## Philip Shucksmith's Memoirs Memories to Present Day - Scribe ended June 2013

At the risk of boring those who read my rather feeble efforts to record a few of the events of my life's journey from schoolboy to retirement, I consider myself to have been very fortunate to have been granted a comparatively long life, accompanied with good health. After all, good health is the major precursor to advancing years. After reading my previous recordings, I realise I left many events unmentioned which may just be interesting to the reader.

I have mentioned that I quite enjoyed my time at elementary school, North Cockerington Church of England, after initial 'misery,' thanks to the headmaster, Harry Brooks. In 1936, the Lincolnshire Agricultural Show was at Louth Park and the headmaster arranged for all the pupils to attend. We walked from school via Green Lane to Keddington Corner and then by road to the show site (about 2.5miles), taking sandwiches with us for lunch. It was a great opportunity to see the livestock, new machinery, craft-work of all descriptions and entertainment in the main ring. I cannot remember much detail but the Show was the highlight of the year for a great many people who were involved in agriculture, the main industry in rural Lincolnshire. The Show travelled round the county; a series of sites near the various towns catered for the Show in a ten-year cycle. Great effort, diligence and pride went into preparing the Show; livestock, horses, cattle, sheep, pigs, goats, rabbits, etc, judged by experts, the winners receiving rosettes to display at future shows and functions. It would be a tiring day as we proceeded our weary way home!

In 1937, '38 and '39, the Lindsey County Council Education Department initiated a series of tours each spring to visit a city which children would not visit otherwise. It was a very organised affair; local trains collected children from the various schools taking part, which met at a rail junction where they transferred to an express train which took us to our destination. Many children's parents could not afford that. In 1937, we visited London where we were given a tour on an open-topped bus of many of the interesting buildings, etc in the city, a cruise on the river Thames where we were served with lunch and I think our last visit was to the zoo. In 1938, the visit was to Oxford where we went round a college, toured the city and the main attraction was going round the Morris car factory seeing the cars made from the beginning to the cars coming off the production line completed, ready for the road. In 1939, we visited Liverpool where we saw the ocean liners in the Gladstone Dock and toured one of the ships tied up there. Later we went through the new Mersey Tunnel – one of the new 'wonders of the world' at that time and were given a guided tour of the Port Sunlight Soap Works. All those visits were very instructive and enlightening. Of course, the War put an end to such activities.

In September 1938, an event took place which I believe made war inevitable sooner or later. Adolf Hitler, Chancellor of Germany, had ideas of expansion of his country's borders, particularly in the East. Germany had borders with nine countries; to the west, south and east, only the north being without a frontier on the Baltic Sea. It is inevitable with a land border that some intermix of nationality occurs in such situations. This was more apparent with some neighbouring countries than others, including Austria, Czechoslovakia and Poland. Austria was a land-locked country and the population was strongly influenced by its German neighbours and the Nazi party gained a strong foothold there. Hitler had little difficulty staging a bloodless takeover when he decided to move his army in in 1938. Many Austrians greeted the Germans with open arms and gained positions of power which they would not have attained otherwise. The minor political parties just disappeared under the efficient and unscrupulous Nazi administration. Czechoslovakia was the next country to have the misfortune to fall under Hitler's greedy eye. The area of Czechoslovakia bordering Germany was known as the Sudetenland; it had a mixed population of Germans and Czechs. Hitler claimed that the German minority there were being harshly treated by the Czech people and claimed it was his duty to protect his people and proposed to take over the Sudetenland forthwith. France and Britain strongly protested this and eventually proposed to meet Hitler in Munich. Monsieur Daladier of France, Neville Chamberlain of Britain, Adolf Hitler of Germany and Benito Mussolini of Italy met and held talks to come to some agreement over the Sudetenland which gave Hitler about one half of what he wanted – he quietly took the rest over in the spring of 1939! Neville Chamberlain returned from Munich, claiming very successful negotiations, waving a document proclaiming, "Peace in our Time," to which Britain heaved a sigh of relief. We were not ready for war but I am sure many people must have seen the future with foreboding; Hitler's quest for so-called "lebensraum" – "living space" – for his people was unstoppable!

In 1938, the Australian cricket team came to England to contest the "Ashes". I had taken little interest in cricket up to that date. The event which triggered my interest was a car-load of enthusiasts from the village who travelled to Nottingham to the Test Match at Trent Bridge. From that time, I have taken a great interest in the cricket and I can remember the names of many of the players in both teams to this day. My hero was Wally Hammond, the England captain, pitted against Don Bradman, the Australian captain, the greatest batsman ever. Five tests were played at Trent Bridge, Lords, Headingley, Old Trafford and The Oval, five days each, the last one at the Oval being played to a finish. The Australians won at Lords, drew at Trent Bridge and Headingley. It was a washout at Old Trafford, not a ball bowled. At The Oval, a memorable match transpired; England batted fist and scored 905 for 7 declared and beat the Aussies by an innings and many runs. During this match, Len Hutton scored 364, a score which was not beaten for 50 years and Bradman broke his ankle while bowling in his desperation. I believe all the players in those Test matches survived the War except for Hedley Verity, the Yorkshire off-spinner who was killed in Sicily while serving with the Green Howards. Memorable events were Colin McCabe, the Australian opening batsman carrying his bat in one of the Tests; 242 not out. Of course, there was no television at that time; it was commentary by various speakers who became famous with their unique style and choice of words; Howard Marshall I remember in 1938. Gloucestershire became my favourite county – many names became familiar; Charlie Barnett, Jack Crapp, George Emmett, Wally Hammond, Tom Goddard, I call to mind. Cricket in those days was like all other jobs; not very well paid, a living wage in summer and they had to earn a wage at other times unless they had independent means. There was a class division very evident between the professionals and amateurs. The latter had private means without exception at the time; every county captain was an amateur with separate rooms in the pavilion. George Heane, a farmer at Skendelby, was captain of Nottinghamshire. When my sister, Elizabeth, was working at Dickins & Jones in Oxford Street in the late 1950s, the store-man was Tom Avery, a useful Gloucestershire player earning his out-of-season living to supplement his summer job!

Farming before the War was a pedestrian affair compared to how it developed, particularly in the last quarter of the 20<sup>th</sup> century. Horses provided the power to do the work. Tractors were available but they were in their infancy with no refinements; more or less a horse on wheels, but they did not tire as horses did, there was no limit to their working day, but they cost a considerable amount of money. The Shire horse was the most useful; you needed a strong animal with large feet and muscles to plough and cultivate the clay-loam soil on this farm and they needed to be well fed and groomed to perform a good day's work of 8 hours duration. The horses were looked after by the waggoner who was responsible for feeding them. This necessitated getting up early so that the horses had time to fill their bellies with food before 7am, ready for a day's work in the fields. Horse teams were generally of two animals for ploughing, three for some cultivations and drilling, occasionally four for specific cultivations. One horse was used for general carting. The waggoner's assistants were known as 'secondy' and 'thirdy', although this only occurred on large farms with over ten horses. This farm had six horses, two more at busy times or when young replacements were being trained – 'broken in'. A youngish team was a necessity to being able to farm well and keep up to date as the seasons demanded. A horse was in its prime at 4-8 years old. It was described as 'aged' after 12. The horses were fed on 'cutmeat', which was oat sheaves harvested and stocked in smallish stacks of about five wagon-loads each; you had to have a supply all the year round so these sheaves were 'cut' by a 'cut box' as feed was demanded. The cut-box consisted of a 'machine' which had a trough with a moving base; the oat sheaves were fed into this trough which moved the sheaves into the path of a circular cast iron wheel about 8 feet in diameter with curved sword-like blades positioned in the wheel. As the sheaves moved towards the cutter wheel, it revolved at speed and chopped the oats and straw into short lengths of about 2" and delivered into a short elevator, from where it dropped into a large sack – a fadge – and four or five men carried it up a plank into a cart up a short ladder and tipped it into the cut-house through a door high on the White Barn. I can assure you from experience that this task was far from being a 'holiday'. I never did like horses! The last stack would not be cut until late spring or early summer and it would be alive with mice – I suppose the droppings would mix in for the horses' diet! Of course, the horse would not need as much dry feed in the summer as they were out at grass during the night.

The sheep required a worker – 'shepherd' – to attend to their needs, not so much in summer, but in winter it could be quite demanding, particularly when it was frosty; sheep do not get on very well eating a frozen turnip! It would appear that about 130 ewes would represent the basis of the flock. They would be fed on turnips during the winter, along with the remains of the previous year's lamb crop and the year-old ewe lambs – 'hogs' – which were retained for breeding. The lambs needed special treatment as they lost their teeth approaching one year old and the turnips needed chopping up in a turnip cutter which produced finger-like portions which they could eat while they were 'teething'. A corn and cake mix supplemented their diet and encouraged them to fatten for market – this was fed to them in troughs. The ewe-hogs and lambing ewes were folded on the turnip crop and given a fresh fold as deemed necessary. The sheep needed to have good teeth to 'gnarl' root crops and this was the curse of their longevity – by six years old their teeth became broken or loose – 'broken-mouthed' – and they were sold for mutton. On stoneless soils they lasted a bit longer but here with quite a stone content, it did not help care of the teeth.

The lambs arrived in March, hopefully in fair weather and a bit of grass. The ewes' diet was supplemented with a little dry food and turnips. A fold yard adjacent to a straw stack with up to ten individual pens gave some comfort and initial mothering – 125% would be normal, 140% would be exceptional, particularly in the Lincoln breed with its long wool which did not help a weak lamb to suckle. Mortality would be worse in some years more than others, depending on weather before and after lambing. Vets were never called out to a lambing and the knackerman was a frequent visitor. The sheep flock was moved to a white clover and ryegrass one year ley for the summer and here they did well if the lambs were fed in a lamb-creep. The ewes were washed in early May and sheared in early June and dipped in a chemical mixture a month later to prevent skin diseases such as scab. In those days, it was done using a dip card – a crude cart-like affair with a ramp, tub and exit ramp temporarily on wheels to allow it to be moved by a horse. Later, permanent dipping set-ups were structured in cement with a bath up to 6' deep with a ramp to draining pens. By then, sophisticated chemical dips were used; this was compulsory and supervised as per the policy. The wool contributed considerably towards income. The biggest problem in summer with sheep was fly-strike – flies laying eggs round the tail and maggots boring into the flesh. This occurred to a greater extent if the sheep was soiled and also in humid weather. It necessitated getting the flock into a fold in the corner of the field – the frequency depending on the dirtiness of the sheep and the weather. Some of the dips gave limited protection against fly strike. Lambs were generally sold at weaning in late August – the later and smaller lambs were fed and sold at the market, about 20 being retained for replacements; the rams were introduced to the ewes in early October - Lincoln Longwool but the trend was for the 'down' breeds to increase prolificacy and better fleshing - Suffolk, Oxford, Hampshire, and Southdown were examples. Sheep were very demanding in time and attention.

Cattle were other livestock which contributed to the income. The native breed, Lincoln Red, was our choice - other breeds were available; Angus, Shorthorn, Red Poll had their enthusiasts. The Lincoln Red had the ability to convert large amounts of straw – the byproducts of the grain crop and grass during the summer – into beef, albeit rather slowly and inefficiently; a bullock was generally 3 years old when slaughtered. Feeding cattle in yards -'garthing' – was time-consuming and hard work. Daily attention demanded hay and straw in the morning, probably enhanced with a little rolled cereals and chopped turnips; this was fed in wooden box-like square or oblong structures on legs. These were filled up with straw again in the afternoon. The hard work involved cutting the straw and hay stacks into squares. The squares were cut by using a long knife 4' long with a handle at right-angles to the blade. The 'secret' was being able to sharpen the blade with a carborundum stone and then being strong enough to use it. The cut square was then transferred to the back of the worker using a long-pronged hay fork and descending thus loaded via a ladder to the ground and thence to the foldyards - it was a demanding job! The straw and faeces were trodden down by the cattle and built up to a considerable depth during the winter; the product – 'manure' – had to be dug out manually following the winter and spread on the land to maintain fertility – again, a very vigorous and time-consuming activity. The cattle were in the partially covered fold-yards – 'crews' – generally from mid-November to mid-April, needing his labour-intensive attention. The breeding cows and their calves which arrived end of February onwards grazed various grass fields and needed little attention unless occasional illness was present – the bull calves were castrated at 3-4 months old by a

travelling 'quack', a curio indeed but I never knew him to have complications. His procedure was unique and his disinfection fool-proof. The younger stock were turned out to grass when the weather was warmer and grass more plentiful – mid-May onwards. The bull was introduced in early May to give late February calving. Disease in calves was always a threat and bacterial diarrhoea - white scour - generally led to some losses. Cattle were almost without exception moved by walking - 'droving' - them on the roads, from field to field, some quite long distances; up to 8 miles. The calves were weaned in October and fed a comparatively good diet; proprietary linseed cake and ground cereals as a base. The cows continued grazing until November, occasionally into December if the weather was mild and there was some grass. The best calves were generally sold as yearlings or later when they became fit for sale. We did not feed strong bullocks. A few females would be retained for replacements. Young cattle suffered from a skin infection known as ringworm; the infected area became bald and developed a crusty scab. It generally occurred on the head, particularly round the eyes and one of the treatments used was painting the scab with a mixture of linseed oil and creosote – a drastic mixture indeed. Surprisingly, the people who looked after these animals rarely suffered from ringworm. The cattle summered on the grass fields on the farm and also some land was rented – grass letting – from April-October. I remember droving cattle to Tetney and Theddlethorpe.

Pigs were used as scavengers in the foldyards; they chewed the straw using the grains left after the threshing machine had processed it and any residue from the cattle feed. In the 1930s, grain prices were abysmal and grain processed and fed to pigs left a better margin than grain sold to the merchant. Some attempt was made as the '30s advanced to put some order into marketing the various commodities; the Milk Marketing Board for milk, the Wheat Quota Act for the wheat, the Bacon Marketing Scheme for pigs. These initiatives put a 'bottom' at least in the income for these products and a great many small milk producers survived and literally 'prospered' with a guaranteed price. Keeping pigs was a part of the farming scene and before the War, the enterprise was quite a contribution to the accounts. Again, breeding and rearing pigs was not without its 'highs' and 'lows'; sow farrowing in those days was an unknown and occasionally tragic occurrence; deaths in piglets were often high and whilst numbers born were often high, the number of teats was a limiting factor in survival, regardless of the dangers of the actual farrowing, particularly with 'gilts' - new mothers. The feed for these animals was ground cereals, bran and sharps-by-product of the flour industry, flaked maize and proprietary mixes of minerals and various spices to encourage appetite. The whole was mixed in a large wooden tub adjacent to a water supply, mixed with a shovel and ladled into buckets to feed the ravenous pigs. The resultant produce was sold to local butcher and bacon processors like Marsh & Baxter. In the War, they all had to go to the Ministry of Food. All farmers would kill one or more pigs for home use and many country-dwellers would feed a pig to augment their diet and use waste and scraps plus some bought-in food. Many workers on farms would have a pig, about 30st DW in weight and this carcass would produce copious amounts of lard, sausages, and dishes for more or less immediate use, while the hams and 'flitches' – sides – were salted and dried later for future use throughout the year.

Poultry were kept to provide eggs, tasty lunches from young cockerels and good soup – 'broth' – from older hens, plus meat. Specialities – turkeys, ducks, capons and guinea fowl – were reared for the Christmas market. Eggs and butter would be taken to customers in Louth and the rest would be sold to the local shopkeeper who acted as an agent. The pullets would be bought-in or some would be hatched in various cubby-holes in the farmyard; quite a surprise when a hen appeared with about a dozen chicks, some of which would survive. Generally, pullets were housed in wooden huts equipped with roosts and nut boxes and parked in the perimeter of grass fields. At harvest time, some huts would be taken to the wheat fields where the chickens would scavenge for grain shed in the process of harvesting.

Now for the crop-growing side of mixed farming. I have described the livestock side and the amount of labour it needed to function. Growing a cereal crop entailed several operations; initial ploughing, cultivation, drilling, harrowing, fertilizing in early summer, weeding, harvesting, stooking, carrying and stacking and finally, threshing. Time consumption was enormous; two horses and one man ploughed an acre a day; a tractor about 3 acres. Cultivation was accomplished with harrows – duck-foot or straight-toothed; about 10-12 acres a day. Drilling with three horses and two men 10-12 acres a day and harrowed after the drill. Top-dressing fertiliser was in its infancy at this time, and was generally broadcast manually; a kidney-shaped hopper holding about 3 stone was carried on shoulder-straps suspended in the mid-riff and sown by the hands in step with the feet; one cart or less per acre was the usual dressing. Weeding was a tedious job, plodding across the field in line with the row of corn and 'stubbing' – cutting up the weeds with a sharp blade about 3" wide on the end of a wooden shaft. Some weeds were copious and vigorous, particularly creeping thistle, shepherd's needle and yellow charlock; wheat sheaves with thistles made stooking very uncomfortable. The selective weed-killer was ten years hence! Cutting the crop was done with the binders - if horse-drawn, a 6' cut machine needed three horses changed every three hours to rest and eat. A tractor could keep going if conditions allowed; 10-15 acres a day if the crop was nicely grown with little hindrance from lodging. If the crop was severely laid, it would be necessary on occasions to cut only one way for the binder to meet the crop heads first. Such jobs were messy with badly formed sheaves and stooking was difficult – more like heaps than arks. Stooking was a pleasure in a nice crop – five rows of sheaves were collected to the centre row and the stooks were like rows of tents. Peas were cut when the green haulm and pods were full by a mower fitted with lifters, pulled by two horses, 4'6" wide cutter bar; the crop had to be lifted out of the way of the horses next time round. This was done by men with forks – a constant job. Peas were the crop which potentially was the most valuable and every effort was made to gather the crop as rapidly as possible; turning the crop to dry and wither the haulm and pods; rain at this stage caused staining in the peas and protracted rain caused shedding and losses. The crop was loaded on to wagons about ten days after cutting and put in stacks in the yard, containing 10-15 acres of crop – sufficient for a day's threshing. Wheat, barley and oats were led to the stack after at least two weeks. The barley harvest could be complicated in some seasons due to the crop being sown late after the turnip crop had been eaten by the sheep which delayed ploughing. Cultivations being difficult often delayed sowing until mid-May and the crop got a poor start; germination for the barley crop was sometimes poor and haphazard. This crop was generally under-sown with clover and grass for the next summer's hay crop and sheep grazing – if the weather became rather wet, the clover grew profusely and outgrew the barley. Harvesting this could be a nightmare in late September, although this did not happen every year! Harvesting was generally a long, labour-intensive affair, beginning in late July and lasting until late September, occasionally mid-October. A late harvest would lead to difficulties getting the land ploughed and cultivated and drilled for the next year's cropping.

In a protracted harvest, every opportunity would be used to plough. If they were held up harvesting, drilling rarely started before mid-October, allowing at most 4-6 weeks to get the crops sown.

The livestock and crops were the essential tasks to be completed. Many other jobs were also done; maintenance of hedges, dykes and buildings, thatching corn stacks if they were not threshed before Christmas. Time-consuming essential tasks, they all demanded considerable man-power. Six men would be employed full-time plus my father and at least two extra in harvest time – possibly retired workers who were still able to do some manual work. In the mid-30s, the government realised the real danger of Germany's army and air force, building aerodromes to combat the menace. Manby was the site of one of the largest and provided employment for many workers over three years prior to the War in 1939. Conscription was introduced in 1938 for 18-year-old males – one of the farm's workers was called up under this scheme. He was posted to France in late 1939 and escaped from Dunkirk in May 1940 when the Germans occupied Belgium and France. He volunteered to serve as a gunner on merchant ships in convoys; his ship was torpedoed in the Indian Ocean off Madagascar. He was picked up and continued the same job throughout the War and returned in 1946 to his job on the farm. His girlfriend gradually succumbed to the long periods of loneliness and a plentiful supply of eligible soldiers posted locally. She married one and he volunteered for a more active posting and in 1944, this soldier was killed in France. Her previous boyfriend came home and they married and raised a family.

Before I leave pre-war days, I would like to give a few details of employment and prices at various times. They are taken from my paternal grandfather's notebook, which began in February 1880 when he became a 'bargee' on the Louth canal; his pay was 4 shillings (20p) a week, plus his living. By changing ships and experience in December 1883, he was paid 12 shillings (60p a week. As an employer in 1910, he hired a married worker who he paid 11 shillings a week plus cottage, 72st flour, 30st bacon and 30st potatoes for the year. A single (unmarried) worker, hired in May 1914 as a horseman, received board and lodging and £22 a year plus insurance, while a labourer received £18 plus insurance. In 1915, the same horseman received £24 plus insurance. Wages improved slightly after the 1914-18 War but fell in the depression and were about £1.13 pre-Second World War plus cottage, 30st bacon and firewood.

Some 1938 prices from my father's diary were: wheat 36/6gr, male calf 8 months old £10 10/-, lamb at weaning £2 at 6 months. Harvest was a long, drawn-out affair, beginning on 25<sup>th</sup> July and finishing on 20<sup>th</sup> October. The crops were quite good, the weather helpful in spring and a very wet last quarter. It would appear to me that farming was seeing a slight improvement in its fortunes. Fertilisers were in their infancy; guano, a superphosphate, was the old standby', ICI had just begun to produce compounds and nitrogen was also a new product from ICI, known as Nitro-Chalk.

So, we come to the War which broke out on 3<sup>rd</sup> September 1939. It had little immediate effect on the ordinary individual; the mobilisation of Reservists and the Territorial Army had taken place just prior to hostilities commencing but farming carried on as usual. Rationing of food gradually took place with ration books for many food items, but it was a fairly slow process – it was noticeable when it took effect. Farming-wise, petrol was rationed, cars were restricted but fuel for tractors – mainly kerosene – was always available and coal was

restricted but available for necessary work. Wheat, etc, was sold as usual to merchants, inter-farm sales were not allowed and livestock had similar restrictions. The cottager pig was allowed to be kept and, of course, farmers could kill one or two depending on how many mouths they had to feed.

I should have mentioned, in 1938, a fairly unique event occurred by today's standards. Alvingham Mill, which was powered by water from the River Lud, was almost half a mile from the Washdyke and the waterway was known as the Mill Beck. The water flowed along the roadside in a northerly direction for about 250 yards, before it ran under the canal in a syphon and reappeared and flowed to the Mill in a north-easterly direction. After going through the millrace, driving the water wheel, it flowed back to another syphon under the canal and joined the Lud, flowing into the marshes. At the Washdyke, there was a penstock (adjustable wooden vertical door holding the water level to the required level to feed the Mill). The wooden door could be raised when the Lud gushed into the lower Lud to the east via a dock-like structure (sluice) which caused a deep pool where the boys used to swim in summer. When the door was down, holding the water level up, it would be 8-9 feet higher than the river which flowed to the east. The mill stream which flowed alongside the road to the syphon at Lock Farm silted up over the years and restricted its flow to the Mill so the local Dykereeve arranged to have it cleaned out. The water in the Lud was allowed directly into the lower Lud via the raised penstock and this drew the water in the Millstream back as far as the syphon, revealing all the mud and silt which solidified to some extent and after 7-10 days, a gang of men with wooden shovel-like scoops threw the mud on to the road, where it covered most of the surface, impeding all but pedestrians. After 2-3 days, men with horses and carts shovelled the silt into the carts and lead it away to spread on the land. The finished product was a filthy road needing a good rain to make it decent. I saw this procedure cycling to school and my father was the Dykereeve – an unpaid post – who collected rates for the maintenance of the sewers (main drains). Rates were levied on the various landowners in the village according to area, each ratepayer being charged for so many 'lots', 11 yards in a lot.

Farm machinery was in short supply during the War; practically all manufacturers were engaged in war production; lorries, guns, tanks, shipbuilding, etc. We managed to get a Fordson tractor on steel wheels in 1943, costing just over £100. A certain number of tractors and farm implements were imported from the USA and Canada after completing the hazardous journey across the Atlantic. Farmers could order these machines which maybe arrived in up to two- or three-years' time. I don't think my father ordered any, but Uncle Jack, who farmed at the Grange, Alvingham, put his name down for some early on in the War. He was a much more ambitious and impatient individual than his brother; a go-ahead, very good arable farmer but less so with livestock. He ordered quite a few of these implements and over a period of time, got a grass mower, a binder and a corn drill – these were far superior to British made. However, the wartime 'restrictions' on farming caused him to sell his farm and retire to Louth. His retirement was spent assisting my father at the farm; he cycled down each day.

In 1943, I left school and started full-time work on the farm; I suppose I mixed in with the regular works. I had worked on the farm for some time during school holidays, particularly summer holidays, latterly helping on the corn stacks and riding the binder, cutting the

cereals. The work on the farm was varied; looking after the stock, threshing the grain; I helped the waggoner drill the corn. My job was to lift the drill coulters at the end of the bout and lower them into the ground again after the horses and drill had turned round. I also helped to fill the drill with seed – putting the seed into a scuttle which held 2-3 stone and lifting it up into the drill box at arm's length. I found it quite exhausting; the drill was about 10' wide and after drilling 10-12 acres in 6 hours, my new boots were not very comfortable. My father wanted me to drive a tractor which led to friction with the man who regularly drove one of them. This man was an excellent worker who could perform any task on the farm competently and thoroughly but like practically all such workers, they could get the idea that the were indispensable. This worker could be so easily upset if he couldn't do the jobs he wanted. Such men could also cause trouble with his colleagues and also with my father at times. However, he left in April 1944, together with his youngest son. Two of his other sons had worked on the farm when they had left school; one of them came back to work for us in 1950 and stayed with us until he retired in 1979. I had an altercation with him just once after which we got on quite well and when he retired, he told me I had treated him very well, which I must admit did please me! Back to 1944, I became head tractor driver, not as competent as my predecessor but I did my best and I am sure life was easier for my father. A school friend came and helped us that year before he was called up to the Forces. Basil left school in July 1944 and started work on the farm. Like me, he was 'pushed' into taking the School Certificate a year early but unlike me, just 'scraped' a pass. It was very unfortunate for him that the autumn of 1944 was very wet. I left for college at the end of September and Basil and father had to cope with the ploughing and cultivations under very atrocious conditions. To compensate, the weather in early 1945 was very dry and they drilled spring wheat on 14<sup>th</sup> February – Candlemas Day – when married workers went to Louth to find new places to work if they were moving on 6<sup>th</sup> April. That particular crop was harvested on 15<sup>th</sup> August which was VJ Day and the end of the War. We celebrated by burning a thicket (bush) in our grass field, assisted by copious amounts of waste oil.

I left home on 25<sup>th</sup> September 1944 to go to college near Loughborough, accompanied by a schoolfriend. It was at the time of the ill-fated attempt to shorten the War by paratroops being dropped behind the German lines in Holland (Arnhem) to capture the bridges on the Rhine and other wide waterways, hopefully to shorten the War but it failed, resulting in many casualties and many more fine men being captured. My life took on a different pattern; being in constant company with fellow students, sleeping in a dormitory. It took me nearly the first term to get settled in to the study and take part in the social aspect of college life. Our course had just half a day practical each week, so it was very theory-based, note-taking being the priority. I found that if I went through my notes each day, either in a free period or at night, underlining headings and correcting English, I developed practically a photographic memory of the subjects involved. This helped me considerably when revising for exams at the end of each term. My highest mark during my years was 98% in Agricultural Chemistry!

I came home in July 1946, back to farm work as I had left it in 1944. My ideas would have to incubate before they were hatched and accepted. Progress in agriculture was largely governed by the prosperity of the industry. With a Labour government in power, they realistically set about putting agriculture on a firm footing to help it to increase production, with farmers being paid fair prices to consolidate and expand. Inflation was gradual, the

upward trend of prices and costs were constant but reasonable. For some time, the agricultural atmosphere was very similar to what it was in wartime; food was in great demand, machinery was very scarce, and most activities were restricted by licence.

In 1946, we got a new Fordson Major; an upgrade of the old Standard Ford. It was a more imposing machine than the latter, with an improved transmission, but a similar petrolparaffin engine – it was an improvement. We also got a new Massey Harris combine drill with disc coulters. It was capable of sowing seed grain and fertiliser together, placing the latter where it was required, rather than the fertiliser being broadcast or sown separately, giving a rather haphazard mix. It was not possible to combine drill legumes, owing to the fertiliser 'burning' the seedlings, but on the whole, it was a great step forward. Fertiliser was in rather short supply and some was imported from Canada, including non-ammonium phosphate – 8% nitrogen, 44% phosphate – the most concentrated fertiliser I came across; phosphate, however, does not 'turn' seed. A further addition to the machinery we got was a Massey Harris 7' power binder. Massey Harris, the firm in Canada, was 100 years old in 1947, so ours came complete with logo celebrating the centenary. The beauty of a power binder was that the drive came from the tractor via a power shaft so that the drive was independent of forward travel which the old horse binders relied on, a large wheel which supported the machine supplying the drive via a large sprocket on the wheel and chain to the cutting and sheaf-tying mechanism.

The most indelible memory of 1947 was the wintry weather early in the year. On about 20<sup>th</sup> January, snow began to fall and for at least six weeks, snow fell repeatedly and freezing temperatures by day caused widespread disruption on the farm and for country residents in general. Our sheep were most seriously affected; they were living on turnips in one of the furthermost fields on the farm. Several sheep were buried in the first snowfall, the turnips were too frozen to eat. My job each morning was to help Wag, the horseman, to take food to the sheep in a cart pulled by two horses. We took turnips, hay and concentrate. Louth road was blocked by drifts up to the horses' bellies, with me hanging on to the cart. Magpies attacked the sheep, perching on their back and pecking into the sheep's spines. One died and we had to tie sacks on others, particularly the rams, to prevent this. With no delivery services, bread had to be brought by tractor and threshing was delayed owing to snow which had been driven into the stacks; generally, life was difficult. But like all things, time passes; a great thaw occurred which caused extensive flooding in some marsh areas. Sowing corn was late in spring 1947, we drilled some wheat on 28<sup>th</sup> April and harvested it on 28<sup>th</sup> August; it was not a bold sample or a great yield.

My first task when I came home from Leeds where I had taken my final exams for the diploma in late July 1946, was cutting sheaves (strings), standing on a threshing machine in the middle of the 13 acre – the furthest field from the farmyard. The crop was winter barley. It must have been an early harvest; winter barley was not widely grown as it was a crop which was usually ravaged by blackgrass (Slender Foxtail) but this crop did quite well; most probably the weather was helpful. The fact that I remember this event was that being stood on a threshing machine is a constant instability, not very perceptible but this movement chafed the skin off parts of my feet, which caused extreme discomfort. My peers were not at all sympathetic, telling me to get into the real world!

Toward the end of the War, father bought 35 acres of grassland at Saltfleeetby; old pasture similar to thousands of acres in the marsh. Badly drained and growing copious amounts of rushes in the low hollow, it provided summer grazing for our cattle, thereby avoiding the usual custom of renting grassland on a 7-monthly letting.

Owning the land gave the opportunity of improving this grassland by applying basic slag – a phosphate by-product of the steel industry – which encourages clovers and, in our case, we levelled an abundance of molehills which were also present, so that when we had finished, it resembled an arable field rather than grass. I think it improved the quality of the grass; of course, it was always green because of the high-water table. I cycled ten miles each way morning and evening for several days, doing this work on an open tractor in the bracing late January 1948 weather.

Chemical treatment of weeds was very much in its infancy, but in 1948, a product was produced in powder form containing a hormone weedkiller – Agroxone – in a harmless bulky carrier; in this case, finely ground chalk which smelled like a very strong disinfectant reminiscent of a doctor's dispensary. The problem was the application - little was known if it had any effect on humans or animals. It was sown into the growing crop in May, possibly 2cwt per acre by a fertiliser distributor. Father did this unpleasant task, leading the horse in front of the distributing mechanism; it was a job for a calm day as the fine dust was easily disturbed. It was a horrible task but it had a great effect on thistles and ketlocks. In 1949, contractors had begun to appear with sophisticated sprayers with a boom width of 60' using refined contact sprays. This was for the pea crop. In 1950, we procured our own sprayer to operate with a Ferguson tractor – a crude container of about 30+ gallons, an impeller pump driven by the tractor power take-off and water pipe booms with spray jets at 18" intervals spanning 8 years. It worked! Using various proprietary hormone mixtures at the rate of 2 or 3 pints per acre, even a 'rough' 2-4D mix at ½ pint per acre controlled 'normal' weeds. Chickweed was resistant; we had to wait a few years for chemicals which controlled 'difficult' weeds and even longer to control wild oats which for many years were 'handrogued'. The sprayer became an important feature in farming and was updated every few years as improvements and sophistication occurred. It took away the drudgery of handweeding, thereby reducing labour requirement and, at the same time, increasing efficiency and production.

My father made quite an effort in 1949 to improve the quality of the herd of beef cattle, Lincoln Reds; he bought quality heifers from a dealer and also from a local prize-winning herd. However, several of these cattle aborted and it was a real disappointment to him personally and financially. Abortion was prevalent in many herds and continued to be until a vaccine became available for 'clean' females. Tuberculosis was also prevalent and in the 1950s, the Ministry of Agriculture introduced a testing programme to eradicate both TB and abortion.

In 1952, we were asked to host a series of field trials for the Pea Growers Research Organisation – PGRO. They wanted to replicate plots, testing seed rates, fertiliser rates and dates of drilling. Prior to sowing, they came to calibrate the drill for different seed and fertiliser rates – quite a tedious task. Drilling plots is a painstaking job, but the researcher knew what was required and I did my best to conform. At flowering – early pod formation – the PGRO held an open day for pea growers country-wide. Large numbers of farmers attended and I believe it was a successful educational exercise. The next year, the PGRO asked if we would undertake private trials. We were willing to and the results were quite a surprise, also to us, that the plots which received no fertiliser yielded as much as any other; rather more in fact.

We bought a combine harvester in 1950, a Massey Harris No 726 model with an 8'6" cutter bar, self-propelled with a 56hp petrol Austin engine manufactured in Kilmarnock. I was not at all conversant with threshing systems and the combine relied on separations of the grain from the chaff using a more powerful air flow in a less confined space than a stationary threshing machine. I had learned little at college about combines except for one lecture just prior to our final exams. This obviously pointed out that the outside examiner had set a question about the combine which was a system very much in its infancy. Two points that have remained with me all my life; our lecturer said that the greatest attribute of the combine, practically, was that if the crop went over the cutter bar, the corn stood a good chance of finishing up in a sack or a tank. I had always been horrified at the amount of waste in the old system, being handled up to ten times before it ended up in a sack. The other point our lecturer made was that in this country, most grain needed drying after it was combined and that the grain was more often drier at midnight than it was at midday. Our combine came with a choice of systems for directing the crop into the machine. It had a fixed rotary wheel, similar to a binder to direct a standing crop into the auger; this could be interchanged with a tined reel which had metal tines which could pick up laid crops and direct them over the knife; this worked on a cam which kept the tines in a pick-up action in front of the combine and thirdly, it had a pick-up rotary reel which replaced the former two described. This pick-up was multi-tined and revolved fairly quickly, positioned at ground level and lifted the crop to the auger. It replaced the knife and was used for peas and tares and barley which had been cut with a binder and allowed to fall to the ground in a continuous swath, hopefully for a few days to dry naturally without any rain falling. The combine was a great boom in harvesting peas – the main cash crop – provided the weather was reasonable. The grain produced was elevated into a rotary screen which took out the small grains and the best was directed into sacks. These were taken off when full, tied up and put down a slide chute on to the ground. This method still entailed a good deal of labour; the sacks of grain had to be led into the barn or put on a merchant's lorry but it did ease labour requirements, sack elevators being helpful. Initially, we used the combine for peas, tares and barley, still binding the wheat and some barley and bean for stacking and later threshing.

In the late '40s, the Ferguson tractor became popular. It was small in appearance and horse power but it employed a novel system of weight transfer, creating the traction necessary to plough or cultivate and transferring the weight via the hydraulic arms and top-link to the wheels, which gripped the soil and increased the pull of the small power unit so that it could, within reason, do as much work as a much larger tractor. The Ferguson system was patented and could not be copied; other manufacturers fitted hydraulic arms and top-links for raising and lowering implements, but wheel slip was always a restricting factor. Harry Ferguson was not a farmer or industrialist – his tractors were made by the Standard Motor Co at Coventry and various implements, of which there were many types, were made by other manufacturers. The tractor was a joy to drive, more like a car; self-starter, differential

lock, independent brakes. Initially, petrol was the fuel. Improvements, mainly cosmetic, were fitted during the '50s – a diesel engine was an improvement until Massey Harris bought the firm in around 1959 and it became Massey Ferguson; a name synonymous with agriculture world-wide for the next 3 or 4 decades. Other manufacturers improved their tractors gradually so that they became more comfortable and efficient.

In the War, we got a new Standard Fordson on spade lugs and iron front wheels to complement the rubber-wheeled Fordson – it cost £107. In 1946, we procured a Fordson Major – same engine as the Standard but with improved transmission, differential lock and independent brakes. In 1949, a Ferguson TE20 arrived with its novel improvements; a 2f plough and grass mower and manure loader were purchased to use the system. By now, the horses on the farm were becoming largely superfluous; 2 were sold in 1950 for £75. A new Fordson Major cost £319; when a new one arrived, we sold the one it replaced. There was a small acreage farmer looking for one – at a price! In 1952, Ford introduced a new model, it was a diesel engine – petrol paraffin models became redundant – and a definite improvement with hydraulic arms, comfort and appearance. With a tractor and combine using petrol as a fuel they were rather expensive to run; a 600-gallon tank was purchased and buried near the Village Hall; a locked pulp sufficed for some years but thieving necessitated it being re-situated at White Barn some years later.

Improvements in plant breeding after the War benefited arable farming – a gradual improvement in yields increased income from cropping with associated use of fertilisers, seed, dressings and then chemical sprays to combat weeds and pests. Wheat varieties in particular improved yield, mainly as a result of French plant breeders. Bersace was the first in the '40s. In spite of a weakness to shed its grain, it yielded 50% more than pre-war varieties; later, Nord Desprez followed by Cappele Desprez, maintaining the improvement with home-bred Hybrid 46. Similar improvements were achieved by plant breeders in barley and oats. Spectacular results were the result of Danish varieties of barley and oats bred by the Welsh Plant Breeding Institute at Aberystwyth. Peas kept pace with cereals with improved varieties from the PGRO. I have a note in father's diary from 1952 – "78gr Nord Desprez in 7 hours" – that was threshing wheat out of a stack; 156 sacks 18st each – 17.5 tons, it was a 18st sack every 3 mins. I find it hard to believe but my father was never one to claim fantastic results, rather the other way. I am sure he was proud of that.

The livestock side of the farm made life interesting with its demands, successes and tragedies. After the early 1947 blizzard, we lost interest in sheep to some extent; by early 1949, all the sheep had gone. However, in late 1954, 31 in-lamb ewes were bought for £9 each. The cattle went through a traumatic period, first with abortion and then with TB. A government-inspired initiative (subsidy) to eradicate TB was available. We tested our cows and heifers in 1956 with appalling results, a high percentage were reactors and we were advised to clear the whole herd out, resulting in all the cows being fed as drapes in 1957. Clean replacements were bought in so that in August 1957, we had 55 attested breeding stock. Pigs were kept at High Street with a steady output.

Haymaking was another labour-extensive operation. Balers were stationary machines used either with threshing machines for baling straw or in the field where the hay was carried to the baler by a sweep, generally on the front of an old car or similar mobile unit – and the

hay forked into the baler or more usually into an elevator to make a stack. It was really an uncomfortable task, particularly on a hot day and where no degree of mechanisation occurred; forking hay on to wagons on a breezy day was hard labour. By 1950, the pick-up baler appeared. Pulled and driven by the tractor power take off, it picked up a swath of hay and moved it horizontally into the baling chamber where the plunger compressed the hay into a square bale. A metering device on the moving bale tripped the two needles to tie the twine knots to complete the process and the bale was ejected out of the baler. The knotters could be very temperamental, mis-tying constantly, making banana-shaped bales and were generally a test of patience but nevertheless mechanised a job that was uncomfortable and hard work. I believe we changed balers six times before we found a make that performed admirably; a John Deere in 1977 and is still being used 35 years later! Baling introduced us to another problem; constructing a stack of hay bales is not quite straightforward – if the bales are not of similar density and if the material is rather green, it 'heats' a form of combustion, the bales can behave to the extent of becoming misshapen and collapsing; we had this experience initially.

The seasons vary widely according to the weather which affects the cropping; a wet autumn-winter reduces planned sowings, putting pressure on increased spring cropping; a damp summer may increase the harvesting extended to mid-October, while in 1959, harvest began on 4<sup>th</sup> August and was completed on 25<sup>th</sup> August. I do not recall as short a harvest time since. 1956, '57 and '58 harvests were atrocious weatherwise and after the experience of 1956, we decided to install some grain storage, namely bins with underfloor ventilation from a powerful electric fan – 5x30ton metal bins, 10' square, 17' high with an elevator to fill them. A grain pit was necessary to tip the grain into; the whole of the below ground level had to be tanked with asphalt to waterproof it – a considerable professional exercise! A new tanker combine was purchased – a Massey Harris 780 10' cut – to replace the bagging combine, plus two tipping carts. We had a few teething problems!

The wet seasons caused problems with soil structure; ploughing in wet conditions resulted in an increase of grass weeds. To try and overcome this problem, in 1958, we purchased a crawler tractor on tracks, plus a semi-deep plough – 2 furrow – which inverted a 14" wide 8"-10" deep furrow, burying the surface trash more thoroughly than hitherto and at the same time breaking the plough pan through ploughing somewhat deeper. Along with better cultivations, better varieties of all crops, more use of fertilisers and specialised chemicals for various weed species with increased quality of application, yields increased with various hiccups caused by the weather. We sprayed peas with our sprayer from 1954, only needing a specialised contractor in beans for combatting black fly late in the growth stages.

In 1960, we were persuaded to grow vining peas for a local company for freezing the product. In our case, we grew about 12 acres each year – 5 varieties at 10–14-day intervals. Harvesting was decided by the maturity of the crop according to the tenderometer reading, the crop being delivered to the vining station 3 miles away at short notice. Cutting the crop could be a nightmare and delivery in all weathers quite an experience. We participated for a few years before pea vining became a specialised exercise with mobile viners.

Potato growing was part of our rotation; the crop provided work in the winter when field work was finished, grading the crop for sale. We planted a small area in the early '50s, rising

to an average of 15 acres annually until 1999. Again, this crop is now specialised, needing expensive machinery and storage and grading to meet the demands of the supermarkets. In our experience, harvesting the crop in wet weather could be quite an ordeal; we enjoyed the business involved trading with shops and potato merchants.

In 1960, our grazing land at Saltfleetby was sold to an entrepreneur who bought a large acreage of grassland in that vicinity. He ploughed it all up – filling dykes in, under-draining it all, building grain and potato stores, growing potatoes and grain. He was able to do this using generous government subsidies and getting the water into the main drains which had been enlarged to deliver the water to the sea. Irish labour was used largely to harvest the potato crop.

A persuasive Dutch flowering bulb salesman came along and we succumbed to his sales patter and bought a few tonnes of 'Carlton' daffodil bulbs. Planted like potatoes for 2 years before lifting, we had an area of beautiful yellow daffodils which enhanced the scenery. Picking flowers to sell at Spalding was not popular, harvesting the bulbs was not easy and the enterprise ceased after 10 years – I don't think any profit could be passed to the farm accounts.

Sheep contributed to our system of mixed farming. We kept about 100 ewes, lambing in February, they gave a feeling of new life after a usually drab December and January; I don't think there was a more pleasant sight than lambs gambolling on the hills in the field behind High Street House, jumping, dancing and racing in the spring sunshine. Sheep were not the most profitable item, needing 20% replacements annually, individual attention at lambing time and good fencing in their enclosures, but the fertility they left in the soil after grazing on clover and grass ley each year I am sure contributed to rising crop yields until we ceased keeping them in 1992. Between 1954-60, lamb prices were consistent at about £8 a head, and always seemed slow, appreciating as quickly as cattle.

The cattle were always a more dominant feature of the business. After the TB ordeal in the mid-50s, a clean herd was established which also proved to be abortion-free when blood tested. Vaccines to combat abortion were available which were used on heifers coming into the herd. TB was a threat we still faced; regular testing is a stressful procedure for the cattle and the appearance of doubtful cases meant isolation and testing. Eventually, we were cleared and thankfully have kept clear. Now, the herd is tested every four years. Lincoln Red cattle were bred pure until 1972, when we introduced Friesian-cross-Hereford females and used a pure Charolais (French) bull, the calf being of better shape beef-wise than the pure Lincoln Red. Of course, the LR cows lasted up to 10 years before they were entirely culled. The various replacements gave the herd a cosmopolitan-coloured appearance until over the years, the introduction for the Limousin breed has slowly stabilised the herd into a pleasant brown appearance, for which Stuart has had the most input. Most breeds of cattle grow horns naturally of varying length and shape. The Lincoln Red grew horns which some people described as useless appendages; they could lead to bullying and generally at least one cow in a group would suffer and be prevented from getting its share of the food presented – this happened in the foldyard during winter. To alleviate this problem, drastic steps were taken to remove horns, either by sawing them off close to the skull or by a cheese wire; a tourniquet was applied before removal. It was rather a ghastly exercise and the prevention

of growth soon after birth was a much better procedure. This was done by capping the small emerging horn with a chemical 'Collodion' which burned the growing points by caustic action. This was successful as long as the cow did not lick it off before it had an effect. It was soon superseded by the 'de-budder' – an electrically heated hollow brass element which cauterized the skin and removed the horn. An injection of local anaesthetic was given initially to alleviate discomfort. Polled (hornless) cattle can be kept more densely in a given area and they are much more settled and comfortable.

Selling livestock has always been an interesting and variable exercise, supply and demand not always being the decisive factor – the fact of government support in the form of payments (subsidies) was always to be reckoned with and the consumer price in the shop by and large increased at the rate of inflation. In 1972, we joined the European Union in which the Common Agricultural Policy was a very important feature, more so on the continent than here, although rampant inflation led to devaluation of the pound in the mid-70s. A 1,000-acre farm on the Wolds sold for £1,000 an acre in 1972, yet by 1974, £500 was the going rate. Sheep were a steady price from 1950-70, lambs rarely rising above £8. In 1970, they hit the magical £10, replacement gimmers (2 years old) went up to £24 in 1972 and in 1973, lambs reached £15. Cattle maintained a steadier increase in price. Our system varied according to various factors; quality of calves, appearance and ability to keep them until they were older and hopefully more valuable. Some prices were: 18-month-old steers £42-45 in 1952, 2-year-old steers £83 in 1955, 1-year-old steers £77 in 1965, 1-year-old steers £84-100 in 1970, in 1971, the price for beef cattle topped £10/cwt, in 1973, it reached £19.25/cwt, in 1975, 1-year-old steer made £157 in April while in October, 8-month-old steer calves made £170 as a result of inflation.

The arable crops were fairly consistent, varying according to season (weather) in yield and quality. Good years were 1949, 1955, 1959, 1970 and 1975. Not so good years which stay in the memory were 1956-7-8, 1963, 1967-8-9 and 1974. The prices were backed up by acreage payments which were paid after civil servants had worked out the average yield and price for the whole country per acre and compared with the price per acre guaranteed by the government so the farmer whose yields were highest received the same payment per acre as the farmer with the lowest yield; this was accepted practice - there was always a payment. It applied to wheat and barley, also oats and rye. Some merchant prices were beans £26-30/ton and wheat £30/ton in 1950; wheat and barley £50/ton in 1973, barley £40/ton in 1975. In 1974, farm workers' wages increased to £25 for a 40hr, 5-day week. The number of men employed had gradually decreased over the years as a result of increased mechanisation and some simplification of rotations. Crop growing was a matter of growing cereals and legumes, each process in the cycle carried out by specialised applications of the necessary inputs; drilling, fertilising, spraying herbicides, pesticides and insecticides, harvesting and storage now becoming a comparatively easier task than hitherto. There were periods of intense activity to get the necessary work done, always to some extent dictated by weather. The potato crop required some casual labour, generally local ladies who came annually for various reasons; socially, healthy company or to help with their Christmas expenses. If the weather was good, it was a pleasant time but in inclement weather, it was less so. I think the worst years were 1968 and 1974; the latter had over 6" of rain in October and the potato harvest that year lasted 7 weeks during which we were only able to harvest on 18 days. In 1968, the wet weather was equally atrocious. In fact, we never did harvest

one area of the crop; the worst waterlogged parts resulted in the potatoes rotting. 1968 was notable for the Louth canal overflowing its bank east of Alvingham Lock on  $11^{\text{th}}$  July and I have a note that on  $10^{\text{th}}$  July, the highest rainfall in one day was recorded – 3.64", which was the most rainfall in one day since  $10^{\text{th}}$  July 1940!

In December 1972, the Alvingham Reservoir Public Inquiry took place at Louth RDC Offices, reading the application by Anglian Water to construct a reservoir requiring up to 250 acres of land to the north-east of the village. This reservoir was to be a satellite of the neighbouring Covenham reservoir constructed in the late 1960s using water piped from the Great Eau at Theddlethorpe and extracted from the Louth Canal at Covenham. This water would be extracted from the canal to fill the facility at Alvingham. Anglian Water claimed that there was sufficient potable water for that purpose and was needed in the future for the increasing demand by industry on the Humber Bank NW of Grimsby. It was a most interesting three days. The affected farmers who would lose their land (250 acres) were most upset and the NF represented those affected at the Inquiry, led by Neville Wallis, a barrister who specialised in Parliamentary business. The local farmers did not at all like the prospect of losing their land, particularly Grace Bett who led a valiant campaign opposing the scheme. The Anglian Water argued that there was a demand for this water; Mr Wallis argued that it could best be met by using the Trent-Witham-Ancholme system in the wet of the county. A year later, the Environment Minister, Mr Geoffrey Rippon, made his decision that water supplies could be obtained from the latter scheme for industrial use. Grace arranged a celebration dinner in Alvingham Village Hall, attended by Mr Wallis and other officials who had been involved in the Inquiry and many villagers and friends. I was chairman of Alvingham Parish Council at that time. It increased my knowledge of official affairs.

By the early 1970s, my father was taking a less active role on the farm due to increasing discomfort with arthritis. In 1958, he took Basil and I in the business as partners. He still maintained office in the local branch of the NFU as a representative at County level. He resigned in 1975 and suggested that I take his place; so began my involvement for the next 30 years. About this time – mid-70s – I was asked to be a representative on the Louth Drainage Board. After a few years, I found this work extremely interesting, dealing very locally with land drainage, a subject involving considerable local expenditure – not always with all the ratepayers' approval. I had the privilege of being the Chairman of the Board when Mr Slack the Clerk of the Board retired – he had been Clerk since the Board's initiation in 1938, when my grandfather was a member. Mr Elkington became Clerk. He was already Clerk of the Alford Drainage Board, so we worked together but not financially! Financial union came later and we were also joined still later by Skegness Drainage Board. Mr Elkington retired in the mid-90s when Colin Hinchcliffe became clerk – again, I was Chairman of the Louth Drainage Board. It was extremely interesting and rewarding. I and a colleague, Norman Borrill, pushed for financial union; up to now, each of the 3 Boards levied their own separate rate on the ratepayers – Louth's was much the highest. Eventually, with the Clerk's diplomacy, the 3 Boards amalgamated and became the North East Lincolnshire Drainage Board. I retired in the early years of the 21<sup>st</sup> century.

Going back to the 1940s when there were several employees – the workers who had no specific jobs – these were called labourers; skilled to a degree, some much more than

others. On some farms, they were 'stood off' – to find other jobs or go on the 'dole' – unemployment pay. All the land on this farm was under-drained; clay tiles which emptied the water into dykes. These tiles, about 3" in diameter laid end to end, the rows of tiles being 10-12 yards apart to use the natural gradient of the land. This drainage had been caried out in the previous century in the profitable years before the American railways had opened up the mid-West and Canadian prairies to transport the grain to the Eastern seaboard ports to flood the market in Europe. To find employment in the winter, about 10 acres of the farm would be 'gripped' - the tiles were found and dug down to using 'gouges' – a saucer-shaped spade 15"-18" long, leaving a trench 6"-8" wide to bare the tiles; a second 'draw' being necessary in most cases as the drains were generally  $2\frac{1}{2}-3$ ' deep. The tiles were removed, cleaned and replaced and broken tiles were replaced with tiles from the local brickyards. It was a task which kept you warm even on the coldest day. 2-3 chains (44-66 yards) dug out was a good day's work, depending on depth of drain and type of clay. A subsidy per acre was paid after the War to encourage improvement of land and help with the labour costs. The late 1950s saw drainage mechanised with trenching machines which laid new systems, new tiles, porous-filled trenches and mole draining to improve the fertility of the soil. The emergence of contractors with specialised expensive machinery made this a necessity if use of the generous subsidy was to be taken advantage of. This meant that the cost of under-drainage was half of its gross cost; £100 net plus per acre at 15m intervals. We commenced contracting draining in 1962, draining two fields in the Fenland previously inundated for periods during the year. We ploughed them and grew arable crops, a trend which our neighbours soon followed. By the early 1980s, we had drained practically all of the farm by which time the subsidy was withdrawn, owing to increased production causing grain mountains.

With regard to cultivations, progress over the years has been remarkable – ploughing has always been the basic soil inverter on our clay-loam soil. If the soil is ploughed in a dry state, the soil is half-way to producing a good seedbed. All that is really necessary is to level the soil and sow the seed. This is an ideal scenario – not often occurring – the seed was often sown into difficult soil conditions with a making-the-best-of-the-situation attitude. Spring cropping was similar; the land was ploughed almost without exception when it was full of moisture and ideally the frosts broke down the soils so that it produced a seedbed similar to autumn work. Harrows originally were made by the local blacksmith or implement manufacturer; not very heavily constructed for horse power but as time progressed into the 1950s, the horse was superseded by tractors of increasing size and HP Implements increased in weight, width, control of depth by wheels carried on the tractor's 3-point linkage. Disc harrows became popular, together with the disc drill; rotary blades driven by the tractor PTO could produce a seedbed without ploughing. Each decade has witnessed progress in power and size of machinery – and the emergence of contractors specialising in working for other farmers who cannot afford the expensive tackle on their own account. This has led to famers being wholly farmed by contractors on a stubble-to-stubble basis for an agreed fee per acre; hence the fact that fewer people are employed in agriculture, this reduction being progressive since 1950.

Fertilisers have accompanied the progress and style of farming – the basic ingredients in manufactured product – nitrogen, phosphate and potash were originally found in by-products of the gas industry; the Bessemer process of the iron industry and potash was

mined where it was found. N2 is manufactured in large quantities, P205 and K20 are expensive materials naturally and generally regarded as a complete fertiliser. Sulphur, manganese and other nutrients have more recently been used to enhance yield and crop vigour. Application of fertiliser in arable crops has moved over the years from hand broadcasting in the early 1940s, to the combine drill which sowed fertiliser adjacent to the seed and in the 1990s, back to seed-only drills with the ability to sow large acreages daily. These drills level and cultivate the soil, sow the seed, firm the soil and level it in one pass. Further applications of fertiliser – top dressing – are applied with tractor-mounted spreaders – from less-than-accurate machines in the late 1950s to very accurate applicators since the 1980s. Aerial top-dressing was popular from 1960-85; it was moderately accurate.

The modern age has seen the advent of chemicals being used, their increasing use accompanying the progress in agriculture. From the use of copper sulphate as a seed dressing prior to sowing, the use of soot to avoid slug damage to crops, various products have been produced since 1946. It is reputed that some emanated from German research in chemicals used in the Nazi death camps. The insecticide DDT was a new chemical in dust and liquid form which controlled various pests, in our experience notably the pea weevil, which was always a nuisance, eating the tender leaves of the pea plant in its early stages. Over the years, improvements have occurred, from the early herbicides which controlled certain common weeds and now specific products control specific weeds; Avadex controls wild oats, Sencorex controls weeds in potatoes, Sevtox controls weeds in peas. These were great advances and are now accompanied by a multitude of new products. DDT and Gramoxone were banned because their persistence is found to be harmful to nature.

I have dealt with the progress of agriculture in the 25 years after the War. It was a steady improvement in modernising the industry – this was assisted by helpful politicians in each government in power during those years. Subsidies in various forms helped many commodities to flourish more or less regardless of market prices. These included payments for cattle of various ages, beef cows (sucklers), beef calves at certain ages, breeding ewes, but not pigs, poultry or dairy cattle. Acreage payments were paid to arable farmers for wheat, barley, rye and oats. There was a limit to the area devoted to various crops so that payments were drastically reduced when over-production occurred in the 1980s when 'intervention' prices were applied form the Common Market – a European-wide organisation which supported price regulation after Great Britain joined in 1973. Production had rocketed, leading to talk of barley barons and wine lakes. Grain stores had to be found for surplus grain, mainly aircraft hangars and quality standards were quite penal so that only the best was accepted. In 1993, again the system of support was revised – all producers had to register their holdings by detailed maps of fields, their OS numbers and exact area in hectares. This caused incredible difficulties for many farmers, many of them having to seek professional assistance. I was able to put into practice what I had learned at college almost 50 years before and guite enjoyed it. These applications had to be checked by civil servants, leading to many corrections and delays in payment. I am pleased to record we had no problems and received the payments on time but it was an annual chore. It was known as IACS – Integrated Agricultural Compensatory Scheme. This was introduced in 1993 with the aim of simplifying support for farmers to appease the many small acreage producers in France and other member states – they all received a sum which each distributed in various ways, all being different; a real recipe for red tape and bureaucracy which it proved to be.

With farming and farmers becoming more profitable, land was in demand to increase areas of production so that values increased to buy any that came up for sale or to rent. In 1950, the land we farmed extended to about 300 acres, to which we added areas as they became available and were adjacent to White Barn. Included were 24 acres at Yarburgh in the early 1950s, 7 acres in the Fen in 1960, 90 acres in 1974 when the Grange Farm was sold for £47K, 27 acres in 1987 as part of Lock Farm, 15 acres in 1982 when George Bett retired, 188 acres in 1992 when the Pridgeon brothers retired, 50 acres in 1995 – buildings and grass at Highbridge – 25 acres of Jeff Hand's at Lock Farm, Dick Parker's 60 acres, taken in hand in about 2003, and Gordon Pridgeon's 14 acres in about 2005. The majority of this was sold by tender, a process which really exercises your ideas on valuation. All I can say is that any land which we tendered for, we obtained ownership, prompting the thought of how much were we over the next highest offer! I do believe the owners were honest in accepting our offers which were the highest. Rental values have moved up positively and particularly over the last 20 years in line with the acreage payments received via the Common Market payments, namely IACS in 1993 and SFFP in 2003. In 2013, we await the latest support for the next ten years.

From the arable aspect, which was the most important sector in our enterprise, a gradual rise in yields and prices for cereals and legumes occurred. This was due to more powerful tractors and improved cultivators, new crop varieties and chemicals which controlled pests and kept diseases of foliage under control, encouraging plant health. However, the weather is still the most important factor in the resultant crop, both in yield and quality. There is a choice of variety of wheat and barley; milling wheat for food manufacture or higher yielding wheat for animal feed. Similarly, one can choose barley for malting or barley for stock feeding. Peas have been a feature in our rotation for as long as I can remember and it is possible to say it has seen the greatest advances in its propagation. From being a crop demanding high labour until the late 1970s, it can be treated almost like a cereal crop, again depending on good weather at harvest time. Alas, a new pest has become almost uncontrollable for both peas and oil seed rape – the pigeon! Yields have increased considerably; in 1960, 2 tonnes per acre was a phenomenal yield and it increased rapidly due to improved varieties and chemical control of disease, leading to over-production in the late 1980s or that production had to be controlled, resulting in set-aside being introduced to reduce overall tonnage. In 1993, S/A was 15% of area to not grow crops, the percentage varied from that figure each year, the lowest being 5% in 2003 and finishing in 2008.

The replacement of horse power as a unit of living flesh and blood by the internal combustion engine has had the greatest effect on arable farming. In 1950, we had three tractors on pneumatic tyres – the necessity of road work made this paramount – open air models running on petrol and paraffin about 25hp. By 1960, those models had been replaced by diesel-engined models of Ford and Ferguson, plus a crawler running on tracks which necessitated moving it on a low loader if road travel was involved. HP had increased marginally and horses had disappeared. The 1960s saw a great deal of machinery available to reduce the hard laborious tasks still attendant in many areas of cropping. The combine which initially put the grain in sacks was soon superseded by the tanker model which needed carts to convey the corn to a store, firstly a pit with elevators to bins, later to onfloor storage with mobile grain elevators and augers. The 1970s saw vast improvements in

quality and availability of tractors and implements – inflation had not increased yet and if you had good land, profits were quite substantial. Tractors and machinery became quite sophisticated – tractor cabs gave some comfort and less boredom with radios. The greatest contributor to removing hard work in agriculture was the forklift which we bought in 1980. It loaded grain out of the store and manure out of the foldyards. Later, it loaded big bale straw when we obtained a big baler in 1990 which created 5' round bales. It was changed for a more adaptable JCB teleporter in 2000. Machinery was changed – upgraded – regularly; combines, sprayers, spreaders, drills, balers and tractors since 1950. The combine was changed eight times.

The livestock were an integral part of our business – sheep had gradually lost favour owing to their low profitability and were dispensed with in 1992. Basil said sheep had two aims in life; either to die or get out of their enclosure! The cattle are still with us, although many farms do not have them now – I believe they have been quite profitable due to David's and Stuart's attention, which hides a large part of the overheads associated with cattle. For many years, we sold the calves at 8 months old or as yearlings and enjoyed good prices for a minimum of labour but more recently, we have changed to keeping and fattening the calves at 24-30 months old, selling direct to the supermarket; less stressful than taking them to market. Modern methods have resulted in mad cow disease, which officialdom said would result in large numbers of people dying from it – it has not. Foot and mouth disease decimated millions of sheep and cattle in 2001-2002 – we missed that. TB is the present disease scare, spread by infected badgers. We have badgers present so hopefully ours are not infected. We live in hope for the future.