CHAPTER XXVIII.

HORSES AND CATTLE.

Every Ostrich-farmer must keep some horses. The number, of course, will depend upon the number of birds he has. Birds are always apt to get astray, and unless followed up as soon as missed, they may go long distances, even if they are not altogether lost. It is much cheaper, quicker, and more effectual to send men on horseback than to send them on foot, when they will probably not go half far enough, spending much of their time asleep under a bush. And much of the feeding can be done by a man on horseback, with a led horse carrying a pack-saddle. Pack-saddles are not half so much used in the country as they might be; they can be bought in the colony, with breeching and breastplate, and complete, excepting the side bags, for £4, and the bags can be made on the farm out of sacks.

The farmer should never give a long price for his horses—what he wants are quiet mokes, the quieter the better for working with birds. Their food should not cost him anything, as he should let them run in one

of his camps, but he must have a stable or warm shed to put them in at night, when the horse-sickness makes its appearance. This horse-sickness is the only thing he need much dread: it generally breaks out once in five years. It begins in December or January, mildly at first, but increasing in virulence, and disappears after the first few frosts in June. Although the exact cause is unknown, there can be no doubt it is connected with malaria in the night air: as, if during its prevalence, a horse is stabled from shortly before sundown until the dew is off the grass in the morning, it will never contract the disease; and where this cannot be done, keeping a nose-bag on all night is a great preventive; whilst even putting them in a kraal with a lot of other stock is good.

The first symptoms noticeable are, that the horse suddenly breathes heavily, droops its ears, and makes for its stable. Froth generally comes from its nostrils, and in twenty-four hours it dies. It is not in the slightest degree infectious or contagious, but in a season when the disease is bad, a single night's exposure, when the dew is falling heavily and there is a cold clammy feel in the atmosphere, will be fatal to a large per-centage of the horses that are at large, especially if feeding in a valley. Some people imagine that the cobwebs on the grass have something to do with it, but this is only owing to

the cobwebs showing out very distinctly in the morning after these dewy nights. The post-mortem examinations show violent inflammation of the lungs, but beyond this the whole disease is wrapped in mystery. The better condition the animal is in, and the less work it does, the more liable it is to take the disease; and we remember seeing a veterinary surgeon, who was holding forth very dogmatically that it was nothing but overriding and bad treatment, being completely posed by being asked how he accounted for unbroken animals being more subject to it than working animals. A remarkable feature is that a sucking foal never contracts it, whilst it is said that if a dog eats the entrails of one that has died of this disease, it will kill it. There is no known cure, but a few recover, after which they are said never to be again subject to the disease. In the high parts of the colony, and on the tops of mountains, the disease is unknown, and these are the parts where most of the horses are bred. To attempt breeding them in low lands sooner or later ends in loss.

Glanders are often very prevalent, and directly the farmer sees it in a horse he should shoot him; but he must not mistake the much more common disease, strangles, for it. With strangles a horse only wants to be put in a camp, and rested for a month or two, to be cured. If worked he will infect other horses, and

the disease will be very apt to run on into glanders. With these exceptions a farmer's horses running at grass will be but little troubled with disease. The principal things that will bother him will be horses getting lame and bad sore backs; and for these, turning them out for a spell is the cheapest and best remedy. When travelling, if the horse is saddled off every two hours, even if only for a few minutes, to allow him to stale, and is not allowed to drink water whilst hot, he will seldom hurt in South Africa. If a chafe is seen, raw brandy should be put on it *ad libitum* to harden the flesh. If the horse gets an attack of gripes, a good and easily procured remedy is a soda-water bottle of gin with a wine-glassful of pepper in it.

The farmer should look well to his saddles, as one badly-stuffed saddle will soon lay up several horses.

Cattle are an essential item on every Ostrich-farm: not only working oxen, but cows, to supply fresh milk and butter to the farmer, and thick milk to the native servants. Even with a few head of cows, the butter he can make and sell in the nearest town will pay all the expenses attending them; whilst the food they supply, for native servants, in the shape of thick milk, together with their increase, gives a very handsome profit. Excepting on the coast and some portions of the grass veldt, 90 to 100 per cent. of the calves will be

reared with no further trouble than seeing that the herd does not take too much milk from the mothers, and that the calves never by any chance get to the mothers in the veldt, thus getting a sudden bellyful of milk, which is often the cause of scour and death. If kept too much in the hock—especially if it is small, and has been long in use—the calves get lousy, lick themselves, swallow a lot of hair, which sets up violent indigestion, and from which many succumb. The louse can be cured by washings of tobacco-water, or other vermifuges; but the preventative should be sought in letting the calves run day and night, and having a new and clean calf-hock. Where practicable, there is nothing like having the cattle kraal in the fence of an enclosure; so that the cows go out one side of the fence, and the calves the other. By this means, excepting on the coast lands, nearly all will be reared. But on the coast lands, in spite of every care, probably not 10 per cent. of the calves are reared. The only successful way there seems to be is, never to let them out to graze until they are twelve months old.

In Natal, red water is very fatal; but this disease is not known in the Cape Colony, where the three main diseases are lung-sickness (pleuro-pneumonia), gall-sickness, and spon-sickness (quarter evil). Lung-sickness is the great bugbear with cattle, as from its terribly

communicative nature the farmer never feels safe. His best course, directly he sees it, is to shoot the infected beast, and to continue to do so whenever it again re-appears; then it is an open question whether it is advisable to inoculate or not. But, whatever he does, he should never let an infected beast live, as for every one that he cures he probably infects several. A farmer with a troop of cattle, if he buys others, should always put them in a camp by themselves for at least three months before he allows them to mix with his own.

Gall-sickness is the next most serious disease. It is purely a disease of the liver and of the digestive organs, and is, of course, in no way infectious. In all cases where sweet veldt cattle are brought on to sour veldt, a considerable per-centage suffer. The best and most simple remedy is a quart of linseed oil with a wine-glass of turpentine for a full-grown beast, and half the amount for a young beast. Failing linseed oil, from one to two pounds of Epsom salts can be used instead. Having given the dose, leave the beast alone; much harm is often done by the farmer getting impatient at the apparently slow working of the medicine, and giving another dose on the top of it. In all cases of physicking, having made up your mind what is best medicine to be given, give it, and leave the rest to nature and perfect rest. With gall-sickness, once

let a beast recover so far as to get up and nibble, and it may be considered out of danger. The surest indication of this disease is a swelling above and round the eyes.

Spon-sickness: this, or some disease closely resembling it, has always been very fatal with young stock on the coast-lands, but of late years it has made its appearance in a virulent form on some farms on the veldt, between the hard Karoo and the sour veldt. It is in no way infectious; but if one beast dies of it the farmer must take alarm, as the same causes will have been at work with the whole of them. It is essentially an inflammatory fever, and is only seen in stock that are in good condition, or those that are running rapidly into condition. The great thing is to reduce them down by kraaling them at night, and keeping them in till late in the morning; and a seton made of rough tow, and dipped in turpentine, cantharides, or some other irritant, can be inserted in the dewlap, and occasionally pulled to keep up an irritation. If a beast is once affected, a cure is very doubtful, but purgatives and bleeding are the right treatment.

Tape-worm, even in full-grown cattle, has been getting somewhat common of late. It is known, as with the Ostrich, by the segments being seen on the dung. It can be cured by giving 3 ozs. of turpentine

in milk upon an empty stomach, and should certainly be got rid of as soon as seen, to prevent it spreading.

The young farmer when commencing should buy fairly good cows, and always keep a moderately well-bred colonial-born bull, with a good dash of English or Friesland blood. The more imported blood in the progeny, the higher price they will fetch; but if too well-bred, they will not breed so freely, and suffer terribly in our severe droughts. Once having got them too well-bred, if an attempt is made to bring them back by introducing common bulls, the result is generally horrid, ill-made mongrels, possessing all the bad qualities of both breeds.

As the towns grow large, and artificial food is grown for feeding the milk-cows, the importance of having breeds that give a great quantity of milk will be felt, as then the dairyman will find it to his advantage to give treble the price for a cow that will give three times the quantity of milk that a common cow will. The value of the calves will be a minor consideration, whilst the small number he will have to feed will be of primary consideration. But until artificial food is grown for them it is useless to get a cow with great milk-producing powers. To the farmer, rapid increase and a constitution that can stand vicissitudes, is of more importance than large milk-producing qualities.

The importing of pure stock and raising thoroughbred cattle is essentially a rich man's business, as he can afford to lose several imported animals if he can eventually attain his end, whilst the not getting an immediate return for his investment is of no importance to him; but not so with the poorer man, who, if he loses an imported bull, probably cannot afford to replace him, and he loses nearly all the advantage he would have got if he could have afforded to keep on; whilst even if he is lucky the return is too distant to suit him, and the risks are very great. These remarks apply equally to Ostriches and other stock. The new beginner, whilst avoiding inferior birds, should not be led into giving fancy prices for what are said to be extraordinarily superior birds.

CHAPTER XXIX.

THE LABOUR SUPPLY.

THE next great difficulty to the constant and ever-recurring droughts, is the uncertain supply and inferior quality of the labour attainable; and as a young man might even have had an apprenticeship of a few years on a farm where the master had the knack of getting on with his labourers, and during a time when labourers happened to be extra plentiful, he might even be deceived, and not calculate this difficulty at its true weight; so that we need not offer any apology for a few remarks on this subject.

The great bulk of the work on a farm is and will continue to be done by natives, and how to manage them successfully can only be learnt from experience. All extra work on a farm requiring mechanical skill, such as fencing, is nearly always done by the assistants on the farm, or by white labourers, who can generally be procured by enquiries amongst the neighbours or by advertising in a local paper, though not always just when they are wanted. Much heavy work, such as dam-making, is often done by white navvies,

but the everyday work, such as herding and feeding birds, wagon-driving, ploughing, &c., is all done by natives. And half the success or non-success of the Ostrich-farmer will depend upon whether he has the knack of managing them, coupled with personal industry.

To obtain this knack, a man must possess all the qualities that are requisite to command white men: he must be firm but not tyrannous, he must show a kindly interest in their welfare whilst avoiding any familiarity, or any unnecessary messing and muddling with them. He must be strictly just, and more ready to defraud himself than to exact the last penny on any doubtful point. He must be liberal in wages and rations, and not too ready to find fault, ever remembering how much that he does—and that he thinks he does so perfectly—would be found fault with if he had a master over him. He should strive to the utmost to be the same every day, and never give way to peevish temper; though a good, wholesome reprimand occasionally, and letting them see you are not to be trifled with, is sometimes necessary. These are the qualities that go to make a successful commander of men in other parts of the world; whilst at the Cape a man must have over and above these a special aptitude for managing the different natives he has to do with; as the Hottentot, the Fingo, and the Kaffir,

all have different peculiarities of character which he must study. They will all be hired as general monthly servants, but for all this he should study each man, and strive as much as possible to give him the work he likes best. Some like herding, whilst others would sooner take 10s. a month to do general work than 30s. to herd. Some men cannot bear to see their wives employed in the house or at other work, whilst others are delighted to do so. Some men will be exceedingly good servants as long as they are on the farm, whilst if you send them to town with the wagon, or on an errand, you might as well try to stop an avalanche as to stop them from getting drunk. Some men will willingly let their big boys work, and these often make better herds for birds than the men; but when the farmer employs them he should never let anything induce him to flog them: he should always send for the father and let him do it; he will give them twice the licking that the master ever would, and it takes far more effect on the boy than the master doing it; whilst if the master does it, the father will generally give notice to leave, or object to the boy working any more.

Sometimes a native servant will goad and annoy a master till human nature can stand no more, and he "goes for him;" but in nine cases out of ten he makes

a mistake by doing so, as the man is generally a worthless character that no amount of thrashing will ever improve, and is one the master had much better be rid of, and whose summary dismissal would have a good effect upon the others; whilst by thrashing him the master is very apt to get a bad name, and the others inwardly resent it, though they may not show it. The only occasion on which a master should ever thrash a native servant is when he is thoroughly insolent; but if a master guards his own conduct carefully, such occasions will be very rare: for although he may not know it at the time, he will generally find that the man had been drinking, and it would have been policy on the part of the master not to have noticed it.

Natives often work exceedingly well under a white man to lead them, but it must be leading, not driving. The difficulty is for the farmer to get such a man, whilst to put two or three natives at a job far away from the homestead, where they will not be watched, is nearly tantamount to throwing away their day's labour. There seems to be something wanting in the native character which prevents him going steadily on when left to his own resources. We see it, not only with the ordinary labourer, but with the mechanic, trained at the missionary or other institution, where, whilst under a white foreman, his work might be equal to that of any

journeyman; but after he leaves the institution he seems to become utterly lost, and to be unable to make use of all he has learnt. That there are exceptions we are aware, but they are very, very rare. Whether the industry and perseverance of the white man are inherent, and the outcome of several generations of civilisation, and consequently cannot be expected in the native, or be the cause what it may, the farmer should never forget the fact, and endeavour to employ his labourers accordingly.

The usual scale of rations is 3lbs. of food a day for a single man, 4lbs. for a married man, and 5lbs. for a man with two wives, and all the thick milk on the farm divided amongst them. Where the farmer owns sheep, half of this is usually in meat, and the other half in mealies; where there are no sheep, half in meal and half in mealies, with an occasional change to a ration of meat. Where many cattle are kept, or the servants have cattle of their own, this ration is ample, and they will be constantly getting hangers-on; but the quality of the rations should always be of the best, if the farmer would have contented labourers. It is also usual to give a piece of tobacco weekly, about a foot long.

Wages generally vary from 15s. to £2 a month. The best plan is to begin at a low rate, and raise

those that are found worth it, or after they have been in your service a certain time. But it should never be forgotten that high wages will not tempt natives to remain under a master they do not like, unless they have got an eye to stealing some of his stock, and few natives can be trusted not to do this if they get the chance.

The greatest difficulty is generally when men first start farming. The native is very chary of going to a master until he knows something of him, but after he has been farming a few years, he establishes a certain connection, and a supply of relatives of those with him, or who have been with him, keep coming. And as long as food is scarce in Kaffirland he is fairly well off for labour; but let there be two or three good seasons when food gets plentiful, then is heard the cry from one end of the colony to the other of the scarcity of labour, and the farmers' hands are tied and all enterprise checked. The servants he has become off-handed and indifferent, and he becomes half worried to death to get along at all.

Very often native servants bring a few head of cattle with them. These make the most trustworthy servants, but as their cattle are often infected with lung-sickness, great care should be taken to isolate these cattle for the first two or three months.

As the native servants are not rationed with coffee

and sugar, or other luxuries, the opportunity of buying these things at a moderate rate should be given them. On a large farm by far the best plan is to have a little shop for them, where, besides groceries, they can obtain such things as boots, blankets, knives, handkerchiefs, cord clothing, calico, prints, pipes, &c. This need only be opened for an hour in the evening, and here the wages book should be kept, so that they can always hear how their account stands. This is an advantage which the natives fully appreciate: it gives them a direct interest in their wages, keeps them to some extent from spending their money in the canteens, and holds out a great inducement to the women to work when required. No license is necessary, so long as things are sold only to the employés. It costs the farmer nothing, as he can put on a per-centage sufficient to cover the expenses; it encourages the natives to clothe themselves and their children to some extent, and is in every way an advantage.

Rows often take place on a farm about men not turning out in the morning, and the length of time they take at meals. Much of this can be avoided by having a good big bell, to be rung at the proper times. After a time the men get to like it, and much bother is saved, whilst it keeps master and all employed up to time.

Some years ago, being on a visit to Natal, and labour

being very scarce in the Cape Colony, we brought round a few Indian coolie families on a three years' engagement. They answered exceedingly well, and if labour became again scarce we should get others. Only those that have been ten years in Natal can leave it. For the first five years after their immigration there they are bound to the master who imported them; for the next five they are free to choose their own master, but cannot leave Natal. After that they are free to leave, but forfeit their right to a free passage back to India, which they would otherwise be entitled to, and continue to be entitled to as long as they remain in Natal, and report themselves every six months to the authorities. The terms on which I got them, and could again get them, were £2 a month wages, dating from the day they left Natal, and a bonus of £9 at the end of the three years for which they contracted, in lieu of the passage to India they had forfeited. For rations they take meal and rice with some fat, and a few pounds of meat once a month, and a pound of split peas once a week. They make exceedingly good herds for birds, and for looking after little chicks; they are useful also for gardening work, but for hard work are not equal to the Kaffir.

The advisability of importing Coolies direct from India, as they do in Natal, has often come before the people in the Cape Colony. But it is not generally

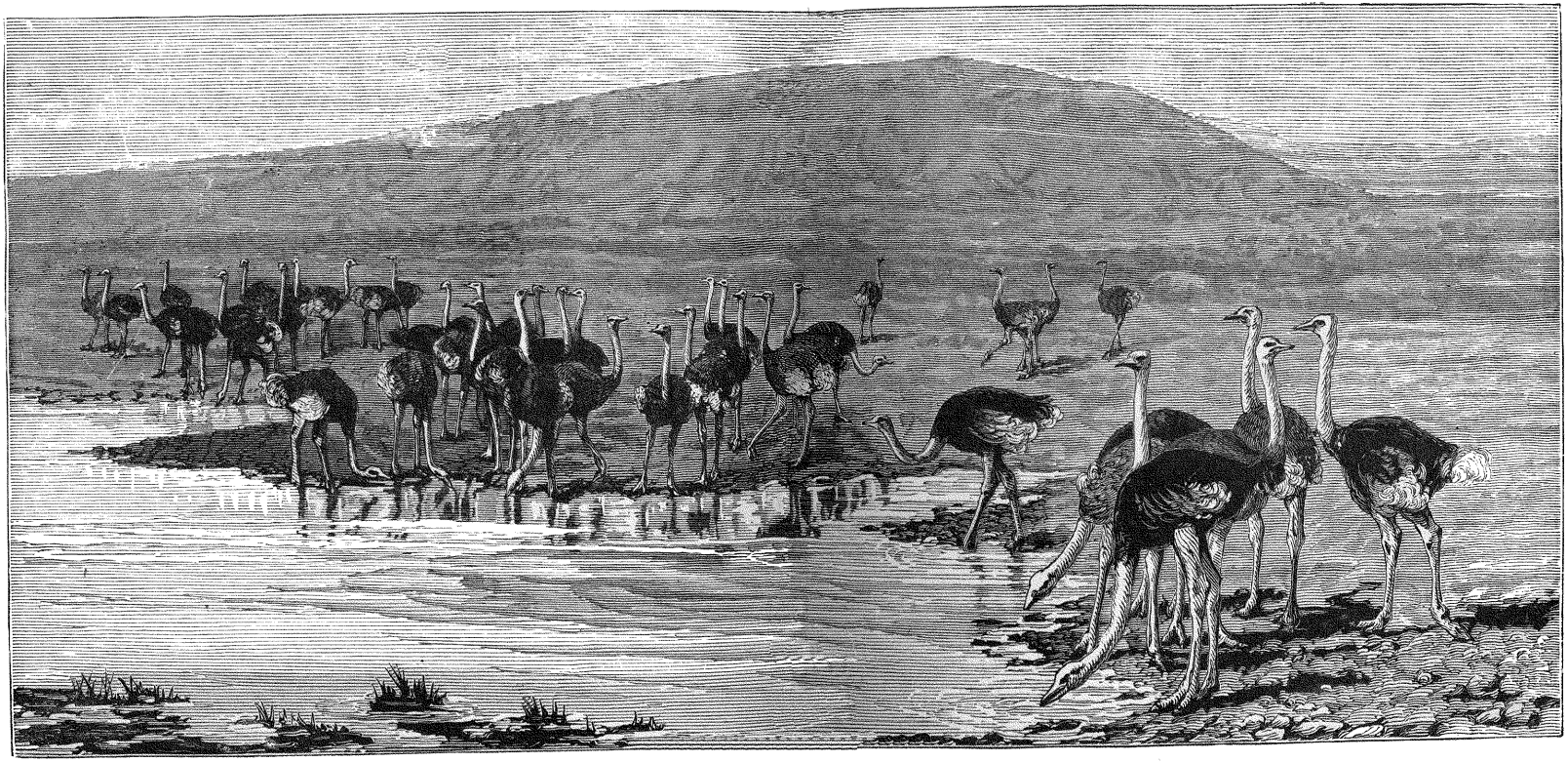
known that the government in India only allow Coolies to emigrate to colonies that have complied with their conditions, and have been entered on their list of available fields for emigration. Their conditions are—that a Coolie office be established in the colony, with a gentleman at its head to act as a protector to them, that there is provision made by the government for their being medically visited, and that a stringent law be made to protect their interests.

CHAPTER XXX.

DAM-MAKING.

The loss which is annually sustained in the country through the carrying away of dams is enormous, and yet nearly all this loss might be saved by a little knowledge and care in their construction. At all times dam-making is expensive and anxious work, generally costing far more than the farmer originally expected; and in some cases, even where the dam stands and does not leak, it proves to be money wasted, from the drainage area being insufficient, or the silt that comes down the kloof quickly filling it up.

It is not our intention to write about large reservoirs intended for irrigation purposes, but about the small ordinary dams for supplying stock with water. With large dams across rivers, or anywhere where the works amount to a large undertaking intended for extensive irrigation, the farmer should long consider over his scheme, and give heed to the remarks of his neighbours before commencing. Many have been half ruined by prematurely commencing on an ill-digested scheme. The difficulties are great in a country like this, where



BIRDS DRINKING AT A DAM.

(From a Photograph taken at Heatherton Towers.)

the veriest little dry bed for eleven months in the year is a rushing torrent for the other month; and the capacity of the reservoir must be enormous if intended for irrigation, unless it is fed by a constant stream or springs.

But where the farmer has fully satisfied himself by some years' local experience that a large reservoir for irrigation is feasible, that the land he purposes to irrigate is worth it, that the river runs often enough to ensure his always having water at the time required, and knows by experience the extraordinary height that these apparently insignificant streams can rise, that the silt and *débris* that come down are insignificant, and that all the necessary conditions of success are there—he should then have the site surveyed and full plans drawn by an engineer before turning a sod—the cost of which will be saved over and over again before the dam is finished. If the engineer is a man of some years' colonial experience, well and good; if not, far greater provision for carrying off the surplus water will be required than he will be likely to provide.

A dam for irrigation purposes that is dependent on local surface drainage, no matter how large the drainage area, will always prove a costly failure, excepting for irrigating an acre or so of garden-ground immediately behind it: the amount of water required and the length of the droughts are too great.

Much was expected by many people on the passing of the Irrigation Act, by which private persons could borrow public money at a low rate of interest for irrigation works. It was thought that the colony would be able to produce its own food supply. We never thought so. We considered that such people did not sufficiently allow for the great difference in this country, where the rainfall is uncertain and falls quickly, and, from the mountainous formation of the country, soon runs to the sea; whilst in countries that have been pre-eminently successful with irrigation, such as Lombardy, the country is flat, the streams run nearly level with their banks, and take their rise in snow-capped mountains, which keep up a constant and moderate supply all the year round.

But with all these advantages which they possess, we think it exceedingly doubtful whether, if they had to construct their works in the present day and compete with a free trade in corn, it could be made to pay. These works were constructed when communication with the rest of the world was slow and uncertain—before the present great granaries of the world were discovered, or steam-ships had turned the world into one vast market for the interchange of those commodities which each country was the best adapted to produce.

That a colony, that can grow its own breadstuffs, is in

a better way to become some day an independent nation, or would be less seriously affected in the event of England being involved in war with some naval power, must be admitted. But this is the political side of the question, which should be attended to by the government, by holding out every encouragement to the agriculturist. All we are here considering is the probable profit and loss to the individual farmer.

In a British colony, where the supply of bread-stuffs can be drawn from any part of the world, the circumstances must be very exceptionally favourable to enable a farmer to grow cereals by irrigation at a profit. If the works are anyways expensive, the interest on the capital and the extra labour of irrigating, coupled with the cramped nature of the cultivation, will exceed the cost of carriage from better-favoured countries, where the crops never fail, and where cultivation on an enormous scale and at a very cheap rate is practicable.

The farther inland irrigation works are constructed, the better their chance of paying, as then the foreign wheat is not only handicapped by the cost of ocean carriage, but of the far more expensive inland carriage. And since no cereals can be grown inland without irrigation, this expense of carriage is a constant item in its favour.

With carriage from the coast to the Diamond Fields at 21s. per hundred pounds, leaving out of the question the extra cost of grinding, there would be a premium of 2½d. per lb. on all wheat grown, to the credit of irrigation works up there, as against the same works on the coast, which would make all the difference between a handsome profit and a costly failure. But the Diamond Fields can often draw their bread-stuff supplies from the Free State and Basutoland, which can produce them in some seasons without irrigation, and being nearer, the carriage is less than from the coast.

The dams a farmer is most generally called upon to use his judgment in constructing, are ordinary stock dams that are required to hold sufficient water to last from one rain to another, for the stock to drink; they generally cost from £50 to £300. These are usually made across a kloof, or in a valley, the drainage into them being assisted by long furrows. For this sort of dam few would think of calling in an engineer, and there is no need to do so; but the farmer should bear in mind that no dam can be relied on as being water-tight when first made, unless a ditch, say, four feet wide, is first dug right along the centre of the site of the proposed embankment, and carried down to the rock or sound bottom, and is then filled in with puddled clay, and this puddling is carried on up the centre of

the embankment to the top. But this is often impracticable, from there being no water near the spot. The farmer is then obliged to dispense with this puddled core, and if the ground is of a good binding nature, although it will be sure to leak at first, it may eventually get quite water-tight.

The best dams, where there is no puddled core, are those made with a scoop, as they then have a good bevel, and the oxen tramp the bank solid in going up and down with the scoop; but this sort of dam is generally shallow, and cannot be made in all places.

The next best are those made with Scotch carts, the working of which on the bank hardens it down, though not so effectively as the scoop.

The worst are those made with wheelbarrows; the earth falls so lightly that the subsidence, when the water gets in it, is incredible to one inexperienced; unless the bank was carried some feet higher than would be eventually required, the water will go over the top; and unless the material is thoroughly good, the water will filter through it, and eventually melt it away. The greater the slope of the inside of the bank, and the more the stock are allowed to trample over it, the better. The base should be the breadth of the top of the bank, with at least two feet added for every foot of height.

More dams are lost through the overflow being too small than by any other cause. A man looks at the run of water in the kloof, and makes his outlet accordingly, quite forgetting that the water there has got a straight flow, on an incline, and with an accumulated velocity; consequently, a very much larger amount of water will pass in the same space than will pass out of the overflow where the water is at rest, and generally flows out on a level. The same mistake is made where men talk of a spring, saying it would fill an inch pipe; whereas, a pipe lying level is one thing, and a pipe inclining down, say, to an angle of 45°, is quite another thing.

Another mistake that is commonly made is supposing the strength of the embankment depends on the distance the water is thrown back. This makes no difference whatever: the pressure entirely depends upon the depth. Thus, suppose an underground tank 10 ft. deep: it will not make the slightest difference to the strength required whether the tank is built 4 ft. square or 20 ft. square. Or, in other words, the weight of a column of water 1 in. square and 32 ft. high is 15 lbs., so that the pressure on the bottom of our tube will be 15 lbs.; but if we take a tube a foot square and 32 ft. high the pressure on any given square inch will only be 15 lbs., whilst if we take a

tube 16 ft. high the pressure on any given square inch will only be 7½ lbs.

The most convenient way of paying for dam work is by the cubic yard, the general price being from 1s. to 2s. a yard, the farmer finding carts, oxen, and drivers; but, of course, much depends on the nature of the soil. The farmer should be careful not to make the mistake of measuring the embankment instead of the excavation, or he will pay dearly. Many farmers are deterred from adopting payments by this plan, thinking from the shape of the ground that it would be difficult to measure, but when tried it is very simple.

Very much more might be done than is done by looking for water under the surface. We have one farm that was badly watered, but by simply noticing five different places where some few rushes grew, and sinking only four feet, we came on perennial springs in every case, which all rose to the level of the ground, and in some cases ran down the kloofs. Our experience would teach us that wherever rushes grow in Karoo country, there is a spring not far down, and that from the appearance of the rush a very fair idea can be formed of the depth it is down.

On three other spots where a hard round rush was growing, we sank wells and got water in all at fourteen feet, eighteen feet, and twenty-one feet respectively; and

in two of them the water was perfectly fresh, though they were sunk in slate shale, where all the surface-water was brack, and much of it undrinkable.

Boring for Artesian wells has been much neglected, but we expect to see it come into vogue to a large extent in the next few years.

CHAPTER XXXI.

BUILDING.

"FOOLS build houses for wise men to live in" is an old saying with much truth in it, and expresses in a few words the experience of nearly every one who has built houses: before completion they too often cost nearly double the sum that was originally intended to be spent. Whilst, when it comes to selling them, they very rarely fetch anything like their cost.

Before Ostrich-farming began, a farm with a good house on it would scarcely let or sell at a higher figure than one with only a mere shanty. But now this is changed; men know that good buildings, good sheds, &c., are essential to success, and they are quite ready, if these are adapted to the requirements, to give the full cost. In fact, it is hardly possible to let a farm to an Ostrich farmer if there are no buildings on it, unless some arrangement is made to allow the tenant for building.

Now, a young farmer is often in a fix. He knows he must have accommodation for his chicks if he would rear them—that slovenly, tumble-down buildings mean a slovenly farm in every way, In fact, the look of a

farmer's homestead, if he has lived there any length of time, will give you a very good idea of his farming powers.

But bricks and mortar are often a synonym for ruin, and it is only by bearing in mind that building to accommodate animals means laying one's money out to be reproduced, whilst building an unnecessarily good dwelling-house means money sunk not to return again, that regret in the future will be avoided. To the farmer the quality of the sheds, stable, rearing-rooms, &c., should be of far greater moment than the quality and size of the dwelling-house.

When buildings of any extent are to be erected, by far the cheapest and best method is to have plans and specifications drawn by an architect, instead of the common plan with farmers of going to work on a half-formed idea, or letting some builder undertake to build a house of so many rooms, with possibly no stipulation as to the thickness of the walls, the amount of timber to be used in the roof, the size and quality of the windows and doors, or the hundred and one things that go to make up the difference in the quality of the house, and which, if not defined, must lead to disputes in which the farmer will be worsted, and will have to pay far more than he could have got it done for if there had been a full and definite contract in the first instance.

The architects charge 2½ per cent. for plans and specifications, and double this if they superintend the erection; but this latter they cannot undertake in the country, so that the first charge is all that is necessary, unless the farmer for his own satisfaction pays them the charge that is usually paid by the builder to get the list of "quantities." This latter he would find it well worth his while to do. But he should always arrange with the architect that, in the event of any dispute with the builder, he will come out for a fixed charge. This he will generally do for two guineas a day and cart-hire.

Although many farmers laugh at employing an architect, it is astonishing how ignorant some are if you ask them how thick their outside walls are to be, or their partition walls, or whether they will use lime, mortar, or dagga, or how they can best secure their wall-plates, &c.

Although we say so strongly, employ an architect, yet a man may want a shed or some outbuildings erected where it would be needless to go to one, especially if it is intended to do it by the yard, and not as a lump job; so we will endeavour to give a few hints on building which we think will be found useful. But before commencing to build, there is nothing like having a good look at anything of the kind it is intended to erect on

the neighbouring farms, and taking notes of size, height, &c.

The common journeymen prices in the country run about as follows:—

18-inch rough stone work	...	4s. 6d. per yard.
14-inch brick work		1s. 9d. „
9-inch „ „		1s. 6d. „
Plastering both sides	... ...	1s. 6d. „
Roofing ... 15s. per square of 100 super. feet.		

There is generally a difference of opinion between employer and employed as to whether these prices should include the mason finding rough labour, to mix mortar, &c.; and who gives way much depends upon whether the man is anxious for a job or not. It is often settled by (in stone-work) the mason quarrying the stone, and the master then supplying all other labour; and in brick-work, the mason finding one man to hand him bricks and mortar, and the master all other labour.

In building with stone, it is always worth while to use lime mortar—lime in the proportion of one to three, and for plastering one to two. With brick the outside wall should never be less than fourteen inches thick, and for mortar dagga (that is, clay worked up the same as for making bricks,) answers very well; but the joints must be raked out at least half an inch deep, or the plaster will soon fall off. The greatest difficulty is to

get bricklayers to properly bed the bricks in mortar. The almost universal plan is to what they call "key" the ends, leaving the rest of the joints open, saying the next layer of mortar will run in; but it does not, and the consequence is that in a heavy rain the wet comes through, and the heat and cold are not kept out. If they are not watched they will not even key them, but put the bricks touching, with nothing between them, as they can then lay them much faster; but, of course, then there is nothing but the plaster to keep out the wet, and paper will never stay on the walls.

Many masons lay the foundation without any mortar between the stones, but it should not be allowed: if for no other reason than that it makes a perfect warren for mice.

In a country subject to such violent winds as this, great care should be taken to tye the wall plates fast. By far the best plan is to build a few long bolts into the wall, with a large washer in their ends, and bolt the plates down. Never make the mistake of using too light timber for the roof, or putting the rafters far apart.

A fall of one inch in a foot is enough to carry the water off and stop the rain driving up, in a roof covered with corrugated iron, but the higher the pitch

the cooler the building will be ; whilst a flat roof in this country is only another name for being roasted alive.

In using cement for tanks or stoops, &c., unless the sand is very good it should be washed in tubs with two or three waters, and then for most purposes one part of cement to three of sand is strong enough ; but for tanks it should be one to two.

In making bricks on farms the clay is generally tramped with horses or natives, but it is seldom thoroughly done. The best ground is a fair clay, free of brack ; it is brack that ruins half the farm buildings. The price paid is generally 18s. a thousand for burnt bricks, the master finding the wood, and the maker all labour. But it is always best to stipulate only to pay for the bricks when counted out of the kiln, as if not, and if proper attention has not been paid to the burning, when the kiln is opened the number will be far short of what was expected. To burn them properly the man must be up all night to close the weather-eye of the kiln with the shifts of wind ; about three days and nights' burning will make a good kiln.

A little calculation will tell you how many bricks you require. Allow 130 bricks to a yard of fourteen-inch wall, and 90 bricks to a yard of nine-inch wall.

CHAPTER XXXII.

HIRING AND BUYING FARMS.

A FEW hints on the hiring and buying of farms will be found useful, especially as regards hiring, which up till lately was generally done without any written contract; or when there was one it was often so vague that misunderstandings between the contracting parties was generally the result.

The first point upon which landlord and tenant generally differ is as regards who should pay the taxes on the farm, and as these are a considerable item, it should be the first question asked after the rent is named. The taxes consist of:—1st, Quit rent; 2nd, House Duty; 3rd, Divisional Road Rates; 4th, Divisional Police Rates. The first is generally about £4 per annum, but if it is a farm that has been lately purchased from Government, as explained in the chapter on the Land Laws, it may be a hundred or more; but this will, of course, have been ascertained. The second is on a sliding scale, according to the value of the house: on every hut or dwelling not over £100 in value, 10s.; not exceeding £500 in value, £1; not exceeding £750,

£1 10s.; not exceeding £1,000, £2; and then rising £1 for every £250 in value, but in no case exceeding £10 per annnm. The third and fourth are levied annually by the Divisional Councils, and vary according to their wants, being generally twopence in the pound on the value of the farm.

The annual rental of farms varies, of course, immensely, and it is hardly possible to lay down a rule as to what the rental should be. The nearest we can give is that it should be about eight per cent. on the Divisional Council valuation. These valuations are generally about two-thirds of what they would fetch in the market; but a farm that has been much improved by buildings and fences is never valued up to anything like the amount of the cost of the improvements, whilst bare land is often valued at its full market price. The Divisional Council valuations can always be obtained by inquiring at the Divisional Council office, which is in the town where the district magistrate resides.

The principal clauses that a landlord generally insists on in a farm lease are:—

1st. The rent payable every six months—sometimes required in advance.

2nd. All buildings and fences to be kept in present state of repair.

3rd. That no native squatters shall be allowed on the farm.

4th. That no portion of the farm shall be sub-let without owner's consent.

5th. That no wood or bush, or only a certain amount, shall be cut on the farm, excepting such as is required for farm use.

6th. By whom the taxes are to be paid.

The tenant should, if he can, get a clause inserted that any buildings or fences that he may erect should be taken by the owner at their value on the expiration of the lease, or, failing this, that he should have the right of removal. Landlords seldom agree to the former, but generally will to the latter, which answers the tenant's purpose well, but of course not equally as well as if the landlord would take them over at valuation.

If the tenant is a very cautious man, he will insist on a clause providing that if any building is burnt down it shall be rebuilt by the landlord.

On agricultural farms there will often be clauses regulating the amount of land to be cultivated; and, where bush is scarce, a clause regulating the amount of bush-fencing that the tenant will be allowed to make.

The transferring of landed property is exceedingly simple at the Cape. Titles are all registered at the

office of the "Register of Deeds," Cape Town, where all transfers are registered, and a deed of transfer is handed to the purchaser. Here, too, all mortgages are registered. If the land is purchased by auction, the purchaser always has to pay all expenses of advertising, auctioneer's fees, and transfer dues. The latter is 4 per cent. on the purchase money; the auctioneer's fees are often 2½ per cent., the seller making a private bargain with the auctioneer to divide the amount, the auctioneer seldom actually getting more than 1 per cent. But this is sharp practice, and many sellers will only charge the purchaser the amount that the auctioneer is actually paid.

The usual terms of credit are:—all the above expenses to be paid on day of sale; first instalment in three months, next in six, and the others in twelve, eighteen, and twenty-four months; the purchaser finding two approved sureties for the due fulfilment of the conditions. Transfer to be given after payment of the second instalment, the purchaser passing a mortgage bond as security for the payment of the remaining instalments. In private sales a certain amount down is often given in lieu of finding sureties.

Two-thirds is generally the outside that can be obtained on a mortgage bond; and a purchaser should see his way to paying one-half of the amount, if he

would not lay himself open to the liability of having his mortgage foreclosed, with the possibility of not being able to get somebody else to take the mortgage. But as long as the amount sought to be obtained on mortgage does not exceed one-half of the fair value of the property, it can always be obtained at from 7 to 8 per cent., and the mortgagor can feel perfectly easy.

When a farm is bought from the occupier he is generally permitted to continue in occupation from three to six months: this is to allow him time to purchase elsewhere, or to sell off, if he is giving up farming; the purchaser has the right of sending stock on the farm at once, and generally stipulates for the use of some part of the dwelling-house, and not to pay interest on the unpaid portion of the purchase-money till the seller clears out.

We need hardly caution an intending purchaser never to purchase without a thorough personal inspection, no matter how tempting an offer may be made him. One of the things he should be exceedingly careful about is that the water supply is really perennial, no matter how severe the drought; and a few judicious questions amongst the neighbours will prove of great value on this point. But when price and quality are found to be satisfactory, the intending pur-

chaser should insist on seeing all corner and angle beacons, and should find out whether any of these are disputed by the neighbours, and if so, all particulars of the dispute, and had then bettor limit his offer to what he considers the farm worth, less the piece in dispute. Boundary lawsuits are exceedingly cumbersome and expensive processes, the costs generally exceeding the value of the land in dispute. Accompanying every title deed is a diagram of the land; and, if a recent one, all angles are marked on it, and it can be relied upon, and any missing corner-stone can easily be fixed again by a surveyor; but all the early surveys were most carelessly made, and no angles being given on the diagram it may be impossible to determine the true position of a missing beacon, and the diagram becomes little more than a fancy picture; but these farms are nearly always larger than the diagrams represent them.

Provided the angle beacons are standing and are undisputed, the line beacons can always be erected by the farmer, if he only provides himself with sufficient flags, no matter whether it goes through bush or over hills. He first takes a line of flags in a line that he thinks will strike the other corner, then seeing when he reaches that, how much he is out, takes another line, and so on till he hits the corner-stone, and having

got the flags correct, proceeds to plant his stones along the line about fifty yards apart.

An excellent plan is to whitewash all beacon stones; everybody on the farm then soon gets to know the boundaries, and unpleasantness between neighbours is often avoided.

CHAPTER XXXIII.

TO YOUNG ENGLISHMEN INTENDING TO EMIGRATE.

ANNUALLY there go forth to the various British colonies hundreds of young Englishmen, most of them well principled, well brought up, and well educated, sound and robust, determined, and sent forth to carve out their own fortunes. For years Australia and New Zealand, with their attractive wool-growing pursuits, absorbed most of these; but now their attention is being largely turned to the Cape, especially in connection with Ostrich-farming, and justly so, for no colony offers a better field.

The bright, wild dreams of accumulating a rapid fortune in some pleasant manner, with little trouble to themselves, in some vague, undefined way, will soon be dispelled; and they will find that neither a decent living, a comfortable independence, nor a fortune, are to be had here, or anywhere else, without strenuous exertion, strict sobriety, command of temper, rectitude, and a power of turning their hands to whatever offers, and doing it with all their might. But these are just the qualities that distinguish the young Englishman above

all others, and what has enabled him to build up such magnificent nations as the United States, the Canadas and Australasia, and is so rapidly developing South Africa.

That many fail, and instead of succeeding drop in the social scale, take to drink, or otherwise go to the dogs at the Cape as elsewhere, is but too true; but this they would have done wherever they were, and is what they are daily doing in all the colonies. But there is no need that this should happen to a single one of them at the Cape, if they can only once get a footing. The first thing is to get some good introductions to leading men there, with a fair prospect of their either offering Juvenis employment, or finding some-one else who will do so.

The best immigrants are those who leave England between the ages of eighteen and twenty-five. After the latter age the mind seems to have been too fully imbued with fixed notions, and does not so readily embrace new phases of life, or adapt itself to new toils and pleasures. There is no special early training that gives one an advantage over another—certainly nothing in the shape of a training to English farming, which is far more likely to prove a disadvantage than otherwise, especially if it has been taught in a scientific manner. Juvenis has then not only to begin and learn every-

thing, but he has to unlearn all he has learned. Men that have had a training at English farming seem to be the last to take in the total difference of the surrounding circumstances, and to imagine that it is ignorance and prejudice that makes old colonists keep mainly to the old primitive grooves. And not till their capital is gone, and they have become embittered by constant failures, do they realise the fact that these men are as shrewd, far-seeing, and enterprising as any in England; but that experience has taught them that all improved methods must come very gradually, and to be successful must only advance at the same pace as the available labour becomes gradually educated up, and other surrounding circumstances of markets and roads advance.

The spirit that goes a long way to make the difference between the young man that will make a successful colonist and one that will not, is the habit of observation. That constant quick observation that never rests, that notices every peculiarity in people and things: the habit that would compel him, if he saw a man laying a drain, to find out how deep it was, how the tiles were laid, and the reasons why; or, if he passed some men building a wall, would notice how the bricks were laid, how the mortar was mixed, and all about it. In fact, he must have the very opposite spirit to that of a

young friend of mine in a house I was staying at, and who told me they brewed their beer twice a year, but on my asking him how it was done, exclaimed, "O! I don't know. I never bother myself to find out." Now, this young man had an idea of emigrating to the Cape, and on my telling him he hardly showed the spirit that was likely to make a successful colonist, wanted to know if he would have to brew at the Cape. Most probably he would not, but the man that was too indifferent to learn how to brew beer when he had the chance would soon find that he did not know heaps of things he ought to know, and, at the best, would be very unlikely to strike out a new course and distinguish himself. It was a wise man that remarked that some men would learn more in a walk down Oxford-street, than others by making a tour through Europe.

After a young man has determined to emigrate, if there is any time to elapse whilst friends are communicated with, he could not spend his time in any better way, if he is going to take up farming in a colony, than by going under a carpenter, and into a mechanical engineer's workshop, not to learn, but to work. The knowledge he will pick up there will increase his value twofold as an assistant on a Cape farm. At the same time, if he finds that steady manual work and soiling his hands with oil and grease are distasteful to

him, he may be sure that he is not fitted to a colonial farmer's life; whilst a practical knowledge of the steam-engine, in a country where very little can be done without irrigation, will be of immense value to him all his life.

If it is intended he should follow mercantile pursuits, let him get a short training in a merchant's office or a bank, or anywhere where he can get a sharp taste that the world means work and not play. Anywhere at the Cape, outside of the purely English towns of Grahamstown, Port Elizabeth, King William's Town and the Diamond Fields, a knowledge of the Cape patois Dutch is an indispensable essential in business; and anyone who can speak the high Dutch as spoken in Holland, or even German, will quickly pick up Cape Dutch.

Much money is often wasted in providing young men with an expensive outfit, which had much better have been laid by as a little capital. Much of the clothing taken is of too warm a nature, and suitable clothing could have been bought nearly as cheap at the Cape, as required. Whilst the money spent on guns, revolvers, &c., would have been much better laid out on a thoroughly good tool-chest; and the parent, in giving him the guns, has been rather encouraging him in the idea that life is going to be made up of shooting

and sport, instead of—as he will find it—mostly hard work. For clothing, all that is wanted is a good-sized portmanteau, containing the ordinary outfit of a gentleman, with a few extra flannel shirts and socks.

And now, before taking leave of our book, can we say a few words that may help you young Englishmen, to whom my heart often yearns, as I see you so full of life and hope starting on your journey through life? Bear in mind that the day you step on board the steamer, leaving father and mother, or dear friends who have thought for and screened you, far more than you have known, from the many evils that so particularly attend you at your time of life, that from that moment you begin the fight single-handed. That one of the first great evils, the scourge of drinking, will meet you at once—the rock that wrecks and utterly blights the lives of thousands of you. Make up your mind at once on the subject, and let it be never to drink any intoxicating liquors, saving at meal-time, unless under most exceptional circumstances, and keep to it firmly, but quietly. You may have seen cases of ruin by drink in England, but you can know nothing of the fearful curse it is in all the colonies; and most of it brought about by a silly habit young men have of asking each other to take a liquor when neither want it; it is done to wile away a few minutes, or to appear friendly, and

is accepted by the other for fear he should appear churlish. But do not be misled: if your friend is worth having he will not think you churlish, and in his inner mind will be glad that you saved him the expense, and drinking what he knew he would be better without. Remember it is to the passage out on board the steamer that many a miserable, broken-down, pitiable object can trace his fall.

Another great stumbling-block is often encountered on board the steamer—gambling. This is indulged in by some men on every steamer; and where it is wealthy men gambling amongst themselves, the whole stakes they play for being a matter of indifference, there is no harm done; the harm is where a man stakes what he cannot afford to lose with indifference. In all steamers there is generally a daily wager on the distance the ship will run. It often begins innocently enough, and Juvenis thinks there is no harm in it, and joins in, and having made a loss, goes on, in the hopes of retrieving, instead of at once stopping.

Arrived in the colony, you will find that a farming life is very different to life in England—that it is not all roses, but neither is it all thorns. Its solitariness is its worst feature. Farms are large, and half one's neighbours are often cut off by rivers that are constantly impassable, or by high hills that make it a

day's work to visit them; and it is generally a case of having said good-bye to cricket, lawn tennis, billiards, and other amusements that are so attractive in early life. But against these we have the healthy open life, in most parts good shooting, any amount of riding, and above all, the most perfect independence to be had anywhere in the world. In England the landed gentry are always envied for the independence their position gives them, but their independence is hampered by numerous conventionalities of which the well-to-do Cape farmer is independent; whilst if he has had the good sense when he left England to determine that the Cape should be his home for good, he will soon find his interest in colonial institutions and politics growing upon him, and himself possessed of nearly all the advantages in another sphere that the English landed gentleman has in his. No greater mistake is ever made than that made by the man who emigrates to a colony simply with the idea of grubbing money together to enable him to return to England and spend it in his old age. But few succeed till so many years have passed that their zest for English amusements and ways has gone, and their English friends and relations have changed so much that they seem almost as strangers.

To struggle to amass wealth simply with the idea

to return and spend it in idleness is selfish and unennobling, making the getting it mere drudgery, and the spending it a disappointment; but to get it by honest means, by extra intelligence and industry, with the object of starting one's children well in the world, and to acquire influence and a voice in the land of one's adoption, and to found a family name in a country such as the Cape, is an object worthy of any man's ambition, and one that will bring no disappointment in the realising—will hold out a high stimulant to the strictest honesty and uprightness, whilst proving a benefit to all with whom he is thrown in contact.

Reader, if you are such an one as this chapter is addressed to—young, strong, self-reliant, and can see your way to get a footing at the Cape in Ostrich-farming—go forth. The world is before you, the limit to what you may do or become is unbounded: on yourself it will depend. A bed of roses you will not find it: often you will sigh for old associations and friends, and often your lot may look dark; but when such is the case, instead of looking on the dark side, look at what most of your schoolfellows are doing: tied down to an office desk to drudge on with scarcely any prospect in front of them, beyond, at the best, securing a competency for themselves, and in due course being buried and forgotten; whilst you have a grand field before

you where, by your discoveries or inventions, or other unknown powers within you, you may develope new industries, or discover mineral wealths, and turn the tide of prosperity on the country of your adoption that will send your name down to posterity as a great benefactor.

ADDENDUM.

International Exhibition, Philadelphia, 1876.

THE United States Centennial Commission has examined the Report of the Judges, and accepted the following reasons, and decreed an Award in conformity therewith:—

Philadelphia, January 10th, 1877.

REPORT ON AWARDS.

Product—Ostrich Incubating Machine.

Name and address of Exhibitor—A. DOUGLASS, Heatherton Towers, Grahamstown, Cape of Good Hope.

The undersigned, having examined the product herein described, respectfully recommend the same to the United States Centennial Commission for Award, for the following reasons, viz.:—

As an apparatus for hatching out Ostrich Eggs in a simple and efficient manner, and for helping the young during the critical period of their early life:

The invention and use of this apparatus, and the treatment of the eggs and young of the Ostrich by Mr. Douglass, have added a most important industry to the world; and in addition to averting the threatened extermination of this species, have greatly multiplied its numbers, and increased

the supply of its feathers for commercial purposes. These can now be taken, year by year, from the same (domesticated) bird, instead of involving its destruction for a single crop.

(*Signature of the Judge*) SPENCER F. BAIRD.

Approval of Group Judges.

EDWARD CONLEY.	COLEMAN SEKERS.
B. F. BRITTON.	H. K. OLIVER.
J. FRITZ.	JAMES L. CLAGHORN.
CHARLES STAPLES, Jun.	HENRY H. SMITH.

A true copy of the Record.

FRANCIS A. WALKER,
Chief of the Bureau of Awards.

Given by the authority of the United States Centennial Commission.

A. T. GRAHAM, *Director General.*
J. L. CAMPBELL, *Secretary.*
J. R. HAWLEY, *President.*

CASSELL, PETTER, GALPIN & CO., BELLE SAUVAGE WORKS, LONDON, E.C.

OSTRICH FARMING

IN SOUTH AFRICA.

BY ARTHUR DOUGLASS.

A FEW OPINIONS OF THE PRESS.

"The author puts the whole case so clearly as to leave but small excuse for an enterprising man with sufficient capital not making a grand success of such an enterprise."—*Daily Telegraph.*

"Of the fitness of the author to write a thoroughly practical work on this subject, derived wholly from his own experience during the past fourteen years, there can be no question. . . . Mr. Douglas, referring to the anatomy of the ostrich, gives a fair sample of his manner when he says, 'the reader need not fear a lot of dry, hard, scientific names that would convey no information to him.' This is the key-note to the whole book; and the absence of any scientific pretence will probably recommend it to the majority of farmers. Mr. Douglass is not, however, without scientific honours in the matter of ostriches."—*Field.*

"Mr. Douglass deserves well of the public for having given, in an interesting and pleasing form, a great deal of information on a subject as to which, in this country at least, very little is known. In our childhood we are taught that the ostrich is a 'daddy longlegs' among birds, that it has beautiful feathers, and that, like many other creatures of fair exterior, it is excessively stupid. But here the knowledge of most of us ends, and although a few of us may be aware that the ostrich has been domesticated and farmed, we know scarcely anything at all about the process. Mr. Douglass's modesty induces him to say that, as a literary production, his work is 'necessarily far from perfect,' written, as it has been, at broken intervals in the midst of a busy life, and he adds that he does not pretend to have exhausted his subject. We feel sure, however, that every one who reads the book will regard these apologies as quite uncalled-for. The author has unquestionably done his work well. Fully conversant with his subject, he has the gift of perspicuous expression, and the result is that the reader is never left in doubt as to the point at which he is aiming."—*Land.*

"An interesting and thoroughly practical work. . . . It is obvious that no one has more right to be heard upon this subject than Mr. Douglass. Of every phase of it he has had practical experience, and is therefore able to impart all the information which the most inquiring mind will expect."—*Live Stock Journal.*

"Mr. A. Douglass writes with authority on 'Ostrich Farming in South Africa' (Cassell and Co.; and Silver and Co.). He has patented several incubators; two years ago he discovered the *Strongylus Douglassii*, which is to ostriches what *trichinæ* are to German lovers of raw ham; and he is one of the largest and most successful ostrich farmers in the world. Of course, most of the book is taken up with its special subject, which is lucidly and thoroughly treated of. There is also full information about land laws. His book is well illustrated, and is not without interest to the general reader."—*Graphic.*

"In a clear and homely manner Mr. Douglass describes the industry of Ostrich Farming. . . . To young men of health and vigour determined to toil hard, and having a little

capital, who mean to turn their attention to Ostrich Farming, we commend the perusal of this volume, which is beautifully printed on excellent paper, and adorned with some fine woodcuts and a map of the British possessions at the Cape."—*Dublin Irish Sportsman.*

"This is the first handy book that has been written on a subject that must be of all absorbing interest. Mr. Douglass has as good a right as any man to speak with the authority of long experience in what is really only a new industry. He gives useful warnings and sound advice to those intending to enter the South African trade, but the prospects which he holds out are, on the whole, extremely encouraging."—*Manchester Examiner.*

"Ostrich farming is a lucrative and profitable occupation. In this work, which is well illustrated, a very large amount of information respecting the birds in different stages of life and their management will be found."—*Derby Advertiser.*

"The chapter in which Mr. Douglass gives hints and advice to young Englishmen intending to emigrate should be read by all who come under that category."—*Derby Mercury.*

"Mr. Douglass, being a practical ostrich-farmer, writes from experience; and the whole book is written in a genial, pleasant manner, without anything dry or uninteresting in it. It is illustrated with eleven engravings from photographs, and is published by Messrs. Cassell, Petter, Galpin & Co., bound in cloth, 251 pp., at the moderate price of 6s."—*Market Harborough Advertiser.*

"Attention to this interesting and profitable industry has been much attracted by the exhibition at the recent Royal Agricultural Show at Derby, of the magnificent stand of ostrich plumes, shown by Mr. Arthur Douglass, of Heatherton Towers, Grahamstown, South Africa. To view these beautiful specimens His Royal Highness the Prince of Wales drove to the stand on leaving the horse ring, and was introduced to the exhibitor, who after explaining the collection presented the Prince with a copy of the work he had just written on 'Ostrich Farming,' and which is published by Messrs. Cassell, Petter & Galpin. On the Royal party leaving the ground, Mr. Douglass presented the Prince with two magnificent plumes for the Princess. The Prince shook hands and congratulated Mr. Douglass on his beautiful collection of feathers. . . . Having been favoured with a copy of Mr. Douglass's book, we can bear testimony to the highly interesting and instructive manner in which he has treated a subject as strange to English readers, as it is safe to enlist their sympathetic and speculative nature, for, certainly 'Ostrich Farming' seems beset with not less troubles and difficulties than the more ordinary pursuits of farmers at home and abroad. Mr. Douglass, like a wise man, begins at the beginning, and explains the whole routine and management of an ostrich farm, as well as the more complicated risks of farming on the 'halves' system, which appears to partake rather more of the nature of 'speculation' than usually attaches to animals not engaged on the 'turf.' However, where big profits are to be made, and there is no doubt that big profits have been made, though Mr. Douglass is careful to make it appear that profits of 100 and 66 per cent. are no longer to be looked for, yet even he holds out the prospect of 15 per cent. as a fair average for ostriches as an 'investment' only. Into the mysteries of fencing, and into the dangers attendant on the early life of the ostrich 'chicks,' we cannot here enter, but can strongly advise readers to make themselves acquainted with Mr. Douglass's book at their earliest opportunity. It might be well to note that 'ostrich farming' cannot be regarded as an elemental source of profit, and that it caters for the fancies rather than the wants of mankind, but, all the same, there is no doubt that it will admit of considerable development before the feather market is overstocked."—*Derby Chronicle.*

Cassell, Petter, Galpin & Co., Ludgate Hill, London.

A Selection of Volumes

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