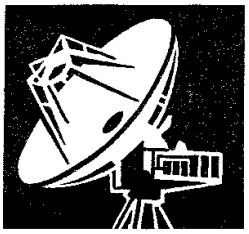
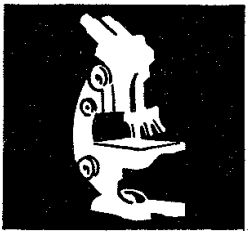


RESEARCH LAB REPORTER



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"RESEARCH LAB REPORTER"

When the idea of the "Research Lab Reporter" was discussed, and I don't remember who first proposed it, I felt very enthusiastic about it.

Not only is the physical separation of the Laboratories' activities tending to counteract the feeling of belonging to a single organisational unit within the overall Departmental structure, but the diversity of staff functions and responsibilities tends to develop separate groups of interest and artificial barriers between Clerical, Professional and Technical staff. Of course, as we grow, these will develop because of the sheer number of representatives in each group and will require certain hierarchical lines of communication.

All these factors tend to introduce a growing apart from each other, whereas we should feel that we belong to one large family that is the "Research Labs." as we seem to feel once a year at Christmas time and on the occasion of our Christmas gathering.

If we could all consider this little chatty publication as a means of expressing and perpetuating this family spirit throughout the year, I think it would serve the purpose it was intended to serve when the idea was conceived.

So come on, lets tell each other of our pleasant, funny, serious, important and unimportant experiences as they will happen in any family. Don't wait for your local "reporter" to find out when the time comes for him to pass on the bits of information for the next issue. He should have received these as and when things happened and/or were observed. Life does not happen in two-monthly intervals, but keeps on going all the time and so should our Reporter.

Since I am fortunate to introduce this first Christmas issue, I would like to close my chat by wishing you all a

MERRY CHRISTMAS

AND A HAPPY AND SUCCESSFUL

NEW YEAR

thUMbNaiL SkEtcheS

Dr. A.J. Seyler, Dipl.Ing., M.E.E., D.Appl.Sc., Assistant Director-General (Advanced Techniques).

Dr. Albert Seyler has been engaged in research since graduation from the Technical University, Munich, in 1938. Seconded from the Research Institute for Airborne Radio Communication and Navigational Aids for war time service with the German Air Force for special project work on radar and radar counter measures with the rank of Captain Engineer, Albert joined the Laboratories in 1948 as a temporary Divisional Engineer with what was to be later known as the Pulse Techniques Division. In 1963 Albert was promoted to Engineer Class 4, Lower Frequency Sub-Section, being appointed to his present position of Assistant Director-General, Advanced Techniques, in 1964. Albert is an active outside member of the faculty of Monash University and an honorary consultant in Electrical Engineering post-graduate studies at the University of Adelaide. It is worthy of note that both his Master of Electrical Engineering and more recent Doctorate of Applied Science (a rare honour) have been awarded on the basis of work performed in the Laboratories and published in a great number of papers in local and overseas journals, including Research Laboratory Reports. To maintain some sort of balance at home the Doctor's only son Peter is doing Civil Engineering at Melbourne University.

Tom Broughton, Administrative Officer.

A welcome from all staff is extended to Mr. Tom Broughton, the Laboratories newly appointed Administrative Officer. Tom who brings with him a wealth of experience from both within and outside the Service has eased himself into the new job gradually, circumstances to the moment requiring a sharing of his time between the Labs. and Treasury Place where he has been acting as Senior International Relations Officer. Since coming to the Department in 1951 Tom has demonstrated his ability in such areas

as Personnel, the Director-General's Staff, Organisation and Methods, and as Administrative Assistant to the F.A.D.G. Finance and General Services, plus a very interesting stint of four years as the Departmentally nominated private secretary to the former Postmaster-General, Sir Charles Davidson, which required transfer of home and family to Brisbane and much coursing by Tom himself around the more northern areas of the sugar-belt. With navigational and organisational skills developed as war-time captain of an R.A.A.F. Catalina flying boat operating over the full range of the Pacific from China Coast to California, Tom has helped put Australia and the Department on the map by his part in steering to successful conclusion two Melbourne based C.C.I.T.T. meetings, the one recently concluded being attended by 153 international delegates from 36 countries and 15 international undertakings.

Kaye Jones, Typist-in-Charge.

A charming and competent Typist-in-Charge, Kaye plays a big part in keeping the correspondence moving and in recording and disseminating the work of the Laboratories. Blessed with the in-built gift of kindly control Kaye runs an efficient and happy department in a field where everything that hits the basket is urgent. Graduating to the Laboratories in 1960 after service in the Public Service Inspector's Office Kaye finds the work most interesting because of its great variety. A keen squash and badminton player Kaye finds time to follow North Melbourne in the football season and on a recent holiday to Surfers Paradise discovered that the Richmond team (minus Kevin Curley) were booked in a hotel around the corner. For good measure Kaye is off again on the 20th January with Ann Dunn of the Costing Section on a Fairstar Cruise to Fiji, Noumea and Savu Savu. All join in wishing the girls a happy voyage.

Arthur Baddeley, B.Mech.E., B.E.E., A.M.I.E., Engineer Class 3, Design, Mechanical and Electrical Division.

At present building up a lot of Class 4 experience while his seniors Les Murfett and Eddie Sandbach are involved elsewhere,

Arthur worked in private industry designing presses, cranes and automotive equipment for twelve months after graduating from Melbourne University before joining the Laboratories (Laboratory Facilities Division) in January 1947. At this time the Facilities Division included engineering design among its activities. Since that time Arthur has been continuously employed in the Laboratories except for six months spent in Paris in 1961 on an A.S.T.E.F. Fellowship working in Le Materiel Telephonique and Establissements M. Portenseigne on studies relating to engineering design of electronic equipment, especially printed circuits. It is interesting to note that Arthur's technical knowledge and mastery of the French language, gained during this visit have since resulted in his being seconded as official technical translator to the two I.T.U. Conferences held in Melbourne. On the side, Arthur's interests lie in Photography (he is a Past President of the Photographic Society of Victoria), Automobiles (as a Peugeot addict), and Rowing. It must surprise many to learn that in his younger days, Arthur, rowing for Banks, won in two Victorian Lightweight Championship races, the Lightweight Eights of 1949 and the Lightweight Pairs of 1953.

Peter Ferris, Storeholder.

With a background of some 10 years with Mayne Nickless around the waterfront before the war followed by later experience with the Department of the Army and Stores and Contracts, Peter Ferris came to the Laboratories eight years ago to build the Store to what it is today. As Peter says, when he started the task looked so formidable that a friend gave him three months before he cracked but the invaluable assistance of such loyal helpers as Siang Tjio and others and close liaison with Ross Pitkethly in compiling the Indexes made the task much easier. With a present staff of four, Dennis Phillips, Storeman, Charlie Wardley, Assistant Storeman, Virginia Wells, Clerical Assistant and Neil Thomas, J.P.O. Peter's store carries over three thousand separate items and handles a vast volume of both inward delivery and outward despatch. Being hemmed in the store and bombarded with requisitions from some sixty to seventy customers a day holds no terrors for Peter after spending seven months in

Tobruk with the Ninth Division during the famous siege. As can well be imagined with materials being ordered on S.6, Contract, D.S.O's, 349's and even Petty Cash, with pro formas being raised for repeated acceptance testing against contract conditions, with outward freight through Stores Branch, by road transport, air freight, shipping and rail, the paper work involved is enormous. If Peter has a worry it is the fact that Mrs. Ferris, who like himself is a keen angler, is by measure, 84 inches of Trout in front at the moment, and as Mrs. Ferris keeps the log book, well nigh uncatchable. Peter's only solace is to tell tall fish stories to his ten grandchildren.

Dick Slade, Dip. Metallurgy, Principal Officer, Chemistry and Metallurgy.

It is a long cry from the time that young Dick Slade came as a Geelong boy to Melbourne High to complete his Leaving Certificate before starting work in 1939 as a junior laboratory assistant in the Ammunition Factory Footscray at £1.10.8d. per week. Although as Dick says it was probably the last time that he had £1.10.8 all to himself, what with the rising cost of living and the job of providing for a family including the education of a growing boy and girl. In charge of the Metallurgy and Chemistry Divisions with a comprehensive testing service available to both State and Central Office Sections, Dick is regarded amongst other things as the Laboratories' expert on mast failures, and numbers amongst his investigations the failures of such giants as the Townsville, Mount Gambier and Emerald (Queensland) aerials, all of five hundred feet or more. Articulate with an analytical turn of mind, Dick after rendering assistance on the Engineers' Case, acted as P.O.A. Advocate in the Scientists' Case before the Public Service Arbitrator, which resulted in Determination No. 76 of 1963 and its substantial gains for the scientist. With a recent extensive overseas visit under his belt to study brittle fracture of steel (remember the King Street Bridge) taking in England, Holland, Denmark, Sweden, Germany, Italy and India, for outside interest, with his boy Peter aged 12 a keen gymnast and his girl Kathie aged 10 involved in ballet and calisthenics, Dick has been President of the Parkdale State School Committee for the past eight years as well as a Vice President of

the Parkdale High School Committee. If Dick has a vice it is the tendency to follow a little ball around the Patterson River Golf Course a little too often.

Otto Lobert, B.E.E., Engineer Class 3, Microwave Techniques Division.

With his interest whetted as a vacation student working for Mr. L.M. Harris, then Sectional Engineer, Line Communications, on a measurement of the distributed constants of multiple coaxial lines, after graduating from Melbourne University in 1950 Otto joined the Laboratories, working for the first three and a half years in Radio Systems Division on the Laboratories' 900 MHz Radio Telephone System. After three years in the Propagation Division Otto was awarded a twelve months Public Service Board scholarship in 1956 for post-graduate study at the Imperial College London University, on propagation and microwave theory. This was followed by a study tour embracing government and industrial research laboratories in the United States, England, Holland, Germany and France, attending whilst in Paris international conferences on microwave techniques and tropospheric propagation. Upon his return Otto worked until mid 1961 under Dr. Ward, now Professor of Physics at the Townsville University, investigating geometrical aspects of satellite orbits. Promoted to Divisional Engineer, Radio Systems, Otto went to Microwave Techniques his present Division in mid 1963 at the time of the re-organisation of the Laboratories.

A family man with three children, two boys aged thirteen and seven, with a girl of eleven, Otto is a keen squash player, interested in religious activities and gardening.

Since 1963 Otto has been mainly engaged in the design and development of parametric amplifiers. Two jobs which stand out in his memory are his work on the aerials for the DC3 aircraft relaying television signals during the Queen's visit and the indoor TV aerial for mounting in the lofts of houses in Canberra where the edict was and still is "no outside aerials". Incidentally the solution was attained by increasing the field strength of transmission to suit ordinary indoor aerials.

MICROWAVES ? wise & otherwise

Gone Coon Department. Young Sylvia Hindmarsh of the typing pool is sporting a solitaire diamond ring in a Tiffany setting after announcing her engagement to Ian Drummond at a party at Sylvia's place on the 18th November, at which incidentally Mrs. Brandt and Carolynne Bird enjoyed themselves no end.

Terry Dillon the Labs. popular Procurement Officer also got around to making the big decision in favour of Jan Field on Friday, 25th November.

Congratulations and life long happiness to both couples.

Alan Gibbs, Pulse Systems Division, has been told that his Master's Degree will be conferred in his absence in March next year while he is overseas pursuing his scholarship at the University of Wisconsin.

Greg Martin, Multichannel Division, recently returned from the Antarctic, has itchy feet again. Greg has applied for L.W.O.P. to gain further experience in Canada - it seems also that his sights might be set on some of those big mountains over there.

John Hughes, Multichannel Division. Although a long way away Johnny can't seem to keep out of these pages. He has now travelled 1,200 miles around New Zealand (how many times around is that?) and is still keeping his mates informed of his whereabouts although the postcards seem to be getting cheaper.

Arthur Thies, Transmission Group, has just returned from annual leave. Arthur knocked off work to carry bricks and his new garage is quite a success. The only thing missing now is a car to go in it.

Fred Symons, Probability Division. Really had it made for quite a while. Fred received a back adjustment of salary of quite

a substantial sum and despite attempts to point out to certain people that he was overpaid, was assured that the payment was correct. Just as well he didn't spend it, for alas, a month later frantic telephone calls were being made to recover the sum in question.

Critical Paths. They say a certain goodlooking young Physicist is very touchy about a rather rigid PERT chart drawn up by senior officers for his convenience and/or discomfort.

Charlie Bates. The Laboratories' cheerfully ubiquitous and dependable Ferry Master had a close call recently escaping with cuts and bruises from an intersection collision with a fast driven vehicle which moved directly across his path on an evening job at Box Hill. Life is never dull for Charlie who will not soon forget the recent visit of Japanese Industrialists when the arrangements to split into three parties and circulate from building to building on foot were interrupted by torrential rain. On short notice Charlie was required to take over with his car and be in more than two places at once, with frequent traffic halts into the bargain.

Johnny Pill and Les Eden-Jones are both back on deck after hospitalisation. Johnny for tonsils and adenoids and Les for a broken leg. Both boys were very much missed during their absence.

Merl Cuzens, Senior Librarian, is back after a three weeks tour of capital cities with a Public Service Board team interviewing likely candidates for the positions of Librarian-in-Training. First time there has ever been a woman on the team - seems a sensible idea as most of those interviewed are female. Whilst looking for new staff Merl has lost one of her old. Dorothy Desjardins left the Labs. in November to return home to Queensland. Best luck for the future to Dot, it might be a long time before the Labs. get another girl with such a fascinating surname.

Roy Potter (Wimpy) is back after his extensive European jaunt heavy with experience albiet a little light in pocket. Roy and his wife in their Bedford van took in England, Scotland, Wales, Belgium, Germany, Switzerland, Austria, Italy, France, Norway,

Sweden, Denmark and Egypt. Camping on the roads and in out of way places, even three nights in an Italian cemetry, Roy is full of praise for the overall consideration and hospitality received from the authorities and people of the places visited. Come the opportunity Roy and his wife intend to repeat the performance.

Service Note. We are reminded that the role of J.P.O. should not be underestimated. There is a story that at a meeting of senior government officials and leaders of industry, when the Chairman said stand up all present who started their working lives as telegraph messengers, twenty-four of the twenty-five present, including a former Director-General stood up and the one left seated probably was left money by grandmother anyway. It is obvious that had the Chairman said stand up all of you who started as Cadet Engineers or Technicians-in-Training, or as Clerks or Library Officers they wouldn't have been hard to count.

Wedding Bells. Ron Zmood on 6th December - every happiness Ron!

Stork Club. Joined by Igor and Mrs. Hawryszkiewycz on 17th October. Proud Dad celebrated the occasion by dispensing beaming hospitality at the Elms (after hours of course). As a footnote to this par we have noticed Dad's happy smile fade a little in the last few weeks. Seems Dianne Helen has discovered what fun it is to receive attention in the wee small hours of the morning.

Get Well Department. Arthur Watson of the Microwave Division, who came from Scotland early this year, has settled in well but unfortunately his wife has been in poor health since their arrival. We wish her a speedy recovery and out of hospital for Christmas.

Married Women are now eligible for permanent appointment to the Service. This should help in some measure to relieve the staff shortage and prevent injustice but the time must surely come when H and W apply for the same job. Can you see the W's appeal, "Superior efficiency and just like his damned cheek anyway".

Street Lighting. Recently it looked as if Albert Seyler had sacked his secretary over the week-end because on the Monday there was a new girl sitting in Mary Street's chair. On closer examination it was discovered that she talked like Mary but that was all. The long hair had gone and what was left wasn't black anymore but blonde or something. We took a lot of convincing but had to agree in the end that it was Mary and now that we are used to the change we rather like it. Anyway it didn't really make any difference because whatever way you look at her, Mary's nice and efficient.

P.S. They tell us Albert has now recovered from the Shock.

P.P.S. Albert had to re-recover from the shock because the lights changed again a week later (Ed.).

Pentathlon. Boyd Rayment of Taubmans was forced to wear shoes on the 7th November. The occasion? Boyd was official armourer for the fencing section of the World Pentathlon Championships at the Moorabbin Town Hall. The weapons, epées (swords to us). These have a button on the end which when depressed (as for a hit) complete a circuit by means of two wires down the blade and a spring loaded lead for each fencer. A light then registers on a board to give accurate judging of the hits scored. Apparently the simple sword electronics were too difficult for a large number of competitors as about 65% of the weapons required attention, keeping Boyd busy for 13½ hours. The Australians' epées were the worst as they had only one good weapon from a selection of about 20.

Greek. Mrs. Vyner, Taubmans industrious typist who is learning modern Greek declares that there is so much similarity between English and Greek that her Australian is improving no end - true Dinks! Let's hope she finds the Greek useful on her forthcoming holiday to French Noumea. Incidentally if the serious discussions they have on literature mean anything it looks as though Gavan Rosman could be getting the language bug too.

Preparing for the Future. At the Seminar on the Development of a Telephone Network run in conjunction with the recent I.T.U. Conference in Melbourne, Mr. Brett, S.A.D.G. Research, delivered an enlightened and forward looking paper entitled

"Preparing for the Future". This included a description of a probable nationwide installation of computer linked data input devices which on the domestic side will enable housewives to place orders by telephone with her local supermarket, whereon the order being received, her credit will be automatically checked, the order fed into a machine which in turn will feed the required articles on to a conveyor, parcel up the goods and make the necessary debit in the housewife's account. Reading the newspaper account of the paper in the Eltham train next morning a commuter was heard to mutter "Not out our way she won't - she'll stand in the queue like everybody else".

Buildings. The Model Shop and Material Store have lately acquired what appears to be the ultimate in floors - a sawdust and acrylic matrix very easy on the feet and if weatherproof, maybe suitable for tennis courts and Do-it-Yourselfer's patios. The new ventilation system at Cheneys is nearing completion. An accepted version is that it will replace the hot dust-free inside air with hotter dust-laden outside air. Coupled with the fact that the latest move was to pump some hundreds of cubic feet of free insulwool into the ceiling space above the top floor between the ducts, the impending cut-over is awaited with some expectancy.

Golf. Saturday, 29th October, was again a first for the golf enthusiasts. 35 players enjoyed a pleasant day at Rosanna Golf Links. After a nervous beginning the players quickly settled down and produced some sparkling golf. Following are the winners of the respective groups:

Group "A" - Garth Jacoby
Group "B" - Frank Arter
Group "C" - Russell Anderson.

It is suggested to fathers who have young sons and live in the Rosanna area, that there is a very profitable business - finding lost balls and selling them (in many cases owners buy back their own balls). Business was so good on the 29th that the local Golf Link lads have indicated that they would like to be informed when the Lab. boys have a return visit, so they can put on more staff.

[redacted]

Computer Controlled Exchange. A working demonstration was held on the 21st November last for the S.A.D.G. and the three A.D.G's Research, of a computer controlled telephone exchange comprising six telephones and a crossbar switch, controlled by the 160A computer. The model, put together by Eddie Durand and his technical staff, Ossie Lambert, Trevor Long and Noel Wolstencroft of the Electronic Switching Division, is for the purpose of gaining experience in programming the computer and developing the electronic hardware necessary for this type of computer application.

In actual practice a computer of this nature could control many thousands of subscribers lines and such exchanges are already in service overseas.

An interesting facet of the project is that the relays become completely subservient to the computer, losing all of their logic functions and performing only simple tasks such as applying ring tone to a calling line or making final speaking connections, etc.

Possibilities of such exchanges being used in the Australian Network are the subject of current investigation.

Corrosion. Some questioning glances were cast in the direction of Ken Mottram and Ken Keir while they closely examined the public telephone cabinet at the corner of Collins and Spring Streets. The two Kens were studying the corrosion of the aluminium in the cabinet which has only been installed for a few years. They presented an unusual sight going over the cabinet with magnifying glass, steel wool and a magnet. The magnet was used to check on steel screws which could contribute to the corrosion. A cabinet in poorer condition has been recovered from the Esplanade at St Kilda and early indications are that the anodising of the aluminium has not been carried out properly.

Examination of some broken pneumatic jack-hammer bits has shown signs of fatigue failure. Bob Cornish, the Division's Technical Assistant is carrying out tests on new bits from the same suppliers to establish the cause. It appears poor heat treatment of the metal is to blame. An engineer can produce a good design and specify the material correctly and failure can still occur in a perfect looking job if the heat treatment is not carried out correctly.

Monitoring Receiver for T.V. Stations. Mr. Graeme Johnson an Engineer from Queensland is at the Laboratories (Radio Equipment) on temporary transfer to redesign for plant use a receiver for TV monitoring that he developed while at Queensland University. TV receivers of conventional function are not the best for monitoring purposes. Mr. Johnson's receiver operates rather differently and overcomes many of the deficiencies of the more conventional receiver and will therefore be of more value as a monitor.

YOUR MOVE

Departures.

The staff of the Model Shop has been further depleted by the loss of one of its oldest (in service) members; Bert Bladier to the Mechanical and Electrical Division (State) where, although the position has not yet been created, prospects of advancement look brighter. Bert will be performing the same type of work as in the Model Shop. Good luck Bert, A/g. Technical Officer, Grade 1.

Radio Equipment Division recently saw the loss of two members from the Service. Vic Rogers, Engineer Class 2, returning to his English home ground and Harry Ellis the Technical Assistant, Grade 2, of the beard, who decided to try his luck in the electronics field in New Zealand.

Jan Crook and Jeanette Villella resigned from Taubmans within a month of each other, Jan for a High School secretarial job nearer home while Jeanette intends to get married. Also from Taubmans went Doug Dent to try computer engineering with Data Control, with Danny Payne also being lost to outside industry.

Congratulations to John Kelly, Noel Wolstencroft, Alan Mitchell and Dick Francis on promotion to Technical Assistant, Grade 2, Transmission Group, and Trevor Long to the same in Electrical Standards. Also to Bryan McMahon on leading the field for the Divisional Engineer job with Semiconductor Division and Johnny Erwin to Technical Officer, Grade 1, Electrical Standards.

Welcome to Greg Crew on promotion from Telephone Exchange Equipment to Engineer Class 3, Crossbar Development. A Tasmanian by origin and education Greg has lately been acting Class 3 in the Planning Branch.

Also to Kevin Monagle, Technical Assistant, Grade 1, Jim Mano, Clerical Assistant, Grade 1 and John Oostemeyer, Clerk, all who have entered by way of Cheneys and to Dayal Abeyasekere who is assisting Otto Lobert in Microwave Techniques, working on optical communication by Lasers. Dayal (Dye-Arl) fresh from Melbourne University and who hopes to be awarded his M.Sc. next March is keen on both chess and photography and is looking for enthusiastic shutterbugs in the hope of holding a Research Labs. photographic exhibition.

Laury Melton, B.Sc., Information Group.

After graduating in Physics at Imperial College London University, Laury Melton did a two year graduate apprenticeship with Associated Electrical Industries in England before deciding

in 1960 that he would like to see how the other half of the world lived and worked. He has been in the Research Laboratories' Information Group ever since, first as Physicist, Grade 1, and now as an Engineer Class 2. In this latter capacity he has just returned after 14 months on a Public Service Board Scholarship to study Information Science at the City University, London, and to investigate methods of handling technical information in England, Germany, Holland, Belgium and U.S.A. It was found that many organisations are beginning to use computers in library and information work and that some of the techniques may be applicable in the Research Laboratories. However, the day when every scientist and engineer has a typewriter keyboard and TV screen on his desk, with direct access to the world's store of information, is still some way off. Laury and his family enjoyed their stay in England, particularly for the opportunity it gave the children to meet their grandparents, but they are all very pleased to be back in their own home out at Mooroolbark again.

Bits and fancy

Important Announcement

A prize of one erg and three free goes on the Ringing Regenerator is offered for the funniest story with a Research or at least Service, flavour. It is hoped to get Kevin Curley to judge the entries and as you know Kevin hasn't raised a smile since Richmond missed out on the finals.

Don Waters, Chemist Class 2 of Watkins tells the story of the late Walter McClinty, when the absentminded Walter bought a tin of paint at lunch time but on the way back to work the lid worked loose and paint splashed onto Walter's suit. A little afraid of his newly acquired wife, Walter removed his trousers and in white dust coat with bright suspenders flashing

wandered over to the Dry Cleaners to have the trousers cleaned. When he returned he discovered paint marks on his suit coat also but Don Waters speedily mixed up a brew which removed the paint instanter. Seeing this Walter hurried back to the Dry Cleaners in white dust coat and suspenders, retrieved his still uncleaned trousers and took them back to Watkins for Don's gratuitous treatment.

Ivan Smith's (Transmission Group) best story is about the United States Ex-Serviceman, who after applying for a job at the Pentagon and getting no reply, worried his local Senator into getting him quite an important but temporary job in the Service pending a decision on his written application. A few weeks after starting work the man received a letter at his home address advising that his application had been received but as he did not appear to be suitable for the position his application was refused. Glancing at the foot of the letter he found to his horror that it was signed by himself.