

down their burden, which was taken up by the second pair, the former bearers falling in behind. When the hill was reached, the bodies were laid down, and half the labourers divided into gangs which dug a grave for each dead warrior. The soldiers laid the bodies of their companions in the graves, and the other half of the labourers then filled in the earth. About six of them had refused to obey orders; they were at once killed, a hole was dug at some distance, and they were thrown ignominiously into a common grave.

The most astonishing point in this account is that the ants must have possessed some mode of counting, as they told off exactly the necessary number of soldiers for bearers, and of workers for grave digging.

It is no wonder that Sir J. Lubbock should state his belief that although the anthropoid apes, *i.e.* the gorilla, chimpanzee, and orang-outan, approach nearer to man than do any other animals, the ants have a fair claim to rank next to man in point of intelligence.

J. G. WOOD.



ART. IV.—ENGLISH AGRICULTURE, 1876-1883.

IT has needed a series of years of agricultural depression to recall to our minds the full importance of agriculture as a trade to England. Gradually the impression had gained general acceptance that the country owed most of its prosperity and much of its greatness to its commercial progress. "Seed-time and harvest" were supposed to be, by degrees, losing their importance. A nation which was fast becoming the workshop of the world did not need to trouble itself much about products which could be imported at small cost, if required, from America or elsewhere. As it happened, too, the years of "inflation," which commenced with 1869 and lasted until 1876, were also years of large agricultural yield. Rent and wages both rose steadily. The harvests were abundant, the seasons good, and the prices of stock of all kinds showed a steady upward tendency. With the disappearance of the rinderpest, and a series of fairly dry summers, cattle did well. The prosperity of the manufacturing interest caused a brisk demand, at increased prices, for all kinds of farming produce. As usual, we began to forget that things could not always be so. Every farm, as it fell vacant, was the subject of eager competition. The price of land rose with an exceptional rapidity. Land agents and land surveyors took a sanguine view of a situation, of which they found them-

selves the masters. A large breadth of soil was brought under tillage which had been previously either down or rough pasture. Local banks were only too ready to grant liberal assistance to any tenant who wanted money to venture upon a new farm, or to stock an old one. Farmers, in short, were supposed, and in many instances supposed themselves, to be doing a roaring trade. And so all went well for a time.

Four short years were sufficient effectively to dispel the illusion. Between 1876 and 1880 the capital of British farmers was diminished by millions. The price of land fell from 10 to 25 per cent. Hundreds of thousands of acres were thrown upon the hands of their owners. A "great fear" came upon all the classes connected with land. As is usually the case, presumption was succeeded by panic. An almost speculative mania for the ownership or occupation of land gave place to the most gloomy forebodings as to the future. In short, history repeated itself for about the hundredth time. The change, too, was felt most heavily by those who could least afford it. Land-owners of small means, or in embarrassed circumstances, were the first sufferers. Unable to stock and crop their own fields, they had to submit to ruinous reductions, especially in those cases in which rents had been recently increased. It is needless to say that among the heaviest sufferers of all were the ecclesiastical corporations and the parochial clergy. In neither case were they in a position to turn farmers themselves. Some of the Chapter surveyors had been the most grievous offenders in the way of over-estimating the value of land. The properties under their control were often, therefore, to say the least, fully rented. The consequent collapse was proportionate. There have been instances in which, at the quarterly audit, owners have had rather to give than to receive. There have also been cases in which livings of considerable value have been resigned because incumbents, drawing most of their income from glebes, were unable either to let or till them. The weakest of course went to the wall. The hardest bargains were driven with those who were obviously least in a position to fight their own battles.

We have learned, then, by a bitter experience that all the resources of modern science do not avail to ward off misfortune. But the causes to which agricultural depression is to be traced are not far to seek. The first of these, as Mr. Bright once truly stated, is the absence of sun; a second is an over-copious rainfall; a third is foreign competition. All of these have been in active operation for several years past, and they have affected all the classes connected either directly or indirectly with agriculture. The crops have ripened badly; the "ingathering" has not been auspicious. And the conso-

lations for the farmer which once mitigated the effects of crops deficient in quantity or inferior in quality no longer exist. Bad harvests do not in the present day mean high prices, although good ones are far less remunerative than of yore. Grain is no longer stored on speculation. Large reserves of it are always available abroad, and a very trifling rise in the value of corn brings in foreign competition. Bread-stuffs and flour of all kinds are also now largely imported. The virgin soils of Colorado and Nebraska, of Manitoba and the "far West," need no manure and little cultivation. The cost of transport is diminishing every day, and the area of production is extending. There is no reasonable prospect, at all events for a generation to come, that these conditions will be materially altered. Unless we can stimulate production by higher farming, and unless the seasons be more propitious, it cannot pay to grow wheat much longer upon any of the poorer soils in England, and it will be difficult even to grow barley so as to make the undertaking a fairly remunerative one. Of course the prescription immediately suggested will be the laying down of land in grass, and the indefinite multiplication of our flocks and herds. This must however be, under the best of circumstances, a work of time. It involves not only a considerable outlay, but a temporary sacrifice of rent in all, and a permanent one in most cases. Down-land which has been broken up for tillage, and which has in that state fetched from twelve to twenty shillings an acre, will take years to make a decent sward again, and may then be worth about half its former value. The fertile "skin" which nature in the course of ages had supplied, when once broken by the plough cannot be replaced at will. Nothing short of a heavy money fine can ever repay the owner of land of this class for permitting it to be broken up. The yield of a few years, may repay the tenant for his labour, but at the end of that period, if he be a wise man, he will have realized the mistake which has been made, and will have served a notice to quit. The imprudent owner will then receive back his land rendered little better for another generation than a barren waste. There is, at the present moment, in a southern county, an estate of seven thousand acres without a single tenant, farmed by a local firm of surveyors on the unremunerative footing of keeping it in cultivation, and of paying the necessary outgoings, but no more. Rent is a word not named in this arrangement for the present, and only a whispered possibility for the future. The case is no doubt an extreme one. But it is typical of many more in which the loss has been less serious, but in which there is no apparent prospect of the soil ever again attaining its former value.

Nor have the losses on tillage farms been adequately recouped by the profits made upon stock. The last five years have witnessed the most serious diminution of cattle and sheep alike ever known in this country. Since the importation of cattle from abroad, England has never been entirely free from one or other of those epidemic diseases to which stock are liable. The cattle plague, it is true, was stayed by slaughter and judicious isolation, but pleuro-pneumonia still raged fiercely, and has only been overcome by a vigorous system of repression, due, as Lord Carlingford admitted the other day, to the energy of the Duke of Richmond, when President of the Council. For the foot-and-mouth disease no adequate specific has yet been found. This malady, although rarely fatal, causes a serious temporary depreciation in the value of the animal affected, and is specially ruinous to dairy farmers. Very heavy losses have accrued from each of these causes. To these must be added that the excessive rainfall has often weakened the grass, preventing stock from thriving, and that there has been an occasional heavy and unexpected drop in prices. Sheep have suffered still more seriously. The ravages of "the fluke" among our flocks have been on a scale hitherto almost unprecedented. Whole pastures have been swept clean where they have been liable to flooding. Nor, although we now recognise the precise character of the pest which is the terror of the flock-master, have we discovered any means of extirpating it. So long as rivers continue to flood the adjacent meadows, they must remain either deserted or sources of danger. It is true that the "scare" which prevailed some time ago, with regard to foreign importations, has proved exaggerated. Under the worst of circumstances the cost of transit should always give the British farmer an advantage of at least a penny a pound. It is more than doubtful, also, whether America was not in too great a hurry to drive a flourishing trade, and whether in consequence she did not exhaust the supply of prime animals too rapidly. Inferior beef will never pay for exportation—a fact which our Yankee cousins are just beginning to discover. Having no means of stall-feeding, they can only secure weight by sending us animals at a later age than that at which they would find their way here to the butcher. But the supply of such beasts even in western America has a limit; and there are unmistakable signs that—for the present, at all events—that limit has nearly been reached. For the past nine months the price for home-raised stock of all kinds has been remunerative. The tantalizing part of the business is that there are now comparatively few to be sold. Two years at least will be needed to bring the supply of sheep at all abreast of the

demand, and even then it will be a difficult matter to do so, consistently with keeping up an adequate supply of breeding ewes. If prices keep up, too, the foreign supply is sure to increase in quantity, and ultimately to improve in quality. Home-raised stock may be able to hold its own against the foreigner, but can never again expect to enjoy a monopoly of the market.

Whether, therefore, the staple product of a farm be corn or cattle, the owners have a hard time of it. The rise in agricultural wages, amounting on an average to about 15 per cent., which was established in 1873, has not been sensibly diminished since. The whole credit of this advance was claimed by the orators of the Labourers' Union: it was in reality due to a combination of forces, all operating in the same direction. There is no denying the fact that it has eaten seriously into the profits of farming. The most unsatisfactory aspect of the question has been that while the price of labour has risen, the amount and character of the work done has diminished. The labourers do not seem to take the same pride in their work, or to render the hearty service which they did in the good old times for a far smaller remuneration. More supervision is required, and more tact is needed in their management. We are not among those who grudge a fair day's wage for a fair day's work; but the difficulties which he has had with his men have not been among the least of those which stared the farmer of late so unpleasantly in the face. On the other hand, it is fair to admit that the development of machinery, as applied to agriculture, has enabled him to dispense with some surplus labour, and has rendered him far more independent of the weather. The most serious, however, of all his embarrassments has arisen from the loss of capital, which successive bad years have occasioned. It is to be doubted whether more than one in ten of the existing members of the class were fully provided with the means of meeting the exigencies of modern cultivation at the outset of these troublous times. It is quite certain that a very small percentage indeed now possess the funds requisite to develop adequately the productive capacity of their farms. Some of those, too, who have the means, have lost heart, and have retired from the field altogether, rather than risk further losses.

The picture is not an encouraging one. Nothing, however, is to be gained by under-estimating the character of the situation. The really important point is obviously not so much the past as the future of agriculture. The year 1883 commenced unfavourably; there was again an excessive rainfall in the first two months, and large tracts of country were apparently hopelessly water-logged. But March and April did much to retrieve

the chances of the harvest. The dry, cutting wind pulverized the soil and gave the farmers a chance of thoroughly cleaning the land. We very much doubt whether for the last four years there has been a single clean farm in the country. If, therefore, Providence should favour us with genial weather, we may expect a good, although not an overflowing harvest. The price of stock, again, has ruled high for many months past. In the end this must be for the advantage of the farmer, though he will have had to pay dearly for his store cattle this spring. Matters are, however, on the mend all round, and we may expect to see from this time forward a steady, though not a rapid, improvement. It will be no small benefit for the future, if we have learnt from the lessons of the past, that agriculture, if it is to be carried on profitably, must be so, like all other trades, on strictly business principles, and with a due regard to thrift. It has been too much the fashion hitherto to consider it a pleasant occupation, which can be carried on without monopolizing the whole time and attention of those engaged in it. Now that that illusion has been effectually dispelled, others are beginning to take its place. One of these is, that great things may be done for farming by legislative interference in the dealings between landlord and tenant. Another is that substantial relief might be afforded by the reduction of local burdens. We doubt the efficacy of either specific. The English farmer is so essentially the child of contract, and, as a rule, so thoroughly capable of taking care of himself, that he has little to expect from an attempt on the part of the legislature to define under what conditions his business shall be carried on. At the present moment he commands the market, and can practically choose his farm and his landlord. He can insist, if he so pleases, upon the conditions of the Agricultural Holdings Act of 1875, or of those imported into the new Government Bill, without any fear of the consequences. Nor is it for his interest that the out-going tenant should obtain more than that to which he is strictly entitled, inasmuch as the burden of an exorbitant valuation is certain ultimately to fall on the incoming man. He is perfectly competent to make his own bargain, and will probably do so for himself far better, and with less chance of incessant wrangling, than the law can do it for him. Farms will probably change hands more frequently in the future than in the past, and it is not desirable to hamper this process by any unnecessary restrictions. If Parliament is content to define generally the principles upon which such contracts are made, it will be wiser to leave all details to be filled in by the individuals themselves. That the local burdens have of late shown a tendency to increase, and are in many cases exceptionally

heavy, is perfectly true. The School Board rate, the Sanitary rate, and the Highway rate have been distinct additions to the burdens imposed upon land. Some relief may and ought to be given in this direction by a more equitable distribution of taxation; but the increase of his public liabilities has been a mere flea-bite in comparison with the effects upon the out-goings of the British farmer from the increased cost of labour and from bad seasons. The conditions under which his business has been carried on have been changed, and he must take up a new base of operations. The old restrictive covenants as to the management and cropping of land are obsolete and must be obliterated. More capital is now required, and he must therefore be contented to farm higher on a smaller number of acres. It may be that the rearing of stock will in the future be the main source of profit, and that the breadth of arable land will be reduced to the minimum necessary for the rotation of crops and for the growth of litter.

Tempora mutantur, et nos mutamur in illis.

The time is essentially one for mutual forbearance among all the classes dependent upon agriculture. As we have already pointed out, the Clergy have been among the most serious losers. Low prices have diminished the value of the tithe-rent-charge. Glebes have gone out of cultivation or been worked at a loss. In many instances they might be disposed of with advantage by those who have neither the time, the skill, nor the capital to turn farmers themselves. But we believe the worst to be now over and better times to be at hand, if the necessity of a change of front is fully and fairly recognised. The war-prices and war-profits of the early years of this century are never likely to return. Nor is it probable that agriculture will ever be a pursuit in which exceptionally large returns can be earned by the capital invested in it. But there is no reason to suppose that there will not be a fair field open to scientific farming on a large scale with adequate capital, as well as to what may be called "petite culture," if it be carried on by men of industry, energy, and skill. Which of these conditions will be the most profitable, will be determined mainly by local circumstances. In the vicinity of towns and in populous neighbourhoods, farms of the latter class will probably succeed best from their proximity to their markets. In other districts, we are disposed to think that there will be ample room for farming upon a more extensive scale, provided always that those engaged in the business are quick to recognise the changes of the times and prepared to adapt themselves to them. It would, indeed, be an evil day for England if a permanent blight were to fall upon what is still the most important

of all her industries. All classes now recognise a fact which they had been inclined to forget, namely, that there can be no real national prosperity while agriculture languishes. The depression, which we trust is now passing away, will not have been altogether a misfortune if it has led us to a truer and juster appreciation of the conditions under which future success must be achieved.

MIDDLETON.

ART. V.—DR. CHARLES WRIGHT'S "ECCLESIASTES."

The Book of Koheleth, commonly called Ecclesiastes. Considered in relation to Modern Criticism and to the Doctrines of Modern Pessimism, with a critical and grammatical Commentary and a revised Translation. The Donnellan Lectures for 1880-1881. By the Rev. CHARLES HENRY HAMILTON WRIGHT, D.D., Incumbent of St. Mary's, Belfast. Pp. 516. Hodder and Stoughton. 1883.

THE present generation has witnessed a rapid and prolific growth in England of critical treatises upon the various books of the Bible, so that this is a class of literature that has been very greatly developed within the last few years. Nor has the mysterious treatise of Koheleth, or Ecclesiastes, proved other than a fruitful field for speculations of this kind. The latest work on the subject is that by Dr. Wright, of Belfast, very favourably known by his recent Bampton Lectures on Zechariah. It may be said generally that there is one feature characteristic of all this class of literature, and that is an inability in the writers to appreciate the meaning of the word *therefore*. In the great majority of cases the conclusions confidently arrived at are in inverse ratio to the cogency and solidity of the reasons advanced in support of them. The number of facts relating to the formation of the Canon of the Old Testament and the composition of the several books of it, is singularly small; but for that very reason the multitude of theories put forth about it, and the variety of speculations advanced, is proportionately large. We have only to open Dr. Wright's book to discover an illustration of the truth of this remark.

"The men of Hezekiah," we are told on p. 4—who are only once mentioned in Scripture, at Prov. xxv. 1—"an important company, or College of Scribes, continued to exist as a Jewish institution for several centuries. It may have lasted, under some form or other, down to and during the period of the exile." Now, this is an apt specimen of the way in which conjecture is substituted and mistaken for historic fact. What is the *evidence*, we should like to ask, properly so called, for the unqualified statement that "the men of Hezekiah" con-