

The Royal Society of Edinburgh
The Rt Hon Lord Fraser of Carmyllie QC,
Formerly MP for Angus, Minister of State at the Scottish Office,
Minister for Energy and Shadow Leader of the House of Lords
Currently a Privy Councillor,
Honorary Visiting Professor of Law at Dundee University,
Honorary Bencher of Lincoln's Inn, London and
member of the Scottish Broadcasting Commission
The Red Lichties and their Impact on the Rest of the World
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The American Declaration of Independence, lawn tennis – and even the adhesive postage stamp – all owe much to Red Lichties. The Arbroath area has produced more than its fair share of great men and women across the centuries. Lord Fraser offered an informative and entertaining insight into the lives and work of some of them, from the 18th century to the present day. Not all are widely known, but each helped shape the modern world.

Whether their names are celebrated or forgotten, Red Lichties have long displayed a gift for inventiveness and hard work. Lord Fraser underlined the point by choosing the oldest sea-washed lighthouse in the world – at Bell Rock – as the backdrop to his lecture. Thanks to the fine workmanship of the stonemasons of Arbroath, it has withstood the fury of the North Sea for two centuries. The blacksmith whose metalwork was equally vital to its strength had just six hours day in which to work before the rising tides extinguished his furnace fire. The workmen's spirit of determination left its mark on history.

So too did the efforts of the Reverend Patrick Bell, 19th century minister of Carmyllie who, witnessing the backbreaking efforts of agricultural labourers was inspired to invent the reaping machine. "When you next see an American movie with a massive combine harvester working its way across vast prairie-like fields, it's worth remembering that the basic principles on which it operates have changed very little from the days of Bell," said Lord Fraser.

The audience had been welcomed into the lecture theatre to the sound of Bob Dylan's *From a Buick 6*, a song that could never have been written had it not been for a Red Lichtie. David Dunbar Buick was described by Lord Fraser as the maker of "the finest and most beautiful motor cars the world has ever seen" and was founding father of General Motors. He reflected that the \$10 million that Buick was worth in 1920 meant his fortune was greater than that of 21st century Microsoft billionaire Bill Gates. Regrettably, like some other Red Lichties, his capacity for inventiveness was not matched by business sense and Buick died poor.

Before applying his talents to the motor industry, he had worked out how to attach enamel to cast iron. The technique was applied to everything from typewriters to the once-ubiquitous enamelled baths that, after being eclipsed by plastic, are now back in fashion as expensive and sought-after features for period bathrooms. "Most of us would have been perfectly satisfied if we had just done that much for humanity, but to have also been the founder of the greatest automotive company that ever existed seems to me to have been quite, quite remarkable."

Shifting from the realm of manufacturing to moral philosophy, the next in what Lord Fraser described as a "personal and idiosyncratic" selection of great figures from Arbroath was William Small. As a young man of 24 he crossed the seas for a post at the William and Mary College in Britain's American colony of Virginia where, despite malaria, he blossomed. The insanity of the head of the college and indifference of its deputy meant that Small was forced to take up the reins. Fraser claimed this daunting task yielded an invaluable legacy for the academic world: "He was so brilliant in all that he did that all the foundations of modern university teaching are probably attributable to him." Yet this was just one aspect of his influence.

Among Small's students was future American President and co-author of the Declaration of Independence Thomas Jefferson. Jefferson praised Small as the man "who probably fixed the destinies of my life".

More than this, he stands behind the founding vision of a nation as, according to Lord Fraser, it was the ideas that he developed in the intellectual foment of Enlightenment Scotland that were the basis of the Declaration of Independence. “I always thought that this document broke new ground, not only in its beauty and simplicity of expression, but also in its profundity of intellectual thought. But I later realised that I was wrong. There is nothing new in that declaration. It was all from Scotland. It had all been thought about and argued about many years before Small went across.”

Another man who allowed others to fulfil his dreams was engineer James Shanks, whose lawnmowers included a roller, so they flattened as well as cut the grass. This innovation made possible the development of the smooth playing surfaces needed for the emergence of lawn tennis. Displaying an early machine, around 120 years old, Lord Fraser said that without Shanks there would be no Wimbledon and Roger Federer may have grown up as an Alpine goatherd rather than a sporting champion. The idea was a winner, but the business ultimately failed. This may partly have been because the first Shanks mowers were so good they never needed to be replaced.

Just as revolutionary was the contribution of James Chalmers, whom Lord Fraser lauded as the man behind the sticky postage stamp, ahead of rival claimant Sir Rowland Hill.

Another Red Lichtie who has tended to be eclipsed by the fame of another was James Bowman Lindsay. He was the first person to discover how to create light by putting electricity through a vacuum – and publicly demonstrated how it worked at the Thistle Hall, Dundee. Despite being in a position to revolutionise the world with the light bulb, he failed to patent the idea. It was thus left to American Thomas Edison to bring electric light to the world. With little obvious interest in commercial possibilities Lindsay, who Lord Fraser describes as a “man of unbelievable genius” instead devoted some 34 years to compiling a now-forgotten dictionary in 50 languages. Nonetheless he is still remembered as a pioneer of telegraphy and also had a fascination for astronomy and religion – ultimately being granted a pension by Queen Victoria for his contribution to science.

And the town’s fame continues into the modern age.

Lord Fraser cited the Arbroath Smokie as a culinary dish so excellent the French have just about adopted it as their own.

It also has a famous daughter to celebrate in Professor Anne Glover, Scotland’s Chief Scientific Advisor, who also has a Chair in molecular and cell biology at the University of Aberdeen. Paying tribute to her trailblazing career Lord Fraser said: “She is a leading edge-scientist who was born and bred in this place, and she is simply mega-brilliant. And it is wonderful to think that we have someone like her to carry forward the great Red Lichtie traditions.”

Following the lecture there was a vote of thanks by Principal of Angus College, John Burt OBE, followed by an open question and answer session chaired by Professor Jan MacDonald, Vice-President of the RSE.

Asked if Arbroath was still producing as many figures of such scientific note as in the past, Lord Fraser said he believed people of the same abilities were still out there. However, the efforts of the individual are often not as obvious as in the past because people work in teams and their careers tend to be in highly specialised areas.

On the subject of the influence of the Shanks lawnmower overseas, Lord Fraser agreed that they were popular in places such as the Indian region of Assam and even in the Middle East.

Lord Fraser was questioned on whether great Scots often seemed to be poor in enterprise. He agreed that this often seemed to be the case, but cited the claim by the BBC’s Jeremy Paxman that the Scots are set on running England, adding “and nae bad thing either!”

Asked which of the figures, or inventions, he had spoken about he would most like with him on a desert island, Lord Fraser opted for either Small or Buick. Rounding off the evening, Professor MacDonald said she believed that while his intellect opted for the philosopher, his heart was with the Buick 6.

Matthew Shelley