

Reinet Fremlin née Maasdorp 1912 to 1992

In her own words

Born in Johannesburg, 11 May 1912 – elder daughter of Henry Ernest Maasdorp and his wife Gladys Grace – née Fendick.

My father. Somewhere in the middle of eight children of James William Maasdorp, farmer. Was schooled in Graaff Reinet, had one year at Bishops (the Cape Town Eton or Winchester) as the gift of an aunt.

Re J. W. Maasdorp – I have a book (David has it now) on maths given to him at school as a prize for maths. Two of his brothers studied law and went to the bar. One became Sir Andrew Maasdorp. I don't know what for. The other, Christian, was the author of a book on Roman Dutch Law which I later found was a recommended book in the Cambridge School of Law. Another brother was a doctor, became an M. P. So J. W. had to take over the farm.

Back to H. E. Maasdorp. He was back on the farm – at the time no money for further education – while his elder brother Willie took a college course to become a surveyor. In the holidays, he taught Ernest what he had been learning. Eventually Ernest went to the same college, and did the three-year course in two years, becoming qualified as a mine and land surveyor.

Before he qualified, he got involved in the Boer War – first as a guide at about seventeen, to English troops moving in the countryside. Story he told – he had been asked to guide them to somewhere and was riding in front when an officer objected and ordered him to the rear – from where he could see that the long column was going the wrong way but kept mum until the General sent for him in a temper to put them right. Before the end of the Boer Wars, he was commissioned as Captain.

Worked as assistant to other surveyors, on farm land in the Cape, then got a job on a mine near Johannesburg – probably about the time of his marriage (1911) to my mother.

Joined the South African cavalry at outbreak of war and was sent to East Africa and to Egypt. (While he was away, his wife and family lived in Graaff Reinet with his wife's mother.) After the war he first went back to the mine work then applied for an assistantship to a land surveyor in Salisbury, Rhodesia. After a time became a partner, and when old Mr. Taylor died, kept the business going – later taking other partners.

A story told years later about Ernest by a fellow officer. His unit was in lines facing a Turkish army (commanded by Germans) somewhere, and his commanding officer said he wished he knew the placement of their troops and guns. My father (then a Major) said he'd find out. So, in uniform and carrying only a stick, he walked into the Turkish lines, strolled along noting all he could, and strolled back with just the information needed. (My explanation – the Turks didn't like the German officers, couldn't see the difference in uniform and avoided speaking to him. No information whether it was night or day.)

Was a very good surveyor, got special jobs such as surveying the border between Rhodesia and Portuguese East Africa; and S.A. Government wrote to England to ask for a surveyor who could do this job – was told they had an excellent man on their own continent.)

Was good at chess and became President of the Southern Rhodesia chess association.

Retired about 1950. Went back to Graaff-Reinet. Died 1961.

My mother. Gladys Grace Fendick, born 1886 in Aberdeen, near G. R., second daughter of Dr. S. Fendick and his wife Edith. Father died when Gladys was 7, and her mother took her daughters to England to live with some Fendick relations. Gladys was sent to a small school (boarding) run by a Miss Probart. Her story was that she was very bored at school – by 14 had learnt all they could teach her and had to repeat the same work. At about 17 she was invited to stay with some relations in Berlin and studied music there for about a year. Realised she could not earn her living by music, and then went to the newly opened Bedford Physical Training College, qualified as a gym, dancing and games teacher about 1907 – 8. Looking for jobs, was attracted by one in South America, but her mother wanted to get back to South Africa, so took a job with the Union High School in Graaff-Reinet. Her sister had meanwhile qualified as a nurse. They all went to Graaff-Reinet. Nelly married a farmer – her cousin.

Married H. E. Maasdorp in 1911. Continued some teaching – I can remember going to her dancing class when I was small. Continued playing her violin – mostly chamber music with other musical people. Took over charge of the Guides. When the flu epidemic came in 1918, Graaff-Reinet was badly hit. Gladys got the town Hall converted to a hospital. Her Guides helped keep it running, Gladys was Commandant. Guides (but may have been also from the other – Afrikaans – troop) kept the essential shops open. I can remember the “corpses” cart going round the streets every morning to collect bodies. We all got flu, but Mom and Edie were worst and were in the Town Hall beds – the rest of us at home. My grandmother moved us children and herself downstairs to sleep on the sitting room floor, as, ill herself, she couldn’t manage the stairs. All the farms round suffered badly. I remember being told of farmhouses visited later and only dead bodies there.

When we moved to Rhodesia, we got, after lodgings for a while, a house about six miles out of town, on a 5-acre plot.

I didn’t know until much later how much my mother disliked the seven years we spent in this house. She was isolated from music, from intelligent conversation etc. We had no telephone, at first no transport, and then only a donkey cart. Got a car perhaps two years before we left. There was a local tennis club and she enjoyed the once-a-week tennis. Also coached some kids from the neighbourhood me among them, in the holidays. Was good at tennis (later, once, she played for Salisbury against a visiting English team.)

She kept hens and later cows. Developed a beautiful flower garden and we also grew veg and fruit. Within a mile we had say 4 neighbouring families, so not much social variety.

After we moved into town (about 1927) my mother started doing all sorts of interesting things. She founded a child welfare society for native children; started and ran an ante-natal clinic for African women; bullied the Home Secretary (Rhodesian Parliament) into proposing and getting passed a Child Protection Act to stop exploitation of little piccannins; started a Health Visitor for African families. The first Health Visitor was paid a pittance by the Child Welfare Society and lived free in our house. Later the Government helped. She became a member of the Town Council and later Mayor. She started the Southern Rhodesia Labour Party open to Africans. Stood for Parliament but didn’t get in. She helped the Africans form trade unions, and advised them on behaviour during their first strike (e.g. no drink!) The Africans were always coming to her for help about this and that, and Daddy didn’t like them in the house, so she took a course in book-keeping, found a part-time job and rented herself a little office in the middle of town.

She retired from this active work when she had cancer of the breast and was ill for some time. Then Dad wanted to live in Graaff-Reinet. so they went there. Missed her work very much. Died 1960.

I was born in Johannesburg 11.5.1912. We went to Graaff-Reinet when I was about 2 and all my earliest memories are after that. Going down to Cape Town when Daddy went into army training and getting caught in the train corridor when going into a black tunnel, and being very frightened. Going out to wave to Daddy when his regiment went off to the war. "He will be on a white horse."

Granny's house in Graaff-Reinet – had an upstairs and a downstairs. Mom going away to nurse Dad in a military hospital in Kenya or somewhere (a fever of sorts.) Daddy coming home on leave. Henry's arrival (1916). Lots of friends and cousins – going on picnics.

Mom teaching me to read and do sums and knit. Starting school (at 6) and immediately being moved up a class. Visiting and staying on various farms – Aunt Nelly, Aunt Alice, Aunt Rita etc. etc. and all their children. (These three aunts had 16 between them.) Playing and jumping over the furrows carrying river water down every street. Going to bazaar. (Every Saturday there was a bazaar in the Town Hall – think some of them may have been for charity – but in general they were affairs at which home grown fruit, veg, flowers and home-made cake, were sold – also toy stalls, sweet stalls – great social affairs where everyone gossiped with everyone else – and children ran about demanding balloons and sweets. When we left Graaff-Reinet we took our guinea-pigs to the bazaar and ran a raffle for them.

Daddy came home from the war in 1919, and fairly soon we went back to Johannesburg – or rather to the City Deep Mine outside Johannesburg where there were neat rows of houses for the white employees. And a school for their children. It was while we were there that I had my first discussion about religion with my parents – I asked them why they didn't go to church. They took it very seriously, explaining how they'd gone against their own parents in becoming atheists – though Daddy preferred to say agnostic. And I remember examples over the next dozen years of Dad reporting some unkind behaviour or prejudice (E.g. against an ex-officer who wanted to join their club but was black-balled because he was Afrikaans and saying "And he's even one of those 'good' churchgoers").

Also my father taking me into his confidence over a serious matter. He came home early and my mother was out. He took me on his knee and told me how as he started (in firm's car) to cross a road a motor-cyclist had run slap into the car's front - and had been taken badly injured to hospital. "And Netty – he must have come awfully fast – I just didn't see him at all when I started across the road – He came awfully fast." Poor Dad, he was upset.

It was after only a year or less that Dad got the job in Salisbury (1920). We stayed in a hotel for a few days, then got half-a-house cheaply about 3 or 4 miles out of town. There Mom had to cope with her first African men servants – and as we were pretty poor, had to use "raw" (untrained) youths. She managed somehow to teach them how to clean the house, lay the table, cook simple things, wash and iron - and in later years, when she could afford more, often had her own trainees coming back or heard other people say "When I saw on his pass that he had been with you, Mrs. Maasdorp, I knew he would be well trained."

While we were there, Edie and I started at the little local school in Avondale, and continued after we moved to our own house (mentioned under Mom). At first this was a private little school – Miss Mould and one helper. Then the city council decided Avondale needed school and built one for the purpose, and Miss Mould was its first head. Very early at Miss Mould's I was moved overnight from Standard 1 to Standard 2 – it only meant moving to a desk on the right of the classroom instead of the left – but the first homework given was long multiplication which I had not yet been taught and I had to ask Mom how to do it. Very easy when shown.

Our Avondale plot was lovely for us children – plenty of room to run about, trees to climb etc. We had about 1 ½ to 2 miles to go to schools and had various methods – a rickshaw pulled by the garden boy (we urged him, his name was Damson, to race the goods train where the road ran parallel to the railway), walking, riding our donkey or falling off when trying to kick him to go faster. Donkey's name was Judy. School was 8 – 1, home in the afternoon, and it was a house rule that we rested on our beds for an hour or so after dinner. I always loved school. In the holidays my favourite occupation was reading, but another house rule wouldn't let us read before 12 or between 3 and 6, or times like that – we were supposed to do something useful or healthful. There were always holiday tasks, making hankies, crocheting doilies, knitting and later sewing. My grandmother sent me a length of dress material for my tenth birthday and my mother said "You can make that up yourself" and I had to. It was a green and white check cotton. After that I made most of my own clothes, until I could afford not to!

I joined the local Brownies, which met at school one day a week. Got various badges, the last one involving a set of various skills, using a flag to communicate in Morse, lighting a twig fire with one match, etc. etc. Edie and I were not allowed in the kitchen when the servants were there, but on their day off were encouraged to make something for tea, using the wood stove for cooking.

Our lighting was paraffin lamps, horrid things to clean and trim (my job for some time). Our water was drawn from a well, and had to be boiled for drinking. My mother made buckets out of old 10-gallon petrol cans, and these stood on top of the back of the wood stove to provide hot water for washing (scooped out with a saucepan) or carried to the bathroom and tipped into the portable metal bath.

The loo was a hut at the far side of the yard, erected over a deepish hole. When the hole was getting full, another was dug, the first filled up, and the hut, with its seat, moved over the new hole.

Even when we moved to town there were no flush lavatories. Still the hut at the back of the garden, but there was a bucket under the hole in the seat, and every night the night cart came past, buckets taken out through a trapdoor at the back and a clean one put in.

A former army friend of Daddy's had died and his kids had been in an orphanage for a year or two. We decided to take on John for a trial period of 1 year (he was Henry's age). He didn't seem much good at anything, and none of us got on with him. At the end of the year, Mom asked him what he wanted to do, and he said he wanted to go back to the orphanage. Although none of us had liked him we were hurt to find that he hadn't liked us either.

We had other children near enough to play with, the Liebermans, but I didn't like them much. Other families living further away would tell my mother they wished they had more company, and invite us children for the day, but I never really liked them either. They were silly, or their conventions were different, or I was just difficult! As far as company was concerned, my own family filled my needs.

My father was away a lot, and this of course added to my mother's misery while we lived so far out of town. His surveying jobs could keep him out in the field for three months at a time. At first, he travelled only by train or walking, with a gang of Africans to carry his tent, foot, theodolite, clothes, chess set, books etc. And might do jobs on several farms in some area before walking back to the railway and coming home. Later he got a lorry, but still had his bearers. Then there would be a spell of office work, doing calculations and preparing reports and maps, correspondence over future jobs, then set out again. Once, when he broke his arm, Mom had to write out his calculations and reports to his dictation.

Occasionally in school holidays we would join him on the veldt for a camping holiday ourselves.

When I was 10 I grew out of Miss Mould's school and had to go to school in town. The 5½ miles were a problem. For a time I got lifts by fathers from nearby who were taking their children to school in town. I taught myself to ride my father's bicycle, and got permission to go to school on that on days when I wanted to stay for some extra activity. At first, my father's bicycle was too high, and something high had to be stood on for mounting. A kerb would do, but if the weather was very wet, then the edges of the cambered roads would turn into streams, and I might have to walk some way to find a suitable place for remounting, after getting off to walk up a hill for instance. For a period, we actually had a bus; a young man bought a third-hand bus and ran a service to Avondale for school times and also one for shopping. He'd hoot outside our gate at about 7.15 am if we weren't on the roadside waiting for him and I can remember running out with a half-eaten slice of bread and jam in my hand. Eventually I got a bicycle of my own but I can't remember whether it was before or after we moved into town.

The extra activities that kept me at school after the bus had taken the others home included elocution, drama, tennis and gym. I suppose I was keen on these because I loved school anyway, was keen to be accepted by the others, and probably didn't have a lot to do at home and would have been roped in to help my mother if I was at home. The elocution led to various competitions.

The move was when I was about 14 and it was suddenly much easier to join in extra games, debating society, elocution classes, dramatic society etc. The only game I was any good at was tennis – early practice – but I joined enthusiastically in everything else. At some stage I got elected as a House Captain, but insisted on their choosing a separate House Games Captain. (Later of course I became a prefect, and deputy Head Girl in my last year. The Head Girl was ill most of that year, so I had to take her place quite often.) Many years later Dorothy Zelter told me that I had been voted Head Girl, but the Headmistress would not allow it because I had opted out of school prayers.

This was when I was 15 I think. I went to the Head and said that I was a convinced atheist and please I don't want to go to Scripture lessons or school prayers any more. I can't think now why she allowed it. I think she was utterly taken by surprise!

Anyway, I also backed out of going to prayers, and filed in with the Jewesses etc. after prayers for any school announcements. It gave me an extra period to finish homework in, until some bright staff realised how useful it would be if I looked after the kindergarten. Scripture lessons were taken by visiting priests, so the staff could have a meeting then, but the kindergarten teacher had been unable to attend it until I became available.

To go back a bit: soon after I went to the Girls High School in Salisbury, I was put in for a special examination for the Milne scholarships open to pupils under 13 – I was about 11. I got one of the 4 given, and it paid my school fees for two years. After those 2 years I was put in for another scholarship – can't remember its name - open to pupils and that paid my fees for the rest of my schooling. Also I found that if one was a boarder the boarding fees would also be paid. (The school had pupils from farms etc. all over the country.) So I decided I wanted to be a boarder for a year, to see what it was like, even though we lived only half a mile from the school.

This meant having clothes according to a boarders' list. My mother had been very ill and Daddy had sent her to the coast (Cape Town?) to recover. I was on a dress allowance and didn't think of asking for extra. So made everything including pants, nighties etc. out of the cheapest calico I could buy. Rather funny-shaped bras too. Had to buy shoes, and the black stockings we wore. (Our pants were navy, as we wore navy tunics, and my cheap material ones washed rather pale!) White blouses.

Took me the whole of the holidays. We had a rather ineffective widow looking after us at the house while Mom was away. Edie and Henry disliked her clucking ways, but I was so busy, I scarcely noticed her!

The boarding school was a new experience – I neither liked it nor disliked it, but didn't go back after the one year. Everything went by the clock – when you bathed, when you did prep, when you had to go outside, when you wrote letters home and darned your stockings. Every Friday night, every boarder was given a massive dose of cascara. (My mother was furious when she heard this and got me exempted.) I refused to go to church and got exempted from that too. We walked to and from the school – 300 yards? – in crocodile. Had a big, hot midday dinner and mostly had to lie in silence on our beds in the dormitories for an hour after, but on Tuesdays went straight to the baths for swimming lessons.

I think my mother was on the school governing board by then – but that may have been later. All this when I was about 14 - 15.

Parties. From early days I disliked parties. There were plenty in the school holidays, our long summer holiday was over Christmas of course. I'm sure I was invited, Edie perhaps too, because the parents knew my mother, or just because the child and I were in the same form. When small there were games and refreshments, and I hated these too. One year when I was 9-ish, my mother made me a sweet white dress for parties. There were four parties in one week, and at about the second a firework burned a hole in the skirt – which my mother mended very cleverly. But I think I must have been a rather dull-faced lump – I can remember one dance where an uncle of the family danced with me pretty often, presumably because he kept on finding me partnerless. And then of course we occasionally had to give parties or dances back, and I hated those. Feeling responsible and not knowing how to behave as if I were enjoying it! I remember once we had sent invitations out for a dance and Mom had a touch of flu a few days before, and, without asking her, I phoned everyone telling them it was off because my mother was ill. Unfortunately, she insisted on organising another dance later, because we owed it.

What I really enjoyed was most of the schoolwork, doing homework and reading. One winter (15?) I read the whole of Shakespeare from beginning to end. Earlier than that, perhaps when I was 12, my prowess at needlework had led me to be thought fairly good at darning. One day, I distributed a leaflet among our 5 neighbours, asking them to give me their darning to do, for which I would charge 3d (say) per darn. One of these neighbours did give me some of his socks to do, at which stage, my mother found out for the first time, and was furious – her daughter taking in darning! After I had done that batch, she refused to let me do any more.

One time (I was about 11 or 13) we went to stay with my grandmother in Graaff-Reinet for 3 months. I was sent to school there. The first day the English lesson was reciting poems learnt for homework – there were 4 poems and the teacher took them in turn round the class. I calculated which would arrive at my turn, learnt it and recited it correctly!

My own school had given me work to do while away. I tackled it only on the journey home (four days in the train and on most stuff had caught up – at least by the time I got back in my class. I remember meeting simultaneous equations for the first time in that train and finding them exciting.

One summer (Christmas) holiday, we were at Jeffrey's Bay, a small seaside place (one shop) about 50 miles along a narrow-gauge railway from Port Elizabeth. Just before we were due to return home there were big rain storms and bridges and part of the railway washed away – so we had to wait – running out of money and time. Eventually we took the first train out: it went terribly slowly,

feeling its way as it were across new laid line on mud and repaired bridges. Our train north was due to leave at 5 (it ran only three times a week) and we got to Port Elizabeth about 7. Found they'd kept the train back. Porter rushed us and our luggage across, dumped us all in the guard's an at the back and the train pulled out, leaving us to walk along the whole train to find our compartment.

We went to Jeffreys Bay a couple of times, so I'm not sure that the rest of this story was the same trip. After four days in the train, we got to Rhodesia. There was a railway strike, and our train crew had had orders not to get involved, so they stopped a few miles short of Bulawayo and dumped all passengers and goods on the veld and steamed south again. Of course, the Bulawayo taxi drivers were on the mark, so we got into Bulawayo, had an awful job finding a hotel and eventually got one room for six of us (a friend of Henry's with us). Then the question of getting to Salisbury (300 miles about). Daddy scouted around and found a friend willing to lend him a car provided we transported his wife's hens to the Salisbury Agricultural Show. So we set off with the hen coop on a trailer. The main road couldn't be used because a bridge had been washed away, so side roads. Very muddy, lots of cars got stuck, local farmers came out with their oxen to haul them out. About 4.30 ish we decided we wouldn't get home that night and managed to get rooms at a hotel in the middle of nowhere, later arrivals slept in their cars, and got home next day. (I believe the hens did not survive.)

A friend of ours, a young farmer, had been visiting his fiancée in the Cape and had no money left. He got a job of conveying a load of fish on ice from the train we'd been on to Salisbury. The two-day journey he made was too much for the ice, and he ended up with a very smelly load of fish but duly delivered it (it was mid-summer, tropical). Came round to our house for a bath and change of clothing as he felt he smelt of rotting fish.

All the way up our senior school, I was at least 1½ years below the average age of the class. It didn't worry me, but may have been why I was so bad socially. Anyway, my mother calculated that I would be only 16 when doing University entrance. So in what would be equivalent to my Upper 6 year, she took me away from school for six months and I went to stay on a farm some 40 miles from Graaff-Reinet with Aunt Gladys Birch, a cousin of my mother's. She was divorced, had a daughter away at boarding school, and ran the farm herself with a manager who lived with his family in a separate house. I loved that time. Found enough to read in her house! She kept me occupied – helping driving sheep, helping with butter-making, helping when shearing was on, or just walking round bits of the farm. (It was several square miles to my remembrance and we went to bits of it by car.)

There was a lot of tennis – a group of some 4 – 6 farms within say 30 miles each had courts, and took it in turn to invite one another to tennis (plus lunch and supper) on Sundays, or perhaps Saturdays? They all played pretty good tennis, and I got a lot of practice. Sometimes with special friends of Aunt Gladys we stayed over the weekend. Sometimes I was invited to stay a week or more – this depended on whether transport was going to be available. I liked them all, girls, boys and grownups (all honorary Aunts and Uncles). Later, when I went to Graaff-Reinet for University holidays, I had very enjoyable stays on the same farms. Helped during shearing time (a) organising tea for the hired gang of shearers (b) herding sheep into the shearing enclosure (c) tramping the wool down into the bales and sewing up the bales. Loved it all. Got very greasy from the lanoline in the wool.

A sheep would be killed, and we'd eat right through it from feet to head. There were also chickens and occasionally Aung Gladys would go out at night to shoot a hare or two. My part would be, when we found one, to hold her big torch to reflect the eyes while she aimed her gun. I had the regular job of providing the sweet course and my limited repertoire got extended.

I was there from about July to December. Then our family was going down to Jeffreys Bay and I met them in Port Elizabeth. I put on my school clothes because I thought Edie would be in hers – we always did the 5-day train journey in school clothes to save our holiday dresses (the trains were filthy) and found Edie had put on a dress because she thought I would! After that I had one more year at school.

As I said, I always enjoyed school, except for Botany. This was our only science subject, was taken by the geography teacher whose geography lessons were also dull, and consisted in reading and learning a text book. I got into the last two years – for the Matriculation Exam which was University entrance – I asked to drop Botany. No, you need so many subjects. So I read up the regulations and discovered that under New Regs, fewer subjects were possible if others were taken at a higher level. So I opted to take extra maths, and was allowed to drop the Botany. The maths teacher found me some books, but not much time to teach me (Edie who didn't like this teacher, said it was because she didn't know that maths) but I got my A in both maths.

That last year, when I was acting as Head Girl, I was also a bit of a star in the debating society, etc. I don't think I did much in the Dramatic Society that year – earlier I had been one of the stars in that, always getting a main part in school plays (probably because I could remember my words!) – competed in Eisteddfods – recitation, playlets, country dancing – also got poems and essays published in the school magazine. Remember once, when the homework was to translate some Latin verse (conventionally a sort of blank verse with a definite number of feet per line) I put it into English blank verse in iambic pentameters. Was a bit disappointed at the teacher's response!

I was also the school's "writer". I had kept up my printing when the rest went cursive, and got the job of printing out notices and lists when the school was putting on a show. Learnt to write a lot of fancy lettering, by myself, with the aid of books.

My mother was rather ill during my last term, and Edie had her tonsils out, so I stayed at home and went to school once a week to collect work. The Head thought my chances of a good Matric were being ruined, but I felt myself that they were improved by not having to sit through dull revision lessons on what I could do quicker on my own. She was very sarcastic when I turned up to play in a tennis match against some other school, "thought you could not leave the house Reinet."

When the Matric results came out, the brother of a girl in my class who had recently got a job on the Salisbury Paper, rang up to say I'd got a third-class pass. I was really down about this, tried to hide it, but went out to a dance rather unhappy. My father rang me half-way through the dance to say he'd found out that as I had done New Regulations, my name was recorded quite separately below the third class passes – with no pass grade given. Later I got a gold watch from Salisbury City Council for the outstanding pass of the year! And was able to get a useful grant to go to University – in fact two scholarships, one of £100 and one of £30 p.a. The £30 one covered teaching fees. The £100 one covered lodging costs at the University Women's Residence (which was £75 p.a.) and left me a scrap over for clothing, holidays, entertainment etc. But more of that later.

Cape Town University. I should have started the term in the first week of February 1930, but didn't. Mom travelled down with me, and we went early enough to have a week with her mother in Graaff-Reinet. While there I developed Enteric fever, and was ill for some time. Mom refused to have old Dr. Hudson, Granny's doctor, and called in the Afrikaans doctor instead – and was probably right!

I was nursed in Granny's house, after a little while Mom got a nurse in to relieve her at night. The doctor sent to Bloemfontein for something to inject, and presumably it worked. I was told that the road outside was blocked for a time to keep traffic away to give peace and quiet. It took some time

to get my strength back. Then we went to Cape Town to have a fortnight by the sea before I could go to the University. Henry was then boarding at Bishop's school (see under my father) and we were met at the station by a master escorting him, Henry, with his arm in plaster and a sling because he'd broken it. So he joined us by the seaside.

When I got to Cape Town University it was only a couple of weeks before the end of the first term. I had really no idea of what I wanted to study, or what for – vaguely wanted to be a teacher, though Mom wanted me to be a doctor – but I didn't want that. My tutor advised that as I was good at Maths, I should do Physics. I went to one lecture, and couldn't understand a word. The regulations were that every student should do at least a one-year course in a language, a Science (including Maths), a group containing Ethics, Metaphysics, etc.; and at least I think three second or third year courses. Can't remember it clearly, but one could get away with eight courses in three years. I took twelve. I plumped to do Maths, English, Latin and Logic-and-Metaphysics in my first year, and spent ages copying up notes. (The Classics Prof., at the end of the first year, asked me to major in classics and come to his Greek lectures). In my second year I went for Maths II, Chemistry, Applied Maths, and Physics as I wanted to try the sciences which I had never done. They started from the beginning, and with a proper start, I really fell in love with Physics. In my third year I did Maths III, Physics II, Applied Maths II and Psychology I. I realised that year that I was reaching my ceiling in Maths. I'd been very bored with Chemistry, but wanted to go on with Physics and the Professor invited me to do an M.Sc.

I got a scholarship for my good degree (eleven class I and one class II result – English) of £80 p.a. for 2 years. Then the Prof. asked me if I would become a demonstrator in first year Physics, also at £80 p.a. but couldn't keep both scholarship and demo fee. I went for that and thoroughly enjoyed the teaching part. One of the days of demonstrating (I think it was 2 days a week) I was supposed to go to the Prof's lecture at 12 and used to forget and he had to come and fetch me. (Professor Ogg, a darling).

I did well enough for the staff to recommend me to go to Cambridge, and our senior lecturer, Dr. Schorland was visiting Cambridge, and got permission for me to go there. I applied for grants and scholarships, and got one (£150 a year) before I sailed for England. When I got to England, I had a letter from the Beit Trustees (my other main application) asking me to call on their office in London. There I was told that the grant I'd applied for was only for post PhD's, but in view of my record, their Rhodesian Office had recommended a special grant, so I got another £150 p.a. which was O.K., remembering that I had got to keep myself during holidays as well as term. (At that time the D.S.I.R. grant for some Cambridge post-graduates was £250 p.a., others less.)

Life in Cape Town

Money. On fees paid plus £100 a year, I was pretty tight - the residence fee was £75 p.a. At the beginning, Mom sent me £3 a month, and recommended I spend some of it on fruit or dried fruit, to keep me regular! But then the slump came, Dad's work decreased, and her money got tight. Dad got a job on a copper mine in Northern Rhodesia, then that closed down, and he went back to Salisbury and started up his practice again, but it was a long slog. So I told her not to worry. From the beginning of my second year, I did Maths coaching (of first years) at 2/6 an hour. And later Physics. Was still making my own clothes, there were sewing machines available in the residence. Even made a warm coat once.

Every now and again I would get a money present from an uncle or aunt, very welcome.

Holidays. There were four terms, 2-week holidays at Easter and end September, longer holidays July (mid-winter) and over Christmas (summer). The short ones I spent either in the residence or on occasion staying with an aunt in a Cape Town suburb - she was very good to me. Twice in my five years in Cape Town I went home to Salisbury – 5-day train journey, expensive - and most of my other holidays I went to Graaff-Reinet, although I had one holiday with a college friend in Zeecust in the Transvaal and one with another friend in Oudtshoorn in Cape Province. On the Graaff-Reinet holidays, my headquarters were Granny Fendick's house, but I wangled invitations for farming families I had got to know before, and always enjoyed those.

Term-time activities. Apart from work, which I continued to enjoy, we had quite a social life in the residence, visited one another's rooms, played friendly bridge etc. Tennis in my first year, then labs prevented this. In the summer, went to the beach at Muizenberg occasionally, would buy a bunch of grapes for a penny for my lunch, as there was bus fare to pay. Very occasionally felt I could afford to hire a surfboard – something like 6d. There were good walks along the mountainside near the residence.

Various dances, on the university site, gradually got to know some of the men, but mostly didn't find them very interesting. Got one offer of marriage, and turned it down flat. Went to the debating society, seldom spoke. Got poems and essays published in the University magazine. Watched rugby football matches, usually free from a suitable window in the residence. The great rugby match of the year was against Stellenbosch University. We could get seats on our stand only if we went to rehearsals of the songs and changes to encourage our team and I did this one year. Then we all went over to Stellenbosch in buses and had a rip-roaring and very exhausting afternoon, making a lot of noise with our songs. Can't remember which team won! Took part in one of the students' concerts as one of the chorus.

Occasionally went into town with a group of friends, mainly window shopping, and had to abandon them when they went into a café for coffee and cakes.

We were allowed out of the residence in the evening only in fours, never in twos. Most of my invitations to the cinema came from someone who needed to make a foursome if she wanted to go out with her boyfriend!

One time, may have been my last year, I was asked by the students' socialist party to stand for the Student's Parliament. There was proper electioneering to do, meetings etc. Didn't get in, but managed to get fare paid to go to the Parliament as an observer, it was in Johannesburg. There was a "government" and "cabinet" and question time and debates on serious bills. All very authentic. But I enjoyed the evenings best – made a boy-friend who took me out to meals and parties and even to visit his parents – we were staying in students' residences, women's and men's but there were no rules as to when we went out or got home, just that we had to sign out and in and the last one in, often me, had to lock the door of the women's residence. (Lost touch with him later, although we corresponded for a while.)

Four of us girls who turned 21 about the same time had a party – in a day-student's home. Each of us invited three other girls and four meant, lots of discussions about whom we were inviting so as not to overlap. We clubbed together to hire a pianist and buy bread and sandwich things. I think it came to about £1 each. May have been a little more. I'm sure the hostess' mother put in some cakes!

In my last year, I was elected Head Girl of the residence and had a little flat instead of just a room, sitting room bedroom and bathroom. Chief problem was that I had to be in time for breakfast to say

grace! Also had to have after-dinner coffee with the warden, a dull woman who brought up various disciplinary problems she wanted the Resident Students' Committee to deal with. Taught her to do the Cape Times crossword puzzle, she got quite interested and it passed the time I had to stay with her before I could get back to my own room.

Also during my last year, or the year before, Mom and Dad came down to Cape Town on a holiday. Mom was horrified at the dress I was proposing to wear at a dance, a hand-down from an aunt, and hauled me into town and made me spend £5 on a new evening dress, but she did buy for me herself a nice cape to go with it. Dad wanted to come to the science seminar meeting at which I was giving a talk, but I refused to let him.

Henry, four years my junior, was at Cape Town University for a year. He wanted to write, but Dad was pressing him to get some useful training first, e.g. Engineering. He failed his first-year exams (I don't know how, it must have been quite an effort) and before the results came out had landed himself a job on the reporting staff of the Cape Times. We occasionally went to the beach together on Sundays, but otherwise I saw very little of him and don't know how he occupied himself.

I seem to have been a very self-satisfied person up to now! I don't think I really was, but I must have been very work-orientated. I always felt myself at a disadvantage on social occasions, not knowing how to deal with people situations, but I could get satisfaction out of schoolwork so rather concentrated on that. I made no lasting friends, but must have got on all right with my contemporaries, always with a chatting group at break for example, not lonely. But each time I transferred, junior to senior school, school to university, etc. I just forgot the people I had known before and concentrated on my new life. I remember one maths lecturer, on a social occasion, calling me "rather an austere person." I didn't know what he meant, but probably because I couldn't let my hair down and be gossipy and at ease. I think I must have been thought very heavy to converse with by my partners at dances!

This inability to join in gossip led me to some problems. E.g. I was invited to a wedding of a cousin in Cape Town and it turned out a very fashionable affair. It never occurred to me to ask anyone what to wear to weddings, and as it was a cold day, went in brown woollen coat and skirt. Definitely wrong! I didn't discover until later that most of the Latin class knew that the Library had "cribs" – translations of the Latin writers from whose works we had homework translations to do. Even at my own wedding – I had always associated a "white wedding" with a church wedding, and as ours was in a registry office, wore a blue skirt and jacket both for the ceremony and for going away in. It only occurred to me years later to wonder what John's aunts thought of it.

As far as boys were concerned, I never liked them while at school, my school friends' brothers seemed so silly! When those friends' families invited me to dances, I hoped to have partners but never knew how to talk to them. At University I usually found someone to ask to our annual residence dance, but can't remember where I found them. Certainly in my first year, when the dance was fairly soon after I first arrived, it was one of the girls telling me about someone she knew who would love to come. But again, I found them difficult to talk to, and decided they were "uninteresting". In my own main subjects, most of the students were men of course, but I don't remember getting friendly with individuals.

When I went to Cambridge, I was the only girl in the post-graduate section, and it is clear from later remarks by some who became professors etc. that they found me attractive. I certainly had a lot of invitations to go to the cinema, or to go out boating or cycling in the country. And during that period

(age 22-25) I began to enjoy their company and became more “loose” in my behaviour. In fact, looking back, I’m rather shocked at myself.

Arriving in Cambridge. So at 22 I embarked on a ship to sail to England. The 3-week voyage included Christmas, and we landed at Southampton on New Year’s Eve, 1935. My first experience of an English winter, disappointingly no snow! Stayed at a cheap hostel I’d been told about and explored London, sometimes just getting on a bus, going to the top, and staying on it for miles. My first experience of going out after dark without any escort.

Then went up to Cambridge. Was attached to Newnham College, which had arranged digs for me, sitting room and bedroom, breakfast and evening meal.

I arrived in Cambridge in early afternoon, went to my digs and then went around to Newnham College to report in. As I was attached to Newnham, I had to go once a week to see my “tutor” who simply asked if I was getting on all right and let me go. There was a science tutor at Newnham and I saw her occasionally but never got any help from her. Then next morning I reported in at the Cavendish Laboratory and saw Dr. Chadwick. (After that I was under Rutherford and Oliphant). I asked Chadwick why women couldn’t be members of the university and he got quite heated, telling me how bad women were at administration, couldn’t manage their own affairs let alone the affairs of a university!

Fairly soon I bought a bicycle, about fifth hand, for £1 or so. A couple of years later, it just fell into several pieces under me while I was on my way to the lab. I just left the pieces at the side of the road and bought another similar. (After we were married, John bought me a lovely new bicycle, with gears and all.)

For my first term or so I was given a set of postgraduate lectures to attend (never examined) and was in the “nursery”, was taught to use a lathe and a little glass-blowing and was given a small project to work on which I can’t remember anything about. Now I began to find how ill-educated I was! My Physics itself was to me way behind what the other graduates had achieved; also they could all talk apparently knowledgeably on politics, literature, history, art, music, etc etc. All I could do was stay quiet, smile and listen!

At teatime in the afternoons we went up to a room (called the library, where there were copies of current journals) where an electric kettle which I was told had been presented by Rutherford was used to brew tea. I stood in one corner and for ages no one addressed a single remark to me – shyness I was told later, but it was rather lonely.

Then I was moved into Rutherford’s old lab and put on to a new apparatus which had been designed to measure alpha particle tracks, and told to calibrate it. Involved learning some new skills. One of these skills was to learn how to get equipment, the head of the workshop, Mr. Lincoln, was very economical with what he handed out. “Please could I have about five yards of flex?” “exactly how much do you want, go and measure it.” Came back with a more exact measurement, he would then stretch the flex with all his might against a ruler, and cut it off to the inch. One learnt to ask for a little more! I was told that if you got a rheostat off him, it was wise to screw it to your bench, if he found it loose, he was likely to lift it and issue it to someone else.

Also had to explore cheap cafes for lunch.

Then I was put with two other, Kempton and Brown, to do some experiments Oliphant wanted done. These involved using an old Cockcroft-and-Walton apparatus for accelerating protons or deuterons on to a target and finding out what was produced. The apparatus itself was a bit

temperamental, we always seemed to be repairing something, e.g. replacing filaments which meant taking everything down, making it vacuum-tight again, and pumping out again, which took ages. At one time a ceramic tube (some 3 ft long 10" (?) diameter) got broken at one end. We explored and explored and eventually raised one in the Chemistry dept., but it had to be sawn off square, copper hacksaw blade and carborundum powder and water – took days with us working in turn. It must have been a couple of years later, Oliphant was working on the design of a new Van der Graaff machine, and asked us to test out the insulating properties of some oil he thought of using. We had a (2-gallon, 4-gallon) battery jar, glass, fitted terminals in, and applied increasing voltage from our machine. Suddenly there was a big spark, a loud crack, and glass and oil all over the floor. We got some sawdust to throw on the floor, and went off to lunch. When I got back, no sign of my colleagues, so I started clearing up the mess, and it was a mess, and they didn't turn up till next morning by which time I'd got it clean and tidy! Another time I was up on a ladder trying to adjust part of the circuit up there, when I got perhaps 50,000 volts (very low current) through me somehow, coming out just above my knee which was supporting me against a shelf. Drilled a neat little hole into me, but I didn't even fall off the ladder! Another time I was waiting for the apparatus to be pumped down, and started tidying a filthy thick-with-dust old mantle shelf on one side of the lab. Moved a fairly thick piece of copper wire when there was a flash. It turned out that there were two pieces of wire lying there in the dust and they were connected to the terminals of large battery of accumulators which lived in the workshop. Don't know how long since they had been used. The flash burnt and copper plated the backs of my fingers, painful for some days.

Anyway, we did get some experiments done, and they were published in the proceedings of the Royal Society. This led to the authors getting invitations to the annual party for authors, i.e. Kempton, Browne and Maasdorp. A couple of days later another letter to me, sorry, as you are female, invitation cancelled.

The Cavendish research dept had an annual dinner, a bang-up evening-dress affair, at which various individuals and groups put on entertainments, skits making fun of the dept etc. In my first year, I applied to go, to find a "no women" rule. By my third year, when there were now two other young women in research, this rule was relaxed. During the sherry prelim the guest-or-honour turned up. I heard later he said "Good God, women!" most disapprovingly, and the organisers rushed round changing the seating lists! (There were two older women in the department, but I never really found out what they were working on. One was the Newnham scientist, saw her occasionally when she kindly asked how I was getting on.)

To use the University Library, I had to carry a card saying I was "a fit and proper person" to use it. Any male undergraduate could just walk in wearing his gown.

At one time I was given a woman undergraduate to tutor, she used to do questions for me, and was much better at the subject than I was. I was thoroughly scared of these tutorials. Another time I was asked to demonstrate in the students' first year lab for a term. It took me all my time to find out what the experiments were about, as some of them were ones I'd never met, and I felt very inadequate. To my surprise, I heard later that Searle, in charge of the lab, had quite approved of me – but maybe he had a very low expectation of females and I was not quite rock bottom.

Holidays. When I was first in London I called as advised on the address in London of Lady Macdonald of the Isles. Any Commonwealth graduate calling got given tea by her secretary and cross-examined, and a card was made. "Do you need accommodation for holidays?" etc. I used her scheme for two short vacations – she had a list of people who would invite us to their homes. One was with a pleasant family in a village south of London, somewhere. They drove me out to see historic houses,

and I went for walks with the mother and her children. Her husband was inventing or improving an electrocardiograph, and I spent some time sitting in his workshop wired up to his machine while he fiddled with circuitry to improve the trace on his cathode ray tube. He was glad to have a captive subject! Another holiday was with a woman somewhere near Diss in Norfolk. I think now she must have bred or trained horses, anyway she was out in the stables all day, except when she took us to tea with friends – there was another South African girl, Nancy, there at the same time. Nancy and I had never been so cold in all our lives! It was March, I think. A fire was lit in the sitting room in the evenings, that was all. We put our floor rugs on our beds at night. In the morning all we had to do was sit around and talk and read, in the cold.

My very first summer holiday I went on a student trip to America, organised by the International Union of Students. There were about 20 of us, British, French, Belgian, Dutch. I explained to people that as I was now so near to America, I had to go. The tour leader was a teacher from London, and he was very nice. I visited him and his wife several times in later years. We went across and back by boat, very pleasant. Stopped in a large hostel in New York for a few days, there were separate floors for men and women and duennas sitting near the stairs all night to check no movement between floors. Various sight-seeing and tours laid on, and we learnt which of our party were never ready at the time we should move off! No meals on the premises, so we had to go out in the shopping street to find breakfast, but other meals were organised as part of the tour. (I had to persuade my bank to lend me some money for this tour.)

We then toured various places, travelling by bus (and mostly sleeping en route). Niagara Falls, Ford car works at Michigan, Chicago, then east again by a different route, e.g. Pennsylvania. Saw mass production methods at a meat factory (live pigs or cattle in at one end, carefully packed sausages, chops et out the other end) and then in Princeton, cows walking in and milk coming out. Very mechanised.

All the way, sundry expeditions and entertainments put on, but some free time. Went to a night club in New York for example – I found it hot and smelly and was too careful with my money to want to spend it on things like that afterwards. But a very enjoyable tour altogether, good company and plenty to say to one another. Arrived back in Cambridge with about 1/6 left in my purse!

It was only after this that I was told that postgraduates did not take the university vacations in full.

One summer, Nancy Walmsley and I went to Germany for a holiday, included the boat trip on the Rhine: Cologne, Freiburg, Munich etc. Stayed in student lodgings from list provided by the International Union of Students. Another summer, I went on a tour to Russia, six of us from Cambridge, organised it with Intourist. Then days there? Leningrad, Moscow and Kharkov. After the others returned home, I went on by myself to Sweden and Denmark for a few days.

My shorter holidays were varied. Occasionally in London. I discovered a very cheap women's hostel. Also visited my mother's cousin, the Rev. Harold Fendick, and another friend of my mother's, Mrs. Macfarlane in Kent. Paid an afternoon visit to my grandmother's step-mother who lived in North London.

The Miss Macdonald of the Isles organisation sent invitations to tea-dances and balls in the Christmas Holidays, also things like visits to the Times Printing works. I went to a couple of these. On the Ball occasion, hostesses did their duty. About 8 of us "empire people" – four couples - entertained to dinner before being sent off to the ball in the Goldsmith Hall - a bang- up affair. It meant we automatically had partners, a good idea.

Activities outside the lab. A fair amount of social activity, at weekends, with for e.g. punting or cycling, going to tea in someone's rooms, etc. Got invited to a "college ball" one year, home about 5 a.m.

But it was more serious activities that took my interest. I was recruited to the Communist Party, joined a small group of post-graduate scientists from various departments. We studied the works of Engel, Lenin, Marx, discussed Russia (pro) and Hitler (anti) etc. Some took part in selling the Daily Worker on the streets (in London?). I did it once I think. Kept up with them until about 1939, but then found myself disagreeing more and more with their tactics, although I still continued to feel the basic ideas of (classical) communism very attractive. And dropped out.

I joined the Association of Scientific Workers (then A.S.W., later A.Sc.W. to distinguish it from the Amalgamated Society of Woodworkers or whatever). The A.S.W. was working for better conditions for scientists, for better public understanding of the importance of science to society, for better science education, etc. It didn't seem long before I became Branch Secretary, and later had a seat on the National Executive Committee. Had to arrange Branch Meetings. And we also put on public film shows of scientific shorts which were being produced quite a lot. One of our big campaigns was to get better grants from the DSIR (Dept of Scientific and Industrial Research) for postgraduates. The level then was £120 a year, though the Cambridge ones usually got up to £250 because of college rules about their lodgings and having to dine in College etc. We found that the chemists were getting a good deal less because their tutors had not complained! Involved a lot of correspondence, and a deputation of us went to London to see the DSIR, but I don't remember that we had any success.

Then I also joined the Cambridge Scientists' Anti-War Group. The activities of this that I remember were (a) sending speakers out to various peace groups all over the place (b) testing out government instructions on E.g. how to gas-proof your home against poison gas, how to deal with incendiary bombs. We did quite complicated experiments on these.

It was through these activities that I got to know John Fremlin better. He was in the lab, but we hadn't begun to fraternise there. Anyway, we began to see more of one another went out to lunch together, he spilt me into the river when out canoeing etc., and eventually decided to get married. He took me to Ryarsh to meet his father and sister, who may have wondered whether a South African with a peculiar name was black!

When we got married, I still had a term to run. Needed 9 terms to be allowed to try for a PH.D. and I decided I wanted to stay in Cambridge for that term. John had landed a job in S. E. London, so went off to it. I found that my grant from the Beit Fellowship did not allow the holder to be married, so I wrote and told them they were encouraging living in sin! I had managed to save a bit, which saw me through that term.

A bit before this, my tutor suggested I apply for a fellowship at Girton College, which was vacant. I wrote the application, but it was a feeble one – couldn't think of anything about my work that was outstanding or showed originality, and was quite sure I wasn't good enough. Polite letter saying I hadn't got on the shortlist.

Meanwhile the A.S.W. executive had decided they needed to replace the paid secretary in the London office; and I decided to apply, and got the job, to start in December (when I finished in Cambridge). £250 p.a.

I never wrote up a Ph.D. thesis. I was quite sure I was not good enough: and the very writing of it was going to take more time than I had. Basically, I felt that while in Cambridge I had carried out instructions adequately enough, but had not shown any originality, nor had I read very widely. I was not in my view a promising scientist.

So in Dec. 1937 we found a flat in Central London, and I started in the A.S.W. office.

Our married life. (I will come back to my work with the A.S.W. later.) I expect John will be doing this in full, but that some bit from me might add to it. I remember when John's father died in 1952 and I decided not to drag you three children down to Ryarsh, Celia was very surprised that John could manage the funeral arrangements by himself, but I always found him very competent when he had to.

We were married (11.9.37) at the West Malling Registry Office, and the lunch reception was at John's father's house, Heavers, Ryarsh, Kent. Celia made and iced the wedding cake and prepared the lunch. Considering she was only 23 and all on her own, it was, looking back, wonderful of her. There were perhaps 10 guests (relations of John's and four people I knew) and John did the wedding photograph with the delayed-action doodah on his camera. Then we went by train to London and from there down to Minehead, Somerset, as John had booked for us to stay at Yemworthy Farm near County Gate. I took along a lot of things to do, my shorthand, and a typewriter to practise, but never did any of it. During the day we walked the countryside, lovely country and mostly decent weather, and certainly some of the evenings were spent developing photographs, with me under the bedclothes with a torch and a watch to give John the timing. One day was very wet, and my mac wasn't good enough. We arrived at pub wet through and the landlady took my skirt to dry in the kitchen while we had lunch.

A lovely fortnight. Then back to Ryarsh for a short time, then looking for accommodation for John in Woolwich where his first job was, and me going back to Cambridge. Poor John.

Then in December hunting for a flat in London. The one we liked was £115 per year, and our joint salaries were £550 p.a. Joe Robertshaw thought we shouldn't take so expensive a flat, then a day or so later wrote to say that his first married home had been about the same proportion. He said, "Every time history repeats itself, prices are up."

The flat was on the top floor of a block in Holborn, 90 steps up? And our coal cellar was under the pavement. John bought a galvanised iron coal container to put in the kitchen and fetched coal up every weekend. We had sitting room, bedroom and bathroom and a small extra room in which we put up a camp bed for visitors. We were there about 3 years. It was unfurnished, so we had to go round buying furniture – mostly out of wedding presents and got enough to start on. Curtains 1/-¹ per yard from Woolworths, a sewing machine had to be amongst first things bought and I've still got it. Also still got desk, sideboard, dining room table and a couple of bookshelves from that period.

John had to travel down to Woolwich, and I had to travel to Earl's Court for our jobs. John's was the longest, he left before 8 and got home about 7, so I aimed to get home by 6.15 – 6.30 and got expert in having supper ready when he arrived. I'd done scarcely any cooking in my life, and got John to come with me the first time I went to buy fresh meat! At some stage I got a woman in a couple of times a week to clean the flat then she took a more regular job in a public lavatory and I can't remember any more.

¹ 1e one shilling

The Left Book Club started about then and we bought and read their books every month. We joined the London Scientists Anti-War Group, and often had their meetings in our flat as it was central. Occasionally went to the theatre.

John was writing p his Ph.D. thesis and I was typing it. (Never tried to write mine. Much too busy, and anyway didn't think my work could possibly merit a Ph.D.) Half-way through, while he was reporting someone's theory that he'd been trying to prove experimentally, he handed me the man's paper and said "How do you think he got from this line to that?" and when I tried to do the intervening maths found the man had made an elementary mistake in integration and so the following lines were wrong. When corrected (and I had to do a later integration by drawing a graph and counting squares under it) it was found John's experiments did fit the theory, so he had to delete all his excuses for not having a fit. It was about a year after we were married that the thesis was ready to send to be bound and then sent to Cambridge.

For holidays we took our bicycles by train to somewhere in the country and stayed in bed and breakfasts, buying bread and cheese etc for lunch.

It was while we were at this flat that John was invited by the Daily Express to do tests on the civilian gas masks the Government was having manufactures. Must have been summer 1938. The reporter (Gallagher – he was a war correspondent and was killed during the war) found a store of these that could be borrowed for the tests and a room (garage?) we could do the tests in. John bought himself a German service mask to use – better than the civilian ones, and got hold of something that could be burnt to make arsenical smokes, also some tear gas. We got a row of volunteers, got them to put their masks on and tested that they were properly on using the tear gas. Then into the room with the smokes. One after another, they had to be let out, coughing and feeling sick.

John made himself a thing to weigh out fractions of a gramme – basically a pencil with a little paper funnel fitted to one end and a small weight in the other, so that it would float upright in water. Would sink say 5 cm for 1 g (say) in the cup. Clever!

Then John spent a day round at the Express offices. Gallagher wrote it up, John checked technical points, the Express lawyers checked legal points, back to Gallagher again. We thought it would be published on the Monday, but it wasn't. We heard later that the Editor was afraid war was upon us (it was Munich time) but it came out a few days later. We have an old copy of the Express somewhere (M has it now). The government had been swearing the civilian gas masks would stand up to arsenical smokes, and some scientists said it was a first class (bloody good) job for half-a-crown. But later withdrew all the masks and had extra filters added.

John was enjoying his work at Standards – went right back to basic electromagnetic theory to improve the valves they were making. But he still managed to do a lot of extras, including speaking at peace meetings etc.

Before the war started, we joined the local Air Raid Precautions centre. There was training in first aid and so on, and when war came we were wardens and had to go round the streets checking people's blackouts. Then some of us started demanding proper deep shelters for the population, and suddenly they disbanded these local volunteer centres.

Just before war was declared, we were cycling down in Dorset (summer holidays). Then there was an appeal for everyone to get home. We managed to get on to a train in Bournemouth, but had to travel in the guard's van. Every train was choc full. Next morning war was declared. We were still in

bed and a neighbour came knocking at our door when she heard it on the radio. There was an air raid warning (sirens) about half an hour later, but it was a false alarm.

I don't remember how soon rationing of food was started. It was quite generous at first, then got stricter. We all had ration books, and the pages were marked for four-week periods and for each such period the allowances were published, and could be different next period. E.g. 2 or 4 oz of butter per week, 6d worth of meat (this was the lowest for meat, earlier had been 1/- (one shilling) so much tea, cheese, etc. As we had our lunches out it wasn't as bad as for people living entirely at home. We gave part of our tea ration to John's father, as he drank a lot of it. For holidays, you had to go to the ration office, and exchange some pages of the book for loose pages which could be used anywhere. The main book could be used only at the grocer you registered with. Cafes and restaurants got some sort of allowance. There were some places which started giving vegetarian meals, and one could get good platefuls there. Every factory employing more than 50 people had to have a canteen for workers' lunches, and in the office parts of cities, "British Restaurants" were opened, which gave a basic solid meal for 1/-. When eggs got short, we imported dried egg, O.K. for cakes, and made a kind of scrambled egg, but allowance was small. We learned all sorts of dishes which were "meat savers". I used to make a vegetable curry for example. Farmers were encouraged to drop things like onions and plant potatoes or wheat instead. (We could get little bottles of "onion flavour".) Later when John was sent to Somerset, he occasionally got some onions for me in the country. Sugar and dried fruit were short. At one stage, it used to be possible in the summer to get an extra 1 lb of sugar a month instead of 1 lb of jam, and we got our friends to give us their sugar and we gave them home-made jam, from the fruit in John's father's garden, and as 1 lb sugar makes more than 1 lb jam, we gained on it. Bottled fruit without sugar, and ate it when we had a little sugar to spare.

Early in the war, industry went into overdrive and hours of work were lengthened. John had to work something like 12 hours a day. At first production went up, then slowed down. As people couldn't read newspapers over breakfast, they read them at work. His lab had to get a barber to come in and cut their hair during working hours etc.

We were still at that flat when the bombing of London started. At first the evenings were light enough for the bombing not to start until well after supper, but as the evenings drew in, it started earlier. By that time, some trench shelters had been dug, and we spent our nights in one of these fairly near. It wasn't very deep, but protected from flying debris and falling bricks. When we were interrupted one evening by a bomb nearby while actually in the middle of our supper, we grabbed our plates and went and sat on the floor in the passage. After that, I used to take some food down to the trench and wait there for John. He really had some horrid journeys from work to home. We had sleeping bags and lilos and made ourselves comfortable on the floor at the end of the trench where no one wanted to come past. Other people seemed to be prepared to sit or try to lie on the very narrow benches provided in the shelter.

One morning we got home to find gas and water off -didn't discover about the water until I'd let all the water I'd carefully put in the bath the night before! Managed to cook breakfast on the coal boiler we had – took a long time for the egg and bacon to cook, but it did. (This must have been while we could still get these.)

People began to demand that the Underground stations be opened as shelters, and then without permission, started sleeping on the platforms. I went down once, and it was a horrid mess, no loos down there and hundreds of families. Later, the government put up bunks and portable loos on the stations.

The Woolwich works suffered bombing and the research labs were moved to a couple of adjoining houses in Eltham. Then they were bombed, and the firm decided to move the labs down to Ilminster in Somerset, where they took over a school. So John had to go there. I was very involved in the A.S.W. work, and wanted to continue it, so stayed in London, but moved away from Holborn which was being heavily bombed to a steel-framed block of flats somewhat north of Camden Town. Shared it with Brenda Ryerson (later Swann).

John got up to London occasionally, and I visited Ilminster occasionally, but it was a difficult time.

One day Northfield Hall (my block of flats) got a bomb. As far as my flat was concerned, it involved broken windows and I couldn't get out into the passage as the walls had fallen down. But some flats on the ground floor in the other wing were completely blown out. However, the block remained standing on its steel legs. And I stayed on there.

We'd put off starting a family, which we had, when we married, meant to leave for 2 years, but then decided to go ahead, and David got started at the first attempt, John carefully timing a visit to London. It was only then that milk rationing started, and I really never noticed it; pregnant mums got 1 pint a day when other people got a pint a week. New bottles were started which held 1/3 pint. Babies up to 5 got a pint a day. I got 3 months' maternity leave, and John booked for us to stay in the house of a Mrs. Davidson, where we had a little kitchen, sitting room and bedroom and use of bathroom. I went down to Ilminster just in time for Christmas 1941. After Christmas I started getting things together, went up to Taunton by bus to shop. I remember it took me a whole day to find a pram, each shop that didn't have one recommended somewhere else, and I walked and walked and eventually landed a second-third-fourth-hand one; and got its furnishings. I think we must have been able to borrow a tiny-baby cot – certainly didn't take that back to London. John had also found a maternity home, in Wellington, and booked me in and I went to see the doctor there beforehand. It was very pleasant seeing John every day! And he insisted on taking me out for walks. David arrived fairly quickly, on time, but fortunately not in the taxi going to Wellington (7.2.42).

Then with David 2 months old, back to my job. I moved from the Northwood Hall flat into one nearer the office, and found a crèche where I could leave him during the day, going round at midday to give him a breast feed. After a time, the matron said he seemed to her to be underfed, and had to start bottle-feeding. Finding it all rather difficult, I managed to find a baby-nurse to come and live in, and she could do the washing and shopping – but not a very satisfactory woman – found she was refusing to take him out because the pram was so old, and bought a new one. Then she found she couldn't wash his nappies because it made her hands sore, and so on, so she left. While I was advertising for more help, David got pneumonia and was in hospital for some time. He was about 12 months now. Then Alma Chalkley arrived with her baby daughter. Her husband was in the army, and we moved to a pleasanter flat in Highgate, off Parliament Hill Fields, with a little garden. Alma stayed until David was 3½ and was very good with the two children. David's first girlfriend was therefore Joanna, 6 months younger than him.

It was while we were in this flat that the adventure I've often told you about happened. David (2½) and Joanna (2) escaped from Alma out of Parliament Hill Fields one sunny afternoon. She said they just vanished while she was counting a row of her knitting. When I arrived home from work, they were still missing, an hour later and Alma was quite frantic. We both went out hunting with no success. About 9 p.m. (3½ hours?) Celia phoned to say she'd found them, dirty and tear-stained, at the bus terminus at South End, and she brought them across in her pram. Oh, the relief! David never told me anything about it, only while he was in his bath "Jojo c'ied." By the signs on him, he had too! Jojo tried similar escapes later, but David didn't.

I was often late at the office for meetings, and also had to travel to branch meetings. I remember once I went up to Oxford for a recruiting meeting, speech unprepared. Found the train blacked out (no light) so made notes in the dark. Then found the hall they'd got had inadequate window covers, so we had the meeting in the dark, so I couldn't use my notes! However, the organisers said I'd made a good speech.

One night I arrived home about bed-time, and when I went into my room found the wardrobe door open and some odds lying about. Thought, oh bother, the children have been in pushed the wardrobe door shut and went to bed. It was only next morning that I found that most of my clothes from wardrobe and drawers, had been stolen. Found an odd garment or two on the path outside. Thieves never found of course. Managed to get some emergency clothes coupons but couldn't get much. Very annoyed that I'd been wearing about the oldest of my suits that day!

John thought David should go to a play group or nursery school, and we found a good one, but it was rather far to take him before going to work. Found a couple of other parents in similar difficulties, so between us we hired a taxi to take them to and fro every week-day. David never talked of what he did there – one could deduce a painting day by stains on him or clothes, but seemed happy enough. Kept it up for a year – 2½ - 3½? I saw as much of him as I could at weekends and John came up from Somerset when he could. They were working a six-day week, but he could accumulate by working 7 days some weeks.

At some stage in 1944, bombing started again, and Granny Peggy² offered to have Alma and Joanna and David, while I stayed in London. I made up a bed under David's iron cot to stop any ceiling falling on me! The nearest was an incendiary bomb into a flat 3 floors up, which fell very neatly into their fireplace – and one out in the garden. Alma and Joanna came back after not very long, but David stayed with Peggy a bit longer. (For a long time, Peggy had introduced me to her friends as "John's wife". Now I became "David's mother" and it came full circle when one day John was introduced as "David's father.")

We spent a lot of our holidays at Ryarsh and I think most Christmases. Certainly, in the summer we wanted to pick fruit and bottle and jam it. During the war, John had very short holidays. Just before the bombing started we had a three-day cycling trip taking in Banbury and ended in Oxford. Got there about 4 and booked a bed and breakfast before going out on the river. By nightfall Oxford was cram-jam full of people coming out of London because bombing had started!

I remember the problem of travelling down to Ryarsh with David and his things plus a box full of empty kilner jars. Once went by taxi to Victoria station and couldn't attract a porter. A naval officer with one briefcase, to whom a porter rushed, told the porter to help me instead! Must have taken a taxi from Malling to the cottage (2½ miles) that time though mainly we walked. John would join me there for his short holiday. Then somehow got fruit and bottles back to London.

If we were there at Christmas, Celia did most of the cooking. Once when we were there at apple picking time, Celia and I between us managed to do a different apple dish for pudding every day for about 10 days. We invited visitors down now and again and one of them, Hank Trent, introduced John to stereo photography.

² Peggy and Joe Robertshaw had befriended John when his mother died and remained helpful and loved family friends for the rest of their lives.

Once while I was making jam in the garden (I carried the oil cooker out) a flying bomb started coming down and landed a couple of fields away. I was much more afraid of getting boiling jam splashed on me than anything else! Meanwhile John was trying to photograph it.

Then in 1945 the war was coming to an end. Alma's husband came home, and they found a house they could turn into a boarding house, and had to do a lot of work on it and buy furniture (junk which Jack was clever at refurbishing.) David and I went there as her first lodgers, and I let my flat, furnished.

Now Daddy was wanting to get out of industry, and I suggested he write to people we had known in Cambridge who were now professors in various universities. Oliphant was the first to reply, and John got a research fellowship in Birmingham. Later lecturer and so on. And I resigned from the A.Sc.W.

In all this, I don't think I've given you much insight into John, which is what you are really wanting. In our early acquaintance and marriage, I think he always had much more initiative than I had – he suggested and organised any holidays and outings for example. I had somehow just gone with the tide without needing to make big decision; University just happened, going to Cambridge just happened, even applying for the A.S.W job just seemed to flow from what had gone before. Also marrying John. But I think he was very observant and sensitive to what he thought I might like, so that he really seemed to go with me on any preferences of mine. I can quite see, looking back, that he couldn't have liked me staying on in London when he was sent down to Somerset, but it was so obvious to me that I had to stay with the A.S.W that he gave me the impression that he thought it obvious too. And so on. In fact, looking back has made me realise how wonderful he was about all this.

I remember (fairly early in the war?) that Oliphant rang me up to ask me what John's attitude to the war was. "He's been rather pacifistic hasn't he?" (Oliphant had been approached in the process of vetting John's lab to see if they could be taken into official secrets work I think.) I replied strongly that we were both anti-Hitler and now we were at war with him, wanted to prosecute the war effort to the best of our ability, and he seemed satisfied.

The Association of Scientific Workers. Now back to the Association of Scientific Workers. I took up the job of Secretary in December 1937. We had a scruffy little office, semi-basement, in Earls Court. I had never learnt to do housework and did little cleaning of it. We may have had a woman in once a week, can't remember. Once a salesman trying to sell vacuum cleaners offered to leave one with me to try out. I gave the office a good cleaning, then returned the machine to him when he came back.

I dealt with all correspondence, with the accounts, attended Executive Committee and other committee meetings, took and typed up the minutes, looked after our quarterly(?) journal, collecting material, dealing with printers, addressing envelopes and posting out, made up annual reports, etc. etc. Also travelled to branches to address recruiting meetings, or give reports. Organised the annual conference.

When I started, I was the only staff. We had 900 members on the books (of whom about 500 had paid their subscriptions, lots of correspondence needed.) When I left in 1945, we had over 20,000 members and about 20 on the staff (including three provincial offices we had opened.)

In the 1930s including Cambridge and the first few years in the A.Sc.W., I had been in touch with a number of scientists who were leading a new approach to what science could do for the community.

E.g. there was Sir Richard Gregory, then editor of Nature, who campaigned for the British Association for the Advancement of Science to add a new Section for the Social Relations of Science; previously their sections (especially the Annual Meetings) had been Physics, Chemistry, Biology, Engineering etc. Then there were Professors Bernal, J.B.S. Haldane, Blackett, Levey, etc. who were writing articles and giving speeches on how the nation needed science and a scientific approach in a socialist sense. There were people like Professor Peierls, for whom assistance was given to bring them over to England from Austria etc. Before they were imprisoned by Hitler.

All this led to me being treated later as a historical figure. In the late 60s and early 70's, I was approached and interviewed by at least three people who were doing research on scientists and their movement in the 30's. One such published book has even an acknowledged quotation from me in it. One of these researchers was doing a project on the A.Sc.W and obtained some archives. She kept on quoting to me things I'd written which I had no memory of.

Back to the A.Sc.W. After 12 to 18 months, the work was getting too much, and I got permission to get an assistant. Then in 1939 we moved our office to a couple of rooms more central, in Bedford Square. When the war broke out, the assistant, a very nice Irish girl, decided to go home to Ireland. Then Brenda Ryerson (later Swann) joined the staff. Then we got another and another, and moved to larger offices in High Holborn. Then opened offices in Birmingham, Manchester and Glasgow.

The A.S.W. was founded in 1918 as a trade union, but somewhere in the 1920's (26, 27?) stopped being registered as a trade union, and went for more wishy-washy aims of improving the position of Science in Society. It lost a lot of members when the institute of Professional Civil Servants was founded, and was definitely on the way down in the early 30's when those who really wanted to improve the position of science in society started to use it as a platform. It was in Cambridge that this movement was strong when I came into the branch there, and they inspired me.

At first, in the office, I was fully occupied in getting affairs into order. The previous secretary had been lazy and incompetent. (He was a friend of an engineering? Professor on our Executive Committee whom I noticed showing resentment when he was given notice. I was never more shocked in my life than when I found a bundle of homosexual love-letters in the back of a drawer in the office when tidying up.) Then I found that the Executive Committee was quite ready to allow me a voice in planning policy, after all, I had to carry it out, and I began to take on the job of preparing policy documents, usually of course, after committee discussions had given a lead. And soon it became clear that in addition to our social aims, we had to consider the treatment of scientists in employment. People would bring up items like "General servant wanted - £120 p.a. – Graduate botanist wanted - £120 p.a." So we started to move gradually in this direction, but had very little power. It was mostly: the Government should support science better – industry needs more science – scientists should be better regarded.

After the war had started, we heard of quite a number of cases where an industrial lab had little to do (because the firm was changing from trying new inventions to mass production of standard items that the army etc. needed) but wouldn't let their science staff leave to go to more useful jobs because they might want them later. And we put out our battle cry of "Science must be fully used in the war effort. This really brought response, new members flowed in. Then pay and conditions of employment became more and more important to the members. There was a law made that employees couldn't leave their jobs without going to a tribunal about it; intended to prevent movement of trained employees just on wages or personal grounds. So people couldn't leave their jobs to get better conditions elsewhere.

There was little “calling up” of scientists. The Government prepared a list of “Reserved Occupations” who couldn’t go into the armed forces. It included all physicists and chemists over 21, teachers over 30, et. Etc. I remember one young, qualified chemist sitting in our office and complaining that he would never feel a man if he wasn’t allowed to go and kill an enemy.

So we started taking up negotiations with employers, and eventually (1942?) decided to register as a Trade Union and join the T.U.C.

Brenda Swann was my second-in-command, and she and another staff member, Ben Smith, were much better at negotiations than I was. I couldn’t be determined or rude enough! So I mostly left that side of it to them. I had plenty to do anyway. With increasing membership, there was a lot to do in getting branches organised, in dealing with the increased circulation of our journal (now monthly I think) in dealing with all the accounts, with all the committee meetings, with Annual Conference etc., and looking after the staff. We even had a friendly doctor come and look the staff over now and again. He distributed vitamins, got one young woman doing exercises which improved her stoop no end, etc.

And in the general policy field of “Science and the War Effort.”

We ran a big conference on this, somewhere in 1943? or even ’42? and one of our staff invited me to her house for the weekend so that I could leave David with her mother. Walking back from the Tube to her house late the opening night, I walked bang into a lamp-post in the fog, and got a beautiful black eye, which caused much ribbing at next day’s session about how my husband must treat me. I had had a very bad night with a horrid headache and David unhappy and not sleeping.

Somewhen, television was just coming, and there was an invitation to people to go to an exhibition in Earls Court and be televised. I applied and got summoned. Explained that I wanted to talk about the A.S.W or about science and the community, but all the questions were “Are you married? Do you want children? Do you miss South Africa?” which made me mad! Some newspaper interviews were just as bad. Evening Standard got me in a series of “Odd Occupations”. “This pretty young woman, who wants children some day, talking abstrusely about science...”

After I left the A.S.C.W – some years later – it amalgamated with A.S.S.E.T (Association of Supervisory Staffs and Engineering Technicians) to form A.S.T.M.S. (Association of Scientific Technical and Managerial Staffs). Secretary was Clive Jenkins, well known in the T.U.C. I went to an annual meeting of theirs in 1968 – 50 years anniversary – and hated it. It wasn’t my kind of body any longer!

Now back to leaving London.

When John told his firm he was resigning, they offered to up his salary from £600 to £900 p. a. and offered me a job. But we were both determined that he should go to the University job. (He’d applied for a lectureship at £550 p.a. but Oliphant gave him a research fellowship at £750.)

I went up to Birmingham to look for digs. With demobbing taking place, and no new building during the war, this was very difficult. I walked round and round Birmingham, following up adverts, calling on people I knew, getting shunted from one to another who might be able to help. On second day, I got news that the char of someone I’d called on (Prof Peierls?, Prof Pascal?) knew of rooms we could get in Kings Norton, so went out there and booked it. In a small house, occupied by two old ladies. We had a small sitting room on the ground floor, they’d moved in a table for meals, and if we had one extra in, one had to sit on the arm of the sofa, a small bedroom where David’s bed only just fitted between the double bed and the wall, use of bathroom and kitchen. The old lady who did the

cooking was rather stout and there was no room in the kitchen for me when she was there - but they organised their meal times to fit ours, and we boxed and coxed in the kitchen.

While we were there, John and his bicycle had an argument with a tram and he broke his collarbone. We went up to London while he was still in a sling for a farewell dinner from A.Sc.W. to me, and as the tenants had left our flat, organised to get all the furniture stored until we could use it. I was flat-hunting, hauling David up to town in time to get the early editions of the Evening Mail, about noon, and then chasing after advertisements, usually to find the premises had already gone. However, John was the successful one – a pair of Americans in the lab were leaving and we got their flat in Moseley, the two upper floor of a house. On the one floor kitchen, bathroom, sitting room, dining room, upstairs two attic bedrooms. Before we moved in I made several trips carrying rucksacks full of coal, there was no power circuit for heating in the flat, nor was there a hot-water tank. The kitchen had a clothes boiler, and we heated water in that (gas) and carried buckets of it to the bathroom for baths. I was pregnant when we moved, then had a miscarriage – was in Dudley Road hospital for a few days, twice in fact, because I had haemorrhages after a day or two back at home, and went in again. This time I had some work to take with me. John was developing a theory for a different shape of the dees of a cyclotron, instead of two letter Ds facing each other along their straight edge, or two halves of a round cake, he was trying for shapes like two slices of that round cake facing each other at their points and needed to find the best angle between them. A bigger angle = more power, smaller = more acceleration of the particles. He had worked out a complicated algebraic formula, which I worked out for various angles (log book and lots of paper) – then plotted it to find the minimum in the curve. He later published his theory, and I understand that pretty well from then on, no cyclotron was built anywhere in the world that did not use this theory.

(About 1987 or 1988, he was asked to let the Head of Dept, know of any new original work in the department in his time, I think in connection with UGC grants, and sent in a list of which some were his own, some other people's.)

The next summer we took our first seaside holiday with David, at Borth-y-gest.

Margaret was born while we were in that flat. I remember the Christmas just before she was born – we had invited some friends who had no families, and they were all John (or Jack). After the dinner, I said “John, could you do the washing-up?” and they all leapt up! John Gooden was there too, Claire was in hospital with something.

Granny Peggy had offered to have David while Margaret was arriving, they were in the Lake District and John took him there. It was a dreadful winter, months with the pavements covered with snow, and trodden down ice. I remember how much easier it was to walk along them when I had the pram with Margaret in it to lean on. The Robertshaws lived in the country, and to get water (pipes frozen) they had to go down to a stream and break the ice, and fetch the water in buckets. The day Margaret was born, David went down with pneumonia. The doctor refused to move him to hospital in case the ambulance stuck on the country road, and Peggy did all the nursing. John went up to help her. Penicillin was becoming available, and poor little David had to have injections every day, but he was very ill and this saved him.

At home the only warm room was the kitchen, where we kept the gas oven going. One day while I was in the nursing home, John got home to find that the gas had gone off, and come on again, so house full of gas, and he had to open all the windows.

So David didn't get home till well after Margaret was born. I remember when I heard him and John arriving, I handed Margaret to Mrs. Ferretti (she and Prof. F. were lodging with us) to go to the door to welcome David. He pushed past me saying "Where is Margaret?"

David got his first tricycle then, and loved it. When we went shopping, he managed well until we came to hilly bits. I had a piece of string tied to the handlebars and pulled him behind me and pushed the pram in front of me.

About the end of March, the snow and ice stopped with tremendous storms, chimneys down etc. all over the place. John went out to try and fix a banging gate, then there was a tremendous crash and he didn't come back in. I went out, very anxious and found him commiserating with the neighbour on her smashed roof.

We were now doing a lot of house-hunting, without much success. Then John wrote on University notepaper in reply to an advertisement for a house in Richmond Hill Road, the replies had to go to a box number. We heard later that the owner had accumulated some hundreds of replies, then started looking at them and the University notepaper one was among the first few, so he answered that first, and that was how we got 53 R.H.R. It was a short lease, 11 years left of 99, so was within our power, with a loan from an uncle of his. (When we applied for a lease extension a few years later, we had to agree to have the roof retiled.)

We needed extra furniture, and John went to auction sales for most of it. The Goodens had agreed they would move in, and were able to get coupons for some new furniture, so we got their rooms furnished. (Second-hand furniture was just about as expensive as new, because it was still rationed.) I made rag rugs for the bedrooms, sewing cut-up old stuff onto to hessian backing.

We moved in one Saturday in May 1947, and had a lovely summer after the horrid winter. Margaret could be out in her pram most days, and also spent time on a rug on the lawn, while we were all outside. The large house took some getting used to. We still had the Ferretis lodging with us, and Maria Ferretti was a great help. (Left a couple of months later.)

Story about Bruno Ferretti (theoretical physicist: John was trying to track down wiring in the house, and there was one line that seemed to have very low voltage on it. (Found later that it went under the yard to the garage, and was leaking, replaced it.) While David and Margaret were asleep, we took up a floorboard, in their room checked the wires by sticking a needle (using insulated pliers) connected to an Avometer, then put floorboards back but had to take them up again as we'd lost the wire, and so on. Bruno couldn't handle the needle with the pliers, so pushed it in by hand – leapt into the air, and said "that one was full voltage!" until he found the one that gave him less of a shock. Then hammer the floor board nails back, he couldn't tap accurately at a nail, so rained heavy blows in its general vicinity until a lucky blow put the nail back – definitely a statistical approach!

At about 10, Margaret woke and demanded her feed. David half woke and said complainingly "Margaret has been keeping me awake the whole time." We knew better, he'd slept all through the hammering! But it showed his sensitivity to Margaret.

Soon after getting in we organised a "gardening party". John went out and brought a mowing machine, spade, cutters etc. back on his bicycle, and several stalwart young men helped mow, dig prune, clear out the pond, et. Etc. and we all fed out on the lawn. Great success. Even Bruno Ferretti helped, very clumsy.

John and John Gooden went to America in autumn that year to visit universities, look at apparatus etc. John fitted in visits to the Grand Canyon and Yosemite Valley and Niagara. They made friends

wherever they went, and brought back a large suitcase full of clothing (mostly children's) donated by people who had heard of our rationing. Claire was ill a lot of the time they were away, some form of jaundice, and I cooked and cleaned for her. While they were away, I was able to inform John that Jeremy-Jane was on the way.

The house was very cold in winter. We got enclosed stoves (coal) to warm downstairs, but for economy, didn't use the book-room for some time. Upstairs there was ice inside the windows many mornings, very pretty patterns. A year or two later we got gas heaters in the hall, which was a comfort, but the curtains upstairs rotted! And coal fires made such a mess – we used them for years.

We kept very careful accounts those first few years – I found that writing everything down helped to economise. The washing was all done by hand, but John got me a washing machine after Jane was born.

A little time before Jane was born, there were two important events close together.

John and his team had managed to get the cyclotron airtight. This had been a struggle as the cast tank seemed to have pores in it, so we threw a party to celebrate, which went on quite late. Next afternoon, I was dozing in a deck chair, while Margaret toddled around. I heard a faint splash, and went slowly round the raspberries to see what she was doing. She had fallen into the pond, and was lying quite still, face down. (The water was about 5 inches deep.) I picked her up by the ankles, thinking oh what do I do now, and the water ran out of her, and she started gasping and crying. I was shaking. I took her up and gave her a warm bath and Claire Gooden made me some tea.

That evening John built a fence round the pond. He had previously put a false bottom into the pond to shallow it. We'd not dreamed that a few inches of water could be fatal for a toddler, but heard several examples quite soon of when it had been fatal. When I heard the splash, I just thought that M. could be frightened by falling in, and if she is stirring the water with a stick, I'd better be by in case she does.

Another thing John did about the same time was to put a fence and gate where the yard dropped to the garage. Before that, if we were in the garden and saw Margaret toddling towards the yard, I'd leap up and fetch her back, we had no gate there then. After John had made the garage entrance safe, the next time M. went in that direction, no one chased after her. She looked back with ludicrous disappointment – her game had gone.

David had started school while we were in Moseley, at a very good little school called Edgbaston College. John used to take him on his bicycle in the morning, and in the afternoon, a teacher put him on a bus, which M (in pram) and I went to meet. From R.H.R it was much more difficult – especially if John was away and I had to get him to school. But he soon learned to walk home by himself, 6 then, and I took M and J down in pram to meet him half way. (There were other children from the same school coming at least part of the same way.) When he was 7½ he went to West House School, a boys' prep, and went by bus, but later walked.

Somewhen, '49, '50, I was asked to do a (short) history of the A.S.W. from 1918, and was sent a crate full of executive minutes and Annual Council minutes. Just didn't seem to be able to get down to it. Then two colleagues of John's who shared a little house offered me the use of a room there. John looked after the children, and I spent two full days there, sleeping at home. The young men fed me, and left me undisturbed. The first day, I went through all the papers, making notes. The second day I wrote up the report. Then when I was home I needed to type it up, and was busy on this when M.

came bothering me. I slapped her. Then when she stopped crying she said “Mummy, I know you didn’t mean to hurt me.” I never slapped her again, and have been feeling guilty about that slap ever since.

Margaret went to school in Sept 1951. We’d put her name down at E.H.S³. 2 years before, and found she only just got in, so put Jane’s name down for 1952 at the same time. A new play group had started near us, and I tried taking Jane to it. After the first two days or so she got German measles, so had to be home for a time, and when I took her again she just refused, and yelled all morning when I left her. So that was given up. However, she settled quite well when she went to E.H.S.

We were still going down to Ryarsh occasionally, especially when the fruit was ripe, but started summer seaside holidays in 1949. Lodged in Llanbedrog, and had the pram to take Jane plus all the beach things down to the beach. Had Nick with us too. Frightful train journey in very full train to get there. We had Grandad with us too. Very pleasant holiday. Jane would drop her bread and jam on the sand, then pick it up and eat it with pleasure. She crawled across the sand, paused when the water hit her tummy, and crawled on. Margaret paddled and played in puddles and dug in the sand, copying David and Nick. John found some rock pools where he could look at bits of marine life. Our landlady fed us tremendously.

Quite a lot of changes were made at 53 R.H.R. in this time. One large room upstairs was made into two, about 1952? The back stairs were taken out to enlarge the kitchen, somewhere in the early 1960s, and new cupboards built in. A bath was put in downstairs for the tenants, and John did some double glazing, and so on.

Meanwhile, John was becoming a popular lecturer and was sometimes out speechifying two or three evenings a week. I’ve got a book somewhere with records of all such engagements. He was doing anti-nuclear-bomb speeches from about 1945 on, also pro-nuclear-energy. Subjects such as “the future of science”, “present forefronts in science” etc. He prepared most of his lectures with scribbled notes on the back of an envelope, so we have little record of what he was talking about. Went to all the lectures by bicycle if near enough and by train if out of Birmingham. (Until he got the car in 1963.) Also took on courses of say 12 or 20 lectures in extra-mural courses, for which syllabuses had to be prepared (which might have been kept?) Meanwhile working very hard at the lab, and often going in at night. After a couple of years, took on the running of the combined 2nd and 3rd year labs and devised new experiments for them, and lecturing to students. He and his bicycle were our transport; he fetched a cot for Margaret, bought a second-hand encyclopaedia of perhaps 15 volumes, and fetched that home by bicycle, etc.

Claire and John Gooden were unable to have a child, and adopted a baby, Christopher, about Jane’s age. Later, they took a baby girl, but had to hand her back fairly soon. In 1950 John Gooden was ill and found to have Bright’s Disease – then fatal. They told Claire, but told John he had pernicious anaemia, which would take a long time to treat. I felt this was a bad mistake. Claire would go up to the bedroom to talk to John, then come down to me to weep uncontrollably. He must have guessed he was seriously ill. Oliphant asked them if they’d like to go home to Australia, and when they said yes, he organised their flight (paid for out of John’s government grant from Australia). For several days, the house was full of people coming to say goodbye – I remember making tea for all of them, doing all Claire’s washing (we had no machine then) and generally helping all I could. When they got to Australia, John was whipped straight into hospital, and died a few weeks later.

³ Edgbaston High School for Girls

John and John Gooden had been writing a monograph on “Cyclic Accelerators” and our John finished it off. Even then I was doing the typing and diagrams! It was after this was published that John’s work on the shape of cyclotron dees became generally known. John Gooden was good on the synchrotron – in fact he invented it but someone else had invented it just before – and Birmingham University had started building one. The trouble was that we built it with “two men and a boy” and by the time it was ready to try out the Americans already had several working well. So it got abandoned.

I think it was in Jane’s first term at school (or was it before?) that she broke her arm falling down the back stairs – she was in her nightie ready for bed. I rang our doctor, he came and immediately conveyed me and Jane to the Accident Hospital. They x-rayed, then said they were busy and would keep her in and set the arm in the night. She was nodding off – swelling immobilising the arm – and I just put her in the bed and left her sleeping – an adult ward. I went next morning with her clothes to fetch her back and she was being kept entertained by people in the beds all round her. She told me that the nurse had brought her cornflakes with milk on them, and she told her to take it away and give her some without milk. And there was something about the bread too, no jam or too much. Anyway, she seems to have been a little dictator.

When was it she had her tonsils out? In the E.N.T. hospital in town. I thought the treatment of the children was terrible, especially of an intelligent child. When I took her in, I asked if I could visit next day and they said yes, so I promised her I would. When I went in, they wouldn’t let me in and I stormed at them until they let me see her for a couple of minutes, and I cried all the way home. Next time I visited, she told me she had asked for some juice (I’d left a bottle for her) and the nurse said “in a minute” and never brought it. I asked the nurse and she said they shouldn’t have a drink soon after the operation as it made them sick. So I explained this to Jane. Next time she told me that the nurse had said “If you don’t eat all your breakfast, you won’t be able to go home” so she ate it and was sick when the doctor was there, and he said she couldn’t go home yet, and she was sure it was because she was sick. So the next time I visited her, I insisted on taking her home, although the doctor had not yet signed a discharge. (I think visiting was allowed only three days a week, even in the children’s ward.)

I was beginning to get impatient at staying at home with only children for company. I did do some extra jobs – took in some coachees in Physics and Maths – worked for about three months as part-time secretary to a doctor at the Accident Hospital and who was organising a conference on the treatment of accident cases and couldn’t get help in the hospital for the correspondence needed. Also became secretary of the Edgbaston Ward Labour Party – and separately helped organise a conference on the need for nursery schools.

John suggested he could get me a part-time job in his lab, but I felt it unlikely that I could stick to part-time, and wanted to be free in the school holidays. So when Jane started school, I decided teaching was best. Wrote about two or three jobs which had been advertised, and was offered every one of them! Then found E.H.S. had a job going and was willing to accept part-time, so applied for and got that. So convenient for conveying M and J to school in the mornings, the other schools meant much more travelling. Started there in September 1953.

Meanwhile, in 1952, John’s father died.

He had spent part of the previous winter with us, and was very unhappy, I think, away from his own familiar surroundings. His mind began to go, he didn’t know the time of day, and chased the children out of the room with his stick because he thought they were strangers. Once when he saw

an envelope addressed to John said, “what is my son’s letter doing in this house?” He had had a habit of a gin once a day with his lunch and we provided him with this, but too often he couldn’t remember when he’d last had one, so kept on tipping and really upset his tummy. He would come down at about 1 a.m. and complain that there was no breakfast for him, so I left bread and a little cold ham or something and a flask of tea out for him. Then one day he said “when I went to bed my bed wasn’t made” and this must have been going up again after a small-hours excursion down. When he began to repeat “I want to go home” John was able to fix up someone to come and live with him – a daughter of Mrs Chambers next door to Heavers at Ryarsh. Mrs. Chambers had ‘done’ for him for years - had just got married and they were looking for somewhere to live – she (the daughter) was a trained nurse. So back to Ryarsh he went (Jan? Feb?). A very sad thing was Doris reporting that at first he couldn’t find his way round his own house.

When John heard his father was very ill, he went down to Ryarsh, stayed till he died (only a couple of days?) and organised the funeral – phoned for me to post him his best suit.

He decided not to sell the cottage – had it redecorated and let, but some years later decided he would never live there, so sold it then⁴. He got some money from his father’s will – had to pay more death duty than expected – local people had estimated the value of the cottage, but the tax people sent an inspector down after it had been repaired and redecorated, and upped the duty.

I took the children down in David’s school holidays and worked on cleaning the house. John came down later, saw the pile of junk I’d put in the yard, and rescued a lot of it! We got a valuer down from Christie’s to look at the furniture, took for ourselves the valuable older pieces and sold the rest by auction.

I hadn’t seen my parents for nearly 20 years, and so John offered – as we had a little spare cash – for me to take the children on a visit, and we went in about April 1953 for 3 months. Poor John hated seeing us all go off, said it was his whole life leaving him. David had just done King Edward entrance, and we heard while we were away that he had got one of the few K.E. scholarships. We went by boat to Port Elizabeth, then by train to Graaff-Reinet, where my parents were now retired. Had a day to wait in Port Elizabeth and I took the children to see the Snake Park, which I think David appreciated. Then by train overnight – M. and J. very excited at sleeping in a train. The coloured man making up our beds asked “Is it true that in England, white people do the work?”

When we arrived in Graaff-Reinet next morning, we found that Edie and her family were there, had lengthened their visit to overlap ours by a couple of days. Nice to see them, but I never took to Edie’s husband. They had adopted daughters, Andree and Elizabeth, roughly M. and J’s ages, Elizabeth younger.

I think the 3 months was too long. M. and J. all right, but David got badly bored in town, except for occasional chess with his Oupa. We were invited to several farms, and he got a little horse riding.

My mother was not at all well, and was in bed more often than not. I found she liked tea at 6.45 – 7 a.m. and used to get up to make it for her and sit in my dressing gown talking to her until almost time for breakfast. Jane was a great success with visitors, could laugh (most flirtatiously) with them.

⁴ David: I think we kept the cottage only for a year or two after Grandad died; I thought that the re-roofing of 53 RH was paid for out of the proceeds – also purchase of extra 50 years’ lease. It was already sold at the time of our family holiday there in 1956.

M. more withdrawn, and got neglected – suddenly she got frightened every night that there was a lion under her bed or something. When I started giving her more time, by teaching her crocheting or something, this stopped⁵.

I'd got work from M and J's teachers and we had "lessons" most mornings – mostly reading and writing and some elementary number work. Mom had a sewing machine so I was able to do some dress-making.

When we returned home, John met us at Madeira so travelled the last four days with us and took us home.

I started teaching soon after – found it very hard work. It was some couple of decades since I'd done any physics, I didn't know how to keep discipline! Always seemed to get myself a lot of marking to do and lesson preparation was time-consuming. Although I was teaching mornings only, I still had to fetch the girls home – and take them to dancing lessons. Once lost count of the time and then had to phone the school "Please put them on a bus and I'll meet it" (down by Brook Road). They were very good.

Mrs Dyer started with us when I started teaching and after a time took on a lot of the shopping, and prepared something for our evening meal. She was really a blessing those first few years – though none of us got to love her⁶.

The second year I was pleaded with to go full time, and agreed. I'm afraid my family suffered a lot from all this but I found I liked teaching, felt I was doing something worthwhile, and didn't even consider dropping it. Poor David – his start at King Edward's was a week or two after our start at E.H.S. and I let him go off to school without some papers he had to take with him, and he came home during lunch hour to fetch them.

Meanwhile, John was doing some really original work at the lab. He invented what is called Heavy Ion Physics – using the cyclotron found that they could split helium nuclei off heavier nuclei (eg nitrogen?) and accelerate either fragment – which was excitingly new. This work was followed up in Russia and America, but not in Birmingham. To go further, John needed some extensions to the cyclotron, and his professor refused to apply for a grant to get it done. So he changed his line of work to deal with teeth and then medical problems – also dating techniques and generally applying his physics – he was ploughing new ground, and made a very good reputation in it: whereas in the pure physics he would never have had apparatus as expensive and efficient as other countries had.

A side-line on John which he may not mention. There were always people writing in to the University with very odd theories, or new inventions, etc, and it gradually became known that John was quite willing to deal with such letter, so they automatically got passed to him whoever they were addressed to in the first place. He would welcome their interest, try to explain why their theories or inventions wouldn't work, or ask for further information. Often had quite extensive correspondence with these people – who usually had no grasp of fundamental principles – trying to invent perpetual motion or putting out new theories of relativity, or getting a single-pole magnet to run a machine, or neutralising electrons by removing their charge. Even after he retired he would get this kind of letter sent on to him from the lab, but nothing recently.

⁵ Margaret: The creatures were snakes, they were in cupboards too and it was French knitting you taught me.

⁶ Rather a sweeping statement, but this is what Reinet wrote. She was a big bit of David's, Margaret's and Jane's childhoods and when David saw this remark he said that he had grown to love her.

From now on all my dates run together – our photographic index “Family Photographs” will give a list of all our family holidays. The first couple of holidays we went as lodgers, full meals – but then I decided I preferred self-catering as the children could have the food they preferred. We took cardboard plates to use for greasy meals – saved washing up.

I was still at E.H.S. when I went out to Graaff-Reinet for my mother’s funeral and later went to visit my father – he died during my last term at E.H.S.⁷ Started at Bartley Green⁸ Jan 1961 or 1962, not long before Mrs. Mackie retired.

While I was at Bartley Green, the Nuffield Physics was coming in, and our school was chosen as a “trial school” before the scheme was published - don’t know why – Mr. Machin the City’s Inspector in Science must have thought I was a better teacher than I thought myself! I’d been trying myself – trying to get the class to find things out from their own experiments, but it was a difficult course, and much too full. Went on vacation courses on Nuffield teaching, and later on was one of the lecturers on such a course.

When I retired (at 60) I was commissioned by the Nuffield Physics to help with revision of course – in particular to write questions for the pupils’ question books – in conjunction with other people – and spent about 1½ years on this.

I wrote a series of four or five articles on bringing up children. They’re still around somewhere, but I never did anything with them.

Girls’ weddings a year before I retired. A year after my retirement, first grandchild born – such joy⁹.

Then Kate at 2 being diagnosed C.F.¹⁰, so tragic, we believed all C.F. children died in childhood.

Joined CFRT¹¹ and in early 1978 became secretary of local branch. Very rewarding work. Keeness of members was building up. I think my work helped the fund-raising a lot. Certainly our fund-raising increased rapidly. Also helped a lot of new families come to terms with their problems – was willing to talk to them and put families in touch with one another. About 1983, Daddy’s book being written, resigned secretaryship, and became Hon Treasurer, still am.

I seem to have spent a lot of my life feeling guilty about things I’d done to – or not done for – my children. And especially when the grandchildren arrived, feeling I’d never done as much for my children as they did for theirs. Much better parents than I was Anyway, I hope they learnt some independence from their neglect.

My trouble was that any job I had took an awful lot of my time and energy. E.g. I wanted to teach well, but didn’t think I did and spent a lot of time preparing lessons – every year again, envying people who could teach from last year’s notes, but not able to do so myself – and on marking. When I left E.H.S the girl who presented the school prize to me was actually weeping – I just thought she was a sentimental type, had not thought they liked me that much. When I left Bartley Green, the school gave me a really wonderful send-off, which I didn’t understand. Then I got letters from other

⁷ David: Oupa died in the autumn (N hemisphere seasons) of 1962, having been taken ill the day before I reached Graaff-Reinet that summer.

⁸ Bartley Green Girls Grammar School

⁹ First grandchild 1973.

¹⁰ Cystic fibrosis.

¹¹ Cystic Fibrosis Research Trust

teachers saying what a good teacher they had thought me! Since then, looking back, I think I probably was a good teacher, but I never thought so at the time. When Professor Rogers came to watch a Nuffield lesson, he told Miss Jackson “you’ve got a really excellent teacher there” and I thought how lucky the girls had behaved themselves and done their experiments properly. When the head of K.E girls¹² sat through a morning of my lessons - she sat with the pupils – she said how inspiring she had found their lively interest in what they were doing, and I again praised the classes in my mind – lucky she sat with that group – (an amusing thing during that morning – a 2nd year girl came to me “Mrs Fremlin, can I have a piece of clean paper please? I can’t open my rough book with that lady watching.”)

Written approximately 1988

¹² King Edward V1 High School for Girls.