

The Invisible Light

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Editorial

Firstly, my I open this issue of 'The Invisible Light' with many congratulations to the Society and College of Radiographers on its 90th birthday and wish very many happy returns. The SCoR has a deep interest in history and I thank them for their long standing support of the BSHR.

I had a holiday this year in Norfolk which is one of my favourite parts of England. I visited the Air Defence Radar Museum located north of Norwich and was rather upset that my son, who is a physics undergraduate, did not find the displays as interesting as I did! The story of radar is one of physics in action and has links with both Godfrey Hounsfield and Ian Donald. My son was more interested in the local second-hand bookshops where I found a couple of items of radiological interest. The first was 'Selected Writings of Sir Arthur Hurst (1879-1944)' published by the British Society of Gastroenterology in 1969. In 1906 when visiting the USA Hurst met the pioneer Walter Cannon who was using radiography to investigate the movements of the alimentary tract. When Hurst returned to London he persuaded the authorities at Guy's Hospital to let him use their newly installed X-ray apparatus to study gastrointestinal motility using the bismuth meal (bismuth was used before barium). This was very early in the use of radiology in gastroenterology and is a landmark in the emergence of gastroenterology from general medicine as a separate scientific discipline. The second book was by the BIR past-President Sir Oliver Lodge and was entitled 'Why I believe in Personal Immortality' (Cassell, London 1927). Lodge was Professor of Physics and Principal of the University of Birmingham and did good early work on X-rays. He was a firm believer in the ether as a physical reality. Sadly after the Great War of 1914-1918 Lodge became as much interested in psychical as in physical research and published widely in this field. There were so very many young men killed

in the Great War and many parents tried to contact their dead children by using a psychic medium. Lodge became convinced of the truth of communication with the dead and wrote many books on the subject. The book I bought is dedicated by Oliver Lodge to Benjamin Davis and dated 11th June 1928. I presume that Benjamin Davis is no relation of the new BIR President Stephen Davis and I have no idea what Stephen's views on personal immortality are.

I am sorry to report the death of Dr John Cole from Birmingham. I met John on many occasions and he was a frequent visitor to the BSHR stand when we were in Birmingham. John had a great knowledge of the history of radiology in Birmingham and of Dr John Hall-Edwards in particular. I remember many conversations about Hall-Edwards which stimulated my own interest in Hall-Edwards. John Cole was a radiologist at Dudley Road Hospital Birmingham and was also interested in James Brailsford. I wrote to his son and expressed our condolences.

I would also like to introduce to you a new idea is being developed and it is called ISHRAD! A group of us including Uwe Busch, Alfredo Buzzi, Arpan Banerjee, myself and some others are developing a plan to found a new 'International Society for the History of Radiology and Radiological Technology' or 'ISHRAD.' This society will be based at the Roentgen birthplace at Remscheid/Lennep. We would like to have a constitutive assembly at the ECR 2011 in Vienna. We have written draft statutes according to German law. Alfredo Buzzi has reserved the web-domain www.ishrad.org which will be our main communication tool. The idea is to collect historic articles, organise periodically 'History of Radiology' meetings and to prepare and to offer scientific exhibitions to ECR/ICR/ISRRT &c. We are starting with a project of 'Roentgen as a Photographer.' If you are interested in joining please contact me.

Can I also remind everyone of the 24th Congress of the British Society of History of Medicine to be held Guildford at the University of Surrey from Wednesday 31st August to Saturday 3rd September 2011? The Congress President is Sue Weir and I am sure it will be a good event. The congress is in association with the Faculty of the History and Philosophy of Medicine and Pharmacy of the Society of Apothecaries. Do consider submitting a paper with a radiological theme. I do not want to be the only one talking about radiology!

Please submit articles and reviews.
Best wishes
Adrian

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The British Society for the History of Radiology

ANNUAL FREE LECTURE: OPEN TO ALL

at

THE BRITISH INSTITUTE OF RADIOLOGY
36, PORTLAND PLACE
LONDON W1N 4AT

MONDAY 21st. FEBRUARY 2011 at 7:00pm

Lecture: "The History of the use of X-Rays at the National
Gallery"

Joseph Padfield BA(Hons) MA, Conservation Scientist at the National Gallery

Light refreshments are available from 5:30pm.

FREE! ADMISSION BY TICKET ONLY, OBTAINABLE FROM:

Dr. Arpan K. Banerjee
Consultant Radiologist
Dept. of Radiology
Birmingham Heartlands Hospital
Birmingham B9 5SS

or by email

arpan.banerjee@heartofengland.nhs.uk

PLEASE APPLY NO LATER THAN 14th FEBRUARY 2011

THERE IS TO BE A RETIRING COLLECTION FOR BSHR FUNDS

Joseph Padfield, Gained a BSc(Hons) Chemistry (1995) from Edinburgh University and a MA in Conservation of Fine Art from the University of Northumbria at Newcastle in 1998, followed by a two year post graduate internship at the Hamilton Kerr Institute: Cambridge University, where he carried out practical conservation and analytical analysis. He joined the scientific department of the National Gallery (London), as the HP Research Fellow in 2000, where he worked to improve applications for digital imaging and general computing in the fields of conservation and conservation science. In 2006 he became a permanent member of the National Gallery Scientific Department conducting research into digital imaging, preventive conservation and the digital dissemination of conservation related data.

**A CELEBRATION TO MARK THE SCoR's SUPPORT OF THE BIR'S LIBRARY
6 OCTOBER 2010**

The Society and College of Radiographers has for some years provided financial support to the library of the British Institute of Radiology which is the UK's most comprehensive repository for journals, books and archived material on the subject of radiology and related sciences. The Society and College of Radiographer's library has been housed at the BIR since 1995. The SCoR's support was marked by the unveiling of a plaque in the BIR's library during this, the SCoR's 90th anniversary year.



The DIEN van DIJK AWARD of the ISSRT

At the ISSRT (International Society for Radiographers and Radiological Technicians) World Congress in Australia on September 8th 2010, the Dien van Dijk award was made to Miss Marion Frank OBE.

This award is in honour of the contributions of Dien van Dijk, one of the founders of the ISSRT and who in 1962 became the first President.

The objectives of which she upheld were to assist the education of radiographers and to support the development of medical radiation technology worldwide.

This award, dedicated to her memory, is to honour members of the ISSRT who have shown exceptional service and commitment to the ideals so powerfully demonstrated by Dien van Dijk

The criteria for nomination are:

- Exceptional service to the radiographic community
- Past or present holder of a recognised position in the ISSRT
- Recognised activities which reflect the founding principles of the ISSRT: Assistance in the education of radiographers.
- Assistance in the development of the profession of radiography in several countries.

Marion Frank OBE more than fills every criterion.

As Marion was unable to be present in Australia, the award was presented to her by Dr Adrian Thomas at her home on Friday 29th October 2010. Marion was delighted.

Jean Barrett

The Joint BIR AND SCoR RETIRED MEMBERS' DAY, FRIDAY 10TH OCTOBER 2010

The first combined member's day was held at the British Institute for Radiology in Portland Place, London.

The morning session was introduced by Dr Adrian Thomas, the Honorary Librarian and Archivist at the BIR, who welcomed BIR members and those from the Society of Radiographers.

Dr Viktor Serafimov gave thought provoking talk entitled "Are we taking too many X-rays" highlighting the importance of assessing the use of any tests unless they contributed positively to the patient management.

This was followed by Dr John Ward highlighting the interesting life of John Arbuthnot (1667-1735) and who was physician Extraordinary to Queen Anne.

The last talk before lunch was by Ms Jacqueline Fowler on the Radiology History Stories project to be undertaken by the BIR. Hopefully this will commence towards the end of next year.

During lunch several radiographer members who had not been in the building before were able to visit the BIR Library.

After lunch Mrs Jean Barrett, a member of the Retired Members Group at the Society of Radiographers, introduced the afternoon session.

Mr John Townley provided us with an insight into the life of Dr John Hall-Edwards, who in 1896 shortly after Roentgen had radiographed his wife's hand, produced a radiograph of a patient's hand to locate a needle.

Dr Adrian Thomas related the History of the BIR with mention of many well known persons from the past.

Dr Thomas brought the day to a close thanking all for their attendance.

JM Barrett, November 2010

Films: recent and classic.

The Heroes of Telemark (Benton Films Ltd. 1965)

The Heroes of Telemark came out in 1965 and was set in the German-occupied Norway in 1942. Kirk Douglas plays the all action figure of Dr Pederson, a physics professor with Richard Harris playing the underground leader Straud. Dr Pederson has to convince the British Intelligence that the Nazis are planning to build an A-bomb. The Norwegian Hydro plant at Telemark is therefore crucial to the enemy strategy to make heavy water and so a task force is sent to destroy it. Dr Pederson is not your typical physics professor at all!

There is information on Telemark at:

<http://www.hydro.com/en/About-Hydro/Our-history/1929---1945/1943-The-Heroes-of-Telemark/>

The Allied forces had determined that the Germans must be stopped from developing an atomic reactor and the nuclear bomb. The barrels of heavy water that came from Telemark were sent to Germany, where they were used to control nuclear fission.

The heavy water cargo was closely guarded at all times, however the boat that was to transport the shipment stood unwatched on the night before. The explosion was to take place when it would be easiest to rescue passengers. Fifty years later, to the day, on Sunday 20th February 1994, the county governor of Telemark unveiled a memorial in honour of the victims, close to the place the "Hydro" sank.

Blonde Venus (1932)

Director: Josef von Sternberg

Writers: Jules Furthman & S.K. Lauren.

Released: 16th September 1932 (USA)

In the story the American chemist Ned Faraday (Herbert Marshall) marries a German entertainer Helen (Marlene Dietrich). Sadly, he is poisoned with Radium (this was a hot topic at the time) and needs to receive expensive treatment in Germany in order to have any chance of a cure. His wife Helen returns to her night club work in order to raise the money needed and becomes popular as the 'Blonde Venus' of the film's title. In an effort to get enough money sooner, she prostitutes herself to millionaire Nick Townsend (Cary Grant). While Ned is away in Europe, she continues her relationship with Nick but when Ned returns from Europe cured, he discovers her infidelity.

Poisoning with ingested radium was topical in the 1930s. Eben McBurney Byers (April 12th 1880 – March 31st 1932) was a wealthy American socialite, athlete, and industrialist. Byers died from radiation poisoning after consuming a popular patent medicine made from radium which was dissolved in water. Radium cures, which reached their peak of popularity in the USA during the 1920's, promised to cure various diseases, restore youthful vigour, and revitalize a failing libido.

Treatment of radium poisoning was and still is difficult and it is not obvious what treatment Ned Faraday received in Germany. In the radiological literature of the 1920s and 1930s there is discussion on the treatment of radium poisoning however I cannot imagine that any of it was particularly effective. Knowledge of the effects of radiation on the body was still limited and it was believed that a period of rest following occupational exposure was beneficial following which the subject could return to work.

This film is recommended. Any film with Cary Grant and Marlene Dietrich must be good!

"Einstein and Eddington (DVD) (2008)"

David Tennant (Actor), Richard McCabe (Actor), Philip Martin

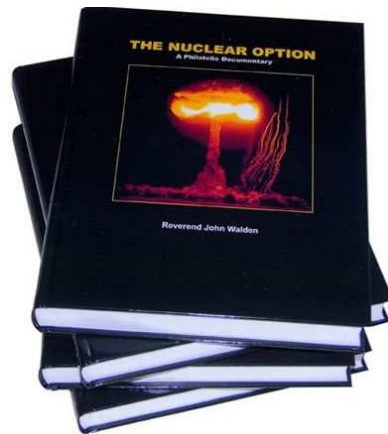
This is a remarkable film and warmly recommended. It is the story of Albert Einstein's theory of relativity and his relationship with the British scientist Sir Arthur Stanley Eddington, and the introduction of this theory to the world. Arthur Eddington realised that Einstein's theories could introduce new ways of thinking about space and time. An eclipse in Africa provided an opportunity for Eddington to prove Einstein's theories.

My copy cost £6.97 with free delivery from Amazon Prime.

Recent Books and Articles.

The Nuclear Option: A Philatelic Document

This beautifully produced book is written by the Reverend John Walden and deals with the discovery, development, tactical use, devastation and aftermath of the use of 'The Nuclear Option.' It has 560 pages, and is a full colour hardback of 23 chapters with 1,800 illustrations and weighs 2.1 kilos! There is an excellent accompanying CD which may be purchased. The book is beautifully illustrated and is recommended for all radiological philatelists. There are a very large number of stamps with a radiological or atomic theme.



The Reverend John Walden MA, F.Inst SMM(Rt), APS is a British Combined Forces nuclear test veteran and he participated in the 1957 'Antler' series of nuclear tests in Maralinga, Australia. He is a retired Church of England Pastor and now lives in Norwich. He has been a philatelist for over 60 years, and is the current President of the Norfolk & Norwich Philatelic Society.

You can order the book by writing to book@atomicstamps.eu and if you mention my name he may give me a commission! The web address is: www.atomicstamps.eu

Radium Girls: Women and Industrial Health Reform, 1910-1935 (Paperback)

The University of North Carolina Press (30 Jun 1997)
ISBN-10: 0807846406
ISBN-13: 978-0807846407

The book is written by Claudia Clark, a historian from Central Michigan University. The books deal with the women workers who fell victim to radium poisoning in the early 20th century due to working with Radium paint. Many of the women worked at the Radium Dial Company in Ottawa, Illinois and they

eventually suffered death from radium poisoning. The women were employed to paint the dials of watches with self-illuminating paint containing Radium. This book gives an account of their struggle to have their condition recognised as an industrial disease and is an important chapter in the history of modern health and industrial policy. Claudia Clark writes that part of what made dial-painting such an attractive job was working with a sensational product, a glow-in-the-dark paint. The women were assured that the radium based paint was completely safe and even digestible. Therefore the young women painted their dress buttons, fingernails, eyelids and even their teeth for fun. When they went home from work, they thrilled their families and friends with glowing clothes, fingers and hair. The book explains that the greatest exposure to radium was in the mouth and jaw area of these women. The workers mixed the luminous paint powder with paste and thinner and then drew their brush to a point with their lips before dipping it in the paint.

The book is again recommended and resonates with the film *Blond Venus*.

The Transparent Body: A Cultural Analysis of Medical Imaging (In Vivo: the Cultural Mediations of Biomedical Science) by Jose van Dijck (Paperback - April 2005)

Publisher: University of Washington Press (April 2005)

Language English

ISBN-10: 0295984902

ISBN-13: 978-0295984902

This book is interesting and looks mainly at the cultural implications of medical imaging. I find the interface between medical imaging and popular culture very fruitful.

From the Amazon review: "From the potent properties of X rays evoked in Thomas Mann's "Magic Mountain" to the miniaturized surgical team of the classic science fiction film "Fantastic Voyage", the possibility of peering into the inner reaches of the body has engaged the twentieth-century popular and scientific imagination."

"The Transparent Body" considers the dissemination of medical images into popular culture. The interior of the body has become a pervasive and common cultural presence. Jose van Dijck explores the interactions between medical images and our cultural ideologies and again this book is recommended.

A History of Neuro-Oncology

Rolando F. Del Maestro. Montreal: DW Medical Consulting Inc. 2006 \$20.00.
ISBN: 0771706359

This book started from an exhibition prepared by Dr. Del Maestro in collaboration with the Osler Library in Montreal to coincide with the 2006 Canadian Congress of Neurosciences and the book is the catalogue from the exhibition. The book is lavishly illustrated from the author's collection and is supplemented by material from the Osler Library. There are chapters on

anatomy, neuro-surgery, medical imaging and therapy. The chapters are illustrated using classic papers.

Copies of this book can be found at <http://www.mcgill.ca/osler-library/about/introduction/sales>

"Practical Mystic: Religion, Science, and A. S. Eddington"

M Stanley; Hardcover; £24.70

Hardcover: 320 pages

Publisher: Chicago University Press; illustrated edition (16 Oct 2007)

Language English

ISBN-10: 0226770974

ISBN-13: 978-0226770970

This is an interesting biography of Arthur Stanley Eddington the Cambridge astronomer. Science and religion have long been thought incompatible and this is emphasised in the recent book 'The Grand Design' by Stephen Hawking. Science and religion was an interest of Silvanus P Thompson the Quaker physicist and first president of what became the British Institute of Radiology. The apparent contradiction between science and religion was fully resolved than in the life and work of Arthur Stanley Eddington (1882-1944) who was both a pioneer in astrophysics, in the theory of relativity, in the popularization of science, and who was also a devout Quaker. In 'Practical Mystic' it is shown how both religious and scientific values can interact and overlap without compromising the integrity of either.

"Science Isn't Everything: Memoirs of a Scientist"

Lloyd Kemp £12.99

Softcover: 402 pages

Publisher: Aspect Designs (2009)

Language English

ISBN 978-1-905795-51-2

Lloyd Kemp was born in 1914 and studied Physics at King's College in London and joined the Medical Physics Department at the Royal London Hospital becoming head of the department in 1946. He moved to the National Physical Laboratory and was for his work was awarded the Röntgen Prize of the British Institute of Radiology and the OBE.

Sadly his wife Mary suffered a stroke in 1968 which had profound effects on their life together. In Mary died in 1988 .

Whilst this book is about his life in medical physics, it is also trying to describe the growth of his concerns with broader and deeper aspects of life including the spiritual basis of life. Lloyd Kemp will find himself in conflict with many scientists 'some of whom hold a near evangelical belief that science IS everything!' however his story is worth reading. Life is not easy and this book is an inspiring account of a one human's life and is worth reading.

Team Twenty Ten: A Global Problem One Solution: A Team (Paperback)

George Korankye

Paperback: 290 pages

Publisher: McTaggart Publishing (15 Oct 2010)

Language English

ISBN-10: 1453804412

ISBN-13: 978-1453804414

This is the third book by George Korankye who is a radiographer in Scotland. He is attempting to convince the publishing world to accept education fiction abbreviated to edufiction/edufic as a genre. An edufictional novel is intended to educate the reader in a particular field, and may also seek to promote awareness about its chosen topics. Although the narrative can be fictitious, all references must be verifiable. Whilst this may sound a recipe for a dry read this is not the case for 'Team Twenty Ten' which is a good read. I had my copy from Amazon (where else!).

Philips Healthcare has bought some for promotion use. And there are a few left embossed with "courtesy Philips..." on Amazon .co.uk priced it £2.50. The proceeds will be going to charity. George is trying hard to raise the profile of radiographers and he cannot do so alone. Once again a TEAM effort is needed!

Articles and papers:

Radiographics: Scenes from the Past: Oestreich, Alan E. **"Skeeter": Harlem Renaissance Author's Description of a Young Man's Impression of a Radiology Examination Room.** September 2010 RadioGraphics, 30, 1411-1414.

The short story "Skeeter" by Dr Rudolph Fisher is an impression of how very threatening a radiology department could appear to a patient. The story has been only recently published and it provides both an insight into the radiology of the Great Depression years and a view of the machinery of science impacting with common humanity.

Rudolph Fisher, MD (1897–1934) was one of the leading authors of the Harlem Renaissance and wrote and published short stories and novels. He was a radiologist in New York City and in addition had a private practice in Harlem and Long Island.

Bonmatí J: **Spanish Radiology in the second half of the XX Century: a view from inside.** Eur J Radiol; 2008 Sep;67(3):378-83

An interesting account of modern radiological history in Spain.

Huda W, Nickoloff EL, Boone JM: **Overview of patient dosimetry in diagnostic radiology in the USA for the past 50 years.** Med Phys; 2008 Dec;35(12):5713-28

A good overview of an important subject.

Museums

Air Defence Radar Museum www.radarmuseum.co.uk

I had heard about this museum when I visited Norfolk previously and I finally made a visit. The museum is located north of Norwich and is located at RAF Neatishead, near Horning, Norfolk NR12 8YB. Part of my interest in radar was because Sir Godfrey Hounsfield, the inventor of CT scanning, worked with radar when he was in the RAF in WW2. I also gather that Ian Donald, the ultrasound pioneer, became interested in radar when he was in the Medical Branch of the RAF (1942-1946). The RAF established a radar unit at Neatishead in 1941. The unit was in action in WW2 and also during the Cold War. There is a good exhibition of radar from the 1940s and on the series of Chain Home (CH) radar stations built along the coast that were to have such a crucial role in the summer of 1940. The radar system was first called RDF (Radio Direction Finding) and was replaced by the American term Radio Detection And Ranging in 1942. The demonstrations were well done and there was a very large amount of apparatus in the museum. It was interesting to see the types of equipment that would have been familiar to the young Godfrey Hounsfield.

Also of interest to those researching radiation history are the displays relating to the Cold War when nuclear war seemed imminent. The Cold War operations room is preserved intact. There is a reconstruction of a Royal Observer Corps Nuclear Reporting Post. There were 800 of these underground bunkers scattered across the country with the task of relaying initial information of a nuclear attack. The Royal Observer Corps stood down in 1991. Close to the reconstructed Nuclear Reporting Post there is a small exhibition of radiation monitoring equipment and personal dosimeters that were to be used in the event of a nuclear attack.

Do visit the museum if you are in the vicinity. It is well worth a visit. The Radar regimental badge is on the front cover.

Interesting Web Sites

Cook Group <http://www.cookgroup.com/history/index.html>

This site tells the story of Cook Group Incorporated which began in 1963 with the founding of its flagship company, Cook Incorporated. Using the spare bedroom of Bill and Gayle Cook's apartment in Bloomington, Indiana, as its first "factory" to build wire guides, needles and catheters, the business grew very quickly. There are articles about Bill Cook, Sven-Ivar Seldinger, Charles Dotter and Cesare Gianturco. I heard Bill Cook speak some years ago when he gave his audience a fascinating account of his early years.

Ian Donald <http://www.ob-ultrasound.net/iandonaldbio.html>

A web page about Ian Donald who was born in Scotland in 1910, 100 years ago this year.

A short History of the development of Ultrasound in Obstetrics and Gynaecology <http://www.ob-ultrasound.net/history1.html>

A great site developed by Dr. Joseph Woo. Well worth a visit.

Lord Kelvin at the Hunterian Museum in Glasgow

<http://www.hunterian.gla.ac.uk/collections/museum/scientific/index.shtml>

There is a permanent display based around the life and work of Lord Kelvin, who was Glasgow's greatest scientist. An exciting mix of hands on activities, original scientific instruments, demonstrations and computer-generated images bring this new display to life. Visitors have the chance to investigate how solving problems in physics 150 years ago led to practical inventions which have transformed all of our lives today.

Radiology in movies.

http://www.radswiki.net/main/index.php?title=Radiology_in_movies

A nice website although not particularly complete.

X-Ray-Lamp

www.xraylamp.webd.pl

A great site developed by Grzegorz Jezierski from the Department of Applications of Chemistry and Mechanics at Opole University of Technology in Opole, Poland. In Polish.

Who was Peter Kerley?

By Adrian Thomas

Thillai Sekar, a Medical Student at UMDNJ New Jersey Medical School wrote to me saying that he is a medical student in the United States of America and was writing an article about Sir Peter Kerley (1900 - 1979) who was an eminent Irish radiologist who was responsible for the naming of the Kerley B lines. My reply to him was as follows:

Sir Peter Kerley, Consulting Radiologist to the Westminster Hospital, died on March 15, 1979. Peter James Kerley was born on October 27, 1900 at Dundalk in Ireland (which was then part of the UK). He studied medicine at University College, Dublin, where he qualified from in 1923 and obtained the MD in 1932. He took further studies Vienna, and took the DMRE (this was the first UK radiology qualification) in 1925. He was outstanding in his chosen speciality and became one of the most eminent radiologists in the world. Peter Kerley was Physician to the X-ray Department of Westminster Hospital and Radiologist to the Royal Chest Hospital. His obituary appeared in the BJR (BJR,

52, 619). "PK" was one of the world's leading cardiothoracic radiologists and made many contributions other than his well known "B" line.

Today he is remembered for his "B" lines. The name of Peter Kerley is synonymous with the discipline thoracic radiology. All young doctors learn the significance of the "Kerley lines" on a chest radiograph of a patient in heart failure. He published many papers in the British Journal of Radiology. Peter Kerley as Assistant Radiologist to the Westminster Hospital and Radiologist to the Royal Chest Hospital in London, UK gave a masterly account of the pathology of early pulmonary tuberculosis as revealed by X-rays (BJR, 3, 404-417) that is worth reading today.

One of the most significant events of the 1930s was the publication of "British Authors" which was the highly influential multi-author textbook covering all aspects of medical imaging. Diagnostic radiology can be seen to have come of age by the end of the 1930s and this book celebrated the knowledge that had been obtained in the previous 40 years. Radiology was progressing rapidly in the 1930s. The editors of the books were EW Twining, C Cochrane Shanks and Peter Kerley and the first edition of "A Text-Book of X-ray Diagnosis by British Authors" was first published in 1938 and was reviewed in the Journal (BJR 11, 702-704). The books were expensive and volume 1 alone cost 50 shillings (£2.50). The exceedingly high standard set by the first edition of "British Authors" was quite outstanding and no other country produced anything that could compare to the work, either in printing or in the excellent illustrations. The books were required reading for generations of radiologists studying for the Diploma (DMRD) and Fellowship (FRCR) examinations. The books were also a reference source in radiology departments. Bill Park wrote that "During the lifetime of this book, the role of the radiologist has advanced from a type of 'aircraft spotter' to that of an established clinical diagnostician. We should gratefully recognize the contribution of this book and particularly its editors, Dr. Cochrane Shanks and Sir Peter Kerley for such a fundamental change in attitudes." The final edition of the book "A Textbook of X-ray Diagnosis" was the 4th edition (edited by S. Cochrane Shanks and Peter Kerley) published by H. K. Lewis & Co. (London) and volume 6 appeared in 1974.

In the BJR of March 1932 Peter Kerley discusses congenital lung diseases (BJR, 5, 234-240) and in May 1933 we find him discussing congenital heart disease (BJR, 6, 257-265). At that time radiology was only supplementary to the clinical features and electrocardiography and relied on the appearances on the plain chest radiograph. In September 1934 he presented a paper on bronchiectasis (BJR, 7, 531-539) with an account of the technique of bronchography using Lipiodol. In March 1939 Kerley described the plain film appearances of intrathoracic aneurysm (BJR, 12, 158-162). In June 1942 and wrote a most interesting paper on erythema nodosum (BJR 15, 155-165). He gives an interesting discussion of sarcoidosis and the radiographs shown are elegant.

In December 1942 he reviewed the techniques needed in mass miniature radiography of the chest (BJR 15, 346-347) and in 1945 with Kathleen C Clark, P D'Arcy Hart and Brian C Thompson he co-wrote the Medical Research Council Special Report #251 on Mass Miniature Radiography of civilians

(HMSO 1945) (BJR 18, 326). This booklet is the definitive account of the technique at the time.

Kymography was a technique that was developed to study and record cardiac movement and was of some value - and was described for the BJR in December 1934 by Peikart Stumpf from Munich (BJR, 7, 707-727) and I Seth Hirsh from New York (BJR, 7, 728-754). It is difficult to be certain how common the uses of this apparatus became. Kymography was discussed in the BJR editorial of December 1934 by PK (Peter Kerley) (BJR, 7, 705-706) and it is apparent that nothing changes. Kerley writes: "It behoves the radiologists to look to their laurels and make sure that the method does not become the prerogative of clinical cardiologists with consequent damage to the prestige of radiology and perhaps to the advancement of science." There is therefore nothing new in turf wars (!) and radiologists and cardiologists were to meet again with the techniques of ultrasound, angiography and MRI.

Some Recollections of the Old X-Ray Department of the Royal Berkshire Hospital, Reading.

These notes were written by Dr Paul Cave who was the first radiologist at the Royal Berkshire Hospital. These notes were written in May 1971.

The picture of the old X-Ray room of the Royal Berkshire Hospital was sent to me by Lionel Williams and is the oldest one they have and is probably from the period 1917-1920.

Paul Cave writes:

My first association with the RBH was in 1925. I was then Resident Radiologist to the pioneer Radiologist, Dr. Robert Knox at Kings College Hospital. Reading an advertisement of a private radiological and electro-therapeutic practice for sale at 73 London Street, Reading, I went down to see it.

One of my first questions to the vendor, Dr. Phillips, was whether I should be able to get on the Hon. Staff of the RBH, as he himself was. He replied that there should be no difficulty, so with that assurance I went round to see the Hospital Secretary. He introduced me to some of the staff and the upshot was that I would be accepted, so to speak, 'on approval'. With this encouragement I bought the practice. (I am not sure if, or when, my appointment was ratified!)

I was pleasantly surprised to find that I knew the radiographer, Mr. A.O. Forder, who had recently left a similar post at Kings College Hospital.

The Radiological Department then occupied a large room, recently vacated by the O.P. Department. It was in this room subsequently divided and sub-

divided and eventually well equipped, that I spent the whole of my appointment until retirement in 1958. My first office was a chilly little room, hardly bigger than a cupboard, opposite the radiographer's room.

In the centre of the radiographic room was a Newton and Wright mechanically rectified 'Snook' transformer and a combined couch and screening stand. The former was noisy but reasonably efficient by 1925 standards. The latter was hand operated and could be used only in the vertical and horizontal positions. There was also a primitive portable set which Mr. Forder used to trundle about the wards. The Potter-Bucky of those days was curved; it was hand operated and its slats very coarse. There were also primitive stationary grids.

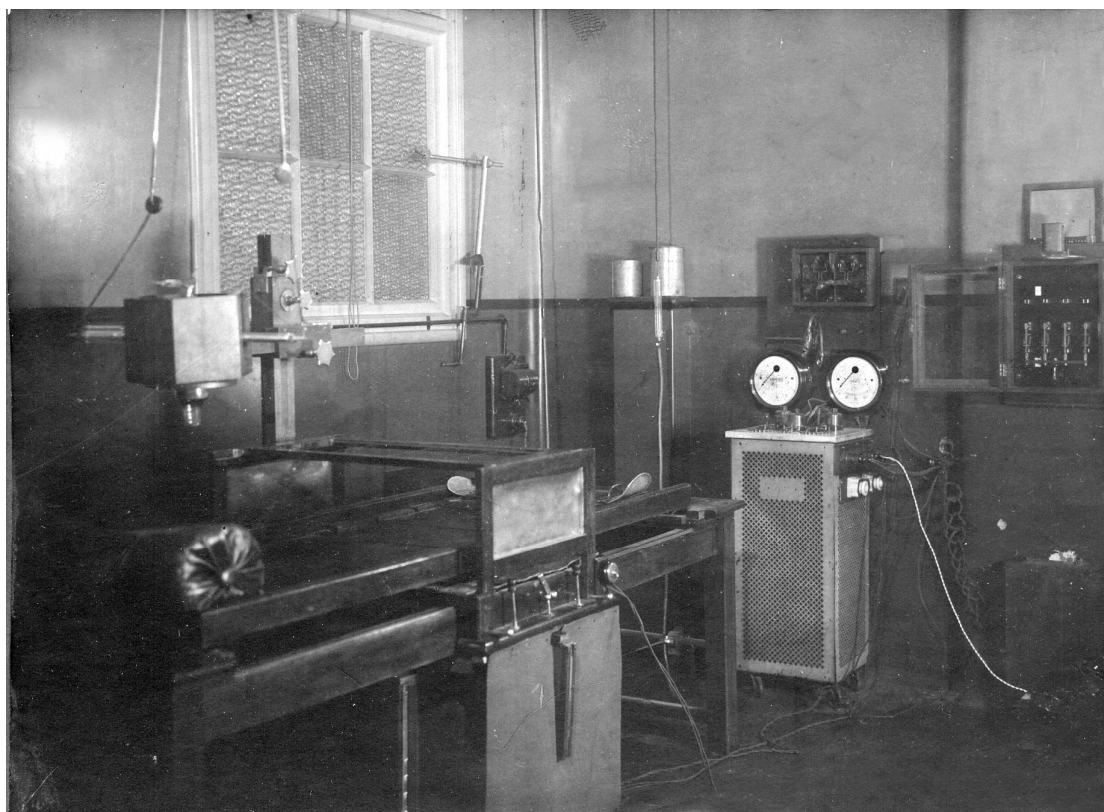


Figure: The old X-ray department of the Royal Berkshire Hospital.

I had been accustomed to using gas tubes at Kings and therefore was pleasantly surprised to find that the RBH possessed two modern tubes, a Phillips Metallix and an American Coolidge. The whole apparatus was, of course, non-shockproof.

There were also some radium needles of various lengths, kept in a lead lined safe. They were used chiefly for cervical carcinoma and for rodents (*rodent ulcers*) and were under the control of the Department which was responsible for dosage and filtration.

Radiotherapy was carried out on an ever increasing number of cases, mostly post-operative breasts, a few thyroids and prostates and an occasional tinea capitis. In the breast cases, one not infrequently was gratified to note

recession of skin nodules. Follow-up statistics unfortunately were not kept but my impression is that the results were by no means negligible. I cannot remember the date when a separate Radiotherapy Department was established.

The small amount of diagnostic work in 1925 can be gauged by the fact that only two half day sessions per week were all that was necessary! Most cases were fractures, with occasional screening for barium meals, enemas and chests. Screen protection was very inadequate, especially when using the undercouch tube. After some years working under these conditions I developed fine epithelial desquamation over my shins, which has subsided only during the last few years. Even now, the skin in these areas is light sensitive and has to be shielded while sun-bathing.

As I had plenty of time on my hands, I joined the staff of the Battersea General Hospital, doing one morning session a week and working up a Harley Street practice on the same afternoon. I kept this practice going for seven years until an opportunity occurred to establish myself in a subsidiary practice at Newbury together with an honorary appointment at Newbury District Hospital.

In 1925 there were no cholecystographies, IVP's or bronchographies. These were gradually introduced, not without a certain struggle against scepticism amongst the staff. I remember also that it required considerable urging to persuade the clinicians that a lateral chest film could be sometimes of great value.

I think it must have been around 1935 that I went to Lisbon to get instruction on aortography from the Portuguese radiologist who introduced this technique (*presumably dos Santos who described the technique in 1925*). I came back with a number of his films and plenty of enthusiasm, but quite failed to convince the surgeons of the potential value of this examination. I felt that the RBH lost a great opportunity of being early in the field.

Previous to this, I had been approached by the Superintendent of Battle Hospital to do a weekly session in the department that he had already established and had run himself. This was the precursor of an ever increasing number of new departments in association with our department the RBH.

Departments were established at Newbury, St. Mary's and Fair Mile, Wallingford, War Memorial and Townlands, Henley and at Prospect Park, Reading.

These developments bring the history into more modern times and are outside the scope of this short paper.

Paul Cave May 1971.

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Australian & New Zealand Society of the History of Medicine Conference

The Australian & New Zealand Society of the History of Medicine Conference is being held in Brisbane, Australia, 12 - 15 JULY 2011. Registration and Call for Abstracts is open and that the deadline for receipt of abstracts is 28 February 2011.

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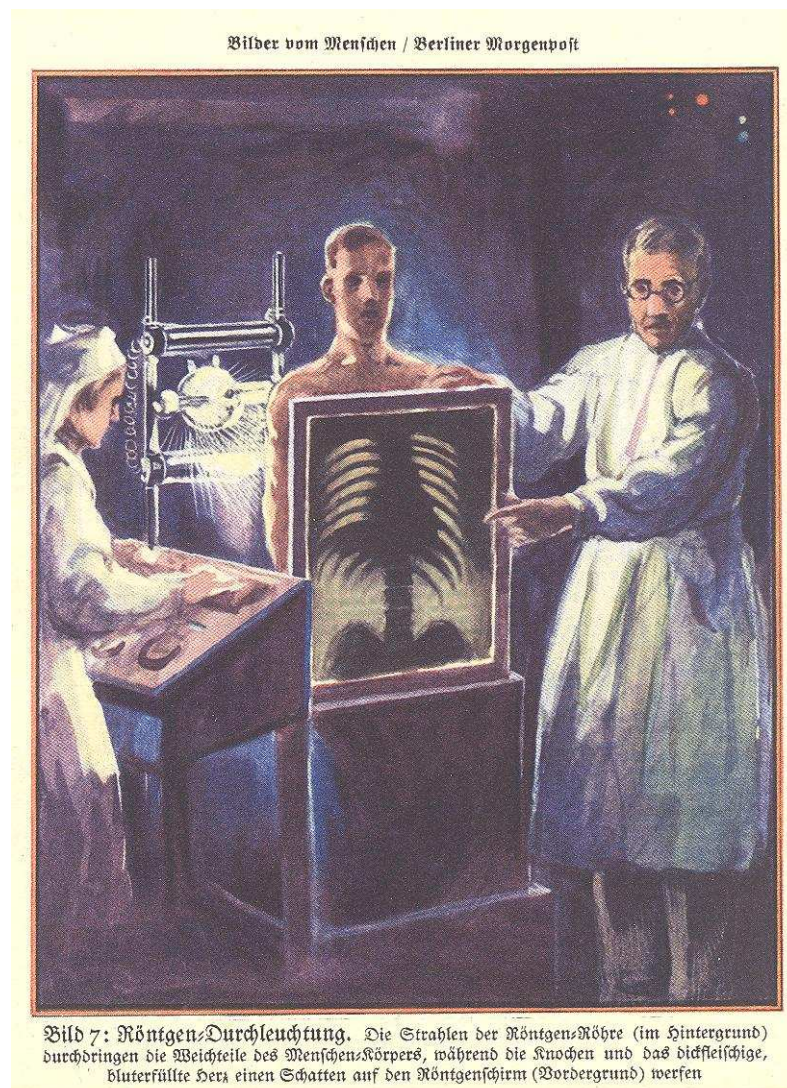
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