

Farming in Wales

The footnotes refer to numbered photos, some are here already..

In July 1947 I left the farm college at Sparsholt and came home to work full-time on the farm, Heberdens, Finchdean, Hants. For 11 years I had been at boarding school or college, almost a visitor when I came home for the holidays. I had no friends or even acquaintances at home. Dad had given me a motor bike while at Sparsholt, and so I was able to join the Young Farmers Club, and might have made friends there, given time. I went to a few meetings, and did go with them on their annual outing in a coach, to Cheddar Caves, and I do have a photograph of us lined up there. I was wearing an ill-fitting, double-breasted suit that had been sent by our Milliken relations in California, knowing that clothes were rationed in England. I don't remember ever wearing it again. I never received regular wages, Dad just said "Take what you need, but don't be extravagant.

Dad decided we needed to find a bigger farm, since he looked on me as a partner, but farms to rent were very scarce. The law was developing in a way that gave unprecedented security of tenure to farm tenants, so that landowners preferred to sell any vacant farm, rather than let it to a new tenant, who would then be impossible to evict. He found his only option was to apply for a big tenancy on offer in west Wales, and although there were 50 applicants, he got offered the tenancy at Pantyrhuad, after proving that he could find £10,000 in working capital, so we emigrated for the first time. "Wales!" said his farming cousin Donald, "you'll never survive there, they'll get the shirt off your back!" Donald had chartered a special railway train when he moved all his farm stock from Liss to a bigger farm near Salisbury, so for the move to Wales Dad did the same.

At the war's end we had bought another Fordson tractor, second-hand, an earlier model with the old water-filled air cleaner. It

had solid cast iron front wheels with the central rib worn right off and huge smooth rear tyres, making it look like a road roller, not tractor tyres at all but taken from some large vehicle working on an aerodrome or road after being worn smooth with use. They were so stiff that they did not sag at all even when deflated, so we never knew that we had a puncture until, pulling a load, the wheel center started turning inside the tyre, chewing up the tube immediately. Because it had a higher top gear than the usual farm model it came in useful when we had to tow all our farm machinery from Heberdens to Rowlands Castle station, although with its well-worn steering gear and iron front wheels it was alarming to steer at high speed!

After the move, I was not to see Old Idsworth or Heberdens again for 55 years when we made a brief visit in 1999. The most noticeable difference was the loss of trees, from the gale in 1988 (?). The Avenue was gone, so was the beech wood eastward of Old Idsworth, and all the trees that had screened it from the public road to the west, so that it was no longer hidden as it had been. I saw no sign of any replanting of the lost trees. Heberdens was 100% barley that year, even the land we had found too steep or stony to cultivate.

9. Farming in Wales

Before the take-over

My father decided that Heberdens was too small for us, and he could not find or afford anything bigger in Southern England, so when he saw an advertisement for the tenancy of Pantyrhuad, a big farm in Wales, he applied for it, and was successful.

Pantyrhuad belonged to the University of Wales; acquired as a result of the disestablishment of the Church in Wales in 1920, when much of the church property was given to the University. I don't know if the land was previously owned by the church or bought later with the church money.

Farming throughout Britain had been desperately depressed in the 1930s, a matter of survival only, since food was being imported cheaper than it could be grown at home; but when war broke out in 1939, that changed very suddenly. War Agricultural Executive Committees (WAECs, "The War Ag" for short) were set up in every county, to encourage farmers to start producing again, and with powers to take over their land if they were unable to do that, and this happened to many farmers in the district. Our neighbour and good friend Heber Howells of Manor Court avoided that fate by selling a third of his land to UoW who added it onto Pantyrhuad, which enlarged it to 495 acres, and provided Heber with the capital he needed to get on with farming the rest himself.

All we ever heard of the farmer there before 1939 concerned the virtues of his horse, which could be relied on to take him safely home, after the occupants of the Llanddowror pub had put him, dead drunk, into his trap.

The University took over Pantyrhuad, and they renovated the decaying buildings, installed a piped water system throughout the land and buildings north of the dingle, and set up the big farmhouse as two dwellings; a little old cottage called The Bannel provided a third.



The Bannel, with Helmut and family

Their Vice-chancellor had a German wife and when the war came she moved to one part of the farmhouse, where her nationality would be out of the public eye and away from the prevailing hatred of all things German. The rest of the farm was then leased to their own Animal Health Department, (AHD) as an experimental farm, and some of their findings can still be seen if you type “Pantyrhuad” into a Google search.

There is a permanent stream flowing through the Pantyrhuad dingle which in practical terms divides the farm into two.



The Dingle, seen from the Bannel

Previous generations had installed an overshot water-wheel and constructed a mill-stream (we called it The Leat) which started at the farm's up-stream boundary, and followed the contour around until, directly downhill from the homestead, it had gained more than 10 feet of head to supply that wheel. Even in our time there was an old rusty wheel in place although we were told it was not the original one. We found rusty shafting sections too, fitted with simple universal joints, which were the remains of a long shaft that had once transmitted the wheel's power right up the hill to the buildings.

For their new water supply the University took advantage of this remarkable feature. They had a Hydraulic Ram installed near the creek below the leat's end, this was a simple device which used the power of a large flow of water to pump a small part of that water to a much greater height, 100ft. above in this case, and did it for 30 years or more.

In addition to the piped water, the old stone houses and buildings had been cement rendered, plumbed with flush toilets, bathrooms and hot water systems from their cooking stoves, burning wood or coal; but mains electricity was not to be connected for another 25 years. Drinking water from the slow-flowing leat, open to contamination from many sources, would not meet the bacteriological standards expected today, but we and our staff drank it for many years and came to no harm.

At a later stage the UoW built a fine new cowshed with 40 standings; and a pair of cottages named Aber & Ystwyth¹. They also added a second, bigger ram to supply water to the southern half of the farm, this was not as well installed and often gave us trouble, but it did pump water to 250 ft above the source!



Les Evans in the Big Cowshed

By 1948 the AHD had decided that Pantyrhuad was too far from Aberystwyth to be useful for research, and were quitting their tenancy. Dad knew that the people and conditions in Wales would be very different from Hampshire, so in May 1948 he sent me to work without wages for the Animal Health Department (AHD) at Pantyrhuad, to look after our interests and get experience of their ways. Perhaps he thought it would be good for me too, to toughen me up. We were to take over at Michaelmas 1948, that is 29 September, the traditional date for the farming year to end.

Before we took over, the farmhouse was occupied by Maldwyn Fisher, their manager. There were married workers in all the cottages, with two students getting farm experience who lodged with Mrs. Rosie Richards, at the Bont (2 miles down the road), and Ronnie Roberts the tractor driver who lived in St.Clears; these three pedaled

1 Cottages (& new dairy 1963)

up daily by bicycle, a long and hilly way for Ronnie. I think Dai Jones the shepherd already lived in the Bannel, Jack Jones the cowman in one of the new cottages, I forget the others.

By the time I went to Wales I think Dad had already offered jobs to some of these workmen, it was in his interest that Fisher should not lose his staff; certainly Dai and Ronnie stayed on with us, the latter getting married and coming to live in Ystwyth cottage.

Fisher found lodgings for me in St. Clears, with Mr. & Mrs. Francis, he was manager of Gwili Farmers, selling stock feed and other farm supplies. Mrs. Francis elegantly gave me my meals alone in the front room, but she was not used to the early rising needs of a farm worker, so I was embarrassed at always arriving long after the others had started work, and after a few weeks I joined the students lodging at The Bont, where I was part of the rather crowded and primitive but happy household, and could get to work even in time to milk if necessary, and it was there I first met that new product: Nescafé!

I drove to work on the motor bike which I already owned and Dad bought a new tractor which I was to use to help Fisher in the months before we took over. This grey Ferguson was the latest thing, for although it had been designed and a few built before 1938, the depression and then the war got in the way and they only took off again in 1947. Throughout the war many new Fordson tractors were built, basically to a 1917 design, and the far superior Ferguson was mothballed until after the war, not a good decision. Within 10 years every farmer in the district had one, but mine might well have been the first in Carmarthenshire.

In those last months of their tenancy, the AHD was starving Fisher of resources, the only road vehicle on the place was an old van, and in the last few weeks even that was only running on 3 cylinders so I, on my licenced Fergie tractor, was often sent 5 miles or more with a little trailer to take calves to market or fetch supplies. All pretence at

experimental work had now been abandoned, but some of the workers talked of having been involved in it in previous years.

They had one very nice tractor, an Allis-Chalmers model U, which must have had a particularly good carburetter for the prevailing tractor fuel, called TVO, (Tractor Vapourising Oil) its exhaust had a sweetish smell and little smoke; what a contrast with their other tractor, an old Fordson, which broke its crankshaft while I was there, replaced on the farm to my amazement by Ronnie with help from Dai. We had never attempted such an undertaking.

Alan remembers that the AHD had not finished their grain harvest when we took over on 29th September, but in some difficult later years nor did we. There must have been at least one stack of grain “up the bank” (our phrase for the high land south of the dingle²), and we inherited an old rusty hayshed in the haggard also full of oaten sheaves, which we threshed in the late winter, and from which I remember we killed 250 rats (or could they have been only mice?) as we came to the end of the threshing in late winter. Their carcasses filled the Fergy lift-box and Robin Lloyd had the job of disposing of them!

To supplement the hay, the AHD were still growing the traditional roots as succulent winter fodder for the cows; but this year the weeds defeated them. I remember endless days with the team hoeing tough Fat Hen and Redshank (*polygonum persicaria*), while the others taught me to say obscene sentences in Welsh, which they assured me meant “How are you today” or “It’s a very fine day”. I think the mangolds and turnips were a failure, smothered by the weeds, and we gave them up in favour of kale and silage.

There was a small tower silo in the haggard, (the local word for stack-yard) made of mass produced concrete slabs fitted between uprights and encircled by ½” mild steel rod, but they did not use it in

that year, they had no machinery to handle green grass.

I was not aware of it at the time, but there must have been considerable bargaining between Dad, (whose former profession had been as an agent to the aristocracy in such deals), Fisher for the AHD and Mr. Perkins of John Francis & Sons, Carmarthen, for the University. As a result, Dad persuaded them that to be viable, the farm needed two new haysheds, a building for baby calves, and a larder added onto the farmhouse. These were soon built for him, the old hayshed being demolished to make room for the calf house.

There were clearly defined customs to judge the value of the former tenant's assets which the new tenant would take over, including the residual value of fertilizer applied in recent years. Dad loved to recall an episode at the AHD's clearing sale. They had removed most of the field gates and put them up for sale. When the auctioneer reached them, our good neighbour Richard Owen of Castle Lloyd was clearly heard to remark "Its a poor landlord that sells the gates off a farm!"

Fisher answered "Oh but these gates are the property of the Animal Health Department".

Dad replied "I expect that. as their agent, Mr. Perkins will buy them back for the University".

"I suppose I'll have to", answered Perkins and he proceeded to do just that! So having removed them the day before, our new employees now had to rehang them!

We sent our cows from Heberdens to Pantyrhuad in several batches as they dried off, allowing them to calve and be milked with the existing herd, some of which we bought at their sale. The AHD were milking less than 40 cows, and I think sold a few culls as our cows joined the herd, keeping below the number of ties in the new cow-shed, the AHD benefitted from the milk of our cows as they calved.

The Move

Dad had decided to emulate his cousin Donald in moving his entire live and dead stock to his new farm, by chartering a special train, and also sending two or three trucks in advance by the normal railway goods system, to move batches of dairy cows as they went dry. The train had been assembling and loading in the siding at Rowlands Castle for many days, carrying almost everything we owned! We had two of the new Fordson Major tractors, one of them with half-tracks, four 4-wheeled trailers each built on the chassis of a big old car (one was a Rolls-Royce), plough, harrows, binder, young cattle in cattle trucks, and one special truck with a compartment for two men in the middle and a section at each end for our dozen cows that were still in-milk. I went back to Heberdens for the move, and travelled in this truck with Jim Ashton, the one worker who was coming with us to Wales. It had been carefully planned that our train should fit neatly into slots between the regular scheduled passenger trains on all the different sections of railway line and make the complete journey in 14 hours; but we were warned that if there were one small glitch, we might miss an opportunity and be delayed for many hours. Jim and I would then have to milk the cows by hand while the train waited for its chance to get through. However, the plan succeeded, and the only milking we did was straight into the cups of tea that we brewed on the way!

After the Move

I now see it as remarkable that neither Dad nor I ever asked if a proposed enterprise would be profitable. We took it for granted that any “good farming” would always be profitable, with care and economy. The bank allowed us a overdraft (equalling 4 months income or more?) and never asked for any budget. The big decisions

were:

To move to Pantyrhuad (ABB)

To keep the cows outdoors all winter (ABB)

To reduce haymaking and concentrate on silage, and mechanise that enterprise. (John)

To buy any available cheap, run-down farms, where we could take advantage of the government's policy of subsidising farm improvements. (ABB). In order of acquisition, we bought and renovated Llwyn-y-felin 98 acres (called Pen-back on the map), White Rose 70 acres, Nant-cwm-rhys, Pen'r-allt-dafn and Clyn-maen-llwyd. The last 3 were all adjoining, near Conwil Elfed, but 20 miles away from Pantyrhuad. Then we were able to buy Pantyrhuad itself, cheaply as sitting tenants. Finally he bought Parciau-glas (Glas-parciau on the map) mainly as a house for himself, half-way between the two districts. All had houses and farm buildings except White Rose.

To buy the outdoor milking bail. (John). To go over from cowshed to bail milking. (John). To grow or not to grow grain. After 1957, we grew only enough to provide some straw for bedding and increased again about 1965. (John)

We never thought of measuring the rainfall! In Hampshire it would have been less than 30", in Pantyrhuad more than 40", maybe even 50".

In our first 12 years at Pantyrhuad, the wages were not enough for any of our men to run a car. To leave the farm, they must walk one Km down to the main road where there was a bus service running between Tenby and Carmarthen about five times a day, which would stop at our entrance if asked. There was a school bus too for the Primary school in Llanddowror and the High School in St. Clears, not really a bus, just a van with some simple benches for the kids to sit on.

We always employed all the men we could house, always full-

time and always living on the farm; that is 4 married men in Pantyrhuad cottages, myself, Alan & Robin (later Hugh Howells and Nicholas Rowlands) in the farmhouse, and sometimes one neighbour's son walking to work, Dexie John coming from Wellstone to our east and later Ieuan Davies from Parc Cymmin to the westward. We could always find staff easily, since many farms employed single farm workers living in, but very few had cottages to offer if these workerrs wanted to get married. The cottage went free with the job, so if you lost your job, you lost your house too. The grocer, baker and butcher all had delivery vans like mobile shops going round all the isolated farms and villages once or twice a week. We would phone in advance, listing our order in detail; but I think the workers wives just took what was offered in the van, or made requests for the next delivery.

As we gradually bought more farms and renovated the houses on them we took on more men, living in those houses as they became available. The only contractors we used were the builders, Hugh & Herbert James, and for 2 or 3 years Guy Horsley to bale hay. At the peak we must have had a regular staff of 8 or 9 men.

After his schooling at Gordonstoun, Alan always had a fancy to live and farm on an island, where the use of boats would be a part of his normal day to day living. We very nearly took the tenancy of Ramsey Island³, with its 600 acres of farmland⁴ off the coast of North Pembrokeshires. Dad called off the deal at the last minute when the quitting tenant suddenly demanded that we paid him for the full value of all the fences. Eventually Alan did leave our partnership and go to live at Scorraig.

Add Gypsies, Building hayshed, Crossing the dingle, Personal stuff.

3 Harbour at Ramsey, boat leaving.

4 Ramsey Island house and farm

5 The Bitches, Ramsey Quay.

Grain

In our early years at Pantyrhuad we continued growing and harvesting our grain crops as I will describe. We had left our 13 row combine drill behind at Heberdens, and bought a bigger one with a self-lift and 15rows⁶ from the AHD. At that time the normal gateways were only 9 feet wide, with stone posts each side, so to move between fields 3 men had to manhandle the drill up wooden ramps onto a trailer; then prop up the drawbar with a baulk of wood so that it would pass above the gate posts, thus jamming the footboard against the 3” high opposite edge of the trailer floor.

Our grain harvesting was still unchanged, cutting the crop with a binder⁷, the most complicated machine in farming⁸. Designed to be drawn by horses, the reciprocating knife system is hardly changed today, while beaters pushed the stalks back neatly onto a canvas that carried it sideways and delivered it between two more canvases which carried it nearly 45 degrees upward and over the single big wheel that carried most of the weight and delivered power to all this mechanism through a system of roller chains. The crop then slid down a sloping, covered sheaf deck, assisted by three packing fingers and held by the knotter mechanism, until the bulk was enough to press down on a trip lever, when the needle came up from below to pass the single thin sisal string to the knotter. The completed sheaf was ejected leaving a clear space for the outfit to pass on the next turn. When horse-drawn, I believe three horses were needed to provide the necessary power.

Even when tractor drawn, an operator was needed on the binder’s seat because the height of the crop would constantly vary, and he needed to make continuous adjustments to the height of the knife and of the beater, and to adjust the whole knotter mechanism to keep the string neatly in the middle of the sheaf. He would shout

- 6 Combine Drill
- 7 Binder at work
- 8 Binder close-up

“Whoa!” the moment a sheaf mis-tied, woe betide him if he was not watching!

The binder was followed by men stooking the sheaves in sixes, or building “Mows” (rhyming with cows) of about 30 sheaves if the grain was ripe enough. These were unknown in England, but useful in Wales where the weather was so “hinderable”. We often rebuilt the sheaves into Mows some days later unless the weather seemed set fair. When we were working “up the bank” Mum would sometimes bring tea to the distant fields, saving valuable harvesting time⁹.

When dry enough the sheaves would be ready for carting into the hayshed¹⁰. The 2 or 3 milkers were available for harvesting between milkings, and with their help we could make up two teams, one loading in the field,¹¹ the other unloading and building the stack.¹² When they went off to the milking, the remaining team would concentrate on loading all four of our fleet of trailers, so that they could do the stacking early in the morning, while the sheaves on the ground were still wet with dew, and the milkers were still at breakfast, or cleaning up.

At first we had to call in a contractor for threshing, who was also a local farmer, and used a tractor, not steam. One of Dad’s first machinery purchases was a stationary baler, built for wire-tying as was customary then; but we specified string-tying as a newly invented extra. One man was still needed for the tying, pushing in and drawing out the needles, and cutting and knotting the strings, but even this was a step forward as two had been needed for wire tying, one each side of the baling chamber. The only pick-up balers at that time also tied with wire in the same way. Our baler was the only one in the district, and we baled the straw straight out of the contractor’s thresher, setting the

9 Harvest tea
10 Sheaf stack
11 Loading sheaves
12 Unloading sheaves

baler at an angle the first time to allow our tractor to drive the baler. The contractor immediately saw the value of the baler and bought an expensive new flat belt to fit between thresher and baler, so that he could hire our baler to take around his other threshing clients. We also baled the stacks of loose hay in the winter as it was needed, since stacking loose was quicker in the urgency of haymaking.

In 1950 Dad bought a threshing machine at a clearing sale of the WAEC, it was a good machine and served us well. Now we could thresh some of our crop straight out of the mows,¹³ at the same time inventing the idea of bringing the mows to the thresher on a buckrake, saving one handling¹⁴. Needing a big team, we could only do this until the milkers left, then the rest of the team might load two trailers with sheaves, before taking home the other two, with their loads of grain bags and straw bales¹⁵. The grain bags all had to be carried on our backs up the steps and tipped in the granary loft, spread out thinly enough for the grain to dry a bit more, and leaving some space so that, if it heated, as it sometimes did, we had room to shovel it over every few days, releasing clouds of steam! This picture¹⁶ shows the steps up (behind Hans's head) and the grannery windows above.

Looking through my 1951 diary, I found records of threshing from the mows in Ebenezer on 28/9, 1/10 & 8/10, and on one of those days I took these three photos. We took the damp tops off some mows and presumably loaded them onto a trailer later in the day. From midday to 3:00 we carted 30 whole mows with a buckrake to the drum and got c.2 tons grain. On the other days we did two runs of threshing, in the 4 days we threshed 248 mows and got c.12 tons grain, (oats by photos but could be barley). The photos show Leslie & Leo pitching sheaves up, Bert cutting strings, Alan feeding the drum, Ronnie taking off bags of grain, there is a man tying strings out of

13 Threshing, straw end

14 Threshing, middle

15 Threshing, grain end

16 Grannery

sight behind the baler, the Governor is stacking bales. and I was driving the buckrake, but got off to take the photos, a total of 8 men. At a pinch we could dispense with the man cutting strings, with output slightly reduced.

Alan had only just left the farm college at Usk, Monmouthshire, at that date, but with gaining confidence he took to doing all the threshing work in the district by contract, but on condition that he should not have to eat Rice Pudding, the traditional sweet course which local farmer's wives always gave to their neighbours, who would come with a pitchfork over one shoulder to help with the threshing.

In the room under the grannery was a hammer mill, fed by gravity, and powered by a flat belt through the open door from a tractor standing outside. The milkers had to grind once each week in winter, and mix the grain with purchased protein-rich products, usually ground-nut cake or meal; this was fed at milking time roughly according to each cow's current yield.

We were harvesting grain this way until we acquired our first combine harvester, made by Marshalls (of Gainsborough?), tractor drawn, 5 or 6 foot cut. It may have been quite a decent machine, but 1957 was a terribly wet year, with massive growth of weeds in the crops, and I remember making a screen for its shakers, from plywood, with holes far bigger than the standard, to help it deal with the excessive green stuff. Heber Howells had an Allis Allcrop, a lighter and better machine with adjustable screens and he lent it to us after finishing his own small cereal acreage. Each of these machines had its own engine to drive the threshing mechanism and needed a man riding on a side platform to change the bags as they filled and drop them off at the right place.

The following year we took the Marshall to the "Milk Field" at White Rose, where we had put in oats after ploughing and sowing it for the very first time, in a dry spring-time. We got that heavy

Marshall machine bogged on the first turn of the field, going down the gentle slope! I think it stayed there until the harvest was over, and we thought we would have to abandon that crop. However, at about the date of Karin’s birth (20th October, 1958, that is how I remember the year!) another neighbour, Cliff Perrot, kindly offered us the use of his small self-propelled combine harvester, and with this I was able to salvage quite a lot of grain there, stopping and backing out as soon as I felt the ground softening, turning and going back the other way. I ended up with this clearly defined boggy strip 20 yards wide, abandoned right across the middle of the field.

We had wet grain that had to be sent off to a drier somewhere in Pembrokeshire. The farmer who owned it allowed us and others to bring grain and dry it in the night while he and his workers who had been running the plant all day were sleeping! We got a one-night’s booking and spent the evening bagging and loading several truckloads, getting it all away by nearly 2:00 AM. George the Bannel had to get up before 6:00 to milk, but insisted on helping until we finished about 1:30 AM, “Four hours sleep enough for any man”, said he happily! Alan and another man spent the whole night tending the drier. After that we gave up growing grain for several years. We could buy it, but I don’t know how we managed for straw bedding.

When we eventually went back to grain, we had made friends with Alex Vedeniapin, who wanted us to go shares with him in buying a 12 foot self-propelled combine harvester. It would have cost thousands, and I persuaded him that we would have equal harvesting capacity with two tractor-drawn harvesters¹⁷ each with a 6 foot cut and costing only £250; bearing in mind that we had plenty of drivers and tractors between us¹⁸. We eventually bought three, one as a spare! They had bulk tanks so we fitted our tipping trailers up to receive the grain¹⁹, and used them for several years, and took the best of them

17 Two harvesters
18 Martin harvesting
19 Unloading on the move

with us when we moved to Australia. We also converted the big cowshed into a grain store, fitted out to clean, store & dry up to 100 tons of barley, 6 foot deep on the floor, with a tractor driving a big fan blowing air through a system of air ducts running under the heap of grain. When that was running, you could lay your handkerchief anywhere on top of the 6 foot deep grain, and see it lift just off the surface.

Haymaking

Finger mowers were the only option for cutting the grass until the 1960s, we had primitive roller-bar rakes for turning it, and a machine called a swaffer (or swather, see reference 49) to shake it up when it got sodden after rain, as it often did! All these had been designed to be drawn by horses, later simply converted by adding a tractor drawbar. New ones were coming in that were able to work faster than horse speed, such as this Ferguson 5 foot cut rear-mounted mower²⁰, and the very first finger-wheel rake²¹, the Blanch-Snoek, its name suggesting an English copy of a Dutch invention.

In Wales we saw the local method of stacking the hay at its simplest form in the pitcher-pole, seen here²² at Wellstone, our nearest neighbour. The pole is set up leaning slightly towards the stack, but the man on the ground pulls on his rope to keep the jib away from the stack while a boy guides the horse pulling the halliard which hoists the load. Then the ground man releases his rope and the jib swings in as far as the man on the stack wants it. Another pull on a trip-rope releases the grab and the horse is led back for the ground man to dig its tines in for another bite.

20 Ferguson tractor & mower, 1952. Dai Jones driving in Mountain Ffold

21 Blanch hay-rake, turning two rows separately, 1952. It worked better putting two rows into one. Dai. driving.

22 Pitcher-pole, 1952. Derek John's arm can be seen leading the horse.

Most local farmers had this grab in a more refined form. They had a rail fastened under the hay-shed roof along its full length and projecting at one end, with a pulley-wheel for the halliard under a carriage which ran along the rail. The hay could be hauled up from a cart outside, rolled along the rail to the desired spot and lowered there. Men with forks could then build it into a neat stack.

Their hay-sheds were built close to the cowshed where the cows were tied up all through the winter, possibly going out for exercise and water for an hour each day. Loose hay in a stack settles very solid, in distinct layers. To cart it loose to the animals you must have a hay-knife, which is like a huge kitchen knife with a blade 40cm long and about 18cm wide. Its straight back is extended another 20cm and ends in an offset crosswise wooden handle. The worker stands on the hay and plunges the heavy knife into the hay repeatedly, gradually extending his cut from right to left until he has cut down about 20 cm around a square of hay about 60cm square, just enough to work on. Then he sticks his fork into the cut-out hay section, turns his back and (from the ground or from a ladder) heaves the loaded fork onto his shoulder, and carries it like that into the shed to feed the cows. The hay clings so tightly together that he only loses a little on the way.

For carting the hay in, we brought our English haymaking methods with us to Wales, building a stack in the field. The hay-sweep on the front of the land-rover gathered up the hay from the windrows into a big tangle and brought it to the foot of our hay-elevator, where 2 men with pitchforks²³ dragged it apart again and fed it into the elevator. Two men on the stack had a rather easier job, building the hay up, layer by layer. A steeply sloping roof was all it needed to shed most of the rain. It would have to be strongly fenced around if cattle were to graze the later growth of grass.

This was a very quick way of getting the hay in, we built the

stack shown here from 17 acres in 4 hours, from 4:30 to 8:30 PM. The milkers would come to help after milking and a bite to eat, glad of the overtime work. No other method could equal it in that climate, where we could only count on a few spells dry enough to cart hay in the whole season. The extra work of fencing, baling and carting later was not a problem. We did occasionally bale some directly,²⁴ but it was far slower and the bales had to be put under cover.

We had cut out our stacks with the hay knife at Heberdens and at Sparsholt too, loading the hay onto carts to take it to the livestock. For the bigger farm at Pantyrhuad, Dad bought a stationary baler, so that we could bale a whole stack of hay in the field when needed in the winter,²⁵ carting the bales back to the homestead for easy use. This allowed us to make and stack hay on our remote and often inaccessible fields at the south end of the farm, and keep the livestock conveniently near the homestead for winter feeding.

The first time I saw a pick-up baler was at Manor Court, Heber had hired a local contractor with his Jones Lion²⁶, a huge clumsy machine feeding the hay in from the top, makers had not yet discovered that it was possible to rotate the chamber 90 degrees and feed in from the side. They were trying to solve a problem with mistying when Alan, Dai Jones and I went to see it in 1953, we are seen here offering hopeful suggestions!. Since tractors did not yet have live PTOs, a baler had to have its own engine. Two years later we first hired Guy Horsley to bale our hay with his Welgar.²⁷ We did not buy our own pick-up baler until about 1965.

24 Baling hay directly from the field, 1951, Breda & Ronnie pitching.

25 Just finishing baling a hay-stack, 1952. Alan tying strings, Dai pitching.

26 Jones Lion pick-up baler at Manor Court, 1953. Gordon Howells, Alan, Leslie Cross-Inn, Dai

27 Welgar pick-up baler 1955

Silage

We first made silage by man-power, our first pit had nearly vertical concrete sides, Our old lodger from the war, Mr. Hammond came to visit and took this photo²⁸ in 1949. We were loading and unloading the green grass by hand, too laborious to do more than once. Dad bought a Butterly Green-crop Loader²⁹, this photo is from 1951. By 1952 we had replaced it with one modelled on the light hay loaders that the welsh farmers all used, but strengthened for loading green grass³⁰. We still had to unload by hand and were still doing so in 1952³¹. We covered the finished pit with earth³², but it was a lot of hard manual work to dig it off again, and we later decided that the saving in waste was not worth the trouble.

We found that haymaking was unreliable in that climate, and growing roots as the succulent part of a dairy cow's diet was too labour-intensive, so in 1953, at my suggestion, we mechanised our silage making and cut right down on haymaking. We bought the only cheap british forage harvester, called a Silorater-Hayter³³, which relied on single vee-belts to drive the cutting rotors, totally inadequate. It then smashed up the grass somewhat, by feeding it through a strong fan, which also blew it to the trailer. This was powered by the Oliver 80³⁴ that we had bought 2nd hand a year or two before. We had two Grey Fergies pulling Fergy tipping trailers, running alongside, and shuttling back to the silage pit or stack. They drove across the silage in its pit³⁵ to tip the loads off. Two men were needed at the pit to spread the load, and another tractor stood by to roll the stack between loads, and to pull the Fergies off when they got stuck, which they

- 28 John rolling our first silage
- 29 Butterley
- 30 International green-crop loader
- 31 Unloading silage by hand at Llwynyfelin
- 32 Earth over
- 33 Silorator
- 34 Silorator
- 35 Tipping on the pit

usually did. The silorater made a penetrating whine which was heard miles away. Alan always drove it, and had to leap off between loads, to sharpen the cutting knives with a file, or the belts would slip.

In 1955 we added a third Fergy and tipping trailer, and replaced the Oliver with a new International diesel engined tractor, the BWD-6, and in another two years we replaced the Silorator with a Lundell forage harvester, 60" cut, offset, and used in the same way. The next step was to pull the trailer behind the Lundell, which had a device to hitch up and unhitch without leaving the tractor. This saved a tractor and driver, but made a clumsy machine, and took time hitching and unhitching.

Up to this point we had seen ourselves as the pioneers in silage making, certainly so in West Wales. But Rex Paterson Farms overtook us, introducing the 40" Lundell drawn in-line behind the tractor with the trailer permanently hitched behind that³⁶. We soon copied them with this simple arrangement, which could drive to the silage pit as it was, tip its load on the ground, and race back to cut more³⁷. The crop was then put onto the stack with a buckrake. No longer did a breakdown in one department bring the whole job to a stop. One man could work alone, or more when available. Previously it had to be a team or nothing. We bought an International B-250 tractor to do the buckrake job, the grey fergy was too small for that.

Dairying

We started off with a limit of 40 cows in milk, the full capacity of our big cowshed, with two milkers using the four bucket milking machines bought from AHD, but in a year or two we started using the old cowshed as well. This had stalls for another 20 cows, justifying another man and two more bucket units, the whole herd of up to 60 cows grazing together, and each cow going by habit to the correct

36 Lundell at work

37 Lundell unloading

shed, and the same stall in each shed, with a little help from the milkers. It would probably have been quite possible to manage with only two milkers using three machines each, but I had been taught that it was bad for a cow to be overmilked, and judged it better for the man to wait for the cow, and help her strip out quickly with a little massage, rather than to let the teat cups be left on for too long when the milker was occupied elsewhere.

The milk was poured from the machine bucket into another, which had to be carried up to the milk room and tipped into a tank above the cooler. We also followed current advice regarding mastitis, taking a squirt of milk from each teat into a strip cup to check for clots after washing the teats, and dipping the teat cups in a disinfectant solution between cows. Any cows producing clots in her foremilk was immediately put on a course of intramammary penicillin, we were actually advised that this modern treatment would soon eradicate the disease! We never asked if the cows had recovered spontaneously in the past, we thought we knew better.

The milkers were expected to know every cow by her name, soon learnt by newcomers, since the old hands made sure that every cow was tied in her correct stall, where her name was chalked up on the black square painted on the wall in front of her, with the number of scoops of concentrated feed she should have, according to her current milk yield. We weighed and recorded each individual's production once every week.

Leslie Evans, our Welsh cowman, would not believe that cows could survive and give milk outside all winter, so in two or three of our early years in Wales we followed his local advice and kept them tied up in the sheds overnight in winter. The cowshed floors had been concreted for hygiene rather than for the comfort of the cows, some of which found it difficult to get up again after lying in their stalls, a few never seemed to lay down at all in the shed, but lay down all day in the field as soon as they were turned out. Then Dad over-ruled Leslie and we left them outside all winter; the cows did not seem to suffer,

but they made an awful mess in some wet fields, halving their pasture production in the following year.

As a reader of AG Street's classic book, *Farmers' Glory*, and my experience at the Hampshire Farm Institute, Sparsholt, I was keen to try an outdoor bail for milk production from pasture in summer, on our land south of the dingle, out of reach of our home dairy herd. We bought such a bail from Alfa-Laval and modified it to my design for moving around with a Ferguson tractor. It was quite successful for two seasons, then we took it to our neighbouring farm Llwyn-y-Felin, permanently installed in one spot, and started a herd there.

Calf rearing

Conwil farms, Govt. subsidies

Beef, sheep