

of their young ones. Nature had never produced anything so beautiful in mongrel birds, I will not here describe the variety of colours they were adorned with. I think the mentioning of the price is sufficient for every one to guess at their beauty."

A gentleman on whose information I can rely, informed me that a barber where he used to go to be shaved, at Cromer, had a pair of Goldfinch Mules that bred again, and that he saw the old ones and their young several times.

I have myself endeavoured to breed from Mules, but without success. I had a cock Goldfinch paired with a hen Goldfinch Mule; they built in a room and laid, but a mouse got in and destroyed the nest and eggs. I had a Goldfinch Mule cock paired with a hen Canary, and though she sat, the eggs proved clear. At another time I had two hen Goldfinch Mules that paired and laid with a cock Canary, but their nests were also disturbed. I noticed what Bechstein observes—that the eggs laid by the Mules are at first small, no larger than peas, but increase in size afterwards. From all my experience I have no doubt but that Goldfinch Mules will occasionally breed, but I believe it is of a very rare occurrence.

If the Goldfinch is paired with a turned-crowned Canary, many of the Mules will be created, which is regarded by some fanciers as an additional advantage.

At the Crystal Palace Show, 1858, Mr. Nicholson exhibited a

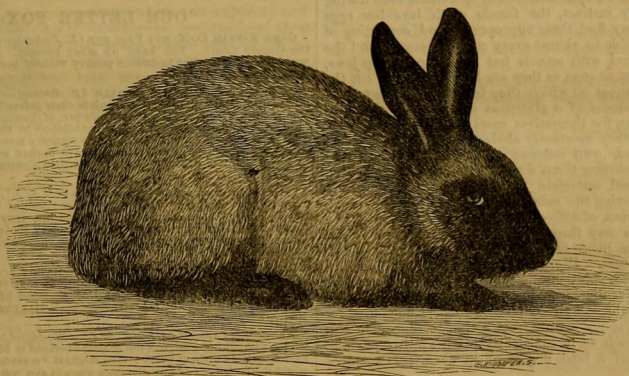
cinnamon-coloured Goldfinch Mule. In 1859, Mr. H. Wardle showed a clear Mealy and also a clear Jonque Goldfinch Mule.

Not only with the Canary does the Goldfinch breed freely, but also with other small birds. Within a very few years Hybrids between the cock Goldfinch and a nestling hen Bullfinch have been exhibited at the Crystal Palace and other bird shows. These are very peculiar, but handsome Mules, of a rich dark plumage, partaking of the character of both parents about equally mixed. To breed them it is necessary that the hen Bullfinch should be very tame, reared from the nest, and while young brought up with Goldfinches; but even then it is rarely that they will make a good nest, and still more seldom that they will hatch and rear their own young in a breeding-cage. When it is found that they have paired, and that the hen is about to lay, it is advisable to cover the bottom of the cage with sawdust, or some such material, to catch the eggs if she drops them, and then hatch and rear them under Canaries.

The Goldfinch has also bred with the Greenfinch. One such Hybrid was shown at the Crystal Palace in 1858, and two in 1859. They were more of a greenish shade of colour, taking more after the Greenfinch, but bearing unmistakable marks of the Goldfinch.

A Hybrid between the Goldfinch and Grey Linnet has also been exhibited.—B. P. BRENT.

THE RABBIT (*LEPUS CUNICULUS*): ITS HISTORY, VARIETIES, AND MANAGEMENT.



SILVER GREY OR RICHE RABBIT.

THIS species, also known by the name of Chinchilla Silver Grey, is so called from the skin resembling that animal, and for which this Rabbit's skin is sold as a substitute. The name Chinchilla also serves to show the distinction between this variety and the Wild Silver Grey or Silver Sprig. It is in general more developed in form than either the wild or domestic Rabbit. Its fur is dark, and is in part of a silvery grey and part slate colour, approaching more or less to a blackish-brown. The hairs of the fur that are short and soft are of a mouse colour, or pale slate, or bluish; some, the long, firm hairs, are blackish, or a dark slate, and the other long hairs are white, so that the mixture of white, slate, and black varies on different parts of the body. The head and ears are nearly all black with a few white hairs. These white hairs are more numerous on the neck, shoulders, and back; but on all the lower parts, such as the chest or belly, the number of white hairs is greater than those of a blue or black colour.

This Rabbit is bred for its flesh, and still more for its fur, but unfortunately it degenerates in cold climates. There its fur becomes of an iron grey colour instead of remaining silvery, and its skin is reduced in value to only 5*d.* instead of from 1*s.* 8*d.* to 2*s.* 6*d.*

M. Gerard states that it is in Siam, a kingdom of Indo-China, that this race is found in all its purity. It is bred there chiefly

for its fur, which is much valued by the northern inhabitants. Its strong, robust constitution renders the breeding of it easy and it there prospers without degenerating. It is tended by the Siamese about the same as a tame Rabbit.

In climates where the temperature alters its qualities, it requires particular care, if you wish to profit by its skin. Warmth must be secured to it which the winter denies it. The uniform temperature of burrows that suit the wild Rabbit, is equally suitable to tame Rabbits. To procure for them this temperature one should make round their burrows a terrace of sandy earth of about a yard or a yard and a half high, retained from sliding down by a wall perforated with holes on a level with the ground. The Rabbits establish themselves in the bank through the holes, and remain there in all seasons. In winter they only come out to feed. The darker and warmer the burrows, the finer, more silky, longer, and more lustrous will be the fur.

Still, there will be sometimes among them a few females whose fur will be spotted with white. The fur of the males is generally of a finer quality. To obtain from this species a finer fur, castration of the males is in use, which operation should be performed when the animals are about three months old. It not only improves their fur, but increases their size, and renders a quarrelsome animal quite docile, so that these emasculated animals can be kept together in large quantities.

The darker shades are the most prized by the furriers at the present time, and with which they make muffs more particularly; but much depends upon fashion, with which the warrener must not be influenced, but must endeavour to have his stock of a medium colour, neither very light nor very dark.

In consequence of the increased demand for the skins of this species, several new warrens have been formed in the south of France, and these Rabbits are in great demand on the Continent at the present time.—R. S. S.

(To be continued.)

VARIETIES.

CLOTHES-MOTH, a name common to a number of species of small moths of the genus *Tinea*, the larvæ or caterpillars of which are extremely destructive to woollen clothes, furs, stuffed quadrupeds and birds, &c. *Tinea destructor* is one of the most annoying of these insect pests. It is of a satiny buff colour, the wings deflexed when at rest. The larva is about a quarter of an inch long, with only a few hairs, white, with a slate-coloured line down the back, an ochreous head, and sixteen legs. *T. tapezana* has the upper wings black at the base, the rest of the wing white. *T. sarcitella* is another very common species, of a silky grey colour; the head, thorax, and base of the superior wings white; the wings folded flat on the back when at rest. The larva is covered with scattered hairs. These moths are most abundant in the warmer seasons of the year, but their larvæ carry on their destructive operations even during winter. Guided by instinct, the female moth lays her eggs where the larvæ may find their appropriate food, consisting of substances indigestible to almost every other creature; and the larvæ being furnished with minute but strong and sharp jaws, not only begin to eat as soon as they are hatched, but to cut the fibres of the substances on which they feed into little bits, and to unite them by means of a glutinous silk of their own producing, so as to form for themselves cases, lined internally with silk; and in these they constantly abide, adding to them at the anterior end as their own increase of size requires, and also widening them, by slitting them down the middle, and mending them with additional materials. All this may be beautifully observed by transferring the same moth-larva to different pieces of flannel in succession, of different colours. The larva of *Tinea tapezana* works its way through woollen stuffs in an arched gallery, carrying its little case with it. *T. pellionella* makes similar tunnels in furs. *T. granella* is destructive to books as well as to grain. The best means of preventing the ravages of moths are perfect cleanliness, frequent inspection of articles, and their exposure to light and air. Spirit of turpentine is used for killing them; the vapour arising from a sponge dipped in this liquid is fatal to such as it sufficiently reaches; they are also killed by the heat of a brisk fire or of an oven.—(*Chambers' Encyclopaedia*.)

INDIARUBBER WATERPROOF VARNISH.—I have used a solution of Indiarubber and turpentine for about twenty years as a waterproof varnish for my boots and shoes. I make the application before blacking is put on, or else remove the blacking by water. When the leather is moist, I take the solution of Indiarubber and apply it with a rag, taking care to rub it in; then I put the boot in a moderately warm place until the whole is absorbed. The process is repeated twice, or until the pores of the leather are filled, when the surplus is wiped off. In a few days afterwards blacking may be put on, and the leather will polish well. By this method of treating my boots, I make them not only watertight but also much more durable, and the leather is always kept soft and pliable. I treat every new pair of boots in the manner described, and effect a considerable annual saving thereby.

CURING HAMS.—At a late fair of the Maryland State Agricultural Society, the first premium was awarded to hams cured as follows:—"To 150 lbs. of ham, take 1½ lb. saltpetre, four quarts of fine salt, with molasses enough to make it a paste; rub well on the flesh side; let it lie four weeks; make a pickle strong enough to bear an egg, let the hams lie in it four weeks; then hang and smoke. Two days before removing from the smoke-house, paint with black pepper and strong cider vinegar, after which bag them.—(*Scientific American*.)

THE SUNBEAM'S GRAVE.—Nothing in this vast creation is ever

lost. Individuals may be losers through carelessness, but to the world at large no created substance can be lost. One combination of things is often changed into another, but no ingredient is ever utterly destroyed, for at this moment the created universe does not contain one particle of matter more, nor one particle less, than belonged to it that day it came fresh from the creating band of Him who made all things very good. Never did a sunbeam shine in vain, and therefore no sunbeam that ever streaked this world with light could be finally lost. Yet the sunbeam, lovely as it is, had its grave, and there sometimes for unnumbered ages it has slept in undisturbed repose. What is coal but latent sunbeams, which need only to be ignited to start out again into active life? The sun, when many thousand years younger than he is now, cast forth his radiant beams on the surface of the world, and noble trees of Ferns and other acrogens started at his bidding into vigorous life; they lived, died, and underwent changes which made them coal—yes, coal! and the old sun he did it all. These sunbeams have long been buried in the form of coal; and though by ignition their resurrection-life is but a dim shadow of their early brightness, they are yet sunbeams. We have nothing but sunlight in summer or in winter, think or talk as we may. The fire on our hearths, the gas in our tubes, the oil in our lamps, and the candles on our tables, are all the products of the sunbeam. We kindle them, and in the very act raise the sunbeam from its grave, and send it forth to run perchance a long cycle of changes ere again it rests in such a place as that we have dragged it from.

OUR LETTER BOX.

GAME BANTAM COCK NOT PAID FOR (*E. Fisher*).—Sue the purchaser in the County Court. You have no other remedy. We have repeatedly warned our readers not to deliver poultry without prepayment to stranger purchasers.

BANTAM PRIZES AT CHESTERFIELD (*R. Baines*).—The Managing Committee of a Poultry Show must regulate their prizes by the entries usually made in the classes. The greatest number of Bantam entries usually are in the Game Bantam class, and the exhibitors in that may fairly expect, that as that class enriches the Society's treasury more than the White and Black Bantam classes, so it ought to have higher awards. We suppose this consideration influenced the Chesterfield Committee, but we do not know.

CHARACTERISTICS OF AYLESBURY DUCKS (*C. S. J.*).—To be winners they must be heavy, but the weight must be the result of large size and not of feeding. The head should be large, the bill very pale flesh colour or French white, long and broad; free from black spots or yellow or orange shade. The body long and broad between the shoulders. Entire colour pure white.

CALL DUCKS, LENGTH OF INCUBATION.—Having bred "Call Ducks" for some few years, I can assure Mr. B. P. Brent that their eggs are quite as long in incubation as those of other Ducks—a fact I have proved in setting their eggs with those of other varieties.—T. HARVEY D. BAYLEY, *Ickwell House, Biggleswade*.

WATER FOR PARROTS (*A Lady, A. Z.*).—We regret to hear that any one so totally without knowledge of the subject ventured to advise you to keep your Parrot entirely without water! Well might it "cease from talking," and well might it "beat itself against the cage when it saw water!" The bird must have suffered excessively. Always let it have a constant supply of water for drinking, and daily when let out place a soup-plate filled with water on the floor. The Parrot will differ from birds of the same kind we have known if it does not soon indulge in a bath. It is the best preventive of a Parrot eating its own feathers. It should have very little hempseed. The canary seed and bread sopped in water form a much better diet. Of fruits the Parrot usually prefers the cherry.

GOLDFINCH MULES (*An Old Friend*).—If you put two hen Canaries to one Goldfinch in the same cage, as you propose, the hens should first be put together to become acquainted, or they will quarrel. You will have seen my remarks on Mule breeding in *THE COTTAGE GARDENER* for March 26th, which will more fully answer your inquiries. The same will apply to Linnet Mule breeding.—B. P. BRENT.

TEACHING A BIRD TUNES (*Susanna*).—It is best to teach birds one tune at a time, but much depends on the capacity of the individual bird as to whether he will learn even one tune perfectly, or if he can master more than one. I am not aware that Chaffinches have been taught tunes, but they sometimes learn other birds' songs as well as varieties of their own.—B. P. B.

LONDON MARKETS.—APRIL 8.

POULTRY.

There is still a very small supply of poultry, and were it not the trade is unusually dull, prices would be higher than common.

	Each—s. d.	s. d.		Each—s. d.	s. d.
Large Fowls.....	6 0	6 6	Guinea Fowls.....	3 6	4 0
Smaller Fowls.....	4 6	5 6	Hares.....	0 0	0 0
Chickens.....	3 6	4 0	Rabbits.....	1 4	1 5
Goslings.....	8 6	9 0	Wild ditto.....	0 8	0 9
Ducklings.....	6 0	6 6	Pigeons.....	0 8	0 9

day, giving each time only as much as they will eat clean. They must be fed early in the morning, and all this involves but little trouble or expense. The chickens must be good-sized; and many who have tried to sell in London and have failed may attribute it to the fact, they sent them too small. They should weigh at least $2\frac{1}{2}$ lbs. each, and if more so much the better. We are very anxious this should be tried, because, anomalous as it may appear, the supply of poultry at the Leadenhall Market has decreased since it has been more generally kept than it was formerly. To pack them they should be put in a basket, the layers being divided with stiff straw. The chickens should be tight, spare space being filled with the straw, because if they have room to shake about they lose the stiffness, which is the proof of their being recently killed—a valuable thing to the purchaser; and they also lose shape and colour—both good properties.

POULTRY FOR A CONFINED SPACE.

I HAVE a piece of enclosed ground, 12 feet wide and 20 feet long, as well as a piece of grass 12 feet wide and 8 feet long, for a poultry run. The poultry-house is 3 feet 4 inches wide, 10 feet long, and 7 feet at the back and 9 feet at the front high, situate in a side entrance. There is a tunnel from the house to the run underneath the garden door, so as not to interfere with ingress or egress of the inmates of the house. Will you inform me how many fowls I shall be enabled to keep without overcrowding?—T. H.

[You would have helped us to answer your question if you had told us what breed of fowls you keep. If Cochins, Spanish, or Brahmas, you may easily keep two cocks and eight hens without overstocking. The number is not regulated so much by the size of the bird as by its aptitude or otherwise for living in a small space. Next to these would be Spangled Hamburgs,

or Game; but the latter are apt to be very quarrelsome when shut up. If, however, you do not care to keep so many birds, you may have in such a place as you describe a cock and six hens in very great comfort, and consequently in very good condition.]

COD LIVER OIL AS A REMEDY FOR PIGEON DECLINE.

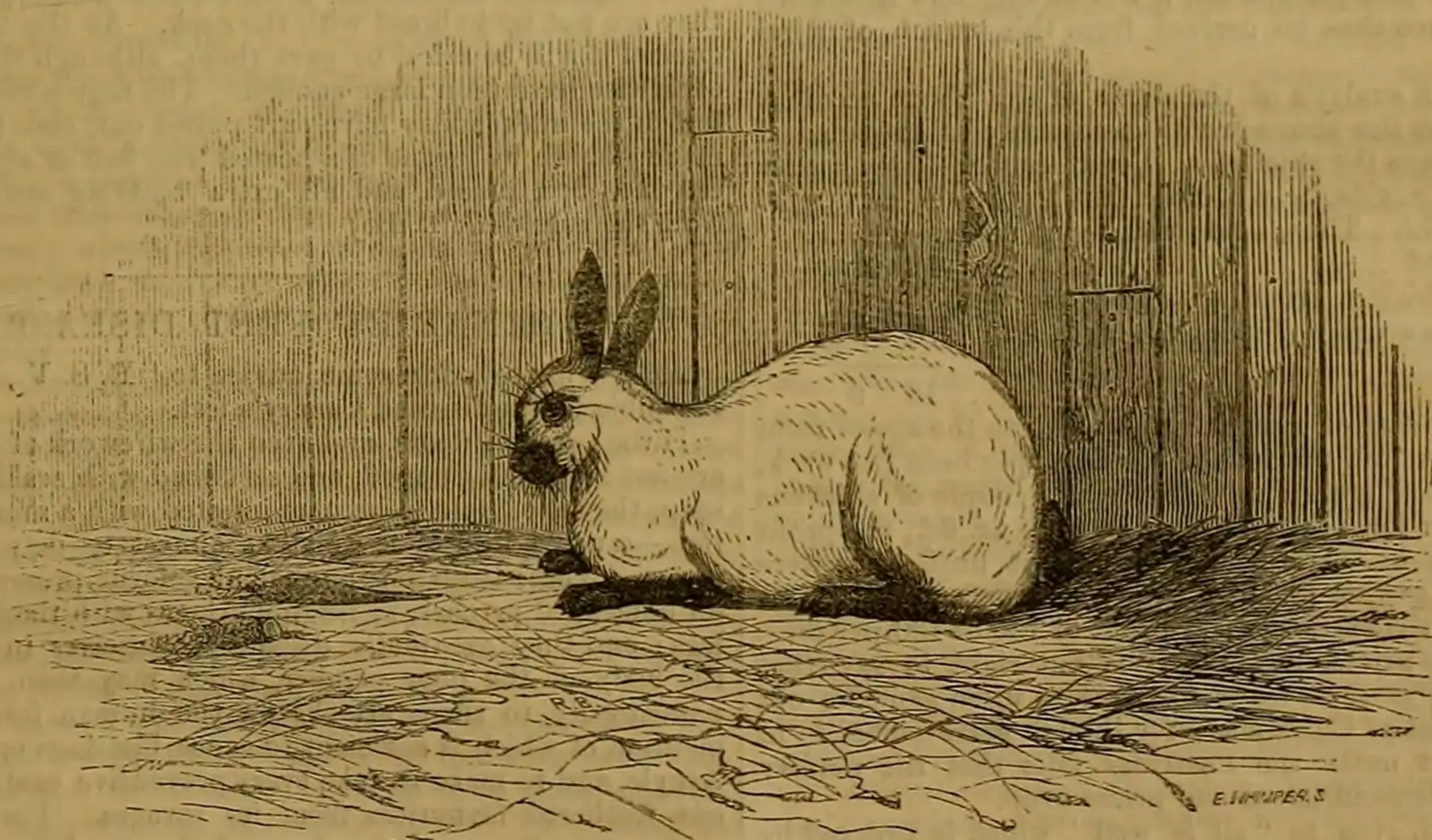
HAVING seen in a recent Number of THE COTTAGE GARDENER a letter from "COLUMBARIAN," requesting you to give a longer account of Pigeons at the different shows, I hope, as a constant subscriber, I may add my voice to his. There are, I have no doubt, several who take your publication chiefly for what they can hear on that subject; and it would be a great assistance to young fanciers if you could induce some of your correspondents to write weekly for that purpose.

I do not know whether any of your readers have tried the effect of cod liver oil on Pigeons that are "going light," or wasting away from consumption or other causes. As I had never heard of its being used, I determined to try it, and certainly it exceeded my most sanguine expectations. During last autumn I had eleven birds ill from that disease; and several of them so bad that they could neither fly nor eat, and, consequently, were as thin as it was possible to be; but I only lost one, and that was too far gone when I began the oil. I mix it with barleymeal and wheat flour, and give as much as I can get down three or four times a-day, and can safely say that if used in time, very few birds will be lost.

I also noticed a letter from Mr. Brent on turned-crowned Pigeons, and cannot understand why he does not include Turbits, as fanciers look upon the crown almost as a property, and it certainly makes the head appear much shorter than if it were without the crown.—W. H. C. OATES, *Besthorpe, Newark.*

THE RABBIT (LEPUS CUNICULUS): ITS HISTORY, VARIETIES, AND MANAGEMENT.

(Continued from page 36.)



THE CHINESE RABBIT.

THIS very handsome and interesting species is also known under the names of Polish Rabbit, Russian Warren Rabbit, and more generally as the Himalayan; but how they derive this name I am at a loss to know, although they are spoken of by Mr. Woolf in the "Proceedings of the Zoological Society" as the Himalayan; also in the Zoological Gardens they are labelled Himalayan or Black-nosed Rabbit.

M. Didieux speaks of them as natives of China, carried into Russia by the nobles to augment the number of fur animals which constitute the chief revenue of many of their lands. From Russia this variety passed into Poland, and from thence into Germany, from whence it was imported into France.

They have red eyes, like the Angora Rabbits. Their fur is whiter, finer, and more lustrous than the common white Rabbit; and the extremities—that is, the nose, ears, feet, and tail are black or a rich brown; the darker this colouring is the more perfect they are considered, but they do not arrive at this perfection till about six months old. When young the extremities are of a light mouse colour.

This race is very hardy, and often used to people warrens and open burrows. It is bred principally for its fur, which is very valuable, and is sold from 1s. 6d. each to 2s. 6d. It is the best imitation of ermine, for which the Russian nobles often sold it. It is now called "mock ermine."

This Rabbit is now very largely cultivated on the Continent. It is useful and interesting for the amateur to breed, being very pretty, hardy, and prolific, the skins valuable, and the body large enough to be useful for the table.—R. S. S.

(To be continued.)

PROFITABLE POULTRY KEEPING.—No. 2.

(Continued from page 51.)

My first attempt at poultry-keeping on system was commenced with hens of every and of no breed. I got them as I could, from the common barn-door fowl to the stately Spanish and aristocratic Game. But even this had its advantages, enabling me to form a just estimate of their peculiar good qualities, and to discard the comparatively worthless. For all purposes, however, I prefer the Dorking, and the speckled of that breed for choice, whether for the table or their eggs. With me they answered best, and were in more general demand by the poultry dealers.

But the subject of hens and their breeds is of too great importance to be cursorily glanced at. A future communication must be devoted to this part of our subject.

In discharge of the promise made in my last, I now give the readers of the "Poultry Chronicle" the results of poultry-keeping for profit.

The following account is drawn by striking the average of three years for 100 hens, having a run of about two acres of grass land, and about a quarter of an acre of yard.

Dr.	EXPENDITURE.	Cr.	RECEIPTS.
	£ s. d.		£ s. d.
To food.....	31 16 0	By return from 100 hens,	
To rent, management, loss,		at 18s. 9d. a head	93 15 0
and interest.....	16 12 0		
By profit—Balance	45 7 0		
	<u>£93 15 0</u>		<u>£93 15 0</u>

Or about 90 per cent.

Now, supposing the stock kept to reach the number of 500 hens, if the poultry keeper's wife charged her own services at £52 a-year, and those of a strong active girl at £30, including her maintenance—£82 per annum, it will be seen how handsome a return would even then be derived from this branch of rural economy.

And now for an analysis of the items of the above account. I will premise that the above profits can readily be extended, if fattening fowls were the chief aim. For instance: If my reader will refer to the Cr. side, he will find that I give the return of each hen at 18s. 9d. Thus, a hen will lay on an average

120 eggs at 1d..... 10s. 0d.

Besides hatching a brood, of which she will

rear, on an average, 7 chickens, at 1s. 3d.... 8 9

18 9

I found the expense of rearing chickens up to the age of from ten to twelve weeks did not much exceed 1d. per head per week, and having a good grass run. Hence, if a couple of chickens cost 1s. 8d. to rear for sale, and then brought 2s. 6d., the profit would be 50 per cent.; but if they were kept until they were five months old, costing 2s., they were then worth 4s. 6d. or 5s. each, thus giving the extraordinary profit of 125 or 150 per cent.

To obtain these prices, however, it is but right to say, that the young poultry must be ready for market when game is out of season, and just at Christmas; for though game comes in in August, it is not until the Partridge falls that the poultry keeper finds the demand lessen and prices drop.

And this is well, even as "all is well" which is ordered by our Divine Father. The tired hens need rest, and it is the season Nature enjoins for them, for they have done their work well and patiently; and if their master will continue to feed them abundantly, and not neglect them during their time of non-productiveness, they will yield him a golden harvest at Christmas. I know no prettier sight than a hen with her young brood, and does not our Saviour himself use them as a simile towards the close of His holy life?—LEIGHTON.

(To be continued.)

PARROTS DEPRIVED OF WATER.

In your Journal I am much surprised at your reply to the lady correspondent, "A. Z." at the ignorance of her adviser to

keep her Parrot without water. The general belief is that water is injurious to them, and I know it is in my neighbourhood, where several are kept; and with regard to myself, I have had one for more than ten years, and have never given it any water, and it is very healthy. I have even offered it water but it will not take it. We feed it simply with soaked bread, with the water moderately squeezed out of it, and hempseed.—W. T.

[It may be that Parrots, fed upon soaked bread, "with the water only moderately squeezed out of it," may find enough moisture to preserve them from thirst; but we are quite sure that no Parrot or Cockatoo ought to be kept without a tin of water attached to his cage to drink from if he required. Moreover, we are equally sure that the opportunity of taking a daily bath should be offered him. In a state of nature those birds have such opportunities, and no animal is judiciously managed that has not a supply of everything as nearly resembling as possible the supply afforded by Nature in the animal's native place. The best specimens of the Parrot and Cockatoo we have known were well supplied with water, both for drinking and bathing.]

BREEDING CANARIES.

A FEW weeks back I put three Canaries up for breeding, two hens to one cock. Last Thursday or Friday one of the hens began to build, and finished her nest by Monday morning. On Tuesday I was rather surprised to find she had filled up the nest with cotton wool. I gave her more building materials, as I thought she might, perhaps, build again on the top of the old nest. She began on Wednesday, and made it about three quarters of an inch deep, and has not made it any larger at present (Friday night). Do you think there is any chance of their breeding? and what was the reason of her filling up the nest? The other hen has not begun to build—in fact, the cock drives her about the cage, and she drives the other hen. What am I to do in case like this? The cage is 34 inches wide, 20 inches broad, and 37 inches in height. I suppose that is large enough for three birds. The cock does not sing. He has never been mated before, but the hen has.—T. M. N.

[In placing two hens with a cock it is always advisable to put them together first, and let them become well acquainted before they are put up to breed with the cock. As the two hens now quarrel it will be safest to part them, although the cage would otherwise have been large enough. The nest which is built too full in the middle may have part pulled out, and the remainder made smooth by means of a heated iron ball or stone; the eggs can then be replaced, and all extra building material removed from the cage.—B. P. B.]

CANARIES' FEET DISEASED.

ALLOW me to offer some advice to "R. S. V.," page 17, on the subject of a diseased Canary's feet.

If the perches, floors, and even the wirework of the cage itself are not kept well scraped, and scrubbed with scalding water and soap, they are liable to become infested with a minute inflammation—causing insects so small as almost to defy a magnifying power. These titillating animalcules form preserves, especially on uncleaned perches, in neighbourhood with the bird's feet and legs; and they eventually disperse themselves in myriads over the body of the poor percher, which may then be compared, parasitically, to those attacks on the human frame, the mere mention of which is sufficient to cause blessings on the Duke of Argyle, and to make us take every preventive caution to defend our feathered favourites from its ravages. For this purpose scrape over the convex surfaces of the perches every morning, as well as the floor-board when it is withdrawn from the cage, to release the débris, previous to the board being fresh sanded. Before it is returned insert the scraper, and clean away any residuum from off the bottom of the cage, well working the implement over its surface; when any living thing there will be made to feel very uncomfortable, and consequently emigrate.

About every six weeks during the summer, and twice or so during the winter, fasten down the windows, turn the birds out into a room, lock the door and put the key in your pocket; and take the cages and perches, and cause them to be well scrubbed—wirework and all—with soap and scalding water, and when they are dry, return the birds into them; or, rather, they will go in of themselves if they are kept without food half-an-hour or so beforehand.

its true shape has, therefore, been much neglected. The head should be broad, angular, and flattened; the orbicular ridges much raised, and the eyes prominent. The best example I can offer is the head of a frog. The short beak, the gullet or dewlap, and the frill on the breast, are the chief properties of the breed, colour or feather being the finishing stroke; and I think the turned-crown spoils the appearance of the head just as it would do in a Tumbler or Carrier.—B. P. BRENT.

PARROT DELIGHTING IN BATHING.

I HAVE had a Parrot nearly fifteen years which, I can assure you, enjoys a shower-bath most intensely. The servant places her on the sink and turns the tap gently. Polly spreads her wings and turns herself in all directions for the grateful shower, and if the water ceases she will flutter and make a noise until it flows again. She is a large, green, yellow, and red bird, and very merry. Another and smaller bird will often follow Polly's example, but not with the same gusto the old one evidently feels.—E. H. D.

THE RABBIT (*LEPUS CUNICULUS*):

ITS HISTORY, VARIETIES, AND MANAGEMENT.

(Continued from page 70.)

THE ANDALUSIAN RABBIT.

THIS, the largest species known, is a native of Spain. It is bred in Paris under the name of "Ram Rabbit," because its head is large, and its forehead round, its ears large and hanging like those of the Half-lop; its throat also is large and forms a dewlap. Its fur is of a russet grey colour, and is smooth and lustrous when it is well cared for and in good health; but when neglected or sickly, it becomes curly and like wool.

M. Didiereux states that this Rabbit will attain an enormous weight, even so much as from 16 lbs. to 20 lbs., and that it is the most robust race known.

The breeding of this Rabbit is receiving much attention in Paris and its suburbs, and the finest specimens fetch enormous prices. M. Millet states that he has seen 130 francs paid for a single female Ram Rabbit, and that M. Gerard, his coadjutor, paid not long ago 160 francs for a pair. Those who have this breed are so tenacious of keeping it to themselves, that it is extremely difficult to procure fine specimens without paying very high prices.

The breeding of this Rabbit is deserving of special attention, it being a wonderful producer of flesh, rendering it the most profitable species that can be bred for food. At eight or ten weeks old it ought to weigh as much as the common tame Rabbit at eight or nine months, thereby saving the expense of six months' keep, and the time and trouble in tending it; besides, the flesh is more tender, juicy, and delicate in appearance.

There is another large variety which is very similar in appearance to the Andalusian, and known in Paris as the ROUENNAIS or BULLDOG, because they have a square head like the dogs whose name they bear. Their weight is often as much as 14 lbs. In colour they are usually a light fawn, but sometimes a light grey. Their ears are long and upright, but are often Half-lop. Many of these Rabbits are imported and sold here as *Patagonians*. I think it not at all unlikely that this is a cross of the Patagonian, although it differs in appearance.

The real Patagonian Rabbit has remarkably short ears and a large round head, which when young, and seen at a distance, gives it the appearance of a cat. I do not think there are many pure bred ones in this country which, considering their size, is to be regretted.

The next on my list of large Rabbits is the *Belgian Hare-coloured Rabbit*, large quantities of which are imported, known and sold as French Hare-rabbits; but they are not hybrids as the name implies. They attain a large size, but are said not to be so fruitful as many other varieties; their ears are large, the head smaller than in either of the before-mentioned varieties, and in colour they are very similar to a Hare.—R. S. S.

(To be continued.)

HEN CANARY NESTING BUT NOT LAYING.

I UNFORTUNATELY lost a Goldfinch last autumn, which for two years had mated with a hen Canary. I procured a cock of her own kind, wishing to breed Canaries. She has built her nest, and constantly sits in it, but without laying; and having a young male bird, one of her own, and hearing them frequently answering one another though they cannot see one another, I wish to know whether that would have any effect and interfere with her laying and breeding.—E. M. A. L.

[I do not think it necessary to remove the male, as the hen Canary's hearing him can hardly be the cause of her not laying. More probably it is the unfavourable weather, and that she will build again, and then lay, unless she is too old, or proves barren from some other cause.—B. P. B.]

BEEES DYING—HIVES IN A BARN—PEACH CROP ON OPEN WALLS.

THE "OLD SUBSCRIBER" who wrote some time ago about a bee-hive in which the bees were inactive regrets to say they all died a few days after. The hive had a large quantity of good honey in it. When the combs were taken out there were not more than about sixty bees clinging to the combs; all were dead, but not decomposed. They were at this time a fortnight dead, and the only odd appearance about them was, that a few had under the rings of their body an appearance of a pure white substance. It did not look like mould. The combs at the lower part of the hive looked thick, and as if damp had affected them. Could it be that the hive perished from damp?

Would it be a good or bad plan to place hives in a large airy barn, having a hole made in the wall where the bees would have egress and ingress towards the south? The wall is 2 feet thick. Would it be bad for the bees to have to creep so far before gaining access to their hive?

Is the peach crop on open walls generally defective this year, from the last wet summer not permitting wood to ripen?

Some geraniums late cut down, and not yet repotted, look badly. Would it be advisable to keep them in the open air for autumn bloom when potted?

[The cause of the loss of your hive appears to have been the death of its queen. How far it may have been injured by damp we cannot determine without ocular inspection. The peculiar appearance on the abdominal rings of the bees themselves probably arose from a fungoid growth.

We have known bees do well in a house in spite of the disadvantage of having to traverse a thick wall before reaching their habitation.

The peach crop on open walls is generally defective, and probably from the cause you mention.

We cannot give an opinion about the geraniums, not knowing either their names or age.]

BEE-HIVES AND THEIR APPURTENANCES.

(Continued from page 90.)

ADJUSTED-HIVE.—Your apiarian readers, the novices particularly, must feel grateful to "A DEVONSHIRE VICAR" for so ably pointing out the defects of the rather *Irish* depriving-hive, a description of which had crept into your columns, and introducing Mr. Fox's vastly superior device. At a first glance, in addition to the fixed breeding space, the peep through the back window in the sketch shows rather many openings for the escape of the heat and the queen into the super, easily remediable by ekes in the one case and slips of wood in the other. Mr. Fox is also too good an apiarian not to know that either for his own use or the market one completed box honeycomb, and a second partially filled (useful for feeding or a fresh start), is much more valuable than a larger box uncompleted. However, to counterbalance this we have his exceedingly ingenious mode of lowering the top to facilitate a start, and by judicious raising to tempt to an accumulation of store in the super, more certainly obtainable than by any other mode I have yet seen tried. With this passing remark I will now describe the appurtenances of the apiary, taking up first

BEE FEEDERS.—All metals, from their coldness, are objectionable for bee feeders—none more so than zinc, from the deleterious powder that collects upon its surface, rendering it an injurious

BATH AND WEST OF ENGLAND POULTRY SHOW.—We are informed that entries will be received until the 13th inst., after which none can be received.

window must be of thin stuff, with a shutter, and hinged to work outwards, lighted from above the window, of the form and raised in the manner of a frame-sash. When a hive is to be disturbed it can be raised a little; any bees making their escape fly to the light from the operator, and so gain their liberty. The shelves should be so contrived that each portion below a hive be moveable, for many reasons—such, for instance, as when the sliding door (fig. 9) be run in the part, can be raised with the hive, and weighed from the strong iron rod running along the length of the house above the hives; this, and the various details, too numerous to mention, will occur to every bee-keeper for his own convenience. The best house of this shape I have seen was built of brick, plastered inside, with a good flagged or brick floor, delightfully cool, and so clean that there was not shelter for a moth, nor a spider's web to be seen.

EXPOSURE.—The remarks in the "Bee-keeper's Manual" are very sensible on this subject. Apianists favourable to a north aspect, of which I have had a little experience, should satisfy themselves first that the spot selected be thoroughly dry and airy. There a well-found hive enjoys a dormancy till roused by the vernal influences, more in keeping with what is experienced in Russian or Canadian climates, with a doubtless economising of store. I have remarked, and it is a singular coincidence, noteworthy, and certainly favourable to the advocates of such exposure, that although runaway swarms have occupied in our roof different exposures, still within the last few years since I have taken a greater interest in their habits, I have observed they have invariably selected the north; the same predilection has been noticed at the neighbouring seat of an M.P. Some of those old pavilion-roofs in our county exert a mesmeric influence, extending for miles, quite unaccountably, and have become a standing terror to many a cottage bee-keeper; the worthy Baronet's last-named not among the least.

Having already exceeded all due bounds, I have only to plead in extenuation the reluctance one has when mounted on a hobby to tighten the rein; and after a trot in company with one of the cottagers above alluded to, in confirmation of what I have set forth, will then "pull up." On a hot summer day some years ago, as calm and scorching as any expectant bee-keeper could wish, there stood a most enthusiastic member of the fraternity watching his bees; nor was he disappointed, for the longed-for swarm rushed forth

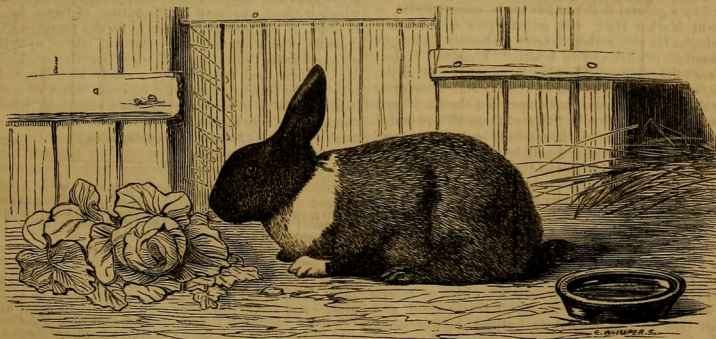
and quietly clustered at the trysting place—a branch hard by; a noble first swarm it was. When about to place his glittering fresh straw hive over his prize (instead of their immediately beginning to ascend facilitated with a cloth or a few leaves, our only Scotch method of hiving) the pleased twinkle of his practised eye suddenly changed on observing the black mass heaving, and numbers rise upon the wing, showing unmistakable symptoms of being off; down went the hive. Our friend possessing no small share of the indomitable "not-to-be-done" spirit of the Scot, divested himself at once of his upper habiliments, preparing to give chase. Away went the bees, and away went the bee-master at their heels, little dreaming what lay before him. Suffice it to say, they took him over the country in regular steeple-chase fashion. The poor cottager soon saw what he had to expect; but, his blood being up, he would not give in, and followed helter skelter as best he could, through fields, hedges, and ditches, fording several burns and a small river, straining his visual organs all the while to keep the game in sight, till at last he finally tracked them to earth in the aforesaid roof of the then Lord of the Manor. Who should he encounter but the laird himself. At first he could hardly comprehend what the stripped, gasping, perspiring man would be at, pointing to his roof and demanding the use of ladders for the recovery of his property. At length perceiving the state of matters, he settled instanter on the spot (what would have been to him a second nature to discuss) the knotty point as to the rights of parties, by paying him handsomely for his bees and complimenting his pluck. They were thus left in undisturbed possession of the spot they had so much coveted.

The distance by the road is fully four miles; but as in the higher parts of our county these are but sorry specimens of engineering genius, being much more noteworthy for the picturesque than the straight, the bees' flight would be considerably less.

On laying down my pen for the present, I would remark, that were your many apianist readers more generally at the trouble of availing themselves of your Journal to communicate their ideas, the bee corner would seldom be vacant, information be diffused, beginners taught, and even our great apianist lights might stoop to gather something from such feeble scintillations, although couched in as limping sentences as those of—**A RENFREWSHIRE BEE-KEEPER.**

THE RABBIT (*LEPUS CUNICULUS*): ITS HISTORY, VARIETIES, AND MANAGEMENT.

(Continued from page 108.)



THE DUTCH RABBIT.

This pretty and useful variety is known in France under the name of *Nicard*. M. Didieux states they are much liked in Old Provence, on account of their prolific and hardy nature, and are very largely bred there.

They are very useful as nurses to bring up the young ones of fancy Rabbits, being such good milkers. It is astonishing to see one of these little creatures bring up five and six young ones in better condition than would be effected by another doe four times her size.

No breeder of fancy Rabbits should be without does of this breed. They are of all varieties of colour, both self and parti-coloured; many of them have a white collar round the neck, as shown in the drawing. The chief point of excellence in these little animals is diminutive size; and I have seen some extraordinarily small specimens, not weighing more than 1½ lb. This small size is obtained by breeding in and in. I cannot see the utility of reducing the size, but such is the freak of fancy.—R. S. S.

(To be continued.)

The Grey *Dorkings* were a capital class, but many of the adult birds were rapidly falling into moult. In *Cochins* Mr. Stretch, of Liverpool, obtained an easy precedence both in Buff and also the Partridge varieties; nevertheless, these classes throughout were very creditable ones. The entries for *Hamburgs* were very limited indeed, only six pens representing all the four varieties; these were mostly good. Mr. Dixon, of Bradford, was the only exhibitor of *Polish* fowls: it is scarcely necessary to say his specimens were excellent. The *Game* classes were, perhaps, the best of any throughout the show-tent. It is somewhat singular that the Black Reds far outnumbered the Brown Reds—a most unusual feature in such meetings during the present season. They were exhibited, too, in a far superior condition of plumage in comparison to the other varieties. One class only was open for “chickens of every other variety,” except *Game*. Here, Captain Hornby, of Prescott, took the lead with a pen of such Grey Dorking chickens as have been but very rarely shown so early in the season. The second prize Silver-spangled *Hamburgs*, are also richly deserving of especial mention; they were from Mr. Dixon's yard. In *Bantams*, one class only remained for every breed. The first prize fell to the lot of Mr. Turner, of Preston, for a pen of excellent Brown Red *Game* Bantams; the second to the Silver-laced Bantams of Mr. Harvey Dutton Bayley, of Biggleswade.

In *Ducks* both the Rouen and Aylesbury breeds shone conspicuously. The latter prizes were swept away by Mrs. Seamons, of Aylesbury; the former, by a pen of the best-grown Rouen ducklings we remember to have met with. The Grey Call Ducks, and the Buenos Ayrean, were likewise first-rate.

The collection of *Pigeons* were undoubtedly the best ever yet seen in Prescott; they were exhibited in the most praiseworthy feather, and contributed a very large proportion to the interest of the Exhibition. Every prize in this portion of the Show was well contested. The following is the list of awards:—

SPANISH.—First and Second, R. Teebay, Fulwood, near Preston.
DORKINGS.—First, W. Coppie, Eccleston. Second, Capt. W. W. Hornby, Knowsley Cottage, Prescott. Highly Commended, Capt. W. W. Hornby. Commended, E. Sergensen, Hutton.
COCHIN-CHINA (Cinnamon or Buff).—First, T. Stretch, Marsh Lane, Bootle. Second, Miss V. W. Musgrove, West Tower, Aughton. Highly Commended, J. Cook, Eccleston.
COCHIN-CHINA (Any other variety).—First, T. Stretch, Marsh Lane, Bootle. Second, Miss V. W. Musgrove, West Tower, Aughton.
HAMBURGERS (Golden and Silver-spangled).—First and Second, J. Dixon, North Park, Bradford. Highly Commended, W. C. Worrall, Rice House, Knotty Ash.
HAMBURGERS (Golden and Silver-pencilled).—First and Second, J. Dixon, North Park, Bradford. Highly Commended, W. C. Worrall, Rice House, Knotty Ash.
POLANDS (Any variety).—First and Second, J. Dixon, North Park, Bradford.

GAME (Black-breasted and other Reds).—First, B. W. Bretherton, jun., Rainhill. Second, Capt. W. W. Hornby, Knowsley Cottage, Prescott.

GAME (Any other variety).—First, A. B. Dyas, Madeley, Shropshire. Second, G. W. Langdale, Leasfield Park, Beverley.
GAME CHICKENS (Any variety).—First, Capt. W. W. Hornby, Knowsley Cottage, Prescott. Second, Mrs. J. Holme, Knowsley. Highly Commended, A. B. Dyas, Madeley, Shropshire; Capt. W. W. Hornby; J. Cook, Eccleston.
CHICKENS (Any variety except *Game*).—First, Capt. W. W. Hornby, Knowsley Cottage, Prescott. Second, J. Dixon, North Park, Bradford. Highly Commended, R. Tate, Driffield, Yorkshire.

BANTAMS (Any variety).—First, M. Turner, Preston. Second, T. H. D. Bayley, Ickwell House, Biggleswade.

DUCKS (Aylesbury).—First and Second, Mrs. M. Seamons, Hartwell, Aylesbury.

DUCKS (Rouen).—First, Mrs. J. Holme, Knowsley. Second, H. Worrall, Spring Grove, West Derby. Highly Commended, Capt. W. W. Hornby, Knowsley Cottage, Prescott.

DUCKS (Any other variety).—First, J. Dixon, Bradford (Grey Call). Second, G. S. Sainsbury, Devizes, Wilt. (Black East Indian Ducks). Highly Commended, G. S. Sainsbury (Black East Indian Ducks); F. W. Earle, Edenhurst, Prescott.

SINGLE GAME COCK.—First, J. B. Chune, Coalbrookdale. Second, Capt. W. W. Hornby, Knowsley Cottage, Prescott. Highly Commended, A. B. Dyas, Madeley, Shropshire; Capt. W. W. Hornby; J. Berry, Prescott.

GAME BANTAM LOCK.—First, T. H. D. Bayley, Biggleswade. Second, Miss V. W. Musgrove, West Tower, Aughton. Highly Commended, M. Turner, Preston. Commended, M. Turner; R. Moon, jun., Wavertree, Liverpool; W. C. Hull, The Vicarage, Poulton-le-Fylde.

PIGEONS.

CARRIERS.—First, D. Thwaites, Rock Ferry, Cheshire. Second, H. Child, jun., Sherbourne Road, Birmingham. Commended, G. Robson, the Brewery, Hull.

BALDS.—First and Second, J. Septon, Scotch Lane, Prescott. Highly Commended, B. W. Bretherton, jun., Rainhill. Commended, J. W. Edge, Aston New Town, Birmingham.

PIEDS.—First, J. W. Edge, Aston New Town, Birmingham. Second, H. J. Septon, Prescott. Highly Commended, H. Yardley, 30, Market Hall, Birmingham.

RUNTS.—First, F. Key, Beverley, Yorkshire. Second, H. Child, jun., Sherbourne Road, Birmingham.

COCKS.—First, D. Thwaites, Rock Ferry, Cheshire. Second, H. Yardley, Birmingham. Commended, J. Beesley, Prescott.

FANTAILS.—First, H. Child, jun., Birmingham. Second, F. Key, Beverley, Yorkshire. Highly Commended, J. W. Edge, Birmingham.

POUTERS OR COOPERS.—First, D. Thwaites, Rock Ferry, Cheshire. Second, H. Child, jun., Birmingham. Highly Commended, D. Thwaites.

DRAGONS.—First, J. W. Edge, Birmingham. Second, H. Child, jun., Birmingham. Highly Commended, D. Thwaites, Rock Ferry, Cheshire.

ROUEN LOCS.—First, B. W. Bretherton, jun., Rainhill. Second, J. Beesley, Prescott. Highly Commended, H. Yardley, Birmingham; J. Septon, Prescott.

ANY OTHER NEW OR DISTINCT VARIETY.—First, E. Sergensen, Hutton. Second, J. W. Edge, Birmingham. Highly Commended, E. Sergensen, Hutton; H. Child, jun., Birmingham; F. Key, Beverley, Yorkshire.

Edward Hewitt, Esq., of Eden Cottage, Sparkbrook, near Birmingham, officiated as the Judge.

ERRONEOUS JUDGMENTS OF POULTRY.

I QUITE agree with your correspondent “BANKER,” that the Partridge *Cochins* are, “as a rule,” very badly judged—in fact, all *Cochins* are the same, and I think it is to be attributed to the mistake of having only one judge to decide upon the merits of a whole exhibition, which is generally the case. There are many breeders of fancy fowls, who would, if solicited by the secretaries, gladly render assistance to any society, and help to judge their shows; and I think if this plan were adopted better judgments would be arrived at, exhibitors would be more satisfied, and professional judges saved from a great deal of blame. Will other amateurs kindly give their opinions on this subject?—COUNTRYMAN.

SICKNESS AMONG POULTRY.

I FREQUENTLY used to have my poultry and Pigeons attacked as your correspondent complains (July 9th). I have for some time used a poultry restorative, prepared by Mr. Collier, chemist, Erdington, near Birmingham, and have had my fowls, &c., greatly improved in health—in fact, I have scarcely any disease since its introduction. Fowls are difficult to “doctor,” therefore remember that prevention is not only better but much easier than cure. I shall try to persuade Mr. Collier to advertise his restorative and roup application, which latter is most valuable to poultry keepers.—CHARLES FELTON, Erdington.

BARBS WITH TURNED CROWNS.

A Lady at Southsea has some good Barbs which she wishes to exhibit. They have turned crowns. All other points being equal, would this be a disqualification? Most works on Pigeons say they may have them.

[If the Barbs are otherwise good the turned crown will not disqualify them from prizetaking; but, if closely pressed in competition, the crest spoiling the appearance of the head may turn the scale against them. Much, however, will depend on the whim of the Judge.—B. P. B.]

THE RABBIT (LEPUS CUNICULUS):

ITS HISTORY, VARIETIES, AND MANAGEMENT.

(Continued from page 169.)

THE RABBIT-HOUSE.

THE form of which varies according to circumstances and convenience. It is easy to judge that to breed Rabbits in this way is more expensive than in the warren, because in that there is neither trouble, embarrassment, nor hand labour, and one leaves to the animals the care of propagation and feeding; instead of which, Rabbits kept in hutches in a house take time and labour. However, the profits that one gets indemnifies advantageously. These little establishments are within reach of the greater number. The home of the citizen or the habitation of the peasant is equally propitious; the rich as well as the poor will find amusement and augmentation of wealth, and private interest as well as public demands that they should be more common than they are. Whether you construct a regular abode for your Rabbits, or for economy make use of an old outhouse or shed, the first condition is that it be dry, airy, and exposed to the east or south; the second, that the house be constructed so that one can keep it very clean. As to the size, that will depend upon the convenience which the situation offers, and upon the number of Rabbits the

breeder intends keeping. It would be inconvenient that too many Rabbits should live in the same place no matter how vast, because under many circumstances a great number of animals vitiate the air, which would be dangerous for the establishment. Let us suppose the spot chosen for the Rabbit-house is in a poultry-yard or garden. Begin by digging out the foundation about 5 inches or 6 inches, press in the earth and ram or tread well down, so that it is smooth and even; then put planks about 8 inches or 10 inches high all round the interior of the foundation, first deciding which way you intend to have the fall to carry off the water and urine when washed down—either have a channel at the back, at one end, or in front, and you must regulate your planks according. These are your guide in laying down the cement floor even. Put a kind of cement of the consistence of mortar, and spread it all over the place you have dug until it rises as high as the planks.

(This cement should be made by mixing one part of lime, three parts of clean gravel, and three parts of fine sand and water, until the mixture is like fine mortar. It must be used as soon as made while it is still boiling with the lime.)

It must be lightly trodden down when all is finished, so that it be solid and firm everywhere, and the top well smoothed with a piece of board used edgewise. The next day it will be as hard as stone; and to give it a more even and smooth appearance, you can give it a thin coat of Roman cement and fine sand, about $1\frac{1}{2}$ inch in thickness, and through this it will be impossible for their urine to filter, which is essential for the health of these little animals. You can now build walls on this cement either of bricks or stone, or, if for economy, you use boarding nailed to upright posts, and in the spaces left it would be better to fill these spaces with pieces of brick or tiles; and to do this it would be a good plan to nail up temporary boards to the post on the inside, and fill up the space between the outside and inside boards with small pieces of brick, tile, or rough stones, and pour down the cement made with lime as before directed, with the exception of being made thinner to allow it to flow more freely. In about a day or two the inside temporary boards may be taken down, and then give it a thin coat of Roman cement, which will produce a smooth surface like a wall, and may be limewashed. You may carry this cement wall as high as you please, but it is not necessary to carry it higher than 2 feet or 3 feet. The reason I advise this is, that it is cheaper than brickwork, and it is necessary to prevent the ingress of rats, weasles, and other noxious animals, which, once located, would be difficult to get rid of, and destroy all your hopes and labours by destroying the litters.

In constructing the roof this will greatly depend upon circumstances—either a span roof, or if the house has a wall at the back, then the roof may be a lean-to, and may be covered with slates, tiles, or, what I have found the best, is a roof boarded and then covered with asphalte, which must be well tarred and sanded. It is economical, warm in winter, and cool in summer, which we cannot say for the slates or tiles. The front or sides, if it has two, and the upper panels of the doors, can either be glazed windows or open spaces covered with wire netting to prevent the entrance of cats, &c., and wooden shutters placed so as to close in cold weather. If glazed windows, they must be constructed to open, as nothing is more essential than a free current of air, and, therefore, it is necessary to cover the outside of the windows with wire netting, to avoid cats, as before mentioned, getting through when the windows are open. As to the height of the house, you must be guided by your own judgment and convenience, but be particular in constructing openings at the top for ventilation, with flaps to close at pleasure.

If you would keep Rabbits in a place already built, the first thing to do is to fill all the holes and crevices with pieces of brick or tile, and with Roman cement stopping the whole firmly, and then mixing one part of cement with two parts of fine sand and water till it has gained the consistency of cream; spread it on the paved or boarded floor to about $1\frac{1}{2}$ inch thick. This operation should be done quickly and dexterously, for the cement dries quickly and becomes a solid stone—through this vermin cannot penetrate. The sides of the building that have been stopped and cleaned should be plastered or covered with the same composition; but it must be thicker than for the floor. In a case where it might be found cheaper to use square tiles, stones, or bricks for paving, it is necessary to see that all the joints of the tiles or bricks be well filled with cement to avoid the filtration of urine under the pavement, for it is a condition of health necessary for the prosperity of the Rabbits, for other-

wise the earth would be impregnated with urinous matters. A fetid and mortal odour produced by the evaporation of septic gases would always be spread in the house. Whatever might be the cleanliness maintained above, it would ever be the hotbed of perpetual diseases, and would soon discourage the breeder by the losses it would make him suffer. I have dwelt rather lengthily on the subject of cement paving, but my experience dictates the necessity for these precautions; and when breeders begin and have no notion of the breeding of Rabbits, they soon find out by dint of losing the necessity for these precautions.

In addition to the Rabbit-house one should have a compartment separated from the other Rabbits, which we will call the hospital, for when Rabbits are sick the air they expire is breathed by others, and produces infection which might have been avoided if the sick Rabbit had been removed. It may happen that some may have a contagious disease, then all the establishment will feel the effects of it, and in a few days may be empty; and you would attribute to an epidemic, a disease that might have been avoided if the Rabbits had been separated.—R. S. S.

(To be continued.)

POT HERBS FOR RABBITS.

Will you inform me if pot herbs are good for Rabbits; and if so, what are the best sort to cultivate, the manner in which they are to be planted, where I can obtain them, and the time of year to have them sown?—H. R. L.

[One of the best herbs you can grow for Rabbits is endive. Sow it three times a year to keep up a constant succession in April, June, and August.]

THE CANARY AND THE BRITISH FINCHES.

(Continued from page 288.)

2.—THE YELLOWHAMMER (*Emberiza citrinella*).

French, Bruant.

German, Der Goldammer.

THE Yellowhammer is the commonest of our English Buntings, and is well known throughout the country by the appellations of Yellow Bunting, Yellowbird, Yellow Yite, and many other provincial names referring to the yellow colour of its head.

The beak, of which the upper half is darker than the lower, inclines to blueish while the bird is in song; in shape it resembles the Bunting tribe, the upper mandible being sligher, and having the peculiar knob in the palate or roof of the mouth. The plumage of the male is certainly attractive. The head and throat are of a clear, bright, pale yellow; but when newly moulted the feathers are mostly edged with a brownish colour, so that at first the beautiful yellow is only visible on the crown of the head, a stripe across the eyes, and part of the throat; but as spring advances these brown edges wear off, and the head appears nearly yellow, and the cocks are said to have more yellow according to their age, young cocks of the first year not having much more than old hens. The general plumage of the body is an olive brown above, with a yellowish-grey beneath; having longitudinal black marks on the back, and some chestnut brown shades on the rump and sides of the chest. Wing and tail-feathers dark, the outer tail-feathers having long white spots on the inner webs. The females are duller in colour, and show scarcely any yellow, being altogether more of a greyish shade.

They breed early in spring and again in June. The nest is rather deep, built of dry grass and lined with fine roots and hair. It is generally placed on a bank, or in a low bush or tuft of grass, very near to or on the ground. The eggs, four or five in number, are of a dirty pink colour, speckled with brown, and streaked with black.

The young may be reared by hand on sopped bread, egg, and crushed hempseed, or bread and milk, with mawseed. When full grown they will eat canary seed, oats, and hempseed, but they are rather delicate, because their natural food being insects, they do not thrive well on seeds alone, and require a change, as hard-boiled eggs, meat curds, ants' eggs, mealworms, &c., especially at moulting time. Much hempseed is very injurious. In a wild state they feed almost entirely on insects, as small beetles, flies, moths and their larva, grubs, and caterpillars, and are, consequently, very great friends to the farmers. In cold or frosty weather, when they cannot obtain their natural food, they

though it sometimes settles in trees, the earth seems its more natural resting-place. He has a pleasing but short song, and in the aviary sings the whole spring and summer through: this song appears, while he records, to be composed of some lark-like notes. When in full song, however, he pours forth many higher, fuller, and sharp-riding cadences, and falls then generally into a soft-cricken cry in piano." He further says, "Their call is very clear and loud like the whistle of a man's voice, and sounds like *Fid, fid, and girraha, gack.*"

They seem to arrive in England in September, and leave again in April, and though common in some parts of Scotland during winter, are rarely met with in the South of England in any great numbers.—B. F. BRENT.

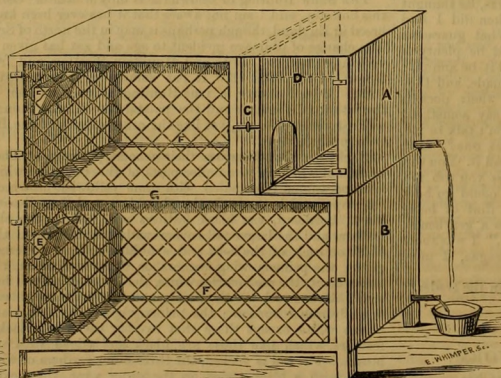
(To be continued.)

THE RABBIT (*LEPUS CUNICULUS*): ITS HISTORY, VARIETIES, AND MANAGEMENT. (Continued from page 330.)

HUTCHES.

THE hutches may be constructed either as fixtures or moveable. I would recommend moveable hutches constructed in stacks of two, three, or four high. They may be constructed single, but alike externally to form stacks when placed on each other, which will give a uniform and neat appearance.

They may be made according to the taste and means of the fancier, and arranged, as to height, according to the size of the building. Each hutch should not be less than from 20 inches to 24 inches from front to back, 3 feet 6 inches long, and 16 inches high inside.



A. Perspective view of doe's hutch.

B. Ditto of buck's hutch.

C. Sliding division to doe's hutch.

D. Door to nest-box.

E. Hay racks.

F. Urine conductor.

G. Wire doors.

The doe's hutch must have a partition about 12 inches from one end, and a hole must be cut at the extremity nearest the front about 1½ inch from the bottom, more than sufficiently large for the Rabbit to pass through. The edges of the hole should be bound with tin or zinc to prevent the Rabbits gnawing them; and if a small door is made to close the hole it will be as well, as the Rabbit can be shut in on one side while the other is being cleaned out. This partition should be moveable, as the object of this is to form a snug corner in which the doe may make her nest, and when the young ones are three weeks or a month old it can be withdrawn, and thus afford a greater space for their accommodation and gambols.

The front of the doe's hutch should be in two parts, one with a close wooden door 12 inches wide corresponding with the division, and the other a wire-framed door as shown in the woodcut; or, which I think is preferable, straight wires, as the Rabbit is seen to more advantage through them. These

doors should be fixed on hinges or pivots, and fastened with buttons, or any other fastening the fancier may think fit. The brass window-sash fastener answers very well. There are many other designs, more or less expensive, but the common button answers every purpose. The advantage of having the whole front in doors is the facility for catching the Rabbits, and also for cleaning out the hutches.

The floors should be made of one-inch boarding well glued together to prevent leakage, and with an inclination to the back of about 1½ inch, from front to back, to allow of all moisture being carried off by a pipe grooved out at the back of the hutch, as shown by F in the diagram; or if not a pipe, the floor should extend 1½ inch beyond the back of the hutch to prevent the urine running down the back.

The buck's hutch should be made without a partition, and the whole front in one wire door. They need not be so long as the doe's hutch, 2 feet 6 inches to 3 feet is sufficiently long. Each hutch may be fitted with a rack for hay, &c., as seen at E in the diagram.

The troughs may be constructed the whole length of the wire door of the doe's hutch, and fastened to it, or made to fix under the door; but a very simple and good trough for single Rabbits is an ordinary spittoon, which is wider at the bottom than at the top, and the Rabbits cannot scratch out and waste their food; but for a doe with young ones it would not answer.

As to the materials for constructing hutches, yellow or spruce deals are the best. The fronts can be made of the same material, or if the fancier is desirous of something handsomer, then come the mahogany fronts, tinned wire, ivory, or brass fastenings, &c.

M. Didieux, speaking of economical hutches, states as follows:—"I managed by chance to obtain a sight of a large Rabbit establishment near the Burrieré du Trone, in Paris. It is a

large court surrounded with walls, transformed into an open warren. Each hutch is nothing else than an old barrel. There were at least 350. One an old grocer's cask, another a spirit cask, and they had not cost on an average more than two francs and a half each. These hutches were thus arranged: Suppose an old barrel with its bung-hole and two heads, one of the heads removed, and with it a floor made. This barrel is laid down on one of its sides, the bung-hole being underneath. The planks of the removed head are fixed at about a third of the lower part, and about half way from the entry. A trough made of wood is fastened to the sides of the barrel a few inches above the floor. The door is formed of a wooden hoop, and closed with bars of wood an inch apart. These bars would be liable to be gnawed by the Rabbits, but they never touch them if you take care to rub them once or twice with the fresh bark of colocynth. The bitterness of the bark of this fruit is offensive to the Rabbits. This door is fastened to the bottom of the barrel with old leather hinges, and the door is kept closed by means of a strap and buckle. A ring nail serves to hang the rack inside the barrel.

"Thus arranged, the barrels are placed on stocks to raise them above the ground, are placed side by side, and facing the east. They are furnished with a gutter to receive the urine descending through the bung-holes. This gutter conveys the liquids into a pail. You may place the barrels one over the other, so that the bung-hole should be over the gutter between the under-barrels. The empty space under the floor, and the floor itself receive the dejections, which are removed by means of a hook or hoe. The Rabbits have this floor for their feeding and exercise ground, and the empty space at the back of the barrel for sleep, and the does can litter there in safety.

"As these hutches are moveable they can be placed under sheds or in stables during the winter."

From the above description you will observe that it is not absolutely necessary to incur a great expense in constructing hutches, but at the same time I would always advise having them properly made. The first expense is the least, and the health of the Rabbits greatly depends on having a comfortable and clean abode.—R. S. S.

(To be continued.)

POLANDS (Any Variety).—First and Third, J. Dixon, North Park, Bradford. Second, T. P. Edwards, Lyndhurst, Hants. Highly Commended, J. Dixon; Miss E. de Courcy Drevar, Rose Hill, Dublin. Commended Miss E. de Courcy Drevar.

BANTAMS (Game).—First, W. Silvester, Sheffield. Second, J. Camm, Farnfield, Notts. Third, T. H. D. Bayley, Biggleswade, Beds. Highly Commended, W. Lawrenson, Poulton-le-Fylde; E. Musgrove, Aughton.

BANTAMS (Any other Variety).—First and Third, T. H. D. Bayley, Biggleswade, Beds. Second, E. Fielding, Rochdale. Commended, J. Dixon, Bradford.

ANY OTHER BREED.—First, R. Chase, Birmingham (White Cochins-China). Second, J. K. Fowler, Aylesbury (Brahma Pootras). Third, J. Ashcroft, Ashton-under-Lyne (Black Hamburgs). Highly Commended, R. Teebay, Preston (Brahma Pootras); J. Dixon, Bradford (Malays). Commended, J. H. Craigie, Chigwell, Essex (Brahma Pootras).

GESE.—First, Capt. W. W. Hornby, Prescott. Second, Mrs. M. Seamons, Aylesbury (Grey and Mottled). Third, T. Burgess, jun., Whitechurch, Salop. Highly Commended, J. K. Fowler, Aylesbury (Go-lings).

DUCKS (Aylesbury).—First and Second, J. K. Fowler, Aylesbury. Third, Mrs. M. Seamons, Aylesbury. Highly Commended, J. Dixon, Bradford; Mrs. M. Seamons.

DUCKS (Rouen).—First, R. Tate, Driffield. Second and Third, J. Holme, Prescott. Highly Commended, J. Dixon, Bradford.

ANY OTHER BREED.—First, T. H. D. Bayley, Biggleswade, Beds (Call Ducks). Second, J. Dixon, Bradford (Grey Call). Third, G. S. Sainsbury, Devizes (Black East Indian). Highly Commended, G. S. Sainsbury (Black East Indian).

TURKEYS.—First, E. Guy, jun., Grantham (Cambridge). Second, Capt. W. W. Hornby, Prescott. Third, J. Dixon, Bradford.

LOCAL PRIZES.

DORKINGS.—First, S. H. Hyde, Ashton-under-Lyne. Second, R. Lees, Ashton-under-Lyne. Third, J. Fairweather, Ashton-under-Lyne.

SPANISH.—First and Second, S. H. Hyde, Ashton-under-Lyne. Third, J. Potter, Openshaw.

GAME.—First, J. Ashcroft, Ashton-under-Lyne. Second, G. Lees, Ashton-under-Lyne. Third, withheld.

COCHIN-CHINA.—First, E. Whittaker, Hurst, Ashton-under-Lyne. Second, H. N. Harrop, Ashton-under-Lyne. Third, withheld.

HAMBURGH (Golden-pencilled).—First, J. Ashcroft, Waterloo, Ashton-under-Lyne. Second, S. H. Hyde, Taunton Hall, Ashton-under-Lyne. Third, J. Hilton, George Street, Ashton-under-Lyne.

HAMBURGH (Silver-pencilled).—First, R. Lees, Ashton-under-Lyne. Second, J. Ashcroft, Waterloo, Ashton-under-Lyne. Third, J. Hilton, George Street, Ashton-under-Lyne.

HAMBURGH (Golden-spangled).—First, S. H. Hyde, Taunton Hall, Ashton-under-Lyne. Second, J. Ashcroft, Waterloo, Ashton-under-Lyne. Third, W. Travis, Little Moss, Ashton-under-Lyne.

HAMBURGH (Silver-spangled).—First, N. Marlor, Denton, near Manchester. Second, J. Ashcroft, Waterloo, Ashton-under-Lyne. Third, S. H. Hyde, Taunton Hall, Ashton-under-Lyne. J. Saxon, Keverlow, near Alt, Ashton-under-Lyne; disqualified, painted on earlobe.

BANTAMS.—First, E. Whittaker, Hurst, Ashton-under-Lyne. Second, S. H. Hyde, Taunton Hall, Ashton-under-Lyne. Third, S. Street, Old Cross, Ashton-under-Lyne.

ANY OTHER BREED.—First, J. Ashcroft, Waterloo, Ashton-under-Lyne (Black Hamburg). Second, H. Heap, Henry Square, Ashton-under-Lyne (Silver Polish). Third, Z. Tetlow, Failsforth (Black Polish). Highly Commended, J. Hilton, George Street, Ashton-under-Lyne (Black Hamburg). Commended, J. Berry, Hartshead, Ashton-under-Lyne (Black Hamburg); H. N. Harrop, Audenshaw, Ashton-under-Lyne (Black Polands).

GESE.—First, J. Whittaker, jun., Hurst, near Ashton-under-Lyne. Second, Mrs. N. Marlor, Denton, Ashton-under-Lyne. Third, J. Lingard, Old Street, Ashton-under-Lyne.

DUCKS.—First, S. H. Hyde, Taunton Hall, Ashton-under-Lyne (Aylesbury). Second, G. Davies, Crowthorne, Ashton-under-Lyne (White Call Ducks). Third, J. Lingard, Old Street, Ashton-under-Lyne (Aylesbury).

The officiating Judges were, Mr. Edward Hewitt, of Sparkbrook, Birmingham, and Mr. Thomas Challoner, of Burnt Leys, Whitwell, near Chesterfield.

BRETTON-WEST POULTRY SHOW.

THIS, the twenty-second annual Exhibition of the Agricultural Society, took place on the 5th inst. The entries were few, but the quality of the fowls generally good.

The Judges were, Mr. Thompson, and Mr. M. Ridgway, both of Dewsbury. The following were their awards:—

COCHIN-CHINA.—First and Second, W. Dawson, Hopton Mirfield. *Chickens*.—First, W. Dawson. Second, S. Pickard, Dintcar House, Wakefield. Highly Commended, S. Pickard.

SPANISH.—First, T. B. Stead, Leeds. Second, J. Dixon, Bradford. *Chickens*.—First and Second, G. Robshaw, Dewsbury. Commended, J. Dixon.

DORKING.—First, S. Pickard, Wakefield. Second, H. Himsforth, Lupset Hall. *Chickens*.—First, H. Himsforth. Second, T. B. Stead, Leeds.

HAMBURGH (Golden-spangled).—First, J. Dixon, Bradford. Second, H. Carter, Holmfirth. *Chickens*.—First, H. Carter. Second, J. Dixon.

HAMBURGH (Silver-spangled).—First, H. Carter, Holmfirth. Second, J. Dixon, Bradford. *Chickens*.—First, H. Carter. Second, F. Hardy, Bradford. Highly Commended, J. Dixon.

HAMBURGH (Golden-pencilled).—First, F. Hardy, Bradford. Second, J. Dixon, Bradford. *Chickens*.—First, F. Hardy. Second, J. Dixon.

HAMBURGH (Silver-pencilled).—First, J. Dixon, Bradford. Second, F. Hardy, Bradford. *Chickens*.—First, J. Dixon. Second, H. Ramsden, Holmfirth.

POLAND (Black with White Crests).—First and Second, J. Dixon, Bradford. *Chickens*.—Prize, J. Dixon.

POLAND (Golden-spangled).—First and Second, J. Dixon, Bradford. *Chickens*.—First, J. Dixon. Second, F. Hardy, Bradford.

POLAND (Silver-spangled).—First and Second, J. Dixon, Bradford. *Chickens*.—Prize, J. Dixon.

GAME (Black-breasted and other Reds).—First, G. H. Crossland, Wakefield. Second, R. Heeley, Holmfirth. *Chickens*.—First, T. B. Stead, Leeds. Second, F. Hardy, Bradford. Highly Commended, S. Schofield, Heckmondwike; G. H. Crossland.

GAME (Whites and Piles).—First, L. Wilkinson, Holmfirth. Second, G. H. Crossland, Wakefield. *Chickens*.—First, R. Heeley, Holmfirth. Second, F. Hardy, Bradford.

GAME (Black and Brassy-winged, except Greys).—First, Master G. H. Crossland, Wakefield. Second, Messrs. Noble & Ineson, Staincliffe, Dewsbury. *Chickens*.—First, Messrs. Noble & Ineson. Second, Master G. H. Crossland.

GAME (Duckwings and other Greys and Blues).—First, Messrs. Noble and Ineson, Dewsbury. Second, F. Hardy, Bradford. Highly Commended, G. H. Crossland, Wakefield. *Chickens*.—First, Master G. H. Crossland. Second, F. Hardy. Highly Commended, G. H. Crossland. Commended, J. Horner, Horbury.

BANTAMS (White, any age).—First, S. Schofield, Heckmondwike. Second, S. Pickard, Wakefield. Highly Commended, Master G. H. Crossland, Wakefield.

BANTAMS (Black, any age).—First, J. Dixon, Bradford. Second, S. Schofield, Heckmondwike.

BANTAMS (Silver-laced, any age).—Prize, J. Dixon, Bradford.

BANTAMS (Golden-laced, any age).—Prize, J. Dixon, Bradford.

BANTAMS (any other distinct breed, any age).—First, S. Schofield, Heckmondwike (Game). Second, Master G. H. Crossland, Wakefield.

ANY BREED (not mentioned in the foregoing classes).—First, T. M. Brooke, Dewsbury (Brahma Pootra). Second, J. Dixon, Bradford (Malay). *Chickens*.—First, J. Dixon (Malay). Second, Master G. H. Crossland, Wakefield (Black Hamburg). *Cock*.—First, J. Dixon, Bradford (Duckwing Game). Second, G. Robshaw, Dewsbury (Game). *Hen*.—First, G. Robshaw (Spanish). Second, S. Schofield, Heckmondwike.

DUCKS (White).—First, J. Dixon, Bradford. Second, G. Robshaw, Dewsbury.

DUCKS (Rouen).—First, J. Dixon, Bradford. Second, Mr. Hirst, Boyne Hill, near Wakefield.

GESE.—Prize, J. Dixon, Bradford.

TURKEYS.—Prize, J. Dixon, Bradford.

A PLEA FOR GAME FOWLS.

I PRESUME that all will allow that the comb and wattles of a Dorking cock are one of its greatest ornaments. Now the comb and wattles of a Game cock are naturally very similar (in proportion to the size) to those of a Dorking. Why, then, are they doomed to be deprived of such great ornaments? This, I believe, even our Judges cannot answer, though they will tell you that it is an imperative rule that "the comb and wattles of a Game cock must be well dubbed." Some may say it is an old custom continued from time immemorial. Undoubtedly it is, but nevertheless a very cruel one. Others say that they are more pugnacious when not dubbed; but that is absurd, for even if they were it would make no difference, for whether dubbed or not two Game cocks cannot be kept together in the same run. I believe many would prefer this beautiful breed to others which they now keep, if it were not for the cruelty they must practise if they wish to exhibit them. The days of cock-fighting are happily nearly gone by, and I am sure our chief breeders do not keep them for that purpose. Why then do they act as if they did? It is just such another absurd practice as that of cutting dogs' ears to make them look handsomer, as some think, as if they could improve upon Nature. It is as great pain to the cockerels to have their combs and wattles cut off, as it would be to us to have our ears shorn off.

If the Committees of some of our leading shows—such as Birmingham or the Crystal Palace, would take up the matter, and require all Game cocks to be shown with full combs and wattles, or allow them to be either dubbed or not, according to the fancy of the exhibitor, I believe they would do great service to the cause of humanity, and the custom would soon be entirely abolished.—HUMANITAS.

THE RABBIT (LEPUS CUNICULUS):

ITS HISTORY, VARIETIES, AND MANAGEMENT.

(Continued from page 430.)

RABBIT COURTS.

RABBIT courts are enclosures or paved yards in which Rabbits may be kept in a semi-wild state. They are of easy construction, and there are many places that could with little expense be converted to the purpose.

A court-yard paved and bounded by buildings, either houses, stables or sheds, and if these are on two sides so much the better, leaving the ends or other sides open for the free admission of air and sunshine; but these ends should be enclosed with walls

of not less than 5 feet high, and if anything more is required to keep out fowls, &c., a fence of wire netting placed on the top will answer the purpose. In the corners or centre should be placed mounds of earth, protected from the rain, in which the Rabbits can burrow and find shelter.

I lately had the opportunity of viewing a large court in Sussex. This court was made in an old melon ground about 200 feet long by 120 feet wide, enclosed with eight-foot walls. Along the south wall were arranged under a lean-to roof of asphalt about fifty or sixty hutches, in which were kept the breeding Rabbits; the court was only used for young ones, which were turned out when about eight weeks old, and allowed to remain till four months old, when the bucks were gelded or killed, except those kept for breeding. This court was not paved, which was much against it, as the land was very heavy, and when a continuance of rain fell it was in a bad state; but the proprietor was going to have it well drained, which would lessen the evil. In the centre was a large mound of earth thrown up to the height of 5 feet and several others along the wall; these were all protected from rain by roofs of different descriptions, but the centre mound was the favourite with the Rabbits. The man informed me that on a fine morning the top would be crowded by the Rabbits performing their toilettes.

In making a court the fancier should always endeavour to get a south aspect, and the north and east bounded by buildings, which will save the expense of making the necessary protection, otherwise it would be necessary to have these sides boarded to the height of 4 feet or 5 feet. The south should be open trellis or wire netting. The floor should be sloping; the floors composed of cement and sand have been found to injure the Rabbits' feet by being too rough, and bringing on what is termed sore hocks, the same as with hutch Rabbits that have no litter under their feet: therefore it has been found necessary to cover the floor of the court with sand or gravel about 2 inches or 3 inches thick. This, of course, will require removing either once or twice a-year, according to the number of Rabbits kept upon it. Straw, sawdust, or dry leaves would have the same effect, and would all be useful for manure when removed.

The mounds should be placed at the back with a leaning roof to protect it from rain; and also the feeding-troughs should be protected by some roofing, so that the Rabbits can stand and feed without getting wet while taking their food. If the court is connected with the shed in which the breeding Rabbits are kept so much the better, as it will afford additional shelter in wet weather to the Rabbits loose in the court.

I may add that the court is only suited to certain varieties, such as Silver Greys, Himalayas, and all others, excepting the long-eared and the Angoras, both these varieties require warmth.

Rabbits so kept are much more amusing than those hidden in their hutches; and this exercise assists their development considerably, and with young Rabbits reared in courts you will seldom find them attacked with pot-belly—one of the greatest evils in rearing hutch Rabbits. I strongly recommend a court to those whose premises, &c., would allow of the plan being adopted.—R. S. S.

(To be continued.)

DEVIZES POULTRY EXHIBITION.—This is fixed for Nov. 5th and 6th. The prizes are liberal, varying from first prizes of five guineas downwards. There are also sweepstakes for single cocks of all the principal breeds.

REMINISCENCES OF A GAMEKEEPER.

(Continued from page 470.)

I NEED hardly say I had few opportunities of saving money under "manager." Beyond the sum actually necessary for my subsistence, I earned nothing, and when the settlement came more than half the items for necessary disbursements were disallowed at the counting-house. I ought to produce written orders or receipts for every penny I had expended. One of manager's clerks explained to me that five hundred caps implied ten shots per diem for fifty days, and manager made a note against it—"Query, what return for all this shooting?" I could not battle for trifles against these "men of the pen," and I left my place penniless.

No man is worse off than a gamekeeper out of place. He has little resource. As a rule he is a man who has taken to that

which suited his nature, and he has undergone no training as a labourer to fit him for earning his livelihood as one. Then he is not a favourite with labourers; all men who work on an estate look with suspicion on the gamekeeper: his duty is to watch them. The man who takes a head of game unlawfully becomes his foe. The keeper out of place has to look for opportunities of earning a trifle by taking charge of dogs from one place to another; by acting as loader at a battue; or by attending for two or three days in a week on some townsman who has taken some shooting. The last is very hard work, and yet I have laughed till my sides were sore with suppressing it.

The first arrival. The master hardly out of the railway carriage before he asks for "the keeper" to tell him where the dog is, and his name—eternal "Don" or "Ponto;" and although he does not go so far as our friend Puttington in that excellent Sporting Tour of Sponge's, who traced every hound to the "Beaufort Justice," yet in a long, lean, flat-sided, sharp-noted weed of an animal he will ask you to observe the unquestionable marks of Spanish blood; or that there is just the necessary cross of the foxhound to insure speed and lasting properties.

I should always advise a man who is on the point of engaging himself as assistant or keeper for a time to survey the shooting, or rather the country, and also the man to whom he is about to hire himself. There were many ditches in my part of the country, and, being kept constantly cleaned out, they were deep and wide; it was necessary they should be, as they had to carry off much water in the winter. They had high banks, but no shrubs of any kind growing on them. They were easy enough to jump by any young, active man, but they were sad posers to my temporary master and his friends. They were all arrived at the age when men begin to increase in rotundity, and when they no longer call the attention of their friends to the difference in the tailor's measurement between the chest and the waist. Now the clayey sticky bottom of the ditch was always thrown on the opposite bank, raising it considerably, making it stiff fencing for those unaccustomed to it. My duty was to get over and hold out a long stick for them to grasp when they jumped, and I was then to pull them up. How I have laughed within myself when a good fifteen stone has put on all his steam, gone at the ditch with a rush, cleared it, laid hold of the stick, but alighting rather too low he has slid down to the bottom, and alighted in six inches of water, accusing me of giving way. I have watched the countenance as I stood on the bank pulling with all my might. Concentration of strength and energy to enable the toes to do the work of the feet, and to support the body; alarm as they began to give way, frantic pulls at the stick, and at last, when the down-slide had begun, blank despair and resignation. But others, and still more amusing were those who with youth, health, activity, and everything else on their side, cannot shoot.

I was employed for two months on a manor that was let to a number of young men, all friends, and all men of property. It was a treat to see their appurtenances. Every description of gun and case; all sorts of caps, powder and cartridge; dogs out of number. All that money can do to kill game was done; but none of them could hold straight enough. Many a time they have had me in the room after dinner in the evening to explain to them the whole theory, and they have declared the following day they would kill everything. They shot as before, and then it was amusing to hear the reasons assigned for missing. Some knew they shot in too great a hurry; others knew they shot under the birds; some were so confoundedly nervous; but all knew why they missed, and yet they could not remedy it. The average of their killing was one shot in twenty, except on great days when we used to beat the woods. They had one virtue—they were very liberal, and I earned much money with them; but it was only for a time, and I was soon reduced very low.

About this time I heard a second keeper was wanted in an adjoining county. I started for a thirty-miles walk early in the morning. I was buoyed up with hope, because I knew it was one of those families where servants remain a lifetime. Weary, hot, and footsore, I got there in the evening. I soon found there was no manager here. The servants were good easy-going men, who filled out their clothes. I had trembled all the way lest the time consumed in walking there might cost me the place, by enabling some more fortunate man to get there before me. It was with trepidation I approached the head-keeper's house. It was a nice place, well planted with flowers, and evidently well furnished. It had an air of comfort and well-doing about it, that made me ask myself whether such a place would ever turn up for me. I inquired for him, and was told by a stout lad who