

sold by public auction in the Y—a public market, to which place he shall bring them, and the proceeds equally divided.

5. In the event of the death or loss of any of these birds, Mr. B. shall pay to Mr. A., within two months of such death or loss, the half value of the same, the value of a cock bird being agreed to be £ , the value of a hen bird £

6. On or about the first day of each calendar month, Mr. B. shall send to Mr. A. a report in writing of the state of his venture, answering therein any reasonable questions Mr. A. may have submitted to him.

7. Any breach of this contract to be held good and sufficient grounds for the aggrieved party to cancel the same, without notice, irrespective of any other remedy he may seek.

8. This agreement to cease on six months' notice being given on either side.

9. In any place where Mr. A. is here named, it shall be taken to mean himself or his duly appointed substitute.

Done at                      this        day of                      18

Witnesses to { C.  
Signatures { D.

Signed { A.  
          { B.

These agreements are often for a term of years, and B. no doubt would prefer this; but A. often finds he has been mistaken in his man, that the birds are doing badly, and his investment is a bad one, when he will be very glad to avail himself of the six months' notice we have above provided for. On the other hand, if B. makes them do well, he may be sure A. will be only too glad to leave them with him.

We will now consider an agreement for, let us say, fifty birds, one year old. This is a matter requiring

more consideration. We have known some cases of a man signing an agreement rashly, and afterwards finding that he was liable to replace, out of the feather money, any deaths, not by birds of the same age as those he took over, but by birds of the same age as those that died; whilst he was getting no interest on the increased value of the remainder: so that since the birds would give about the same feather return the first year as the last, any death the first year would only take about £20 of the feather money to make good; whilst the last year, since he would have to make good a four-year-old bird, it would take £50. So that, although he might do well the first two years, if he had many deaths the last two he would be ruined. In fact, if he had only ordinary luck with them, he would find at the end of his term he had cleared nothing.

But we do not advise either party to have anything to do with replacing the birds that die. Let them be paid for, as they die, out of the feather money; and when a number are dead, it is open for them to make a fresh agreement for another lot. This keeps the transaction simple, whilst the other will be found in practice to open the flood-gates to trickery and misunderstanding. We here give an agreement on this plan:—

Agreement made and entered into between Mr. A., on the first part, and Mr. B., on the second part, by which—

1. The first-named agrees to lend the second-named fifty ostriches, averaging in age one year, to be farmed by the second-named on the halves—that is, Mr. B. is to find grazing and to bear all and every expense connected with the birds.

2. The birds to remain, as now, the sole property of Mr. A.

3. The value of these birds is agreed between the above-named parties to be twenty pounds sterling each.

4. That the proceeds of all feathers sold from these birds shall be equally divided by Mr. B. within one month of such sale, who shall submit to Mr. A. original account sales of such feathers: provided that, before any such division of money, Mr. B. shall pay out of it to Mr. A. the sum of £20 for every bird that has died or been lost up to that date; and if such feather money is not sufficient to pay for all so deficient, the remainder shall be made up out of the next feather sales.

5. That a bird shall be deemed lost after it has been missing one calendar month; but should it afterwards be recovered, Mr. A. shall refund to Mr. B. £10 sterling for such bird.

6. On or about the first day of each calendar month Mr. B. shall send to Mr. A. a report in writing of the state of his venture, answering therein any reasonable questions Mr. A. may have submitted to him.

7. This agreement to terminate three years from the date thereof. At its expiration Mr. B. shall deliver the birds to Mr. A. in Y—a, to be sold by him at auction on the public market, who shall pay to Mr. B. one-third of whatever they may net over and above £20 each.

8. Any breach of this contract to be held good and sufficient grounds for the aggrieved party to cancel the same, irrespective of any other remedy he may seek.

9. In any place where Mr. A. is here named, it shall be taken to mean himself or his duly-appointed substitute.

10. In the event of any deaths or losses of the birds after the last sale of feathers, or any deficiency at the last sale to meet former losses, Mr. B. shall pay to Mr. A. the sum of £10 sterling for such bird so deficient.

11. The feathers not to be taken oftener than once in eight months.

Done at                      this              day of                      18

Witnesses to { C.    Signed { A.  
Signatures { D.    B.

We have here supposed that the farmer is to get a share in the increased value of the birds when sold; we know that this is not general, but we do not see that he has a fair chance of benefiting himself unless he gets this, at any rate not in proportion to the risk he runs.

Allowing for those that die having given no feathers, or only a few, we cannot safely reckon on more than £12 a head return all round, which would give £600; but taking 10 per cent. to be a fair average for deaths and losses, this will take off £100, leaving £250 each for the year's return, but out of his share the farmer will have to pay all expenses.

But supposing present prices to be maintained, at the end of the three years the birds would be worth £50 each. Now, allowing 10 per cent. per annum for deaths, there would be thirty-seven birds to sell, which would give £1,111 more than the original cost; and if the farmer got a third, he would have £370 to receive. It would then have paid him handsomely.

## CHAPTER VIII.

### FARMING PARTNERSHIPS.

WE do not advise any one to try starting on his own account with less stock than we have given in our last chapter. If he has not the capital and cannot get birds on the halves, his only other resource is to take a partner. If he can get a sleeping partner who is willing to put in, say, £2,000 against his £500 and services as manager, he is infinitely better off than if he took birds on the halves, because he will then have to give up only half the net earnings, in the place of half the gross earnings if the birds are on the halves; and yet it may answer the sleeping partner quite as well, as he then has a voice in the management, and his birds will not suffer for want of liberal treatment, as is so often the case where an impecunious man has the birds on the halves.

Even if he cannot get one man to put in £2,000, he may get four men to put in £500 each, when each of these will get an eighth of the net earnings. This to a certain extent constitutes a company, but with the great pull in their favour that the managing partner, having the greatest interest of any of them in the

success of the concern, will require no supervision; all that the sleeping partners need do is to look into the books and see that they get their due portion. There are no brokers' fees, no outlay on huge advertisements of the prospectus, no promotion money, no secretary to pay, and no directors' fees, and, above all, no swindling by shareholders and directors slipping in stock or stores at an outrageous price.

It is partnerships like this that have proved so pre-eminently successful in wool-growing in Australia.

Another kind of partnership which is likely to become much more general is:—A. owns a suitable farm, which he gives rent-free for the use of a partnership between himself and B., as a set-off against B.'s services as manager, each putting in half the working capital; but B. has only £500, and the half-capital would be £1,250. A. therefore agrees to advance the £750 B. is short of, taking his bills at one, two, and three years, bearing interest at 6 per cent. per annum. We have personally known this kind of partnership to work with the greatest success. B. thoroughly understands his business, or else A. would have had nothing to do with him; therefore the more A. leaves him alone the better. But this just suits A., who has got his own business to attend to. A. should, however, guard himself by registering the concern under the Limited Liability Act,

and should provide in the partnership deed that no joint promissory note shall be given, or mutual debt incurred, and no stock bought or sold, except by joint consent.

A. being the owner of the land can consent to take over from the partnership, at its expiration, any improvements at one-half their value. By this means he enables B. to provide the birds with proper accommodation, whilst he guards against B. being extravagant by the quarter loss he would sustain. It also gives B. an incentive to stick to the partnership for its full period, by the loss of all claim to compensation for improvements that its termination earlier would entail. A. should further guard himself by stipulating that any infringement of the deed, *ipso facto*, constitutes full grounds for the aggrieved party to break up the partnership if he thinks fit, irrespective of any other remedy he may seek. The deed should also state that B. is to reside on the farm, and give his whole and undivided attention to managing it, agreeing not to engage in any other occupation; also that B.'s household expenses are to be borne by himself. In fact, it should be as precise as possible, leaving no loopholes for future misunderstanding.

But another, and apparently the simplest kind of partnership, namely, that where two men put their

money together and jointly farm on the same farm, we cannot advise, except where they are brothers, or are as brothers. With mercantile or professional men the thing is feasible, and of course is daily done, but then they do not have to live in the same house, they only meet at the office, when each has his own department, and clashing is thus avoided. All they need is to be agreed as to the general manner in which their business shall be conducted, and then to use mutual forbearance in carrying it out. But in farming it is impossible to avoid almost hourly clashing; and besides this, they will be living together, which greatly increases the chances of disagreement.

Man and wife often find it difficult to rub along smoothly, with their two spheres of labour so utterly distinct; and two men living in the same house, and farming together, are in nearly as close union, with all the favourable circumstances of agreement removed. If one is older, and has more experience than the other, and the younger agrees in the deed to let the voice of the senior be final in all matters, it may work; without this, you might as well put two captains in command of one ship and think they would agree.



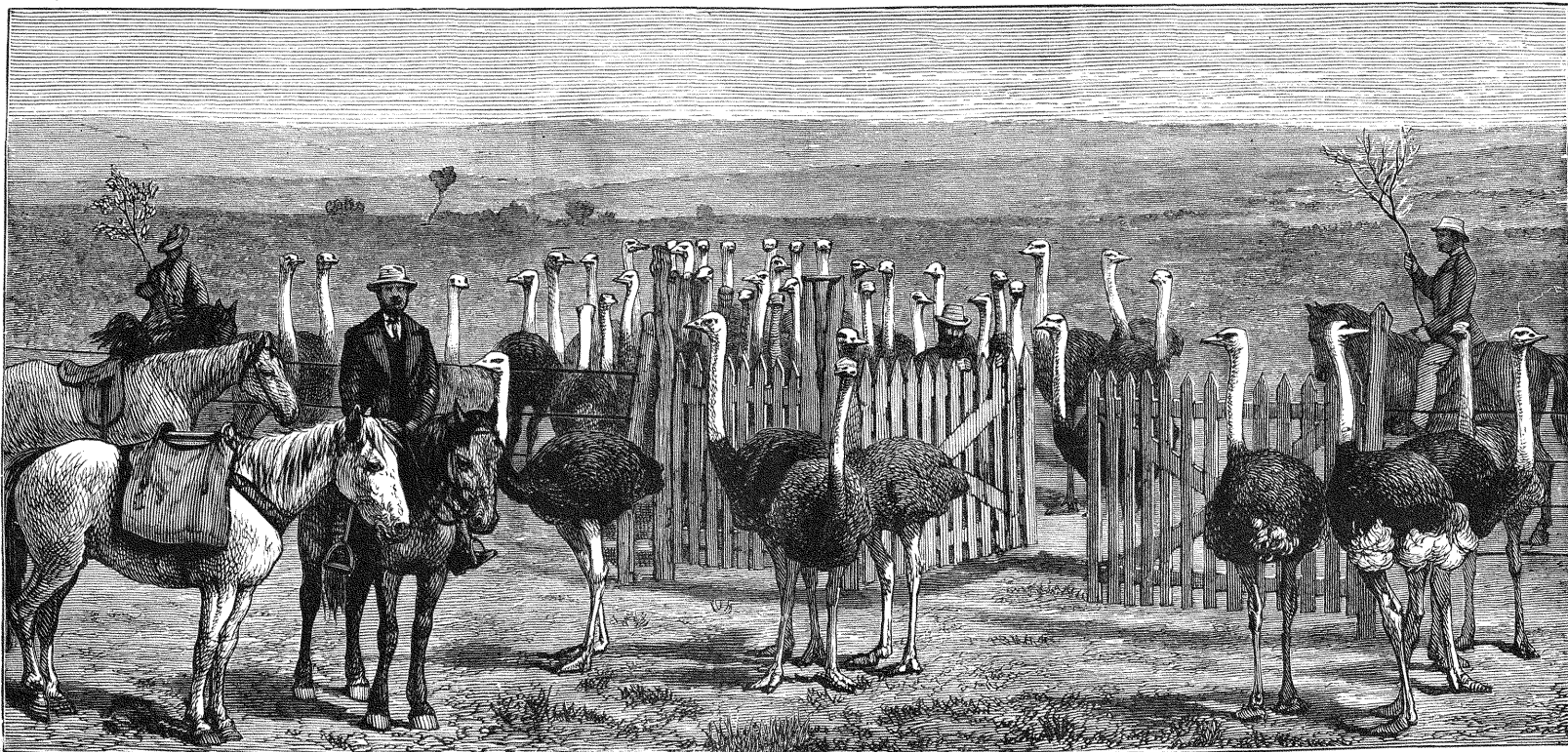
## CHAPTER IX.

### TRAVELLING WITH BIRDS.

YOUNG beginners often meet with great trouble, and sometimes serious loss, in removing their birds, after purchasing, from a want of knowledge of how to manage them.

At all times, with the most experienced men, removing birds where they have been long in camps and have become unused to strange sights and sounds, is a matter of anxiety, forethought and patience, especially the first two days' journey, though after that time the birds get accustomed to it, and there is little difficulty, unless dogs are met with and chase them.

With birds of all ages, a man should walk in front with a bag of mealies, dropping a few as he goes along, and calling to the birds, the other men driving on behind being armed with light thorn-bushes, which are infinitely superior to whips, as, if the birds take fright and try to turn back, the thorn-bushes turn them where whips are useless; besides, whips spoil the plumage and are apt to catch in the birds' legs and throw them down, especially when the whips get wet.



**TRAVELLING WITH BIRDS.**

*(From a Photograph taken at Heatherton Towers.)*

With chicks and troops of plucking birds there is little difficulty ; the main danger is at night, when, if put into a strange kraal or enclosure they are apt to take a panic and rush against a fence, injuring themselves. If the journey is for more than two days the traveller should have a wagon or cart, carrying grain and going in front ; they then become attached to it, and by turning out of the road at night and camping, the birds will lie quietly round and the risks of strange kraals are avoided.

Birds stand travelling very well, and will keep up their 25 to 30 miles a day without feeling it ; but they should not be taken out of a walk, and should be liberally fed with grain, say three or four pounds a day each. If the journey is short, and time is pressing, they can be taken from 40 to 50 miles a day, when they can be taken at a good swing for miles at a stretch down-hill or on level ground, but if pushed whilst going up-hill they soon knock up and become dangerously distressed.

Persons should be very careful of trying to remove birds that have been long in a garden or small enclosure where they do not see other stock, or wild bucks ; such birds when taken out will sometimes take a terrible panic, and run till they drop down dead or paralysed. Such a case happened last year in Grahams-

town, where a man tried to remove 18 birds that had been reared and kept in a small yard. I had been consulted by one of the parties about it, and had told them that the thing was impossible without first getting them into a strong paddock and letting them for a month or two get thoroughly accustomed to strange sights ; it was, however, attempted without, when what I predicted happened : the birds at once bolted in every direction, and only six were ever recovered that lived afterwards ; some ran till they dropped dead, others killed themselves against fences, and others dropped down, and although they lived for days never stood up again.

Breeding birds are the worst to remove, from having been in their small camps ; they are always rather timid, and, where more than one pair has to be removed at a time the difficulty is increased by their fighting. If there is a camp round the homestead, or even a good kraal, they should be brought there in pairs, and then, all being more or less timid at the strange place, they will not be nearly so likely to fight seriously. By keeping them there for twenty-four hours and working with them, much time is often saved, and the birds do not throw themselves back in breeding, as they invariably do if they get raced about much in moving. To move a pair of breeding birds that have been long

camped off, at least four men should be employed, all armed with bushes, and one of them at least mounted.

Sometimes a bird will become frightened at a gateway, and will not pass it; it should then be caught by the neck by one man, another man on each side seizing it and pushing it along, when it can be taken anywhere.

Hobbling and all other like practices are quite unnecessary, and constantly result in the serious injury or death of the bird. The great secret is to take things quietly, and never to gallop after a bird; when he "scricks" and runs away, if you can cut him off and turn him, well and good; but novices often gallop after a bird, when the harder they gallop the harder the bird goes and the greater fright he gets; whereas, if they had got off their horses and lit their pipes first, they would generally have found the bird had only gone a short distance, and was waiting for them.

Much harm is often done by impatience. Constantly at first a bird will not come through the gate of its enclosure, and force is used, instead of coaxing; the bird is thus frightened, and gives much trouble.

## CHAPTER X.

### STOCKING A FARM.

WE will suppose a young man, a bachelor, has gone through his novitiate on some farm, has cut his wisdom teeth, and has £2,500 to invest. How had this capital be best invested?

We will suppose he has decided to try up-country and not on the coast, the capabilities of which for birds have yet to be proved; but should it prove that the birds will remain in health on the coast, a much smaller farm than is given below would be sufficient.

A farm of, say, 3,000 to 4,000 acres of suitable land, with good permanent water, with some sort of a house and a couple of outbuildings, has been leased for five years at, say, a rental of £150 a year. It has probably been used for cattle, there is a kraal, there is plenty of bush near the homestead and in other parts, but there are no camps.

The first thing is to buy a cart and six oxen, a few simple articles of furniture and cooking utensils, a couple of horses, a dozen cows and a bull, fifty head of poultry, provisions and rations for four or five men, axes, and a few carpentering tools, &c.; with these our

friend tracks on to the farm. His first difficulty will be to get men, but having succeeded in this, he sets to and makes a bush enclosure, say 300 yards square.

He should then purchase, say, fifty young birds a year old; these he will have herded by day, and put in his enclosure at night. His next step will be to commence, say, a line of six breeding camps—of course, if possible, taking advantage of anything in the shape of a natural fence—these should be not less than 300 yards square; as he completes them he can purchase, say, four pairs of thoroughly good breeding birds, and two pairs of three or four year olds. He should now purchase an incubator, not necessarily large, but the best kind he can get; as, even if he does not mean to incubate as a regular thing, every farmer should have one as a stand-by, in case of accidents. If he has a neighbour with a family, he will probably be able to get his supply of meat from him.

Our friend will now be started, and his capital will be invested somewhat as under:—

Cart and gear ...	...	...	...	...	...	£40
6 Oxen ...	...	...	...	...	...	60
12 Cows ...	...	...	...	...	...	144
1 Bull ...	...	...	...	...	...	10
Poultry ...	...	...	...	...	...	6
Furniture, gun, tools, provisions, servants' rations, plough, &c. ...	...	...	...	...	...	120

2 Horses, saddles, and bridles ... ..	40
1 Incubator ... ..	40
Cash in hand for wages and petty ... ..	40
	500
50 Young birds ... ..	1,000
4 Pairs good guaranteed breeders ... ..	800
2 Pairs 3½-year-old birds ... ..	200
	Total 2,500

It will be seen here that the capital over and above that invested in the birds is a fifth of the total; but if he was on veldt, where the bush is scarce, he would have to go in, at any rate partially, for wire, which would bring this item up to a quarter of the whole, and correspondingly reduce his returns. There will be considerable saving of labour after the wire is once up, but this will probably be counterbalanced by the greater liability to accidents with wire.

What shall we say as to the returns our friend may expect? This we have partially answered in another chapter, where we have given the case of a man under somewhat similar circumstances, who made in one year a net profit of over a hundred per cent., and over a considerable number of years made an average of 66½ per cent.; and in his case he had scarcely any bush, and was compelled to use wire. But he worked with both hands and brain in a manner few would be found



to do; and honesty compels us to say that, owing to the greater prevalence of disease in birds, and other causes, we doubt whether the same man under the same circumstances could do it now.

But let us suppose the commoner case of a young man who has only got £500 to invest, but is promised birds on the halves. We should then advise him to invest his capital as in the first £500 in the former case, and to get on the halves a proportion of breeding and feather birds as there described. Breeding birds, where they succeed, undoubtedly pay infinitely the best; but the risk is correspondingly greater, and every man should have a moderate troop of plucking birds to meet the rent and expenses in case of a bad season with the breeders. Of course, with birds on the halves our young friend has got a tough up-hill game to fight, but "Faint heart never won fair lady," or a fortune.

As soon as our friend has got his birds comfortably located on his farm, he should commence a camp of say 1,000 acres in which to put his plucking birds, and so have them to a considerable extent off his hands by the time his first chicks come.

A farm of the size we have named is more veldt than he will require at first, but he must have room for future increase, and nothing will damage his chance

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of success more than being cramped up. If the sight of part of it lying idle grieves him, he could take oxen on to graze.

If possible, let him select a farm that has on it especially plenty of spec boom and carl prickly pear. Without these, the first severe drought that comes, if mealies are scarce, will play havoc with his farming.

## CHAPTER XI.

### MANAGING A TROOP OF PLUCKING BIRDS.

OSTRICHES are generally designated as chicks up to seven or eight months old, or as long as they have still got their first crop of feathers on. From then till a year old, they are called young birds. From one to four years old, they are called plucking or feather birds. The next two years they are properly designated as four and five year old birds; but in advertisements of sales and prospectuses of companies they are often called breeding birds, but this is only a trick to swell the appearance of the thing. We have heard of cases of men buying birds as breeding birds, thinking they were buying birds that had already bred, and finding afterwards that they were only four or five year old birds that had not yet bred, and were consequently only worth about half what they gave. Birds that have been paired off in separate camps, but have not yet bred, are often called "camped-off birds." As they may be camped off at any age, the term conveys very little information, though four years old is the usual age for camping them off. After they have bred they

become "guaranteed breeders," and have changed their designation for the last time.

The distinguishing marks of the different ages are somewhat as follows, though it must be borne in mind that a very forward bird of one age will have many of the marks of the age above him, whilst a backward bird will have many of the marks of the age below.

*Six-and-a-half months old.*—The quill feathers will be ready to cut; some of the body feathers will have begun to change; some of the cocks will show yellow in the front of the legs.

*Twelve months old.*—The second growth of quill feathers should be showing; some of the cocks should begin to show black feathers; all cocks should show white on legs and bill.

*Two years old.*—All the chicken feathers should have gone from the back, and the cocks should show quite black, or nearly so. Most of the little white belly feathers should have been replaced by blacks or drabs, according to sex.

*Three years old.*—There should not be a single chicken feather to be found on the body; the last place from which they disappear is where the neck joins the body. Every vestige of the white belly feathers has gone. The bird's plumage has reached perfection; some of the cocks will be red in front of the leg and on the bill.

*Four years old.*—The birds have reached maturity. The breeding organs are fully developed; the cocks in season will have the back sinews of the leg pink, the front of the leg and the bill scarlet, and much of the fineness of the feet, the leg, and the lines of the body will have gone.

*Five years old and upwards.*—The only distinguishing marks we know are a generally coarser look of the limbs and body, and an increased coarseness of the scaling in front of the legs and feet.

Up to twelve months old the birds should be treated as chicks, being herded and fed with one pound each of either wheat, barley, or Kaffir corn, shedded in wet weather, and green food cut up for them when the veldt is dry. After this age they can be put in a large camp, of not less than ten acres to a bird, of ordinary South African veldt, and left to shift for themselves; but an opportunity should be selected for doing this when the veldt is in prime order, and even then they will be very apt to take to hanging up and down the fence nearest the homestead, and will require to be partially herded for a time in the camp.

For the next two years they will require watching, and, if the veldt should get dry, to be fed; each year as they get older they will get more robust, and better able to stand hardship and scarcity of food. Up to three

years old they often suffer terribly from internal parasites, and occasionally, especially if food is scarce, require to be physicked (*see* DISEASES, &c.). If your fences are good, once a fortnight is quite often enough to muster them.

Every farmer should keep a stock book, and carefully note the count in each camp. Trusting to memory is uncertain; a bird is taken out for some reason, or some are sold, or one dies, and these are very apt to be forgotten, and much trouble and uncertainty as to what the count should be is thus caused.

The days of cutting the feathers or pulling the stumps of every bird on the farm should be carefully noted in a book. If this is not done the feathers will be very apt to be left a few days too long, and be considerably damaged; or else, perhaps, in a very busy season, much time will be lost by getting the birds up to pluck, and then finding that the feathers are not ready.

#### BRANDING.

Every bird should be branded with the owner's initials in large letters of about four inches. The branding-iron should not be more than an eighth of an inch broad on the burning edge. If many birds are to be branded there should be three irons, to ensure their being red-hot. The birds should be put in the plucking-box, and

a few mealies thrown to them to attract their attention from the operator, when no holding will be required. The irons being red-hot, they only require to be applied and removed almost instantaneously, and then a dab of oil should be put on the place. The mistake that is generally made is keeping the iron on too long, thus destroying the skin and making a sore. On a large establishment there should be an age-brand as well. Pieces of fencing-wire twisted into any required shape make the best branding-irons that can be used for either age or quality branding.

Every plucking time, any extra well-feathered bird should receive a private brand, and every particularly inferior one another. This can also be done by notching the toes with a file; but these will grow out in time.

Birds can be branded when a few months old, but the skin is then very thin, and the operation must be done with care.

When the birds are three years old, some of the hens will endeavour to get out of the camp and go off, generally in a northerly direction; and it is astonishing what places they will get through at this time, though up to this period if bred on the farm a very moderate fence will have sufficed. But where up-country birds are brought coast-wise, for months they will try their utmost to get away northwards—sticking to the north

fence of their camp, starving and fretting, and at last compelling the farmer to herd them in their camp.

In the fearful droughts to which every part of South Africa is more or less subject, there will occasionally come a time when on the very best of veldt there is little for the birds to eat, when even the spec boom shrivels and seems to lose its sustaining power as food; under these circumstances grain alone will not keep the birds in a healthy condition. And it is in these times that the farmer with plenty of carl prickly pear reaps the advantage, as he can then bring the plucking birds into smaller camps, and either with large butchers' knives, or with the machines known as Ostrich food-cutters, and which are made for the purpose, cut up once a day as much of it as they can eat. This, with a pound of grain each daily, will keep them in good trim.

The prickly pear, especially the thorny kind, is a great nuisance in the summer when the fruit is ripe, as, if other food is scarce, the birds will go for the fruit and get the little thorns in their eyes, sometimes almost blinding themselves for a time; but, if left alone, in a few days they recover, but often not before they have become terribly thin.

The plucking birds should have access to water, and be well supplied with crushed bones; if a few heaps of



these are thrown out in their camp, they will find them when they require the phosphates the bones contain.

On the coast, or places where mangel-wurzel can be cultivated, it makes an excellent food for birds ; and where there is no prickly pear, something of the sort should always be cultivated, in case of drought or locusts coming.

For the benefit of my English readers, I should explain that "mealies" is the Cape name for maize or Indian corn.

## CHAPTER XII.

### TAKING THE FEATHERS.

IN the first days of Ostrich-farming the feathers were plucked every six months, the feathers in that length of time, almost to a day, having apparently attained their full growth, but varying a little according to the condition the bird was in. I say apparently, because, although the fluffy part of the feather is at its longest, and the blood-vein in the feather will have dried as far down as the junction of the feather with the wing, yet the stalk below the skin is still alive and growing. It was soon found that this constant pulling before the feather was ripe caused it in each successive growth to become shorter, and the quill stiffer, till by the time the bird was five or six years old the feathers were of little value. But the feathers cannot be left after the blood-vessel has dried up as far down as the junction of the wing, as the vitality of the upper part of the feather has then gone; and even if left for a few days after this has happened, the point will be found much injured, and the value considerably reduced.

It is to enable us to take the feather at its prime,

without injuring the next growth, that cutting the feathers after six months' growth has now become an universal practice as regards the quill feathers—that is, the white and long grey, or what naturalists call the primary, secondary and tertiary feathers—the stumps being left in till ripe.

As regards the blacks and tails, the practice varies considerably. The best plan is:—When the chick is seven months old, cut the quill feathers as near the wing as you can without letting the stumps bleed; pull out two rows of the brown feathers above the quill, also two rows above and below the arm of the wing, taking care not to pull so many as to leave the skin exposed, nor yet to take the floss feathers, that is, the row of light feathers next the leg, which are of little value and greatly help to keep the bird warm. Pull out the tail. Two months afterwards pull out the quill stumps. Six months after this you repeat the process, leaving the quill feather stumps in two months each time. You thus have after the first plucking a growth of eight months for the black and drab feathers, which is no injury to them, as their points are not liable to get damaged, and they protect the quill feathers for the first four months of their growth.

The tail is quite ready to pull every seven months, and this is the best thing to do; if left till the time

comes to cut the quill feathers, it is much damaged. But if the symmetry of the bird is desired to be kept by having all its feathers ripe at one time, then the tail should be cut and stumps drawn, as with the quill feathers. But with breeding birds the stumps in the hen's tail are apt to balk the male in pairing.

Great care should be exercised in pulling the brown feathers from the young birds at the first plucking, as the skin and flesh are very tender, and the socket is apt to pull out, when a blank will be there for ever. To avoid this, the flesh should be held down with the fore-finger and thumb of the left hand.

In drawing the quills after leaving them the two months, it will be found that they are still a little moist and slightly bloody, but it is better not to leave them longer, or the new feather will have begun to grow, and sometimes will be pulled out, having adhered to the old quill. This I believe to be the cause of blanks in the wing, which every Ostrich-farmer must have experienced. I do not speak positively as to this being the cause, but I never remember noticing blanks when I used to pluck every bird at six months old, and regularly every six months afterwards.

Once in the early days I was busy plucking some chicks six months old, when another of the first beginners of bird-farming happened to pay me a visit. He

was dreadfully shocked at the idea of plucking a chick under a year old. Seven months afterwards I had plucked the same birds again, and sold the feathers, netting £7 10s. a bird. With this money I went up in the Karoo country to try and purchase more birds, when I came to my friend's house. We visited his young birds, rather older than mine, and found, in the place of a nice young crop of feathers, he had half blanks in nearly every bird, and the remainder twisted and bad. Of course, other causes may have had something to do with this, but as the birds were in good condition I have no doubt that the pulling out of the young feather which was adhering to the old one was the main cause.

It is quite possible that there is something to be learnt yet about taking the feathers, and that cutting the quill allows the air to penetrate down the stump and causes it to shrink, and consequently that the socket is not kept as wide to allow of the growth of the new feather as in the ordinary course of nature, when the old feather remains in perhaps for years, and is gradually pushed out by the new feather.

It is self-evident that the tame feather is not nearly so heavy or long as the wild one, but then it must be borne in mind that the Ostrich has no moulting season, it only sheds a feather now and again; consequently the whole growing strength is thrown into a very few

feathers, whilst with the tame bird it is divided amongst the whole of the quills.

This is another reason why it is better to pull the other wing feathers when the quills are cut; the quills then get the whole growing power for their last two months, when the blacks have ceased to grow.

For a large troop of birds, say 150, the best kind of plucking-box is a kraal in a fence, made of yellow wood planks nailed on to quartering, and this quartering should be bolted on to sneezewood feet. The size of the kraal should be twenty feet square and five feet high, one foot being left open at the bottom. There should be two plank doors on hinges opening on either side of the fence; alongside this kraal, and communicating with it by a sliding door should be another kraal, only ten feet wide, with one end moveable, and made of lighter timber, say three-quarter-inch deal: this latter kraal should also have two doors opening in different directions.

The birds having been got into the large kraal, those that are wanted to be plucked or branded are picked out and put into the small kraal. The moveable end of the small kraal is brought down and the birds jammed up, when the men can stand in amongst them and pluck with the greatest impunity, one man standing outside to receive the feathers. For breeding camps, a simple kraal eight feet square, with one end moveable, is suffi-

cient. A bottom along the back of the moveable end, for a man to stand on, avoids the necessity of his going in to the birds.

The best implements for cutting the feathers are the pruning-scissors with two bends in them. For drawing the stumps little sixpenny pincers are the best.

In pulling the stumps or feathers, care should be taken to make the man stand well behind the bird, and draw them straight out.

## CHAPTER XIII.

### PREPARING THE FEATHERS FOR MARKET.

WASHING the feathers has been much in vogue of late years, and although at first the producer undoubtedly got a better price by doing so, the dealers are no longer misled by the showy appearance thus given to the feathers, but buy them by their quality, giving the preference to the unwashed article. The washed feather is apt to discolour on the voyage, and the manufacturers greatly prefer doing the washing themselves. The only feathers the grower should wash are old feathers that have got soiled and would spoil the look of the others, and occasionally tails that are heavy with mud.

I shall, however, later on describe the best process for washing feathers, as the farmer should undoubtedly know how to do it, so as to prepare feathers for shows or other purposes.

We will suppose that whilst plucking, the cocks wings, the hens' wings, cocks' tails, hens' tails, blacks and drabs have been kept separate, and have been taken to a room with tables in it. The sorter will first take in





**HEATHERTON FEATHER ROOM.**

*(From a Photograph.)*

hand the cocks' quill feathers ; these he will—feather by feather—sort first into heaps consisting of prime whites, first whites, second whites, tipped whites, best fancy-coloured, and second fancy-coloured. He will then take each one of these heaps separately, and sort each kind into six or more lengths ; he will then proceed to tie them up in bunches according to their lengths, about twenty quills of the longest making a bunch, and rather more of the shorter ones. The second whites can all go into one bunch. The tipped whites are whites with black tips.

The hens' wings he will first sort into heaps according to their shades of colour, with a second quality heap for each shade, and then again sort each heap into lengths as with the whites. Amongst the hens' feathers he will get some white ones, but these have not the gloss of cocks' whites, and should be kept separate. The hens' wings require more judgment and care in sorting to make the best of them than any others.

The hens' tails he will sort into six heaps, as follows, and then tie up. The heaps will be :—First, whites ; second, light-coloured ; third, coloured ; fourth, dark-coloured ; fifth, short ; sixth, broken feathers. The cocks' tails into seven heaps, namely :—three lengths of whites, one of broken feathers, and three lengths of what are called mixed tails, that is, white tails with black butts.

The blacks and drabs should each be run into seven different lengths, with a bunch each of broken feathers, and one each of floss. The floss are the soft feathers that should not be plucked, but of which there are always some taken by accident. Care should be taken that any old chicken feathers that may get in amongst them are carefully removed, as these greatly spoil their value.

The various heaps of blacks and drabs should be tied into bunches, the size being regulated by the number that can be conveniently held in the hand; they should then be tied three or four together, with the exception of the long blacks and drabs, which are better in small bunches. It will then be found that they will nicely divide into—First, long; second, medium; third and fourth, two qualities of shorts; fifth, broken feathers, and the sixth floss.

The chicken feathers will sort into five qualities :—First, white chickens', which can include any with a slight colour; second, light-coloured chickens'; third, coloured chickens'; fourth, chickens' tails; fifth, dark chickens'.

The sorter, having now got all his feathers tied up, should proceed to arrange his lots as he intends them to be sold. He should then frame a list, and ticket each bunch with his name and the number of the lot

it belongs to. As a sample I give my last sale, the lot fetching £545, prices being at the time the lowest known for years.

No.	Bunches.	Description.	lbs. o ...
1	... 24 ...	Prime white ... ..	4 15½
2	... 5 ...	" " ... ..	1 2½
3	... 3 ...	" " ... ..	0 12
4	... 5 ...	" " ... ..	1 2½
5	... 4 ...	" " ... ..	0 11½
6	... 2 ...	" " ... ..	0 6
7	... 4 ...	First " ... ..	0 13½
8	... 1 ...	" " ... ..	0 6½
9	... 2 ...	Fringed " ... ..	0 13
10	... 2 ...	" " ... ..	0 7
11	... 3 ...	Seconds " ... ..	0 10½
12	... 1 ...	Tipped " ... ..	0 2½
13	... 1 ...	Fancy-col <sup>d</sup> ... ..	0 4½
14	... 1 ...	" " ... ..	0 8½
15	... 1 ...	" " ... ..	0 5½
16	... 3 ...	Long col <sup>d</sup> light ... ..	0 12½
17	... 2 ...	" " " ... ..	0 9½
18	... 4 ...	" " " ... ..	0 10½
19	... 1 ...	" " " ... ..	0 4½
20	... 1 ...	Long col <sup>d</sup> dark ... ..	0 8½
21	... 1 ...	Long col <sup>d</sup> seconds ... ..	0 9½
22	... 7 ...	White tails ... ..	1 14½
23	... 1 ...	Damaged white tails ... ..	0 2
24	... 4 ...	Mixed tails ... ..	0 8½
25	... 4 ...	Light " ... ..	0 14½
26	... 1 ...	Col <sup>d</sup> " ... ..	0 4½
27	... 4 ...	Long blacks ... ..	2 4
28	... 15 ...	Medium " ... ..	6 15½

G 2

No.	Bunches.	Description.	lbs. oza.
29	... 22 ...	Short ,, ... ..	8 7½
30	... 2 ...	Floss ,, ... ..	1 1
31	... 1 ...	Long damaged blacks ...	0 1½
32	... 5 ...	Long drab ... ..	3 0½
33	... 7 ...	Medium ,, ... ..	3 13
34	... 9 ...	Short ,, ... ..	3 7
35	... 1 ...	Floss ,, ... ..	0 9
37	... 1 ...	Damaged long drab ...	0 2½
36	... 8 ...	Inferior short ,, ...	3 10
38	... 41 ...	White chickens' ...	6 12½
39	... 17 ...	Light col <sup>d</sup> ,, ...	3 0½
40	... 11 ...	Col <sup>d</sup> ,, ...	1 10½
41	... 8 ...	Chickens' tails ...	1 14
42	... 18 ...	Dark chickens' ...	7 14

The numbers are given here to show all the whites together, and then the feminas, &c.; but in sending them to market it is better to arrange the numbers so that a lot of whites are followed by a lot of feminas, then a lot of whites again, then a lot of fancy colours, then whites again, and so on right through. This assists to keep the lots from being mixed upon the sale-tables, and insures the buyers seeing clearly which lot they are bidding for.

It cannot be too strongly impressed on the sorter not to put broken or inferior feathers with the good ones; not only as it is not honest, but it defeats its own end: the buyer buys nearly as much by the feel of the feather as by the look. He takes the bunches in one

hand, and presses on the top of the bunch with the other; if there is a broken feather in the bunch it is at once felt.

Every Ostrich-farmer should weigh his feathers before sending them to market. He can buy agate beam scales, including a set of weights, for £2, which a single feather will turn. The weights, however, must be assized, as there is no depending on them as sold.

The sorter should avoid making an unnecessary number of lots, as each lot has to turn the scale, causing a loss in many lots of nearly a quarter of an ounce.

#### FEATHER WASHING.

This is a very simple process, and can be done by the black women, but it requires careful supervision. Have two baths, put in a little washing-soda, shred into the one about a quarter of a pound of soap, and pour boiling water upon it, stirring until it is dissolved, to make a strong lather; in the other bath put half the quantity of soap, to make a weaker lather. When the hand can be borne comfortably in the water, take a few feathers and rub them well with the hand against the side of the bath, taking care to rub towards the tip of the feather. When the dirt is pretty well out, wash them in the same way in the second bath, then plunge

them into clear cold water to get all the soap out, then in blue water about the same strength as you use for clothes. Wring them out well, and finally put them through thick starch (the starch simply mixed with cold water).

The feathers must then be shaken in the hand, out of doors in the sun and wind, until perfectly dry, when they should look snow-white.

## CHAPTER XIV

### THE ENGLISH FEATHER MARKET.

We have considered in the last chapter the preparing of the feathers for the Colonial market. But the farmer who would be thoroughly successful should use every endeavour to know as much as possible of the home markets and the final retail market, where the goods pass from the shopkeeper to the wearer. Since our arrival in England we have made it our special work to acquaint ourselves with all these, by attending the public sales, and by becoming acquainted with some of the largest shopkeepers who dress and dye the feathers, and keep shops for the sale of these articles only.

As most of my Cape readers are aware, the greater part of the Cape feathers are bought up and exported by a very few men, and of these by far the largest buyers are the resident representatives of the few great English manufacturers; where the ordinary merchant has tried exporting feathers it has generally resulted in a loss. The reason has generally been considered a mystery, but there is no mystery about it. These men have enormous connections in many parts



of the world. The feathers as bought are all assorted abroad into cases adapted for the different markets, packed in tin-lined cases, or cases lined with prepared paper, sewn up in canvas, and shipped to England.

The English sales are held monthly. The principal auctioneers are Messrs. Lewis & Peat, and Hale & Son; the feathers catalogued by them at this month's sale consisting of 590 cases, with a net weight of 15,769 lbs. The cases on arrival are warehoused at the warehouses in Billiter Street, where they are opened, and the feathers exposed on tables with wire divisions to separate each lot, one long table under the windows being reserved for intending purchasers to examine the feathers on. The warehouses are open for a few days before the sale, and intending purchasers go with their catalogues, the great dealers examine and fix their valuations on every case, the smaller buyers only valuing those cases that are likely to suit their wants. On entering the warehouse the visitor is taken in charge by one of the attendants, who remains with him as long as he is in the building, and carries any lots he wishes to examine from the feather tables to the table under the windows. The sales are held at the "Commercial Sale Rooms," Mincing Lane; but we cannot do better than give the notice and conditions as published on the catalogues, viz. :—

**For Public Sale,**  
**BY LEWIS & PEAT**  
 AT THE  
**LONDON COMMERCIAL SALE ROOMS,**  
 (On Wednesday, May 18th, 1881,  
 AT ELEVEN O'CLOCK,  
 THE FOLLOWING GOODS, VIZ.:—

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350 Cases 1 Parcel	}	<b>OSTRICH FEATHERS</b>
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LONDON PRODUCE BROKERS' ASSOCIATION'S  
 PUBLIC SALE CONDITIONS.

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**CONDITIONS.**

- 1.—The highest bidder to be the purchaser; and if any dispute arise the lot shall be put up again, or settled by a show of hands, unless left to the decision of the Selling Broker.
- 2.—All Brokers who do not declare their Principals in writing within three days after the sale, and those who may purchase for Principals not satisfactorily known to the Selling Broker, will be held responsible as the Principals, and obliged themselves to pay for the goods so bought. The biddings of parties who have been defaulters at previous Sales will not be taken.
- 3.—Goods to be taken at Dock original working weights, with all faults, errors in count or description, as they now are in the Warehouses, where they will be considered at the risk of the Sellers against fire (to the amount of the Contract value only) until the prompt day, unless previously paid for.
- 4.—Prompt as printed. Payment on delivery of warrants or order, if required.
- 5.—Lot money as customary, to be paid to the Selling Broker, whether bought at or after the Sale. Buyers to pay rent from the expiration of the prompt, with re-housing or re-warehousing.
- 6.—In the event of the non-fulfilment of the Sale Conditions, the Goods may be re-sold immediately, either by Public Sale or Private Contract at the option of the Selling Broker, and all losses, charges, interest of money or any other damage that may arise, shall be made good by the defaulted and for which he will be liable to be sued.


Prompt Fourteen Days. Without Discount.

The feathers are put up at per lot as catalogued, the bidding being in advances of £2 10s. a bid on the larger lots, and £1 a bid on the smaller cases. The auctioneer sits on a raised dais, with two assistants on either side, the company being in front of them on seats rising tier upon tier. The chief assistant generally starts the lot at something far below its value, as, for instance, a case worth £250 he will start by crying out, "£150 on my side;" the assistant on the other side catches a look from a buyer, and shouts, "52 10 my side;" the other assistant catches a sign from a bidder—perhaps nothing more than a sign with his penholder—and shouts, "55 my side;" and so on, till the bidding stops, and the lot is knocked down, when the assistant who got the last bid shouts out, "My buyer," or some such expression, and writes down his name in his list. In no case is the name of the purchaser disclosed. To prevent mistakes, especially where two bidders are sitting close together, the assistant who took the last bid gives a glance at the man he booked the lot down to, and gets an answering glance back to make sure he is right. A great many lots are bought in, and the old hands in many cases know when it is so, and pass their remarks freely.

Judging from what I have seen, I should say very few of our best feathers ever go on the public sales, and

that the principal reason why the ordinary Cape merchant loses by exporting feathers and selling them on the London sales is a want of knowledge in making up the cases to suit the retail dealer. Taking the lot I here give out of the catalogues—

Ex "Trojan"

LOT	Mark	Nos.	Bdls.	lbs.	ozs.			
34		390	1 case	15	2	0	white	
					20	3	5	„
					9	2	4	3rd white
					17	2	7	white and light fem
					8	1	1	light femina
					13	1	6	femina
					8	1	0	3rd femina
					4	0	15	light Spadona
					3	0	5	femina Spadona
					11	0	14	white Boos
					4	0	10	femina Boos
					4	0	6	drab Boos
					7	0	13	long and med black
		qty			6	10		med and short „
					5	0	14	long and med drab
qty			3	10		med and short „		
<hr/>								
			28	8		Sold for - - £200		
<hr/>								

the first, fourth, fifth and tenth lines might suit a west-end retailer, whilst he could do nothing with the other lines; whilst a retailer from a manufacturing

town might do with the cheaper lines, but could do nothing with the best lines. Or in the lots made up of one kind of feather only, the quality in the same case varied so much that only in exceptional cases could the same retailer make use of all the feathers it contained.

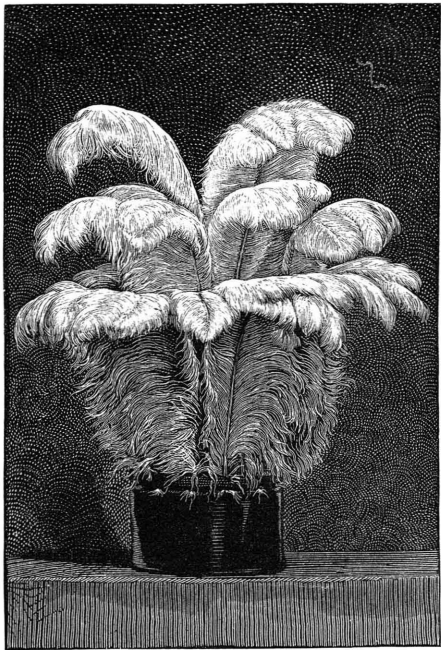
The consequence of this is, to play directly into the hands of middlemen by keeping the retail dealer out of the public sales, and leaving it to middlemen to buy there, and, by re-sorting the feathers, to suit the retail dealer with the article his particular locality consumes.

It would be much to the advantage of the Ostrich-farmer if Cape merchants generally would study this subject more, and learn how to make up cases to suit the various retailers, so that they would acquire the habit of coming more to the London market instead of buying from the middleman, whose profits mean so much taken out of the pockets of the Cape farmer and merchant.

The great complaint against our Cape feathers is a want of fulness, closeness, and breadth of fluff of the lower part of our feathers, as well as a want of weight at the tip. But we have seen many parcels of Cape feathers that would compare favourably with the best Barbary feathers, and if this complaint against our feathers were more generally known by

## THE AUTHOR'S PRIZE FEATHERS,

*As Exhibited at the Royal Agricultural Society's Show at Derby, July, 1881.*



No. 1 STAND.

**PRIME WHITE OSTRICH FEATHERS;**

Being the feathers in the wing that correspond with the flight feathers of other birds.



No. 2 STAND.

*Crown and Centre.*—FANCY COLOURED;  
Being the last two feathers of the primary row.

*Base.*—LONG BLACK FEATHERS;  
Being the second row of wing feathers.



No. 3 STAND.

*Crown.*—LIGHT LONG COLOURED;  
Being the primary feathers of the hen bird.

*Centre.*—SAME, ONLY WHITE.

*Base.*—DIFFERENT SHADES OF THE SAME.



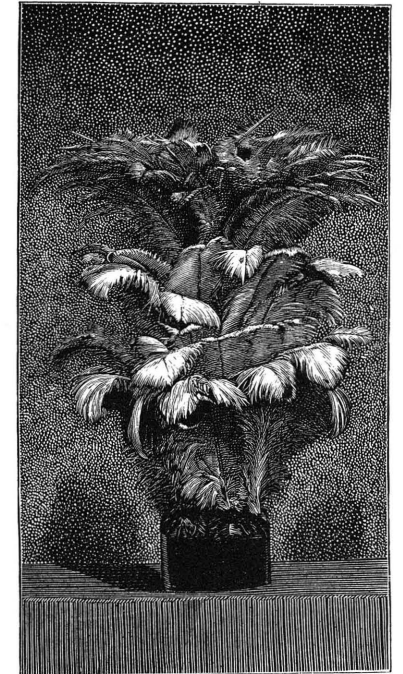
No. 4 STAND.

*Crown.*—MALE BIRD'S TAIL.

*Centre.*—DIFFERENT SHADES OF  
FEMALE'S TAIL.

*Base.*—DIFFERENT LENGTHS OF  
BLACK AND DRAB;

Being the inner rows of the wing, the Black coming from the Male, the Drab from the Female



No. 5 STAND.

*Crown.*—CHICKEN FEATHERS;  
Being the first crop from the wings of the young bird.

*Centre and Base;*  
Being the male bird's feathers, with a black eye in the tip peculiar to some strains of breed.

our growers, selection of the breeding birds would soon remedy it. At the present time the demand is not so much for length of feather as for this fulness of fluff; and the immense difference this makes in the value of different parcels to the retail dealer can be readily seen when we consider that with thin feathers it will take three—one on the top of the other—to make a good hat-feather, whilst with thick feathers it will only take two.

The present fashions all run on light dyed feathers, such as orange and blue, the colour being deep at the base and gradually getting lighter at the top, white feathers being scarcely worn at all. Within the last few months a process has been discovered by which the natural colouring of our femina and fancy-coloured feathers can be extracted, and there is an establishment in London where you can send feathers and have the colouring removed for £5 a pound. It is this that has caused the great drop in white feathers, whilst dark goods have kept up their price.

We personally supply several dealers in different parts of the world with feathers, either grown by ourselves or bought from other growers. Anyone interested in feathers can communicate with us.

## CHAPTER XV.

### SELECTING AND MANAGING THE BREEDING BIRDS.

THE young beginner should avoid buying at large sales which are constantly held in the towns all over the colony. They are nearly all birds bought up cheap by speculators, owing to some fault, and the most bare-faced swindling is practised. I have heard of more than one case of men buying guaranteed breeders, where they have both turned out cocks. And where you see birds advertised as being four and five years old, they are seldom more than two-and-a-half to three-and-a-half years. Yet the prices given at these sales are generally in excess of what the beginner would give if he went to some well-known breeder, whose word he could perfectly rely on, and got a pair of good breeders that would probably have a nest within a month or two.

The men that should buy at these sales are men in large way, with great experience, but these are just the men that are the most chary. Of course, these remarks on sales do not apply to farmers' stocks being sold off, or when the birds are known. The present



price of a good pair of guaranteed breeders—that is, a pair that have been breeding together—is about £200, but the beginner should get birds that have not only had one nest, but should, if possible, get birds that have bred for two or three seasons, and have had not less than three nests each season. He may not always be able to get guaranteed breeders, in which case he should buy good four-year-old birds, which he should get for £100 to £130 a pair. If they have been well nourished as young birds, and are well forward, the cock with a deep scarlet in front of his legs and round the eyes, and the back sinews of the leg pink, with generative organ thoroughly developed, and that of the hen large, soft, and sticky, he can then pretty safely rely on their breeding that season.

The term “guaranteed breeders” is so universally used now to designate birds that have had nests, that any purchaser who had bought birds sold under this designation, without any further questions being put and answered, and which he could afterwards prove had never bred, would have no difficulty in law in recovering full damages. But supposing an unscrupulous person to sell as “guaranteed breeders” two birds, both of which have bred, but not together as a pair, it might be doubtful if the purchaser could recover damages; so it is always advisable to put the following questions. On

the answers given, a good idea could be formed of the value of the pair as breeders:—

1. What age are they ?
2. How many years have they been breeding together ?
3. How many nests have they had each year ?
4. How many eggs do they average in each nest ?
5. How many of these nests have they sat out ?
6. What average of chicks do they bring out ?
7. Are their chickens strong and healthy ?

Of course many large breeders could not answer these questions categorically, but they would then give a general character of the pair, whether good, fair, or indifferent breeders.

With regard to the first two questions, our experience is that the older the better. We have birds that we know to be over sixteen years, and they breed more freely, sit more steadily, and bring out a larger percentage than any birds we have.

Three-year old birds will sometimes breed (especially the hens), but no reliance can be placed on their doing so ; and if they do, I should doubt its being good either for them or their progeny.

The common difficulty of getting a young pair to breed is, the cock gets so excited and furious that the hen becomes timid and runs from him. Holding the hen's

head and covering her eyes is often resorted to for the first few times, and with success. Another good plan is, to take the cock away for a short time to a strange camp. This tames him a little, and when taken back he is generally all right. But on no account ever take the hen to the cocks' camp.

In choosing the birds you will, of course, be largely influenced by the quality of the feathers. It has been the fashion to run entirely after white-feathered hens, with not half enough regard as to the quality of the feather in other respects. Dark hens' feathers of good breadth, softness, closeness and droop are worth far more than indifferent hens' feathers that are white. The dark hen will transmit her good qualities to her cock progeny, and benefit the future pluckings far more than would the whiteness of the light hen's feathers, if inferior in other respects.

The birds should also be selected for coming from a good breeding strain. They should have a well-developed, muscular frame, large feet, thick, powerful-looking legs, with great depth of girth, and a prominent, bold eye. On no account have anything to do with a herring-gutted, flyaway-looking bird.

The body feathers should be curly, rich in colour, with a shiny gloss on them; and the birds, if in good condition, should be broad across the back, with a slight

furrow running down the middle. The tamer and more thoroughly domesticated they are the better, but by tameness I do not mean that they should not be pugnacious.

Avoid selecting brothers and sisters, especially if from the same brood or the same season; for although I doubt there being any proof forthcoming as yet that any weakness in the chicks can be traced to this cause, still it is beyond doubt that all sorts of undesirable results have ensued from in-breeding in other animals; and, as like begets like, if there is a tendency to weakness in any organ running in a family, every time members of that family inter-breed, this weakness will be more highly developed. But, above all, the marked checks that nature puts on the Ostrich inter-breeding in the wild state should make us careful. The first of these checks is, the hen invariably coming into season earlier than the cock, and the persistent efforts she makes at this time to get away from the camp she is in, and to wander far distances until she meets some strange cock. The second is the timidity of the birds, which in a wild state must cause the broods to be constantly dispersed before they come to maturity.

The size of the camp for a pair of birds greatly varies. The best are from twenty to forty acres each in Karoo country, but smaller on the coast, the birds

feeding themselves entirely, except in very severe droughts, when they will get daily 1 lb. of mealies and some prickly pear leaves cut up.

In this manner they cost hardly anything to keep, they breed freely, keep healthy, sit steadily, and have nearly every egg fertile. The only objection is the amount of ground required—which is not often of much consideration in Africa—and the cost of fencing; but this is made up immeasurably by the after-saving.

Others, again, will have them in tiny camps down to forty yards square; of course, then they must be entirely artificially fed, and their breeding will not be so certain, even supposing that they remain in perfect health, which we very much doubt.

The breeding birds need not have water at all if the camps are large and the herbage at all succulent, such as the Karoo veldt. We know many breeding birds that have not had water for years, and of those that have access to water some do not avail themselves of it; but we prefer growing birds to have free access to water.

If the camps are large, they do very well abutting on to each other, even if there is only a wire fence dividing them; as, when once the cocks get used to each other they scarcely ever bother to fight, they get to know which is master, and the conquered one keeps away