

= William Speirs Bruce =

William Speirs Bruce FRSE ( 1 August 1867 ? 28 October 1921 ) was a Scottish naturalist , polar scientist and oceanographer who organized and led the Scottish National Antarctic Expedition ( SNAE , 1902 ? 04 ) to the South Orkney Islands and the Weddell Sea . Among other achievements , the expedition established the first permanent weather station in Antarctica . Bruce later founded the Scottish Oceanographical Laboratory in Edinburgh , but his plans for a transcontinental Antarctic march via the South Pole were abandoned because of lack of public and financial support .

In 1892 Bruce gave up his medical studies at the University of Edinburgh and joined the Dundee Whaling Expedition to Antarctica as a scientific assistant . This was followed by Arctic voyages to Novaya Zemlya , Spitsbergen and Franz Josef Land . In 1899 Bruce , by then Britain 's most experienced polar scientist , applied for a post on Robert Falcon Scott 's Discovery Expedition , but delays over this appointment and clashes with Royal Geographical Society ( RGS ) president Sir Clements Markham led him instead to organise his own expedition , and earned him the permanent enmity of the British geographical establishment . Although Bruce received various awards for his polar work , including an honorary doctorate from the University of Aberdeen , neither he nor any of his SNAE colleagues were recommended by the RGS for the prestigious Polar Medal .

Between 1907 and 1920 Bruce made many journeys to the Arctic regions , both for scientific and for commercial purposes . His failure to mount any major exploration ventures after the SNAE is usually attributed to his lack of public relations skills , powerful enemies , and his fervent Scottish nationalism . By 1919 his health was failing , and he experienced several spells in hospital before his death in 1921 , after which he was almost totally forgotten . In recent years , following the centenary of the Scottish Expedition , efforts have been made to give fuller recognition to his role in the history of scientific polar exploration .

= = Early life = =

= = = Home and school = = =

William Speirs Bruce was born at 43 Kensington Gardens Square in London , the fourth child of Samuel Noble Bruce , a Scottish physician , and his Welsh wife Mary , née Lloyd . His middle name came from another branch of the family ; its unusual spelling , as distinct from the more common " Spiers " , tended to cause problems for reporters , reviewers and biographers . William passed his early childhood in the family 's London home at 18 Royal Crescent , Holland Park , under the tutelage of his grandfather , the Revd William Bruce . There were regular visits to nearby Kensington Gardens , and sometimes to the Natural History Museum ; according to Samuel Bruce these outings first ignited young William 's interest in life and nature .

In 1879 , at the age of 12 , William was sent to a progressive boarding school , Norfolk County School ( later Watts Naval School ) in the village of North Elmham , Norfolk . He remained there until 1885 , and then spent two further years at University College School , Hampstead , preparing for the matriculation examination that would admit him to the medical school at University College London ( UCL ) . He succeeded at his third attempt , and was ready to start his medical studies in the autumn of 1887 .

= = = Edinburgh = = =

During the summer of 1887 , Bruce travelled north to Edinburgh to attend a pair of vacation courses in natural sciences . The six @-@ week courses , at the recently established Scottish Marine Station at Granton on the Firth of Forth , were under the direction of Patrick Geddes and John Arthur Thomson , and included sections on botany and practical zoology . The experience of Granton , and the contact with some of the foremost contemporary natural scientists , convinced Bruce to stay in Scotland . He abandoned his place at UCL , and enrolled instead in the medical school at the

University of Edinburgh . This enabled him to maintain contact with mentors such as Geddes and Thomson , and also gave him the opportunity to work during his free time in the Edinburgh laboratories where specimens brought back from the Challenger expedition were being examined and classified . Here he worked under Dr John Murray and his assistant John Young Buchanan , and gained a deeper understanding of oceanography and invaluable experience in the principles of scientific investigation .

= = First voyages = =

= = = Dundee Whaling Expedition = = =

The Dundee Whaling Expedition , 1892 ? 93 , was an attempt to investigate the commercial possibilities of whaling in Antarctic waters by locating a source of right whales in the region . Scientific observations and oceanographic research would also be carried out in the four whaling ships : Balaena , Active , Diana and Polar Star . Bruce was recommended to the expedition by Hugh Robert Mill , an acquaintance from Granton who was now librarian to the Royal Geographical Society in London . Although it would finally curtail his medical studies , Bruce did not hesitate ; with William Gordon Burn Murdoch as an assistant he took up his duties on Balaena under Capt. Alexander Fairweather . The four ships sailed from Dundee on 6 September 1892 .

The relatively short expedition ? Bruce was back in Scotland in May 1893 ? failed in its main purpose , and gave only limited opportunities for scientific work . No right whales were found , and to cut the expedition 's losses a mass slaughter of seals was ordered , to secure skins , oil and blubber . Bruce found this distasteful , especially as he was expected to share in the killing . The scientific output from the voyage was , in Bruce 's words " a miserable show " . In a letter to the Royal Geographical Society he wrote : " The general bearing of the master ( Captain Fairweather ) was far from being favourable to scientific work " . Bruce was denied access to charts , so was unable to establish the accurate location of phenomena . He was required to work " in the boats " when he should have been making meteorological and other observations , and no facilities were allowed him for the preparation of specimens , many of which were lost through careless handling by the crew . Nevertheless , his letter to the RGS ends : " I have to thank the Society for assisting me in what has been , despite all drawbacks , an instructive and delightful experience . " In a further letter to Mill he outlined his wishes to go South again , adding : " the taste I have had has made me ravenous " .

Within months he was making proposals for a scientific expedition to South Georgia , but the RGS would not support his plans . In early 1896 he considered collaboration with the Norwegians Henryk Bull and Carsten Borchgrevink in an attempt to reach the South Magnetic Pole . This , too , failed to materialise .

= = = Jackson ? Harmsworth Expedition = = =

From September 1895 to June 1896 Bruce worked at the Ben Nevis summit meteorological station , where he gained further experience in scientific procedures and with meteorological instruments . In June 1896 , again on the recommendation of Mill , he left this post to join the Jackson ? Harmsworth Expedition , then in its third year in the Arctic on Franz Josef Land . This expedition , led by Frederick George Jackson and financed by newspaper magnate Alfred Harmsworth , had left London in 1894 . It was engaged in a detailed survey of the Franz Josef archipelago , which had been discovered , though not properly mapped , during an Austrian expedition 20 years earlier . Jackson 's party was based at Cape Flora on Northbrook Island , the southernmost island of the archipelago . It was supplied through regular visits from its expedition ship Windward , on which Bruce sailed from London on 9 June 1896 .

Windward arrived at Cape Flora on 25 July where Bruce found that Jackson 's expedition party had been joined by Fridtjof Nansen and his companion Hjalmar Johansen . The two Norwegians had been living on the ice for more than a year since leaving their ship Fram for a dash to the North Pole

, and it was pure chance that had brought them to the one inhabited spot among thousands of square miles of Arctic wastes . Bruce mentions meeting Nansen in a letter to Mill , and his acquaintance with the celebrated Norwegian would be a future source of much advice and encouragement .

During his year at Cape Flora Bruce collected around 700 zoological specimens , in often very disagreeable conditions . According to Jackson : " It is no pleasant job to dabble in icy @-@ cold water , with the thermometer some degrees below zero , or to plod in the summer through snow , slush and mud many miles in search of animal life , as I have known Mr Bruce frequently to do " . Jackson named Cape Bruce after him , on the northern edge of Northbrook Island , at 80 ° 55 ' N. Jackson was less pleased with Bruce 's proprietorial attitude to his personal specimens , which he refused to entrust to the British Museum with the expedition 's other finds . This " tendency towards scientific conceit " , and lack of tact in interpersonal dealings , were early demonstrations of character flaws that in later life would be held against him .

= = = Arctic voyages = = =

On his return from Franz Josef Land in 1897 , Bruce worked in Edinburgh as an assistant to his former mentor John Arthur Thomson , and resumed his duties at the Ben Nevis observatory . In March 1898 he received an offer to join Major Andrew Coats on a hunting voyage to the Arctic waters around Novaya Zemlya and Spitsbergen , in the private yacht Blencathra . This offer had originally been made to Mill , who was unable to obtain leave from the Royal Geographical Society , and once again suggested Bruce as a replacement . Andrew Coats was a member of the prosperous Coats family of thread manufacturers , who had founded the Coats Observatory at Paisley . Bruce joined Blencathra at Tromsø , Norway in May 1898 , for a cruise which explored the Barents Sea , the dual islands of Novaya Zemlya , and the island of Kolguyev , before a retreat to Vardø in north @-@ eastern Norway to re @-@ provision for the voyage to Spitsbergen . In a letter to Mill , Bruce reported : " This is a pure yachting cruise and life is luxurious " . But his scientific work was unabated : " I have been taking 4 @-@ hourly observations in meteorology and temperature of the sea surface [ ... ] have tested salinity with Buchanan 's hydrometer ; my tow @-@ nets [ ... ] have been going almost constantly " .

Blencathra sailed for Spitsbergen , but was stopped by ice , so she returned to Tromsø . Here she encountered the research ship Princesse Alice , purpose @-@ built for Prince Albert I of Monaco , a leading oceanographer . Bruce was delighted when the Prince invited him to join Princesse Alice on a hydrographic survey around Spitsbergen . The ship sailed up the west coast of the main island of the Spitsbergen group , and visited Adventfjorden and Smeerenburg in the north . During the latter stages of the voyage Bruce was placed in charge of the voyage 's scientific observations .

In the following summer Bruce was invited to join Prince Albert on another oceanographic cruise to Spitsbergen . At Red Bay , latitude 80 ° N , Bruce ascended the highest peak in the area , which the Prince named " Ben Nevis " in his honour . When Princesse Alice ran aground on a submerged rock and appeared stranded , Prince Albert instructed Bruce to begin preparations for a winter camp , in the belief that it might be impossible for the ship to escape . Fortunately she floated free , and was able to return to Tromsø for repairs .

= = Marriage and family life = =

It is uncertain how Bruce was employed after his return from Spitsbergen in autumn 1899 . In his whole life he rarely had settled salaried work , and usually relied on patronage or on influential acquaintances to find him temporary posts . Early in 1901 he evidently felt sufficiently confident of his prospects to get married . His bride was Jessie Mackenzie , who had worked as a nurse in Samuel Bruce 's London surgery . Bruce 's secretive nature , even among his circle of close friends and colleagues , was such that precise information about the wedding ? its exact date , its location ? has not been recorded by his biographers .

In 1907 the Bruces settled in a house at South Morton Street in Joppa near the coastal Edinburgh

suburb of Portobello , in the first of a series of addresses in that area . They named their huse " Antarctica " . A son , Eillium Alastair , was born in April 1902 , and a daughter , Sheila Mackenzie , was born seven years later . During these years Bruce founded the Scottish Ski Club and became its first president . He was also a co @-@ founder of Edinburgh Zoo .

Bruce 's chosen life as an explorer , his unreliable sources of income and his frequent extended absences , all placed severe strains on the marriage , and the couple became estranged around 1916 . However , they continued to live in the same house until Bruce 's death . Eillium became a Merchant Navy officer , eventually captaining a Fisheries Research Ship which , by chance , bore the name Scotia .

= = Scottish National Antarctic Expedition = =

= = Dispute with Markham = = =

On 15 March 1899 Bruce wrote to Sir Clements Markham at the RGS , offering himself for the scientific staff of the National Antarctic Expedition , then in its early planning stages . Markham 's reply was a non @-@ committal one @-@ line acknowledgement , after which Bruce heard nothing for a year . He was then told , indirectly , to apply for a scientific assistant 's post . On 21 March 1900 Bruce reminded Markham that he had applied a year earlier , and went on to reveal that he " was not without hopes of being able to raise sufficient capital whereby I could take out a second British ship " . He followed this up a few days later , and reported that the funding for a second ship was now assured , making his first explicit references to a " Scottish Expedition " . This alarmed Markham , who replied with some anger : " Such a course will be most prejudicial to the Expedition [ ... ] A second ship is not in the least required [ ... ] I do not know why this mischievous rivalry should have been started " . Bruce replied by return , denying rivalry , and asserting : " If my friends are prepared to give me money to carry out my plans I do not see why I should not accept it [ ... ] there are several who maintain that a second ship is highly desirable " . Unappeased , Markham wrote back : " As I was doing my best to get you appointed ( to the National Antarctic Expedition ) I had a right to think you would not take such a step [ ... ] without at least consulting me " . He continued : " You will cripple the National Expedition [ ... ] in order to get up a scheme for yourself " .

Bruce replied formally , saying that the funds he had raised in Scotland would not have been forthcoming for any other project . There was no further correspondence between the two , beyond a short conciliatory note from Markham , in February 1901 , which read " I can now see things from your point of view , and wish you success " ? a sentiment apparently not reflected in Markham 's subsequent attitude towards the Scottish expedition .

= = Voyage of the Scotia = = =

With financial support from the Coats family , Bruce had acquired a Norwegian whaler , Hekla , which he transformed into a fully equipped Antarctic research ship , renamed Scotia . He then appointed an all @-@ Scottish crew and scientific team . Scotia left Troon on 2 November 1902 , and headed south towards Antarctica , where Bruce intended to set up winter quarters in the Weddell Sea quadrant , " as near to the South Pole as is practicable " . On 22 February the ship reached 70 ° 25 ' S , but could proceed no further because of heavy ice . She retreated to Laurie Island in the South Orkneys chain , and wintered there . A meteorological station , Omond House , was established as part of a full programme of scientific work .

In November 1903 Scotia retreated to Buenos Aires for repair and reprovisioning . While in Argentina , Bruce negotiated an agreement with the government whereby Omond House became a permanent weather station , under Argentinian control . Renamed Orcadas Base , the site has been continuously in operation since then , and provides the longest historical meteorological series of Antarctica . In January 1904 Scotia sailed south again , to explore the Weddell Sea . On 6 March , new land was sighted , part of the sea 's eastern boundary ; Bruce named this Coats Land after the

expedition 's chief backers . On 14 March , at 74 ° 01 ' S and in danger of becoming icebound , Scotia turned north . The long voyage back to Scotland , via Cape Town , was completed on 21 July 1904 .

This expedition assembled a large collection of animal , marine and plant specimens , and carried out extensive hydrographic , magnetic and meteorological observations . One hundred years later it was recognised that the expedition 's work had " laid the foundation of modern climate change studies " , and that its experimental work had showed this part of the globe to be crucially important to the world 's climate . According to the oceanographer Tony Rice , it fulfilled a more comprehensive programme than any other Antarctic expedition of its day . At the time , however , its reception in Britain was relatively muted ; although its work was highly praised within sections of the scientific community , Bruce struggled to raise the funding to publish his scientific results , and blamed Markham for the lack of national recognition .

= = Post @-@ expedition years = =

= = = Scottish Oceanographical Laboratory = = =

Bruce 's collection of specimens , gathered from more than a decade of Arctic and Antarctic travel , required a permanent home . Bruce himself needed a base from which the detailed scientific reports of the Scotia voyage could be prepared for publication . He obtained premises in Nicolson Street , Edinburgh , in which he established a laboratory and museum , naming it the Scottish Oceanographical Laboratory , with the ultimate ambition that it should become the Scottish National Oceanographic Institute . It was officially opened by Prince Albert of Monaco in 1906 .

Within these premises Bruce housed his meteorological and oceanographic equipment , in preparation for future expeditions . He also met there with fellow @-@ explorers , including Nansen , Shackleton , and Roald Amundsen . His main task , however , was masterminding the preparation of the SNAE scientific reports . These , at considerable cost and much delay , were published between 1907 and 1920 , except for one volume ? Bruce 's own log ? that remained unpublished until 1992 , after its rediscovery . Bruce maintained a wide correspondence with experts , including Sir Joseph Hooker , who had travelled to the Antarctic with James Clark Ross in 1839 ? 43 , and to whom Bruce dedicated his short book Polar Exploration .

In 1914 discussions began toward finding more permanent homes , both for Bruce 's collection and , following the death that year of oceanographer Sir John Murray , for the specimens and library of the Challenger expedition . Bruce proposed that a new centre should be created as a memorial to Murray . There was unanimous agreement to proceed , but the project was curtailed by the outbreak of war , and not revived . The Scottish Oceanographical Laboratory continued until 1919 , when Bruce , in poor health , was forced to close it , dispersing its contents to the Royal Scottish Museum , the Royal Scottish Geographical Society ( RSGS ) , and the University of Edinburgh .

= = = Further Antarctic plans = = =

On 17 March 1910 Bruce presented proposals to the Royal Scottish Geographical Society ( RSGS ) for a new Scottish Antarctic expedition . His plan envisaged a party wintering in or near Coats Land , while the ship took another group to the Ross Sea , on the opposite side of the continent . During the second season the Coats Land party would cross the continent on foot , via the South Pole , while the Ross Sea party pushed south to meet them and assist them home . The expedition would also carry out extensive oceanographical and other scientific work . Bruce estimated that the total cost would be about £ 50 @, @ 000 ( 2016 value about £ 4 @, @ 600 @, @ 000 ) .

The RSGS supported these proposals , as did the Royal Society of Edinburgh , the University of Edinburgh , and other Scottish organisations . However , the timing was wrong ; the Royal Geographical Society in London was fully occupied with Captain Scott 's Terra Nova Expedition , and showed no interest in Bruce 's plans . No rich private benefactors came forward , and persistent

and intensive lobbying of the government for financial backing failed . Bruce suspected that his efforts were , as usual , being undermined by the aged but still influential Markham . Finally accepting that his venture would not take place , he gave generous support and advice to Ernest Shackleton , who in 1913 announced plans , similar to Bruce 's , for his Imperial Trans @-@ Antarctic Expedition . Shackleton not only received £ 10 @,@ 000 from the government , but raised large sums from private sources , including £ 24 @,@ 000 from Scottish industrialist Sir James Caird of Dundee .

Shackleton 's expedition was an epic adventure , but failed completely in its main endeavour of a transcontinental crossing . Bruce was not consulted by the Shackleton relief committee about that expedition 's rescue , when the need arose in 1916 . " Myself , I suppose , " he wrote , " because of being north of the Tweed , they think dead " .

= = = Scottish Spitsbergen syndicate = = =

During his Spitsbergen visits with Prince Albert in 1898 and 1899 , Bruce had detected the presence of coal , gypsum and possibly oil . In the summers of 1906 and 1907 he again accompanied the Prince to the archipelago , with the primary purpose of surveying and mapping Prince Charles Foreland , an island unvisited during the earlier voyages . Here Bruce found further deposits of coal , and indications of iron . On the basis of these finds , Bruce set up a mineral prospecting company , the Scottish Spitsbergen Syndicate , in July 1909 .

At that time , in international law Spitsbergen was regarded as terra nullius ? rights to mine and extract could be established simply by registering a claim . Bruce 's syndicate registered claims on Prince Charles Foreland and on the islands of Barentsøya and Edgeøya , among other areas . A sum of £ 4 @,@ 000 ( out of a target of £ 6 @,@ 000 ) was subscribed to finance the costs of a detailed prospecting expedition during the summer of 1909 , in a chartered vessel with a full scientific team . The results , however were " disappointing " , and the voyage absorbed almost all of the syndicate 's funds .

Bruce paid two further visits to Spitsbergen , in 1912 and 1914 , but the outbreak of war prevented further immediate developments . However , early in 1919 the old syndicate was replaced by a larger and better @-@ financed company . Bruce had now fixed his main hopes on the discovery of oil , but scientific expeditions in 1919 and 1920 failed to provide evidence of its presence , although substantial new deposits of coal and iron ore were discovered . Thereafter Bruce was too ill to continue with his involvement . The new company had expended most of its capital on these prospecting ventures , and although it continued to exist , under various ownerships , until 1952 , there is no record of profitable extraction . Its assets and claims were finally acquired by a rival concern .

= = Later life = =

= = = Polar Medals withheld = = =

During his lifetime Bruce received many awards : the Gold Medal of the Royal Scottish Geographical Society in 1904 ; the Patron 's Medal of the Royal Geographical Society in 1910 ; the Neill prize and Medal of the Royal Society of Edinburgh in 1913 , and the Livingstone Medal of the American Geographical Society in 1920 . He also received an honorary LL.D degree from the University of Aberdeen . The honour that eluded him , however , was the Polar Medal , awarded by the Sovereign on the recommendation of the Royal Geographical Society . Although the Medal was awarded to the members of every other British or Commonwealth Antarctic expedition during the early 20th century , the SNAE was the exception ; the medal was withheld .

Bruce , and those close to him , blamed Markham for this omission . The matter was raised , repeatedly , with anyone thought to have influence . Robert Rudmose Brown , chronicler of the Scotia voyage and later Bruce 's first biographer , wrote in a 1913 letter to the President of the Royal

Scottish Geographical Society that this neglect was " a slight to Scotland and to Scottish endeavour ". Bruce wrote in March 1915 to the President of the Royal Society of Edinburgh , who agreed in his reply that " Markham had much to answer for " . After Markham 's death in 1916 Bruce sent a long letter to his Member of Parliament , Charles Price , detailing Sir Clements 's malice towards him and the Scottish expedition , ending with a heartfelt cry on behalf of his old comrades : " Robertson is dying without his well won white ribbon ! The Mate is dead ! ! The Chief Engineer is dead ! ! ! Everyone as good men as have ever served on any Polar Expedition , yet they did not receive the white ribbon . " No action followed this plea .

No award had been made nearly a century later , when the matter was raised in the Scottish Parliament . On 4 November 2002 MSP Michael Russell tabled a motion relating to the SNAE centenary , which concluded : " The Polar Medal Advisory Committee should recommend the posthumous award of the Polar Medal to Dr William Speirs Bruce , in recognition of his status as one of the key figures in early 20th century polar scientific exploration " .

= = = Last years = = =

After the outbreak of war in 1914 , Bruce 's prospecting ventures were on hold . He offered his services to the Admiralty , but failed to obtain an appointment . In 1915 he accepted a post as director and manager of a whaling company based in the Seychelles , and spent four months there , but the venture failed . On his return to Britain he finally secured a minor post at the Admiralty .

Bruce continued to lobby for recognition , highlighting the distinctions between the treatment of SNAE and that of English expeditions . When the war finished he attempted to revive his various interests , but his health was failing , forcing him to close his laboratory . On the 1920 voyage to Spitsbergen he travelled in an advisory role , unable to participate in the detailed work . On return , he was confined in the Edinburgh Royal Infirmary and later in the Liberton Hospital , Edinburgh , where he died on 28 October 1921 . In accordance with his wishes he was cremated , and the ashes taken to South Georgia to be scattered on the southern sea . Despite his irregular income and general lack of funds , his estate realised £ 7 @, @ 000 ( 2016 value about £ 280 @, @ 000 ) .

= = Assessment = =

After Bruce 's death his long @-@ time friend and colleague Robert Rudmose Brown wrote , in a letter to Bruce 's father : " His name is imperishably enrolled among the world 's great explorers , and the martyrs to unselfish scientific devotion " . Rudmose Brown 's biography was published in 1923 , and in the same year a joint committee of Edinburgh 's learned societies instituted the Bruce Memorial Prize , an award for young polar scientists . Thereafter , although his name continued to be respected in scientific circles , Bruce and his achievements were forgotten by the general public . Occasional mentions of him , in polar histories and biographies of major figures such as Scott and Shackleton , tended to be dismissive and inaccurate .

The early years of the 21st century , however , have seen a reassessment of Bruce 's work . Contributory factors have been the SNAE centenary , and Scotland 's renewed sense of national identity . A 2003 expedition , in a modern research ship " Scotia " , used information collected by Bruce as a basis for examining climate change in South Georgia . This expedition predicted " dramatic conclusions " relating to global warming from its research , and saw this contribution as a " fitting tribute to Britain 's forgotten polar hero , William Speirs Bruce " . An hour @-@ long BBC television documentary on Bruce presented by Neil Oliver in 2011 contrasted his meticulous science with his rivals ' aim of enhancing imperial prestige . A new biographer , Peter Speak ( 2003 ) , claims that the SNAE was " by far the most cost @-@ effective and carefully planned scientific expedition of the Heroic Age " .

The same author considers reasons why Bruce 's efforts to capitalise on this success met with failure , and suggests a combination of his shy , solitary , uncharismatic nature and his " fervent " Scottish nationalism . Bruce seemingly lacked public relations skills and the ability to promote his work , after the fashion of Scott and Shackleton ; a lifelong friend described him as being " as prickly

as the Scottish thistle itself " . On occasion he behaved tactlessly , as with Jackson over the question of the specimens brought back from Franz Josef Land , and on another occasion with the Royal Geographical Society , over the question of a minor expense claim .

As to his nationalism , he wished to see Scotland on an equal footing with other nations . His national pride was intense ; in a Preparatory Note to The Voyage of the Scotia he wrote : " While ' Science ' was the talisman of the Expedition , ' Scotland ' was emblazoned on its flag " . This insistence on emphasising the Scottish character of his enterprises could be irksome to those who did not share his passion . However , he retained the respect and devotion of those whom he led , and of those who had known him longest . John Arthur Thomson , who had known Bruce since Granton , wrote of him when reviewing Rudmose Brown 's 1923 biography : " We never heard him once grumble about himself , though he was neither to hold or bend when he thought some injustice was being done to , or slight cast on , his men , on his colleagues , on his laboratory , on his Scotland . Then one got glimpses of the volcano which his gentle spirit usually kept sleeping " .