

Il semble que le Ministère de la Santé se préoccupe de ce problème. Espérons seulement que le frein mis aux dépenses de la Santé ne nuira pas aux archives médicales et administratives des hôpitaux.

J. Roubert.
 Directeur des Services d'Archives
 Des Hospices Civils de Lyon.

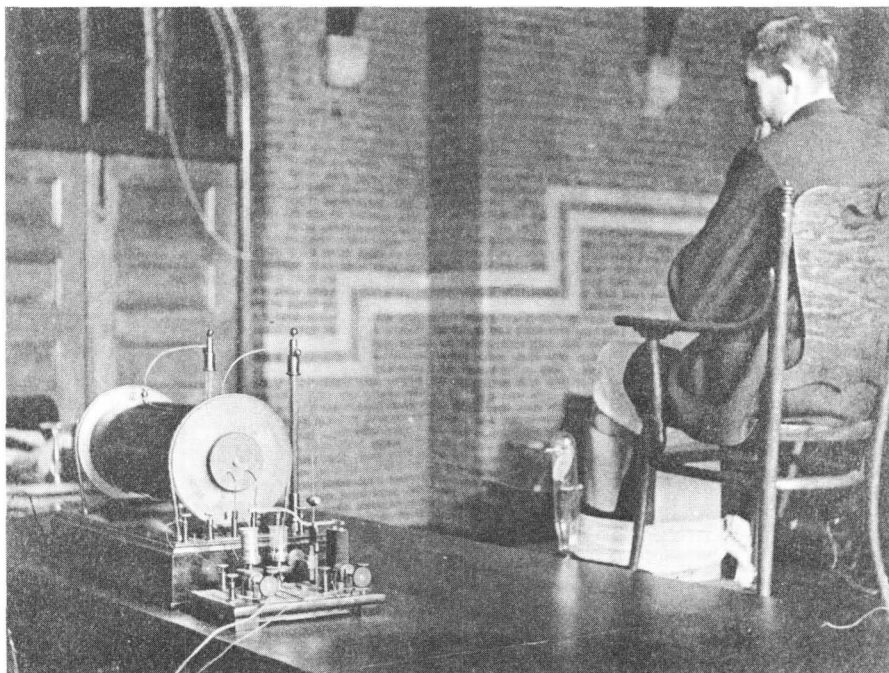
The All-Penetrating "X"

Following the publication of Professor Wilhelm Roentgen's paper "Eine neue Art von Strahlen" in January 1896, news of the discovery of x-rays travelled quickly from Germany to Canada. There was great public interest in the application of Roentgen's rays to the process of medical diagnosis.¹ "Although the whole discovery has been given a charlatan-like boom," wrote one sardonic observer, "its practical application cannot fail to be of immense and wide-reaching value".² The most successful and best-publicized x-ray demonstrations were those conducted by Professor John Cox and his associates at McGill University in February 1896. Cox delivered a lecture about the demonstrations at a meeting of the Montreal Medico-Chirurgical Society on 7 February, and collaborated with Dr. Robert Kirkpatrick of the Montreal General Hospital in writing an article which appeared in the March issue of the *Montreal Medical Journal*.³

One of those who participated in the demonstrations was Nevil Norton Evans, who was a Lecturer in Chemistry at McGill. Like Cox, Evans was an active member of the Montreal Camera Club and shared Cox's interest in the "new photography". The Public Archives of Canada recently acquired a collection of Evans' photographs, including a few which he took during the demonstrations. A previously unpublished statement by Evans, entitled "The Actual History of the Experiment", not only supplements the facts given in contemporary press reports and in Cox and Kirkpatrick's article, but also suggests that Cox was rather less than generous in assigning credit where credit was due. The statement is as follows:

On the evening of Saturday, 2nd February, 1896, I happened to call on the Pastor of the German Church in Montreal⁴, who showed me a little German magazine—a sort of Ladies' Home Journal on a small scale—on the outside of the back cover of which was a diagram and short description of the method of producing "black light" X-rays by means of a Crookes tube. The next morning I took this little magazine with me to church and showed it to Professor Cox, who was immensely interested. He said that the day before he

-
- 1 See, for example, "The Cathode Ray," *The Gazette* (Montreal), 5 February 1896, p. 6; "The New Photography," *The Montreal Daily Star*, 5 February 1896, p. 6; "Photographic Experiments," *The Montreal Daily Star*, 6 February 1896, p. 8; "Photographed the Bullet," *The Montreal Daily Star*, 7 February 1896, p. 8; "Applied to Surgery," *The Gazette* (Montreal), 8 February 1896, p. 3; "Prof. Roentgen's Discovery," *The Montreal Daily Star*, 8 February 1896, p. 12; "The Bullet Extracted," *The Montreal Daily Star*, 10 February 1896, p. 8; "Applied to Surgery," *The Gazette* (Montreal), 10 February 1896, p. 3; "The Roentgen Process," *The Gazette* (Montreal), 17 February 1896, p. 3; "Cathode Rays in London," *The London Advertiser*, 17 February 1896, p. 8; "Located a Needle in the Hand," *The Gazette* (Montreal), 2 April 1896, p. 3; "The X-Rays at Acadia College," *The Halifax Herald*, 2 November 1896, p. 1.
 - 2 Letter from F. Tillemont Thomason, *The Montreal Daily Star*, 8 February 1896, p. 11.
 - 3 John Cox and Robert C. Kirkpatrick, "The New Photography with Report of a Case in which a Bullet was Photographed in the Leg," *The Montreal Medical Journal* 24, no. 9 (March 1896): 661-665.
 - 4 St. John's Lutheran Church, 129 rue St. Dominique.



"J.C. [John Cox] sitting for 'photo' [a re-enactment of the x-ray demonstration] of bullet in calf of leg, [McDonald Physics Building, McGill University, Montreal, Que.], 7-ii-96 [7 February 1896]. Neg and print—Evans." (PAC, National Photography Collection Accession 1979-304, N.N. Evans Collection, PA-122909)

had set out all the Crookes tubes that the Macdonald⁵ Physics Department possessed—a very fine collection—as he intended to lecture on them on Monday; and he suggested to me (who had been his lecture-demonstrator five years before) that we go up that afternoon and have a try at producing X-rays. We accordingly met at the Physics Building and succeeded in getting a rather poor photograph of the bones of my left hand, showing also a ring which I wore. We had no idea of the time required for exposure, and our result turned out to be very much underexposed. A few days later, Messrs. King and Pitcher⁶ of the Department of Physics obtained a very much better result—the one reproduced in the *Journal*. As there had recently been a number of references to this "black light" in the daily press, and as several inquiries had been made concerning it, I suggested to Professor Cox that he write short notes to the *Star* and *Witness* telling that the experiments had been repeated at the University. He demurred at this, but finally wrote the

⁵ "Macdonald" should read "McDonald".

⁶ Messrs. Robert O. King, B.A.Sc., and Frank H. Pitcher, B.A.Sc.

letters but had me sign them. They duly appeared in the press⁷, and several requests were made that we photograph persons suffering from obscure troubles. As far as I remember, all of these, with perhaps one exception, were declined. On the evening of Wednesday the 6th, I received a telephone call from my old personal friend Dr. Kirkpatrick, who told me he had in the hospital a man⁸ suffering from a bullet wound in the calf of the leg, and that they had been unable to locate the bullet (as described at the end of the article in the *Journal*)—and would I make an experiment on the leg with the “black light”? I told him that I no longer had any official connection with the Physics Department, but that I would see Professor Cox first thing next morning and would communicate the result of the interview to him. Professor Cox next morning said to me that I knew as much about the work as he did, that he had two lectures, from nine to eleven, and that I was at perfect liberty to make use of any apparatus that I liked in the Physics Building. The wounded man, who was quite active and not in much pain, was brought to the Building, and the arrangements made as described in Professor Cox’s article and shown in the photograph which I made during the exposure with my own camera. I remember that, during the experiment, a stranger came in who introduced himself as the President of a Camera Club in Toronto, and, having seen one of our letters in the press, had come down to learn more about what we were doing.⁹ Just as the exposure was finished, Professor Cox turned up from his lectures and I asked him if he would care to develop the negative. We all adjourned to a dark room upstairs where Professor Cox proceeded with the development, with the result described and pictured in the article. I was not aware at the time that Professor Cox had any idea of making a report to the Medical Society, and did not learn that he had done so until weeks afterwards.¹⁰

Peter Robertson
Public Archives of Canada

-
- 7 *The Montreal Daily Star*, 4 February 1896, p. 7: “Sir—It may be of interest to your readers to know that Prof. Roentgen’s photographic process has been repeated in the McDonald Physics Building, Prof. Cox having obtained a photograph of the writer’s hand, as follows: A Stanley dry plate (Sensitometer No. 50) was placed in an ordinary mahogany plate-holder which was kept closed during the exposure; the hand was placed upon the outside of the plate-holder and the “rays” from a Crookes tube allowed to fall upon the whole for about five minutes. Upon developing in the ordinary way, a negative silhouette of the hand was obtained. The cover of the plate-holder, through which the “rays” had to pass to reach the plate, was of 1/8-inch mahogany, and the whole process (except the developing) took place in ordinary daylight. Prof. Cox is of the opinion that the cause of the phenomenon should not be described as a new kind of light, as has been suggested in some quarters, but is to be looked for in an induced electrification of the surface of the plate where not screened by a conductor; or else is similar to the known electrification of certain substances when ultraviolet light falls on them. [Signed] Nevil Norton Evans, McGill College, February 3, 1896”.
- 8 The “man” was in fact a youth named Talson Cunning.
- 9 Dr. Edmund E. King of the Toronto General Hospital, who was also President of the Toronto Camera Club and one of the foremost Canadian amateur photographers of the period.
- 10 Nevil Norton Evans, “The Actual History of the Experiment,” undated statement, PAC, National Photography Collection Accession 1979-304, Nevil Norton Evans Collection. The author acknowledges with gratitude the assistance of Professor Evans’ grandson, Ewan Evans of Ottawa, in the preparation of this note.