

## Dunfermline's Industrial Past Gilbert Rae's Aerated Water Works, Baldrige Works, Golfdrum Street, Dunfermline



Gilbert Rae was born in 1841, at Marchwell Farm, Rullion Green, near Penicuik, East Lothian. He was the son of James Rae, who was then a tenant farmer, and his wife Rachel Martin. During Gilbert's early childhood his father changed his profession to that of general merchant/grocer and moved to Edinburgh. It appears that young Gilbert was trained in his father's shop and, according to family folklore, was given the sum of £100 by his father to go out into the world and set up in business for himself.

It is not known why Gilbert came to choose Dunfermline for this venture but it is known that in 1867 he took over the 'family grocery warehouse' business of James Shearer, in the Maygate, Dunfermline. This shop was part of a three storey building located at the Kirkgate end of Maygate and was licensed to sell wines and spirits. These premises would later become, for over a century, the headquarters of the wholesale grocery firm of Fraser and Carmichael. An advertisement in the Dunfermline Press of that year intimates this move and details an extensive list of the products Gilbert could supply. These included fine wines, liquors,



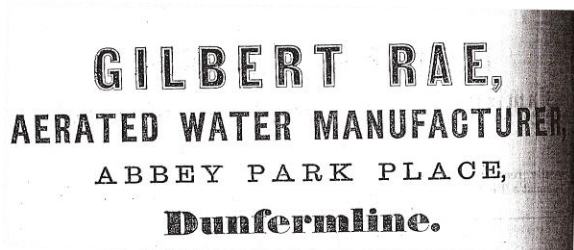
Gilbert Rae's shop in Maygate, Dunfermline, with the Abbey in the background

ales, porters, teas, coffees, eggs and butters. As will be seen from the bottle label below Gilbert Rae also sold 'Fine Old Burntisland Whisky'.



As with most grocers and chemists of that era, young Gilbert probably had a few

sidelines and one of these is likely to have been filling bottles with home-made drinks. The first we know of Gilbert Rae as a manufacturer however, was when he took over the small aerated water factory of Alex. Reid (later owner of The Globe Bottling Works) in Abbey Park Place, Dunfermline, where he made various ginger drinks, some apparently being alcoholic. An advertisement in Dunfermline's Trade Directory of 1869 shows Gilbert Rae of Abbey Park Place as an aerated water manufacturer and a licensed dealer in malt liquors.



Another important event took place in 1869, when Gilbert married Dunfermline girl, Jane Crombie, (below) at Abbey Park Place, on 25<sup>th</sup> November – See note 2.



Jane Crombie Rae

Around 1870/71, when Gilbert Rae was no more than 30 years old, he leased much larger factory premises, known as Baldrige Works, located at the west end of Golfdrum Street,

immediately to the north of the current garage premises of Ian Brown. These premises had had something of a chequered history, having been built in 1830 for use as a flax spinning mill. This venture, by Mr Kinnell, operated for only some seven years, before it was purchased by Mr Robert Robertson, and enlarged, for use as a spinning and weaving concern.

Robertson's business apparently never fully started, the firm coming to financial disaster. In 1855, the then Government took over the entire buildings and fitted them out, at great expense, for use as Military Barracks. As such they were never occupied however and Mr Mordaunt Gray, of the North British Advertiser, became the owner in 1859. It is not known what use, if any, the premises were put to between then and when Mr Rae took them over around 1871.

This must have been a major step forward in terms of a business venture by Gilbert Rae as the floor space at the three-storey Baldrige Works, (seen in the photograph below) was of massive proportions in relation to the use he proposed to put them to. One estimate put the floor space at almost four acres.



Gilbert Rae's Baldrige Works

Mention must be made of the workings of industry in the middle-to-latter of the 19<sup>th</sup> century when Mr Rae began his business. It was the great age of individualism in business. The steam engine had been recognised as the world's most wonderful invention and new source of power. Many factories were being converted to steam, but for others, as throughout the centuries, nature was the only supplier of power, by way

of windmills, watermills and horses. Lighting everywhere remained primitive, and was mainly by oil lamps or candles, with only a few having the benefit of town gas. Steam trains were beginning to provide a new means of transport for passengers and freight, indeed the Dunfermline to Stirling railway line, which ran immediately to the north of Rae's premises, had only opened in 1852, a feat witnessed by Jane Rae. Jane, by that time, had also sailed across the Atlantic in a square rigger with an auxiliary steam engine.

It was into this type of environment that Mr Rae started manufacturing aerated waters at Baldrige Works. From an early stage it appears that Mr Rae made his reputation with ginger drinks and this opinion was many years later shared by one of his oldest employees, William Ramage, who put these thoughts into verse;

To all who work with Gilbert Rae  
Long famed for ginger beer  
I wish a Merry Christmas time  
And a Happy Guid New Year

May he and we always agree  
And strive to do our best  
To keep our goods from blemish free  
Superior to the rest

From the outset Gilbert Rae's business appears to have made good progress. He used his own method of essence extraction and, as in the early days ginger root came to the factory from Jamaica in an unbleached state, a pure drink was the result. He was accepted as the original maker of a speciality drink, known as 'Champagne Ginger Beer'. Such was his confidence in the purity of this drink that, in 1974, he had it examined by Mr Stevenson Marshall, Ph.D., Lecturer on Chemistry at the Analytical Laboratory, Surgeon's Hall, Edinburgh, who was quoted thus, '*I have made a careful Chemical Analysis of the "Champagne Ginger Beer" manufactured by Mr Gilbert Rae, Baldrige Works, Dunfermline, and find such to be free from lead and other injurious ingredients, and to be of first-class quality.*'

He also made fermented drinks for some 35 years and bottled the ales and Burdock Stouts of several firms and the non-alcoholic ale of

Kops of London. Unusually for a businessman however, he stopped producing alcohol drinks about 1905, his reason being that as he had seen so many people ruined by alcohol he felt he could no longer have a hand in its production.

Regarding the drinking habits of the time, there is a typical story about Rae's workmen going for a day's outing by horse-brake and the driver returning without any passengers. Apparently he had left them drunk in various jails and pubs around the country-side. When he himself regained consciousness, he said the horses had brought him back home.



Gilbert Rae Horse-Drawn Lorry ready for a local Parade

Success with drinks did not stop Mr Rae from trying other manufactures. At different periods he made soft soap, rhubarb jam and coffee essence. He also made ice in hundredweight (51Kg) blocks which were used in the cold stores of hotels and large country houses throughout the area. The manufacture of ice was carried on until 1939, by which time people were acquiring electrical refrigerators.



Gilbert Rae Lorry Loaded With Ice Blocks

For the first 40 years at Baldrige, the mode of transport was the horse or train. It was therefore necessary for an enterprising businessman of the time to have agents,



depots or factories in other towns. By the late 1870s, Mr Rae had added a factory at 13 Marshall Street, Glasgow, as well as having depots in Alloa and Falkirk. He later opened another factory at 157 Leith Street, Edinburgh, known as the Scottish Central Aerated Water Manufacturing Company. This factory appears to have been run by Gilbert's son, James, but this appears to have been a short-lived venture. A depot existed at Portobello about the turn of the century, possibly serviced from the Leith factory. Finally, again about the turn of the century, he bought, but never used, the Globe Bottling Works in Woodhead (now Chalmers) Street, Dunfermline – See Globe Bottling Works. Apparently after removing the contents to his own factory, he sold this property.

Supplies for the depots were obviously important. So far as Alloa was concerned, horse drawn vehicles would set out simultaneously from Dunfermline and Alloa, and would meet halfway between the towns. There they exchanged loads, and presumably vehicles. The Alloa horse or horses then took the load of full bottles to Alloa, while the empty bottles went back to Dunfermline, each horse travelling some 15 miles each day. As there had been a railway from Dunfermline to Alloa since 1852, it must be assumed that the train was more expensive than the horse.

George Grieve was employed by Gilbert Rae as a horse van-man around 1900 and his grandson, also George, recalls his grandfather's stories about transporting lemonade and ice to the Kiwi Tavern in Auchtertool, the round trip taking the best part of a day.

There is evidence that some bottling was carried out at Falkirk before 1908. Certainly there was an ice-making plant there in 1904. It stopped production when one of the local managers, through lack of attention, ruined the machinery. The new manager apparently had more sober habits. It would appear then that Falkirk had been operating as a factory. Probably owing to the loss of the ice machinery, and the arrival of the first motor lorries, Mr Rae decided to keep Falkirk as a depot, and supply it by motor lorry from Dunfermline. This would be about 1910.



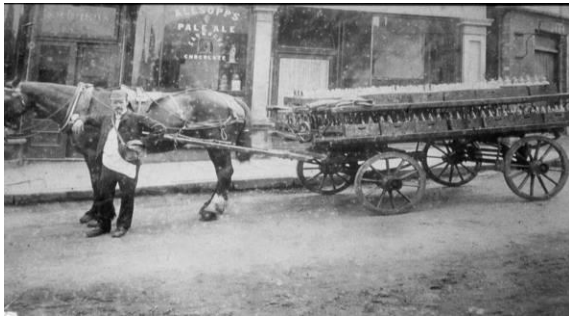
Early Gilbert Rae Lorries (Well Loaded With Empties)

To get to Falkirk on the south side of the Forth, the only road bridge until 1936 was at Stirling, 13 miles upriver (as the crow flies) beyond Falkirk – 13 miles in the 'wrong' direction. By this route the lorries from Dunfermline had a round trip each day of 70 miles, compared with the Kincardine/Higginsneuk Ferry route of 28 miles. This small ferry, though non-vehicular, was within horse distance on both sides, so it must have been economical for goods transport. In 1908 and earlier there were several ferry routes across the Forth in the Kincardine/Alloa area.

The Falkirk depot survived until the opening of Kincardine Bridge, in 1936, robbed it of its usefulness, as Falkirk then became only 14 miles distant from Dunfermline by motor lorry. So too, the ferry with its short journeys to the Elysian fields on the opposite side, came to an end. Kincardine, a hitherto forgotten, peaceful labyrinth of a village where children could play in the streets, was changed overnight into a busy main traffic route.

Perhaps it was for the ancillary products that Mr Rae took over Luscar Farm on the outskirts of Dunfermline during the latter part of the 19<sup>th</sup> century. There were then 30 or more horses used in the lemonade business. Their 'fuel tanks' were probably filled up with hay and other farm products. All products not used in the business would find a ready market elsewhere. Increasing the use of motor lorries brought a decreasing need for the farm and it was given up around 1909. The steam traction engine from Luscar, used for threshing, and as a mobile power unit, also the apparatus used for baling, were

occasionally used at Baldrige in the following years, being kept in the grounds there.



Gilbert Rae Horse-Drawn Delivery Lorry

Until the first world-war in 1914, steam had no real rival for power. Steam was used at Baldrige, supplied from a central power house to the buildings circled around it. This was the usual arrangement for factories in those days whenever possible. Besides some small boilers, there were two large ships boilers in use. These had originally been found on the beach at Portobello, and somehow Mr Rae had them transported to Dunfermline.

At this point it might be mentioned that Mr Rae also tried his hand at making concrete. He made large blocks, some were 2ft. x 9ins. x 6ins., and used them to add a storey to the original boiler house. Then he used them to add a single storey to the east side of the factory. He also, around 1900, built a two-storey block of flats with them in William Street, just to the north of his works. This building, modern for its day, housed many of his employees. He used his own concrete for some flooring in all these buildings. It says much for the quality of Mr Rae's concrete that the block of flats he built to the north of the Baldrige Works is still there in 2008. The afore-mentioned George Grieve was the first of Rae's employees to occupy one of these houses and his grandson, George, was born there in 1922.

Another early occupant of one of the flats built by Mr Rae was Jessie N. Cook who was employed at the works for over 40 years until her retiral in 1956. Jessie was initially employed as a commercial traveller and would travel by bus to various local towns and villages to obtain orders for the firm.

Jessie then moved on to take charge of the office at Baldrige Works for many years.

Mr Rae utilised two floors of Baldrige Works for stables and hay storage. He made additional exits with fireproof doors. After 1918, with empty stables, he used the ground floor to install a second ice-making plant. The first floor was used for the storage of boxes and bottles. One had to keep a good stock of everything in those days. The top floor was used for different purposes at different times.

Most of Rae's trade towards the end of the 19<sup>th</sup> century was with high class grocers, or Italian Warehousemen as they were sometimes called. Trade was also done through these grocers with the large private houses of wealthy people, but sometimes the trade was direct. Mr Rae was his own representative. He wore the garb of those days – top hat, frock coat, striped trousers, and a gold chain across his waistcoat with a gold watch attached to one end. An umbrella was sometimes carried, and sometimes a Gladstone bag. Mr Lyle, of Tate & Lyle Sugar, apparently used to dress that way when he called at Mr Rae's premises for orders. On one of his visits to Dunfermline, Mr Lyle impressed a very junior member of the Rae family by giving him sixpence, a small fortune in those days.

As regards Mr Rae's business trips, there were reports that they were not always without conviviality, but he did get orders from all over Britain. Some trade was done even as far a-field as India, the bottles being packed in large barrels with protective wood shavings, etc. In Britain the goods were despatched in very large wooden boxes with normal partitions, and holding three or four dozen bottles. Lids were tied down, and transport was by horse or rail. It must have required two people to lift these boxes. Baldrige Works were fortunately placed as regards the railway, for Whitemyre railway sidings were just across William Street, on the west side of the factory. These sidings were a remnant of the old Elgin Railway which took coal from the coalfields on the north side of Dunfermline down alongside the Coal Road (now William Street) to Charlestown and the Forth. This siding was linked to the main Dunfermline/Alloa/Stirling railway line.

At some early period Mr Rae had supplied Queen Victoria indirectly. Probably this was arranged by the Queen's grocers, whose name would appear on the bottles. The tin caps placed on top of the corks, bore the royal coat of arms. Cork and cap were kept in place by being wired on. This was before 1875 – the advent of the glass ball in the middle of the neck of the bottle. It is evidence of the high quality of Mr Rae's goods. His principles were cleanliness, thoroughness, and first class quality. He was strict about all three.

The early stoneware bottles used by Gilbert Rae were manufactured by Buchan of Portobello, Edinburgh. The use of these bottles was banned in the early 1900s following a court case when a woman found a dead mouse in a bottle of ginger beer – not one of Gilbert Rae's it must be emphasised. Clear glass bottles were the order of the day thereafter.



Three of Gilbert Rae's early stoneware bottles

The bottle with the glass marble in the neck always intrigues people. These were known as Codd's, this being the name of the inventor and were in use from 1875. With this type of bottle gas pressure had to be maintained in order to keep the glass ball in the closed position. From the number of glass marbles found at Baldrige, it is almost certain that the ball-in-neck bottles were used there. None has been found with Rae's name on it however.

There was another type of bottle, years later, which used a strong wire device anchored to the bottle neck, and stopper. This wire when pushed in one direction, kept the stopper tight

on the neck with mechanical pressure. Pushed in the other direction, the wire gadget released the stopper. This type was apparently never used at Baldrige Works.

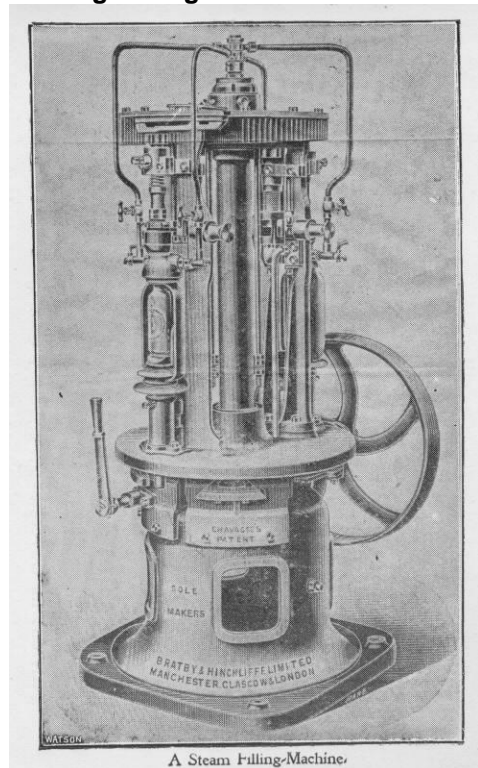
The glass bottles used by Gilbert Rae over the years were of different sizes and designs. One fairly unique design was entrusted to a French supplier who managed to spell Mr Rae's name 'Ray' on a large batch of etched bottles resulting in the order having to be reproduced. It is unlikely that wrongly printed bottles would be returned to France and, from the numbers still existing with collectors, it is likely that Mr Rae made good use of them.



One of the mis-spelt French produced bottles

Mr Rae always showed an inventive and progressive turn of mind. He tested all the materials, chemicals, etc. which were used. Though he left school at about the age of twelve, he later acquired a good knowledge of chemistry somehow. He was always willing to try new things. If his system of filtering was different from others, it was because he found it more efficient. It was some other person's trouble with water impurity, and a prosecution, that caused Mr Rae, for a period, to put an extra label on his bottles declaring – *'The water used in the manufacture of all our goods is genuinely filtered and sterilised'*. This was true of course. He used not only the

town's water, but water from a well in the works. The well was found to be inexhaustible with the pumps used. Apparently there was an underground stream running through it.



As already mentioned, he had his own process for obtaining ginger essence. According to an advertising pamphlet of the time, he was also the inventor and patentee of:-

1. An appliance for the extraction of air from water before carbonating;
2. A unique and successful germ-preventing, syrup-filling appliance;
3. A screw-top siphon bottle for the dinner table and part used for lemonade etc; and
4. A steam-powered filling machine - see above.

Most of the fruit essences used were made by Mr Rae. At one time, only the skins of lemons were used to make lemon essence, and apparently the rest of the lemon was dumped outside the building to await removal because

there was no market for them. Dunfermline people soon found a market! Lemons came from Palermo and Messina mainly, but sometimes came from other places. A secret and expensive ingredient of the original lemonade was attar of roses. This was supposed to add bouquet. Today it seems quite unsuited to lemonade. However, it is likely to have suited Mr Rae's contemporaries.

Boxes of ginger root came from Jamaica, while barrels of lime juice came from Montserrat. Raspberries, being extensively grown in Scotland and having a very good flavour, were collected mostly at Auchterarder and Greenloaning. Surprisingly, Mr Rae never seems to have produced a raspberry drink, except for the raspberry fruit 'wine' or 'cordial', which was made for the Christmas season. It had a ready sale all the year round however as it was very popular when added to ice-cream, the mixture being known as a 'McCallum'.

Likewise, blackcurrants were confined to the Christmas fruit cordial trade, and strawberries too. There were no vitamins in those days! The essences of some fruits were used in other drinks such as Ginger Ale and Stone Ginger. These were special drinks with an excellent flavour. Kola too was a special drink and was tremendously popular. It was sold in dumpy 10 ounce bottles – the sole survivor of the original type of bottle used for soft drink in the 19<sup>th</sup> century. Dry Ginger Ale was a 'luxury' drink sold in 5 ounce bottles with superior labels and the top part covered in gold foil. The boxes were special too, being without spars and accommodating 1 dozen bottles lying flat. Except for a few drinks with registered names, and which sold all over the country, Mr Rae used his own recipes or formulae.

It should be pointed out that the popularity of Rae's Kola was quite unconnected with the popularity of other kolas or colas in other places, or at other times. The flavour was quite individual, as were the ingredients. Kola is in fact what you make it. It may contain anything, the nuts themselves having no appreciable of pleasant flavour. Today, one is required by law to have a certain proportion of kola nut 'essence' in a drink labelled 'kola', but otherwise one can have ingredients of any

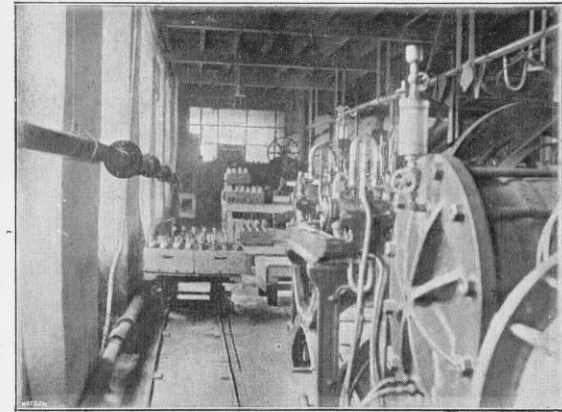
description. One reads on labels for example phosphoric acid and caffeine. Rae's Kola had an almost entirely fruit basis.

Rae's original formula for kola had to be abandoned after the 1939 – 45 war, and a modified formula had to be given up some years later, because it was too expensive to maintain at competitive prices.

Before leaving the ingredients, mention must be made of Rae's Invalid Soda, which was genuinely made for invalids. It was not just a fancy title as with some manufacturers who were known to put little more than gas and water in their siphons. It should be mentioned that it was then considered quite honourable to describe a bottle of gas and water as Soda Water. Sometime after 1920 many ice-cream shops started making their own drinks by buying the syrups from essence makers, and adding gas and water from their own 'soda fountain' machines. But to return to Invalid Soda, it contained sodium citrate, which doctors frequently advised patients to take in a glass of milk at night.

In the early days the gas used in aerated waters, carbon dioxide, was made on the premises by the action of sulphuric acid on local limestone, which apparently gave good results. It was stored in a gasometer, just like the coal gas at a town's gas works. Later on carbon dioxide gas was supplied in gas cylinders by a central supplier, making for an easier life in the factory.

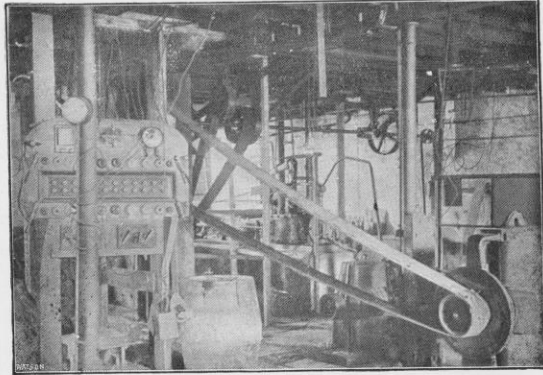
In connection with the gas, Mr Rae had a unique and complicated system of storage of gas and water, mixed at specific pressures. This was devised so that he could start bottling quickly, without the necessity of starting up the gas making and mixing plant. It was also possible to be emptying some tanks while filling others, with most of the machinery in action of course.



Corner of Machine-Room.  
Gilbert Rae Processing Plant

This storage system consisted of 10 or more cylindrical tanks which could be interlinked. Each had its own pressure and volume gauges, and three pipes with taps attached to each. There was a central master tank too, and a dashboard with several pressure dials and taps. These were connected to the gas-water mixing machinery, and to the tanks, and to the bottle filling machinery upstairs. For any employee to be left in charge of this plant, having less than six months tuition on it, was a most frightening experience. In such a case, one or more dials might show mounting pressure, and despite frantic efforts to find the right taps to adjust, nothing seemed to stop the upward spiral. An explosion would seem imminent. Should one run like mad while there was still a chance to escape? Fortunately there was always a permanent engineer in the place, who could be called upon in an emergency, if one could find him in time. He had a habit of going up one stair while you were going down the other! There were safety valves at several points of course, but the new employee always got the impression that they did not work, and that the place was about to become a heap of rubble. No one ever found out if this impression was correct. There must have been a good fairy lurking among all that machinery





Part View of Engine-Room.

**Is the Engine Room About to Blow?**

The complete scene in the aerated water factory in the decade before 1914 was only different from today in the sophistication and integration of today's machinery. One may now have a single machine which can carry out all the processes concerned, except syrup making, syrups being the concentrated drink before the addition of gas and water. Dirty bottles and new ones go into the machine at one end, and come out the other end cleaned, filled, corked, labelled, and ready for the market; whereas at the beginning of the twentieth century every operation was separate. It was a do-it-yourself age.

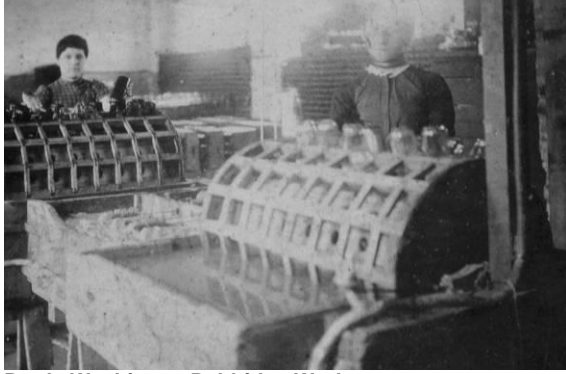
At Baldridge, as in most places, the syrup room was one or more floors above the bottling plant. This allowed the syrups to go through pipes to the filters, etc. by gravity, and from storage vessels again by gravity to the filling machines below. In the syrup room sugar was boiled by passing steam through it. This sterilized the sugar, and in any case it was just as easy to prepare and use as any other way of liquefying the sugar. Sugar of special grain arrived at the factory in 2 cwt. bags (102kgs). Most men found the 2 cwt. bag to be about the limit of their carrying capacity of their backs. Quite a few staggered about like drunks trying to carry them. Flour mills used even bigger bags! They must have been supermen to carry them.

Mr Rae insisted on sugar as a sweetener even when saccharin had been put on the market. Saccharin was 'artificial' and in any case its qualities were unknown at first. Also slimming was not so popular then. It really was cheapness which made manufacturers try it.

When the liquid sugar had cooled, a quantity of it, along with the appropriate quantity of water and other ingredients of the drink, were placed in a mixer and mixed either by rotation of the vessel, or by rotation of blades within the vessel. For many years Mr Rae used barrel churns, and they were certainly efficient. The mixture or syrup, was then run through tubes to the filters below, from there to the containers and, when required, to the syrup machine in the bottling department.

Mr Rae's essences were his secret, as were of course his recipes for the syrups. He counted on their excellence to bring him sales. The syrup room may have been a secret department, but the aroma attracted many intruders in the shape of bees and wasps. To try and keep them outside the building, trays of syrup were placed outside the windows. Since the wasps could not escape from the sticky syrup, most of them never flew again. Buckets of dead wasps were cremated daily.

Having given a brief glimpse into the section pumping gas and water to the filling machines, and the section supplying syrup to these machines, there remains only the bottling department to be looked at. First there is the bottle washing section. Silver paper was put over the stoppers before 1914, when the war stopped its use. Without this seal there was no guarantee as to the contents. Its disadvantage was that it was difficult to remove, and this necessitated soaking the bottles overnight in washing tubs. Next morning the bottles were washed in hot water, and then each placed on power driven rotating brushes. Finally they were rinsed by being inverted over jets of water. They were then placed upside down to dry on a rotating round table, full of holes of sufficient size to take the necks of the bottles. There the bottles remained till required for filling.



Bottle Washing at Baldrige Works



The bottle washing sinks and drying tables



Washed bottles ready for re-filling

Stoppers were of the screw type with a rubber ring round them. Naturally they had to be thoroughly examined and cleaned. After soaking to get the silver paper off, they were placed in a special machine for washing, and a germ killing fluid was always added to the water.

There was a miniature railway running round the bottling department, taking boxes of bottles from machine to machine – the conveyor belt or roller track of its day. It also

ran to other parts of the same floor such as the storage room or the loading bay. There was however no locomotive, the heavily constructed bogies were pushed around by man or woman power.

Clean bottles were taken by the mini-rail to the next machine, the syrup machine, which put the correct amount of syrup in each bottle automatically. This replaced an earlier hand-controlled machine. There were no problems of pressure at this stage. Each bottle removed from the syrup machine was replaced by another empty one. When all the bottles on that bogie had their ration of syrup, it moved on to the gas and water filling machine.



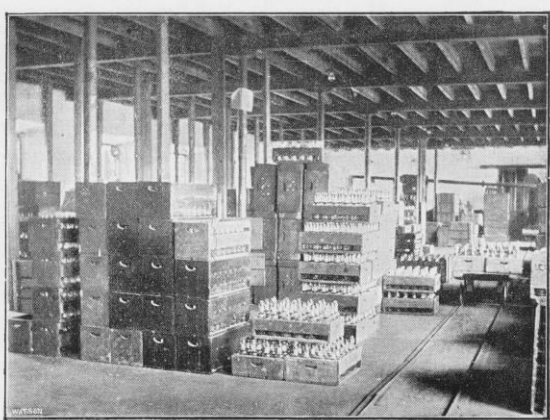
Bottle-Fillers at Baldrige Works c.1900

The operators of the gas-water machine, who were by law required to wear masks for protection against bursting bottles, would first see that this rotary machine was cleared. Then one would place a bottle with syrup in a niche of the machine as it orbited into view. By the time a bottle had made a circuit of the machine it was full at a predetermined pressure. One operator removed each full bottle, and inserted a screw stopper in it. Meanwhile, the other operator placed another bottle with syrup in the vacated niche, to start its tour round the machine.

Pressures in those days were much higher than they are today. Lemonade type drinks were bottled at 80 lbs. per sq. Inch. Stone bottles would only stand 40 lbs. per sq. in. Pressure affects flavour, and some of the newer drinks were bottled at 40 lbs. too. Siphons were filled at 130 to 150 lbs. per sq.

in.

Still in boxes on the mini-railway, the filled and corked bottles were pushed to the labelling section. Before the advent of labelling machines, it was all done by hand. Girls sat at little desks with gummed rollers or pads, alongside the mini-railway. As the boxes came along, the girls took out each bottle separately, and stuck on it the required label or labels, and the tinfoil over the stopper. A hand sponge for pressing, ensured proper attachment. Labels could be purchased already gummed, but dampness had to be avoided or they all stuck together. After labelling, the bottles went by mini-rail to the stockroom. There had to be ample store room in case of a hot summer. Most of the winter production went towards filling the store room.



Stock Room and the Mini Railway at Baldrige Works

The hours of work were 8 am to 6pm with a break for lunch. Unscheduled stops were permitted as and when possible, and probably these were necessary as some girls walked over three miles to work, in all weathers. There were few restaurants around, so the girls, who could ill afford restaurants in any case, had to carry their food with them. Drinks were 'on the house', as long as they were aerated waters. The sirens or horns of the local linen factories acted as alarm clocks for miles around. Some sounded at 6 am, some at 7 am, and some at 7.50 am. The men started at 7 am, or earlier. Those looking after the horses had to be at work before 6 am to feed them and get them ready for the road. Lorries were usually loaded the night before, and checked in the morning before going out.

They were also checked immediately on return, for all empty bottles had a deposit on them, and siphons were very expensive. Horses had to be fed and watered at night too of course. On journeys taking much time, lorries carried feed-bags and sometimes a pail for water. One thing a horse could do that a motor couldn't. The horse could bring the driver home, even if he fell asleep and did not want to go home.

Boxes for bottles and siphons were all made of wood, and most were bought from box making firms. However, here again Mr Rae did not rely solely on outsiders. He had his own machinery for making special boxes, and varnishing, and printing his name on them. There was also a full-time joiner employed to repair boxes, and frequently he had an assistant.

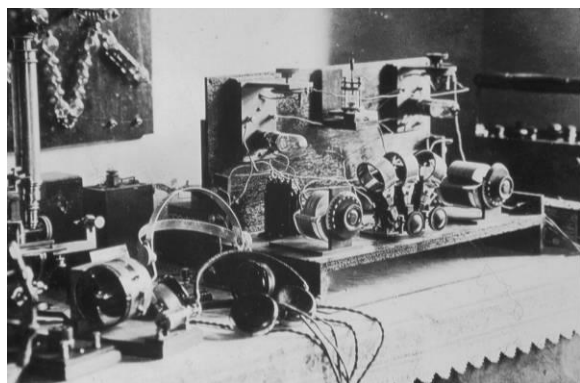


Box Manufacturing and Repair Workshop

Before the turn of the last century, Mr Rae was making electricity for lighting of Baldrige Works and his house, and, knowing his character, it is not altogether surprising to find that he was the pioneer of electricity in Fife. According to a letter under the pen-name of 'Electrum' in the Dunfermline Press of 30<sup>th</sup> November, 1957, the details of which have been corroborated by several people, the date on which he was generating electricity for lighting his home and Baldrige Works was 1889. There was too, a switchboard existing in the works, which bore the date 1897. Electrum's letter also indicates that, by 1891, Mr Rae had installed electric light in the premises of his friend, Mr David Brown, at Westfield Laundry, Grieve Street; and that of J & R Marshall, Bleachers, in Foundry Street, among others.

In 1957 there were apparently still some older members of the community who could remember a 'Two-day' Church Bazaar, held in St. Margaret's Halls in the early 1900s, when the star attraction was the lighting of the hall by electricity installed by Mr Rae. Some of these lights were arc lights, a form one never hears about today. Mr Rae used to tell with amusement how the town-people would arrive at the works to buy a box of electric light, thinking they were a species of improved candle.

As regards the original installation of electricity in the works, the wires were without insulation. The bare wires were attached to strips of wood, with a respectable distance between the two. Although not of high voltage, how there was never a fire is a miracle. Nor had it been foreseen that a small boy could learn how to make sparks with the wires!



John Crombie Rae's Electrical Museum at Baldrige Works.

Mr Rae was among the early users of the telephone. He subscribed to the National Telephone Company about 1907, and his number was National 128. He was not however a lover of the telephone. When he spoke on it, which was nearly always to answer a call, he did so more and more loudly, till he was absolutely shouting. He would not give the person at the other end a chance to say anything. In the end, he always shouted: "I canna' hear a word you're saying; hold on a minute an' I'll get someone else to speak to you". It was a good theatrical performance anyway.

Electricity became more and more popular for lighting. The Townhill Electricity Works (Fife Electric Power Company) had started in 1905,

supplying alternating current, as opposed to the direct current made by Mr Rae. Eventually, he became a user of alternating current for business purposes, though it was many years before he went over to this current for his house, actually using alternating current for some years to drive an electric motor, which in turn drove his dynamo producing the direct current for his house!

One final mention about electricity. Mr Rae was among the early people to advertise by electric signs. Above the power house, the highest point of his works, he had an illuminated sign bearing his name. At one time it flashed on and off somehow. Probably this was done by a mechanical arrangement, because the bulb filaments were very weak in those days and would not stand much on-off repetition.

Though steam was the main source of power up to 1914, Mr Rae found some assistance from two water wheels which he erected at a dam behind the works. One was overshot and one was undershot, for comparison no doubt. There was insufficient water to drive both together. The Baldrige Burn runs there on its way to Pittencrieff Park, and in those days there was a good flow of water from a nearby mine, pumped into the burn. Mr Rae rebuilt the mill dam with a diversion to his water wheels.

It is also reported that power from a horizontal windmill, situated on the roof of the works, was also harnessed, but it could not have been a success because it was not renewed after being destroyed on stormy day. The windmill is said to have revolved faster and faster on its final day, then to the amazement of all who saw it, it suddenly took off like a forerunner of the helicopter, flew northwards over the building, and crashed into the burn behind the works. Fortunately no one was injured.

So far, no mention has been made of gas engines. These also were tried for driving dynamos, and for driving pumps direct. They were internal combustion engines, and used gas instead of petrol. They drove some of the brine pumps for making ice, and for keeping the ice rooms below 0 deg. C. If these pumps



stopped going, the ice blocks melted at the surface, and when the pumps got going again, the ice blocks all froze together forming a large iceberg. Probably the gas engines required more attention than the steam engines, for ultimately Mr Rae reverted to steam or electricity to drive his brine pumps.

It is obvious that these steam engines or electric motors had to work day and night and therefore required an engineer to be present at night. There were several men who took on this work in rotation, and some who could be called on in an emergency, including Mr Rae. Using gas engines must have been soporific at night, unless one had something else to occupy one's attention. Steam engines required one to go to the boiler house occasionally to see to the stoking and pressure. Electric were like gas engines, but in all cases one hoped that nothing would go wrong!

These night men also acted as guards against any intruders. Nor were they alone. There was always a guard dog. For a certain time there was a guard goose as well. It was the best guard ever on the payroll. Everyone was scared of it! Unfortunately the dog and the goose disliked one another. They were always fighting. Then one day they had a real battle. Hair and feathers filled the air. In the end, the goose killed the dog. But alas, it was a victory of short duration, because the goose was so badly injured that it lay down and died as well.



The Rae Family 1897 Daimler – Reg. No. SP 92

There remains only one sphere not yet mentioned, where changing times altered the way businesses of the time were run, and one where Mr Rae was again to welcome invention

and innovation. This was motor transport. His first acquisition was an 1897 Daimler motor car, believed to be the first motor vehicle in Dunfermline. It had two bodies, one a wagonette (as shown above), was used for the transport of people, while the other body, a small platform for the transport of a few boxes of lemonade bottles, made it one of the earliest motor lorries in existence. The original incandescent tube ignition was however, rather fickle in the wind, so Mr Rae's son James, who had trained as an engineer and had joined the firm, converted the machine to magneto ignition. It was always advisable when driving this machine to entice another man aboard, ostensibly to have a pleasure jaunt, but really to have someone to help push the car up steep hills if necessary! The tiller steering was faultless at the speeds then possible and allowed. Another feature, using the original ignition, was that one could start the engine by putting a match to it! And in those days petrol was volatile.



The Rae Daimler now in Glasgow Transport Museum

The Daimler, like many of Gilbert Rae's artefacts from a bygone era, was still in the factory when the premises closed in 1974. It was sold to the Scottish Transport Museum in Glasgow where it was fully restored and is now on display there.

It seems extraordinary that Mr Rae himself never at any time drove this car, or any subsequent car. In fact he was never known to have driven a horse, whatever he may have done before this time. There was no danger on the roads either, except for scared horses which danced on their hind legs all over the road, and Mr Rae must have been very well acquainted with horse management, for his

father and grandfather had been farmers. It has been said however, that it was the snobbery of the 19<sup>th</sup> century upper class which made them abstain from driving, if they could afford to have a coachman or horse-driver. When cars appeared at the start of the 20<sup>th</sup> century, the same principle applied. Perhaps employers were rated as upper class.

The next car was a 1905 Sunbeam, which had an almost modern specification, minus refinements of course. The accelerator had not yet appeared on cars however. In place of it was a lever for increasing the supply of 'steam' worked by hand. Some time after 1911, the Sunbeam was converted to a light delivery vehicle by removing the back seat, and replacing it with the lorry platform which had originally been used on the Daimler. The Sunbeam was used for many years afterwards, putting fear into all who saw its wobbling front wheels.

Somewhere about 1907 Mr Rae bought his first real lorries – two Grantons, presumably made at Granton, near Edinburgh. They had two cylinders with magneto ignition, and sounded like old V-twin motor bikes, or single cylinder bikes well silenced. They were excellent machines apparently.



One of Gilbert Rae's 'Granton' Delivery Lorries

Lorries had as yet no driver's cabs, or even windscreens. In winter, drivers had to dress like polar explorers.

Between 1910 and 1913, some more modern lorries were bought – an Edison Electric lorry, two 2-ton Commers (with pre-selector gear boxes), two Thorneycrofts of approximately 2-ton capacity, and an almost sports performance Straker-Squire carrying a 30 cwt.

load. For all these, and the two Grantons, Rae's engineering department supplied windscreens and cabin-like frame tents, the frames being made from gas piping, and the cover of oilskin.



Gilbert Rae's Edison Electric Lorry – The boxed area behind the driver housed a series of batteries which required charging each night.

The KRIT private car, bought in 1911 was what would now be called a convertible. About 1915 a Belsize light van was acquired from another business, a casualty of the war. All these vehicles had oil lamps, except the Edison; and all the new petrol vehicles, except the Commers, had accelerators – henceforth the symbol of the petrol car.

The KRIT car gave good service for many years. Sometime in the twenties it too was converted to a light delivery van, with the same platform at the rear as was on the Daimler and the Sunbeam previously. This marks the end of the car details, because by the time of the 1914-18 war the motor car had fully arrived. The use of horses steadily decreased.



C.1914 and Motor Lorries outnumber Horse Lorries

The 1914-18 war was suffered without too

much trouble. Some men were lost to the business, including all the office staff and travellers, not that they were killed but, except one, they did not come back to the firm. They were all replaced by women, and after the war women continued to do these jobs. The essential men were not in danger of being called up until near the end of the war. One young man was added to the staff, Mr Rae's grandson, Gilbert, (son of James) who was too young for the army. He discovered that there was a scarcity of lorry drivers, and that the authorities were giving special driving licences to under-age boys who could help the war effort by driving business vehicles. The only condition was that one had to have satisfactory testimonials. There were no driving tests, no insurance, and heavy commercial vehicles were not allowed to exceed 14 m.p.h. The state of the roads often compelled an even lower speed. It is not known how these young men were supposed to get driving experience since it was illegal for them to drive, but this one had been driving as soon as his legs were long enough to reach the pedals. So Rae junior got his licence, and his enthusiasm for helping the war effort was unbounded.

During the war, the main scarcity was sugar. Two of the firm's lorries were commandeered for the war effort and detachments of the Royal Garrison Artillery and the Royal Field Artillery were billeted in part of the factory. Army horses found Rae's old stables very comfortable.

#### An Army Officer and Horse at Baldrige – W.W.1

During the war the main scarcity was sugar. Trade in the soft drinks continued at a reduced rate, but ice was used more and more

everywhere, including the new naval base at Rosyth.

After 1914, the increased use of motor transport resulted in the closing of the Alloa depot, while Falkirk continued until after the bridge was built at Kincardine in 1936. Portobello had been closed before 1914 for reasons now unknown. Trade after 1918 again decreased, because of increasing unemployment. In the winter it was usual to cut staff, but this time the workers sought and obtained an agreement with Mr Rae to employ all staff for three or four days per week, rather than keep on only a few people for a six day week, as was the custom then.

As already mentioned the great demand for ice continued, and it is one of the anomalies in Mr Rae's character that he did not acquire new machinery to meet the demand. Instead, he dallied for a few years till he saw a reconditioned plant for sale and bought it, but by then other manufacturers had sprung up, and though the new plant was used as well as the old, he had lost a virtual monopoly of the large market of Fife. In this case of the ice machinery, it is likely that, owing to his age, his judgement and energy were diminished. In fact, his final year saw him physically active, but mentally unable to cope with the machinery. He had to be tactfully kept under observation in the works.

By this time however Gilbert Rae had achieved much more in life than the average man, not the least being the building of a hotel at West Linton in memory of his parents and appropriately named the Raemartin Hotel.



The Raemartin Hotel built by Gilbert Rae at West Linton in memory of his parents.

Gilbert Rae died in 1924, leaving the running of the business to his sons James and John. The business had been registered as a limited liability company in 1911, when James and John became directors, and as the both had been employed there for some years, the transition was uneventful. As already indicated, Mr James Rae was primarily in charge of the engineering section, looking after the plant and production. Mr John Crombie Rae, having been trained in a Dunfermline law office, was supervisor of sales and administration, and was also the company secretary. Both had a good general knowledge of the business.

Thus ended a period of some 53 years at Baldrige Works under the direction of its founder. During this time science had gone ahead as never before, and faith in its beneficial results was unquestioned. From candles and oil lamps to gas and electricity; from horses to motor cars; from bottles with corks tied by wire, to screw stoppers, screw caps, and tin 'crown corks'; from genuine essences to (in some businesses) synthetic essences; machines advancing all the time; and a change of market in soft drinks – from exclusive grocers and big houses all over the country, to the more democratic post-1918 community, the local miners, the many new Italian ice-cream shops everywhere, and the entirely new markets where the great increase in the use of ice took the trade. Such was the changing scene.



Rae Family Members at Baldrige Works c. 1920

From 1920 onwards there were of course some outstanding events which affected not only the aerated water trade. There was the great slump or trade depression, with millions unemployed in Britain. Also, from a local point of view, several other lemonade manufacturers had started up. The effects of the slump were still being experienced when the Second World War started in 1939.

During this war, normal trade ended when, due to sugar shortages, the government decreed that only one or two lemonade firms, in each area, would be appointed to make the drinks for several. Rae's business was one of those forced to stop production, with local rivals, James Woodrow & Sons, and William N. Mitchell & Sons, being allowed to continue trading. Gilbert Rae received certain payments during this time based on the amount of business done with their old customers prior to the war. After the war it was very much an uphill struggle for the business to get going again. It was similar to starting a new company and searching for customers from scratch.

On the brighter side, there was a boom in soft drinks after the war. There was also an accidental 'spin off' benefit to the trade, thanks to the boosting in 1935 of the then new vitamin C as a panacea for good health. Children who had been taking it in the form of oranges or orange drinks, retained the taste for the fruit, and demanded more and more orange drinks after the war.





Aerial photograph of Baldrige Works c. 1938

The above aerial photograph of Baldrige Works, probably taken around 1938 by Gilbert Rae's grandson, Captain Gilbert Rae, (see Note 6) gives a good impression of the extent of the premises. It also shows the block of houses built for the Rae employees and, across the road in the immediate foreground, the Colton railway sidings. The two houses facing the railway sidings were occupied for many years by the Rae families. The smaller factory to the east of Baldrige Works was occupied by Messrs Eadie, Cabinetmakers. Towards the top of the photo can be seen Baldridgeburn and the Bowling Green

Gilbert Rae's descendents went on to operate a reasonably successful business at Baldrige works until 1974, when the firm closed as a result of there being no younger member of the family willing to carry it on. The company was latterly operated by two grand-daughters of Gilbert Rae - Mrs Christina Drysdale and Mrs Jane Crombie Lind (daughters of John C. Rae), and a grand-son, Gilbert Rae (son of James Rae). The husbands of the two ladies were also directors, and actively concerned with the business. The grand-son, Gilbert Rae, having lived in London for many years, lived to far away to take part in the everyday running of the business. Mr David Drysdale was the local manager of the Clydesdale Bank and Mr Harry Lind was well known for his early achievements as an international rugby player and as a local architect. They came into the firm in 1954, two years after James Rae died. The major task of running the business was eventually devolved to Mr

Drysdale in 1959, when he became company secretary after John Crombie Rae died. He did the job with a degree of success which was impressive since he had no experience of the trade. Mr Lind was an able assistant, and, in these days of women's equality, it must be said that the ladies frequently assisted too. It should however be made clear that the man responsible for the day to day running of the business over its last twelve years was the works manager, Robert Kinninmonth, who had learned the trade in Kirkcaldy. His usefulness to the company over this latter period was quite considerable and much appreciated.

Thus, in 1974, saw the end of one Dunfermline's most successful businesses. Such was the enterprise displayed by Gilbert Rae in driving his business forward, and such was the quality of his products, that at one time it was deemed to be on course to become the 'Shweppes of Scotland'. So why did this business not fulfil its early potential? It may be that Mr Rae's successors did not have the same drive to take the business forward. What is more likely however, is that the effects of the Second World War viz. the forced closure of the business and the loss of John Crombie Rae's son, Gilbert (see Note 6), had a devastating effect on those left to pick up the pieces in peace-time, and contributed to the slow run-down of the business.

When the business ceased trading the buildings at Baldrige works seemed full of aerated water, electrical and engineering paraphernalia from decades past and was a treasure trove for collectors. Two such collectors, Angelo Maloco and his son Michael, were allowed access just prior to demolition by which time it was assumed that everything of interest had already been removed. The Malocos however, came across an outbuilding, the floor of which was covered with what appeared to be pieces of broken glass bottles. After raking through this it was seen that the floor was in fact steel plates. These were lifted to reveal ash lined pits containing row upon row of Gilbert Rae stone ginger beer bottles. On the first day some 700 such bottles were removed from their ash grave. The next day another 300 stone bottles were recovered, along with numerous soda siphons, rare marble stoppered glass bottles

from around 1875 and various torpedo shaped glass mineral water bottles, etc. As relatively amateur bottle collectors, Angelo and Michael couldn't believe their luck and, by trading some of the Gilbert Rae bottles, the find formed the basis of what is now one of the best collections of stone ginger beer bottles in the country.

These old stone bottles had been outlawed by new hygiene regulations, introduced during the early 1900's following a court case in Dundee where a woman found a dead mouse in a stone bottle. It was probably in keeping with Rae's ideology of throwing nothing out that the bottles had been stored all these years 'just in case'.

In 1976, all the original buildings were demolished, including the two houses facing onto William Street which had been occupied by Rae family members for many years. The only building left was the block of flats on William Street, built by Mr Rae around the turn of the last century.

Note 1 – Much of the material used in this 'History of Gilbert Rae' was put together by his grand-son Gilbert (son of James Rae) in 1974, following the closure of the firm, and is based on his childhood memories at the works and his conversations with his grandmother, Jane Rae.

Note 2 - Gilbert Rae, son of a farmer, was born at Marchmont, Rullion Green, near Penicuik, south of Edinburgh on 21st July, 1841. He married Jane Crombie, of Golfdrum Street, Dunfermline, at Abbey Park Place, Dunfermline (probably his home at the time) on 25th November, 1869. The couple had three of a family, viz:- James, born 4th April, 1871, at Abbey Park Place, Dunfermline; Euphemia, born 18th April, 1875, at Coal Road, Dunfermline; and John, born 27th January, 1878, at Coal Road, Dunfermline (Coal Road is now William Street where the Rae home was known as Baldrige). Mr Rae died on 16th July, 1924, at his home, Baldrige, William Street, Dunfermline, aged 83 years. Mrs Rae survived her husband by almost 11 years, dying at Baldrige on 21st April, 1935, aged 94 years.

Note 3 – Mr Rae's eldest son, James Rae,

married Helen Crichton Philp, at Golfdrum Street, Dunfermline (this was probably the bride's home) on 3rd July, 1901. The couple had three of a family; Gilbert, born 11th October, 1903, at Pittencrieff Street, Dunfermline; James Philp, born 10th May, 1908, again at Pittencrieff Street; and John, born 1st May, 1913, also at Pittencrieff Street. Gilbert moved to England as a young man and when he registered his father's death in 1952, his address was given as 41 Alexandra Road, St John's Wood, London. James Jnr., who became a hotelier, died on 24th February, 1983, at Bridge of Earn Hospital, his usual residence at that time being 3 St Ninian's Court, Dunkeld. His brother John, who had worked at Baldrige Works, died at Stirling Royal Infirmary on 27th January, 1967, his home address at that time being 127 Golfdrum Street, Dunfermline. James Rae Snr. died on 29th July, 1952, aged 81 years, at his home, 64 Cameron Street, Dunfermline. He was pre-deceased by his wife Helen.

Note 4 – Mr Rae's daughter, Euphemia, remained single and died at 32 William Street, Dunfermline, on 7th April, 1962, aged 86 years.



John Crombie Rae 1878 – 1959 – See Note 5

Note 5 – Mr Rae's younger son, John Crombie Rae, married Agnes McInnes, a Clerkess, at Brucefield Avenue, Dunfermline, (home of the bride) on 30th September, 1908. The couple had three of a family, namely, Christina

Campbell Rae, born on 10<sup>th</sup> September, 1909, at Coal Road, Dunfermline; Jane Crombie Rae, born 29<sup>th</sup> October, 1913, at Coal Road, Dunfermline; and Gilbert Rae, born 28.03.1917, also at Coal Road, Dunfermline. Christina, who trained as a physical training instructress, married David Drysdale, a bank clerk, at St. John's Church, Dunfermline, on 17<sup>th</sup> August, 1937; whilst Jane, also a physical training instructress, married Henry (Harry) Lind, an architect and Scottish international rugby player, at St. John's Church, Dunfermline, on 2<sup>nd</sup> August, 1941. Gilbert was tragically killed in a flying accident during the latter months of the 1939-45 war. The story of Gilbert's short, but heroic, life is interesting enough to warrant special mention in this history of the Rae family – See note 6. John Crombie Rae died at 34 William Street, Dunfermline, on 20<sup>th</sup> September, 1959. He was 81 years of age. He was described as a man of many interests. He was a founder member and honorary vice-president of Dunfermline Naturalist Society and also took a keen interest in Dunfermline Photographic Association, of which he was also honorary vice-president. He was also a regular exhibitor at local horticultural and rock garden shows. He in fact built a very large greenhouse within the grounds of Baldrige Works, heated from the central boiler-house, and from which he produced a sufficient quantity of tomatoes each year to add these to the list of Rae's products. From his early days he was a great enthusiast of vintage motoring and also maintained at Baldrige a private museum of his father's electrical apparatus.

Note 6 – Gilbert Rae Jnr. was born on 28<sup>th</sup> March, 1917, at Coal Road, Dunfermline, the son of John Crombie Rae and Agnes McInnes. Growing up, surrounded by all the vehicles, plant and equipment of the Baldrige Works, it was no surprise he developed an interest in machinery. His ambition was to be a pilot, but his father was adamant that there was no future in flying. Perhaps as a compromise with his father, Gilbert left Dunfermline High School, in 1934, to take up an apprenticeship as a ground mechanic with Scottish Airways at Renfrew. Gilbert joined the local Flying Club and, by the end of the year, had his first amateur pilot's licence.

By the time he completed his apprenticeship, aged 21, Gilbert had enough flying experience, to immediately transfer to the pilot staff of Scottish Airways. For the next two years, he flew light aircraft to the Western Isles. Scottish Airways provided both scheduled passenger flights and an air ambulance service that would land on the grass runways and beaches of the outer islands.

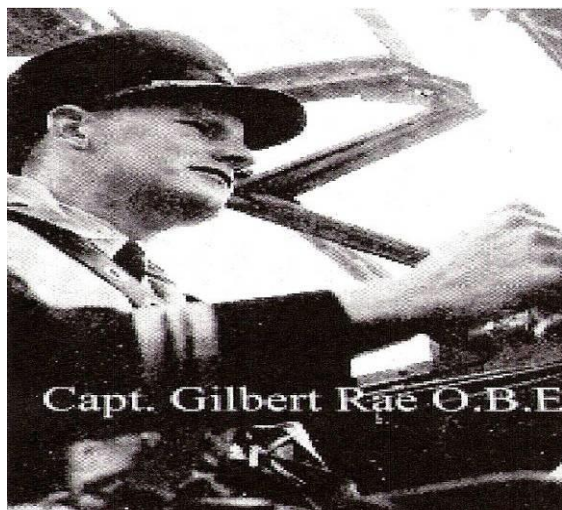
Gilbert left Renfrew in 1940, to join the British Overseas Airways Corporation (BOAC). He spent most of that year training on the Flying Boats, DC3s and other aircraft used by BOAC. By the end of 1940 he was serving as a First Officer on the Lisbon service. Portugal and Sweden were neutral countries during the war but civilian flights to these countries were vulnerable to attack by German fighter aircraft. The actor Leslie Howard was one of those killed when a flight from Lisbon was shot down. The BOAC Lisbon service was sub-contracted to London based Dutch KLM, with the condition that each flight crew should have one British member who would hold the BOAC codes for radio messages.

In June, 1942, the newly promoted Captain Rae was transferred back home, to be based at Leuchars, near St. Andrews, and to fly the Stockholm route. Sweden, although neutral, was at that time surrounded by German occupied territory. The Leuchars/Stockholm flights carried newspapers, diplomats and government officials on the outward trip and brought high quality ball bearings back to Scotland. The ball bearings, from the SKF factory in Gothenburg, were an essential element in keeping the British war machine 'turning over'. Known as the 'ball bearing run', the 800 mile flight from Stockholm to Leuchars took pilots over 250 miles of heavily defended German occupied land. Space on board was limited and the few passengers were usually diplomats or POWs who had escaped to Sweden. One of these passengers was the Physicist, Professor Neils Bohr who was smuggled out of Denmark into Sweden and then flown to Scotland. Professor Bohr went on to America and was one of the scientists whose work resulted in the development of the atomic bomb. At first a variety of different aircraft were used, mostly

with Norwegian aircrews, on night-time flights. Then in the summer of 1943 the Mosquito was introduced.

The Mosquito was a converted bomber, which could fly so high and fast, that it was decided to attempt daylight flights to Stockholm. The return flights from Sweden were particularly dangerous. Anyone could observe flights taking off from Stockholm Airport and then simply telephone German fighter bases in Norway. In the first few weeks of daylight flights, Gilbert's plane was subjected to two attacks, either of which could have resulted in disaster.

For his work on the Stockholm route, Gilbert was awarded the OBE and his radio officer, James 'Pops' Payne, the MBE. They received their awards at Buckingham Palace in February, 1944. Gilbert's citation read; *"Captain Rae had shown courage of a high order over an extended period in flying unarmed aircraft on civilian war-time service between the United Kingdom and Stockholm"*. Although he continued on this route, it appears that on some occasions Gilbert also flew elsewhere.



In November, 1943, he was the pilot of a Dakota flying out of Gibraltar. A problem in the fuel system caused first one and then the other engine to fail. Gilbert was able to fly his plane towards the Portuguese coast and land on a beach. After running repairs, local villagers helped to use timber planking from a nearby fisherman's hut to make a 150ft runway over the sand. Gilbert was then able

to take off and fly on to Lisbon.

On what would have been one of his last flights back from Stockholm, Gilbert's Mosquito was within sight of the airport at Leuchars when it crashed into the North Sea.

BOAC later wrote to his father...."*Mosquito aircraft, G-AGKP, left Bromma airport, Stockholm, at 23.16hrs GMT on the night of 18 August 1944 to fly to Scotland. The crew consisted of your son and Radio Officer D.T. Roberts. The only passenger was Captain B.W.B. Orton. All three officers were members of the staff of BOAC. The aircraft took off in clear weather and routine signals were exchanged throughout the journey. The last message received from the pilot was at 02.18hrs when he said that he knew his position and was approaching the airport (Leuchars). No further messages were received, and as soon as the aircraft became overdue, emergency procedure was put into operation. A high-speed launch and three RAF aircraft searched the area where it was known the Mosquito must have been. The wreckage was found and the bodies of Captain Orton and Radio Officer Roberts were recovered. It was clear that their death had been instantaneous. No trace could be found of the body of your son, and it must be assumed that he went down with his aircraft."*

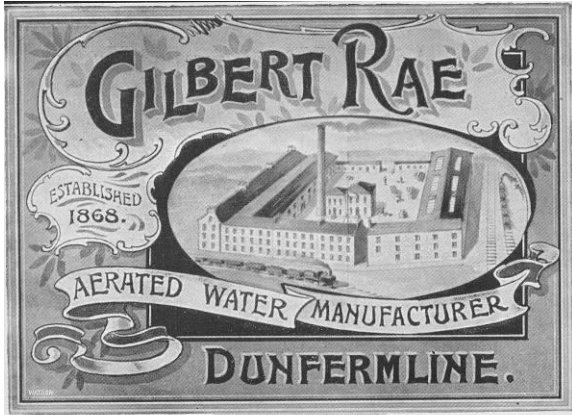
In all, Captain Rae made 150 return trips between Leuchars and Stockholm prior to his death. The official accident report on his death read:- *"There is insufficient evidence to show how this accident occurred."* It was generally accepted however that Captain Rae's aircraft had been sabotaged by German agents whilst on the ground in Stockholm. The ball bearing runs ceased shortly after his death.

Note 7 – Dick Smith, who was brought up in Goldrum Street, during the 1930s recalls Gilbert Rae Jnr., on more than one occasion, landing a bi-plane in a field near Berrylaw, (on the west side of William Street) whilst visiting his parents at Baldrige.

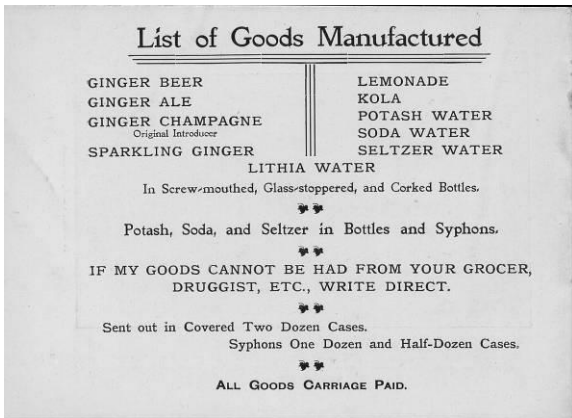
Note 8 – Captain Rae's flying colleagues, when operating in the Fife area, used the factory chimney at Baldrige Works as a landmark, naming it, 'Gibby's chimney'.



Note 9 – The first conductor of the Carnegie Trust Band which played daily in the summer months in Pittencrieff Park from 1905, was Mr A. Jordan. Prior to 1905 he conducted affairs in the office at Baldrige Works, including, it is said, invisible bands.



Above is the front cover of a small booklet issued around 1900 promoting the products of Gilbert Rae. It will be noted that a certain degree of artistic licence has been taken in depicting Baldrige Works. It also shows 1868 as the year the business was established and this will probably be when Gilbert started in Abbey Park Place



Back page of above booklet indicating the various bottled products from Baldrige Works.