

WHAT BAIRD THINKS OF TELEVISION

REMARKABLE STRIDES TOWARDS SUCCESS

It is announced that Jno. L. Baird is preparing for a television test between London and New York. If successful, we may have placed on the market television sets at £30 apiece! This is how Mr. Baird's success was recently outlined in the "Glasgow Herald."

"For many months Mr. Baird and his partner, Captain O. G. Hutchinson, have been quietly at work perfecting the apparatus by which the actual images of people can be sent through the ether. The success obtained over short distances encouraged the inventor to undertake the bold experiment of establishing televisual communication between the first and second cities of the Empire.

"No doubt sentimental considerations also influenced Mr. Baird in choosing his native city as the setting of the greatest test to which his invention has yet been put. In a semi-darkened room on the fourth floor of the Central Hotel the receiving television was installed under the superintendence of Captain Hutchinson, and the transmitting end in London was in charge of Mr. Baird himself.

"Among those who were privileged to be present at the first demonstration was Professor E. Taylor Jones, of the Chair of Natural Philosophy in the University of Glasgow, who, in an interview with a representative of the 'Glasgow Herald' in his study at the University, gave his impressions of the process by which Glasgow obtained its first look into London.

"I saw it all quite distinctly," said Professor Taylor Jones, speaking of the screen transmission. The Professor explained that the transmission took place over a trunk telephone line, and owing to induction effects on the line the images were unsteady at times, but at other periods they were remarkably steady and clear. The first object to be shown at the transmitting end was from still life—the head of a dummy.

"It was an office boy who had the distinction of being the first to exhibit himself to the eager gaze of those who were watching the receiving screen in Glasgow. The operator at this end spoke instructions through the telephone which were immediately obeyed by the image on the screen. At request the boy turned his head from side to side, put his hands to his head, and even protruded his tongue—and each action was plainly seen at the receiving end.

A REMARKABLE ACHIEVEMENT.

"Recognising the great difficulties of light and shade which had to be contended with, Professor Taylor Jones expressed surprise at the clearness with which the image came through. The parts of the head have to be transmitted in very rapid succession, but so swiftly did the apparatus work that the impression given was that the face was being presented not piecemeal, but as one whole. Herein was the key to the success of the experiment.

"Questioned as to whether the face was recognisable, the Professor replied that the features were sufficiently clearly marked for a person to recognise an acquaintance. 'There are great possibilities for future development,' concluded Professor Taylor Jones, 'but it is a remarkable achievement at the moment that a face transmitted from London can be clearly seen in Glasgow, and its movements followed in detail.'

THE INVENTOR APPEARS.

"Towards the conclusion of the demonstration Mr. Baird, who operated from the London end, was prevailed upon to appear in the 'spotlight.' To those who know him, Mr. Baird's features, even to his mass of wavy hair, were easily recognisable. It was at this point that television over a long distance was made an actuality," adds the "Glasgow Herald" later.

"Picking up the telephone receiver, Sir John Samuel engaged in animated conversation with Mr. Baird, whose face, with the instrument at his lips, was reflected steadily on the screen.

"Sir John Samuel conveyed heartiest congratulations to Mr. Baird on his wonderful achievement, which, he said, offered the greatest possibilities for the advancement of international communication. It bordered on the uncanny, he confessed, to be able to speak by telephone from Glasgow to a man in London, and at the same time to see his features clearly depicted in front of him. Professor Taylor Jones also engaged in conversation with Mr. Baird, who still remained clearly in view, and remarked afterwards that even since the first demonstration three days ago remarkable improvements had been made in light and shade and in the steadiness of the image on the screen.

"The most notable features of the details of the experiment is that it is carried out by only two operators, one at either end. In a demonstration which took place recently in America with Mr. Baird's apparatus, over 200 miles of land line, nearly 1000 men were engaged at various points. In the apparatus used by Mr. Baird in his latest demonstration the system of synchronism between the two machines has been simplified by means of a new method of filter circuits.

"The efficacy of this, it is claimed, is such that anyone who can operate an ordinary listening-in set can work the television. The progress made by the inventor in scientific research has served to reduce greatly the compass of the apparatus. The receiving television now in use is contained in a cabinet approximately 32in. in length by 24in. in height.

"Mr. Baird's object is to link up television with wireless broadcasting over any distance, and definite steps towards this end are now being taken so that in the near future it may be possible for

a person on this side not only to establish televisual communication with America, but to see the person to whom he is speaking. We are informed that a number of receiving televisuals are now in process of completion, and that they will be distributed to different centres within the next few weeks in order to test reception by radio, which obviously should give better results than the use of the land line, which is subject to so many outside disturbances.

"The advance of scientific research in electrical communication is so swift in these days that it is difficult for the man in the street to keep pace with its developments; but Scotland has reason for satisfaction that one of her sons is keeping well in the forefront, and bids fair to realise his immediate ambition, which is to have television receiving

NO SERIOUS OBSTACLE TO LARGE PICTURES.

"It would be idle to forecast the developments that may be expected in television in the sphere of world communication. But it is interesting to note Mr. Baird's prophecy, speaking at a recent meeting in London, when he remarked that within ten years people would be able by means of the television to see such topical events as the finish of the Derby or the Boat Race. Questioned regarding future possibilities, an authority on the subject said the picture presented at present by the television was admittedly a small one, but in his view the greatest difficulties had been overcome. The enlarging of the picture should not present any serious obstacle; it was merely a question of light at the receiving end.

"The process by which Mr. Baird has arrived at his discoveries is best described in his own words. In the course of an interview with a 'Glasgow Herald' representative quite recently he said that a great deal of confusion existed in the minds of the public between television and the sending of photographs and pictures by wireless. Television was not the sending of photographs by wireless, but was the instantaneous transmission of living and moving scenes. In the television process whatever was set before the transmitting apparatus was reproduced simultaneously, with every detail of movement, in the image on the screen of the receiving apparatus.

HOW PROGRESS HAS BEEN MADE.

"The ambition to achieve a form of television had been the cause of experiments for the past 50 years, said Mr. Baird. His own, and the latest contribution towards the accomplishment of what was formerly a scientific abstraction, began in practical form four years ago with the experiments at Hastings. In January, 1926, he was able to exhibit to the members of the Royal Institution the feasibility of transmitting living human images with light and shade and detail at the first demonstration of television in history. At this early demonstration, however, an intensely brilliant light was necessary in the operation of the process, and this fact was advanced by the members as being the most serious disadvantage which the system appeared to offer.

"After the demonstration Mr. Baird made special research into the matter by reducing the use of intensely brilliant lights in transmission, and it was while he was engaged in this work that the idea occurred to him of utilising the invisible rays outside the spectrum. After considerable experimentation he achieved his purpose by the use of infra-red rays, and on December 30 last, almost exactly twelve months after his first demonstration, Mr. Baird appeared before the Royal Institution, and this time conducted the television operation in total darkness.

"In television, said Mr. Baird, continuing his explanation of the process, the image or scene to be transmitted is first of all turned into modulating electrical current. This current is transmitted in precisely the same manner as the voice current in broadcasting is transmitted, and listeners-in may hear the television signals as noises in their head phones. Each scene, or object, gives a peculiar and distinct noise.

"For example, different faces emit different noises. Phonograph recordings have been taken of different sounds given by individual faces, and it is now possible to hear the sound of a moving face, the sounds of various familiar objects, such as a cabbage, a bowler hat, and a chest of drawers. These sounds, if applied to a television, recreate on the screen the images of which they are the sound."

RADIO AT CANBERRA

Federal Parliament House, Canberra, New South Wales, has been equipped with a high-powered radio receiving set, capable of picking up all the Australian and New Zealand stations. One wonders what items on the programmes Australian legislators will fancy most. It must be borne in mind that political speeches, on which they thrive, are barred from all the A class stations, except in special circumstances. Religious broadcasts are very popular, but on Sundays, when these are coming over the air, the House will not be in session. Sporting, of course, is another popular branch of radio, but the descriptions of horse racing, football matches, and similar contests are on the air on Saturday afternoon, when no self-respecting Parliament House is in session.

RUGBY REMINISCENCES

HISTORIC GAME RECALLED

(BY GOLDMIELDS VETERAN.)

Among the thousands who listened in while Mr. W. J. Meredith described the recent Auckland-Wellington Rugby match was an ex-Auckland representative player, whom followers of the game will remember well, Mr. E. Johnson. At his home at Waikino, Waikato, so many miles from Auckland, he was able to visualise the big struggle going on, and his mind flew back two score of years to Wellington, where another such memorable game took place. In a letter congratulating Mr. Meredith on his racy and highly interesting account, Mr. Johnson writes:

This match against Wellington has always been the classic, and it appears to me all the jealousies and feelings, perhaps more imaginative than real, between Wellington and Auckland, are settled year by year when their respective fifteens clash in the grand game. In spite of the atrocious weather conditions it must have been a brilliant game. I was particularly amused at your frantic instructions to Hook to put the ball down when he was racing round to finish up behind the posts the brilliant work which culminated in his second try. You evidently, like myself, have seen scores missed by the player seeking to make the shot at goal easier.

While listening to you yesterday my mind was carried back to the match Auckland v. Wellington, played at Potter's Paddock in 1908, in which match I had the honour of helping Auckland to withstand Wellington's challenge for the Ranfurly Shield as wing-three-quarter. There is a distinct resemblance between the two matches. The first half was a terrific battle, and finished up, I think, three points all. In the last 15 minutes the Auckland team took absolute charge and rattled on 21 points, to win by 24 to 3. Bob Magee had his kicking boots on that day (like Berridge yesterday), and did some brilliant goal-kicking. At the dinner to the teams after the match the ball used was inscribed by the members of the teams and presented to Magee. I daresay he still cherishes the trophy. The Auckland team that day was A. Renwick, F. Wilson, G. Murray, E. Johnson, G. Bate, R. Magee, F. Morse, G. Gillet, F. Herd, J. McGuire, H. Hayward, W. Cunningham, A. Francis, G. Nicholson, C. Seeling. The Wellington team contained Fred Roberts, Ranji Wilson, Spencer, Green, Hardham, and Eveson among others, not forgetting the brilliant F. Mitchinson. Frank Wilson paid the supreme price in France, while Cunningham, with whom I also played in Goldfields representative matches, died a few days ago.

We also had a hard fight against Taranaki that year, but what a back they had! Cameron, Dive, Hardgrave, Hunter, Mynott, with Coleman wing-forward!

I think New Zealand is right back to pre-war standard in football, and that if the selectors do their work right the team for South Africa should be a magnificent combination.

A WIRELESS DREAM

(Written for the "Radio Record.")

I grasped the mystic dial one day
And as I turned it round
There came to me from out the air
An unexpected sound.
I heard the swirl of water—
The ocean's deafening roar—
The crashing of the billows
On the shores of Labrador.
Again I turned the dial,
That wireless fairy wand,
And heard the church bells ringing
In the dear old Motherland.
And then I heard the pibroch—
The rippling of the rills;
And the laugh of bonnie lassies
Away on Scottish hills,
And still I turned the dial,
And across the Arctic snow
Could hear the grinding icebergs;
The breaking of the floe.
From out Brazilian forests
Floating sweetly on the breeze,
Came the trills of feathered songsters
And the rustling of the trees.
Australia then came in the range
And from its wide-spread plains,
I heard the bleating of the sheep
The rushing of the trains.
From out the ether then I heard,
Sweet strains of melody—
The singing of the dawkies,
Way down in Tennessee.
I heard the wild beasts roaring
In far Mashonaland,
And the stampede of the cattle
Down on the Rio Grande.
In the dense dark Indian jungle
The panthers stealthily tread;
The chattering of the monkeys
In the high trees overhead.
The clashing of the cymbals:
The beating of a gong
In an ancient Chinese joss-house
In far away Hong-Kong.
The strains of wondrous music then
Unknown delights did bring,
'Twas of most exquisite sweetness—
For I heard the angels sing.
Then the sound of myriad voices.
And my heart beat hard and fast,
For I listened to the voices
Of the spirits of the past.

The mystic shell was broken:
I turned the dial again
But all was still and silent
I turned and turned in vain.
And now I often wonder
As I gaze into the blue,
If in the distant future
That dream will ever come true.

—W. F. SLACK.

The speech-amplifiers generally used to make addresses audible to a large gathering are usually wired systems; but a new method was tried out at the commencement of the Georgia School of Technology, Atlanta, U.S.A. The speeches of the day were actually broadcast by radio, through WGST, and reproduced by the loudspeakers of powerful receiving sets distributed among the audience.

Some receiving sets howl when the loudspeaker is turned towards them. A cure for this is to place a rubber cap, made out of an old bicycle tube, over each valve.

ESPERANTO

Since the introduction of the radio Esperanto course, combined with oral instruction from 2YA, many interesting communications have been received from various parts of New Zealand. Although busily engaged in the work connected with the publication of the lessons and the conduct of the course, the instructor welcomes letters from students. The reports already to hand indicate that the scheme for providing Esperanto instruction by radio is being very satisfactorily carried out; and even at this early date—the first half of the course has not yet been completed—the success of the scheme is assured.

As in the past, inquiries relative to Esperanto and the lessons may be forwarded to "The Esperanto Instructor," N.Z. Broadcasting Co., Wellington, or care of "Radio Record." To ensure a reply, enclose a stamped addressed envelope.

The tenth lesson of the course is published below.

Lesson X.

(To be broadcast from 2YA on October 6, from 7.30 to 7.54 p.m.)

Bonan Vesperon!

THE ADVERB.—Adverbs may be formed from any word whose sense admits of it, and especially from adjectives, by means of the termination E; as bona, good; bone, well; antan, before; antaŭe, previously or formerly; mateno, morning; matene, in the morning.

When it is desired that the adverb show the "direction towards" any place, actually or figuratively, N is added; as li iris hejmen, he went home. Antaŭen, forward.

The Degrees of Comparison of adverbs are the same as with adjectives, i.e., pli and plej; pli rapide ol bone, more quickly than well; li kantas li plej bone en tiu, he sings the best of all.

WORDS.—Resti, to remain; kun, with; dang'ere, dangerous(ly); iri, to go; rapide, rapidly; fermi, to close; kolero, anger; kontraŭe, a contract; honesta, honest; agi, to act; mateno, morning; true, early; urbo, town.

Resti kun leono estas dang'ere. Iru rapide. Li fermis kolere la libron. Ni faris kontrakton ne skribe, sed parole. Honestaj homoj agas honeste. Matene true ni iris al la urbo.

Bonan nokton al ĉiuj!

AVOID

DISAPPOINTMENT

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