Farnon led me to the first of several doors which opened off a passage where the smell of ether and carbolic hung on the air. ‘This,’ he said, with a secret gleam in his eye as though he were about to unveil the mysteries of Aladdin’s cave, ‘is the dispensary.’

The dispensary was an important place in the days before penicillin and the sulphonamides. Rows of gleaming Winchester bottles lined the white walls from floor to ceiling. I savoured the familiar names: Sweet Spirits of Nitre, Tincture of Camphor, Chlorodyne, Formalin, Salammoniac, Hexamine, Sugar of Lead, Linimentum Album, Perchloride of Mercury, Red Blister. The lines of labels were comforting.

I was an initiate among old friends. I had painfully accumulated their lore, ferreting out their secrets over the years. I knew their origins, actions and uses, and their maddeningly varied dosage. The examiner’s voice – ‘And what is the dose for the horse? – and the cow? – and the sheep? – and the pig? – and the dog? – and the cat?’

These shelves held the vet’s entire armoury against disease and, on a bench under the window, I could see the instruments for compounding them; the graduated vessels and beakers, the mortars and pestles. And underneath, in an open cupboard, the medicine bottles, piles of corks of all sizes, pill boxes, powder papers.

The dispensary that Siegfried proudly shows to James in If Only They Could Talk belongs to a bygone era, when veterinary surgeons relied upon a variety of age-old remedies to treat their animals, with varying success. Antibiotics, vaccines and modern drugs were on the horizon but were yet to revolutionize veterinary treatment and in the pre-war years veterinary surgeons were working much as they had for decades. Instead of injecting drugs, vets often dispensed liquids that they or a farmer would pour down the throat of an animal – known as drenching – with the use of bottles or drenching horns. For skin conditions, they might slaver on tar or diesel oil or apply mustard plasters to an animal’s chest if it had pneumonia. The James Herriot books provide a fascinating insight into this former world and chronicle the huge impact the introduction of new drugs and methods had on veterinary practice in the 1930s and post-war years.

As we moved around, Farnon’s manner became more and more animated. His eyes glittered and he talked rapidly. Often, he reached up and caressed a Winchester on its shelf; or he would lift out a horse ball or an electuary from its box, give it a friendly pat and replace it with tenderness.

‘Look at this stuff, Herriot,’ he shouted without warning. ‘Adrevan! This is the remedy, par excellence, for red worms in horses. A bit expensive, mind you – ten bob a packet. And these gentian violet pessaries. If you shove one of these into a cow’s uterus after a dirty cleansing, it turns the discharges a very pretty colour. Really looks as though it’s doing something. And have you seen this trick?’

He placed a few crystals of resublimated iodine on a glass dish and added a drop of turpentine. Nothing happened for a second, then a dense cloud of purple smoke rolled heavily to the ceiling. He gave a great bellow of laughter at my startled face.

‘Like witchcraft, isn’t it? I use it for wounds in horses’ feet. The chemical reaction drives the iodine deep into the tissues.’

‘It does?’

‘Well, I don’t know, but that’s the theory, and anyway, you must admit it looks wonderful. Impresses the toughest client.’

Some of the bottles on the shelves fell short of the ethical standards I had learned in college. Like the one labelled ‘Colic Drench’ and featuring a floridly drawn picture of a horse rolling in agony. The animal’s face was turned outwards and wore an expression of very human anguish. Another bore the legend ‘Universal Cattle Medicine’ in ornate script – ‘A sovereign Remedy for coughs, chills, scours, pneumonia, milk fever, gargett and all forms of indigestion.’ At the bottom of the label, in flaring black capitals, was the assurance, ‘Never Fails to Give Relief’.

Farnon had something to say about most of the drugs. Each one had its place in his five years’ experience of practice; they all had their fascination, their individual mystique. Many of the bottles were beautifully shaped, with heavy glass stoppers and their Latin names cut deeply into their sides; names familiar to physicians for centuries, gathering fables through the years.

The two of us stood gazing at the gleaming rows without any idea that it was nearly all useless and that the days of the old medicines were nearly over. Soon they would be hustled into oblivion by the headlong rush of the new discoveries and they would never return.

‘This is where we keep the instruments.’ Farnon showed me into another little room. The small animal equipment lay on green baize shelves, very neat and impressively clean. Hypodermic syringes, whelping forceps, tooth scalers, probes, searchers and, in a place of prominence, an ophthalmoscope.

Farnon lifted it lovingly from its black box. ‘My latest purchase,’ he murmured, stroking its smooth shaft. ‘Wonderful thing. Here, have a peep at my retina.’

I switched on the bulb and gazed with interest at the glistening, coloured tapestry in the depths of his eye. ‘Very pretty. I could write you a certificate of soundness.’

He laughed and thumped my shoulder. ‘Good, I’m glad to hear it. I always fancied I had a touch of cataract in that one.’

He began to show me the large animal instruments which hung from hooks on the walls. Docking and firing irons, bloodless castrators, emasculators, casting ropes and hobbles, calving ropes and hooks. A new, silvery embryotome hung in the place of honour, but many of the instruments, like the drugs, were museum pieces. Particularly the blood stick and fleam, a relic of medieval times, but still used to bring the rich blood spouting into a bucket.

In the early days of veterinary practice, vets were also required to mix up potions and powders to their own recipes. ‘Materia medica’, as it was called at veterinary college (today known as pharmacology), formed a key part of the curriculum in the 1930s and 1940s, and required students to learn the different medicines, liquids and relevant doses. When he was a student, it was Alf Wight’s least favourite subject, partly because he hadn’t taken science as a Higher at school and he had a poor grasp of maths, which was critical when working out the doses of medicines that might contain arsenic, turpentine and a variety of toxic substances.

The job of grinding, weighing and mixing up potions often fell to the more junior members of the practice, as is the case at Skeldale House, where James and Tristan are frequently found blending up concoctions in the dispensary.

Looking back, I can scarcely believe we used to spend all those hours in making up medicines. But our drugs didn’t come to us in proprietary packages and before we could get out on the road we had to fill our cars with a wide variety of carefully compounded and largely useless remedies.

When Siegfried came upon me that morning I was holding a twelve-ounce bottle at eye level while I poured syrup of coccilana into it. Tristan was moodily mixing stomach powders with a mortar and pestle and he stepped up his speed of stroke when he saw his brother’s eye on him. He was surrounded by packets of the powder and, further along the bench, were orderly piles of pessaries which he had made by filling cellophane cylinders with boric acid.

Armed with their various pills and potions, James and Siegfried then administer them to the farm animals of the Dales, exactly as Alf and Donald did in the late 1930s. Dispensary staples included stomach powders and bloat drenches which they gave cattle to reduce the potentially lethal build-up of gases in their digestive tracts which caused them to bloat up (a condition less frequently seen today as much more is

known about cattle nutrition). For horses and cattle that had ‘stoppages’ in their bowels, they would pour liquid paraffin or castor oil down their throats in order to get things moving again.

In the early days, Alf used great quantities of the antiseptic Acriflavine to wash out stomachs and to clean wounds or various orifices. Jim also remembers that his dad had one glass syringe – rather than the hundreds of disposable syringes used by vets today – which was stored in a black plastic cylindrical container filled with surgical spirit along with a supply of metal needles. Stimulant medicines were also a staple of the dispensary, including ‘Universal Cattle Medicine’, a rich red fluid that constituted the last line of defence in the battle with animal disease.

It was a pity it didn’t do any good because there was something compelling about its ruby depths when you held it up to the light and about the solid camphor-ammonia jolt when you sniffed at it and which made the farmers blink and shake their heads and say ‘By gaw, that’s powerful stuff,’ with deep respect. But our specific remedies were so few and the possibilities of error so plentiful that it was comforting in cases of doubt to be able to hand over a bottle of the old standby. Whenever an entry of Siegfried’s or mine appeared in the day book stating ‘Visit attend cow, advice, I UCM’ it was a pretty fair bet we didn’t know what was wrong with the animal.

Alf Wight and Donald Sinclair regularly resorted to using Universal Cattle Medicine for a variety of bovine complaints. Cows might splutter after being drenched with the stuff – unsurprising as it consisted, amongst other things, of ammonia and arsenic – but its stimulant properties often helped. Its powerful odour meant that just sniffing it was enough for most people but there was one raucous night at the Thirsk practice when Donald, after a few too many drinks, decided to take a few swigs from the bottle of UCM as a form of self-medication. Clutching his throat, he then staggered out into the garden and collapsed in the flowerbed. Thankfully, Donald survived the incident but it didn’t stop his younger brother Brian recreating the whole event in the pub afterwards. Lying on the floor, twitching and convulsing, the theatrics soon became a regular party piece of Brian’s, as entertaining as his ‘mad conductor’.

The arrival of James Herriot comes with a certain amount of expectation by the farmers in the region, not least that the newly qualified vet will be acquainted with some of the modern drugs they’ve heard about. Dairy farmer Phin Calvert – who was based on the real farmer Fred Thompson, known by everyone as Atom Thompson – is hoping the young vet will come up with ‘summat real and scientific like’ when James visits to look at his sickly calves. But sometimes the old remedies work just as well and, having diagnosed lead poisoning, James prescribes Epsom salts, which work as an effective antidote to the poisoning, and the calves soon recover. James is then called in again to Mr Calvert’s, this time to see his prized pedigree shorthorn bull who’s ‘puffin’ like a bellows’.

The bull was standing as though rooted to the middle of the pen. His great ribcage rose and fell with the most laboured respirations I had ever seen. His mouth gaped wide, a bubbling foam hung round his lips and his flaring nostrils; his eyes, almost starting from his head in terror, stared at the wall in front of him. This wasn't pneumonia, it was a frantic battle for breath; and it looked like a losing one.

He didn't move when I inserted my thermometer and though my mind was racing I suspected the half-minute wasn't going to be long enough this time. I had expected accelerated breathing, but nothing like this.

'Poor aud beggar,' Phin muttered. 'He's bred me the finest calves I've ever had and he's as quiet as a sheep, too. I've seen me little grandchildren walk under 'is belly and he's took no notice. I hate to see him sufferin' like this. If you can't do no good, just tell me and I'll get the gun out.'

I took the thermometer out and read it. One hundred and ten degrees Fahrenheit. This was ridiculous; I shook it vigorously and pushed it back into the rectum.

I gave it nearly a minute this time so that I could get in some extra thinking. The second reading said a hundred and ten again and I had an unpleasant conviction that if the thermometer had been a foot long the mercury would still have been jammed against the top.

What in the name of God was this? Could be anthrax . . . must be . . . and yet . . . I looked over at the row of heads above the half door; they were waiting for me to say something and their silence accentuated the agonized groaning and panting. I looked above the heads to the square of deep blue and a tufted cloud moving across the sun. As it passed, a single dazzling ray made me close my eyes and a faint bell rang in my mind.

'Has he been out today?' I asked.

'Aye, he's been out on the grass on his tether all morning. It was that grand and warm.'

The bell became a triumphant gong. 'Get a hosepipe in here quick. You can rig it to that tap in the yard.'

'A hosepipe? What the 'ell . . .?'

'Yes, quick as you can – he's got sunstroke.'

They had the hose fixed in less than a minute. I turned it full on and began to play the jet of cold water all over the huge form – his face and neck, along the ribs, up and

down the legs. I kept this up for about five minutes but it seemed a lot longer as I waited for some sign of improvement. I was beginning to think I was on the wrong track when the bull gulped just once.

It was something – he had been unable to swallow his saliva before in his desperate efforts to get the air into his lungs; and I really began to notice a change in the big animal. Surely he was looking just a little less distressed and wasn't the breathing slowing down a bit?

Then the bull shook himself, turned his head and looked at us. There was an awed whisper from one of the young men: 'By gaw, it's working!'

I enjoyed myself after that. I can't think of anything in my working life that has given me more pleasure than standing in that pen directing the life-saving jet and watching the bull savouring it. He liked it on his face best and as I worked my way up from the tail and along the steaming back he would turn his nose full into the water, rocking his head from side to side and blinking blissfully.

Within half an hour he looked almost normal. His chest was still heaving a little but he was in no discomfort. I tried the temperature again. Down to a hundred and five.

'He'll be all right now,' I said. 'But I think one of the lads should keep the water on him for another twenty minutes or so. I'll have to go now.'

Phin Calvert offers James a drink before he goes and, sitting in the farm kitchen, he is a little lost for words over the miraculous recovery of his bull. However, he soon finds his voice again at the next meeting of the farmers' discussion group, where various gentlemen are discussing the latest advances in veterinary medicine. It's all too much for Phin and he jumps up and cries: 'Ah think you're talking a lot of rubbish. There's a young feller in Darrowby not long out of college and it doesn't matter what you call 'im out for he uses nowt but Epsom salts and cold water.'

Much of Siegfried's and James's work is undertaken in stables, cow byres or fields, with owners helping to hold their animals or looking on, meaning they must also witness various medical procedures and the gore that goes with it. Most farmers are able to cope with the more visceral aspects of animal husbandry but there are some – and it's often the big, burly types – who grow weak at the knees at the sight of a needle or blood.

So this morning I looked with satisfaction at the two men holding the cow. It wasn't a difficult job – just an intravenous injection of magnesium lactate – but still it was reassuring to have two such sturdy fellows to help me. Maurice Bennison, medium-sized but as tough as one of his own hill beasts, had a horn in his right hand while the fingers of his left gripped the nose; I had the comfortable impression that the

cow wouldn't jump very far when I pushed the needle in. His brother George, whose job it was to raise the vein, held the choke rope limply in enormous hands like bunches of carrots. He grinned down at me amiably from his six feet four inches.

'Right, George,' I said. 'Tighten up that rope and lean against the cow to stop her coming round on me.' I pushed my way between the cow and her neighbour, past George's unyielding bulk and bent over the jugular vein. It was standing out very nicely. I poised the needle, feeling the big man's elbow on me as he peered over my shoulder, and thrust quickly into the vein.

'Lovely!' I cried as the dark blood fountained out and spattered thickly on the straw bedding beneath. 'Slacken your rope, George.' I fumbled in my pocket for the flutter valve. 'And for God's sake, get your weight off me!'

Because George had apparently decided to rest his full fourteen stones on me instead of the cow, and as I tried desperately to connect the tube to the needle I felt my knees giving way. I shouted again, despairingly, but he was inert, his chin resting on my shoulder, his breathing stertorous in my ear.

There could only be one end to it. I fell flat on my face and lay there writhing under the motionless body. My cries went unheeded; George was unconscious.

Mr Bennison, attracted by the commotion, came into the byre just in time to see me crawling out from beneath his eldest son. 'Get him out, quick!' I gasped, 'before the cows trample on him.' Wordlessly, Maurice and his father took an ankle apiece and hauled away in unison. George shot out from under the cows, his head beating a brisk tattoo on the cobbles, traversed the dung channel, then resumed his sleep on the byre floor.

Mr Bennison moved back to the cow and waited for me to continue with my injection but I found the presence of the sprawled body distracting. 'Look, couldn't we sit him up against the wall and put his head between his legs?' I suggested apologetically. The others glanced at each other then, as though deciding to humour me, grabbed George's shoulders and trundled him over the floor with the expertise of men used to throwing around bags of fertilizer and potatoes. But even propped against the rough stones, his head slumped forward and his great long arms hanging loosely, the poor fellow still didn't look so good.

I couldn't help feeling a bit responsible. 'Don't you think we might give him a drink?'

But Mr Bennison had had enough. 'Nay, nay, he'll be right,' he muttered testily. 'Let's get on with t'job.' Evidently he felt he had pampered George too much already.

The incident started me thinking about this question of people's reactions to the sight

of blood and other disturbing realities. Even though it was only my second year of practice I had already formulated rules about this and one was that it was always the biggest men who went down. (I had, by this time, worked out a few other, perhaps unscientific theories, e.g. big dogs were kept by people who lived in little houses and vice versa. Clients who said ‘spare no expense’ never paid their bills, ever. When I asked my way in the Dales and was told ‘you can’t miss it’, I knew I’d soon be hopelessly lost.)

I had begun to wonder if perhaps country folk, despite their closer contact with fundamental things, were perhaps more susceptible than city people. Ever since Sid Blenkhorn had staggered into Skeldale House one evening. His face was ghastly white and he had obviously passed through a shattering experience. ‘Have you got a drop o’ whisky handy, Jim?’ he quavered, and when I had guided him to a chair and Siegfried had put a glass in his hand he told us he had been at a first aid lecture given by Dr Allinson, a few doors down the street. ‘He was talking about veins and arteries and things,’ groaned Sid, passing a hand across his forehead. ‘God, it was awful!’ Apparently Fred Ellison the fishmonger had been carried out unconscious after only ten minutes and Sid himself had only just made it to the door. It had been a shambles.

I was interested because this sort of thing, I had found, was always just round the corner. I suppose we must have more trouble in this way than the doctors because in most cases when our medical colleagues have any cutting or carving to do they send their patients to hospital while the vets just have to get their jackets off and operate on the spot. It means that the owners and attendants of the animals are pulled in as helpers and are subjected to some unusual sights.

A veterinary surgeon must also be paid and this sometimes proved a problem for Alf and Donald at the Thirsk practice. Most clients paid their bills on time but there were the stubborn few who racked up debt with the practice or resented having to pay veterinary bills, particularly when the National Health Service was launched in 1948 and doctors were no longer charging for their services. Bill-paying days were often accompanied with the usual grumbles, that the practice had been ‘ower heavy wi’ t’pen’ or they wanted a ‘bit knockin’ off’.

Alf loved his work, but neither he nor Donald were businesspeople and often exclaimed: ‘Why can’t I just drive around, doing the job I love and receive a decent sum of money at the end of the week?’ James and Siegfried similarly must deal with the ‘ten per cent’ or so of clients who avoid paying their bills, as James muses upon in It Shouldn’t Happen to a Vet.

As time passed and I painfully clothed the bare bones of my theoretical knowledge with practical experience I began to realize there was another side to veterinary practice they didn’t mention in the books. It had to do with money. Money has always formed a barrier between the farmer and the vet. I think this is because there is a

deeply embedded, maybe subconscious conviction in many farmers' minds that they know more about their stock than any outsider and it is an admission of defeat to pay somebody else to doctor them.

The wall was bad enough in those early days when they had to pay the medical practitioners for treating their own ailments and when there was no free agricultural advisory service. But it is worse now when there is the Health Service and NAAS [an advisory arm of the Ministry of Agriculture] and the veterinary surgeon stands pitilessly exposed as the only man who has to be paid.

Most farmers, of course, swallow the pill and get out their cheque books, but there is a proportion – maybe about ten per cent – who do their best to opt out of the whole business.

We had our own ten per cent in Darrowby and it was a small but constant irritation. As an assistant I was not financially involved and it didn't seem to bother Siegfried unduly except when the quarterly bills were sent out. Then it really got through to him.

Siegfried goes through the outstanding bills, muttering and occasionally raging about the non-payers, some of whom he's seen betting at the races or driving around in brand-new cars. There are some debtors, however, that he can't help but admire, including the very charming and erudite Major Bullivant who for years has got away without paying his vet bills or those of most of the tradesmen in Darrowby. He eventually leaves the area, still without paying what he owes, and yet Siegfried holds little bitterness towards the major.

Siegfried's attitude to his debtors was remarkably ambivalent. At times he would fly into a fury at the mention of their names, at others he would regard them with a kind of wry benevolence. He often said that if ever he threw a cocktail party for the clients he'd have to invite the non-payers first because they were all such charming fellows.

Nevertheless he waged an inexorable war against them by means of a series of letters graduated according to severity which he called his PNS system (Polite, Nasty, Solicitor's) and in which he had great faith. It was a sad fact, however, that the system seldom worked with the real hard cases who were accustomed to receiving threatening letters with their morning mail. These people yawned over the polite and nasty ones and were unimpressed by the solicitor's because they knew from experience that Siegfried always shrank from following through to the limit of the law.

Some clients resent having to call in a veterinary surgeon because they feel they know, or should know, more about caring for their own livestock than any vet. When examining animals on farms, James must frequently deal with farmers and their neighbours pontificating on the ailments of animals – rural folk are often experts when it comes to other people's livestock – who swear by a range of home-spun remedies.

James and veterinary surgeons like him must also contend with an army of unqualified practitioners, many of whom had built up thriving businesses and were trusted by local farmers.

Marmaduke Skelton was an object of interest to me long before our paths crossed. For one thing I hadn't thought people were ever called Marmaduke outside of books and for another he was a particularly well-known member of the honourable profession of unqualified animal doctors.

Before the Veterinary Surgeons' Act of 1948 anybody who fancied his chance at it could dabble in the treatment of animal disease. Veterinary students could quite legally be sent out to cases while they were seeing practice, certain members of the lay public did a bit of veterinary work as a sideline while others did it as a full-time job. These last were usually called 'quacks'.

The disparaging nature of the term was often unjust because, though some of them were a menace to the animal population, others were dedicated men who did their job with responsibility and humanity and after the Act were brought into the profession's fold as Veterinary Practitioners.

But long before all this there were all sorts and types among them. The one I knew best was Arthur Lumley, a charming little ex-plumber who ran a thriving small animal practice in Brawton, much to the chagrin of Mr Angus Grier MRCVS. Arthur used to drive around in a small van. He always wore a white coat and looked very clinical and efficient, and on the side of the van in foot-high letters which would have got a qualified man a severe dressing down from the Royal College was the legend, 'Arthur Lumley MKC, Canine and Feline Specialist'. The lack of 'letters' after their name was the one thing which differentiated these men from qualified vets in the eyes of the general public and I was interested to see that Arthur did have an academic attainment. However the degree of MKC was unfamiliar to me and he was somewhat cagey when I asked him about it; I did find out eventually what it stood for; Member of the Kennel Club.

Marmaduke Skelton was a vastly different breed. I had been working long enough round the Scarburn district to become familiar with some of the local history and it seemed that when Mr and Mrs Skelton were producing a family in the early 1900s they must have thought their offspring were destined for great things; they named their four sons Marmaduke, Sebastian, Cornelius and, incredibly, Alonzo. The two middle brothers drove lorries for the Express Dairy and Alonzo was a small farmer; one of my vivid memories is the shock of surprise when I was filling up the forms after his tuberculin test and asked him for his first name. The exotic appellation pronounced in gruff Yorkshire was so incongruous that I thought he was pulling my leg; in fact I was going to make a light comment but something in his eye prompted me to leave it alone.

Marmaduke, or Duke as he was invariably called, was the colourful member of the family. I had heard a lot about him on my visits to the Scarburn farms; he was a ‘right good hand’ at calving, foaling and lambing, and ‘as good as any vitnery’ in the diagnosis and treatment of animals’ ailments. He was also an expert castrator, docker and pig-killer. He made a nice living at his trade and in Ewan Ross he had the ideal professional opposition; a veterinary surgeon who worked only when he felt like it and who didn’t bother to go to a case unless he was in the mood. Much as the farmers liked and in many cases revered Ewan, they were often forced to fall back on Duke’s services. Ewan was in his fifties and unable to cope with the growing volume of testing in his Scarburn practice. I used to help him out with it and in consequence saw a lot of Ewan and his wife, Ginny.

The flamboyant names of Marmaduke and his brothers were inspired by one of the Thirsk practice clients, Alonzo Cornforth, whose farm Greendales was just a couple of miles outside the town. Alf couldn’t get over the fact that a Yorkshire farmer had the rather splendid, but unusual name of Alonzo, which clearly stayed in his mind when he wrote the James Herriot books.

Alf used to help out the real Ewan Ross, who was based on the nearby veterinary surgeon and later great friend, Frank Bingham. Twenty years Alf’s senior, Frank was laidback in his approach but immensely experienced, with veterinary skills that frequently impressed Alf. In Let Sleeping Vets Lie Ewan Ross is called to a farm to deal with the prolapsed uterus of a cow and James comes with him. On arrival, the farmer Mr Thwaite guiltily tells them that Marmaduke Skelton is in with the cow and that despite having wrestled with the cow for an hour and a half, he is no further forward and ‘about buggered an’ all’. Ewan at first refuses to interfere until Mr Thwaite begs him to take over, fearing he’ll lose one of his best cows. They head to the byre and find an exhausted Duke Skelton stood next to a huge everted uterus, still dangling behind the cow: ‘Blood and filth streaked his face and covered his arms and as he stared at us from under his shaggy brows he looked like something from the jungle.’ Duke refuses to let the vet help, so Ewan squats on a milking stool, rests against a wall, rolls a cigarette and watches the sweaty, struggling figure a few feet from him.

Duke had got the uterus about halfway back. Grunting and gasping, legs straddled, he had worked the engorged mass inch by inch inside the vulva till he had just about enough cradled in his arms for one last push; and as he stood there taking a breather with the great muscles of his shoulders and arms rigid his immense strength was formidably displayed. But he wasn’t as strong as that cow. No man is as strong as a cow and this cow was one of the biggest I had ever seen with a back like a table top and rolls of fat round her tail-head.

I had been in this position myself and I knew what was coming next. I didn’t have to

wait long. Duke took a long wheezing breath and made his assault, heaving desperately, pushing with arms and chest, and for a second or two he seemed to be winning as the mass disappeared steadily inside. Then the cow gave an almost casual strain and the whole thing welled out again till it hung down bumping against the animal's hocks.

As Duke almost collapsed against her pelvis in the same attitude as when we first came in I felt pity for the man. I found him uncharming but I felt for him. That could easily be me standing there; my jacket and shirt hanging on that nail, my strength ebbing, my sweat mingling with the blood. No man could do what he was trying to do. You could push back a calf bed with the aid of an epidural anaesthetic to stop the straining or you could sling the animal up to a beam with a block and tackle; you couldn't just stand there and do it from scratch as this chap was trying to do.

I was surprised Duke hadn't learned that with all his experience; but apparently it still hadn't dawned on him even now because he was going through all the motions of having another go. This time he got even further – a few more inches inside before the cow popped it out again. The animal appeared to have a sporting streak because there was something premeditated about the way she played her victim along before timing her thrust at the very last moment. Apart from that she seemed somewhat bored by the whole business; in fact with the possible exception of Ewan she was the calmest among us.

Duke was trying again. As he bent over wearily and picked up the gory organ I wondered how often he had done this since he arrived nearly two hours ago. He had guts, there was no doubt. But the end was near. There was a frantic urgency about his movements as though he knew himself it was his last throw and as he yet again neared his goal his grunts changed to an agonized whimpering, an almost tearful sound as though he were appealing to the recalcitrant mass, beseeching it to go away inside and stay away, just this once.

And when the inevitable happened and the poor fellow, panting and shaking, surveyed once more the ruin of his hopes I had the feeling that somebody had to do something.

Mr Thwaite did it. 'You've had enough, Duke,' he said. 'For God's sake come in the house and get cleaned up. Missus'll give you a bit o' dinner and while you're having it Mr Ross'll see what he can do.'

The big man, arms hanging limp by his sides, chest heaving, stared at the farmer for a few seconds then he turned abruptly and snatched his clothes from the wall.

'Aw right,' he said and began to walk slowly towards the door. He stopped opposite Ewan but didn't look at him. 'But ah'll tell you summat, Maister Thwaite. If ah can't put that calf bed back this awd bugger never will.'

James watches in amazement as Ewan effortlessly replaces the uterus back into the cow, with the use of rope, a pig stool, a pound of sugar, a whisky bottle and a beer tray (complete with ‘John Smith’s Magnet Pale Ale’ emblazoned on the side). He loops the rope around the cow’s body and pulls, causing it to collapse on top of the stool with her rear end stuck high in the air. He first dusts sugar over the uterus, which causes it to shrink, and then hoists it onto the beer tray. Then, without even breaking a sweat, he pushes the uterus back in, before carefully passing the whisky bottle into the vagina the length of an arm and moving his shoulder vigorously so he can position the uterus correctly in place.

He was drying his hands when the byre door opened and Duke Skelton slouched in. He was washed and dressed, with his red handkerchief knotted again round his neck and he glared fierce-eyed at the cow which, tidied up and unperturbed, looked now just like all the other cows in the row. His lips moved once or twice before he finally found his voice.

‘Aye, it’s all right for some people,’ he snarled. ‘Some people with their bloody fancy injections and instruments! It’s bloody easy that way, isn’t it!’ Then he swung round and was gone.

Alf had similarly seen Frank Bingham perform the difficult procedure with the same rudimentary items and with similar finesse.

To keep their dispensary stocked up, James and Siegfried also receive visits from various company representatives who carry weighty catalogues of liquids and remedies, each one peculiar to their own firm. One such representative is Mr Barge, based on a real company representative, Mr Collinson, known to the family as ‘Collie’, who was a regular visitor to the Thirsk practice. Mr Barge’s dignified presence elicits deference even from Siegfried.

Nowadays the young men from the pharmaceutical companies who call on veterinary surgeons are referred to as ‘reps’, but nobody would have dreamed of applying such a term to Mr Barge. He was definitely a ‘representative’ of Cargill and Sons, Manufacturers of Fine Chemicals since 1850, and he was so old that he might have been in on the beginning.

After lunch, Siegfried and James browse though Mr Barge’s catalogue of exotic remedies and Siegfried orders fever drinks, castration clamps and a variety of now obsolete items, Mr Barge responding gravely to each order ‘I do thank you’ or ‘Thank you indeed’.

Finally Siegfried lay back in his chair. ‘Well now, Mr Barge, I think that’s it – unless you have anything new.’

‘As it happens, my dear Mr Farnon, we have.’ The eyes in the pink face twinkled. ‘I can offer you our latest product, “Soothitt”, an admirable sedative.’

In an instant Siegfried and I were all attention. Every animal doctor is keenly interested in sedatives. Anything which makes our patients more amenable is a blessing. Mr Barge extolled the unique properties of Soothitt and we probed for further information.

‘How about unmaternal sows?’ I asked. ‘You know – the kind which savage their young. I don’t suppose it’s any good for that?’

‘My dear young sir,’ Mr Barge gave me the kind of sorrowing smile a bishop might bestow on an erring curate, ‘Soothitt is a specific for this condition. A single injection to a farrowing sow and you will have no problems.’

‘That’s great,’ I said. ‘And does it have any effect on car sickness in dogs?’

The noble old features lit up with quiet triumph. ‘Another classical indication, Mr Herriot. Soothitt comes in tablet form for that very purpose.’

‘Splendid.’ Siegfried drained his cup and stood up. ‘Better send us a good supply then. And if you will excuse us, we must start the afternoon round, Mr Barge. Thank you so much for calling.’

Within a week, the new supplies from Cargill and Sons arrive in a wooden chest – including the much-anticipated Soothitt. That same day James decides to try Soothitt on a spaniel who howls like mad every time he’s in the back of a car as well as an aggressive sow who is attacking her piglets. The Soothitt has no effect on Gertrude the pig, who seems, if anything, more fierce after injections of the stuff – it’s only after she’s given two gallons of strong ale that she allows her piglets to suckle from her. Soothitt similarly proves totally ineffective with Coco the spaniel whose howls can still be heard long after his owner next drives past the practice.

Gradually modern drugs began to make their presence felt in veterinary practice and by the early 1940s, vets like Alf could see for themselves just how effective they are in the treatment of disease. In Vet in Harness, James visits some very sickly calves belonging to Mr Clark, whose farm is covered in rusting agricultural implements, derelict cars and a converted railway wagon in which the calves are kept. They are suffering from white scour, diarrhoea caused by a lethal bacterial enteritis that once had a depressingly high mortality rate. He tries the usual age-old treatments which ‘whiskered veterinary surgeons in top hats and tail coats’ had been using a hundred years before, which include astringent powders of chalk, opium and catechu and wrapping each calf in a big sack to ensure they are warm and sheltered. James returns

the next day but finds the calves lying motionless on their sides and looking so close to death that Mr Clark calls in the knacker man Mr Mallock. James, however, has some new drugs and suggests he gives them a try.

I took the tin from my pocket and read the label. ‘It’s called M and B 693, or sulphapyridine, to give it its scientific name. Just came in the post this morning. It’s one of a completely new range of drugs – they’re called the sulphonamides and we’ve never had anything like them before. They’re supposed to actually kill certain germs, such as the organisms which cause scour.’

Mr Clark took the tin from me and removed the lid. ‘A lot of little blue tablets, eh? Well ah’ve seen a few wonder cures for this ailment but none of ’em’s much good – this’ll be another, I’ll bet.’

‘Could be,’ I said. ‘But there’s been a lot of discussion about these sulphonamides in our veterinary journals. They’re not quack remedies, they’re a completely fresh field. I wish I could have tried them on your calves.’

Almost to humour James, Mr Clark agrees to him trying the new drug, although he and Mr Mallock are convinced it won’t work. Having pounded the tablets with Mrs Clark’s potato masher in the kitchen, James measures out five doses which he and Mr Clark trickle into each of the calves’ mouths. The next morning, James is stunned to discover the calves much recovered, now with normal temperatures and standing munching hay.

I didn’t know it at the time but I had witnessed the beginning of the revolution. It was my first glimpse of the tremendous therapeutic breakthrough which was to sweep the old remedies into oblivion. The long rows of ornate glass bottles with their carved stoppers and Latin inscriptions would not stand on the dispensary shelves much longer and their names, dearly familiar for many generations – Sweet Spirits of Nitre, Sal ammoniac, Tincture of Camphor – would be lost and vanish for ever.

This was the beginning and just around the corner a new wonder was waiting – penicillin and the other antibiotics. At last we had something to work with, at last we could use drugs which we knew were going to do something.

All over the country, probably all over the world at that time, vets were having these first spectacular results, going through the same experience as myself; some with cows, some with dogs and cats, others with valuable racehorses, sheep, pigs in all kinds of environments. But for me it happened in that old converted railway wagon among the jumble of rusting junk on Willie Clark’s farm.

Of course it didn’t last – not the miraculous part of it anyway. What I had seen at Willie Clark’s was the impact of something new on an entirely unsophisticated bacterial

population, but it didn't go on like that. In time the organisms developed a certain amount of resistance and new and stronger sulphonamides and antibiotics had to be produced. And so the battle has continued. We have good results now but no miracles, and I feel I was lucky to be one of the generation which was in at the beginning when the wonderful things did happen.

The arrival of new drugs to combat infection, first with the sulphonamides in the early 1940s, then sulpha drugs in the mid-1940s and a year or two later antibiotics, resulted in something of a golden age for veterinary practice which lasted into the early 1950s. Where once an animal might be sent to the knacker's yard, one injection in the rump might see a complete recovery overnight, much to its owner's delight. However, James has it drummed into him by Siegfried always to give a bleak prognosis for every case, so that if an animal dies, then they're proved right but if a patient recovers – which they did with more frequency with effective drugs – they would be hailed heroes.

By the time of The Lord God Made Them All, set in the years immediately after the Second World War, James is more often than not injecting animals with medication rather than pouring it down their throats.

I had had a disturbing morning. Everywhere I had gone I was reminded that I had come back to a world of change, and I did not like change. One old farmer saying 'It's all t'needle now, Mr Herriot' as I injected his cow, had made me look down almost with surprise at the syringe in my hand, realizing suddenly that this was what I was doing most of the time now.

I knew what he meant. Only a few years ago I would have been more likely to have 'drenched' his cow. Grabbed it by the nose and poured a pint of medicine down its throat.

We still carried a special drenching bottle around with us. An empty wine bottle because it had no shoulders and allowed the liquid to run more easily. Often we would mix the medicine with black treacle from the barrel which stood in the corner of most cow byres.

All this was disappearing and the farmer's remark about 'all t'needle' brought it home to me once more that things were never going to be the same again.

A revolution had begun in agriculture and in veterinary practice. Farming had become more scientific and concepts cherished for generations were being abandoned, while in the veterinary world the first trickles of the flood of new advances were being felt.

Previously undreamed-of surgical procedures were being carried out, the sulpha drugs were going full blast and, most exciting of all, the war, with its urgent need for better treatment of wounds, had given a tremendous impetus to the development of Sir

Alexander Fleming’s discovery of penicillin. This, the first of the antibiotics, was not yet in the hands of the profession except in the form of intra-mammary tubes for the treatment of mastitis, but it was the advance guard of the therapeutic army which was to sweep our old treatments into oblivion.

In the pre-war period, a highly contagious disease known as brucellosis ravaged cattle herds, causing pregnant cows to abort their foetuses or give birth to very weak calves. In Vet in Harness brucellosis breaks out at Frank Metcalfe’s farm and his cows begin to abort their calves. The only drug James has at his disposal is to inject a mostly ineffective dead vaccine into the herd. A local farmer who reckons he knows better than James also advises that Frank try the quack remedy ‘Professor Driscoll’s Abortion Cure’. James wearily agrees that it probably wouldn’t do any harm, knowing that his dead vaccine is likely to be just as ineffective.

Because this sort of thing was always happening in those days before the modern drugs appeared. Quack medicines abounded on the farms and the vets couldn’t say a lot about them because their own range of pharmaceuticals was pitifully inadequate.

And in those diseases like abortion which had so far defeated all the efforts of the profession at control, the harvest for the quack men was particularly rich. The farming press and country newspapers were filled with confident advertisements for red drenches, black draughts, pink powders which were positively guaranteed to produce results. Professor Driscoll had plenty of competition.

After two cows calve normally, Frank is hopeful but it isn’t long before three more cows abort their calves and then another two, and he knows there’s nothing anyone can do to save the herd.

Driving home, I brooded on his words. Contagious Bovine Abortion has been recognized for centuries and I had read in old books of the filthy scourge which ravaged and ruined the ancient farmers just as it was doing to Frank Metcalfe today. The experts of those days said it was due to impure water, improper feeding, lack of exercise, sudden frights. They did note, however, that other cows which were allowed to sniff at the foetuses and afterbirths were likely to suffer the same fate themselves. But beyond that it was a black tunnel of ignorance.

We modern vets, on the other hand, knew all about it. We knew it was caused by a Gram-negative bacillus called Brucella abortus whose habits and attributes we had studied till we knew its every secret; but when it came to helping a farmer in Frank’s situation we were about as much use as our colleagues of old who wrote those quaint books. True, dedicated researchers were working to find a strain of the bacillus which would form a safe and efficient vaccine to immunize cattle in calfhood and as far back as 1930 a certain strain 19 had been developed from which much was hoped. But even now it was still in the experimental stage. If Frank had had the luck to be born twenty

years later the chances are that those cows he bought would have all been vaccinated and protected by that same strain 19. Nowadays we even have an efficient dead vaccine for the pregnant cows.

That autumn, Frank calls round to tell James he's had to sell up and move back to Middlesbrough. It's a disastrous and utterly underserved outcome for Frank, but like many Dales farmers, he's stoic about his misfortunes.

'Oh hell, Frank,' I said. 'I can't tell you how sorry I am. You haven't had a scrap of luck all the way through.' He looked at me and smiled with no trace of self-pity.

'Aye well,' he said. 'These things happen.'

I almost jumped at the words. 'These things happen!' That's what farmers always said after a disaster.

By the time Alf Wight wrote the final James Herriot book in the early 1990s, brucellosis had mostly been eradicated and herds were no longer being ravaged by it as they had in the 1940s and 1950s. Veterinary surgeons, however, had practically paddled in the bacteria when treating infected cattle and some would later suffer the effects, both physically and mentally. James thinks he has escaped without being affected, until he starts to experience what his family call 'funny turns'.

I was always apprehensive and ill at ease when I had Mrs Featherstone's problem dog on the table, but this time I felt relaxed and full of confidence. But then I was always like that when I was delirious.

Delirium was only one of the countless peculiar manifestations of brucellosis. This disease, which causes contagious abortion in cattle, ruined thousands of good farmers of my generation and was also a constant menace to the veterinary surgeons who had to deliver the premature calves and remove the afterbirths.

Thank heaven, the brucellosis scheme has now just about eradicated the disease but in the fifties such a thing hadn't been dreamed of and I and my contemporaries wallowed almost daily in the horrible infection.

I remember standing stripped to the waist in cow byres – parturition gowns were still uncommon and the long plastic protective gloves unknown in those days – working away inside infected cows for hours and looking with wry recognition at the leathery placenta and the light-coloured, necrotic cotyledons which told me that I was in contact with millions of the bacteria. And as I swilled myself with disinfectant afterwards, the place was filled with the distinctive acrid odour of abortion.

The effects on many of my fellow vets were wide and varied. One big fat chap faded

away to a skeleton with undulant fever and was ill for years, others developed crippling arthritis and some went down with psychiatric conditions. One man wrote in the Veterinary Record that as part of his own syndrome he came home one night and decided it would be a good idea to murder his wife. He never got round actually to doing it, but recorded the impulse as an interesting example of what Brucella abortus could do to a man.

I used to pat myself on the back and thank God that I was immune. I had been bathing in the infection for years and had never experienced the slightest reaction and as I looked around at some of my suffering friends I was so thankful that I had been spared their ordeal. And after all this time I just knew that such a thing would never happen to me.

That was before I started my funny turns.

This was my family's term for a series of mysterious attacks which came unheralded and then passed off just as quickly. At first I diagnosed them as repeated chills – I was always stripping off in open fields, often in the middle of the night – then I thought I must have a type of flu of short duration. The symptoms were always the same – a feeling of depression, then an ice-cold shiveriness which drove me to my bed, where within an hour I shot up a temperature of 105 or 106. Once I had developed this massive fever I felt great: warm and happy, laughing heartily, chattering to myself and finally breaking into song. I couldn't help the singing – I felt so good.

This was a source of great amusement to my children. When I was at the singing stage I could always hear them giggling outside the bedroom door, but I didn't mind – I didn't mind anything.

However, I finally had to find out what was happening to me and a blood test by Dr Allinson dispelled all doubts by showing a nice positive titre to Brucella abortus. Reluctantly I had to admit that I had joined the club.

Alf suffered similar 'funny turns' that would eventually subside, but it has been suggested that these repeated attacks may have contributed to the depression he suffered in later life.

Alf was nonetheless aware, and thankful, that he had experienced rural life in Yorkshire as it once was, along with the introduction of effective modern drugs that would save the lives of the animals he treated.

'I consider that I am a very fortunate man,' Alf once said. 'I have lived through the golden years of vet practice – without doubt, the best years.' In The Lord God Made Them All Siegfried agrees as much although he also looks forward to great days ahead in veterinary practice.

‘Do you know, James,’ he said. ‘I’m convinced that the same thing applies to our job. We’re going through the best time there, too.’

‘Do you think so?’

‘Sure of it. Look at all the new advances since the war. Drugs and procedures we never dreamed of. We can look after our animals in a way that would have been impossible a few years ago and the farmers realize this. You’ve seen them crowding into the surgery on market day to ask advice – they’ve gained a new respect for the profession and they know it pays to call in the vet now.’

‘That’s true,’ I said. ‘We’re certainly busier than we’ve ever been, with the Ministry work going full blast, too.’

‘Yes, everything is buzzing. In fact, James, I’d like to bet that these present years are the high noon of country practice.’

I thought for a moment. ‘You could be right. But if we are on the top now does it mean that our lives will decline later?’

‘No, no, of course not. They’ll be different, that’s all. I sometimes think we’ve only touched the fringe of so many other things, like small animal work.’ Siegfried brandished his gnawed piece of grass at me and his eyes shone with the enthusiasm which always uplifted me.

‘I tell you this, James. There are great days ahead!’