaciously described Dr Bell’s invention of the telephone as ‘very satisfactory’ and ‘[it] will certainly be the greatest mechanical discovery since the telegraph’.

The second extract, entitled ‘Extermination of the Kelly Gang’, was published in 1880. It described two Posts and Telegraph personnel who attended the siege at Glenrowan.
One bravely climbed a pole while bullets were flying to establish a telegraph connection to Melbourne, and the other relayed continuous updates on the situation.

The third extract, entitled ‘Speed of Working the Morse Instrument’, was published in 1875. It discussed the top speed of Morse messages on the busiest telegraph lines in New York, USA. Not to be outdone, the Victorian operators covering the Melbourne Cup demonstrated they could send messages at double that speed.

The fourth and final extract, entitled ‘Fighting by Telegraph’, was published in 1880. It is a curious article describing the fighting by operators over telegraph lines, before reliable duplex systems were introduced.

These extracts were all published later in a Society paper entitled ‘Centenary of Telecommunication Societies in Australia’, written by J.E. Sander for the Telecommunication Journal of Australia, the predecessor of this Journal, in 1974 (Sander 1974).

References


The historical extracts

**NOVEL TELEGRAPHY IN CANADA.**

A number of gentlemen interested in scientific matters recently assembled at the office of the Dominion Telegraph Company, to witness some very wonderful experiments on an apparatus which has been invented by Mr. A. Graham Bell, son of Professor A. M. Bell, of Tuckan Heights. This gentleman claims to be able to transmit musical sounds over a telegraph wire. A person singing or speaking, for example, at one end of the wire, every note or word will be distinctly heard at the other end—not only the words would be heard, but the tones of the voice also would be readily recognised by any one who had heard them before. Another very important improvement, which Mr. Bell claims to be able to put into use, may be described as follows:—A man wishing to send a message to Hamilton, for instance, writes it on shellac paper. It is received by a boy, who puts it into a machine made for the purpose. The message is received in Hamilton by another boy, who brings it forth from a similar machine copied upon a piece of shellac paper in telegraphic impressions or written like copper-plate. Pictures drawn in shellac can also be sent and received in the same way. If this system can be put into use and worked effectually it will do away with telegraph operators altogether. But the most important feature which Mr. Bell claims is that he can transmit 30 or more messages over a single telegraphic wire at one and the same time. The way he proposes to do this is as follows:—On a wire running from, say, Brantford to Toronto, Mr. Bell would place 30 or more instruments at Brantford office. All these instruments will be tuned to different pitches. A corresponding number of instruments to be placed in Toronto office, each of the instruments tuned in unison with the corresponding instruments in Brantford. An operator can then transmit a sound on any one of these instruments, and none but that at the other end of the line which is in unison will correspond. Therefore, 30 or more operators can work together on the same wire without in any way affecting the others. This seems very wonderful, but Mr. Bell claims to be able to put it into practical use, and if he succeeds it will certainly be the greatest mechanical discovery since the invention of the telegraph itself.

Mr. Bell's explanation and practical experiments were very satisfactory, and every person present seemed convinced that he had got hold of a good thing, and one which only required time to bring it into general use. Strange to say, two other gentlemen, one an electrician named Gray, of Chicago, and the other a scientist in Copenhagen, have hit upon the same ideas, but it appears Mr. Bell was ahead of them both, and got his discoveries entered in the patent office at Washington ere they appeared upon the scene. He is backed by Boston and New York capitalists. The way in which Mr. Bell first got his idea was in blowing on a single chord inside a piano. He noticed that all the other chords which were in unison were affected thereby. A gentleman present when Mr. Bell was explaining said that when the whole thing was put into working shape a concert given in San Francisco could be easily heard in New York.—Brantford Expositor.

Figure 1 – Novel Telegraphy in Canada
THE EXTERMINATION OF THE KELLY GANG.

The Telegraph Service was not unrepresented at this terrible affair. Mr. H. E. Cheshire, who was acting as Post and Telegraph Master at Beechworth, volunteered, with Line-Repairer Osborne, to accompany the train which left that town on the morning of the 20th June for Glenrowan. They arrived there during the thick of the fray, and Mr. Osborne having, in a most plucky manner, climbed a pole while bullets were flying about him, communication was established with Melbourne, and Mr. Cheshire was enabled to keep the colony—indeed the neighbouring colonies also, for the excitement extended equally to them—informed of the progress of events until all was over. The Postmaster-General has expressed a high sense of the conduct of Messrs. Cheshire and Osborne in this affair. Messrs. D. Mickle and P. Cregan, operators from the Melbourne office, were also despatched to the scene of combat, but did not arrive there until the hotel had been burnt, and the dead and charred remains of the bloodthirsty Kelly gang had been taken from the smoking ruins of the hotel.

We are also glad to observe that Superintendent Hare, in his report on this affair, alludes to Mr. Saxe, of the Benalla Telegraph office, in the following complimentary terms:—"I would also bring under your notice the great services rendered by Mr. Saxe, Telegraph Master at Benalla. The police in the district found him always ready to assist them at any moment, day or night (Sundays inclusive), and he complied with everything he was asked to do most readily and cheerfully. I would therefore urge upon you the desirability of bringing his conduct under the notice of the hon. the Postmaster-General, with a view to his promotion in the service, as you are well aware, from your own personal knowledge, of the many services rendered to us by him."

Figure 2 – Extermination of the Kelly Gang

SPEED OF WORKING THE MORSE INSTRUMENT.

Some interesting details of the speed of working the Morse system are given by Mr. F. L. Pope in The Telegrapher. Six days' work on five of the busiest lines in the New York office resulted in the transmission of 5,753 messages, containing 234,546 words. This gives an average of 191 messages of 46.8 words (7,800 words), as the work of one line for one day. The average number of words per message seems high, but it is evidently caused by the occurrence of long press messages. Two instances of fast transmission of ordinary messages are given, viz.:—

330 messages in 6 hours 30 minutes, 50.7 per hour
136
2 hours, 68 per hour.

As it may be interesting to some of our readers to know what has been done in Victoria, we may mention that, on the occasion of the last Melbourne Cup race, 216 messages were sent from the Racecourse to Melbourne, on one of the wires, in 1 hour and 58 minutes, being at the rate of 109.8 per hour. At the Cup of the previous year, 135 messages were sent in 1 hour 5 minutes, being at the rate of 124.5 per hour. It must, however, be borne in mind that the average number of words in these race messages did not perhaps exceed 20 (address, signature, &c., included), and, on account of the frequent occurrence of the same names, abbreviations could be used to a great extent. As a matter of swift penmanship on the part of the receiving operator (he having written everything in full), these performances could not easily be surpassed.

Figure 3 – Speed of Working the Morse Instrument
FIGHTING BY TELEGRAPH.

The proceedings before the coroner at Huntingdon, on the 2nd February, in the Abbots-Ripton collision case (says the Times) recall the existence of a curious pastime in working the telegraph. When two stations want to send a message at the same time, and neither will give way, they are said to "fight." Each operator grasps the handles of his instrument tightly, and moves them rapidly and irregularly from side to side; the result being that the needles are violently agitated, even to "clicking" loudly, and the "face" of the instrument assumes quite an excited aspect. Such, or something like this, may be assumed to have been the case when the Abbots-Ripton signalman wanted to send his message to Huntingdon for "doctors and help," and somebody else on the circuit would not let him. "Fighting" on the wires was a common practice in the early days of the telegraph, when nothing but the double-needle instrument was used—so common, indeed, that a fine used to be imposed on clerks who broke the handles of their instruments in this warlike occupation. Battles of this kind were not always confined to two persons; for when there were more than two stations "in circuit" others would join in for the mere fun of the thing, and a "free fight" would often ensue. The improved forms of telegraphic apparatus have reduced "fighting" very much, although they have not altogether done away with it. The simpler forms of recording instruments still admit of telegraph clerks giving rein to their angry passions on the wire, the rapid up-and-down motion of the keys taking the place of the violent swaying to and fro of the handles. But the arts of peace as well as that of war are studied by the telegraphist in his spare moments, and the gentler passions often find vent through the wire. It has been stated that long courtships have been maintained between persons hundreds of miles apart, who never saw each other, and that there is now a telegraphic sign for "love's first snowdrop, virgin kiss." One of the latest inventions in telegraphy, known as the "duplex" system, is a great peacemaker, for it enables the operators at either end to charge at each other as much as they please without disturbing the continuity of transmission, thus removing all inducement to "fight." What an American humorist has said of a railway collision—viz., that it is an effort on the part of two trains travelling in opposite directions to pass each other on the same track—is true of the attempt to send two messages on the same wire at the same time by the needle telegraph, but not of the "duplex" system, by means of which this feat is now very generally accomplished throughout the world.

Figure 4 – Fighting by Telegraph