The Leather Industry in Bridge of Weir - Past and Present

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Leather making is probably one of the oldest industries known to mankind. Today Bridge of Weir is home to the largest leather manufacturing plant in the United Kingdom and from which almost 90% of all the leather produced is exported to over 40 countries around the world. Much of the history of the leather industry today is intertwined with the history of the Muirhead family who have had an association with Bridge of Weir since 1870 and which continues to this day.

Before dealing with the history, here is some brief generic information about leather manufacturing. Leather can be made from the hide or skin of any animal, reptile or fish. Tanning is the process that converts raw hide or skin, an unstable material comprising mainly the protein collagen, into leather. Originally the tanning process was based upon the application of the by-product of the forester, oak bark, to the by-products of the farmer, hides and skins. It is not surprising that the profound changes that took place in agricultural practices throughout the eighteenth and nineteenth centuries had their repercussions on the tanning trades.

The first known tannery in Bridge of Weir was the Burngill Tannery, which was opened in 1770. As far as it is known, this probably preceded the cotton mills by about 10 years or more. 1770 was also the year in which the original bridge over the River Gryffe was built. The tannery was owned and run by the Speirs family. William Speirs had established it and in later years it was run by his two sons. The business eventually fell into bad times and assets were taken over by the City of Glasgow Bank. It closed finally on John Speirs' death in 1869, just one year short of its centenary. Coincidentally it was the same year in which the railway line was constructed.

It is not known exactly what type of leather was produced in the original tannery but it is known that at that time leather played its part as a suitable material of construction in all stages of the mechanisation of the textile industries. [The textile industry was dominant in Renfrewshire at that time. Indeed until the cotton trade disappeared from the village in 1876, Bridge of Weir had several cotton mills which for many years employed over 700 people.] A wide range of different leathers were employed in the building of the various carding, combing and condensing machines used to prepare the fibres before spinning. Leather was used to cover the rollers on spinning machines.

By the end of the nineteenth century it is estimated that there were 90 million spindles worldwide, all requiring leather roller covers. The unique properties of leather were also exploited in the design of weaving machines.

It is not known exactly what caused the Burngill Tannery to fail but changes in agricultural practices such as the enclosure movement, improvements in drainage, the introduction of metal branded agricultural implements and the application of chemicals to the soil together enabled areas of land, previously fit only for afforestation, to be exploited for arable and grazing purposes. This led to a shortage of oak bark and a resultant increase in prices, particularly during the period of the Napoleonic and Crimean Wars.

The hides and skins themselves were also affected. Breeding experiments at that time resulted in larger animals being produced and larger and thicker hides coming onto the market. In the case of cattle hides this trend was accelerated by an increase in the proportion of animals being over wintered. But at that time larger size and artificial feeding generally lead to poorer quality hides.

And so increasingly there was a shortage of hides and tanning materials, a shortage that could only be made up by importing; firstly raw materials and then finished leathers from the expanding Empire and elsewhere. As a direct consequence, the second half of the nineteenth century saw the laying down of numerous large tanning yards close to the port areas of such cities as Bristol, Liverpool, Newcastle, Hull and of course Glasgow.

There might not have been a thriving leather industry in Bridge of Weir today had it not been for Andrew Muirhead, who on the 15th May 1870 purchased the Burngill Tannery from the City of Glasgow Bank for the sum of £500. The sale was concluded on the 16th January 1871 and the interest which had accrued during the six month period amounted to £16 and 17 shillings. Interestingly the legal fees for the transaction were £4/14/6, just under 1% of the purchase price.

Andrew Muirhead was a successful tanner and leather merchant in Glasgow. He himself was a fourth generation member of a family that had been involved in tanning leather since 1758 when his grandfather's uncle, John Muirhead, founded a tannery in partnership with Sir John Stirling Maxwell which produced glove leathers which he exported to the colonies in North America. The tannery was located on the banks of the river Cart at Pollokshaws. In 1840 the business was transferred to the Burnside Tannery, rented premises on the Molendinar Burn, Spoutmouth (near to where the Gallowgate is today). In the same year Andrew

purchased the business outright from his father, James. The closure of the Burngill Tannery in Bridge of Weir was extremely opportune, as in 1870 the Burnside Tannery was purchased compulsorily by the Glasgow and South West Railway Company. Andrew also conducted business from other premises in Brunswick Lane (part of what we know today as the Merchant City), which Andrew had purchased 8 years earlier.

When the purchase of Burngill Tannery was completed in 1845 Andrew changed its name to the Gryffe Tannery. With Andrew continuing to spend much of his time in Glasgow, the business in Bridge of Weir was managed by a foreman, John Young, until 1876 when Andrew's eldest son James took over at the age of 18. Interestingly, at about this time the Black Bull Inn, now called the Garthland Arms, in Lochwinnoch lost its licence. Andrew, who lived in Lochwinnoch during the summer months and who was an abstainer, purchased the premises and converted it into a temperance hotel. It lasted only for a few years trading at a loss and he eventually gave it up. The Garthland has thrived as a licensed pub eversince and Andrew sensibly concentrated on making leather!

Despite the enforced sale of the Burnside Tannery in Glasgow, Andrew had wanted to expand his business to safeguard the prospects of four of his five sons who were interested in leather manufacture. Shortly after starting the Gryffe Tannery for his eldest son James, he closed the Brunswick Lane factory and moved production to larger premises, the Dalmarnock Works, a former flax and jute mill at Dunn Street, Bridgeton. Andrew's second son, Henry, worked in Bridgeton and was made a partner in 1883 after which time the firm became known as Andrew Muirhead and Son Ltd. The company remains there to this day and is the only surviving leather manufacturer in Glasgow.

Andrew's investment in Bridge of Weir was a bold stroke. In the early nineteenth century the village population was supported mainly through cotton spinning and blanket making. There were at least four fair sized mills and about three or four small ones, all using the Gryffe River for water power, first by way of water wheels and then water turbines. By 1870 the cotton and blanket trade was in decline. In Bridge of Weir there was therefore an available pool of labour and an ample water supply. Land was presumably cheaper there and of course Bridge of Weir was an advantageous location, being on the recently constructed Glasgow to Greenock railway line.

Andrew died in 1885. In 1892 Andrew's eldest son, James who owned and ran the Gryffe Tannery, made one of his younger brothers, Roland, a partner in the

business. It is interesting to note that the fixed asset inventory at that time records the water wheel as the most valuable at £210, followed by the steam boiler valued at £76. A tannery drum was valued at £10.

In 1905 James sold his share of the Gryffe Tannery to Roland for the sum of £8,292.18s and $7^{1}/_{2}d$. Gryffe Tannery had built up a reputation for producing equestrian leathers, the demand of which had grown during the latter half of the nineteenth century. Interestingly, Roland, who had more than a passing interest in politics [he was later to be one of the founders of the Scottish Nationalist Party in 1934 and indeed its first Chairman], changed the spelling of Gryffe to Gryfe with one 'f'. It was suspected that he thought that two 'f's was an anglicised version of the name!

However the member of the family who was to provide probably the greatest legacy to Bridge of Weir was Andrew's youngest son, Arthur, who was only 12 at the time of his father's death. When Arthur left school at the age of 15 he entered the family business in Glasgow, serving his apprenticeship as a currier with his brother Henry at Dunn Street, Bridgeton before completing his training at the Gryffe Tannery with James. "Currying" is not the culinary process used in the kitchens of Indian restaurants but is the process that was carried out after the hides were tanned. To curry a hide it was first shaved level then treated with oils and fats, often rubbed into the hide by hand, to give the finished leather the desired suppleness and softness.

In 1905 Arthur Muirhead decided to strike out on his own and formed his own business in Bridge of Weir. He bought a parcel of land from Dr Alexander Freeland Barbour for £1,500. It was on the site of an old blanket mill called Laigh Mill. The mill was adjacent to the River Gryffe, downstream of the Gryffe Tannery and it had rights to draw water from the nearby Houstonhead Dam. The new company was named Bridge of Weir Leather Company and the mill was renamed Clydesdale Works, although the workforce and local villagers often referred to it as 'the Currying Shop' from the process that was carried out there. Arthur's vision was to produce upholstery leather for furniture and seating in the transport industry – for cars, ships, railway carriages and, in later years, aeroplanes. He had the foresight to predict that people would always want to be transported in comfort and luxury and that leather provided the ideal covering.

The Gryffe Tannery in the meantime had made its name supplying leather for an earlier mode of transport – the horse. During the eighteenth and nineteenth centuries the increasingly efficient system of toll roads encouraged the expansion

of travel both on horseback and by carriage. For example the number of licensed carriages had increased from 18,000 in 1775 to 106,000 in 1840. This created a massive demand for harness and saddlery leathers. The development of a countrywide railway system also generated a requirement for leathers, not least to upholster thousands of carriages.

By the beginning of the 20th Century, many of the tanning chemicals had to be imported. There was just not enough oak bark available to tan all the leather required and the imported materials just had to be made to work. In the 1850s British tanners used 200,000 tons of home grown bark and 30,000 tons of imported materials. By the last decade of the Century, the use of home grown bark had halved, whereas imports of tanning materials had increased to about 700,000 tons. One such tanning extract used as an alternative to oak bark was bark from the mimosa or black wattle tree. Its widespread use by the tanneries in Bridge of Weir in the early 20th Century was probably the reason that Mimosa Road in Bridge of Weir got its name.

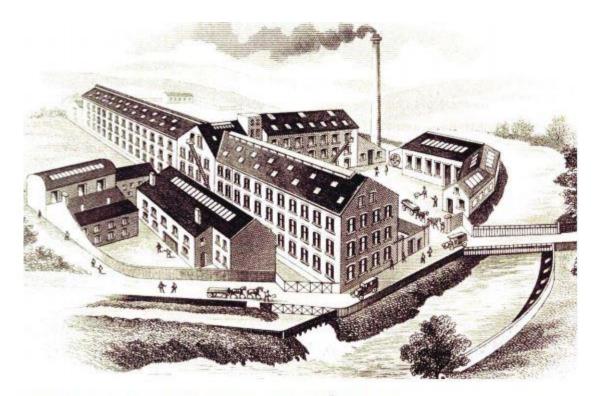


Figure 10: Clydesdale Works in the Early 20th Century

The first leather produced at Clydesdale Works was mainly upholstery leather for the furniture, marine and automobile industries as well as bag and case leather for travel goods. The automobile industry was in its infancy but orders were won with the Ford Motor Company in Detroit which later led to orders from the Ford Factory at Trafford Park, Manchester where the Model T was first assembled in Britain. Arthur started the company with 20 people and by the outbreak of the Second World War he had doubled the factory space and was employing 100 people. During the 1914-1918 war the company was fully utilised for the production of military leather equipment including army boot leathers. After 1918 Bridge of Weir Leather Company reverted to their normal production and added pigskins for fancy goods such as wallets and handbags. Leather from pigskins proved popular and in 1920 the adjacent Gryffe Grove Mill was purchased from William Shanks and converted into a sheepskin tannery. Sheepskin leather production was relatively short lived and after the second World War the tannery (always known locally as the Sheepskin tannery) became engaged in the production of pigskins. The skins were traditionally sourced only from Scotland where they were removed. In England pigskins were unavailable as consumers there wanted crackling on their pork and rind on their bacon – so they ate the skins! In 1927 Arthur Muirhead formed a limited company, The Bridge of Weir Leather Company Ltd.

The trade of tanning and leather manufacturing was heavy and dirty. Bridge of Weir was a small community. Skilled workers were therefore hard to find and hard to keep. Because of this, Arthur Muirhead carried out remarkable social experiments. In 1911 he had introduced into the basement of the Clydesdale Works a half length swimming pool with all the attendant facilities, comprising ordinary and Turkish baths, drying pipes, costumes and towels. Shortly after the baths opened they were also made available to the public. Pension schemes, sickness benefit and paid holiday schemes were also introduced at that time long before these benefits either became commonplace or even mandatory under law. In the 20 year period between the two world wars, Arthur built over 40 houses with modern conveniences for his workforce. Many are located on Houston Road and Mill O'Gryffe Road and some are still owned by the company. In 1921 Arthur bought land in Ranfurly and gifted it to the community. This is now the park and glen which extends from Horsewood Road down towards the Main Street behind the Railway Tavern. In addition from 1925 to 1948 Arthur was the main benefactor to the Thistle Golf Club in Bridge of Weir until the lease expired and the land was reclaimed by the owners of Auchensale Farm.

In 1929 the company diversified into the tanning of reptile skins for ladies shoes and handbag trade which increased the turnover enormously. In the 1930s the fashion for alligator, lizard, python and other snake skins continued unabated. In 1932, to satisfy the market demand, Arthur Muirhead bought the disused Locherfield Works, Kilbarchan Road, which had lain idle for seven years. It was an old calico printing works and it was purchased from the Calico Printers Association. The title of the land also included the Locherfield Dam adjacent to Old Ranfurly golf course from where all the process water was and continues to be sourced.

By 1933 the Bridge of Weir Tannery at Locherfield was producing over 1,000 python, 500 other snake, 3,000 lizard and 600 alligator skins per week and by 1938 was the largest reptile tannery in the UK. In 1934 Arthur formed a new subsidiary company, National Chrome Tanning Company, which was restructured in 1936 with the financial assistance of Belgian and French investors (also tanners). Now Bridge of Weir had four tanneries – one on Kilbarchan road, the others in the centre of the village.

Chrome tanning, using basic chromium sulphate had become the principle method of tanning and even today 80% or more of all leather is manufactured by variants of this process. Chrome was first used commercially in the 1870s but was not employed as a tanning method in Bridge of Weir until the establishment of National Chrome Tanning Company. Chrome tanning was a more permanent method and allowed tanners to produce softer and more heat resistant leathers – ideal for shoes and boots for which National Chrome became well known. The tanning processes were carried out in large drums made of African teak, of the type still used today, whilst the traditional vegetable tanning was done by immersing the cattle hides in pits.

In the meantime Gryffe Tannery continued to produce leather by more traditional means (vegetable tanning) for saddles, harnesses and gloves. Bridge of Weir Leather Company continued to produce leather for cars, ships, railway carriages, buses and furniture. It was during the late 1920s that Bridge of Weir Leather Company won its first contract to supply benches for the House of Commons. Indeed it is one of a few firms still manufacturing today that exhibited at the Empire Exhibition at Bellahouston Park in 1938. On the eve of war in 1939 the various tanning enterprises in Bridge of Weir were producing finished leathers for such diverse products as wallets, furniture, shoes and automobile upholstery out of materials from cowhide to python and alligators to pigskins.

When war came in 1939 all the tanneries in Bridge of Weir were engaged in war work: National Chrome supplied boot and shoe leather for the three services; the Gryffe Grove mill produced sheepskins for military clothing; the Gryffe Tannery tanned hides for belts and straps for military uniforms and at Clydesdale Works, leather was produced for the seats for warships, tanks, personnel carriers and other military vehicles.

Towards the end of the war the business was expanded again by the purchase of an Edinburgh company, John Cameron & Son (Curriers) Ltd, which had tanneries in at Silver Mills in Edinburgh, the site of the old Scottish Mint, and at Kinghorn in Fife. In the early 1950s, the production at Cameron's factories was moved to Bridge of Weir and in 1951 a large extension to Clydesdale Works was completed.

One of the speciality leathers produced by John Cameron was the famous Kinghorn Tacky grip for golf clubs and tennis racquets. This speciality was developed further at Clydesdale Works and the grips exported all over the world, particularly to the USA and Canada with such names as Slazenger and McGregor Sports being amongst the company's best customers. The well known and highly successful golfer, Ben Hogan, won the Open Championship in 1953 with Kinghorn Tacky grips on his clubs made in Bridge of Weir. In later years, Arthur Ashe won Wimbledon in 1975 with a Head racquet with a Bridge of Weir leather grip. Sadly this business was not to last as the rubber sleeve grip and towelling grips had been developed. These were less expensive and easier to fit. Consequently the production of sports grips finally ceased in 1984. However the company's connection with golf continues as Bridge of Weir leather is featured on all the chairs in the R&A Clubhouse and the R&A came to Bridge of Weir when they needed to make three replicas of the original Open Championship belt. Earlier this year a further two replica belts were commissioned by Prestwick Golf Club in recognition of the 150th year since the first Open Championship was played at Prestwick. One of these belts was presented to this year's winner at St Andrews.

In the post war years the tanning companies returned to normal production. Ships built on the Clyde, such as the Royal Yacht Britannia, were fitted out with Bridge of Weir leather. The early contacts with Ford prior to the First World War were continued and in the 1950s leather from the Clydesdale Works was specified in Ford's Continental Mark II, America's challenge to the Rolls Royce, which sold for £6,500 in 1956.

The 1950s also was a boom in commercial travel. No more so than in 1954 when Vickers Viscount became the first ever turboprop airliner in the world to enter

commercial service – with Bridge of Weir leather. The first jet airliner designed for transatlantic flight was the de Havilland Comet. Under the flag of BOAC the Comet heralded a new age in air travel with all passengers seated in the comfort of Bridge of Weir leather.

At that time also the Citroen DS revolutionised the way we look at cars – Bridge of Weir leather was supplied to their assembly plant in Slough. Bridge of Weir leather was also selected for the original, and now famous, Charles Eames chair and ottoman in 1956. Even curling stones, made in Mauchline, featured a red leather washer at the base of the handle.

In 1957 both Arthur Muirhead and his eldest son Ramsay died. The business was taken over by Arthur's second son Wilbur and his younger brother Earl.

The changing market conditions experienced by the leather trade in the late fifties and early sixties with competition from cheaper foreign leathers and the emergence of plastics convinced Wilbur that the successful way ahead was for suitably viable leather producers to amalgamate and reap the benefit of the resulting savings from rationalisation. In 1965 a group of Scottish tanning companies was formed. It was named Scottish Tanning Industries Ltd. It comprised Bridge of Weir Leather Company Ltd, National Chrome Tanning Company Ltd, Andrew Muirhead & Son Ltd. of Glasgow, W J & W Lang Ltd of Paisley and W & J Martin Ltd of Glasgow. Of the original companies only W & J Martin has failed to survive to this day. Martin's was located in Baltic Street in Bridgeton and at the time when their tannery was being compulsory purchased, new premises were built adjacent to Locher Works and named Baltic Tannery. In later years it was re-named Baltic Works. And so from 1965 Bridge of Weir had five tanneries: Gryffe Tannery, Clydesdale Works, The Sheepskin Tannery, Locher Works and Baltic Works. For a while these tanneries collectively employed as many people as the cotton industry had done over 100 years earlier.

Gryffe tannery continued to be independent however as by then it had concentrated much of its production of pigskins and horse hides as its raw material and operated in different markets, such as leather for motor cycle jackets, although it was still owned by a branch of the Muirhead family. In 1977, Gryffe was sold to a large English tanning group called Garnar and after they themselves were merged into a larger group, the tannery was closed in 1982 and the site is now occupied by Bull's Garage. Significantly the river, which had provided the source of power and dare I say, the means of waste disposal in the early days, underwent a momentous change. Salmon reappeared and have done so each year since.

The 1960s and 1970s saw many different types of leather being made in Bridge of Weir. Shoe leather production flourished especially after the introduction of long boots for women. During this period National Chrome Tanning Company and W & J Martin produced leather for shoe manufacturers such as Clarks, K-Shoes, Church's, Loake and Bally. Bridge of Weir Leather Company focussed on high quality furniture and car upholstery leather produced mainly from Scandinavian hides which were of a superior quality to domestic cattle hides due to many fewer barbed wire scratches and an absence of warble fly damage with which domestic cattle were infested.

There was still a production of high quality pigskin leather at Clydesdale Works and during the 60s and 70s almost all of it was exported to Italy, mainly to the fashion house Gucci for handbags, belts and other fashion accessories. Bridge of Weir's pigskin leather was the first to be used by a newly established company called Mulberry, which is now a recognised international brand. During these decades Bridge of Weir leather was specified in some iconic products – the QE2, built on the Clyde and some years later Concorde. Somewhat more traditionally, the early 1970s saw the rise in popularity of reproduction Chesterfield furniture which was to consume many thousands of hides over the next 20 years or so.

Production of leather for the motor industry continued. Aston Martin had become a customer in the late 1960s and into the seventies. At the end of that decade, Bridge of Weir became the sole supplier to the ill-fated De Lorean sports car which was assembled in Northern Ireland.

Also at the end of the seventies the Gryffe Grove Mill was destroyed by fire in the middle of the night. The building was subsequently demolished.

During the seventies the exodus of the shoe and leathergoods industries to low cost labour countries, initially Spain and Portugal then ultimately the Far East, accelerated. Towards the end of the 1970s shoe leather manufacture became very unprofitable and the decision to close W & J Martin was taken in 1980. Bridge of Weir now had three tanneries.

Whilst the 1980s saw further decline and unprofitability in shoe and other leather manufacturing, the decade heralded the rise in demand for leather in cars. First Saab, then Volvo, then Jaguar became important customers of Bridge of Weir Leather Company, which they remain to this day. In 1985 Bridge of Weir won the first of four Queen's Awards to Industry for Export.

So out went pigskins and sports grips and in came volume production of car upholstery leather. By the end of the 1980s it was obvious that it was no longer possible to continue to make shoe leather profitably in Locher Works where many of the buildings were as they had been when it was the printing works. In any case volume shoe manufacturing had moved by then to lower cost labour countries. Accordingly many of the old buildings were demolished and a new tannery building was erected and opened by HRH Princess Royal in July 1989. National Chrome Tanning Company changed its name to NCT Leather Ltd and it started producing furniture leather in place of shoe leather for a few years in Baltic Works which had lain empty since the closure of Martin's in 1980. This venture was not successful and in 1992 NCT Leather became a producer of tanned hides only (as opposed to producers of finished leather) supplying both Bridge of Weir Leather and Andrew Muirhead with the necessary raw material for their respective upholstery leathers.

The cessation of National Chrome's leather finishing at Baltic Works allowed Bridge of Weir Leather Company to expand its automotive leather production capacity and from 1992 until 2000 Bridge of Weir produced leather at both Clydesdale and Baltic Works.

During this period contracts were won to supply other car manufacturers in addition to Volvo and Saab such as Renault, Honda, Mitsubishi, Mercedes and Volvo Truck. NCT extended their plant and in 2000 all the production at Clydesdale Works was relocated to Baltic Works, which by then had been expanded to cope. Clydesdale Works, the old blanket mill, had outlived its usefulness and was no longer suitable, with its wooden floors, different levels, low ceiling heights and difficult access, for modern day manufacturing. In 2005, exactly 100 years after the commencement of leather manufacturing there, Clydesdale Works was demolished.

Since the early 1990s leather had become more popular than ever before and it was now being sold in volume to the aviation, marine and contract furnishing industries (hotels, restaurants, bars, public buildings) as well as the car industry. Bridge of Weir Leather Company went on to win three more Queen's Awards for export, in 1996, 2000 and 2012. In 2005 it was decided to change the parent company's name from Scottish Tanning Industries to Scottish Leather Group as the word 'tanning' had taken on a different and unwelcome meaning in contemporary parlance.

Income from the sale of Clydesdale Works for residential housing allowed further investment in automation and state of the art equipment, enabling production to be competitive. So, despite the increase in competition from China and elsewhere leather made in Bridge of Weir has found a special niche by concentrating in meeting the aesthetic demands of designers and the demands of high performance specifications from engineers. Today Bridge of Weir leather can be found in many of the world's leading cars and boats, as well as luxury hotels like the 7 star Burj al Arab in Dubai. Also Bridge of Weir is no stranger to Hollywood having been featured in films such as 'Back to the Future', 'As Good As It Gets', the last few James Bond films featuring the Aston Martin DB9 and 'Thunderbirds' when Bridge of Weir was asked to supply a pink leather for Lady Penelope's car.

More than 400 people are employed in leather manufacturing in Bridge of Weir making it now the largest leather production unit in the UK, processing over half a million cattle hides per annum almost all sourced from within the British Isles. Sadly however, Scottish Leather Group is today one of only 15 leather manufacturers left in the UK such has been the decline of this traditional manufacturing sector.

However the company is one of the world's leaders in high quality leather for seating and has developed this traditional material for use in other contemporary applications such as mobile phones and laptops.

In 2009 work started on the construction of a thermal energy plant, which was completed and commissioned at the beginning of this year. The plant was designed to produce energy, in the form of gas, from waste. In July 2010 HRH The Princess Royal returned to Bridge of Weir to officially open the plant. As well as having become almost self-sufficient in energy, the company no longer consigns its process waste to landfill sites. So in many ways the industry has come full circle in that the original tanneries used water from the River Gryffe, a renewable resource, to power the turbines. The company is now leading the way in environmental sustainability and has won many national awards for its efforts and achievements, including one from the Carbon Trust.

In 2012 Bridge of Weir Leather Company was granted a fourth Queen's Award for International Business and in the same year a new factory building, to accommodate a leather cutting facility, was completed and opened.

Over 250 years since John Muirhead first started producing his leather in Glasgow and 143 years after Andrew Muirhead first made his initial investment in the

village, the name 'Bridge of Weir' has become known internationally for fine leather and the business still remains under the same family ownership today. Jonathan Muirhead/ revised February 2014