

Cambridge University Press
978-1-107-02058-0 - Alan M. Turing: Centenary Edition
Sara Turing
Excerpt
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PART ONE

Mainly Biographical

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1

Family Background

The Turing family is of Norman extraction and the family tree goes back to 1316 AD, the family motto being *Fortuna audentes Juvat*. Having arrived in Scotland the members settled in Angus in a barony of that name, whence they removed to Aberdeenshire early in the fourteenth century and came into possession of Foveran, which remained the family seat until recent times. The name was variously spelled Turyne, Thuring, Turin, Turing. William Turin received the honour of knighthood from James VI of Scotland (James I of England) and thereafter Sir William added the final “g” to the name.

John Turing of Foveran was created a baronet by Charles I in 1639 for loyal service, and was at the battle of Worcester; but his loyalty cost him the loss of lands which had been in the family for 300 years. Records show Turings holding positions of trust and responsibility in the County of Aberdeen.

By the eighteenth century some Turings were venturing further afield. Thus Sir Robert Turing (Bart.), born in 1744, was a doctor and amassed a considerable fortune in the East Indies and then retired to Banff in Scotland where he made himself very useful and popular. One kinsman in the Honourable East India Company took part in the defence of Seringapatam. Others in the nineteenth century lived in Holland; two, father and son, were successive British Consuls in Rotterdam. Some of their descendants have now become domiciled in Holland. Alan’s great grandfather, presumably through this Dutch connection, had some occupation in Batavia, maybe in some shipping concern. He was John Robert

Turing (1793–1828) who married Jane S. Fraser, and it was, I think, on a voyage back from Batavia that his family were involved in a shipwreck.

His son, another John Robert Turing, who was Alan's grandfather, was admitted to Trinity College, Cambridge, in May, 1844, and in the Mathematical Tripos 1848 was classed eleventh among the "Senior optimes." At Trinity he was notorious for sleep-walking on the leads. In 1848 he was ordained Deacon, and Priest in 1849, and was Chaplain of Trinity College from 1859 to 1871, and simultaneously from 1859 to 1864 was Curate at Great St. Mary's, Cambridge. Marrying Fanny Montagu Boyd he had ten children of whom eight survived. It was when he was Rector of Edwinstowe, Nottingham, that his son, Alan's father, Julius Mathison Turing, was born, 9th November, 1873. On the death of his father, when Julius was ten, the family moved to Bedford: later from Bedford School Julius won a history scholarship to Corpus Christi College, Oxford, and thence passed into the Indian Civil Service, and was posted to the Madras Presidency. He inherited none of his father's mathematical ability, in fact algebra was just mumbo-jumbo to him and as for the claimed result of one minus quantity multiplied by another minus quantity – that for him was beyond human comprehension.

On the maternal side Alan was descended from the Stoneyes. According to Burke's Landed Gentry of Ireland the Stoneyes are believed to be descended from a Danish family which settled near Kettlewell in Craven in Yorkshire about the ninth century and were known by the name 'de Stanehow,' or 'Stonehow.' One member of the family was Rector of Kettlewell about the time of Edward I and others were among those who paid Richard II's Poll Tax in 1379 at Buckden, three miles from Kettlewell. Sundry domestic events are recorded in the register of the Church at Rilston, Yorkshire, among these the marriage on 6th January, 1675 (date according to "old style" – by our reckoning 1676), of George Stoney of Kettlewell and

Mary Moorhouse of Rilston, direct ancestors of the Irish Stoney.¹ George and Mary Stoney emigrated to Southern Ireland at the end of the seventeenth century obtaining land under the William and Mary scheme which offered inducements to English Protestants with capital to settle there. George Stoney took up his abode at Knockshegowna (Hill of the Fairies) in the northern extremity of Tipperary. Alan's great-great-great-great-uncle, Andrew Robinson Stoney, subsequently known as Bowes, married the Dowager Countess of Strathmore; under her father's will any person whom she married had to assume her maiden name to assure her inheritance. Hence the coupling of the name Bowes with the family name, Lyon, of the Earls of Strathmore. It is an understatement to add that Andrew Stoney Bowes was no adornment to the family.

The *Annals of the Stoney Family* show its members leading the ordinary life of the "landed gentry" in County Tipperary and King's County, occasionally sending sons to England for education and occupied with the supervision of their estates and livestock and with hunting. Some held positions of responsibility as J.P.s and so forth, one being Deputy Governor of Tipperary. There is something pleasantly feudal in the account of my father's great-grandfather, the principal magistrate in the neighbourhood usually holding a petty sessions court on his front door steps, while an arm-chair in the porch served as the "bench." Sundays saw large dinner parties of twenty to thirty guests at his home, Arran Hill, to which relations and intimate friends had standing invitations. He always enjoyed showing visitors his deer park and herd of Devon cattle. Open house was kept: guests stayed as long as they liked to hunt with their host's private hounds. In the little church at Borrisokane the Stoney's pew was a small room off the chancel with its own open fire – all very snug. It was the privilege of the eldest son to occupy a comer seat whence he could survey the congregation. This room

¹ Here I follow the record given in *Annals of the Stoney Family* by Major F. S. Stoney, R.A.

is now put to another use and houses the stove to heat the church, but a tablet above the door commemorates its having been the “Stoney Pew.”

Thomas George Stoney, J.P., of Kyle Park, Co. Tipperary, Alan’s maternal great-grandfather, married in 1829, Anna Henrietta Waller, a member of the family of Wallers, among whom were Sir William Waller (known by Londoners as “William the Conqueror”), a highly skilled General in Cromwell’s army, and his first cousin, Hardress Waller. The latter was one of the Regicide Judges; but in 1660 he professed his penitence, adding that he “did appear more to preserve the King upon trial and sentence than any other.” His petition for pardon is among the Egerton manuscripts in the British Museum.

This Thomas George Stoney (my grandfather) was a man of considerable enterprise. Over a hundred years ago he introduced on his lands mechanical reapers which had to be conveyed about sixty miles from the nearest railway. I have seen both a model of the school which he intended for the children of his employees and a specimen of the £1 notes signed and issued by him for use on his estates. However he “wasted his substance” on building and horses; so two of his sons, Francis G.M. Stoney and Edward Waller Stoney (my father), became civil engineers. The former, Alan’s great-uncle, invented the “Stoney Sluice” used on the Assuan Dam, the Manchester Ship Canal, in the bridge over the Thames at Richmond and at numerous other places the world over; he was also the inventor of the “Titan Cranes.” The story is told that Francis Stoney, on going up to be interviewed for a certain post, took a model of his sluice, the working of which he demonstrated to the other waiting candidates. Francis was the first to be summoned to the interview – when he emerged he found the waiting room empty; the other candidates, completely discouraged, had disappeared.

Edward Waller Stoney, C.I.E., Alan’s maternal grandfather, spent most of his professional life as an engineer of the Madras and Southern Mahratta Railway, of which he later became Chief Engineer.

His inventiveness came out in the original methods he devised for the construction of bridges over some of the great Indian rivers, notably the Tangabudra. In connection with railways he brought out various patents, but to Anglo-Indians he was best known as the inventor of “Stoney’s Patent Silent Punkah-wheel.” Previously sleep was much disturbed by the creaking punkah- wheels. In 1903 he was made a Companion of the Indian Empire.

A distinguished collateral relation of Alan’s was Dr. George Johnstone Stoney, F.R.S., president of the Royal Dublin Society. He pre-supposed the existence of the electron and in its hypothetical stage named it and also gave the name to ultra-violet rays. He was known as “Electron Stoney”: with all his learning he used to say, “we know so little.” He was one of the great who nevertheless retained into old age a childlike simplicity. I well remember him in his eighties with his long, flowing, snow-white beard. Age had not dimmed his enthusiasms. Gramophones were a new invention and he owned the most enormous one, from which he derived great pleasure. His knowledge of music was such that he used to compose himself for sleep by reading musical scores. Another great interest of his old age was the study of Esperanto, which he believed had a great future. His son, George Gerald Stoney, F.R.S., made his name in connection with work on steam turbines in collaboration with Charles, later Sir Charles, Parsons. From his father he had learned much about the technique of silvering of mirrors, which led to his appointment in 1893 as Manager, in addition to other duties, of the Searchlight Reflector Department of Messrs. C.A. Parsons & Co. Though he had resigned from the firm in 1912 he gave much advice on the re-organization of the searchlight mirror department which in the 1914–18 war had become the largest of its kind in the world. He likewise served on Lord Fisher’s board of invention and research, and later on the Lancashire anti-submarine committee. (These activities are interesting to compare with Alan’s work for the Foreign Office in the Second World War.)

Johnstone Stoney's eldest daughter, Dr. Florence Stoney, in her hospital in France was very early in the field using X-ray photography to locate shrapnel and bullets in the wounded in the 1914–18 war. Her younger sister, Edith A. Stoney, who had been at Newnham College, Cambridge, and in the early nineties was bracketed with the seventeenth wrangler, did remarkable service in the 1914–18 war with the Scottish Women's Unit in Serbia, setting up and working electrical equipment for their hospital. Bindon Blood Stoney, F.R.S., brother of Johnstone, was noted for his invention of his "Shears Float" for dredging Dublin Harbour and of docks which may be regarded as the forerunners of the famous Mulberry Dock.

Alan's maternal grandmother was Sarah Crawford of Cartron Abbey, Longford, Ireland. It was her grandmother, (I think), a Miss Lindsay, belonging to the family of the Earl of Crawford and Balcarres, who married a Mr. Crawford. My mother recalled how the old family servants used to speak of the bride arriving provided with house linen all embroidered with a coronet. These Crawfords (or Crawford as originally spelt) were related to the Crawfordds of Crawford – John, through the houses of Loudoun and Kilbirny. My mother was a gifted amateur painter and excelled in her beautiful paintings of the wild flowers of the Nilgiri Hills in South India. A volume of these flower paintings was presented by me and most gratefully accepted by the Royal Botanical Gardens, Kew, where, to quote the Director, "it forms a valuable addition to the collection of drawings."

I was Ethel Sara, daughter of Edward Waller Stoney, and was born at Podanur, Madras Presidency, on 18th November, 1881. My education was at the Alexandra School and College, Dublin, and at Cheltenham Ladies' College. Later I attended lectures at the Sorbonne in Paris, before I joined my parents in Madras.

On a voyage home from India via Japan, Canada and the United States of America I met Julius Turing and we were married in Dublin on 1st October, 1907.

2

Childhood and Early Boyhood

Shortly after our marriage my husband and I returned to the Madras Presidency. Our elder son, John Ferrier, was born at my parents' home in Coonoor, Nilgiris, 1st September, 1908. Nearly four years later our second son, Alan Mathison, was born at Warrington Lodge, Warrington Crescent, Maida Vale, London, on 23rd June, 1912. His christening took place at St. Saviour's Church, Warrington Avenue, on 7th July, 1912. We spent the following winter with our boys in Italy. My husband returned to India in the spring of 1913, while I followed in September, leaving both children at home with Colonel and Mrs. Ward at St. Leonards-on-Sea. Both boys grew very much attached to "Grannie" as they called Mrs. Ward. It had been intended to take Alan out to India, but owing to his having slight ricketts it was thought better to leave him in England. Despite his delicacy he was an extremely vivacious and forthcoming small child.

My letters to my husband when I was in England in the spring and summer of 1915, round about Alan's third birthday, give some idea of what he was like. I was not alone in my opinion when I wrote, "a very clever child, I should say, with a wonderful memory for new words," for I reported that his uncle, Herbert Trustram Eve, maintained that he would do great things – this when Alan was nearly three. Here are extracts from letters at this time: "Alan generally speaks remarkably correctly and well. He has rather a delightful phrase, 'for so many morrows,' which we think means, 'for a long time,' and is used with reference to past or future." Being a very pretty and engaging small boy he attracted a good deal of

notice from complete strangers, and workmen who came to the house. In those days he was quite free from shyness and ready to greet anyone. He loved hunting up in John's history book the picture of what he called "the firstest train" (Stephenson's). One letter to my husband in May, 1915, says: "Alan will in a moment cry with rage and attempt to hold his breath, and in the next moment he will laugh at his tears, saying 'Look at my big tears,' and squeeze his eyes and say, 'Ah' with his mouth wide open trying to squeeze out more tears for fun." However, three months later a letter says, "Alan has improved greatly. He has many charming traits. He misses nothing. The maid in these rooms took my newspaper without leave . . . when she was taking the tea away Alan ran off saying, 'I'll get the paper for Elsie (the maid) to read,' which though useful was not tactful." In this summer of 1915 he made his first venture in experimenting: as one of the wooden sailors in his toy boat had got broken he planted the arms and legs in the garden, confident that they would grow into toy sailors.

Once more in the autumn of 1915 I sailed for India and the children were left at St. Leonards-on-Sea pending the return of my husband and myself in the spring of 1916. On the expiry of his leave my husband returned in the late autumn to India but did not wish me to have a fourth voyage among enemy submarines, so I had the boys with me in "rooms" at St. Leonards-on-Sea until the end of the war, with John home only for the holidays.

Alan was interested in figures – not with any mathematical association – before he could read and would study the numbers on lamp posts, etc. To meet the difficulty of remembering whether the figures read from left to right or *vice versa* he devised a method all his own. He noted on his left thumb a little red spot; this was the clue, dubbed by him "the knowing spot." Out of doors, as he came to a number, there would be a hasty turning back of his right or left glove to find "the knowing spot" to enable him to read the figure. Taken out by me sometimes with a sketching party he went the rounds among the young students who made much of him,