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SOIL AND SECURITY

T. B. MARSON

"The worth of a State, in the long run, is the worth of the individuals composing it. A State which dwarfs its men will find that with small men no great thing can really be accomplished."—John Stuart Mill.

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FOREWORD

How happy is his low degree, How rich, in humble poverty, is he Who leads a quiet country life; Discharged of business, void of strife, And from the griping scrivener free. Thus, ere the seeds of vice were sown, Liv'd men in better ages born, Who ploughed, with oxen of their own Their small paternal field of corn.

JOHN DRYDEN.

At a time when we are building, or attempting to build, a new World on the ruins of our pre-war compromise with Life, every effort should be made to induce the General Public, and particularly the urban sections of that Public, to take a real interest in the Agricultural Policy of the Country, and by so doing, to help produce saner, economically sounder, conditions than those of recent years.

In view of past experience it is to-day too readily assumed that these Islands are incapable of producing their own Food Supplies, though in the present state of the World a time might come when failure in this respect would mean Famine to the inhabitants.

Great stress is laid upon restarting Export Trade, and the advisability of taking a wide view, and regarding Europe, and even the World, as one unit. Those who hold these views place British Agriculture in a subsidiary position, maintaining that such crops as cannot be grown here with profit must be, and can better be, obtained from overseas. This Policy, be it remembered, has failed in the past, and has led to the depopulation and im-

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poverishment of our own countryside. History, as Mr. Belloc remarks, adds a third dimension to experience. The present can only be assessed, the future prepared for, in the light of the past. In examining the present condition of Agriculture in this country and considering remedial action for the future, it is inevitable that thought should be given to the character and methods of those great Agriculturalists of the not so distant past to whose foresight and courageous initiative we owe what is best in present day farming. This will explain what may otherwise appear to be unwarrantable digressions—we have much to learn from their work and methods, much that can be applied in putting post-war agriculture on a sounder basis.

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CHAPTER 1

THE LAND AND ITS POTENTIAL VALUE

Princes and lords may flourish, or may fade—
A breath can make them, as a breath has made;
But a bold peasantry, their country's pride,
When once destroyed, can never be supplied.
GOLDSMITH.

In Norfolk in the autumn of 1914 a covey of half a dozen partridges settled to feed five and twenty or thirty yards beyond a thickset hedge. A yeomanry trooper with a noiseless single barrel rifle took up position on the opposite side of the hedge to the feeding covey unobserved and, taking aim at the outside bird, fired. The patridge aimed at made a slight jump and fell motionless whilst the remainder of the covey continued to feed as if nothing untoward had occurred. A second and a third bird shared similar fates without the slightest alarm or concern being shewn by any of their surviving fellows. In due course only one partridge remained alive and feeding and surely, it might be thought, the fate that had overtaken its fellows would rouse its suspicions and cause it to quit, as quickly as possible, so fatal a spot. On the contrary, the sole survivor, beyond a quick glance now and then at its prostrate fellows, betrayed neither curiosity nor fear; but continued to feed alone for some ten minutes before the yeoman added it to his bag. The wayfarer through Life, who by fate and chance visits different localities and meets diverse people, cannot fail to be struck by the resemblance between the conduct of human beings and that of the covey of partridges. Times of war, despite the heroism, self-sacrifice and comrade-

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ship are in this respect no better than those of peace pace Flag Days, appeals and protestation.

"The devil was sick, the devil a monk would be, The devil was well, the devil a monk was he."

Within the last half-century the inhabitants of these islands have been involved in three major wars. The South African War can claim inclusion with World Wars I. and II., for, in its course, numbers of the civilian population, as distinct from the professional soldiers and sailors, became involved as combatants and casualties, distress and unemployment were the result, as they were after the War of 1914-1918. In this latter War, it is, unfortunately only too true that casualties and distress reached a peak heretofore undreamed of, and that the virile manhood of a generation was lost. Side by side with casualties and distress, the War brought increased wealth to many who were not involved as combatants and in particular large profits to those engaged in agriculture, since the Industrial Revolution, the Cinderella of our industries. On demobilisation there was an orgy of gaiety and spending which the profiteers could afford but which rapidly absorbed the slender financial rewards of the returned warriors now happily, so many of them, mistakenly alas, thought, civilians again. The boom period was short and was followed by depression and unemployment which hit hardest the ex-service men of all ranks. No major war for ten years was the political slogan: and war potentials, including man-power and agriculture, could be left to take care of themselves. plain language the country could afford to neglect its bulwarks-there was the dole-and so the country did.

It was not until Mussolini became rampant and Hitler attained to power that the full extent of past neglect became apparent and that tardy and, to a large extent, inadequate measures were inaugurated. Even so,

agriculture was ignored despite warning after warning from those who knew the real facts of the agricultural problem. North of Tweed farming qua farming struggled for its continued existence; but south thereof, particularly in East Anglia, much land went out of cultivation, and throughout England farmers were forced to give up, and, as a result, ever increasing numbers were lost to the countryside. Sport, maintained for the most part by the nouveau riche, flourished; the old skilled labourers died out; the younger generation forsook their natural environment and fled to the congested industrial districts. There was no suet in the crust, and the crust itself was without flour or flavour. The net result was that many gave up the unequal struggle in despair, many were forced out, and those left in reduced to a hand to mouth existence with little regard to, and less practice of, the tenets of good husbandry. To such an extent was this the case that one of the oldest and most experienced Midlands agricultural auctioneers declared early in 1940: "We are in much worse state than in 1914. Our farmers have forgotten how to farm and lack capital. Ninety per cent, ought to be relieved of their farms; but as there is no one to take their place this is impossible, and we shall continue to makeshift." Not so far away from the County Town one of the big Banks, whose business in that locality had been built up on an agricultural foundation, prided itself in 1939 on the fact that it had got rid of practically all the accounts run by local farmers. This, it must be borne in mind, was within hail of the lands developed so ably by the celebrated Robert Bakewell of Dishley, who was not only a pioneer in the breeding of Stock but also a keen and practical The Druid wrote in Saddle and Sirloin in 1870: farmer.

"We can go back through the guidance of the Gentleman's Magazine to the days when Bakewell was a living name, and

Dishley the head-quarters to which all the best breeders of farm stock made resort. The scene rises up through the dim vista of the years. There are the willow clumps which are cut on a seven years rotation; the water-meadows which grew four grass crops in the season; the mimic Dutch canal, which supplied the sluices and carried boats laden with produce and manure between the different parts of the farm, and on whose sluggish stream turnips were floated down to the stock, and washed in the course of their sail. Two Pounder is brought out by the shepherd, with all the respect due to such a patriarch of the long-wools. Will Peet is on parade with the black cart stallion and John Breeder and Will Arnold, hazel wand in hand, have gathered the herd into a corner of the Long Pasture, and listen eagerly for any word that may be dropped about their favourites. In the business room there are not only skeletons but pickled carcases of sheep, whose points were most after their breeder's heart; but he shows with no less relish some beef joints, the relics of his Old Comely, which died at twenty-six, and the outside fat of a sirloin full four inches The latter were his Longhorn trophies, and no man could boast of a herd with deeper flesh and lighter of fat. his eves the breed was fated to represent the roast beef of Old England for ever and aye; and the thought that the very glory of their heads would be objected to as taking up too much room in the straw yards, and that a breed with shorter horns and earlier maturity from The Banks of Stately Tees would ruthlessly push them from their place and reduce them to a mere fraction in the Midlands, never vexed his soul. hold of public favour had been long and sure, and their greatest triumph was to come. If Two Pounder had then the reputation of earning 800 guineas in one season and serving some picked home ewes as well, the Dishley bull, Two Penny, was fated to make the herd of Fowler of Rollright, and swell its sale average to £81 14s. 3d. for fifty-one head. Longhorns of some kind or another, and generally with good milk marks and the faculty of fattening at a great age, were at this period the farmers' friends. They excited the admiration of Dr. Johnson in Derbyshire, and led him to note that his host, "whose talk is of bullocks," sold one of them for 100 guineas; and as good prices were obtained for the armenta fronte lata—those blacks with white backs, which Sir A. Ramsay took to Scotland as a cross for the Aberdeenshire, and whose horn practice in Garstang market was duly felt and recorded by Pennant as he journeyed towards the Hebrides."

For the rest Bakewell entertained in the evenings in his chair by his kitchen fireside and at half-past ten o'clock knocked out the ashes of his last pipe and, whatever the company, and he entertained many of all ranks in life, retired to bed. It was in 1898 that the last tenant farmer's herd of the old Longhorn breed was dispersed by auction. This herd belonged to Mr. Thomas Taverner, of Upton in Leicestershire, who at the same time gave up the farm which had been in the hands of his family for generations. When asked to produce the pedigrees of his cattle, he replied: "Pedigrees. They were here before I was born. not that enough?" The old man was then over eighty and was helped by his three brothers, the youngest of whom was sixty-nine, and in due course, between them the pedigrees were produced. All things change, nothing perishes, and though his breed of cattle have been superseded, Bakewell's principles remain, and in the Midlands to-day the traveller might search in vain to find land so well-farmed, and the truth of good husbandry so well maintained, to say nothing of the skilled stockmen and others who recked little of overtime and less of "new" summertime.

It has been said that there is nothing so false as facts, excepting figures, and old-time facts are out of mode to-day and figures even more so, yet a few gold coins in pocket in place of the best modern paper money would produce a solid and comforting reaction. The trouble (and the difficulty) is that the townsman and countryman have drifted so far apart that, metaphorically, they neither think the same thoughts nor speak the same language. Mechanism has grown up with and become embodied in industry and the one is dependent upon

the other; but in agriculture it has so far merely been superimposed, somewhat as if a wooden sailing ship were to be fitted with powerful supermarine engines and the same crew required to work their vessel with sails and/or power regardless of the laws and requirements of Nature. It is incontrovertible that for some time back our fellow countrymen have depended less and less on manual skill for their livelihood, the majority remaining indifferent to, or in practice ignorant of, this form of work. The country-side is visited only for purposes of holiday and health and is looked upon at best as a playground and at worst as a liability. There is a lack of understanding of the problems and of sympathy for the difficulties of the countryman which can only be accounted for by ignorance.

The professional, business, and artisan classes are a kindly and intelligent people, and their courage has been proved by the manner in which large numbers have faced intensive bombing and hostile action during the years of this war, but they have been taught to regard the Export Trade and Cheap Food as of first importance and to relegate the sources of Home Grown Food to the limbo of a forgotten past. Even during this war new summertime has been maintained and augmented without regard to the effect upon the farmer and labourer, and detrimental though it is to the production of those Food Supplies without which the country could not have weathered the storm. It is an old maxim verified time and again by History that the best basis for general prosperity is a prosperous agriculture and flourishing participants, and, notwithstanding apparent wealth and a high standard of living, can it be asserted, that as a result of the experience of the last forty years the vaunted world to be has the requisite solid foundation unless and until agriculture is reinstated? It is difficult to visualise sufficient numbers of the professional, business, and artisan classes willingly returning to work on the land under existing conditions, even with present prices and rates of wages, and this applies to those seeking fresh outlets on demobilisation. To the majority the life of the country with its isolation, monotony, and lack of social amenities cannot compete with the livelier and quicker life of the town, which also affords better prospects and richer material prizes. Maybe much is glitter and the advantages more apparent than real: but the magnetism is there as the never-ceasing drift from the countryside abundantly proves. The truth is we have ceased to be a country-minded people with a taste for, and sense of, the delights of work amongst stock and tillage, and, if those brought up and wedded to country conditions decline to continue in the way of life of their forbears, those returning from War with the wider outlook and more varied ideas attained by experience and travel are still less likely to wish to espouse such a country existence of their own free will.

Present prices, founded on the unsound system of subsidies, are illusory and there is not a practical farmer who has faith in their continuance. Moreover, although maximum prices have been fixed that is not the case as regards minimum prices, which will depend upon the continuation, or cancellation, of subsidies, the abundance or otherwise of the World's food supplies, and the ability of those countries in need of food to finance imports. It must also be borne in mind that the War years may have stimulated agriculture and at the same time have failed to enrich, have indeed impoverished, the land by encouraging the excessive growth of corn crops without adequate return of manure, or the rest and change between such crops fundamental to good husbandry. It will be said, and truly, that Food

Rationing has been a success and that people have been well and suitably fed and that much of the credit for this must be given to our own agriculture. The gap has indeed been bridged by the aid of Government assistance, subsidies, and other means of a temporary nature, but nothing so far done has provided any permanent solution any more than did the financial gains of 1914 to 1922. Over the years such periods of hectic prosperity are merely spotlights in the murk. Furthermore, owing to lack of skilled labour and materials, dilapidations, repairs and general deficiencies have been piling up, land unfairly cropped, and stock immoderately used. Everything has had to give way to the crying need for as much production as possible, regardless of cost. justifies the means, and the storm has so far been weathered. Is it not the time, therefore, to take a long view of the situation, to visualise where we stood in 1914 and again in 1939, and where, if we continue as formerly, we are likely to stand in 1969? We have risked famine twice and it is beyond conception that, as a reasonably intelligent people, we dare risk it a third time. The need is for a National Long Term Policy embracing full equipment and development of the land in conformity with modern requirements and on up-todate lines, and the programme entailed by such a policy would require capital expenditure and time.

The first question to be settled is that of the ownership of the land, bearing in mind the old saying that he who buys land buys many stones, and the fact that the financial responsibilities of ownership are heavy and likely to continue heavy. The ownership of land to-day (apart from Crown property) is in the hands of corporations of many sorts, and private individuals. It is cultivated and the working capital requisite provided by landlords with their Home farms and farms in hand,

owner-occupiers, and tenant-farmers, the latter comprising all those who rent land from a landlord or landowner. As regards publicly owned land, which may be regarded as all land in the hands of Government Departments, a good deal has been taken and is being used for purposes other than those of Food Production, e.g. aerodromes, army training areas. Of this land some has been purchased outright, some has been requisitioned subject to restitution with compensation, restoration, or ultimate purchase by the State. In extent it is considerable and its ultimate fate at this stage impossible to predict. Trusts and Companies (exclusive of those concerned with the preservation of historic monuments and of areas of natural beauty and interest) hold their lands as an investment and expect and receive appropriate returns upon the capital involved. First amongst the private owners come the owners of large estates, and it seems reasonable to place them in this category despite the fact that the majority of such owners have turned their estates into limited liability companies of recent times in order to alleviate Death Duties and Taxationa temporary palliative for, it is to be feared, a permanent evil. To date, for good or ill, the big Estate has been the basis of our system, and, taking into consideration all the adverse factors with which it has had to contend, it may fairly be said to have served its purpose. Tempting prices, 1914 to 1922, caused a considerable pruning of the acreage involved, and that process continues at the present time despite the fact that the Landlord with a Home farm and/or farms in hand is reaping the benefit of war-time prices, and that both temporary and permanent lettings are on a much higher financial scale than pre-war. The big estate has served its turn and so far no alternative has emerged to take its place as, at the lowest, the provider of the raw material of the soil

to the man who wishes to farm but cannot afford to buy his holding. The last class, and the one that probably has its all at stake, is the owner-occupier, the ideal solution provided the individual can afford to own and to farm without having to mortgage his assets.

It is relevant at this stage to glance at the position with regard to purchase and mortgage of agricultural land. As to purchase, it has come to be assumed that a fair price as between a willing buyer and a willing seller can be taken as twenty-five years purchase of the annual net rental—that is the gross rental less standing charges and ten per cent. for repairs—and this assumption, rightly or wrongly, has become so universally accepted as to be regarded as unchallengeable. The corollary to this in respect of mortgage is that lenders have put out their money on mortgage upon agricultural land up to two-thirds of its value as ascertained by the twenty-five years formula. Despite this it is contended that both the twenty-five years purchase and the two-thirds mortgage assumptions are open to objection and challenge and may have to be considerably modified if agriculture is to be put upon a sound basis. Mining Royalties were derived from the product of the land, even if beneath instead of on top, and were liquidated at fifteen years purchase, and though it is true that in many cases the surface was still left to the owner, that was but as a shell from which the kernel had been extracted. Were the value of agricultural land to be taken as fifteen years purchase of the net rental and were all agricultural mortgages to be liquidated pro rata, and subsequently made illegal, a very different approach would be attained to the problem of a stable agriculture. Certain people would lose money—certain people in the war have lost their lives—and it is impossible to make omelettes without breaking eggs. All the money in the world,

and this country has not all the money in the world after this War, cannot assure the inhabitants of these islands against such threats of starvation as arose between 1914 and 1918 and again since 1939. Not even gold can be relied upon to stave off famine against which a prosperous and productive home agriculture is the only insurance, and that insurance can only be effected by the necessary financial adjustments.

It must be borne in mind that, apart from improvements relative to the soil itself, such as drainage, fences, and general rehabilitation, houses, both of farmer and farm worker, and buildings, are out of date and repair. Little or no use is made of electricity and not much of electric light. With the advent of the combined harvesterthresher and the tractor, the place of machinery becomes increasingly important. Every farm of any size ought to be equipped with a suitable garage and workshop; and the combine, to reap full benefit therefrom, requires a drying plant, in addition to a covered central rickyard, cattle courts and suitable housing accommodation for combines, tractors and all farm implements. Open-air milking with its saving of labour has proved satisfactory and will continue and probably increase; but because the actual cows are not housed it does not follow that neither buildings nor equipment are required. They are, and must be good-and well lighted-at that. A plant that will probably become increasingly popular and in demand is the dried grass plant. Were the twenty-five years purchase price to be taken for the average farm and then a deduction made for bringing houses and buildings up-to-date and supplying deficiencies, such deduction would go a long way to level up the difference between a purchase price of twenty-five years and fifteen, without considering such matters as drainage, farm roads, etc.

On the assumption that the country can be brought

to agree to put agriculture on a sound basis, is it desirable to have ownership as at present, or to make a definite change? To take the large estate first. No foreseeable system of the future can afford a non-resident landlord whose main interest in his acres is the sense of importance they give him and the opportunities for sport he is afforded thereby. Since 1939 thousands of farmers have been dispossessed of their farms because they were not farming sufficiently well; but no landlord has been dispossessed of his estate because he was not managing it sufficiently well. This may, of course, be due to the superior virtues of landlords, or it may be a case of leaving Ben Lomond where it stands. Many resident landlords, large and small, take an active interest in the management of their estates and in the working of the Home farms or other farms in hand, and are a valuable asset to their own countryside and to agriculture at large. Unfortunately, many estates are encumbered by mortgages and other fixed charges and, despite the fact that many are now private limited liability companies, Death Duties and Taxation, if continued on the existing levels, make the possibility of the continuation of this system, which incorporates the landlord-tenant farmer system, more than doubtful. Trusts and Companies holding agricultural land as an investment must face the prospect of providing the requisite equipment and of obtaining a somewhat lower rate of interest, or of selling their holdings at fifteen years purchase, provided that term be approved. There remains the large class of private individuals, of whom a certain number hold land as an investment; but the majority of whom are owneroccupiers. With regard to the former their lands are run on the landlord-tenant farmer system, and they want their interest on the capital involved, and are unlikely to be prepared for the expenditure necessary to bring their

possessions up to the requisite standard. The owner-occupier in the majority of cases has his all invested in his holding, and between 1922 and 1939 many, probably most, had a rough passage from the financial point of view, and have only survived by reason of their business acumen and practical ability. The enhanced prices of the War Years have benefited them and, if left in possession, they can be relied upon in their own interests and because their livelihood is dependent thereon to equip and maintain their farms to the required standard.

Briefly that is the ownership of the land position at present, and the question to be decided is, provided the country decides to take agriculture seriously and to equip the soil as it should be equipped, by whom is the land to be owned in the future? In deciding the question the problem will be simplified if the basis of present value be taken as fifteen years purchase of the net annual rent, because that would enable many would-be owner-occupiers to gratify their ambition and own the lands farmed, and, if the owner-occupier system were on a sufficient scale to form a predominance in ownership, would be the best solution. Such a class has, and would continue to have, the greatest stake in the general prosperity of the country to which its members would have to look for their livelihood. It would follow that the acreage of the resident landlord big estates would be sensibly reduced by sales to those of their tenants able and willing to purchase, and this would apply to all acreages beyond the ability of one owner to handle. In time this would lead to a system of owner-occupiers throughout.

The alternative is nationalisation, or complete State ownership of the land and that would doubtless entail nationalisation of some of the main branches of the industry, e.g. milk. It would mean complete Government Control with officials, forms, and red tape. Though

officials, good and bad, forms, and red tape be permanent, Governments change and policies with them, and the sense of continuity and security so essential to the well-being of agriculture would be conspicuous by its absence. Nationalisation of the land has, most unfortunately, come to be regarded as a political matter, urged by one party, opposed by another. In so far as it affects food supplies and safeguards against famine and starvation, it is a problem that vitally affects every adult in the kingdom, and which he or she should study to resolve individually and apart from any suggestion of political bias. If land nationalisation is the best system under which to obtain from the soil its products in most abundance it is right, otherwise it is wrong.

There is no analogy between this country and Russia, and it does not follow that a system that might suit the one would suit the other. Pre-revolution agriculture in Russia was backward and out of date; but she possessed vast acreages and large numbers of people habituated to country life and accustomed to laborious toil with small reward and few of the amenities of life. Superimposed on such a basis any organised and progressive system was bound to show improvement and to achieve some measure of success. It may be significant that Russia, like ourselves, has had to import large quantities of foodstuffs to eke out her own resources during the War and that her general standard of living is lower than ours.

Farming in these islands has many diverse branches and methods and a potentially valuable export trade in all classes of pedigreed stock, and is essentially an individualistic calling. It is too readily assumed that our own soil is incapable of supplying our own population with essential foodstuffs. It has never been afforded a fair chance to prove what it is capable of in this respect. Since the Industrial Revolution agriculture has been

ignored and allowed to go to the wall, and hectic activities when the country is in extremis such as those of 1914 to 1918 and again since 1939 afford no true test of its potentialities properly utilised over a period of years. It is possible to envisage this country being forced back upon its own resources from causes other than those of War. With regard to prices, the volume of Home Grown Food supplies is the most valuable counter and, it may be, the greatest asset. "The Land for the People" sounds well and is an attractive slogan; but land is no good unless equipped and worked to best advantage and, at this stage, to underpin agriculture by nationalisation of the land sounds easier than in the event it might prove and fails to commend itself as the most efficient means of assuring to the population the maximum return in the way of food supplies. What belongs to everybody belongs to nobody and it is too probable that the best crop nationalisation would produce would be one of officials.

To discard nationalisation does not imply the continuation of indifference and deterioration, nor the triumph of stagnation and laissez faire. The matter is far too serious for that, and definite action that will achieve results must be taken with as little delay as possible. When a business is in a bad way and unable to pay dividends or interest, the remedy is to reduce the capital, cut the losses, eliminate superfluities, and make a fresh start from the old foundations. So with agriculture a similar solution invites trial. Establish the principle of fifteen years purchase of lands and mortgages, and bring prices to their real economic level shorn of subsidies, vested interests, and unfettered by shibboleths. In this way the superfluous and foundered would be eliminated, and the work of rebuilding and equipping become the task of the virile and competent, whose own hope of satisfactory survival would be dependent upon their continued virility and competency. At present Cinderella is at the Ball and having an excellent time, but her joy is threatened by the ever quickening approach of the midnight chimes which she knows indicate her return to the barrenness of the kitchen ash-laden hearth, all the more desolate by contrast with the briefly tasted festivities of the moment. Prices are soaring to-day because they are (in the long run erroneously) based on profits realisable solely through subsidies and shortages, and wages and other expenses have risen with them. In his heart of hearts every agriculturalist believes that prices are bound to fall and profits with them as occurred after 1922, with the added handicaps of soil not in such good heart, of higher overhead charges due to increased wages and expenses, and of buildings and equipment out of date and repair.

Other important matters that require revision include Tenant Right Valuations and forestry. What is known as the unexhausted value of the husbandry and improvements of the outgoing tenant of a holding as indicated by the custom of the country and various Agricultural Holdings Acts is payable by the incoming tenant to the Landlord or outgoing tenant, or a combination of the two, and such value is ascertained by the system known as Tenant Right Valuation. Such Valuations vary in many respects, e.g. the payment of manure and labour thereon, or the payment of labour thereon only; differing from county to county and even from one parish to another. Another aspect is that of acclimatisation value in respect of sheep stocks. These valuations, sound enough in inception, have become unduly complex and, as at present conducted, are frequently an undue tax upon the pocket of the incoming tenant who, under the guise of unexhausted values, is called upon to part with cash that he will never see again in any guise. Doubtless there is a benefit to be derived from a properly constituted and acclimatised sheep stock and reasonable payment may be fair play as between outgoing and incoming tenants. But this acclimatisation value has become a fetish preventing would-be outgoing tenants leaving and farms benighted, and has been the cause of much financial loss. The art or science of forestry, which our careful forefathers practised with such assiduity, has fallen on ill days and is not practised as it should be. Such afforestation as has been done has been carried out under Government auspices, and by the majority of private owners it is neither understood nor practised.

If, for the sake of argument, it be granted that the decision rests between nationalisation and such a revised system of private ownership as suggested, the financial aspects of the two solutions fall to be taken into account. That for the whole country involves a costly, complex and complicated enquiry, some idea of the extent of which may be realised if one estate, one parish, or even one farm be taken as an example. Such examples so taken do, however, give a clear pointer. In a nutshell the cost of nationalisation would have to be borne by the country as a whole, the cost of the suggested fifteen years scheme would be borne by the agricultural community itself, and that such scheme is within the bounds of agriculture's financial resources properly applied is certain and not the least of its recommendations. Finance is a question of confidence. Provide the confidence and the required finance will be forthcoming. With regard to mortgages, it might be deemed advisable to devise a system of short term terminable mortgages to provide financial elasticity and to be solely devoted to permanent improvements, regarded as essential. Otherwise mortgages must be prohibited, as mortgaged land is like waterlogged land, and from the agriculturalists' profit point of view as deceptive. Far too many existing mortgages and charges upon the soil were raised for the benefit of persons and the exploitation of purposes far divorced from the toils and requirements of the land, and this must never be allowed to recur. "Keep your ain fish-guts to your ain seamaws." Too many mortgages on the land have been raised and used for the purposes of current spending which is akin to retaining half-a-dozen keepers in place of an estate bricklayer or carpenter.

There is the choice: laissez-faire, which is the short cut to famine, Nationalisation, or reformation on economic Nationalisation of the land has been made a plank in the platform of one of the political parties. This is unfortunate because, whatever the merits or demerits of such a policy may be, it needs dispassionate and unbiassed consideration from a wider view than that of any one Party. Nationalisation is State ownership, involving purchase of all land by the Government, which would then become the one and only landlord. This. so far as agricultural land is concerned, would eliminate the owner-occupier whose status would be changed to that of tenant-farmer. As George Moore wrote, the State and the family are for ever at war. The crux of the matter from the point of view of the General Public (who would have to pay) is whether or not such a system would bring about better cultivation and greater productivity of the soil at justifiable cost. It must be admitted that the hereditary landed estate has been, and is being, eliminated by taxation, and that a continuation of the present state of affairs can only result in lands being taken over by the State on account of lack of money to meet Death Duties, which fall the harder, the bigger and more valuable the estate. The usual practice of the

Inland Revenue Department in cases in which money to discharge Death Duties is not forthcoming is to register a land charge under the Land Charges Act 1925. This charge subsists against the land even if it changes hands, and its existence is usually so detrimental to the owner for the time being that, if at all possible, he is only too willing to pay up and free the land. Failing payment the State acquires ownership of the land charged. So that if present conditions are allowed to continue, the State will in due course become possessed of very large tracts of land without having actually to put down any money, and putative owners will forgo possession of estates because they are unable to find the money to discharge the Death Duties. In fact this is already happening, and is bound to continue to happen on a larger scale in the future. This procedure may be described as Nationalisation by infiltration and, carried to its logical conclusion, will eventually put the State in possession of all land except that held by Trusts and Corporations in perpetuity. The last to succumb would be the owner-occupiers, whose existence is the surest guarantee the Public have of the cultivation and productivity of the soil. But this taxation procedure, which has been continued by successive Governments for many years, is not considered rapid enough by the advocates of Nationalisation, and also tends to force upon the State ownership of the more barren and less valuable lands which, as is inevitable, are the first to be discarded by private owners. State owned land implies, for good or ill, State controlled and managed Agriculture under the supervision and care of State Officials with the red tape and adherence to precedents and forms inseparable to officialdom. The custom of the country, age old, and the laws of Nature would be cribbed, cabined, and confined by forms, formulas, and formalities, and the

most successful farmer would be the one who showed the least initiative and the most aptitude for completing forms in triplicate and quadruplicate as and when required.

The first men in the world were a gardener, a ploughman, and a grazier, and they were on an individualistic and not a corporate basis, and ever since the respective branches of agriculture which they inaugurated have progressed and flourished through the efficacious abilities and initiative of their successors. There have been in the past, as there are to-day, good and bad landlords, good and bad farmers, and good and bad workers; but no one of them, good or bad, is so because of any fault or failure of the soil, dependent as it is upon human agency for its cultivation. Would the soil be better cultivated and therefore more productive were the State to be the sole landlord, and what would be the cost? Were it possible to maintain that the soil would be better cultivated and at no greater cost under State ownership than under private ownership, it might be justifiable to sacrifice individualism and personal effort and to risk the evils of an absentee landlord holding the pursestrings and the creation of generations of rustic robots. State owned land postulates state financed agriculture, and that does not mean cheaper food to the people judging by the war years, wherein the State has taken far more of the admittedly high profits of the products of the soil than landlords, farmers, and labourers put together. Moreover, to take the case of the Post Office, so frequently held up as an example of the efficiency and value of a State controlled industry. The State in this case holds the monopoly of the essential and ever growing services of post, telegraph and telephone, and once upon a time indulged its customers with the penny post. That has gone long since, and the same applies to

reasonable telegraphic and telephonic charges, and there appears little chance of any reduction at present. Yet the logical justification of any services such as these should be not only their accessibility to the public but their cheapness to the public. In fact the real proof of the success of a State monopoly of such services would be that they were free to all. For such services to become ever more expensive is a strange commentary upon the benefits to the community of State ownership and control. It will no doubt be argued that increases in costs are due to the War and that otherwise they would not have occurred; but this argument cuts both ways, and demonstrates how great is the power of the State when in control of essential Services, and in need of money. The individual cannot bargain with the State, and this is the great objection to nationalisation of the land. The State would be in the position of an absentee landlord and would manage and control the land through officials, who would be subject to rules and regulations, and terrified of creating precedents, or making exceptions. These officials would require both practical knowledge and experience, and would be wanted in considerable numbers. Such officials are not in existence to-day, and where are they to come from, bearing in mind that they would take years to train and to acquire the requisite knowledge?

Nationalisation is an attempt to regiment the soil, and to control Nature, and is foredoomed to failure, because however much the State may juggle with the clock the sun pays no attention, and soil varies so much from field to field, parish to parish, and county to county that uniformity, so dear to the heart of officialdom, is an impossibility. The State would want to make the soil from the landlord's point of view a paying proposition, and would squeeze and crimp farmer and labourer to

that end. It is probable that most of the extraneous wealth, such as that obtained from the sale of land for building purposes, railways, waterways, and roads has been made and disposed of, and that more and more in the future will the value of the soil consist solely of the value of what is produced in the way of food. This means that the State would have to depend for interest on purchase price and costs of upkeep and supervision upon the price of produce, and this would involve a higher retail price for food. Therefore the ordinary citizen would not benefit; so far as he is concerned it would be simply a case of robbing Peter to pay Paul. The farmer would be far more tied down and doctrinated than he has ever been, and the labourer would have less chance of improving his position and becoming his own master than he has ever had. Furthermore, the State would be faced with the problem, as great as urgent, of re-equipment, for to-day houses, buildings and cottages are out of date and inadequate to serve the needs of an up-to-date agriculture. Apart from these, there is the matter of drainage and water supplies generally, matters in which local knowledge and experience are of the utmost value. The manner in which Government Departments have up to the present handled these matters (e.g. aerodromes), and the ignorance displayed of local conditions and failure to follow local guidance are a sorry recommendation of the ability of Officialdom to handle similar problems upon a national basis. Were the State to take over the lands of the country, and Officialdom entrusted with the responsibility of handling them, Ovid's lines on the charioteer aptly picture Officialdom's position:

[&]quot;Ipse pavet; nec qua commissas flectat habenas, Nec scit qua sit iter; nec, si sciat imperet illis." *

^{* &}quot;He himself is scared; nor does he know how to turn the reins entrusted to him, nor which way to take; nor, if he did know, could he control those horses."

On the other hand unimpeachable authorities affirm that present favourable conditions for agriculture will continue for the next five years, thereby affording ample time and opportunity to the farming community as a whole to get together and work out their own salvation. It must be recognised that all that counts to-day is the soil and its productive capacity, and that houses, buildings, and cottages are so out of date and inadequate as to be liabilities instead of assets. To the farmers contemplating purchase the only sound basis to consider is that of the value of the soil and, in regard to the further demands upon their financial resources, to add to the soil value the cost of re-equipment to modern and up-to-date standards. If the maximum price were fixed at fifteen years purchase of the nett rental—and, if land is nationalised, the State cannot pay more—the agricultural problem would be nearer a satisfactory solution than it has ever been, and the position as regards food supplies settled.

The best method of carrying through much needed agricultural reform and of ensuring the country's food supplies is to rely upon the owner-occupier and to back him to the utmost. A comprehensive scheme of Insurance with a Central Fund would provide finance, and keep the land clear of mortgage and debt, and would enable Agriculture to finance itself. The State already holds a large acreage of land, and is committed to considerable schemes of afforestation and would, therefore, have ample opportunity of demonstrating what can be done by means of State ownership and control, and could, and should, participate in the general scheme. Flocks and herds and routine cultivation of the soil have been developed and maintained by private enterprise despite public neglect and lack of support, and Agriculture, given a fair deal, is more likely to take the place it should hold in the future under private than public control.

CHAPTER 2

FARMERS AND FASHION

Such is the patriot's boast where'er we roam, His first, best country, ever is at home. And yet, perhaps, if countries we compare, And estimate the blessings which they share, Though patriots flatter, still shall wisdom find An equal portion dealt to all mankind.

GOLDSMITH.

There are many distinctions and differences to be observed in the practice of agriculture north and south of the Tweed, and in endeavouring to provide for future requirements these must be taken into account. The population of Scotland is less than an eighth of that of England, and, whilst the former may still be said to be on an agricultural basis, the latter is definitely not. Industries have permeated the English countryside until there are few tracts untouched, and the growth of cities and towns and their contingent ancillaries has absorbed and encroached upon many a formerly productive acre. In Scotland, apart from Glasgow and Clydeside, there is little to compare with the density of the industrial belts and congested human rookeries of England. This bulk of population and easier access thereto might be thought to confer an advantage upon the English producer; but in point of fact this is not the case for (in normal times) the Scottish producer makes a higher price of his products than his southern competitor. Moreover, during the Industrial Revolution there was neither the transfer of so large numbers of the population (pro rata) nor the acute distress and heavy losses of the English sixties and

seventies so far as agriculture was concerned. The bad times in England that wrecked agriculture were less felt and better weathered in Scotland so that northern agriculture is now in better heart, better manned and equipped. This must be qualified by making an exception, for the most part, of the Islands and Highlands; but their distresses and depopulation cannot wholly be attributed to the failure of agriculture, for the decline of the fishing industry in the case of the islands, and the drastic treatment meted out to the Highlands as the result of the rebellions of '15 and '45 were contributory causes, and it therefore seems reasonable to omit them, whilst recognising the importance and urgency of action for their reinstatement and recovery, in making a comparison between the agricultures of the two Countries.

A fundamental difference in the countrysides is the existence of the many village and hamlet communities in England for whom there exist no counterparts in Scotland. The tied house system as regards farm workers is common to both countries: but the English village, with its opportunities for obtaining free accommodation, is of value to the countryman, and helps to relieve the hardship entailed from time to time by the tied house system. The village also affords opportunity for sociability, recreation, and amusement, and the day-to-day activities of village life afford a welcome relief to the monotonous daily round of work. In Scotland the farmhouse and the cottar houses appertaining to the farm are more often than not situated in an isolated position and are forced, willy nilly, to exist as an isolated community. Scotland has the bothy system whereby one or more single men employed on a farm live in quarters known as the bothy, adjacent to either the farmhouse or steading (as the farm buildings are called), and "do" for themselves. The fortunate may

get a woman to come in and tidy up and cook for them, or they may get assistance from the farm-house in this respect; but nowadays most are left to their own resources. In England young and unmarried workers were boarded and fed in the farm-house—they lived in—but from obvious causes this is practically in abeyance at the present time. By and large the North Country grieve undertakes more responsibility than his southern counterpart—the bailiff or foreman—and is far more in evidence; indeed he may be compared to the Regimental Sergeant Major, whose value to his regiment is equalled by the grieve's to the farm. Acre for acre there is more labour employed on the Scottish arable and mixed farms than in the south, excepting the Fen Country, and making the comparison between ordinary farms.

One of the main arguments against nationalisation is the diversity of purposes for which the soil is used from fruit in the Evesham Vale to raspberries in the Blairgowrie District, cherries and hops in Kent to bees in Highland Heather—and a comparison as regards labour would be of too complicated a nature, not only as regards ordinary farms but also in the case of what may be called specialistic ventures. In the northern arable districts large numbers of Irish workers, male and female, come over each year for harvest and the potato lifting. They are accommodated about the steadings, more or less fend for themselves, make good money, and have come to be regarded as an essential part of the harvest requirements. The late Mr. McLaren of Fairnington had one field of, from memory, some 150 acres, and on an occasion pre-war of its all being in wheat there were over one hundred workers engaged in lifting and stacking the crop all in the same field.

There is, in normal times, less regular continuity of service in Scotland than in England owing to the fact that labour is engaged either in Spring or Autumn on a yearly basis and contract leaving master and man free at the expiration of the term. The result is that for any reason, or for no reason, changes are frequent, even though the man for the most part will continue to work in the same category throughout his career. An astute Lothians farmer remarked that the system probably helped in its way to keep farm work up to the mark and to encourage initiative, for by the time a man was fiveand-thirty years of age, he had probably worked on half-a-dozen, or a dozen, different farms, had seen many different kinds of operations, learnt the value of various methods, and become as a result so knowledgeable that nothing nonplussed him, and there was nothing he was afraid to tackle. As against that, the man married twenty years and with nineteen different places to his credit may have put an undue tax upon his family and himself in his thirst for change. Colloquially these changes are known as flittings.

There may be little to choose between the best of the North and the best of the South: but on balance the North has it. The Scots ploughman and stockman are as good as the most exacting could wish, and the Scots shepherd, Highland or Lowland, far and near, without equal the world over. By the roadside in a quiet part of the Border Country the wayfarer's attention is drawn to a handsome memorial plaque to the memory of Telford, the pioneer builder of bridges. Within sight are, indeed, good examples of Telford's art and genius, and his birthplace is in the vicinity. The setting is sublime and the memorial such a one as the most notable might envy; but what, it is permissible to suggest, will linger in the chance wayfarer's mind, after woodlands, fields, river, and bridges have faded therefrom, are the words on the plaque referring to Telford's father, who

is described as a "blameless shepherd." There is no higher calling, as there is no better adjective, and, for all his art and genius, these words somehow seem to transfer the honour of the memorial from the son to the father. There are still many blameless shepherds.

The big graziers of the Midlands, and of Leicestershire par excellence, may be said to have formed an aristocracy of their own. They farmed the rich grass lands reputed capable of fattening a bullock and a sheep to the acre in the summer season, and farmed them well, for the manure was carefully spread or collected whilst the lands were stocked during the summer, and rested, harrowed, and rolled during the Winter. They were substantial men with capital, good supporters of foxhunting (before fox-hunting as a natural sport was ruined by the advent of the motor car and horse-box and large crowds of adventitious strangers who knew not the why or wherefore of drawing covert upwind or downwind) good judges of stock, and shrewd bargainers. Many of them sent cattle to be wintered in the Eastern plough countries where for the agreed consumption of so much cake per head the cattle were yarded, attended, and fed as much straw and as many roots as they could eat. The arable farmer got his roots and straw enriched with cake converted into the manure so essential to him, and the grazier got his cattle well-wintered and forward to hand when he wanted them for grass in the Spring. The cattle they fattened were Lincolnshire Reds, Shorthorns, Herefords, Devons, and Welsh blacks with a certain number of Aberdeen Angus, and probably their best friend from the profit point of view was the three or four year old Welsh runt. Their profits fluctuated and throughout they were under the handicap of paying more per lb. for the raw material than they received for the finished article. As summer lengthened more and

more grass-fed animals came into the market and prices generally fell; but the advent of the early maturity craze, the smaller beast, and the smaller joint finally made the game not worth the candle. One of the last of the big graziers had to make £20,000 a year before he earned anything for himself, and to work hard and skilfully at that.

Apart from the abnormal profits made by farmers between 1914 and 1922, money has been made in many different ways and in unlikely places. A young Scotsman came south to the Midlands as shepherd to his uncle, already settled there, and in due course started farming for himself, taking with him a fellow worker, a Lincolnshire bred man, who understood the intricacies of arable and who as friend and servant proved a sheet anchor. The Lincolnshire man's wife cut the farmer's hair and made his shirts for him at prices that Arkwright and Belfast would have scorned, and before his death the grateful master put the man into a farm of his own. which he could well afford to do, having achieved a fortune of some £70,000. Another successful Midlands venture was founded on the dairy herd and the sale of milk, and the farmer who started in a small way on a mixed farm as a tenant eventually became an owneroccupier, and, as such, purchased several farms, carrying his agricultural activities as far afield as Norfolk. Midlands were also favoured by another successful man who, starting as a butcher, eventually farmed many acres in the Sandringham district as well as in his native county.

A tenant farmer of the old-fashioned type farmed some 300 acres of heavy clay (four horse) land on the Leicestershire-Warwickshire borders near Nuneaton. He, or rather his wife, with the aid of two dairymaids, made Leicestershire cheese, the proceeds paying the rent of the farm and the wages bill. Most of his stock were pedigreed-Shorthorn herd, Shire horses, a breeding flock of Shropshire sheep, and pigs which he bred, reared and fed. He also bred a Shire foal or two each year, and reared his calves. His reasoning as regards pedigreed stock was that they cost no more to keep than nonpedigreed, and, if a good animal were bred, the extra price obtained by its being in the book, meant a welcome addition to the bank balance. Practice proved the soundness of his theory for he sold foals from time to time at a hundred guineas or more apiece, and the American boom brought him high prices for such of his Shorthorns as he saw fit to dispose of. His varied activities and interests indicate the advantages of making cheese as against selling milk—with cheese there is the whey, so many sidelines, and dairy cattle dry and costing little to winter, whereas milk is all absorbing and all goes off the farm. For all that, the old people said that for successful cheesemaking the farmer should sleep with the dairymaid, which meant that the farmer's wife should make the cheese. In the course of summer as the number of heavy cheeses mounted up and the days became hot, they had to be turned twice daily, no light job for the dairymaids with their other work to do. No fit work for any woman, said the old people again, and milk, in combination with foreign competition, has driven out cheesemaking, much to the detriment of the standard of farming.

The farmer was out by five o'clock in the morning all the year round, at which hour milking started in the sheds, and grooming in the carthorse stables, whence at six o'clock the teams went forth to their daily labours. The great day in the year was the visit to London to the Shire Horse Show which he never missed and even on that occasion he took his turn at the five o'clock milking,

though lateness of return might make him miss the evening one. At the local shows he was in demand as a judge of Shires, and his fearless independence on occasion caused embarassment to others less bold. One such occasion occurred at a local show, when he and his fellow-judge were called to decide upon the merits of a class of shire matrons amongst whom was a mare twice champion in London and unbeaten in the Show Ring, After the parade and stationary inspection the two judges met to confer. "Well," said his fellow judge, "we shall have no difficulty in placing the first here." "Stop a bit," was the reply, "if it's the London Champion you mean, have you examined her legs?" "Oh, well, she's good enough for London, and we can't put her down here." "She's got a big sidebone on her off-fore." "Maybe, but she's London Champion, for all that." The discussion continued, neither judge being willing to give way, the one for fear of consequences, the other because he knew he was right, and that his fellow judge in his heart of hearts also knew he was right. Finally, to end the impasse, it was agreed to call in the Show's Veterinary Surgeon, and take his opinion. That worthy duly made his examination and then met the two judges. "Well?" they queried. "Well," said the Veterinary Surgeon, "it's as it may be, but she was passed in London and it is not for me to spin her here." "Has she a side-bone on her off fore?" demanded fearless Independence. "She was passed in London, and you can't expect me to put my opinion against theirs." "Look here," was the rejoinder, "if you were sent to my farm to pass one of mine, and she'd got what London Champion has got, should you pass her or not?" "I should not." replied the Veterinary Surgeon with decision. "Then," was the triumphant retort, "London Champion wins nothing here." Reluctantly his fellow

judge concurred, the discarded Champion passed unnoticed for the first time in her Show career, and was never shown again. Magna est veritas et praevalebat.

The sturdy veoman was a stickler for sound feet and "My furthest arable field is four miles from the rickyard and stiff four horse clay, and, if they haven't sound feet and legs what use would they be to and fro' a day's ploughing on that?" "Never look over the hedge to see what your neighbour's doing," was another of his maxims, but it is only fair to add that he always had a remarkably up-to-date and shrewd knowledge of what his neighbour might be about. "Beans well manured are the best preparation for wheat there is," was another, and this he practised as well as preached, and with success. He was a splendid arable farmer, and at the local Red Gate Inn on the Watling Street where the farm hands gathered on occasion, and when opinion upon the farming abilities of their respective Masters waxed heated and faction strong, his men could always play the ace of trumps with the simple statement: "Our Master forks for twitch." So he did, and it was a sight to see half-a-dozen men with four-tined forks quartering a large arable field with the same care as if it had been a garden of a few roods.

He farmed through the bad times; started on some £5,000, but left a solid £25,000, when he died at a good old age. In his youth he served his apprenticeship with a big London firm of wholesale grocers, and that early training gave him business methods and the sense of figures. He feared no one, never told a lie in his life, and never owed an account. He had setbacks; abortion broke out in his Dairy Herd when, regardless of loss, he fattened the lot, sold out to the butcher, and bought in anew. He did not have abortion a second time, and he always gave way to the old country superstition of

running a goat or two with his dairy cows as a precaution against the dread scourge. The goat superstition dies hard, if indeed it be dead. Some say it is the smell of the goat that is the charm, others that goats eat a herb that induces abortion if eaten by the cows. Practical experience invalidates belief in either case in any real and permanent safeguard from this source, and as with cows so with horses for whom goats are also supposed to act as guardian angels.

The Red Gate Inn stands in the Watling Street, and was reputed to have been a resort of Dick Turpin. The sign was a Red Gate on a swing with the legend:

"This Gate hangs well and hinders none, Refresh and pay and travel on."

Nowadays the inn is styled The Royal Red Gate, and it has so far successfully survived absorption by the adjacent aerodrome; but the farm just mentioned and several adjoining farms have been absorbed, and so look unlikely to produce beans or lucerne, let alone cheese, for some time to come.

Chance, or an unexpected turn of Fortune's wheel, brought success to two Gloucestershire farmers who left the heavy ploughlands of Northumberland to take a large run-to-ruin farm on the roof of the Cotswolds. During the first spring at the Gloucestershire farm, they went early one morning to see the teams at work in a big arable field a short distance from the house. A short inspection convinced both that the state of the field was so bad it was useless to continue ploughing with any idea of taking a crop, so the teams were stopped and sent to other work, and the brothers returned home to a ten o'clock bite. Whilst thus engaged they glanced at the contents of an agricultural paper, wherein was an advertisement of a quantity of white clover seed for sale

by a Kelso firm. The same idea came to both simultaneously, so they always declared, and they agreed that seed was the sole chance left to them of getting a crop that season from the big arable field. They telegraphed the Kelso firm, to whom they were known as old customers, to send on the clover seed, of which there was no surplus, immediately, and this the Kelso firm, although they had other would-be purchasers and could have sold nearer home, did. The seed was sown broadcast and harrowed in and the field left to take its chance. The result was a crop of white clover altogether beyond the most sanguine expectations. It was well-harvested, thrashed out, and sold at a remunerative price. In fact so gratifying were the financial results and so obvious did the fact that they had found a crop their out-of-heart land could grow at a profit that they concentrated upon it. Wild white clover boomed to such an extent that on one occasion the brothers sent two farm wagons loaded with seed to the local station and received £3,000 a wagon for the contents, at the rate of twenty shillings per lb. of seed. They bought the original farm and a couple of others, putting all in order and farming according to their own system. They put all the land down to grass, bred and fed sheep and cattle and prospered exceedingly. They had their battles to fight, for their white-faced lambs, the result of a Border-Leicester-Cheviot Cross, were unpopular at the start in the local markets, at any rate for a season. They sent the lambs and cast ewes to Doncaster in Yorkshire whereby the selling prices were bettered by over twenty shillings per head. In due course local prejudice was overcome and the character and excellence of their stock was recognised and appreciated in the local markets. They were as hard working as shrewd and knowledgeable, early risers, fond of a blood horse, and capable stockmen. For years during the lambing season one of them lived and slept in a movable wooden shepherd's hut, and had all his meals brought to him. For the propagation and improvement of the white clover they found bees an invaluable, not to say indispensable, aid, and one brother became President of the Gloucestershire Beekeepers' Association and gave free pasturage to as many hives as he could accommodate, greatly, doubtless, to the benefit of his seed. The Beekeepers used to say that for every shilling the bees yielded their legitimate owners in honey, they put a pound into the brothers' pockets by way of increased quantity and quality of clover. Both have passed on, but a son still carries on the family traditions on the family lands, though times, and also his own inclination, have turned him from pasture to arable.

Another Gloucestershire farmer who successfully defied adversity, farmed more to the South, and, as in the former case, his success was originally founded on an unpropitious failure. He had taken his fat cattle to London and met with a bad, very bad, trade and was in the depths of despair when he chanced to meet the biggest London horse dealer of the day, with whom he was acquainted, and with whom he had done a certain amount of business in the past. The sad tale of the cattle was told and heard sympathetically by the dealer. who then suggested that the victim lived in the midst of a hunting country, had sold a few hunters, and might sell more. The dealer's stables were full of hunters, he could have his pick of a dozen, take them home and pav for them when he had resold them. The farmer liked the proposition, he had had enough of fat cattle and did not see how hunters could be worse, so assented and proceeded to make his selection. Halfway through, and the price of each hunter being fixed before the farmer agreed to take him, "Hold hard," said the dealer,

"you're choosing all the best." "Leave me alone," was the rejoinder, "you want your money, don't you? No good me choosing the worst." The transaction turned out satisfactorily for both parties and led to the establishment of a successful hunter business, though, as a true farmer he never lost his interest in, nor his grip of, his farm and its varying interests. He had a keen sense of humour and a shrewd wit. "You're an honest man," exclaimed a satisfied lady who had just concluded a transaction with him, on one occasion. "H'm, not honest, not honest, honestish," was the somewhat unexpected rejoinder. His landlord and near neighbour was the late Sir Michael Hicks-Beach, who frequently visited him on a Sunday for a talk and look round. On one such occasion Sir Michael brought with him the late Earl Balfour, then Mr. A. J. Balfour, whom, either from inadvertence or because he thought it was unnecessary, he neglected to introduce to his host. Mr. Balfour walked up to the fireplace over which hung a full length portrait of the then Duke of Beaufort, and, gazing at the portrait, remarked, half to himself and half to his company: "Dear me, what a wasted life." "Wasted life." retorted the farmer indignantly; "you talk like one of those dreamy folk who think there's nothing more active in life than a game of golf. How can a man's life be wasted who looks after his estates and hunts six days a week?" "Tut, tut," remonstrated Sir Michael, "you don't know whom you are talking to. That's Mr. Balfour." "Ought to have known, of course," replied the farmer, shaking his distinguished guest warmly by the hand, and with a disarming smile, "Ought to have known, but then, you're a bachelor and that's worse." He died a comparatively young man, and on his last Christmas Day on earth, when he knew he was dying, bade them bring him a glass of champagne so that he

could pledge a Merry Christmas to them all. They were afraid to give him the neat wine, so diluted it with water without letting him see, and he was handed the glass. "A Merry Christmas," said he, and drank, adding as he handed the glass back: "And you needn't think I don't know you've put water to it."

The Napoleon of Hunter Dealers, the late John Henry Stokes, of Great Bowden, Market Harborough, farmed all his life the rich feeding pastures around him, and was as good a judge of a bullock and his value as he was of a hunter, and he could tell more of the qualities and defects of the latter by watching him ridden for five minutes around and about him than ninety-nine people out of a hundred were capable of doing in an extended ride of as many hours. For years the cattle he fattened were sold by auction on his own premises at an annual sale, and he always made his own estimate of what they would make beforehand, and always, as sale results proved, with extraordinary accuracy. He started with one horse but his judgment and business acumen brought him success, and for years his hunters were outstanding in Show Yard and Hunting Field, and he had a big and wide connection. There was somewhat of the banking business about it, and his patience must have been taxed at times as the following story shows. A friend, walking round his stables one morning and chaffing him on the profits he must make, was advised to wait a bit. In due course Stokes had three chestnut blood hunters out of their boxes and shewn in hand. "What do you think of them?" he asked, after his friend had inspected them, individually. "Good sorts enough," came the reply, "but they have done a lot of hard work, and show more wear than yours generally do." "Yes, I sold them over a year ago, and ten days past wrote to the buyer and asked him if he would send me the money. He wrote back that they did not quite suit him and he was sending them back, and there they are, and then you talk about profits." It is only fair to assume that the buyer in that particular case was a good customer and, if he was not profitable on that occasion, was so on others. However, there is no doubt that, if he made high prices, he supplied a grand type of hunter, and that when he knew his customer he was liberal in the time he allowed for payment.

A worthy representative of an old family still farms at Aldsworth in Gloucestershire. Distinguished as one of the soundest judges of Shorthorns in the world, Mr. W. Garne maintains a large herd of Shorthorns, one of the last pure-bred flocks of the old breed of Cotswold Sheep, and old English Game fowls. His Pve family of Shorthorns have been in an unbroken line of succession in the herd of their origin to the present day, a record believed unique since the dispersal by auction of Mr. Bruce's Heatherwick Herd in 1038. The Heatherwick Bellas claimed a similar distinction and moreover were bred throughout on the same farm. The Pve family was and is older than that of the Bellas, and has continuously been in the hands of the Garnes, though not always on the same farm, and their members have well maintained the qualities of character, constitution, colour, and wealth of flesh to which the Garnes have for generations attached so much importance. Mr. Garne has remained loval to the old breed of Cotswold sheep, big, docile and of great constitution. Rams from his flock meet a ready sale in the markets of Norwich and Ipswich and are used in lands beyond the Forth by more than one Scottish flockmaster, and wherever they have gone, have proved their value for crossing purposes. Now-a-days cock fighting is illegal and Mr. Garne's old English Game must content themselves with peaceful avocations; but

there is no doubt their ancestors held their own in the pit and, if similar opportunities are denied their descendants, the latter continue to add a touch of colour and distinction to the Aldsworth domains. As in the judgment of stock, Mr. Garne can form and, once formed, adhere to his own opinion, so in his cultivation of his native soil has he adhered to the best of the old traditions, and neither good times nor bad have shaken his faith, or changed his practice. With his great heart, quiet determination, and cool, well-balanced judgment he is a worthy and live embodiment of the best type of the old School, and fond, when opportunity occurs (very seldom these days alas!) of a day's fox-hunting. Report hath it, that in his father's time, after a particularly satisfactory deal, the old man asked his son whether he should invest the proceeds, or fill up the cellar with port, and that the son, with a prophetic vision of the difficult times ahead, elected for port on the grounds that if they did not get the cellar stocked then he would never be in a position to stock it.

Within a mile or so of the stone set up by the Watling Street Road to mark the centre of England, though now-a-days the correctness of this is disputed, and the real centre is said to be some distance away, stands as good a house and well-equipped a homestead, in the midst of lands as well-farmed as can be found anywhere. There Mr. John Stanhope lives and farms the lands his father farmed before him and has his own son in a large farm some parishes away. Though Mr. Stanhope has discarded the Dairy Herd which his father established, there are few farming activities in which he does not indulge, and, as owner-occupier of the most of his acres and tenant for the balance, he is in a big way of business. Born and bred to the game, he is blessed with great knowledge, energy and decision coupled with initiative

and a flair for business. He has farmed through good times and bad and faced both with the same imperturbability and has consistently farmed his lands honestly and well. Whether the stone at High Cross mark the real centre of England or not, it is near enough to justify the hope that the standard of husbandry set by Mr. Stanhope may radiate and circulate till it reaches the farthest confines of the country. For the rest, as a Leicestershire man born and bred should be, he is a good supporter of fox-hunting.

Pre-war a striking contrast to the productivity of the centre of England's soil capacity and skill in good husbandry was provided by an inspection of the shop (and a very good shop within a few miles of High Cross, kept by descendants of the same family who founded it in times past) whose well-stocked shelves offered a variety of tempting wares, Danish bacon, Danish butter, Swiss milk, American cheese (and there was a prize-making Leicestershire Cheese farm almost within hail), a selection from Heinz' 57 Varieties, bread made from imported wheat, and even a jar or two of foreign honey. In fact a purchaser could satisfy most of his needs provided he were satisfied with the imported article, and did not demand any of the products of the soil of the parish they were not stocked. Within sight lies that great industrial belt which runs almost uninterruptedly from the rich city of Leicester via Nuneaton and Coventry to Birmingham, the city of Joseph Chamberlain with his Tariff Reform, and his equal-sized loaves, whether baked under Free Trade or his proposed system. The old agricultural interests hailed Mr. Chamberlain as a possible saviour; but the cries of "Dearer Food" and "Hands off the Food of the People" extinguished their hopes. Birmingham might and indeed did, follow their Joe; but not so the rest. The manufacturers, the tradesmen, and

the artisans recked little of disaster and decay in the countryside adjacent to them so long as Exports flourished and money was plentiful when wanted. The War of 1914-18 and England within three weeks of famine when German U-Boats took their toll of imported foodstuffs should have taught the dwellers in city and town the lesson. But the crisis passed and by 1922 any food bar Home-grown was the order of the day again. Truly it is the folly of the world which constantly confounds its After this war it is never to be allowed to happen again, they say; the Devil was never more determined upon remaining monk. Alas and alack, that he may not wholly be trusted, but he has cast off cowl and gown, when he thought it suited him, so oft-times before. How can home agriculture survive if at its heart and with rich markets to hand its products are ignored?

Another farmer, the descendant of a family which has always farmed, born and bred on the land, and with valuable foreign experience in his youth to aid him, found the farming of the familiar acres so tough a proposition that he turned to literature, and the success of his Farmer's Glory opened the way to Mr. A. G. Street to further literary and broadcasting activities. He continued to farm meanwhile, if not as he would, at any rate in manner satisfactory enough to enable him to revert, not, it is permissible to suggest, unwillingly, when the advent of War and the needs of the Country required it, to his first love. Farmer's Glory was read with zest by townsman and countryman alike but though it was written from actual experience and the moral of the story was clear as daylight, the obvious remedy was ignored, and Mr. Street was left to open-air milking and continued literary work, whilst his skill as ploughman and heart-whole love for the soil were allowed to take care of themselves as best they might. There is plenty of talent and initiative in the country; the pity is that under stress and force of adverse circumstances it is too often either diverted from natural channels or overwhelmed and lost.

The four-course rotation system of farming in England was initiated by Coke of Holkham as a sheet anchor for preserving the fertility and ensuring the cleanliness of arable The Norfolk rotation was roots, barley, seeds, and wheat, and Coke's precept and example spread the system throughout the Kingdom, though in modified or altered form to meet the specific requirements of different Generally speaking, it was extended to a five and six course rotation, the latter notably in Scotland, and the actual crops sown varied from the Norfolk formula, though in no case was the growing of more than two white straw crops consecutively permitted, and the latter practice was probably induced by the desire to grow as many cash crops as possible. The tendency has always been to lengthen the rotation, either by lengthening the period under grass or seeds, and by the introduction of another type of crop. The English Fen Country, practically all arable, is in a class by itself. The soil is rich and it has been managed and farmed by those who know their business inside out and who have not tolerated slipshod methods nor slovenliness, and have been quick to exploit any new crop or method that was favourable to them, and the result is a striking example of high-class and intensive husbandry. In England open-air milking, introduced by Mr. Hozier, has spread and will probably continue to do so, for the saving in labour is obvious. Implements have been improved and the tractor and combined harvester-thresher are used in ever increasing numbers, which would probably have been greater now had they been more readily obtainable. Despite all this in most districts the old system and methods are still practised, and not even the War itself has been able to

produce any such improvements of lasting value as were provided by the introduction of the turnip crop and the drill. Under the urge of necessity the growing of wheat wherever and whenever possible and the break up for tillage of pasture lands, good, bad, and indifferent, must have on balance taken a great deal from the fertility of the soil, and for this the future will have to pay.

Scotland's agriculture is based on stock-raising, breeding, and fattening, and her extensive flocks, herds, and studs have established a world-wide reputation, and the maintenance of them is dovetailed into the arable system which owes its productivity to the growing of potatoes, dung made from the cattle fattened in winter in the courts, and the judicious use of young grass as a restful restorative. There is much mountainous and hilly ground as sparsely stocked as populated; but there is also much fertile and well-farmed land from the Borders, through the Lothians, Fife, the Carse of Gowrie, Angus to Aberdeenshire, the Black Isle, and a favoured stretch on the east coast between the Moray and Dornoch Firths. This is ideal farming country, predominantly arable, for the most part in large farms well managed by shrewd and substantial men with a large amount of capital at stake, and definitely in farming as a business. Taken all in all, this is the best farming in these Islands for there is, pro rata, a greater head of Stock reared and fattened in conjunction with the amount of arable than in the highly cultivated English Fen country and, though the crops in the latter may average more to the acre, the northern land is more durable and there is less chance of its wearing out. The position of Scotland as an agricultural entity is a sound one and as favourable, if consolidated and conserved, as that of any other country in the World. She can feed her own population and export produce elsewhere, and in England she possesses a

favourable and responsive market at her own threshold. Her fishing industry could be revivified and developed for she possesses remarkable reserves in sea, loch, and river for a large and continuous trade. Her natural resources are so great and durable, suitably managed and utilised, and so self-evident that it would be disastrous for her future well-being were she, as so many other countries have done, to fail to put first things first and to concentrate upon her greatest and most vital industry before all else. Factories, trades, and other industries may be important and lead, or seem to lead, to wealth and a high standard of living; but let the old fable of the dog and the bone be heeded; in Christopher Smart's version:

"The churl that wants another's fare
Deserves at least to lose his share.
As through the stream a Dog conveyed
A piece of meat, he spied his shade
In the clear mirror of the flood,
And thinking it was flesh and blood,
Snapped to deprive him of the treat;
But mark the glutton's self-defeat,
Missed both another's and his own,
Both shade and substance, beef and bone."

Where is the wealth of Europe and these Islands to-day, and upon what do the peoples depend for existence? Is not the answer to this question the Soil, and its produce? If so, Scotland has everything to hope and nothing to fear.

CHAPTER 3

THE SHEET ANCHORS OF GOOD HUSBANDRY

Is there no braver work than war? You who think lightly of the drudge, Take thought of what he drudges for: Love of the land, the labour's sake, Love of a woman, and the store Beneath her heart, of his own make.

MAURICE HEWLETT (The Song of the Plow).

Down the ages the wage earner has worked harder and gained less than any other from the soil to which he owes nourishment and virtue; but from which the wealth he gains goes to enrich others. He lives with Nature and must conform to her inexorable laws lest his work be in vain and his greatest efforts fruitless. So he ponders sun, moon, stars, and weather, says little, strives a lot, and is satisfied when the results achieved approve his wisdom and attest his craftsmanship. He has always had to live hard as well as work hard, and to be satisfied with the bare necessities of life, or as many as he could get, and to ignore its luxuries. He has had his compensations in some ways, for, if his money wages have been low, he has enjoyed such perquisites as came his way, even as the Ox whom Scripture recommends to be unmuzzled when treading out the corn, though even his perquisites have always been jealously watched, and woe to him when he has tried to exceed the established order. His wages have recently been brought to a level somewhere commensurate with those paid to other workers; against this the purchasing value of money has fallen, admittedly for other wage earners as well as farm workers, and so the level remains. But, in addition, the farm workers' perquisites

have dwindled, and modern methods give the regular worker less opportunity than of yore to augment his normal earnings by piecework. Up and down the country his most urgent and crying need is better and more up-todate housing accommodation, for he has to work in all weathers all the year round, yet is more inadequately housed than any other class. The country cottage may be picturesque, but in the main it is destitute of electricity or gas, bathroom, or any room, or even cupboard, in which wet clothes and boots can be properly and quickly dried; and how great a handicap the lack of adequate drying facilities is, anyone with a scanty wardrobe who has ever spent a day outdoors in pouring rain will realise. Sanitary arrangements are primitive, laundry facilities negligible. and even gardens in all too many instances poor and inadequate. Little sympathy and less insight have been bestowed upon the worker's comfort and health so far as housing amenities are concerned, and in many respects he is worse off than the stock upon whom it is part of his labours to attend. The active and open-air life he leads is responsible for the measure of good health which he enjoys, and it must, alas! be added that many suffer acutely from rheumatism in the prime of life and are martyrs thereto in old age. Mere money is not, and never has been, the main interest or objective in life of the worker, born and bred to the soil, and enriched with the lore and ever changing variety of the countryside. Love of wife and children, of the work upon which he is employed, of Nature, and of the land, bind the true wage earner more firmly to soil and toil than any monetary rewards, and this will always be the case. He may lack the sense of real security and be anxious as to his fate in old age; but for some time now he has suffered little from unemployment, strikes are unknown, and he is remarkably free from jealousy or envy. Maybe caution and a dislike of mere verbiage are the keynotes of his character as exemplified by such proverbs as "Never count your chickens before they are hatched," and "There's many a little bird sings before breakfast the cat eats ere sunset."

He has had his champions and advocates, and History teaches that once his stolid stay is eliminated from any country, that country is doomed so far as future greatness is concerned. Sir Walter Scott who, according to Carlyle, prostituted his talents in the will-o'-the-wisp pursuit of adding barren acre to barren acre, loved him and understood him.

"When the tired ploughman, dry and warm, Hears, half-asleep, the rising storm Hurling the hail, and sleeting rain, Against the casement's tinkling pane: The sounds that drive wild deer and fox To shelter in the brake and rocks, Are warnings which the shepherd ask To dismal and to dangerous task."

Rudyard Kipling versified his grip of the land from the days of the Romans to his own, and yielded pride of place to him in any operation concerning the soil.

"His dead are in the churchyard—thirty generations laid. Their names were old in history when Domesday book was made; And the passion and the piety and prowess of his line Have seeded, rooted, fruited in some land the Law calls mine."

His simple home life inspired the genius of Robert Burns to one of the best of his poems, his Cottar's Saturday Night:

"O Scotia; my dear, my native soil,
For whom my warmest wish to Heaven is sent,
Long may thy hardy sons of rustic toil
Be blest with health, and peace, and sweet content.
And, O, may Heaven their simple lives prevent
From luxury's contagion, weak and vile.
Then, howe'er crowns and coronets be rent,
A virtuous populace may rise the while
And stand a wall of fire around their much-lov'd Isle."

whilst Maurice Hewlett in *The Song of the Plow*, told in rhyme the tale of the English rustic from the time of the Conquest.

There have been many others; but though most have moralised upon his wrongs, none have succeeded in righting them. So the indispensable adjunct to the soil and the most valuable human asset to the Country has continued to languish and decrease until now-a-days, despite tractors and so forth, there are not enough skilled agricultural workers to cultivate and sow the land and far too few unaided to garner the harvest. The worst feature of the case is that this leakage of man-power from agriculture continues and shows no sign of ceasing, with the result that not a few of the one-time skilled avocations either have died out or are dying out, that the skilled men left are growing older, and that younger ones are not coming forward to supply their places when, as in course of time they must, they fall out. Apart from the superior attractions of town and city trades and crafts and ways of life to account for this continuous and continued leakage, there is a loss of joy and gaiety in the countryside itself. Many old-time Fairs which furnished occasion for holiday and revel have died out, and gone for the most part are the entertainment and jollification of Sheep Shearings and Harvest Suppers, together with the songs and festivities of the Maypole, and there is nothing in their place. Country churches are but illattended and the practice, which has grown up in recent times of amalgamating two or more country parishes under one clergyman, justified by sparseness of population, is an added handicap to a lone parish's social life. Maybe 'twill never be merry in country again till the Fairies come back, and parsons regain their ability to sing and to dance, to say nothing of conjuring. village smithy and its smith, and their counterparts, the

wood-shed and the carpenter, still linger on the stage. The former shoes fewer horses than of yore; but provided he is a capable mechanic, as so many are, makes up for this loss by increased work on tractors and other modern implements. As regards the carpenter, the competition of large firms with their lower prices has made his continued existence a somewhat desperate struggle, dependent for the most part upon repair work and odd jobs, for there were few village-made wagons and carts of local and distinctive pattern ordered even in pre-war days. The country baker continues. and pre-war supplied his country customers with loaves made from imported wheat, oblivious of the fact that by so doing he was cutting his own throat together with theirs. Almost extinct is the village cobbler, though there were sound judges of good leather and capable tackmen amongst their number.

The butcher is (or was pre-war) now a purveyor of meat, chiefly foreign, and visits his customers by motor van. Pre-war the wage earner consumed more meat than his forebears though he had caught the townsman's distaste for fat, and lost his own for fat boiled bacon, a former mainstay. Few things in the countryside have changed more than the fashions, if that be the correct word, for food. No more do people relish the flavour of a four year old ham, nor savour a three weeks' hung leg of wether mutton served with red currant jelly. Four year old wethers are as obsolete as the old-fashioned farmhouse kitchen with the wooden racks overhead loaded with home-cured hams and sides of bacon which. having ripened with age to mellow richness, played so large a part in the economy and hospitality of the household. Whoso has not tasted such viands can have no idea of the delicacy of flavour and the sustenance derivable therefrom, far superior to the choicest morsel of veal, lamb, or porklet. Indeed the taste for immature flesh and the small joint, and, on the producer's part, the desire for quick profit and turnover, have combined to befog all concerned as to the true merits of the case. The war effort has comprised concentration upon weight. which is only attainable by maturity, and has led, in some degree, to a diminished slaughter of fat calves and lambs, and their retention till increased age enables them to make bigger and heavier carcases. The Ministry of Agriculture has bought numbers of lambs and run them on till the following year, at any rate, on heretofore unstocked or neglected grazings such as those provided by deer forests and so forth; and this policy, a wise one from the point of view of food reserves, has met with due measure of success. For weight and flavour the yield from the matured animal properly treated is superior to that from the immature, as should indeed be the case. Since the break-up of the manorial system and the gradual substitution of money payment for work done instead of payment by service, the tendency to deprive the wage earner of his rights in village, or community, farming, common grazings and pasturage, and rights in woodlands, increased with the Enclosure System until to-day he has practically none left.

"The Law doth punish man or woman,
That steals the goose from off the common,
But lets the greater felon loose,
That steals the common from the goose."

The terrible plague known as *The Black Death* depopulated towns, villages, and countryside alike at the time of the Black Prince, and restoration of the lost numbers was retarded in the country districts by the demands of the towns and cities for manpower at higher wages than country pursuits could afford, and subsequently by conversion of tillage to pasture, with a lessened

demand for labour as a result. The golden age of Queen Elizabeth was a bad time for wage-earners who by that time comprised the bulk of the peasantry, and poverty and care continued to be their lot until after the Revolution and the final elimination of many old customs and relics of the Feudal System. Wool, and tillage laid down to pasture, tended to increase the price of corn and lessen the demand for labour, and so conditions worsened till Waterloo, and continued bad through the general distress and pauperisation of the lean years to 1837. Then came the railways, hailed by Erasmus Darwin in *The Botanic Garden*:

"Soon shall thy arm, unconquered Steam, afar Drag the slow barge, or drive the rapid car; Or on wide-waving wings expanded bear The flying chariot thro' the fields of air."

The incorporation by Royal Charter of the Royal Agricultural Society of England took place in 1840, agricultural machinery was developed and improved, drainage, artificial fertilisers and feeding stuffs played their respective parts in restoring prosperity, the Corn Laws were repealed, and much care and attention was given to the breeding and grading up of all classes of stock. The wage earner, who had served and suffered under Kings and Protector, haughty nobles, proud prelates, purse-proud citizens and squires (guardian angels or besotted tyrants) and who had fared so ill under Queen Elizabeth, now came under the more benignant rule of Queen Victoria, and to the Golden Age of Agriculture—the years from 1852 to 1864, or thereabouts. If the Golden Age was short it was sweet while it lasted, the Fairies played again in glade and woodland, parsons danced, sang and conjured and the prosperity of the countryside was so great that even wage earner and

crofter came in for a share thereof. Thereafter were felt the effects of the Industrial Revolution, with the crave for riches and luxuries, the development and ever increasing growth of cities, towns and industrial regions, the absorption of agricultural land and curtailment of the products of the native soil by the importation of less costly foreign substitutes. The wavering balance between town and country was lost, and has never been restored, though once and again opportunity has offered for such restoration, only, alas! to be neglected. Such opportunity presents itself to-day and it may well be for the last time. Woe indeed to these Islands, and to the town dwellers of all classes in particular, if on this occasion the opportunity be not recognised and used to uttermost advantage to preserve the soil, and to save what is left of the agricultural wage earners. The kindly sophist may object to "save" as over emphatic, and to "what is left" as unduly pessimistic; but both are as true as correct and as correct as true. Numerically the skilled and hereditary peasantry, and no other class is so truly hereditary, grow fewer and fewer every year, and, until that annual loss of the land's first effectives is stopped, turned from numerical loss to numerical gain, all Schemes, Plans, and Reforms are worse than useless, and mere waste of time.

The monasteries were good landlords in their day, and the monks good agriculturalists, who lived and worked close to, and at one with the wage earners, and this association preserved old saws and superstitions, more particularly so if they could be turned to religious account. Many old saws and superstitions are still common, and the rhyme about magpies is as well-known as any, although there are different forms so far as the words go in diverse localities. Possibly the following is the most common form:

"One for Sorrow, Two for Mirth,
Three for a Wedding, Four for a Birth,
Five for Silver, Six for Gold,
Seven for a secret that's never been told."

The person, male or female, with a hare lip was long looked upon with mistrust and even aversion and regarded as a harbinger of woe; but the passage of time and a better informed generation killed this erroneous idea. In some parts it is regarded as unlucky if the wayfarer's path is crossed by a hare, whilst in others no importance is attached to the incident. A black cat is lucky everywhere, and if a black cat takes up its abode uninvited in any house, great good fortune is imminent, and it is as well to butter its paws to induce it to remain. To interfere with, kill, or rob swallow or martin, or their nests, is sure to bring ill-fortune, and the idea underlying this may be that both species have long been recognised as regular visitors, and that as such, they are entitled to the full benefits of hospitality. The belief that cuckoos become hawks has not died out in some districts, though on what myth it is founded it is difficult to say. A somewhat similar superstition to the magpie one is prevalent in some districts where to see one crow is regarded as unlucky, to see two as lucky. Those who keep bees should keep them informed of all their doings, and have no secrets from them, otherwise they will fly away, which has been put into rhyme by Rudyard Kipling:

> "Marriage, birth or buryin', News across the seas, All you're sad or merry in, You must tell the bees"

and Thomas Tusser in his Five Hundred Points of Good Husbandry gave advice as to attending to the wants of bees at Christmastime.

"Go looke to thy bees, if the hive be too light, Set water and honie, with rosemarie dight, Which set in a dishful of sticks in the hive, From danger of famine ye save them alive.

It was long the custom to visit, with lanthorn in hand, all the housed stock at midnight on New Year's Eve with the idea that the attention and good wishes bestowed upon them would promote their well-being in the months to come. The influence of the moon has been recognised from time immemorial and the countryman still firmly believes that planting and sowing should be carried out under a waxing moon. He is well versed in weather lore and proud of his knowledge, which is eked out by well-known and simple formulæ, mostly in doggerel verse, such as:

"A red sky at night is the shepherd's delight;
A red sky at morning is the shepherd's warning"
and

"Rain before seven, fine before eleven,"
which latter takes no account of summer time, whilst

"A dripping June sets all in tune"

is ever and anon verified by practical experience. There is the old tradition of the borrowing days, the days March by repute borrowed from April and repaid with interest, as follows:

"March said to April, 'There are hoggs on the hill, If you'll lend me days three, I'll try gar them dee.' The first paid back was wind and weet, The second paid back was snow and sleet; The third day came on such a freeze, That it froze the birds' nebs to the trees."

Versions of this are still current from Land's End to John o' Groats.

The wage earner's duties oblige him to brave all weathers, and to compensate him, he is privileged to share Nature's beauty and glory in sunrise, sunset, the varying phases of sun and moon and the milder lustre of the stars. For him are sung without charge, carol and hymn by Nature's finest songsters, the lark, the blackbird, the thrush, and all the rest of the feathered tribe, to be crowned in favoured localities by the most beautiful and wonderful of all—the nightingale—with the tiny body and magnificent notes, vox et praeterea nihil.

At work, and particularly at plough, the ploughman is accompanied by the rook and, in many districts, the gull. Probably the most satisfactory sight the country can give is that of ploughman and horses turning a straight and steady furrow followed by attendant rooks and gulls. The rooks strut and straddle in the plough's wake attentive to the business in hand; but the gulls are more restless and range wider in their seeking. Both rooks and gulls in their respective fashions are powerful flyers in all weathers and their evolutions in a strong wind, adverse or otherwise, show decision and the ability to time to a second. Anywhere within reach of sea or sufficiently large river the sea-gull may be seen at all times of the year, but to the greatest degree in Spring and Autumn, taking daily toll of field and fallow. Sometimes singly, at others in such numbers that they pattern the surface of a field on alighting, the gulls fit in with the landscape and seem to be in keeping with, and supplementary to, the colour scheme provided by green grassland and brown arable. On afternoon or evening when time for departure arrives they will rise from the ground, and gradually circle higher and higher, till their ceaselessly changing spiral towers in the sky, their white under bodies and wings giving colour and contrast, making of the simple operation to gain height and direction before setting off on the homeward journey, a fairylike evolution of eddying light and shade. Rooks to the countryman are good weather guides, for more than others their behaviour varies and they anticipate the weather's moods by abrupt and fantastic flying vagaries of their own. "The rooks be playing breakneck," says the ploughman, "and we shall ha' a storm," and so it is.

Besides the mouse, whom Burns rhymed, many other animals provide enjoyment and are of use to the countryman. The rabbit who, as his value through the war years has increased, has become scarcer; the elusive hedgehog, who does much good in garden and field. and who, baked in his spikes in clay, provides dainty fare, and who has an unfortunate propensity for getting run over by motorists at night; the squirrel, provided he be the native variety, and not the imported grey squirrel, who eats grain at the stacks like a rat, whose tastes in other ways he shares as well as the latter's unpopularity as a destructive pest; the timid and graceful hare, whose March gambols never grow stale nor cease to be amusing, and the fox—Mus' Reynolds in the south. and tod in the north-of whose cunning and villainy more stories are extant than of all the rest put together; the badger, the shiest of all and the least easy to observe, and valuable for the price of his coat; the otter, of whom in Tarka, the Otter, Mr. George Williamson wrote a perfect Nature story; stoat and weasel.

Of the birds, the wood-pigeon, credited with doing much damage to crops and the object of everyone's enmity, continues to survive. It is a descendant of the former inhabitants of dovecots of which at one time there were so many up and down the country, and is a strong and determined flyer, difficult to hit and kill with the gun. The commoner game birds, pheasants, grouse, partridges, of whom the cock pheasant in full plumage is one of the most handsome, and the curlew, peewit or plover. At the nesting-time the peewit, whose eggs are esteemed a delicacy, is the most anxious of birds and many are the wiles and devices employed to lure the unwanted visitor, human, dog or other, from their chosen grounds. With noisy cries the birds will swoop around the intruder's head as he approaches their haunts in frantic endeavour to drive him off, or to lead him away. With a dog they will run along the ground in front of him, stop to encourage him in the pursuit, pretend to be hurt that he may the easier catch them, and throughout maintain an incessant and shrill crying, probably a warning to the nesting birds as well as to the intruder.

A curious fact about the ploughman is that in directing his horses at furrow's end, similar words are used by English, Scots, and Germans as *Hott*—to turn to the right, *Huh*—to turn to the left. These must be very old expressions, and have a common origin. Over much rain is not of benefit to the land, arable or grass; but snow, which mantles the countryside in white and emphasises its beauty and mystery, is, as is borne out by the old rhyme:

"A foot deep of rain will kill hay and grain,
But three feet of snow will make them come mow."

The peasant does not get the full benefit he might and should from his personal ventures in the keeping of bees, poultry, goats, pigs, or stock, nor in cultivation of his garden or allotment. The allotment scheme largely tried has been largely a failure due in part to distance from the home and possibly to the adverse fate which has attended all efforts to re-establish any sort of common interests since the full acceptance of the enclosures

system, which, although it had spread throughout the country in greater or less degree, did not receive general legislative sanction until the passing of the General Enclosures Act for Scotland in 1695, and the passing of a similar Act for England in 1801. Arthur Young, who lived between 1741 and 1820, and who wrote much and forcibly on the English agriculture of his time, was a strong and vehement advocate of the system of enclosures as the panacea for a better and more intensive husbandry, and the many tours he made of different districts from time to time confirmed and strengthened him in his advocacy thereof. Long before Young the Essex born Thomas Tusser, "of lineage good, of gentle blood," according to Ellis, and who lived between 1523 and 1580, advocated the advantages of Severall Countrie (enclosed lands) over Champion Countrie (open, unenclosed lands).

CHAMPION.

"There swineherd that keepeth the hog,
There neat herd with cur and his horne,
There shepherd with whistle and dog,
Be fence to the meadow and corne.
There horse, being tide on a balke,
Is readie with thief for to walk.
Where all thing in common doth rest,
Corne field with the pasture and mead.
Though common ye doo for the best,
Yet what doth it stand ye in steade?
There common as commoners use,
For otherwise shalt thou not chuse,"

and so on, citing Leicestershire as example of the defects of Champion.

"Example by Leicestershire,
What soile can be better than that?
For anything hart can desire,
And yet doth it want ye see what.
Mast, covert, close pasture and wood,
And other things needfull as good."

Whilst of enclosure he writes-

ENCLOSURE.

"All these doo enclosure bring,
Experience teacheth no lesse,
I spake not to boast of the thing,
But onely a troth to expresse,
Example (if doubt ye doo make);
By Suffolk and Essex go take
More plentie of mutton and biefe,
Corne, butter and cheese of the best,
More wealth anywhere (to be briefe),
More people, more handsome and prest,
Where find ye? (go search any coast)
Than there where enclosure is most."

The advocates of enclosure got their way and won the day and there is no doubt that the improved cultivation of the soil and betterment of all classes of stock followed as result and in justification of the adoption of their policy. By the same token the Commoners suffered, they lost their birthright without compensation for the most part and for little more than a mess of pottage for the rest, and their ranks were swollen and the value of their labour lessened by the addition and competition of numbers of the smaller fry of farmers who in their turn had become dispossessed of their hereditary acres. The tragedy of the turnover from open country to enclosed country farming was that the (comparatively) few benefited at the expense of the many, and it is but little consolation at this stage to realise that their greed and short-sightedness redounded upon, and has been the cause of distress and anxiety to, their descendants. In due course the chickens came home to roost. striking a balance it must be admitted that on the one hand the art and practice of husbandry in its widest sense benefited and attained higher levels by virtue of the more individual and advanced work enclosure rendered possible. The standards of arable and grass farming,

of the management, breeding and feeding of all classes of stock were raised out of all previous knowledge; drainage, and the general equipment of home and homestead were immeasurably advanced to the benefit of agriculture throughout the Kingdom. On the other hand many of the privileges and rights of the commoners and crofters in the soil were eliminated, or at best curtailed, and they became as a class mere wage earners dependent for a livelihood upon the success from a monetary point of view of those by whom they were employed. Wages compared with those paid in other industries were low, and, though some of the products of the soil, such as milk, firing and vegetables, were conceded without charge made, such additions were in fact a somewhat parsimonious method of supplementing money wages admittedly too low for the necessities of life without them. When times were good and money to be made by farming, too little regard was paid to adjusting the labourers' wages to farmers' profits, and in bad times any increase or betterment was regarded as impossible. So the commoner lost his birthright so far as any vested interest in and privilege attached to the land went and became a mere drudge. It is little wonder if the iron entered into his soul, and left him with feelings of frustration and resentment, inarticulate maybe; but none the less heartfelt. Tradition, perchance obstinacy, made him fight as hard as lay in his power, and some survivors of an older day were still to be found pre-war in the small cowkeepers of English villages who grazed their cattle on the roadsides, some of which they also mowed for hay for winter keep, and who thereby gained a precarious livelihood for their stock and eked out a frugal existence for themselves. These free lances in most cases had other irons in the fire, an inn, the village post office, or the village shop. There are still small

holders and crofters; but these, to live, have not only had to work from morn to night themselves; but have also had to subject wives and families to the same onerous conditions. So it went, and the only consolation offered is suggested by the lines—written by a parson:

"None are completely wretched but the great, Superior woes superior stations bring; A peasant sleeps, while cares awake a King."

The peasant could always sleep—except when he was too wet, or too cold, or too hungry—left to himself he would probably prefer to forgo a little slumber, however pleasant, for a chance at the superior stations malgré the woes and cares.

The Scottish worker differs from his English counterpart by reason of the existence of the clan and the clan spirit, which still glows, deep down maybe, but inextinguishable:

"A fiery family passion for the name Of Lancelot, and a glory one with theirs."

In former times the worker was a clansman endowed with the same surname as the head of his house or clan, and not infrequently claiming blood relationship and, mutatis mutandis, there are survivals to-day, for there are still many Scotts, Elliots, Grahams, Bruces, Camerons, MacDonalds and Frasers in humble place, but still mindful of the lustre shed upon their country's history by bearers of the family name, wherever glory was to be won or good work accomplished. This gives the Laird a hold far from despicable over his lesser brother, and though it is far more apparent in some than in others, it remains a factor to be recognised and taken into account in any attempted reconstruction of Scotland's countryside.

The Scottish shepherd is one of Nature's gentlemen. and with his near dog and far dog, an unsurpassable artist in all the intricacies of his calling, whilst for good ploughing, so characteristic of the sound methods of husbandry practised, the ploughman can more than hold his own with his prototypes the world over. Scottish farm workers are a skilled and hardy race, more independent and less tolerant of supervision and interference in work than the English, and on the whole more highly skilled and reliable, and more capable of acting upon their own responsibility. In the cottage homes of England it is deemed unlucky to bring in snowdrops or the May blossom, and it is seldom this embargo, for that is what it amounts to, is lifted; whereas in Scotland there is no such ban. It may be that the dislike to have these flowers in the house arose from the fact that as garniture they were so frequently used at deaths and burials, flowering as they do at what were wont to be regarded as the most dangerous periods of the year, late Winter and Springtime, always looked upon as synonymous with death particularly amongst the aged. That may, or may not, account for the aversion to them in England, but it does not account for the fact that there is no such aversion in Scotland, though the same factors hold good.

The commonly accepted picture of the British farmer as a coatless, collarless, burly and genial ruffian is as far from the truth as so many of the Continental and American cartoons depicting John Bull as typical of the average Britisher. There is much diversity in farming and many and varying are the different types of individuals engaged therein from the big man farming his thousands of acres to the little man who helps milk his own cows and delivers the milk to his own customers. To-day one and all must be business men first and

foremost, otherwise they would be unable to keep up-to-date with official proclamations and regulations, or to compete with the numerous forms to be filled in.

The agricultural community may be cosmopolitan, but it is eminently businesslike and practical, and might even claim a wider outlook and keener insight than those of city dweller and industrialist. Side by side with others, Dukes and titled magnates may be seen marketing their own cattle and sheep with an acumen and knowledge that enables them to hold their own with all comers. Men with many thousands of pounds of capital at stake are out on hillside or open field with shepherd and stockman ere the sun has risen, gathering the stock for market, and may subsequently be seen sorting sheep and cattle prior to sale at auction marts with as keen an eye to the most suitable matchings and values as the most expert of dealers possesses. The same practical ability and expert knowledge enables them to carry out each and all of the many other operations which are entailed by the variegated business of farming, but they will be found, even in these days of scarcity and coupons, to be suitably dressed and no more likely to discard coat or collar, unless such action is necessitated by the work upon which engaged, than any other member of the community. To farm well does not involve slovenliness and a dilapidated appearance, as even the most casual acquaintance with the agricultural community will prove. Ink-stained fingers do not of necessity postulate a large bank balance nor does a collarless neck testify to a successful farm. Agriculture is a great and diversified business run by many different types of men with much capital at stake, and these individuals are as up-to-date and alert as any other type of business men. There may be cobwebs in Government Departments but there are no cobwebs on those who, given fair opportunity,

could undertake the duty of providing wholesome and home-grown food for the people.

There is a distinct difference in the manner and matter of exchanging salutation or greeting, between the native of the south and the native of the north. In the south the countryman exchanges "Good morning," or "Good afternoon," as the case may be with the passerby, whilst in the north it is "It's a saft day the noo," or "It's gey weet," and confirmation, or some slight elaboration of the state of the weather, completes a satisfactory exchange and acknowledgment.

All the land over of the wage earner it may be said:

"He shares the sacrament of bird and beast, And greatly he enjoys the miracle."

The Manorial System was originally one of payment by service eventually superseded by payment in money and kind until the present day when payment may be said to be entirely in money. The manor was submerged by the Monasteries, castles and mansions, which by Reformation and Revolution were in turn transformed into the estates, large and small, of Crown, Church, nobility and gentry, cultivated by their respective owners and tenant-farmers-largely the system of the landlordtenant-farmer-and so to the present day. Throughout these changes, whoever for the time being may have been winner or loser, the worker has consistently been a loser. He has come early to feel the effects of depression and late to those of prosperity. Though nearest and most vital to the soil the wealth and fruition thereof have been taken from and denied him, and it is time and in the interests of the Kingdom that he should receive fair play and generous treatment. He has been a drudge and oft-times been called upon to risk life and limb that he might continue in his drudgery. He wants better

housing accommodation, real gardens, the right and opportunity to improve his lot by facilities for keeping his cow, his goat, his pig, his bees, his poultry, which right and opportunity were alienated from him in the past and strongly withheld from him ever since. At present what interest has he outside his work, and what relaxation to relieve the monotony of his life? He has none but those supplied to him by Nature, and, rich though those may be, a man must have pursuits and interests of his own to live, and to know that he is living, to best advantage.

"Pluck a gown o' gold and you may get a sleeve o't," goes the old proverb. It is time the peasant was given the opportunity to pluck.

CHAPTER 4

PROMINENT BREEDS OF BRITISH CATTLE

Now, Jacob knew the ways of stock—that's most uncommon clear—

For, when he got to Laban's Run, they made him overseer; He didn't ask a pound a week, but bargained for his pay To take the roan and strawberry calves—the same we'd take to-day.

But if I keep the narrer path, some day, perhaps, I'll know How Jacob bred those strawberry calves three thousand years ago.

A. B. PATERSON.

The flocks and herds of Britain are of inestimable value and assets of the greatest potential worth not only to their native land but also to the world at large. For quality, character, and constitution, and the ability to transmit these to their descendants, British Stock have long been outstanding in all countries to which they have been introduced. In fact, there is no stock-raising country in the World that has not benefited by their introduction and use, not only as a pure-bred stock, but also as the most valuable for crossing with native breeds with the intention of improving and upgrading them. The climate of these islands may make competition with countries more favoured by sun and equable weather conditions an impossible task so far as the growing of the highest quality corn crops is concerned and this applies also to the best foreign wheat and barley (more esteemed by the baker and brewer-when they can get them—than the home-grown varieties). But that does not apply to stock. The careful, intensive and selective breeding which has been carried on for generations, has resulted in bringing Britain's flocks and herds to so high a standard as to make them unrivalled so that their import in large numbers is indispensable to the stockraising countries of the world to maintain and improve the breed. This has been the case for so long a time now that there is a danger of the value of this ascendancy being undervalued or overlooked; although it is probable that it was never so high nor of so great a value as it is to-day. It must be borne in mind that during the War years many countries formerly in the habit of regularly replenishing their stocks from this country have either been unable to do so, or have only been able to do so to a small extent, certainly not to full requirements. countries have considerable leeway to make up, and to them must be added the many countries whose flocks and herds have been ravaged and diminished by the War.

Never in their history has there been so good a prospect of a lucrative and sustained demand for as much stock as these islands are able to offer, and, with one proviso, this demand bids fair to increase as more and more of the liberated countries find their feet. The proviso is that prices are kept within reasonable bounds and are not allowed to soar beyond the limits of the purchasers' ability to pay. What can be foreseen is a general demand for all classes of stock, and not merely for a few outstanding specimens confined to those who can afford to pay high prices. High prices made by individuals of any Breed are forthcoming because the purchaser is prepared to pay handsomely for an animal which conforms to his particular ideas and requirements; and these purchases benefit the few fortunate breeders who are able to supply such an animal. One swallow does not make a summer, and high prices obtainable by a few breeders do not constitute a stable and profitable export

trade for the many. The export trade of the forthcoming decade, rightly handled, should be of benefit to all breeders, and not merely to the privileged few. The demand will be for quantity as well as quality and, provided a sufficient number of the best representatives of each breed are retained for the maintenance and preservation of British stocks, the more such demand can be met the better, not only for breeders in general, but for agriculture as a whole. The pure-bred animal, correct in fashion, shape, and marking, or colour, has never lacked a market: but for each one such there are dozens equally well-bred and made, who, owing to some slight aberration or defect in marking or colour, are delegated ordinarily to oblivion so far as high prices are concerned. In the demand that can be envisaged, slight shortcomings debarring the individual from absolute championship. whilst not affecting his or her qualifications as a true specimen of the particular breed, will not be of paramount importance. Doubtless the champion will continue to make a high price and rightly so; but there are not, and will not be, enough champions to go round, and the common or garden representatives will be called upon to make up the numerical deficiency. What opportunities this state of affairs affords to all breeders, not only of benefiting the world at large but also of improving and consolidating their own flocks and herds can readily be perceived.

There are many different breeds, each with its own champions and followers dispersed throughout the land, and it may well be that amalgamation in some cases would tend to improvement and renewed strength. Concentration on and development of existing tried breeds is the desideratum and not the initiation of new. The English thorobred horse is recognised as outstanding and the many breeding establishments devoted to his

continued existence and propagation employ much capital, labour, and land. The value of different lines of blood and methods of breeding are put to practical proof and test on the racecourse, so that breeding and racing are by this means interwoven; but thorobred horse breeding cannot be classed as agriculture, nor its pursuit regarded as a farming occupation. The Darby Arabian, the taproot of the best blood of to-day, was imported into England in 1704, and since then breeding of horses primarily for the purpose of racing has been carried on intensively and progressively. Many theories have been evolved, not a few discarded, systems have emerged and general principles been laid down, to be, in due course, tested and proved, or disproved, as the case might be, by success, or failure, on the racecourse. It follows, therefore, that, although not within the orbits of agriculture qua agriculture, yet the experience gained by and the lessons learnt from the breeding of the thorobred horse have been of great value and benefit to breeders of other classes of stock. The amount of money involved, the prizes to be won, and the fame attainable have attracted the best brains and skill, and made those interested pioneers, whose opinions and methods have carried, and must continue to carry, the greatest weight with other breeders of pure-bred stock.

In agriculture, Robert Bakewell first put into practice the general principles of line breeding or of breeding from a definite type and blood to, by and from that definite type and blood, and he carried out his work with Longhorn Cattle, Leicestershire Long Wool Sheep, the Heavy Black Horse, which subsequently became the Shire of to-day, and pigs. The results he obtained proved so successful that, although he was the reverse of communicative, his principles and methods were followed and improved upon by contemporaries and successors

and the outcome is seen in the many magnificent studs, herds, and flocks of to-day.

The principal breeds of cattle at present comprise the Aberdeen-Angus, Ayrshire, Devon, Welsh, Frisian, Shorthorn, Lincolnshire Reds, Red Polls, Galloway, West Highlanders, and Hereford. In the specialised farming of to-day these, though originally dual purpose, have been divided into dairy (or milk) and beef breeds. The Ayrshire, Frisian, and Dairy Shorthorns are predominantly milk breeds whilst the Aberdeen-Angus, Devon, Galloway, Hereford, and Scottish Shorthorns are beef.

George Coates produced his Shorthorn Herd Book in 1822, and this was followed by the Hereford Herd Book in 1846, the Devon Herd Book in 1851, Aberdeen-Angus Polled Herd Book in 1862, the Ayrshire Herd Book in 1878, and various others, until to-day every recognised breed has its own officially recognised Herd Book.

The West Highlanders, in picturesque appearance the aristocrats of cattle, with their long horns and long haired red or brindled coats, continue to flourish in their native northern folds, and, as a breed, have continued to be developed in recent times. Hardy and able to thrive where others would starve, the West Highlanders are slow to mature and take their own time to fatten, but properly finished there is no better beef. They always weigh well, and from the point of view of the milk yield are by no means to be despised. They are economical and, where time is immaterial, ideal for rough grazing or keep.

Shorthorns, which superseded the hitherto most popular breed—the Longhorns—enjoyed for a time supremacy as a dual purpose (milk and beef) breed to which no other breed has attained before or since. The

Shorthorn owed its supremacy to its ability under the aegis of the earlier breeders to yield milk and to make into beef, and it was not until its powers to produce milk were challenged by the Ayrshires, Frisians and others devoted specifically to milk production, and to make beef by the Aberdeen-Angus, Hereford, Devon, and Galloway, that from the parent breed two breeds with distinctive aims-milk and beef-were evolved. The result was the Dairy Shorthorn and the Scotch Shorthorn, the former concentrating on milk, the latter on beef, and breeders in the one case as in the other concentrated upon those qualities most desirable in the respective spheres to be filled by the cattle they bred. Thus divided, the Shorthorn has continued to hold its own, and the value of the blood for crossing purposes to be maintained.

The Red Polls, descendants of the Galloways which formerly were driven from Scotland and sold at the autumn fairs of Norfolk and Suffolk for winter feeding in these counties, and of the native Suffolk Duns, famous for their milking qualities, have had their own Herd Book since 1874. For a long time they were little known outside their native counties; but by the years between the two wars Red Polls had achieved wider horizons and had met with increased favour both at home and overseas, and with the practical withdrawal by the Shorthorns of the claim to be the ideal dual purpose breed, had definitely thrown out a challenge for that title. Whether, with modern tendencies and specialisation, any breed can produce, and continue to produce, an animal with the udder for high milk yield and carcase for beef, and capable of competing in the one case and in the other with animals of other breeds specifically devoted to only one of the two desiderata is doubtful, to say the least. Moreover, where the Shorthorn has failed, it is problematical that the Red Poll can succeed, and this breed may be compelled to concentrate upon either beef or milk, unless in its turn Shorthorn example is followed and a beef type and a dairy type evolved. It is to be hoped this will not occur, as to split any Breed must induce weakness and divergence of type, and in the end is all too likely to result in the elimination of one or the other sections and consequent loss of *true breed* character.

There is no doubt as to the value the original breeders of the improved Shorthorns attached to the ability of their stock to yield milk as well as to make beef. famous Thomas Bates records that one of his fellow breeders, Mr. Mason, calling on him for breakfast one morning, he told him he should not have it until he had counted the week's butter which Mr. Bates' housekeeper had just put in readiness for the Newcastle Market on Saturday. "There were three hundred half pounds to go to market, besides what was sold at home and used in the house. There were at that time in the Kirklevington Herd thirty cows which had calved, and the butter sold for above one shilling per half pound, being above ten shillings per cow in butter alone, besides the value of the old milk otherwise sold; while all the calves were reared by the pail, as I did not allow any calves to suck the cows. Had all the milk been creamed and made into butter it would have made about twice the quantity."

Thomas Bates showed great tenacity in maintaining his own views and in rigidly adhering to what he considered the only Shorthorn blood without alloy, and on this his own words are worth quoting: "When my Ketton bull ceased to get calves in 1815, I then felt the loss, and I saw no way to reinstate myself in that blood but by sending Duchess cows to Duke (226), own brother

to my Duchess I. in the Herd Book. When I had accomplished this I was convinced I could again keep improving. I remember in the summer of 1820, when Duchess III. was in calf to her uncle, naming this only hope of the Shorthorns to Lord Althorp, at Wiseton when he said 'I will give you fifty guineas for the chance, calf or no calf.' I rejoined I would not take two thousand guineas for the chance, and I think anyone who has seen my herd since must have been convinced that I was right in so highly estimating the Earl bull (646), then in his dam's womb. I imprudently drove the bull calf, the Earl, when I moved from Halton Castle to Ridley Hall, May 1821, and turning him out to fresh grass on his arrival there after the day's journey, he swelled with the wet grass, being the first day he was turned out, and often afterwards did the same when on green food, clover, or turnips, and at last he was found dead at the stake, having had clover given to him when the man went to Church, and was dead on his return. I had, however, kept three bull calves by him, one of which was my Second Hubback, the other two were named Second Earl and Third Earl. I had some by Second Hubback which I used, and to the daughter of Second Hubback I put Belvedere. In this union of blood consists my present herd of Shorthorns and they carry a character that no other Shorthorn blood possesses, and will transmit it to their posterity unimpaired to the most remote generations, if judiciously put together. And in no other tribe of cattle can the best ancient blood of the Shorthorns be found pure and unadulterated." He bred over a hundred of his famous Duchesses, fountain heads of a line which became so sought after and valuable at home and in America, whence on occasion they were re-imported to their home country and sold for very high prices. F

Contemporaneous with Mr. Bates was Mr. Thomas Booth of Killerby and Warlaby who, having bred Shorthorns for many years, availed himself of the Messrs. Collings' best blood, and incorporated it with his own, and continuity of blood and methods was provided in his case by his sons and grandsons at Killerby, Studley, and Warlaby, so that the family herds became world famous as foundation stocks of some of the most renowned Shorthorn families. Mr. Amos Cruickshank established and maintained the large and renowned Sittyton Herd in Scotland and gained for the Shorthorn Breed in Scotland the éclat which Messrs. Bates and Booth had won in the South. Though the Ketton herd of Charles Colling may be regarded as the pioneer herd of improved Shorthorns, and his bull "Hubback" as the corner stone of the breed, and though many other breeders, such as Mason of Chilton, and Jonathan Whitehead of Little Methlic, played more or less conspicuous parts in constructing and popularising the breed, it is undoubtedly true that the achievement of success and establishment of the Shorthorn as the best dual purpose animal was. due to the efforts in their respective spheres of Messrs. Bates, Booth, and Cruickshank.

The brothers Cruickshank, for though Amos is the better known he farmed in partnership with his younger brother Anthony until the death of the latter, had good foundations upon which to build, for good Shorthorn blood had previously been introduced into the district by Captain Barclay of Ury, and although Captain Barclay was, perchance, careless as to pedigrees, his spade work was of great value to Sittyton. Amos Cruickshank's aim was to breed a type of cattle suited "to our country, our agriculture, our people"; rent payers in short. He went to England for his sires and also for some of his females, and in due course built up a very large and

good herd. Milking qualities were not overlooked; but in view of his environment, and of the fact that beef was more in demand than milk, the bias of his Shorthorns was from the beginning in the direction of beef. In due course those desirous of milking qualities first went to the Bates and Booth strains, whilst those whose aim was primarily beef supported the Cruickshank strains, which became known as Scotch Shorthorns. Eventually the Sittyton herd went, as regards the yearling heifers, to the Bapton herd of Mr. J. Deane Willis, and, as regards the older cows, to Mr. William Duthie of Collynie, and it was by the agency of these two herds that the invaluable Sittyton blood was continued and widely dispersed not only in Scotland but in England and overseas.

With representatives of the best Sittyton families in his herd Mr. William Duthie, "the Shorthorn King," raised his Collynie herd to the highest eminence. William Duthie for a time used bulls of Bates and Booth blood. and it was the opinion of more than one of his most knowledgeable contemporaries that he might have continued doing so for a longer period with advantage, but he was content to reintroduce the proven old strains after they had re-invigorated themselves for a generation or more through English channels and also to the limited use of English lines top crossed with Scottish. For over fifty years the annual Collynie Sale was an outstanding feature of the Shorthorn year, and for many years Collynie and Uppermill joined forces for the occasion, and held a joint sale on the second Tuesday in October. As a successful and constructive breeder, no one did more for the Shorthorn than William Duthie.

Though interbreeding between Bates, Booth, and Cruickshank strains took place to a certain extent, particularly in England, the tendency to concentrate on milk on the one hand and on beef on the other, and the

special qualifications of Bates and Booth blood for the first, and of Cruickshank blood for the second, tended to divorce the descendants of the former from the latter. until the cleavage became so wide that the dual purpose of the original improved Shorthorns was negatived by the formation of Dairy Shorthorns and Scotch Shorthorns as they exist to-day. The Dairy Shorthorn has been cultivated in England by the milk from milk process of breeding, thereby eliminating the use of the Scotch sires, with the result that the Scotch herds in England have dwindled, though Aldsworth, Bapton, Marden, and the courageously managed Wing Herds are notable exceptions. In Scotland the breed continues to flourish on its own lines. the annual sales of bulls at Perth, Aberdeen, Inverness, and elsewhere providing the source of the major financial returns. In point of fact there is plenty of milk behind the Scotch Shorthorn of to-day and a good deal of attention is paid to correctness of udder. Mr. James Durno of Uppermill knows as much about milk as anyone, and his females have long been famous and much sought after. Captain MacGillivray of Calrossie, whose herd has attained such prominence, values the neat type of female with a good udder, and will breed from none other, whilst the stately matrons of Beaufort, in whom their owner, Lord Lovat, takes such interest when war is not afoot, and the well proved Cluny Castle dams, have milk in plenty about them.

Two famous herds that may be said to have preserved the via media are Bridgebank and Aldsworth. Of Aldsworth, mention has already been made, and it is sufficient to add that Mr. Garne is far too experienced and practical a breeder to put all his eggs into one basket, and to neglect one of the chief desiderata of the female of any breed—a good udder. Mr. A. J. Marshall is, and for long has been, a foremost figure in the Shorthorn

world as owner of the largest pure bred herd and as a large exporter. The Showyard successes of the Bridgebank Herd at Stranraer have been phenomenal, and include the Champion Bull at the International Chicago Show on two occasions, outstanding successes at the Palermo and Toronto Shows and many supreme championships at R.A.S.E., Highland, Great Yorkshire, and Royal Dublin Shows. Independent, shrewd, quick, and courageous, Mr. Marshall follows his own ideas, forms his own judgment, and has never been afraid to support the one or the other with his purse at auction, or in a private transaction. He possesses the power of concentration and the flair for essentials that distinguished Mr. Bates who, were he to return to this mortal sphere. would find at Strangaer Shorthorns after his own heart. In his long career as a breeder Mr. Marshall's stock has been justly celebrated for many virtues, none more so than for the correctness, quality, and shape of their udders. Times change and requirements with them. as a comparison between the following descriptions of the desirable animal prove. Vergil, translated by R. D. Blackmore, author of "Lorna Doone," in the third book of the Georgics, writes:

"Now whoso coveteth Olympic meed,
The Conqueror's palm, and reareth generous steed,
Or whoso craveth strong ox for the share,
The mother's shape must be his special care.
The best of forms a grimly visaged cow,
With head uncouth, and neck more than enow,
With dewlaps hanging from the jowl to shank,
And most unreasonable length of flank;
All over large; the very foot is so,
And bristling ears in arching horns below.
Myself would not a dappled white one scorn,
Shy of the yoke, and gruff to show her horn,
With bull-like face and quarters straight and high,
Whose tail in walking sweeps her footsteps dry.

The age Lucina claims, and Hymen's due, Is past ere ten, though scarce at four come true; Unmeet the rest alike for plough or stock; Then while gay youth still lords it o'er the flock, Untie the males, right early mate thy Kine, And one from other, re-supply the line."

The late Earl Bathurst, who used oxen for farm work on his estate at Cirencester, and who was versed in Bruce Lowe's Theory and Mendel's Law, would have been at a loss to make anything of the Poet's animal, but he would have vouched for the truth of the fourth line, for he had implicit faith in the value of the dam in breeding. Mr. Carr, writer of the History of the Killerby, Studley, and Warlaby Herds of Shorthorns, wrote: "Another most valuable cow, though of more recent origin, who remained at Killerby after Mr. Booth's death in 1857, was Hecuba, by Hopewell, from a dam by Hamlet, out of a Leonard cow. This cow has all the Booth character and transmits it to her offspring. is in colour a dense red; a large animal on short legs; when not in milk, laying on flesh with wonderful rapidity; and when in milk, she is what every cow ought to be, a great and deep milker, with an udder whose size and form might provoke the cupidity of even a London dairyman. When young she was pronounced by one of the best of judges, Mr. Eastwood, to be the very type of the true Shorthorn, the very model of a bull breeder." Hecuba would probably be no disgrace to any Shorthorn herd to-day.

In the early days "training," as it was called, cattle for shows was the cause of a good deal of harm. Training in reality meant artificially forcing the animal to be shown so that it should be full of bloom and flesh. Incidentally by this method bad points might be hidden and good ones emphasised. Such overfeeding not seldom

induced subsequent failure to breed, and was also responsible for loss of character and constitution. Artificial forcing by whatever means for auction or show purposes is the bugbear of pure bred stock as it in course of time too frequently results in accentuating the weakness and minimising the strength of the animal subjected thereto, and consequently brings discredit on the breed. For breeding purposes the maintenance of natural condition and no more is a sine qua non if full value from pure blood is to be obtained and transmitted. With so strong a breed as the Shorthorn it seems a pity that circumstances have caused a division in the blood. though the very fact that the breed has been strong enough and sufficiently established to continue on two separate lines—Dairy and Beef—is proof of its virility and potentialities. The cleavage has not yet gone too far, and it may be that in the future all the strains from the common origin will again be utilised to the full for the benefit of the breed as a whole instead of for one, or other, of the present divisions of it.

Much learning has been expended, and many interesting theories advanced, as to the remote ancestors of our present domestic cattle, whether they are all derived from the same origin, or from diversified origins, and this has included the minor issue of horned and hornless or polled cattle. Herodotus definitely states that the domestic cattle of the Scythians were without horns, and hornlessness has been held to be ancestral by some scientists, though Charles Darwin summed up his own views as follows: "No one can give any explanation—although no doubt there must be a cause—of the loss of horns, any more than of the loss of hair, both losses strongly tending to be inherited. It is, I think, possible that the loss of horns has occurred often since cattle were domesticated, though I can call to mind only a case in

Paraguay about a century ago." There are polled Shorthorns in America, which originated from ordinary Shorthorns, and of course, the majority of Irish cattle imported to this country are polled, and, although in the case of many the polling is the result of dishornment when calves by artificial means, there must be advantages, and notably in travelling and yarding, or such keen salesmen as the Irish Dealers would not continue to countenance the practice. It may be that originally horns were the adornment of the males of the species only, and that the females were without horns and that in time the females acquired horns, though some still remained polled, or that two distinct types, those with horns and those without, have always been coexistent.

However this may be there is ample evidence to prove that there have been for over four hundred years numbers of polled cattle in different districts in Scotland, notably in Aberdeenshire and Forfarshire, and that from these, and more particularly from the old breed of Angus and of Aberdeenshire can be traced the present-day pure bred polled Aberdeen-Angus, whose Herd Book was started in 1812. At this stage of the history of the Aberdeen-Angus it does not seem of great importance whether, or not, they are a direct branch of the aboriginal cattle of Scotland as well as indigenous to the northeastern counties with Aberdeen and Forfar as centres as is claimed for them. It is established that the improved Aberdeen-Angus breed was derived from, and is founded on, the ancient polled cattle of Angus and Buchan, and that in these districts polled cattle were well known and established over four hundred years ago.

It must be borne in mind that oxen were largely used for draught purposes the world over until comparatively recent years, and they are still so used in a number of countries. In the South African War the number of

trek oxen used by both sides probably exceeded the number of any other species of animal. Though, in this country, the cumbersome ox plough is now as extinct as the human breast plough of the Cotswolds, oxen were extensively used for the plough well up to the time of the formation of the oldest breed of pedigreed cattle, and for this and kindred farm work a big strong animal with a certain length of leg was required, and retention for work after maturity ensured that such animals were not fattened off for the butcher at less than eight or ten years of age. What more natural, therefore, than that, particularly in the northern districts, a breed of cattle of early maturity and more delicate flesh should be kept, utilised for home consumption, and the surplus thereafter exported to the South, with which a large trade was carried on from the time settled relations between the two countries were assured. In due course the feeders of the South must have found from practical experience which cattle came quickest to hand and left most profit, derivable from the value of the carcase to the butcher, and Southern demand, reflected by willingness to pay more for the choice cattle than any other, reacted in turn on the Northern dealers and through them to the cattle breeders themselves, thereby settling up an increased demand for that particular type of animal.

That this is what actually happened and that the approved were the ancestors and forerunners of the improved Aberdeen-Angus there is abundant evidence to prove. In the Herd Book of 1862 Aberdeen-Angus and Galloways were included, but after the issue of the fourth volume some years later the Galloways were excluded and the Herd Book limited to the Aberdeen-Angus suum cuique. It was the progress made by the improved Shorthorns and their penetration into regions hitherto foreign to them that first roused the mettle of

the Black Cattle men and stimulated them to look into their own breeds to meet the challenge. As the Shorthorn Breeders had first imbibed and profited by the pioneer work of Robert Bakewell, so in turn the polled cattle Breeders learnt from the Shorthorn men. of the early Aberdeenshire breeders of Buchan polled cattle, Mr. John Marr, Cairnbrogie, Tarves, commenced to breed Buchan polled cattle in 1810, and also tried Galloways with them; but his herd was not carried on after his death, his son, Mr. W. S. Marr. Uppermill. favouring Shorthorns, of which he was a very successful and well-known breeder. Many others in Angus and Aberdeenshire bred, or continued to breed, polled cattle, but there was a certain amount of inter-breeding, and, doubtless, in many ordinary herds an admixture of Galloway and West Highland blood.

The credit of being the first breeder to put the Aberdeen-Angus into the foreground belongs to Mr. William McCombie of Tillyfour, who is said to have done for the polled breed what Bates, Booth, and Cruickshank did for the Shorthorns, whilst the Angus breeder, Mr. Hugh Watson of Keillor, has been compared to the Collings. The great successes achieved by animals from Mr. McCombie's herd in the Showyard were of inestimable value in advertising the Aberdeen-Angus, and his Black Prince and other remarkable winners drew public attention to the potentialities of the breed, and conduced considerably to its establishment in public favour, The old-established Ballindalloch Herd, under the aegis of Sir George Macpherson Grant, came to the fore in due course and for many years exercised a vital influence in the general improvement, and spread of the breed which was continuous and extensive. In England Dr. Clement Stephenson, Balliol College Farm, Long Benton, the Bywell herd of Lord Allendale, Mr. T. H. Bainbridge

of Eshott, Mr. J. J. Cridlan of Maisemore Park, and Mr. T. H. Bridges of Longshott, were early and successful breeders, whose success with, and advocacy of, the breed did much to popularise it. Once the breed became known its success was continuous and widespread, for the bloodlike and handsome appearance of the cattle, their conformity to type, mellowness of flesh, ability to thrive, and early maturity were combinations hard to equal and harder to excel. As beef cattle, combining quality and weight, and for crossing purposes, the Aberdeen-Angus has become known and popular the world over. They are, and are likely to remain, primarily a beef breed; but this by no means implies that they are lacking in milking qualities. Mr. Wheeler, of Claverdon, Warwickshire, for long kept careful records of the individual milk vields of his animals, and these were not only instructive but heartening in their testimony.

All over the land there are many valuable herds to-day; but, possibly, none of more interest than that of Mr. J. E. Kerr of Harviestoun Castle, Dollar, a very able and experienced breeder. Within the short period of the war years Mr. Kerr has produced Perth Champions from his Aberdeen-Angus herd and also Perth winners from his Shorthorn Herd—a remarkable achievement. Mr. Kerr has likewise been very successful with Hackneys, Clydesdales, Shetland Ponies, and Border Leicester sheep. In both his Shorthorn and Aberdeen-Angus Herds, having made up his own mind as to the blood he wanted, Mr. Kerr has concentrated on his few picked families, using the best of his home bred heifers for continuation purposes, and selecting only the very best sires, and has succeeded in building up, in the case of both Shorthorns and Aberdeen-Angus, herds typical of the best of their respective breeds, and of great value from a breeder's standpoint. He farms his

own lands around Dollar and his record as a breeder is outstanding.

The Earl of Rosebery gave up his Shorthorns between the wars, and concentrated his efforts at Dalmeny upon his Aberdeen-Angus Herd, with which he has won conspicuous success. As a breeder of thorobred horses he has gone from strength to strength and has given ample proof of the possession of flair and judgment. It is worthy of note that Lord Rosebery during the war years has disposed of his Mentmore agricultural lands, retaining only the thorobred stud farm, but has maintained his Scottish estates intact. In addition to the Dalmeny Home Farm he has considerable interest in his own sheep farms, and is a successful breeder of sheep.

The Galloway cattle were originally registered with the Aberdeen-Angus in the Herd Book issued in 1862, and also in the three following volumes; but after the fourth volume the Galloway Cattle Society acquired the copyright of the Galloway portion, and the two breeds since then have worked on separate lines. There is no doubt that the Galloways are the descendants of the cattle that formerly occupied the large acreage of pastureland in the south-west of Scotland known as Galloway, whence in turn they derive their name. There is undeniable evidence that for a long time the Galloways have been a polled breed, and that in crossing with horned breeds they are prepotent in this respect. Very Rev. John Gillespie, editor of the Galloway Herd Book, stated: "I think there can be very little doubt but that the Galloway and West Highland breeds of Cattle have sprung from the same parent stock at a very remote There is a close resemblance even at the present day, between a well-bred polled Galloway and a West Highlander minus the horns. Indeed the similarity is so great that when we bear in mind the fact that previous

to the close of the seventeenth century almost all the Galloways were horned, it is easy to understand how any difference between the two types of animals may have been produced by the different treatment to which they have been subjected." It was the Very Rev. John Gillespie's opinion that polled specimens are found in every breed and that this feature could be preserved and transmitted by selective breeding. It is, therefore, suggested that Galloway breeders favoured and concentrated upon the production of polled cattle for their own reasons and because they found that the lack of horns was an asset in the trade of store cattle to England. The English trade was a large and valuable one, as many as 20,000 head of cattle being sold each year to be fed on and fattened—the bulk going to Norfolk—and English buyers showing a preference for polled cattle. As a natural result the Galloway breeders eliminated their horned stock and concentrated upon the polled. Be that as it may, there is no doubt that the modern Galloway is a distinct breed, very hardy, and capable of thriving under conditions deleterious to most other breeds. Bigger in size than the Aberdeen-Angus, the Galloway is a deep, thickset, and well-fleshed animal, somewhat slow to mature, but thoroughly honest, and can always be relied upon to weigh well when ripe for the butcher. They are much used in different parts of the country for breeding purposes crossed with the Scotch Shorthorn bull. The progeny of this cross are invariably polled, and if, as is usually the case, reared on their dams, do remarkably well and come early to hand for the butcher. The favourite cross is the white Scotch Shorthorn bull on the Galloway cow with the idea of breeding the fashionable blue-grey animal for feeding purposes. In the worst of times Galloways rearing their calves, or with followers as they are called in Scotland, have consistently shown a profit, and have provided the one bright feature in many an otherwise dismal farm balance sheet.

The war appears to have brought the white-faced Herefords into greater prominence for crossing purposes than they have enjoyed for some time previously, and in England to-day the Hereford bull may be seen as the Herd sire where a white-faced bull has never been seen before. The Herefords, credited with the ability to stand drought and untoward climatic conditions, have long enjoyed a flourishing export trade, and though not so quick to mature as the Shorthorn nor productive of the quality beef of the Aberdeen-Angus, they have continued to stand their ground, and to hold their own as a separate breed.

Of Dairy cattle, apart from the Dairy Shorthorn already dealt with, the Ayrshire for economy in grading and ability to milk is deservedly popular. The first Volume of the Ayrshire Herd Book was published in 1878, and since then the breed has flourished, improved, and extended, particularly in Ireland. Channel Island and Holderness blood laid the foundations for the present pure breed, which can be looked upon as one that has been successfully built up, improved, and developed without any claims to being indigenous to any particular locality. As a Dairy Breed the Ayrshires are particularly sound and healthy cattle and have been an outstanding success when used for open-air milking.

As regards open-air milking the first trial of the system in the north was made by Lord Cochrane of Cults, who, selecting his cattle with great care, carried on open-air milking on his farm in Fife for some time with conspicuous success. Lord Cochrane of Cults reared his young stock, which were habituated to the open from their earliest days and the females of which

in due course replenished the herd. A very enlightened agriculturalist his Lordship also had a grass drying plant installed, and combined the two systems with satisfactory results to his pastures.

The British Frisian is, as the name implies, in its origin an imported breed, which owes its development and present position to its own merits as a milking proposition. From small beginnings the Frisian has rapidly spread throughout the country, and, so greatly are the milking capabilities of animals of the breed esteemed, that there is every reason to believe they will continue to be popular as Dairy Cattle, and, it may well be, even to extend their present hold.

The Black Cattle of Wales have maintained their national characteristics, though they have been much improved by a more general use of really good bulls during recent times. Very hardy, small, active and good doers on a sparse and economical diet, they may still be classified as dual purpose and nothing fattens better, or quicker on a good pasture, than a Welsh cow, discarded for dairy purposes as too old, provided due attention is paid to the udder, to which the milk is apt to return even in old age with high feeding. Not so many of the big three and four year old Welsh runts for feeding on the rich English pastures are nowadays to be seen as was the case in the past, presumably as they are fed off earlier. The Welsh do not penetrate into Scotland, and, apart from the fact that they are a horned breed, are smaller, smoother on their coats, and lighter fleshed than their Scottish counterparts. Good and honest milkers, they are ideal cattle for the poor, or small, farmer, and for the cottager, and are good buttermakers. With an independence akin to that of the natives of the Principality they continue to maintain their own characteristics and virtues unimpaired. For hardihood and thrift they

can more than hold their own with any other type of cattle in existence, and are remarkably healthy and free from ills.

There are in certain districts a number of whitebelted Galloways, which are polled, excellent beef cattle, and from the visible point of view are both handsome and attractive.

The Channel Islands cattle, the Jersey, the Guernsey, and the Alderney have the reputation of rich and deep milkers, and of being in the front rank for the excellence and quality of their butter. The English Herd Book of Jersey cattle was first issued in 1879, and the English Jersey Cattle Society was incorporated in 1883. They are, like the Frisian, fundamentally a Dairy breed pur sang, and are credited with a share in laying the foundations of the milking propensities of the Ayrshire. They are handsome coloured cattle, noteworthy for the uniform excellence of their udders and the sweetness of their heads. Docile and kindly animals, they have not penetrated to any extent in the north, and have been for the most part confined to the private individual who keeps a cow, or two, for the family benefit, and small herds. The big dairy man has preferred the Avrshire and the Frisian.

A matter, more or less in its infancy at present, but which must be exercising the mind of every breeder, is that of artificial insemination. Facts so far ascertained open up a very wide field for the future, and some of the implications are perplexing, and, to the breeder of purebred stock, disturbing. Future developments will, doubtless, be carefully considered and subjected to every possible scrutiny.

So far as these Islands are concerned there is, no doubt, a sufficient number of different breeds. The result is a tendency to over-specialise and to sacrifice

constitution, character, and frame to the development, or over development, of one particular attribute. In the long run the cow that for lack of milk cannot suckle its own calf is as futile as the cow that cannot produce a calf worth rearing because it has no back, and lacks frame and constitution. Both alike are useless to any breed. In the immediate future it may be that with many countries short of food and stock, the dual purpose animal will again be in demand, and there is no doubt that, as of yore, this country can supply the dual purpose animal in abundance provided available resources are suitably utilised.

The terrible scourge of abortion still continues to take toll of stocks throughout the country. Inoculation is being increasingly practised; but brings its own problems and difficulties in its train. It would be all to the good were abortion to be made compulsorily notifiable, and much more care should be taken to isolate and segregate infected stock, and to prevent their exposure at markets and sales throughout the country. The need for taking such steps in regard to contagious abortion is, moreover, reinforced in view of the valuable work done by the Diseases of Animals Branch of the Ministry of Agriculture in preventing, inter alia, the spread of foot and mouth disease, and the gradual eradication of tuberculosis from British herds. The eradication of tuberculosis is in itself a gigantic problem and one which is made more difficult by insanitary buildings and conditions, and a somewhat unfortunate tendency to underestimate the gravity of the menace to the general public.

CHAPTER 5

SHEEP, HORSES, PIGS AND POULTRY

Lay men say, indeed, How they take no heed Their sely sheep to feed, But pluck away and pull The fleeces of their wool.

THOMAS TUSSER.

The value attached to sheep was for long almost entirely dependent upon their yield of wool, upon which farming profits were largely dependent; to a less degree upon their usefulness in manuring and rendering firm the land: and last of all to their value as mutton. were, as there are now, many different breeds and many local varieties but the essential difference was whether or not a particular breed was of the long woolled or shortwoolled variety. Probably no stock benefited more by the introduction of the field cultivation of roots, clover, and artificial grass than sheep, and many of the old breeds have advanced and improved through better feeding, breeding, and management to such an extent that to-day's representatives bear few traces of the features of their ancestors. There were, as to-day, horned breeds and breeds without horns and the horns of the ram have always been larger than those of the ewes of the same Down the years sheep folded and at large have been good and profitable friends to the farmer, and the improved flocks of to-day with their yields of wool and mutton, and their ability to fertilise and work the land when folded thereon, make them an invaluable asset, particularly to the arable and mixed land farmers.

For a long time the milk of ewes was used for human consumption and in some parts the practice continued to Victorian times. Says Thomas Tusser in his Five Hundred Points of Good Husbandry:—

"At Philip and Jacob, away with the lams that thinkest to have any milk of their dams, A Lammas leave milking, for fear of a thing: least (requiem aeternam) in winter they sing, To milk and to fold them is much to require, except ye have pasture to fit their desire. Yet manie by milking (such heede they doo take), not hurting their bodies much profit doo make. Five eawes to a cow, make proofe by a score, shall double thy dairie, else trust me no more. Yet may a good huswife that knoweth the skill, have mixt and unmixt at his pleasure and will."

Whilst in that most plaintive of Scotland's Ballads, The Flowers of the Forest, the following lines occur:

"I've heard the lilting at our yowe-milking,
Lasses a-lilting before the dawn o' day;
But now they are moaning in ilka green loaning:

'The Flowers of the Forest are a' wede away.'
At buchts, in the morning, nae blythe lads are scorning;
The lassies are lonely and dowie, and wae;
Nae daffin', nae gabbin', but sighing and sabbing;
Ilk ane lifts her leglen, and hies her away."

(Buchts are sheepfolds, a yowe the ewe, a loaning a lane, and the leglen the milk-pail).

There is no doubt Tusser knew what he was writing about, and that his estimate that the milk of five ewes, rearing their own lambs as well be it remembered, was equal to that of one cow, was correct. So far as human consumption goes the practice, undoubtedly to the benefit of the lambs and maybe also to that of the ewes, has lapsed; but it can be looked upon as an untapped reservoir. Even goats, hardy and economical animals.

are but little regarded in these islands, yet their milk is rich and wholesome and excellent for making cheese. There is abundance of milk at home, properly developed, without importing the stale tinned and dried varieties, but, unfortunately, though everyone can use a tinopener, not everyone can milk ewe or goat, a much pleasanter and more wholesome operation as a matter of fact.

Sheep probably gave Robert Bakewell the most immediate reward he obtained in his own lifetime. Professor Rowland E. Prothero in his English Farming Past and Present gives the following account:

"In the treatment of live-stock for the butcher, Bakewell's object was to breed animals which weighed heaviest in the best joints and most quickly repaid the cost of the food they consumed. He sought to discover the animal which was the best machine for turning food into money. 'Small in size and great in value,' or the Holkham toast of 'Symmetry well covered,' was the motto of his experiments. In his view the essentials were the valuable joints, and he swept away as non-essentials all the points on which fashion or prejudice had hitherto concentrated, such as head, neck, horn, leg or colour. The points which he wished to develop and perpetuate were beauty combined with utility of form, quality of flesh, and propensity to fatness. To attain these objects he struck out a new line for himself. Crossing was then understood to mean the mixture of two alien breeds, one of which was relatively inferior. Bakewell adopted a different principle, because he regarded this form of crossing rather as an adulteration than as an improvement. He bred in-and-in, using not merely animals of the same native breed and line of descent, but of the same family. He thus secured the union of the finest specimens of the breed which he had chosen as the best, selected for the points which he wished to reproduce or strengthen. It was with sheep that Bakewell achieved his greatest success. When he began his stock-breeding experiments, he selected his sheep from the best animals in the neighbourhood, and a guinea, or even half a guinea, secured him his choice from the fold. The breed from which they were chosen were the Leicestershire or Warwickshire long wools. 'The true old Warwickshire ram' is thus described by Marshall in 1789: 'His frame large and remarkably loose. His bone, throughout, heavy. His legs long and thick, terminating in large splay feet. His chine as well as his rump, as sharp as a hatchet. His skin might be said to rattle on his ribs.. like a skeleton wrapped in parchment.' Even this animal was handsomer than a ram of the 'true old Leicestershire sort' which Marshall saw in 1784. 'A naturalist,' he says, 'would have found some difficulty in classing him; and seeing him on a mountain, might have deemed him a nondescript; a something between a sheep and goat.'

"Out of these unpromising materials Bakewell succeeded in creating a new variety. His 'new Leicesters' became the most profitable sheep for arable farmers. As by degrees the compactness of form, smallness of bone, fattening propensities and early maturity were perpetuated, the breed was established and for a time swept all competitors before it. While other breeds required three or four years to fit them for market, the New Leicesters were prepared in two. Those who tried the Dishley sheep found that they throve where others pined, that while alive they were the hardiest, and when dead the heaviest. In 1750 Bakewell let rams for the season at 16s. or 17s. 6d. apiece. In 1789 he let none under twenty guineas, and received 3,000 guineas for the total of that season's letting. The New Leicesters were the first breed of sheep which were scientifically treated in England, and though they were less adapted for the southern, eastern and northern counties, their supremacy on enclosed land in their own Midland districts was undisputed. Bakewell raised the New Leicester to the highest perfection. But this was not all. His breed in weight of fleece could not compete with Lincolns, and was less suited to hills or mountains than for enclosed arable land. He had, however, shown the way in which other breeds might be improved; imitation was easy. In a less immediate sense he was the creator, not only of the New Leicesters, but of the improved Lincolns, South Downs and Cheviots. Before these breeds, fitted for the most fertile grass lands and plains as well as suited to hills and mountains, native races died away, like Red Indians before the civilised intruders. But gradually supporters rallied round other varieties. Bakewell's weapons were turned against himself. Native sheep of other districts,

improved on his principles, began to hold their own, and, though on historical grounds preference will always be given to the New Leicesters and the South Downs (improved by John Ellman of Glynde, 1753-1832), it may be questioned whether they have not been rivalled and surpassed by other breeds in the qualities for which they were once pre-eminent."

Thomas Bell, who wrote a history of the improved Shorthorn Cattle and the Kirklevington Herd from the notes of Thomas Bates (North of England Farmer Office, 1871) tells an interesting story anent Robert Bakewell's improving agents, or one of them.

"Mr. Bates first had his interest in agricultural improvements raised by his early friend and mentor, Mr. Wastell, of Great Burdon, near Darlington, and as an instance of Mr. Wastell's discernment recounted the following story: 'Mr. Bakewell,' said Mr. Wastell, 'had concealed from the world how he had produced that wonderful improvement in his flock, but if the truth was known, he was sure that it would prove he had done it by the use of a black tup.' Seventeen years after Mr. Bates heard Mr. Wastell state this, he named it to a gentleman who had visited Mr. Bakewell in his early career as a breeder, and he said, that, 'while staying with Mr. Bakewell I observed that there was one part of his premises he never showed me, and I got up very early one morning and went and examined these premises, and I there found a black tup, a most extraordinary sheep; but, as it was a liberty I had taken, I never named it before to anyone.' This he told Mr. Bates, which confirmed what Mr. Wastell had said. Mr. Bates stated that he had learnt from good authority that Mr. Bakewell bought this black tup at Ashbourne market in Derbyshire, and that the fact was well known there by those who saw Mr. Bakewell buy the black tup. Mr. Bates stated that he had good authority for saving that of late years black lambs occasionally came from Leicester ewes, though none were ever seen in Mr. Bakewell's day, which is as strong a proof as can be given that animals bred back even to very remote ancestors, where there has been anything very peculiar in such ancestors; but the general principle holds good in most cases that 'like begets like."

Presumably Mr. Bakewell did not buy the black tup to make a meal of; but how and when he used him was a secret between himself and his shepherd, and he may have had Bacon's adage that all colours will agree in the dark in mind. Black tup or no black tup, the New Leicesters were the forerunners of improved methods of breeding and improved flocks in all the numerous varieties of sheep throughout the Kingdom, and most of the local varieties continue to this day. At the great annual Ram Sales at Kelso, English and Scottish Flockmasters send consignments of their best, and the Oxfords, Suffolks, and Border Leicesters are as popular as ever.

The Cheviots continue not only to hold their own; but to penetrate to English localities, though possibly the finest all-round example of this hardy and prolific breed is the Sutherlandshire Cheviot ewe, who is also an exceptionally good mother. On their native hirsels the picturesque Blackfaces flourish where none others can, and if deer forests are in future more in demand for production of food than purposes of sport, apart from cattle, the Blackfaces are the sheep for the experiment. No breed has more knowledgeable and loyal supporters, who adhere to the principles proved sound by past experience, and who are averse to any tampering or experiments lest, perchance, untoward mischance might disturb established relationships and depreciate the value of, in many cases, the farmer's greatest asset, the Blackface flock. In Scotland the Blackfaced and Cheviot sheep are predominant, with the Border Leicester, Oxford, and Suffolk rams as the most popular sires for crossing purposes, and the flocks are so uniform and are on so satisfactory a basis that it is unlikely that innovations, let alone experiments, will be countenanced by the large body of experienced Flockmasters and their highly skilled shepherds. Mr. Pyper, a well-known

Shorthorn breeder, when farming his own lands at the Grange, Burntisland, tried Corriedales, and met with some demand for his rams; but he was the exception that proves the rule. In England and Wales there are many and diverse breeds of sheep, Marshams, New Forest, Kent or Romney Marsh, Lincolnshire Long Wools, Oxford Downs, South Downs, Suffolks, Border Leicester, Dorset Horn, famous for early lamb, Herdwicks, Ryelands, Hampshire Downs, and others.

In Scotland the colour of the face makes no matter—black or white—but in England in certain districts a black face is almost a sine qua non, a white face is looked on askance, and these local prejudices influence the type of ram chosen to produce cross-bred lambs. An English breed, formerly popular, which has dwindled considerably is the Shropshire, and these sheep have been largely superseded even in districts in which a quarter of a century or so ago they were predominant. They may have had a tendency towards overfat mutton; but a Shropshire ram on a Cheviot ewe still makes an excellent cross. The Scottish Blackfaces must have range and liberty, cramped lands are no good to them, and Welsh sheep in their turn like liberty to roam, although none are hardier nor make sweeter mutton.

Glancing at the past the fleece was the distinguishing element and the numerous varieties of short wools differed greatly from one locality to another. Long wools were more uniform in type, large framed, hornless, white faced and white legged. The short wools were far more numerous. The survival of so many different, they might even be called local, breeds to-day may be taken as evidence that acclimatisation is a more definite factor with sheep than with other classes of stock, and that the sheep stocks "bound to the ground" have on that account a greater than market value. The assump-

tion is taken for granted in Scotland, at times to extreme limits, and has been the cause of difficulty in reletting sheep farms from time to time. Prior to the war the sale of fat lambs from their dams was on an ever increasing scale, quite apart from the Dorsets, whose speciality has always been early lambs, and as a good fat lamb often made as much as a shearling wether, there was every inducement to breeder and feeder to comply with the demand, which has been checked somewhat during the war years. Quick profits apart, the disposal for food of the immature animal must always be uneconomical from the weight point of view, to say nothing of the loss of the mature fleece; but whether or not these considerations are of sufficient strength to curb the practice in normal times is problematical. The question has a definite bearing upon the popularity or otherwise, of different breeds, particularly in regard to the type of ram to be used for crossing purposes.

Mechanisation has brought to the fore the question of the future of the horse, so far as land work is concerned in the same way that years ago the question of the continuation of the ox on land work loomed up on the introduction of horses. The champions of the oxen urged their greater economy in keep and lesser needs for house room in the same way that the champions of the horse put forward his claims to-day. Speed beat the oxen, as, mutatis mutandis, speed will probably beat their erstwhile ousters in their turn, sad as that may be to equine enthusiasts. Meantime, the increased acreage under plough and difficulties in obtaining implements and petrol have made a greatly increased demand for horses for farm and country work since the War, although it is easier to get a score of the younger generation to work a tractor than one to look after and work a pair of horses: and in the future the human factor will also

influence developments. Meantime the Shire, Clydesdale, Suffolk Punch, Percheron, and their derivatives continue to flourish and to do their share of whatever work may be going, rough and smooth. In the north the Clydesdale is supreme, and proves himself a fast and steady worker with the constitution and stamina necessary to last out a hard and long day, and continuous periods of strenuous work. In the south the Shire, the descendant of the "Large Black Old English Cart-horse," and who derives his name from the heart of the England wherein for so long he has been bred, still holds his hereditary place, and with his honesty, strength and courage and great staying powers may with justice claim to be second to none. Suffolk Punches (nothing looks better than a well appointed team of Suffolks) and Percherons have their advocates and enjoy, particularly in certain districts, their measure of popularity. Usage, sentiment and maybe wishful thinking, unite to retain for the horse his place on the land against all rivals, and so may it be; but if he has touched the highest point of all his greatness and must now retire from the fields in whose cultivation he has played so noble a part he will leave precious memories and genuine regret at his passing.

"When the pig's proffered, hold up the poke," says an old proverb, and pigs, though liable to the greatest fluctuations in monetary values of any class of stock, have since the days of the Saxons, whose wealth, we are told, was founded upon them, played a large part in agriculture. Large and Middle Whites, Large and Middle Blacks, Wessex Saddlebacks, Berkshires, Tamworths, Old Gloucester Spots, and others continue despite untoward war-time handicaps to replenish the land and to produce succulent pork and bacon as have their ancestors before them since they were first reclaimed

from wild life in the forest. Left to himself the pig is a clean and intelligent animal enough, and still capable of thriving mightily on what at one time was a part of his staple diet—acorns and beech mast as any one who likes may prove for himself. To two great evils they are subject, particularly when kept in large numbers, erysipelas and swine fever, which will go through a herd like a hot knife through butter.

In recent years the Danes brought pig-keeping and the production of bacon to a fine art, and consistently succeeded in making their pigs profitable, so much so that they found imitators in this country, though it is doubtful whether any succeeded in equalling them, and certainly none succeeded in beating them at what might be regarded as their own game, i.e. the production of good bacon at a less price per lb. than any competitor could succeed in doing. Before the war, Danish quality and price governed the market, with Canada and America, with great natural resources, also playing increasingly strong hands. The Home producer was in an invidious position as his profits and/or losses were at the mercy of his oversea competitors, and he found it a difficult matter to cut his costs so as to be able to compete. Open-air Pig Farms were started up and down the country, and provided they were adequately equipped and that suitable stock was employed, met with a certain measure of success, though little enough considering the amount of work involved, risks run and capital employed. The White and the Black breeds and the Wessex Saddlebacks assimilated modern conditions, and the cross between the Large White boar and the Wessex Saddleback sow is an excellent one and capable of producing an excellent bacon pig at moderate costs. The Wessex Saddlebacks are good grazers and capable of getting their own living during the summer months given sufficient range of pasture. The Blacks are a hardy and sound constitutioned breed, and the Old Gloucester Spots, though local, have many good qualities, and make an excellent cross. Given access to woodlands, particularly beech when the mast has fallen in autumn, it is surprising how pigs thrive and put on condition. A sow will average two litters a year, and pigs seem a tempting proposition; but it must be borne in mind that, whilst a useful adjunct, they are, except to those with experience and skill, a dangerous mainstay, and those contemplating pig-keeping ventures for a post-war livelihood would be well advised to walk warily.

The War years have concentrated attention upon Poultry and the nutritive value of fresh eggs, particularly when unobtainable. Turkeys, geese, ducks, guinea fowl, as well as what are known as barn-door fowls, are kept in greater or less degree on most farms, depending largely upon whether the housewife has the interest, the time-little enough, probably, these days with her many other duties-and inclination to bestow upon them for their success and well-being. Poultry farms large and small, with intensive methods and selective breeding, are again a matter for experts, and involve much hard work in addition to meticulous care and attention. There is no doubt more attention could, and should, be paid to Poultry on the farms up and down the land; but that is not to suggest that as a sheet anchor for a livelihood the keeping of Poultry is anybody's prerogativeit is as likely to be anybody's funeral.

CHAPTER 6

THE LITTLE ALMSMEN OF SPRING-BOWERS

Seek first for bees a cot and station good, Where neither wind hath entry of the bowers. (For winds forbid them to bring home their food). Nor sheep and buttish kids dance o'er the flowers. No vagrant heifer in her wanton raid Scatter the dew, and wounds the rising blade. VERGIL, Georgics, Book IV.

It is established from many sources that honey, if only of the wild variety, was known and appreciated in very early times, and that the art of bee-keeping was one of the earliest attainments of the husbandman. Vergil's time peculiar notions were in vogue for he writes of Kings leading the bees when swarming, and awards to the supposed Monarch all the martial vanity and prowess of his human prototype of the day. He it is, also, who gives credence and circulation to the story of the emergence of bees from the putrid carcase of a nine days dead steer-"A prodigy right wondrous to be told "-which in truth, had the insects really been bees and not blowflies, it would indeed have been. Much has been learnt about bees since then and, by the same token, doubtless much remains to be learnt. War and shortness of sugar have focussed attention upon bees, and brought many recruits to the profession, hobby, or pastime, whatever individual beekeepers like to make, or can make, of it, and honey has been much sought after. The great advance in bee-keeping was the substitution of the wooden hive and its fitted brood chamber and frames for the old-fashioned straw hive. Taking

the season's honey from the straw hive was a major operation of war inviting the destruction and loss of many, sometimes all, of the unfortunate bees. With the modern hive this is avoided, and taking the honey at any time is merely a skilful display of pocket-picking in place of the former bludgeoning robbery with violence. Up and down the country there are numerous businesses run on commercial lines for the keeping of bees, not only for the honey and wax produced, but also for the supply by means of selected queens and surplus stocks, of replenishments for smaller beekeepers and beginners, and most of these businesses also supply hives and all the requisite accessories, and all are, without exception, run on eminently fair and straight-forward methods, which is most satisfactory when the great discrepancy between the experts' knowledge and that of the neophyte is borne in mind.

"God Almighty," says Bacon, "first planted a garden." It may be taken for granted, there were bees in that garden, for nothing adds to the prolificacy or to the charm of a garden to a greater extent than the bees. The majority of Bee-keepers, however, keep them for the interest and pleasure obtained rather than from any idea of making money. If they get enough honey for themselves and to give away to friends, they are satisfied, and like the size of the fisherman's catch, the amount of honey taken from a given hive in a satisfactory season grows by repetition. In the country bee-keeping as a spare time occupation could with benefit to practitioners and the country side itself be much more extensively indulged in than it is at present, for the propagation value of bees amongst blossoms, flowers, clovers, and so on is immeasurable, and how they love a bean field in flower. Some years ago in a certain isolated agricultural district disease killed off not only all the hive bees but

all the wild bees as well, so that for a time the district was devoid of its natural fertilisers. The result was so great a decline in all round yield of garden and field that dire necessity compelled the inhabitants to restart beekeeping, which led to a speedy amelioration of the situation. No untoward fate attended the new bees and in course of time the wild bees in their turn made a welcome and fruitful reappearance.

It is a country pursuit, upon which the novice can embark with little financial expenditure and no qualms as to future commitments or possible contingencies. There are several useful books which the beginner can pursue, and Colleges of Agriculture arrange practical demonstrations and lectures, and members of their staffs are always ready to advise or to lend a helping hand, whilst the Beekeeping Associations also hold practical demonstrations and lectures and promote Members' meetings whereat mutual views can be exchanged, items of current interest discussed, and information sought and given. There are several good types of hives of different sizes, and as regards the best size, divergent views are held even amongst the experts, some of whom advocate the big double hive, others the medium or moderate sized hive. Chacun à son goût. The essential requirement as regards equipment is for the bee-keeper to have a standard pattern throughout.

For the bees themselves with their Queen, princesses, drones, workers, nurses, young bees, and brood, it is doubtful whether any more fascinating and interesting community be available for human study, and the knowledge obtained by personal observation and practice is worth all the rest put together. On a sunny day wity a hive working its hardest, the workers continuously setting forth and continuously returning fully laden, the luxurious drones, whose ultimate fate is so tragic,

executing their joyous dance, and the tuneful hum over all, it is impossible to contemplate a more soothing or peaceful picture—an incontrovertible panacea for war frayed nerves.

The Queen is the fons et origo of the Bee State, which flourishes or dwindles according to her egg-laying capacity and fertility, and when a daughter or daughters, princesses in their own right, have been reared to maturity they assert their rights to Queenship and responsibility, and a swarm occurs. Modern practice deprecates the bees' habit of swarming and seeks to limit, or even eradicate it, in the interests of a greater supply of honey and stronger colonies. Various methods of controlling swarming are advocated and practised with more or less success. Some believe in clipping the wings of the Queen, a practice Vergil advocated: "Clip thou the Monarch's Wings"; many in giving more room and seeing that the bees have abundance of work in front of them. Evidently bees always have swarmed, and it is certain that swarming means that the bees concerned are in a healthy and thriving state, and they are always in the utmost good humour on these occasions, as being full of honey, they ought to be. While it lasts and is in the air a good swarm with no intention of going far afield is a fascinating and joyous spectacle, and the air is filled with the Music of their rejoicing. Overmuch swarming is not good for the yield of honey nor for the bees themselves, particularly later on in the season, as it may so easily result in depleted and weak stocks. There is an old Derbyshire saying :--

"Swarm o' bees i' May
'S worth a load of hay;
Swarm o' bees i' June
'S worth a silver spune;
Swarm o' bees i' July
'S not worth a fly.

No one need be afraid of venturing upon Bee-keeping, given the opportunity, for the bees themselves are the best instructors and guides, and it is a great mistake to interfere with them unduly. The Queen is the sheet anchor now even as she was in Vergil's day, though he did think she was of the opposite sex.

"The monarch safe—all hearts and minds are one;
The monarch lost—society is gone:
Themselves asunder rend the honey-dome,
And burst the wattled order of the comb.
The King protects their work, the King they greet
With hums of awe, and body-guard complete;
Upon their backs they lift him, and confront
A death of glory, in the battle brunt."

If "Queen" is substituted for "King" and due allowance made for poetic licence these lines give a realistic picture, as true to-day as then. The practice of using smoke is also mentioned by Vergil:

"Now, when the narrow homestead you unseal, And honey locker'd for the public weal, First with a draught of water dash your face, And launch a column of thick smoke in chace."

There are those who affirm that a draught of beer taken internally has a more beneficial effect than the draught of water. However that may be there is no doubt Bees object to dirt and bad odours.

Though the smallest members of the working countryside community Bees are by no means the least important, least instructive, nor least interesting, and they offer an easy avenue of approach to the city dweller desirous of learning more of country life.

CHAPTER 7

THE ECONOMY OF THE COUNTRYSIDE

Le réel est étroit, le possible est immense.

LAMARTINE.

The statement that it is impossible for these Islands to be self-supporting is frequently made by leading politicians, and appears to be accepted by the general public as incontrovertible. The fact is, however, that never in the last half century have these islands been given a reasonable opportunity to test the truth, or otherwise, of this statement owing to neglect to take the necessary action in time, and to the fact that even in 1914-1918, and again in the last War, measures were taken to secure, and reliance was placed upon, a considerable supply of food-stuffs from overseas, which in both cases by the grace of Providence duly materialised. Spasmodic attempts to revivify a moribund agriculture, and by any and every expedient to force the neglected land to bring forth its abundance, are no criterion of the productive capacity of that land were it to be systematically and suitably cultivated, managed, and equipped, on a long term policy with a definite objective. In the present state of affairs that objective could, and should be, to feed the inhabitants of these islands by home grown products and not to import from overseas. War has twice within a comparatively short time brought the threat of starvation, if not to the threshold, at least very definitely within view, of the door of the national larder. There are other dangers, apart from war, which might cause a recurrence of this threat, and in a form even more difficult to counter. The country owes overseas a very large sum in sterling, and/or payable in sterling, and a country that owes more than it can repay if called upon is in precisely the same position as an individual in similar circumstances. The only solution in the case of the individual is to live on his own fat, and so it is with the country.

In the autumn of the year 1939 a very capable and experienced English farmer wrote in the public press that the food essentials-corn and meat-were not assured and never would be again in this country; that bona fide farming was never in such a desperate strait as it was then; that prices that year were the worst ever experienced and that the outlook, at the moment, was still worse. There were hardly any genuine farmers left and ninety per cent. of those remaining would get out if they could. Ninety per cent. again, if they paid their cake, corn and manure merchant; then rent, or mortgage interest; and then their bank overdraft, would be left high and dry, and the situation was getting worse every day. He further stated that at a low estimate it would take ten years and £30 an acre to put the land back to anything approaching "good" condition, and the land itself was not worth half that amount. Genuine agriculture was as dead as the Dodo. The writer concluded by stating his willingness to pay £10 to any charitable institution the Editor might name were his statements incorrect.

The plight of agriculture at that time as represented by this writer was accepted, for no attempt was made to challenge or controvert his statements, and no charitable institution was the richer for his £10. That was the accepted position, therefore, eight years ago so far as English agriculture was concerned, and in Scotland, although the position from the point of view of the land's condition and the calibre of the farmers was better,

prices were as adverse. By the following harvest War had supervened and frantic efforts, regardless of cost and the canons of good husbandry, were made to revive the forlorn countryside, and to obtain food supplies. One great reservoir of unexhausted strength there was in the amount of land that had been allowed to revert to grass in the past, and that was available for tillage and the growing of crops. In a way it must be regarded as an irony of fate that the past neglect, which was the cause of so many acres being in grass, should at a crucial time prove an advantageous factor; but how different the case would have been had this neglected surplus been kept in cultivation, and been equipped with skilled personnel, buildings, and requisite implements. As it was, subsidies were given and Government assistance provided to get as many acres of grasslands as possible broken up, and put to the production of corn. The stored fertility reserves of all this grassland have been used without replacement to any appreciable extent, and in due course such land will require replacement of the fertility expended unless it is to be allowed to become exhausted and derelict. Never, in fact, in history has any system of agriculture been so heavily, and lavishly, subsidised as our Home agriculture during the War years and the result is that, from the financial aspect, it is now on an entirely false footing. Subsidy has followed subsidy, and Government help for sowing and harvesting operations has been organised and put at the service of farmers freely and with as liberal a distribution as possible. The wheel has indeed come full cycle and as it was impossible pre-war for the best of farmers to do justice to his land and make money, so during the war it has been impossible for even the worst farmers to fail to make money. That much of the money so made has had to be returned to the Exchequer proves that subsidies were more numerous and on a more lavish scale than necessary, and therefore that the Public has been paying too much for its home-grown food supplies. Neither subsidies, returns to Exchequer, nor high prices, have done anything to benefit the land itself, nor has any return in respect of them been made to the land—pace lime, drainage et hoc genus omne. It has been a case of granting such subsidies to poor and marginal lands as would enable the farmers thereof to produce as much as possible at a profit to themselves and the same subsidies have been also applied to good land without regard to the fact that it was capable of producing twice and thrice as much per acre.

Agriculture, from neglect and prices that had relegated it to a derelict industry, suddenly found the purse of Fortunatus at disposal, and encouragement and tribute coming from all quarters thick as autumnal leaves. The natural consequences have followed, despite limitations of retainable profits, and costs and prices have soared. Since the war the wages of agricultural workers have doubled as, with those responsible for paying them making profits on the scale they have been doing, is equitable; rents in the case of new lettings, and prices for land in the case of sales, have become extravagant.

For all this, and despite repeated assurances by responsible persons that agriculture is never again to be sacrificed, there is no real confidence amongst farmers, and no belief in a continuation of, certainly not the present profits, but of reasonable profits, taking a long view. It must be borne in mind that the man bred and brought up on the land, who in due course becomes a farmer, has thereafter no alternative. The independence and the individuality which his chosen avocation enables him to enjoy unfit him for the restraints and irksomeness of other callings, and he must by hook or by crook continue

to farm, or, at best, eke out a precarious existence as local agent for somebody's cakes, or medicines, and at worst work as an ordinary labourer on the land. So, in good times and in bad, the farmer with a working lifetime in front of him will continue to farm, and in so doing divest himself in the lean years of the profits of the fat. Some, as between 1914 and 1922, seize time by the forelock, realise whilst prices are high and retire; but the majority continue for better or worse, to farm and it is on them that the brunt of the battle will fall in the future.

Land, the soil, is, as it always has been and always will be, the raw material of agriculture, and upon the cost of the raw material depends the price of the product or finished article in agriculture as in any other industry. In the past the main reason for depression in agriculture has been that the price of the product was too high to enable such product to compete with imported products of a similar nature. Apart from climatic advantages the factor that enabled imported products to undersell the home variety in home markets was the far lower cost of the raw material, i.e. the soil. To this, the prime cost, must be added the higher cost of wages in this country for a similar quantity of any given product from overseas and the discrepancy under this head is higher now and will be higher in the future than was the case in the past, thereby making competitive prices still more difficult of attainment. Much, doubtless, might be done by better and more direct methods of transport and sale from farm to consumer, not only by way of reducing prices but also of improving the purity and freshness of the supplies. The crux, however, remains the cost of the soil and its working, and, if one or other, or both, of these, is, or are, too great, the price of the product will be too high.

The Home Market fairly available to the Home

Producer is all that he requires, or can in reason expect, and, if the Home consumer wants fresh and untainted foodstuffs, the best, in some instances the only, source from which he can obtain such foodstuffs is the Home producer. Consumers and producers comprise the total population of these islands, and of course all are actually consumers, though not all are producers. It is in the interests of all, however, that food prices, compatible with fair wages and reasonable profits, should be on as reasonable a level as possible, and should not, mutatis mutandis, exceed the prices of similar products elsewhere in so far as fair and reasonable comparisons can be made. It is, therefore, in the interest of the whole community that the initial cost, that of the raw material, or soil, should be fixed at such a figure as to make possible its profitable use and fair exploitation for the benefit of the whole community. Unless and until the soil has been unshackled and the cost stabilised at a workable figure there can be no secure foundation for lasting prosperity in agriculture, nor any guarantee that on yet a third occasion the dread spectre of famine may not arise.

It is for these reasons that the present system, which, when all is said and done, is chaotic, has failed, and will continue to fail. To mortgage, charge, and fleece the soil by any and every means and in every conceivable way, to extract the maximum therefrom, and return the minimum thereto, has resulted, and must result, in a dwindling, deserted, and neglected countryside and a derelict agriculture. Free the soil from all burdens foreign to it, and provide safeguards against exploitation and profiteering and then give Home agriculture a fair opportunity to supply the basic needs as regards the food of the population, and the three basic needs are milk, corn and meat.

To take milk first, as in its case Home production is

the only source of a fresh supply, there is no doubt that the country not only can but must be self-supporting. Grave aspersions have been cast upon the state of the Dairy Herds of the country, and likewise upon the purity and quality of the supply of milk. It may be that concentration upon the supply of milk and intensive breeding with that end alone in view have been carried to injudicious lengths, and that the case should be considered from a wider aspect. Certainly the indiscriminate slaughter of newly-born calves because the milk required to rear them is considered of more value to the dairy must be a wrong policy, and economically unsound. If Dairy Herds on the present system of breeding cannot must be a wrong policy, and economically unsound. If Dairy Herds on the present system of breeding cannot breed calves, male or female, that are worth rearing, there must be something wrong with that system. Presuming that it is constitution and frame that are lacking, the remedy is not far to seek and is to be found in the utilisation of sires capable of supplying the qualities lacking without insisting upon their sires and dams having so many gallons of milk behind them, which insistence has largely brought about the present regrettable state of affairs table state of affairs.

Apart from liquid milk itself there are the many products of milk—butter and cheese. Home supplies of butter, since they are the only supplies that can be fresh, should have no difficulty in holding first place in the Home Market; but so far this has not been the case. Foreign butter, uniform in colour and taste and better marketed, has ousted the Home product, which varies in colour and taste, from its place. This could and should be remedied by consolidating the manufacturing methods of Home butter and taking the necessary steps to put on the market a standard butter, uniform in colour and taste, and attractively exhibited. Much might also be done by direct service from producers to consumers.

Were consumers once convinced that they could rely upon home supplies with as much, or even more, confidence as they have relied upon foreign supplies in the past the battle so far as the Home Producers is concerned would have been won, and all that remained would be to extend and expand the market. The same remarks apply to cheese, as to which there is no foreign variety comparable in nutrimental value and flavour with Home products. But if the public taste demands a standardised cheese there is no doubt it can be provided, and with beneficial results to the public.

"Corn and horn go together," and "Up corn, down horn; down corn, up horn," represent accepted and widely held beliefs on the part of our forefathers. When the price of corn was high, cattle ipso facto, cost more to feed, and therefore when sold left less profit behind them. Conversely when corn was low, cattle cost less to feed and when sold realised the greater profit. In other words what was lost on the swings was gained on the roundabouts, or vice versa. Those beliefs held sway until prices of both corn and horn went down in face of foreign competition, and persistently stayed so low that neither horn nor corn paid, and both were to a large extent abandoned. That knocked the bottom out of British agriculture, and effectually negatived any possibility of the country being self-supporting, for the only way to obtain the maximum output from the land is to stock it, and the more the land is stocked the more the land will carry. Cattle and potatoes, sheep and roots, are the sheet anchors of production and fertile arable land, having as its objective abundant corn crops. Cattle return to the land by means of dung the fertility that has been taken from it, and it is surprising how many cattle, good straw, hay, and roots will carry, and to what condition they will bring them. The trouble is that there is scarcely a farm in the country equipped with the courts, yards, and accessories requisite for the numbers of cattle that could and should be reared and fed thereon if maximum production be aimed at. Augmentation of sheep flocks is a matter that requires a different angle of approach for breeding sheep are large eaters, and many of the higher land grazings available during the summer are unsuitable as winter quarters, necessitating removal of the flocks grazed during the summer, and alternative room and food supplies during the winter. In the case of both cattle and sheep a limitation of early marketing, particularly of calves and lambs, is well worth consideration; for carrying stock on to full maturity, provided the accommodation and food supplies for so doing are available, must result in heavier weight of carcase to the butcher, and therefore, more food for the public.

With regard to Poultry, very much more in the way of food in the shape of eggs and table birds could be obtained were more care and attention bestowed upon poultry keeping in the case of the majority of farms in the country, and this applies to all classes—turkeys, geese, ducks, guinea fowl, and the barn-door fowl.

Increased production, combined with better and more expeditious marketing methods, is not only possible but desirable in the case of vegetables, which can only be obtained in anything approaching the fresh state from the home producer. Production of fresh vegetables as a side line might well be started on suitable farms. With regard to bees no farm can afford to be without its hives if only for the benefit derived from the inmates as fertilising and propagating agents; whilst the honey industry, properly organised, should certainly be able to supply the needs of the home market at a reasonable price without calling upon the overseas producer.

Fishing is not agriculture, but from the point of view

of food supplies it is closely allied, and could, and should, be made a more valuable and dependable auxiliary. In the North, and amongst the islands, until comparatively recently, many crofters and agricultural workers played a double role, augmenting their earnings on the land by going to sea during the herring season and helping at the fishing. Some do so still; but the practice might with advantage be encouraged and extended to the benefit of both harvests, that of the land and of the sea. While fish that have been caught at cost and labour are returned to the sea for lack of a market, can it be alleged by anyone that this country has made any real attempt to be self-supporting?

Farming is not a five-days-a-week business, nor even a six-days-a-week one; it is a seven-days-a-week proposition, and very full days at that, and this is a factor often lost sight of; but one which deserves serious consideration when rates of pay and profits are weighed. Since 1939 money has poured into the industry, much old debt has been repaid, frozen assets have been liquidated, losses transformed into gains, and large amounts by way of taxation returned to the Exchequer. The soil thus entreated has abundantly responded but it remains the same soil to all practical intents and purposes as it was before 1939 and the inflated value attached to it to-day is based on financial circumstances that cannot endure and is therefore a false value. The real value of the soil is the amount it is worth as the raw material of agriculture; and that is no more to-day than it was in 1938 if the amount of food fit for human consumption obtained therefrom be taken as the criterion of value. and depreciation for used fertility be allowed for. Subsidies, the Rationing Scheme, and the virtual monopoly of the Home market have raised the monetary value of Home grown supplies and this accounts for present

prices. In so far as subsidies, rationing, and the monopoly of the Home market are temporary and wartime expedients by so much are present prices inflated and fleeting, and to seek to stabilise prosperity on so illusory a basis is to court disaster. Were it possible to convince the British Public that in the long run it would pay them in every way to look to their own soil for their own sustenance, though subsidies and the Rationing Scheme would go, vet the Home Market would be left to the Home Producer, and that would suffice. It may be objected that we can no more feed ourselves from our own resources than we can finance the War except by borrowing. That is true so long as we can continue to obtain food from overseas, just as much as it is true as regards borrowing. Both borrowing and imported food are equally unsound as permanent propositions, and extraneous events over which we have no control may bring one or other, or both, to an end. The evils of financial stringency are great in the shape of unemployment and trade stagnation; but are far outweighed by the evils caused by a shortage of food supplies in the shape of the spectre of Famine. It might be that for a time it would be necessary to continue to import certain quantities of corn and meat, provided they are obtainable, as it may be necessary to continue borrowing; but in due course the one could be stopped as the other, if the public made up its mind so to do and a long term policy to this end were adopted.

The actual is limited, the possible is immense. There are many essential differences between England and Scotland, not the least important of which is that Scotland is not only self-supporting but is an exporter of food supplies. In the case of both countries, however, the basic principle that the price of the soil must be an economic one holds good, and further that the Home

Market is assured to both. Nationalisation of the land would be a tedious lengthy, upsetting and costly business, for its advocates do not suggest confiscation; but state it is to be paid for. That being so, it is reasonable to enquire upon what basis of value such payment would be arrived at, and this would certainly not be upon that of twenty-five years purchase of the nett rental ascertained by customary methods. To judge by the price paid for Mining Royalties the number of years purchase would be nearer half the commonly accepted quota than anything else.

Originally land was acquired by conquest and held by force; whoso could held and enjoyed it, and only the strong survived. In early days individual ownership by free individuals or communities was superseded by the Manorial System in England, and by the Clan System in Scotland, and it must be remembered that Tostig's earldom of Northumbria ran to the Forth, so that the line of demarcation between the two countries was not as now, and similarities, which always outrun boundaries. varied more and faded further north. The Lord of the Manor was supreme in his lordship, and the labourers. though tenants of the land de facto and with defined and recognised rights, were bound to the manor and liable to aid in cultivating and garnering the lord's lands, and in certain circumstances to surrender to the lord a proportion of their own produce. The privileges enjoyed were repaid by service and goods, chiefly the former, for each Manor was self-supporting.

External conflicts, the Crusades, and the Wars of the Roses with their fluctuating turns of fortune diminished the nobility and the military orders, weakened the power of the King as supreme Overlord, and lessened the hold of the Lords of the Manor over their estates and the agricultural classes thereon. The Church gained in

lands and in influence and Churchmen became leaders in agriculture and also as landlords. Monetary payment took the place of payment by service, payment in kind was converted for the cash equivalent of the day. Free-hold land was created as the result of out-and-out grants on hereditary basis and a new class of agriculturalists—the tenant farmers—arose and increased rapidly. Henry VIII. and the Reformation denuded the Church of many a fair manor and many a fruitful acre, and bestowed them on whomsoever the King listed, always providing, however, for the Crown's share of the plunder. Whoever else was spoiled, or was benefited, the position of the growing class of tenant farmers and, indeed, of cultivators of the land as a whole was strengthened.

James I. of England and VI. of Scotland united both Kingdoms, brought his Scots followers south to share the fortunes of his new Kingdom, and brought some sort of peace to the Borders, which enabled them to lay the foundations of an improved agriculture, which has never since looked back. Charles I. lost his head and his Kingdom, estates were forfeited and changed hands, and Cromwell dinged down the castles and cramped the powers of what remained of the old order of nobility, and a new class, successful brewers and traders, took seizin of a goodly share of the land. Charles II.'s return retrieved some, by no means all, of the forfeitures and losses the adherents of his father had suffered, and regained the Crown's landed holdings, which by grants to favourites and through need of money, he in his turn diminished to a large extent. Dutch William took the Kingdom from his father-in-law, and rewarded his followers and those who did him service from the Crown's patrimony; but by his time the landlord-tenant farmer system was in full swing, and squires and rustics were established in strength on the land.

In Scotland internal feuds and the rebellions of the '15 and '45 caused many changes and forfeitures, and war and politics engaged the activities of the hereditary nobility far more than the cultivation of the land, which was left more and more to those regularly occupied thereon. The '45 broke the military power of the Clans, and the subsequent opening up of the Highlands, though it was of a limited nature, brought new ideas to Chiefs and clansmen, and necessity forced them to look to their lands for maintenance.

The Georges encouraged agriculture—there was even Farmer George—and improvements proceeded apace; there were no more violent disturbances of ownership. Henceforth the lawyer with deeds and titles became the arbiter and it was only by his instrumentality that manors and acres could legitimately change ownership—the days of force were over, chicanery took the place of the sword. Entails, trusts, transfers, mortgages, bonds (all of which were features of English land law from shortly after the Norman Conquest), and lawsuits on occasion have done much to find the lawyers in work and to keep them supplied with money.

"For never title yet so mean could prove,
But there was eke a mind which did that title love."

In truth favour and fortune have played the main part in awarding the ownership of the land, and the merit of many an accepted title is certainly not to be found in its acquisition. Down the years much wealth has been extracted from the land, above and below ground, timber, coal, shale, stone, ore, and tribute from the passage of rail and water ways, not to mention land sold for building purposes, and the rents and premiums of those fortunate enough to possess town properties. Possession of an hereditary landed estate with the position and privileges

attached has been an invaluable asset for any sort of career the fortunate owner might see fit to embark upon. But now-a-days taxation has altered all that; and if the facts are fairly faced there is no one with knowledge who believes that the continuation of the hereditary landed estate subsisting on its own resources is either a possible or practical proposition, with Death Duties and taxes as they are. For the last half century owners of landed estates have as landlords received scant return from the monetary point of view, and the better they have cared for their estates the less has been the monetary gain, more's the pity. Round about the twenties not a few landlords took advantage of a favourable market to realise estates and outlying portions of estates, and some sold out of land altogether. To attempt to continue as conditions are is but failure to accept the inevitable and by continuing to fight a losing battle to accentuate the losses. If the best is to be obtained from the land no man should hold more than he can himself manage, and he must be prepared to make a full time job of it at that. Those who have enjoyed the cream of the land and all it has yielded have little cause to complain if they are now asked to be content with less and to afford opportunities to others. They would still be in a favourable position, for they would be able to retain a sufficiency of the most profitable and valued portions of their estates and to relinquish others, and by so doing would strengthen their own position and secure greater public support in every way.

The electoral power in the country lies with the urban and industrial masses whose votes so greatly outnumber those of the land, that only by obtaining their support and interest can there be any hope of a constructive and long term agricultural policy, and the more diverse the ownership of the land the more probable that their

essential support and interest will be forthcoming. There are far too few on the land to-day, and the tendency even now is for the numbers to decrease, and until this tendency is checked, and increase becomes the order of the day instead, agriculture, whatever the prices, will continue to be a declining industry. The best and surest way to retain those on the land and to attract fresh blood is by stabilising the cost of the soil, the raw material, at such a level that needed equipment and development can be carried out and a satisfactory rate of wages and profits be assured. Any idea of nationalisation on the basis of existing rentals pre-supposes the continuation of those rentals and the maintenance of the soil at too high a price, and therefore from the Food Supply point of view is bound to fail. On the other hand were those farming the land afforded the opportunity to buy their holdings at fifteen years purchase they would have the raw material at such a price as would enable them to retain their place in the Home Market and to supply the up-to-date equipment essential. Liquidation of all mortgages and charges on the same basis would disencumber the soil of strangleholds, prohibitive of development and enterprise.

So far as agriculture itself is concerned it is so vital to the country and so resilient that, given the Home Market, it could re-organise and re-equip itself and obtain such extraneous finance as was required by a comprehensive system of insurance. After the war changes in the financial system and reconstruction in every walk of life are inevitable and no better opportunity of dealing with Home agriculture is ever again so likely to present itself. So far as the land is concerned, mechanisation is in its infancy, and has been superimposed upon the old system without preparation or regard to lack of facilities, and it has had no chance to

shew what results could be attained under ideal conditions. Mechanical power suitably developed and supported would revolutionise agriculture just as much as Air Power has revolutionised warfare.

"There are more things in heaven and earth, Horatio, Than are dreamed of in your philosophy."

It is necessary to look upon the soil as the greatest national asset and to deal with it as such, and to bestow as much care and thought upon its re-organisation and re-equipment as so important an asset merits and requires. Since the time of the Industrial Revolution the countryside has been shelved to all serious intents and purposes, and its progress or retrogression regarded supinely as half farce, half tragedy, twice interrupted by stark reality by way of possible failure of overseas food supplies and the need to rely upon home resources. The time has come when trifling and temporary patching will no longer serve, and a fresh start upon new and up-to-date lines must be made, taking full advantage of all modern science can provide without reservation. Many interests would be affected and many preserves invaded and the vital object of the soil—to grow food—would have to be given absolute priority. An endeavour to be selfsupporting presupposes more land under the plough and more winter-feeding of stock for the butcher, and an all-round utilisation of electricity and mechanisation, and, after the war, great advance will be forthcoming in respect to both of these by way of precision tools and implements designed and made to fulfil the specific work for which required.

The time is ripe for the slumberous labyrinth of an outworn system to be abolished and for the initiation of a new venture on sounder and broader lines.

CHAPTER 8

"KNOW YOUR OPPORTUNITY"

The flying leaves among the wintry skies
In ghostly ruin flit;
The flower's perfume when the flower dies
Ah, what becomes of it?

After Chinese

Gone is the castle, gone the mansion, vanished the manor with all that in their time was inherent in tradition, leadership and example to the countryside they may have dominated but also indubitably served. So far no suggestion as to who or what is to replace them has been made. Their going has involved to a lamentable extent the elimination of rectory and vicarage, and consequent cessation of Church Services and activities, formerly one of the mainsprings of country life; and leadership and example are now to seek. Nature has wonderful powers of recovery and resiliency and the capacity to recoup from neglect and decay, and, suitably aided by mankind, these powers and this capacity can produce not only as abundantly as before but with still greater abundance. The slumbering wastes remain sterile for lack of exploitation by those whose destiny it is to earn their bread by the sweat of their brow and the labours of their hands, and who cannot evade the overdue task unless they are to starve. In the past all classes had a share in evolving the common foundations of good husbandry and in establishing the most suitable breeds of stock. Their work was well done; but since the Industrial Revolution and the fetish of cheap food from overseas no real opportunity has been afforded to test the land's possibilities, or to utilise its potential resources.

Home Agriculture can never really flourish unless and until it is given priority in the Home Market, which should be its natural outlet and prime support. For many products Home Agriculture possesses in the ability to provide fresh, absolutely fresh, goods, an asset of inestimable value from the consumer's point of view. Who would use dried milk were fresh milk available, and who would risk a Chinese egg were a newly laid one to hand? Apart from the freshness of Home Products, so vital to the populace from the point of view of health, there is the value of the offal and bye-products to be taken into consideration. Empty tins, bottles, and cases, however cheap their contents may seem to an unthinking public, are of no aid to the soil, which they rob of its natural supporters, cattle, pigs, and poultry. Every pound of food produced in this country leaves, apart from the cash value at which it is sold, some residue in the course of its production that goes to enrich the country's soil, and the bigger and more frequent the transactions the more is this the case. It is no matter in the long run under what system the soil is held. Unless and until the Home Producer has beyond any peradventure first claim upon the Home Market, agriculture in these islands will dwindle and deteriorate.

> "Give fools their gold, and knaves their power; Let fortune's bubbles rise and fall; Who sows a field, or trains a flower, Or plants a tree, is more than all."

Of what use is it to go all out for a large Export Trade, sacrifice Home agriculture and security of supplies therewith, in order to obtain funds with which to import Foreign Foodstuffs, if and when procurable, and to be left defenceless and starving in the event of failure of

overseas supplies? It is stated that we must export to provide employment, and there is no gainsaying the fact that the fear of unemployment is very real to the ordinary worker. Employment founded on an Export Trade at the mercy of foreign markets and foreign competition from any and every quarter is not, and never can be, a reliable panacea. On the other hand employment obtained and maintained by work upon the improvement and maintenance of the native soil is employment founded upon assets under our own control, and which would consistently propagate and fructify. To build for employment on the Export Trade is to build on shifting sand. To build for employment on Home Agriculture is to build upon the unassailable foundations of these islands themselves. It is idle to repeat ad nauseam that we can only supply 65 per cent. of our own food requirements unless and until we have as a long term policy seriously attempted to procure the additional 35 per cent. required. Until that effort is made, and appearances indicate that it will have to be made, no credible assertion as to the achievement, or failure, of the power of these islands to be self-supporting is possible.

Scotland is self-supporting and also exports to England large quantities of supplies which, provided Scotland's agricultural industry continues to progress, could be augmented. In England there are large acreages of good land neither farmed to the best advantage nor producing what they are capable of doing. The business of farming is not a forty-hour a week job for master or man, nor is it likely ever to become so. Apart from the work of cultivation and harvest there is the unremitting attention required by stock, and for full productivity the one is as important as the other. Since 1939 no effort has been spared to induce farmers throughout the country to produce supplies of the most vital food; but

to-day costs of production tread perilously close to prices realised, and one bad season is sufficient to turn profits into losses. All farmers have benefited by price appreciation both from the capital and income point of view. In addition some have made money, some have improved their position, some have remained stationary, and some have even lost money. Food supplies have been heavily subsidised; but the State has taken back from Home producers large amounts in taxation, wages have doubled, other costs have greatly increased, and a good deal more has been taken from the land than has been returned to it.

In the past rents and wages were paid more in the products of the land and less in wages, and though monetary payment is the vogue to-day there is much to recommend former usage, particularly as regards the worker for a stated wage, the value of which varies according to the cost of living, whereas a given quantity. of food supplies remains constant and invariable for its essential purpose of maintenance. Those who live and work on the land should be the first to enjoy the increase of the land and the fruits thereof. The right of keep for poultry, pig, goat, or cow is one which to many to-day presents greater attraction than that of the mere monetary value, and even in times of less stringent food economy the attraction founded on ownership would still be there. Iacob was well-advised when he worked for Laban for an agreed amount of stock in lieu of payment in money. Even if the worker of to-day cannot expect to win a wife in like manner the sense of ownership of however small and insignificant an amount of stock would add to the status of the worker, and also to the attractiveness of the work, and work on the land must be made as attractive as possible.

Whole time work on the land is a remarkably healthy form of employment and there is many a hardy sexa-

genarian to-day capable of doing as good and long a day's work as anyone thirty years younger. The acquired skill of the agricultural worker matured by time and experience serves the fortunate possessor thereof to break the legs of time. This is of a great importance in view of the raising of the school-leaving age and the lowering of the age for pension, the result of which means, if literally accepted, that the country's work has to be carried on by a largely decreased number of persons. Acceptance of the forty-hour week necessitates the employment of three individuals to do the same amount of work two carry out with longer hours. In due course the problem of what to do with enforced leisure looks like becoming far more acute than the problem of work. Carlyle wrote: "Blessed is he who has found his work: let him ask no other blessedness." In truth there is nothing that has a greater influence on mankind's happiness. health, and well-being than congenial work, as conversely there is nothing more detrimental thereto than an over abundance of leisure. Agriculture is a full-time job, and any attempt by the wise in their wisdom, or by fools in their folly, whichever way you like to look at it, to apply any such time limit as a forty-hour week implies leads straight to the final eclipse of agriculture and starvation. It may be contended that this implies putting back the hands of the clock: but it is better to put back the hands than to let the clock stop altogether.

The future demands and requirements of the coloured peoples of the world also vitally affect the question of food supplies and afford further cogent reason for the desirability, maybe necessity, of these islands making every effort to become self-supporting. The coloured peoples far outnumber the whites, who have up to the present been in a position to obtain and maintain a higher

standard of living by greater knowledge and superior strength in armaments. For the first time in the Modern World large numbers of coloured peoples are throwing off the restraint of the whites and becoming independent. The use they make of independence remains to be seen, but though "East is East, and West is West, and never the twain shall meet," according to Rudyard Kipling, yet there is sufficient similarity in human nature to justify the assumption that the coloured peoples in their turn will strive for a higher standard of living, to attain which they will require more of their own food supplies and more of any available foreign surplus food supplies. Longer hours of work and lower wages will enable them to be serious competitors in any market to which access may be available. The idea of closed markets has been tried and found wanting, so that the factor of increased and increasing competition for the World's necessities and luxuries on the part of the coloured peoples is undoubtedly one that will assume greater importance and wider import as time goes on.

The policy of Exports to procure food, if, when and where obtainable by such means, is neither safe, sane, nor sound. It has resulted in the neglect of our own soil and its potentialities, in the loss of numbers of the hardiest and most worth-while of our inhabitants, and has led to scarcity of food, whence the road to starvation is short, abrupt, and discernible by all with eyes to see. There is an old proverb which says: "Give an ass oats, and he runs after thistles."

The first and most outstanding requirement for the due working and development of the soil is equipment, using that word in its widest sense. Up-to-date housing for people and stock, modern implements designed as precision instruments for the express work for which they are required, and so standardised that there is no

difficulty with regard to spares and replacements. Take for example one of the most onerous, least interesting and most essential of farming operations, i.e. the loading, leading, unloading, and spreading of dung or manure. What saving of manpower and the heaviest type of manual labour may be made by the provision of a simple power-worked implement or implements, to say nothing of the saving of time, and the gain thereby in efficiency. Then the drying plant which can serve so many purposes must create great developments if thoroughly employed, as it should be, in the future. It can enable more crop to be gained and more stock to be fed, and vastly aid increased production. Mechanisation has undoubtedly come to stay, but constant care is required to avoid any detrimental effects the use of heavy machines may have on the soil itself. Apart from breakages to gateways and drains heavy machines solidify the land far beyond any horse-drawn traffic, and necessitate requisite repairs and renewals in the case of the first, and due consideration and remedial measures as regards solidification. Tractors make ploughing, particularly at depth, easier and an operation of greater speed. The combined Harvester-Thresher has more than proved its worth, and as an economical, speedy, and efficient machine is indispensable in present-day farming.

Such are only a few examples taken at random, and there are many more either already in use, or in due course to come into use, whilst there is practically no limit to the possibilities of the future. The most important part of these developments may well be great saving in manpower without loss of efficiency, fertility of the soil, or quality of the produce. The increased and increasing use of machinery may and should be, of great importance and benefit with regard to increased production, but it must be borne in mind that the necessary

power pre-condition involves the certain procurement in time and sufficiency of the essential oils and fuel, much of which is only obtainable outside these islands at present. Horses have this advantage; they live off the land they help to work.

With regard to stock, and to dairy cattle in particular, hand milking throughout the kingdom has to a large extent been superseded by machine milking, and there are divergent opinions as to the effect this may have on dairy cattle themselves in the future. The policy of specialising on breeds for milk only is in fashion to-day, and is apparently justified by the financial results obtained. However, there can be no justification for the slaughter in large numbers of young calves, whose carcases are of so little value from the food point of view, and which calves, if reared and allowed to mature, would be a valuable augmentation to home produced food supplies. may well be that the future will afford opportunity and scope for dual purpose cattle, capable of filling a pail and making a roast. Specialisation can be carried too far.

Artificial insemination has its advocates, but it is contrary to nature, and that which is contrary to nature is contrary to truth, and the sooner this unnatural practice is abolished for good and all the better.

The policy during the war years and since has been to discourage the keeping of poultry and pigs on the ground of scarcity of food on which to feed them. In point of fact poultry and pigs kept under suitable conditions are economical feeders and encroach less than most classes of stock upon provender fit for human consumption. We have made use of hips and haws during the years of scarcity but not of the beech mast of which considerable amounts go to waste every season, and than which there is no food on which pigs better flourish. The wealth

of our Saxon forbears was said to consist in their herds of swine, and in their days full advantage was taken of the beech mast. Both pigs and poultry are rapid and prolific breeders, and give a return which shows a handsome gain in food produced over food consumed under conditions in which it should be possible to keep many more than is the case to-day.

With the countryside suitably equipped—houses, cottages, steadings, workshops, barns, and yards-a greatly increased head of stock of all categories could be reared and kept. Pure-bred studs, herds, and flocks thrive in these islands and can be relied upon to maintain and improve upon type, character and standard not only for the benefit of the homeland but also for that of the many overseas peoples who look to this country for the maintenance of character and replenishment of their own stocks. Equipment on a comprehensive scale and on a long-term policy is the soundest investment that can be made and the safest insurance against starvation. regards the soil itself-without equipment and manpower what value has it? Were the countryside equipped and made livably attractive the magnet of a full, healthy and open-air life would draw the manpower required both while the process was taking place and thereafter. It is said that this is a mechanical age and that the modern worker is interested in and requires machines to work, and these could and should be provided on the soil in ever increasing number.

On the question of ownership—whether the land be left in private hands or be nationalised? The crux, irrespective of all else, of the question of ownership is the choice between individualism and communism. In the past over-large concerns have proved neither unmitigated successes nor unmixed blessings either to those in charge of them or to the public they professedly

serve. John Stuart Mill once stated that: "A people may be progressive for a certain length of time, and then stop. When does it stop? When it ceases to possess individuality." Cultivation of the soil, the production of crop and stock, are the most highly individualistic forms of progress in the world.

Not the most fervent supporter of land nationalisation dare aver that individualism is to be found or can be produced by bureaucracy, the augmentation of which already swollen body Nationalisation involves.

On the other hand there is nothing that so promotes individuality as ownership, fully interested ownership, of the soil. The pioneers of progress and improvement have been individuals and carried out their work by putting their individual beliefs into practice to be followed as success accrued by their fellows as individuals and with such variation as divergent conditions necessitated and individual judgments approved. The man on the spot is the only one who can decide whether rooks on a field are doing ill by taking the crop, or good by eradicating wireworm.

So far as it is possible to form even an approximate estimate at the present time 40% of the land is held by owner-occupiers, 10% by the State and public authorities, and the remaining 50% by individuals or bodies who are owners pure and simple and lease or let their lands to others for farming purposes. Ownership, particularly on the part of the State, is in a fluid state and it is impossible to place too great reliance on any given set of figures.

However, even if only approximately correct, the strength of the land held by owner-occupiers is significantly apparent, and an economical, wise, and long-term policy would be to add to their numbers and scrap all idea of nationalisation. The country paid in food

subsidies in 1939 the sum of twenty million pounds sterling and this amount increased to three hundred and sixty-nine million pounds sterling in 1946, in which year two hundred and eighty-two million from the sum named went to imported and one hundred and eightyseven million to home-produced foodstuffs. Internal finance can be arranged; but the demands made upon dollars and foreign exchange equivalent to two hundred and eighty-two million pounds per annum are too serious for long continuation. Food prices the world over are high to-day and may fall. On the other hand they may not, and, in any event, what happens if this country fails to obtain the requisite dollars and foreign exchange? It will be forced to subsist upon its own resources, and to finance its own agriculture to the utmost. Supplies, home produced and from overseas, are scarce enough now and also costly enough; but the present does afford opportunity to decide upon a long-term policy and to put in hand the essential work. It is a breathing space and. if taken full advantage of, may lead on to sufficiency and security: if lost, it can only lead to disaster and starvation.

Even in the last three generations much land has been reclaimed from waste, heath, and marsh not only by landlords but also by ordinary rent-paying tenant farmers. In spite of the disastrous times through which agriculture has struggled and striven there are men to-day owning and farming highly productive lands their great grandfathers or grandfathers as tenants reclaimed from waste and barren dereliction, and which have run in the family ever since. Indeed many tenant farmers of an older generation not only made their lands but also built farm houses, barns, and byres on no better security than the length of their leases (normally 21 years) afforded. Such faith and such work was founded on more than the mere

hope or anticipation of monetary gain. The lure of the soil and the satisfaction of hard-earned achievement which their convictions stimulated them to pursue were far greater incentives than any prospect of financial enrichment. In some cases alas! those who had borne the burden and heat of the day and carried out all these improvements forfeited their well-merited reward when their leases fell in, and landlords either stepped in themselves, or let to other and more favoured tenants.

The requirements of the soil to-day postulate just as strong a faith and just as strenuous work as these past husbandmen possessed and accomplished. It must have been apparent to them that they were starting at rock bottom with the soil itself, and, in fact, that is precisely the position of the vast majority of those called upon to produce food to-day. But to-day even agriculturalists are less altruistic than of yore, and demand, as they are entitled to demand, full security of tenure. Full security is obtainable in only one way and by only one method, and that is by the farmer becoming possessed of the freehold, and thenceforth continuing as owner-occupier. The size of the holding, large or small, makes no matter so long as it is not beyond the compass of the owneroccupier's power of direction and control; and the crofter or smallholder of few acres can possess the same security of tenure as the farmer of many acres. In order to obtain this desirable objective to-day's inflated prices The soil is the raw material and ownerare impossible. ship thereof only the starting point. Equipment and its cost is the actual decisive factor, and the more paid for the soil the less is there for progress and development, on which full productivity depends.

The present system of ownership is a hotchpotch of conflicting interests, the only satisfactory section of which is that of the owner-occupiers, which, as previously stated, may be taken to comprise approximately 40% of the whole. Were the soil to be put at such a price that this 40% could be raised to 80%, the problem of these islands becoming self-supporting in the essential foodstuffs would be well on the way to solution, and the extra 35% of foodstuffs required would become attainable by experience and perseverance.

The sands are running out, time is the essence of the contract, and all too soon the present opportunity, if neglected, will have been lost.

"There is a tide in the affairs of men, Which, taken at the flood, leads on to fortune; Omitted, all the voyage of their life Is bound in shallows and in miseries. On such a full sea are we now affoat, And we must take the current when it serves, Or lose our ventures."