UTILISING X-RAYS.

THEIR VALUE IN SURGERY AND COMMERCE.

One of the ses of X rays is to ascertain whether the centres of golf bails are spherical or not, according to Dr. H. Carew Nott, who spoke on the subject at the Rotary Club luncheon yesterday. Armed with a portfolio of remarkable photographs of various portions of the human austony, Dr. Nott he'd the interest of members while he told of the discovery, descopment, and uses of those mysterious rays. He explained that when an electrical carrent was passed through Crookes' take containing rarefied gases certain phesenena were set up which puzzled scients for many years, and much time and thought were directed towards solver the problem. Chief among the invest rates were Sir William Crookes in England and Professor Rontgen in Germany. The peculiar rays emitted were called X my because their nature was then unknown. Whilst experimenting with them ma tube covered with black paper, the Geman scient'st noticed that a fluorescent screen which was lying on the table gleved with a brilliant green light whenever the electrical current was poseing through the tube, and assumed its normal spearance when the current was turned off. Following up his discovery he communicated his findings to the world is 1895, and X rays were being put to practical use in Australia two years later. Considerable strides had been made since then, and it had been definitely established that X rays were produced by electrons straig against any opaque substance. So in as was known at present, these rays bid no mass, but were simply composed of vibrations, and in that respect were analogous to light rays, but,

unlike the latter, they had the power to pass through opaque substances and could not be refeted from a mirror or focussed by lenses as they passed completely through them. A certain proportion of them, hower, became absorbed, and this fact had been availed of by medical and other scientes in connection with X raphotography

In media and surgical practice these photographs, Dr. Nott said, had proved invaluable fr locating foreign substances in the boly sich as bullets, or pennies and buttons mlowed by children. By means of injection of metallic salts into different one their functions could be studied, me thus discoveries had been made what threw fresh light upon certain intrate diseases. The rays were also extensive used for detecting tlaws in metal wor and the woodwork of aeroplanes, an they had also been used durthe war is exposing contraband cargoes. For deterning fractures in bones the use of X-ray was comparatively simple, and had not ken reduced to a line art.

To illumnte the strides made in this direction Dr. Nott produced two photographs almost identical fractures of the forum, both taken in Adelaide, one in 1897, men half an hour's exposure was required and one taken recently in a fraction of second. Both definitely located the frame, but the advance in medical science suld undoubtedly be appreciated by the prient. Among the many interesting phasgraphs shown was one taken by Or. Not of a box of golf balls, which he had tested, in order to test the veracity of he salesman, who guaranteed that they al contained perfectly solid and spheric centres.

Late Mr. Rober Barr Smith

British Centenar on Monday

If he had lived, thelate Mr. Robert Barr Smith, one of buth Australia's greatest pioneers, would have been 100 years old on Monda. This publicspirited and generouscitizen, who died on November 20, 1915 at the age of 91, left behind him a recrd that will stand for ever.

Noted for his philathropy, he played a great part in opening up the back country of the State He belonged to the sturdy pioneers ho laid the foundations of South Astralia, and although no record wa kept of his acts of private charity, is public benefac-

tions were numerous Mr. Barr Smith was born in Lock winnoch, Renfrewshie, on February 4, 1824. He was a sol of the Rev. Dr. Smith, of the Free hurch of Scotland. Mr. Barr Smith cam to Melbourne, and In 1854 arrived in Idelaide, where he entered the firm of Ilder and Co., later finown as Elder, Smth. and Co. There he was associated with the late Siz Thomas Elder, G.QM.G. These two were pioneers in Justralian shipping and commerce, in the extension of pastoral development, and in the opening up of undeveloped tacks of country.

Sir Thomas Elderand Mr. Barr Smith were the real pioners of the pastiral settlement of the Sate. Everyone acquainted with the forth knows of thei: owrk in opening w ehe country there Other States, partiularly New South Wales, also benefitd in this direction.

Mr. Barr Smith played a prominent part in connection with the Wallaroo and Moonta mines for the firm gener ously assisted propectors in the search for copper. Mr. Brr Smith loved rac ing, and loved hunting. He was th owner of the imparted Mostyn, which won the Goodwold Handicap twice Disiking publility there were only few pubic position he consented to fil He was a member of the Botanic Ga den and Public Library Boards, and fo a time was president of the South Aus tralian Coursing Cub. But most of his work was done in the background.

Adelaide University receiving most atbenefited by his generosity, the whole art throughout the Commonwealth. debt being wiped off In 1895 Mr. Bari Smith presented to South Australia a steam lifeboat, casting £3,500. It was

called the Cit yof Addaide. Beloved by all classes, the late Mr. aBrr Smith is still hild in revered memory today. His private charity, his public benefactions, and his sound advice, combined with his cheery companionship, made him a friend of all.

Herald

TEACHER.

A TALENTED INSTRU-MENTALIST.

ted to succeed Mr. Gerald Walenn as a teacher of violin in the Elder Conservatorium. It is expected that first week of April, when he will immediately take up his duties.

Mr. Schilsky is a cultured musician of European reputation as well as a solo violinist of exceptional ability, and his advent to this State will be a great gain to the cause of music.

He was born in London. later he was a student of the dis- England, and is a bond of social unite Paris, and was immediately engaged Lord Haldane, presiding over a crowded as a first violin player in the cele- ettendance at a meeting organized by the

as a solo violinist in Russia, and made his debut there in conjunction with the Moscow Philharmonic Soclety, in association with the great Wagnerian singer, Theodore Reich-He remained in Russia for mann. about a year, appearing in many large cities, and subsequently at After several subsequent Warsaw. engagements in Poland, he returned to England and became vice-leader of the Glasgow Symphony Orchestra. under Henschel. Following upon this association came his appointment as professor of the violin in the Belfast Conservatorium. Two years later he returned to London as a member of the Kruse String Quartette, of world-wide reputation. The quartette appeared at concerts all over the United Kingdom, as well as on the Continent. While in London at this time Mr. Schilsky was a teacher at the London Academy of Music, as well as the Hampstead Conservatoire. at the same time holding the responsible position of vice-leader of Queen's Hall Orchestra, under Sir Henry Wood. This position he resigned in order to visit the colonies as an examiner for Trinity College of Music, a responsibility which he has held with distinction for many years. More recently during a residence of two years in America, he acted as professor of violin and leader of the string quartette at the Buffalo Conservatorium, during which time be appeared as a solo player in New York before an audience of 3,000 people.

It will be remembered that Mr. Schilsky, during his visit to Adelaide last year, gave a recital so recently as last December, when his cultured and masterly playing established for him at once a reputation as an artist

of supreme ability.

He is a brilliant teacher, who will place at the disposal of our many violin students his ripe experience and masterly technique. It is more than satisfactory, also, that as a pupil of the great Sauret, his methods will be those of his predecessor, Mr. Walenn, and therefore there will be no break in the continuity.

Mr. Schilsky has already expressed His benefactions were many, the St his earnest wish to form a distinc-Peter's Anglican Cathedral and the tive Australian string quartette, and it is to be hoped that he will realise time had a mortgage of £2,300, also this ambition in the cause of musical



By Unclocke.

Value of Education.

The new conditions would be such as to efficient, and the general oversight in very At a meeting of the council of the attract the best men and women to the capable hands. University held on Friday, January service. Whatever these attractions are, tinguished Emile Sauret in Berlin. In this connection it is interesting to

From Berlin Mr. Schilsky went to notice the opinions of other leading men. brated Lamoureux Orchestra. After British Institute of Adult Education, remarked that adult education was nothing MALSVILLSON VID

We had abolished the lifes readucation consisted of separated bitselementary, primary, secondary, and university. It is now looked upon as one great whole, and all people are entitled. according to choice, to have as much as they like. Lord Grey said that primary and secondary education were valuable as equipment for work, but were not in the truest and highest sense, education, Adult education was not equipment for any special object, it was the training of men for life and living. It would break down class barriers. It was the education people gave themselves after other people considered they were educated, and all classes need it, the rich as much as others,

In our State the W.F.A. is doing excellent work in the matter of adult aducation, and every State in the Commonwealth has a branch of this fine institution. A member of the new Labour Cabinet in England said that his colleagues could be depended on, for they had graduated in the hard school of life. There may be much truth in this saying, for one not infrequently has come across a University graduate who is a mere child compared with his employer, who never saw the inside of a university. But, other things being equal, the man with the university training behind him will always lead the other. Many persons think that the university belongs to a certain class, and everything possible should be done to get rid of such a mistaken idea. When we consider what civilization owes to universities which have done much by freely helping clever men irrespective of class. the people of any State should feel that they have special interest in their own. and assist it with all the means in their power.

Revision of Salaries.

Teachers in our State should feel glad, as doubtless they are, that they work under such a good education system. In England, where the system is "the best in the world," trouble has once more arisen over salaries. Mr. Wood the late President of the Board of Eductaion, asked the Burnham committees to meet again and draw up new scales for the payment of teachers. Any one reading the reports from various counties soon becomes aware that instead of one scale ruling all over England, each county has its own. There are four scales, and while a teacher under the L.C.C. may be paid by the first, another in one of the counties (say Devon) may have to rest content with the third. The Central Board ture by rates, and as the local council which raises another part of the expenditure by ratees, and as the local council navs the teachers, it holds the power. Friction has often resulted because of a decision to pay a lower scale than the adjoining county, and teachers have actually gone out on strike, in consequence of what they considered gross injustice. A recent writer asks for the adoption of a single scale, and points out where it is superior to the present system. Teachers with similar training and experience are paid widely different rates, for no other reason than that they are under different local councils, and it may happen that the less officient man receives the smaller There is no system of classification. such as exists in South Australia, there is much discontent when promotions are made, for there is no definite system on which the choice is made. The considerations are efficiency, length of service, and character of the teaching given; but when one remembers that the inspectorial work is of the most perfunctory character, and that some schools are not visited for two or three years, who is to judge of the

teacher's rights to promotion? It is said that not a few teachers are disheartened by having been passed over. and take less interest in their duties as the Mr. Baldwin, in a speech just prior to time goes on. A reader of some of the the elections of the House of Commons, local council reports is led to believe that assured the people of the high value his there is a lack of educational experts on party placed on education. He said: some of the councils, and that others have got into a groove along which they con-"Teachers had been patriotic, but they tinue to run. We do things better in our must remember that England was poorer own State, and one becoming acquainted than before the war, and that further re- with the discontent in many parts of Engductions would be made, though they land feels glad that we have a single scale would never go back to pre-war times." of salaries, that the inspectorial staff is

Rhodes Scholars.

18, Mr. Charles Schilsky was appoin. The London Times says that Mr. Bald- It is said that less interest is taken in win's policy cannot be desribed as a bribe, the Rhodes Scholars than was formerly The Prime Minister holds the opinion, in the case. If this be so, the lack of inforcommon with all Englishmen, that their mation available to the public may have system of education is the best in the been the cause. The work of the trust he will reach Adelaide during the world, and mentioned that experts, who should call for attention in all Englishought to know, affirmed that the English speaking countries, for the great influence youth was two years ahead of the Ameri- it has exerted, and the hope of much-excan in secondary education. That might tended influence in the future. When be owing to the fact that the English aim these men, who have lived and studied at starting higher education at II years together, and have learned something of of age, while in U.S.A. they begin later, the opposite point of view from their own, as we do in Australia. He went on become persons of note in their respective further to point out that in adult educa- lands, they may be able to settle import-His tion England leads the world. Nowhere is ant diplomatic problems with ferhearance father, a Pole, was a naturalised Bri there such cordial co-operation between and wisdom. The allowance of £350 per tish subject, and his mother a French State Universities and the various agen- annum does not cover expenses, and the woman. His first master for the cies controlled by the working class than holder of a scholarship must be prepared violin was Benoît Hollander, and in the old country. The movement adds to supplement this with £50 a year. In violin was Beneit Hollander, and in the old country. The movement and 1919 some Americans decided to invite some English students to engage in a year's post-graduate study at one of the Antiquesties, or in American works. Twelve

GENERALL AS SHOW'S HEREUNDERS --

Between Furner and Hatherleigh,