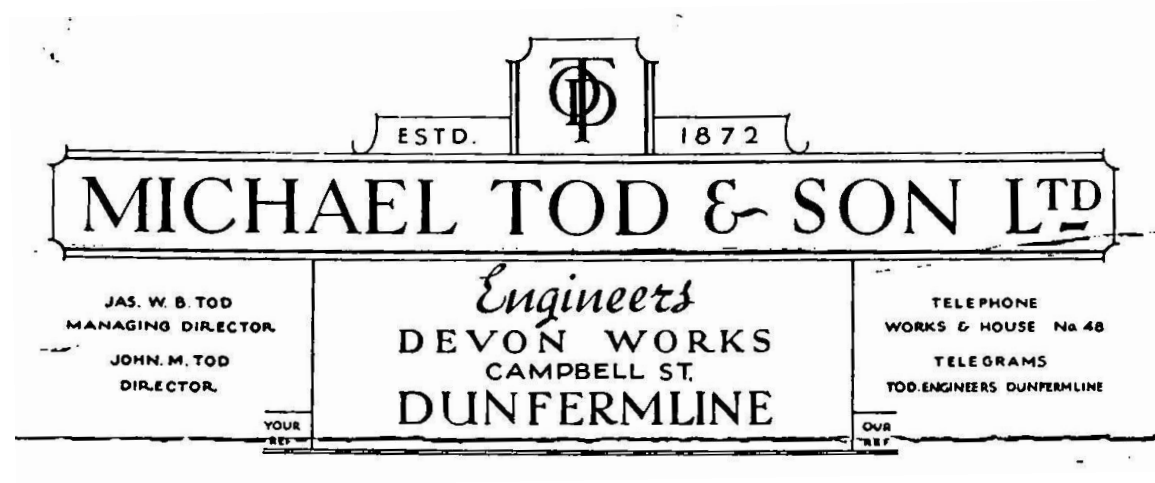


Dunfermline's Industrial Past

Michael Tod & Son Ltd, Engineers

Devon Works, Campbell Street, Dunfermline



A native of Kirkcaldy, who spent his early years in the West of Scotland, Michael Tod came to Dunfermline around 1870. Shortly thereafter, in April, 1872, he formed a partnership with Alexander Bennett, founding the firm of Tod and Bennett, Millwrights & Engineers, with premises in Foundry Street. See separate history of Bennett, Engineers. It is likely that Messrs Tod and Bennett chose the Foundry Street location because of its close proximity to Dunfermline Foundry where much of the raw engineering material would be cast.

In June, 1876, the partnership was dissolved and both men set up millwright/engineering businesses on their own. Mr Tod set up Devon Works, Campbell Street, Dunfermline, where he concentrated on mechanical engineering. By that time Michael Tod's son, John, had joined the business, thereafter known as

Michael Tod & Son. John had served an engineering apprenticeship with Alex More & Son in Glasgow. A reference given by Messrs More in 1870 indicated that John had served 3 years in the pattern shop and 2 years as a fitter.

In the early days the Tod enterprise built all types of engineering equipment for mills, mines and bleach-works in the area, including steam winding engines, haulages, and pumping and screening machinery for the collieries of the Fife Coal Company and for many of the collieries in the Lothians area.

On the death of his father in 1894, John Tod took control of the business which was greatly developed under his charge.

In addition to mining machinery the firm became specialists in textile machinery with John Tod being the author of a number of patents relating to this side of the business.

Many of the machines which were to gain the firm a country-wide reputation were designed by John Tod. The Tod yarn softening and finishing machine was initially supplied to Dunfermline linen mills but was also in demand by firms throughout Scotland and Ireland. Such was its success it was soon being exported to Europe, North America, Japan, China and India. Interestingly, the last job carried out by Messrs Tod, prior to closure in 1960, was an order for one of these machines from a Bulgarian company.

VERTICAL STEAM ENGINE.

STRONG AND SUBSTANTIAL.


ACCURATELY CONTROLLED.

CAN BE EASILY SET TO SUIT ANY DRIVE.

WITH OR WITHOUT FEED PUMPS.

COMPACT FOR SHIPMENT.

ALWAYS IN STOCK.



The Engines are of conical tube pattern, as illustrated. The tubular frame is fitted with the guide bars and crankshaft bearing blocks. The pump seats all in one, and accurately toolled or machined at all parts from the same centres, so that all are fair and in line. The cylinder is cast with the steam chest in one, and lugged with felt and sheet steel or mahogany. The piston is fitted with metallic packing, and inlet bearings are adjustable. The governor is of improved design and high speed, and can be adjusted while running to increase or decrease speed of engine. The feed pump has gunmetal plungers, valves, and stems, and is worked by a separate eccentric.

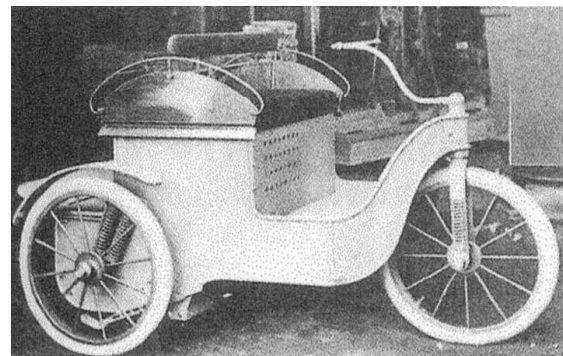
Nominal Horse-power.	4	5	5	5	10
Price with Governor.	£20	£25	£30	£35	£50
Food Pump.	extrn.	extrn.	extrn.	extrn.	extrn.
Holding-down Bolts.	£2	£2	£2	£2	£2
Diameter of Cylinder.	6 1/2	7 1/2	8	9	10
Length of Strokes.	8	8	10	12	14
Revolutions per Minute.	200	200	180	150	125
Diameter of Flywheel (for belt).	32	36	42	48	54
Diameter of Steam Pipe.	1 1/2	1 1/2	1 1/2	2	2 1/2
Diameter of Exhaust Pipe.	1 1/2	2	2 1/2	2 1/2	3

A Cylinder of larger diameter can be fitted to any of the above Engines, if desired, to suit requirements. The illustration, description, and other details are given as approximate only. Packing for Shipment extra.

M. TOD & SON,
DEVON ENGINE WORKS, DUNFERMLINE.

In 1897, in collaboration with George Kay & Sons, Coachbuilders, of Inglis Street, Dunfermline, the firm experimented in motor car construction and built the 'Tod Three Wheeler' to the specification of a Glasgow engineer. The car had two forward facing seats and two rear facing. It had tiller steering and, according to the under-noted photograph, not much in the way of brakes, although the 'motoring press' of the time reported on it as being

ahead of its time as it had pneumatic tyres and was capable of achieving 30 mph, a speed well in excess of what was permitted at that time. The car apparently attracted much attention when it was exhibited at an exhibition in the Drill Hall in Bruce Street, Dunfermline. For unknown reasons only one car was built and this at a time when motoring was very much in its infancy. Perhaps the decision not to go into full-scale car production was a wise one as many of the small companies who did venture down this path around the turn of the century soon came to financial grief.



The Tod Three-Wheeler prototype motor car

Another noteworthy example of John Tod's engineering skill was a device for the production of coal oil, which, whilst at the experimental stage in the early 1930s, was favourably reported upon by the heads of the Royal Navy, where it had been subjected to practical tests.

John Tod died in 1937, aged 87 years, having the previous day attended to business at his Devon Works (See Note 2). During his life-time he had undoubtedly driven the business forward with his inventive mind and a high level of engineering and business acumen.

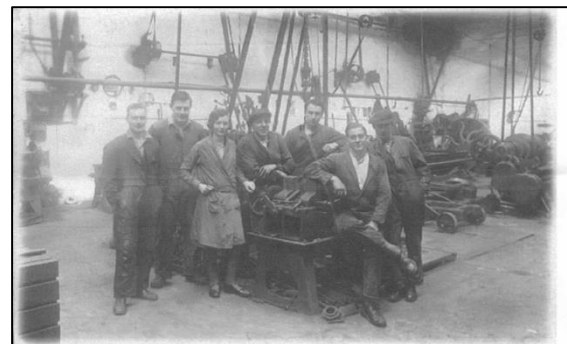
Following John's death the business was turned into a limited liability company with his elder son James becoming managing director and younger son John, a director.

James had served an engineering apprenticeship with his father and continued to work for the firm throughout his lifetime.

John had also served an engineering apprenticeship at Devon Works but, at the outbreak of the First World War he left the family business to serve his country with the Scots Guards in France where he was wounded in action before transferring to the Royal Artillery. His skills as an engineer were not lost on the War Department however as in May, 1916, John was seconded to The National Projectile Factory at Cathcart in Glasgow, where he was a sectional foreman, then, in January, 1918, he attended the Ordnance College, Woolwich, where he undertook a Modified Armament Artificer's Course working on the development of the 6" and 8" Howitzers. At the end of the war John entered the Merchant Navy serving with the Blue Star Line Ltd., sailing on 10th May, 1919, as 5th engineer aboard SS Broadmead on a voyage from the Port of London to China. Some two years later John was back on dry land and working as a charge-hand fitter and turner, and general works engineer with St George's Engineers Ltd., based at Hulme Hall Road, Hulme, Manchester.

It appears that around 1925, John returned to Devon Works, where he remained until his death in 1959.

A fourth generation of the Tod family, in the form of John Michael Rintoul Tod (known as Rennie), the elder son of John Michael Tod, joined Devon Works as an apprentice engineer in January 1929. He worked there until 1938, at which time he joined the merchant navy, serving with various shipping lines for the next ten years and progressing from the position of 7th engineer to 3rd engineer, in full charge of watch on main engines, boilers and auxiliary equipment on board the City of Calcutta. During his time at sea during the Second World War, Rennie was also heavily involved with the North Atlantic convoys.



Tod's Workshop c.1938 with Rennie Tod and Stuart Bowman (2nd and 4th from the left). In the background to the right can be seen the flywheel of the oil engine used to drive the overhead pulley system.

Henry Hoey, who served an engineering apprenticeship at Devon Works from 1951 to 1956, recalled that Jimmy and John Tod ran the operation at that time. John's son, Rennie, also worked there whilst John's younger son, James (Sandy), attended Dollar Academy. In addition there were three tradesmen engineers and 3 or 4 apprentices there at that time. Stuart Bowman, from Aberdour, was a

first-class turner, who travelled to and from his work on a 1935 Sunbeam motorcycle. Another turner was Gordon Horne. Donald Campbell, who came from the Hill Street area of Dunfermline, was a fitter who later worked for Hill's Laundry. In addition to Henry, other apprentices of that time were David Gibson, Charlie Scott and Eddie Gairns.

Devon Works, at that time, comprised a large workshop containing belt driven lathes, planers, grinders, and other engineering machinery. There was only one lathe with its own electric motor. In effect, even for that time, the workshop equipment was fairly old-fashioned. Never-the-less, Henry stated that there always seemed to be a demand for Tod's products and expertise, having regular customers such as Kilbagie Paper Mill, Balfour of Leven, Rosyth Quarry, and Lochside Brickworks. In addition they carried out annual overhaul work at Elder's Mill and Harriebrae Mill in Dunfermline, along with inspection work on behalf of insurance companies.

Henry also recalled that around 1953-54 Tod contributed to Government Re-armament Programme, making wheel hubs for Ministry of Defence motor lorries. He also remembered being involved in the manufacture of yarn softening machines for customers in India.

As an apprentice, Henry was paid fortnightly, at a rate which was roughly half that paid to Rosyth Dockyard or Coal Board apprentices. Perhaps not surprisingly he left Tod for the National

Coal Board at the end of his apprenticeship.

Michael Tod's great-grandson, James Alexander Tod (Sandy) – son of John Michael Tod – carried on the family engineering tradition, but not with the family firm. Sandy studied engineering at Leeds University before going on to a life-time vocation in civil engineering.

Sandy recounted, in 2011, how, as a youngster he would accompany his father on his Sunday walk around the Dunfermline, the highlight of which was when they called into Devon Works. It was a time when Sandy could take off on his own and explore around the machinery, the pattern shop and the drawing office. He found it a magical place, especially when his father turned on the machinery which produced a deafening clatter from the overhead shafts and belt drives. The works had been electrified shortly after the Second World War and it was electric motors that ran the pulleys and drove the shafts. Prior to that the source of power had been a long stroke oil engine which by then lay silent in a corner, a fall-back in case the electricity failed.

Sandy said that his father was pleased that his son found it all so interesting but he was never encouraged to go into the business – it had probably been decided in the family some time back that the business would be wound up eventually.

James Tod died in 1956 (See Note 3) and brother, John in 1959 (See Note 4). They were succeeded for a short time in the

business by Rennie Tod, son of John and great-grandson of the founder.

Sadly, an article in the Dunfermline Press of 9th January, 1960, announced that the firm would close at the end of February, that year. Rennie Tod stated that of a work-force of eight engineers and apprentices, six had found alternative employment.

A notice in the Edinburgh Gazette of 20th May, 1960, announced that on 17th May, 1960, at an Extraordinary General Meeting of the Company of Michael Tod & Son Ltd., held at 30 Queen Anne Street, Dunfermline, a special resolution was passed that the company would be voluntarily wound up on that date, the liquidator being David Kenion Wilson, Chartered Accountant, 30 Queen Anne Street.

Sandy Tod stated that he had often wondered whether, with a bit more entrepreneurial spirit, Tod's might have been 'reborn'. If it could have been kept going for another decade or so North Sea Oil might have brought in business for a small firm with a good name and a wide range of skills to offer.

The Devon Works premises were sold to Messrs Farrell and Moir, Motor Engineers, who moved there from existing premises in Market Street. Farrell and Moir would subsequently move to much larger premises at the former Winterthur Silk Mill in Bruce Street.

Following the demise of Tod's engineering business Rennie Tod became the owner of The Fruit Bazaar, located for a number of

years at the junction of Carnegie Street and Chapel Street, Dunfermline. He also owned another shop at Jigburn, in the Baldridgeburn area of the town.

Note 1 – Michael Tod was born on 12th June, 1827, in the Parish of Abbotshall (Kirkcaldy) to John Tod and his wife Mary Steedman. On 25th November, 1849, in the Parish of Barony (Glasgow), Michael, then described as a millwright, married Ann Wilson, also of that parish. Michael died on 8th September, 1894, at Ravenswood, Cove, Dumbarton-shire after suffering from bronchopneumonia. His death was registered by his daughter Jeanie (Jane) Tod, Victoria Street, Dunfermline. His widow, Ann, survived until 1st March, 1908, when she died, aged 86, at 68 Rose Street, Dunfermline. Her death, which was due to senile decay, was registered by her son, John Tod, residing at Grantsbank, Dunfermline.

In the 1851 Census there is a Michael Todd, aged 23, a millwright, born in Kirkcaldy, residing, probably as a lodger, in New Row, Dunfermline.

There is no trace of Michael or his family in the 1861 census but, in the 1871 census, his wife Ann, then 48 years, sons John and James, aged 21 and 19 respectively, and daughters Jane (15) and Margaret (14) are residing at 191 Duke Street, Glasgow, whilst there is a Michael Tod, aged 45, an engine maker, and probably a son David, aged 17 and also described as an engine maker, residing as boarders in a house in Knabbie Street, (now Carnegie Drive) Dunfermline. This is almost certainly the same Michael Tod shortly after his return

to Dunfermline. Son John's occupation is given as an engine fitter whilst, interestingly, his brother James' occupation is given as a 'philosophical inst. maker'.

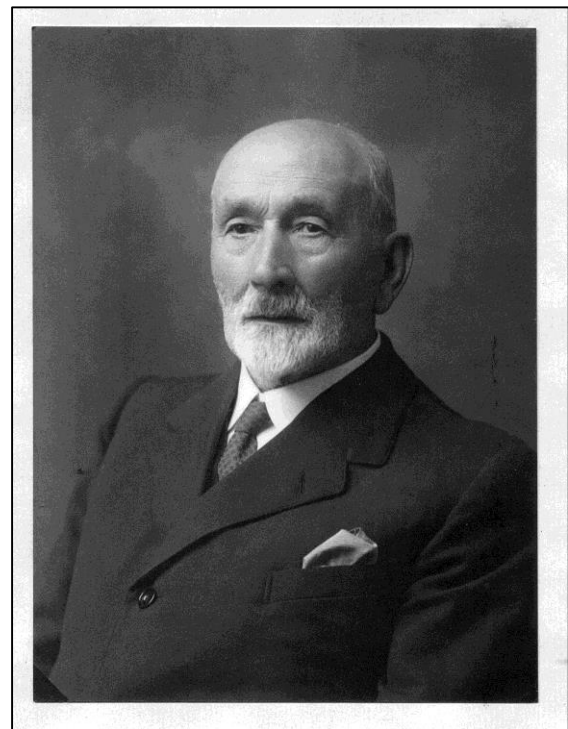
In the 1881 Census, Michael Tod, then aged 53, his wife Ann (56), son John (31), and daughters, Jane (25) and Margaret (24), are residing at 60 Albany Street, Dunfermline. Michael is designated a Master Engineer employing 4 men and 2 boys. Daughter Margaret, mentioned above, would die four years later on 4th May, 1885, after suffering for 18 months from phthisis pulmonalis.

In the 1891 Census, Michael (64); Ann (66); and daughter Jane (35); are residing at Alma House, Rose Street, Dunfermline. He is then designated as a Steam Engine and Machine Maker.

Note 2 – John Tod was born c.1850 at Glasgow. On 21st August, 1884, at 129 High Street, Dunfermline, John, (34), a master engineer, residing at Alma House, Dunfermline, married Catherine Wallace Brown (23), the daughter of James Brown, Master Brewer. The witnesses to the marriage were William White and Agnes D. Brown. John died on 2nd June, 1937, aged 87 years, at his home, 87 Pilmuir Street, Dunfermline. The cause of death was acute lobar pneumonia. His death was registered by his son J.M. Tod, 12 Castleblair Park, Dunfermline. John's wife, Catherine, had died at the family home in Pilmuir Street, Dunfermline, on 24th September, 1910, at the early age of 48, after suffering from a heart condition.



C.1900 – Studio photograph of John Tod with sons James and John



C. 1925 - John Tod Snr.

Although devoting most of his time to his engineering business, John Tod was keenly interested in municipal and other public affairs. For a time he was one of the representatives of the First Ward in

Dunfermline Town Council; he was an active member of Dunfermline Chamber of Commerce; and a prominent member of the Ancient Society of Gardeners, of which he was Chancellor, an office later held by his son, James.

In the 1901 Census, John Tod, aged 51 years; his wife Catherine (40); daughters Catherine (15) and Annie (14); and sons John M. (11) and James W. B. (8); are residing at Linburn Cottage, Grantsbank Street (now Pilmuir Street), Dunfermline. John's occupation is given as a mechanical engineer.

Note 3 – James William Brown Tod was born on 28th February, 1893, at Grantsbank, (now Pilmuir Street), Dunfermline. On 9th June, 1917, at the Royal Hotel, Dunfermline, James, (24), a mechanical engineer, then residing at 51 Broughton Street, Greenock, married Isabella Philp, (25), manageress of a china warehouse and residing at 5 Brucefield Avenue, Dunfermline, the daughter of Robert Philp, builder. The witnesses to the marriage were John M. Tod and Helen Bissett Philp. James died on 22nd June, 1956, aged 63 years, at his home, at 87 Pilmuir Street, Dunfermline. The cause of death was coronary thrombosis and the death was registered by J.M. Tod (his brother) of 12 Castleblair Park, Dunfermline. Mr Tod had been a member of Dunfermline Chamber of Commerce and also a member of the Ancient Society of Gardeners. His wife, Isabella, survived James by some 24 years, passing away at 87 Pilmuir Street, Dunfermline, on 22nd July, 1980, at the age of 89 years. Her death was registered by her niece, Margaret B. Holden, 84 Holmes Chapel Road, Congleton, Cheshire.



James William Brown Tod



James Tod, his wife Isabella, and brother John

Note 4 – John Michael Tod was born on 3rd June, 1889, at Eildon Bank, Dunfermline. John was married twice, firstly on 17th April, 1912, when aged 22 years, at 20 George Street, Edinburgh, to Elizabeth Black Rintoul, (20), of Jigburn House, Dunfermline, the daughter of John Black Rintoul, manure manufacturer. Elizabeth died on 15th July, 1932, at 12 Castleblair Park, Dunfermline, after suffering from

cancer. John re-married on 19th April, 1938, at St Andrews Parish Church, George Street, Edinburgh, this time to Nellie Hislop, (44), Hospital Nurse, 59 Tweed Road, Galashiels. John died on 21st August, 1959, aged 70 years, at the Northern Hospital, Dunfermline. His usual residence was 12 Castleblair Park and the cause of death was Bronchogenic Carcinoma. His death was registered by his son, J. Tod.



C. 1955 - John Michael Tod

During the First World War, John served in France with the Scots Guards and, after being wounded in action he transferred to the Royal Artillery. He was a member of Dunfermline Toastmasters Club, Dunfermline Bowling Club, and a life-long member of Gillespie Church.

From information provided by John Michael Tod's son, Sandy, it would appear that sometime between 1925/30, John went to the USA, sailing aboard the S.S. Transylvania from Glasgow to New York. Sandy stated that his father was an admirer of all things American, especially

their mechanical engineering and production line techniques. He was also strongly opposed to trade unions and, talking about his time in America, he described how he found no difficulty getting work, even at the height of the recession, because of his wide experience and ability to turn his hand to any job required of him. However, this willingness to be flexible made him unpopular with the unionised workers who were tied to a particular trade and he found himself being victimised on the production line. They would divert products from his line which would cost him piecework payments. Sandy was of the opinion that his father would return to Scotland around 1930, when his wife was diagnosed with cancer.

John's widow, Nellie, died on 4th June, 1975, at Peel Hospital, Galashiels, her usual residence being 28 Woodstock Avenue, Galashiels. She was 81 years of age and her death was registered by her son, James A. Tod, Four Winds, Brooker's Hill, Shinfield, Reading.

Note 5 – John Michael Rintoul Tod (known as Rennie Tod) was born on 27th October, 1912, at Jigburn House, Baldridgeburn, Dunfermline, the son of John Michael Tod and his wife Elizabeth. On 10th November, 1962, at Limekilns Church, Rennie, then 50, and described as a mechanical engineer, married Margaret Hughes Russell, (43), a clerical officer, residing at Brucehaven Cottages, Pattiesmuir, Dunfermline, the daughter of James Russell, Marine Engineer. Only 14 months later, on 13th January, 1964, Rennie died suddenly on Carnegie Street,

Dunfermline, after suffering a coronary thrombosis. His home address at that time was 12 Castleblair Park, Dunfermline.



Rennie Tod

An obituary in the Dunfermline Press of 18th January, 1964, stated that Rennie Tod's death had robbed Charlestown Bowling Club of one its prominent members. He had been vice-president of the club for the previous two years and had been a founder member and keen supporter of the Carpet Bowling Club. He was also a member of Dunfermline Small

Bore Rifle Club. Rennie's widow, Margaret, survived him by some 35 years, passing away at Canmore Lodge Nursing Home, Robertson Road, Dunfermline, on 14th May, 2000, aged 80 years. Her death was registered by her brother-in-law, James A. Tod, West Barn, Friar's Garth, Malham, North Yorkshire.

Note 6 – James Alexander Tod was born on 10th February, 1939, at Buchanan Street, Dunfermline, the son of John Michael Tod and his second wife Nellie Hislop. James attended Dollar Academy.

Note 8 – Check 1861/71 censuses for Michael in Glasgow area. Also 1911 census for the Tod families in Dunfermline. Also check birth of John Tod c. 1850.

Note 9 – Sandy Fairbairn recalls attending the auction following the closure of Tods in 1960, at which time the Tod Three-wheeler was still on the premises but was broken up when it didn't sell at the sale. Apparently the engine was donated to the Glasgow Transport Museum.

Note 10 – David Penny, 59/4 Grange Loan, Edinburgh, EH9 2EG, Tel 0131 662 1529, is a descendent of the Tod family.