

BELGIAN HARES
P. E. CRABTREE



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P. E. CRABTREE.

THE FIRST
BELGIAN HARE
COURSE OF INSTRUCTION.
TWENTY LESSONS.

*COMPLETE DIRECTIONS FOR BUYING, SHELTERING, FEEDING, BREED-
ING, KILLING, SKINNING, DRESSING, CAPONIZING, COOKING,
CURING AILMENTS, SCORING, EXHIBITING, JUDGING,
SHIPPING, DEVELOPING A BUSINESS, ETC.,*

*WITH A TRUE HISTORY OF THE BELGIAN HARE AND ACTUAL
EXPERIENCES OF BREEDERS, TOLD BY THEMSELVES.*



By P. E. CRABTREE.

*ILLUSTRATED WITH PLATES FROM PHOTOGRAPHS SPECIALLY
TAKEN BY THE AUTHOR, AND FROM OTHER SOURCES.*

REVISED EDITION.



BOSTON, MASS.:
NEW ENGLAND BELGIAN HARE COMPANY.

1901.

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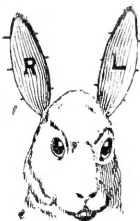
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NEW ENGLAND BELGIAN HARE COMPANY.



THE NUMBER OF THIS COURSE IS:

P. E. Crabtree.



SPECIAL NOTICE.

We have designated by number the experiences furnished by breeders. We shall be glad to furnish a key giving the names of these breeders, with their addresses, on request from those who buy Belgian hares of us.

NEW ENGLAND BELGIAN HARE COMPANY.

PREFACE.

THE ISSUANCE of this Course of Instruction is the result of a conclusion arrived at by careful thought, brought about by a combination of circumstances and conditions existing in America and Europe, such conditions receiving my personal inspection and most thorough investigation both here and abroad.

The prime object of the work is the furtherance of one of the most practical and essential industries that has ever come to the notice of mankind, in that it is the source of a most delicious meat supply, a thing entirely indispensable to the human race.

It is truthfully said that of the three "necessaries of life" (food, clothing and shelter), the first is the prime one, and it is a well known fact that meat forms a major portion of the same. Since this be true, how necessary it be that the variety of which we partake be the most healthful and palatable, thus becoming transformed into pure blood, healthful muscle and active brain fibre to the end that we be capable of enjoying a happy existence, making the most out of every opportunity presented and leading a most prosperous and useful life, the memories and accomplishments of which will be perpetuated by future generations.

It is needless for me here to enumerate the various kinds of meat foods partaken of by unsuspecting human "victims," and their respective peculiar transmission of scrofula, tuberculosis and cancer, their inducement of rheumatism, dropsy,

dyspepsia and all such things, as are well known to the medical and surgical professions to be the result, direct or indirect, of trying to transform with our assimilative organs diseased and unhealthful meat food into healthy human mechanism.

How necessary it then becomes that our meat food be supplied by an animal that is dainty in appetite, cleanly in habit and free from disease. From this point of consideration springs the secret to the great popularity of the Belgian hare as a meat producer for the great hospitals, hotels and clubs, where he is sufficiently known, throughout the length and breadth of the land.

The economic and practical features of the animal as a meat producer were the reason of my early becoming interested in its personal use and its introduction to the public.

However, the fancy has long since been considered my life-work and since I have brought the Belgian hare so prominently before the public within the past four years, enthusiasm is unbounded in its behalf, and one can see innumerable unreliable, misleading and impractical articles and fables written on the subject, and numerous publications delving deep in extravagant statements regarding the industry, prices of individual specimens and the Belgian's possibilities as a fur producer. Such overdrawn statements are unnecessary, as the animal is amply able to stand on its honest merits, and a reaction follows as a reflection from overzealous, excitable persons who have dropped into the business intent on making a fortune in a year or two without work.

This misstatement of facts concerning the little animal prompts me to sound a word of warning to the beginner in purchasing his stock of the dealer who spends more money in extravagant advertisements than he does in the purchase of the stock he sends you, and to "beware" of the advertisement that declares its proprietor to be the happy possessor of thousands of acres of hares in some unknown location,

and who has a string of "branch offices" established all over the universe.

I mean nothing personal in the above remarks, and merely wish to advise beginners to buy of reliable dealers or directly of breeders, whose reputation has been established, that your personal satisfaction direct, will result indirectly to the betterment and advancement of the industry.

My line of introduction of the hare was originally through organized effort, later through that and illustrated publication, and lastly, when it required still more attention, to lecture and institute work, as well.

Now it has reached that point where my personal attention is wanted in perhaps a dozen places at one and the same time, and that, coupled with a wrong impression regarding my Institute work, has determined me to issue this Course of Instruction, knowing that it will permeate local fields and touch places abroad that my limited time would not permit of me giving personal attention.

It perhaps will be timely to state here that my work in the fancy is, has been and will be opposed by three classes of people, which I group under the following heads: (1) Ignorance. It is noticeable that some people oppose my Institute work who know absolutely nothing about it personally. That such is unjust I will prove by referring ones interested to my graduates throughout America, now numbering about 100, and the first complaint is yet to be heard from even one of them. (2) Jealousy. It is a lamentable fact that the life of some creatures in the form of human beings is devoted to trying to reach the "acme" of their calling by throwing every body else below their level, instead of by endeavoring to build themselves to the top. I don't advise such course and there are but few people who admire it. (3) Unscrupulous dealing. It is plainly evident and most natural that wherever the educational line of work on the Belgian hare goes it is opposed by dealers who have sold, or wish to sell, inferior stock

at advanced prices. Nothing is more natural. I find that in hundreds of instances the practice of changing animals on the score card or selling elaborate, inflated score cards with a mongrel rabbit thrown in has been practiced to an alarming degree and that a course of Institute work in such a locality is always welcomed by the conscientious breeders and is opposed by unreliable parties who know that the stock misrepresented by them will meet its "Waterloo" and that their little game is all over in that locality. In proof of this statement I advise people to watch the result of the work where I have gone and where I will go in the future. Take notice of the class of dealers who leave said localities and seek a new field, note that they next touch at a point where such educational work has not yet been done, invariably, and also note the shifting of worthless stock and the demand for the high-class type of animal that always follows in the locality of such instructions.

I consider that the "cold water pouring" by the above three separate and distinct classes of people coupled with my inability to be "everywhere at the same time" is reason enough for me to get out a publication, at this date, which will introduce the industry in the same lines and set countless thousands on the right track, who would find it impossible to take a personal course of instruction at present.

The truth is, that if poultry raising is practical and profitable, Belgian hare raising is vastly more so, and I make this statement, not from the standpoint of one who speaks of what he knows not, for I have bred and exhibited 13 different breeds and varieties of fancy poultry, and am today a fancier of Barred Plymouth Rock poultry, Poland China swine, and Short-horn cattle, but Belgian hares are my specialty, as they produce the most delicious, most healthful and most economical meat food in existence. Fraternally,

P. E. CRABTREE.

Denver, April, 1901.

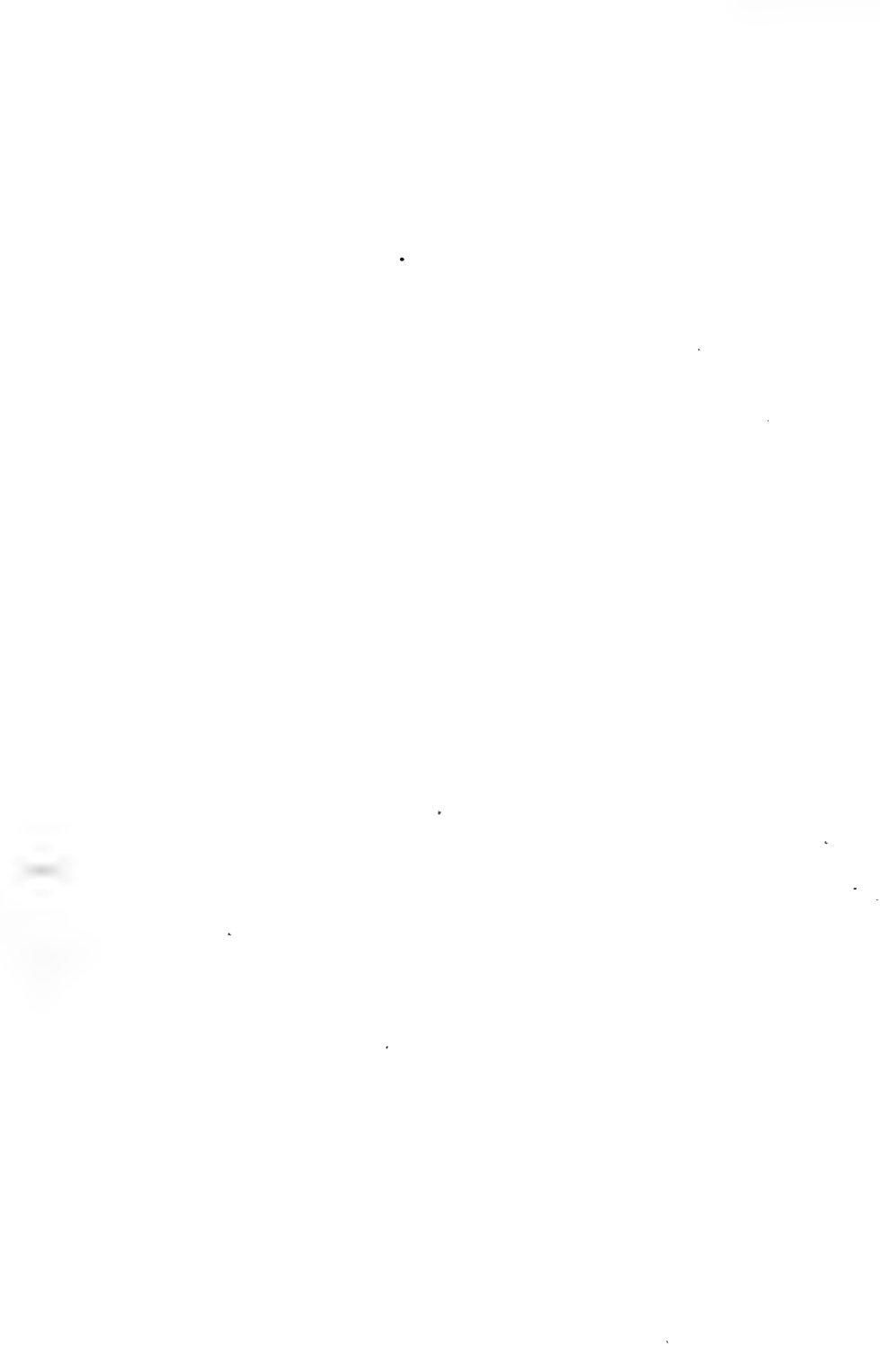
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LESSON ONE.

INTRODUCTION.

NEED of instruction in the breeding of Belgian hares is apparent to all, whether beginners, dealers, or those breeders who, by experience more or less costly, have learned what might have been theirs at the start, had not the industry then been in a new and unformed state. The ground has been gone over by so many that it would be a pity if the beginner could not have the benefit of their experiences,

In compiling this Course of twenty lessons, the plan has been to secure a reliable, authoritative and indispensable guide for all breeders of Belgian hares, whether beginners or not.

The Belgian has made great progress in this country, but it should not be forgotten that the industry had its birth in Europe, and it is principally to the breeders of England that we must look for the most trustworthy advice concerning the care of rabbit stock. The rearing of rabbits has been common in England for many years; there are gray-headed men in that country who have raised prize rabbits all their lives, and their fathers have raised before them, and in this Course of Instruction these practical English breeders have been appealed to freely. As the Belgian hare is a rabbit, and as all rabbits have practically the same nature, and thrive on the same food, and by the same methods of feeding, the compiler feels that no apology is needed for giving students the material furnished by the best English breeders. As the climatic and other conditions in this country are different from England's, greater space in this Course is given to the American breeders and their ways, and we think this fea-

ture will be found of especial value to the American breeder who is starting in the industry. The credit for the commercial development of the Belgian is to be given to this country, and as that side of the subject is of greatest importance, a special effort has been made to make the Course practical and of interest to those who wish to raise Belgians for profit, as well as to those who desire merely to raise pet or purely exhibition stock.

It has been stated by persons of limited observation and experience that there is considerable disagreement as to the proper food, mating and judging of Belgians, but this is not so. When the views of the experienced breeders are collected and compared, as they are in this Course, there is found to be no essential disagreement, except in minor matters. In this Course the student will find a method of handling which cannot fail to be successful.

Every student, if he is encouraged to become a breeder, should make up his mind to help himself by helping others. He should join with other breeders and strive to further the advancement of the industry in every way. Belgian hare associations in every section of the United States either are formed or are being formed, and the member is sure of finding companionship, and of receiving and giving information that will be of value. The quicker the industry is put on a solid footing, the better for all concerned.

We shall be pleased to hear from breeders, and to know their experiences, and to add such experiences to future issues of this Course, if any new points of value are brought out. Climate and food stuffs vary with latitude and longitude, and information bearing on these points will be gratefully received.



Photograph by the Author. Copyright, 1901, by the New England B. H. Co.

LADY SYMMETRY.

This illustrates the ideal in shape. Note the racy body, straight front feet, arched back, ear carriage, proportion of head, bold eye and firm breast. This stuffed model is used by the author with his classes in the American Institute.

LESSON TWO.

HISTORY.

THE BELGIAN hare is not a hare, but a rabbit.

It has an outward resemblance to the hare in the respects of size, and color of fur. The size is large and "racy" and the fur is a similar sandy tinge, but there the likeness ends.

The young of the hare are born perfect, with eyes open and fur on their bodies. The young of the Belgian, like the young of other rabbits, are born shapeless, blind, and almost naked. The wild hare gives birth to its young in a "form" on the surface of the ground. The rabbit gives birth underground, just as the Belgian would if many generations of captivity and nest littering had not almost obliterated its burrowing tendencies.

It was supposed that the Belgian was a cross between the hare and the rabbit, but that supposition was demonstrated to be wrong by careful experiments in mating at zoological gardens in France and England. Young were born from such mating of the hare and the rabbit, but they were mules, and consequently sterile.

It is quite certain that the Belgian was originated in the early part of the 18th century by some students of nature, who set about producing a handsome and practicable domestic animal. Taking the wild animals they combined the good qualities of each, one variety for color, another for size and still another for shape, making it a point to avoid undesirable features. They produced an animal to their liking, which they called a leporine. From the time of its first production the leporine drops out of sight until the middle of the 19th century, when it made its appearance in England, presumably being

taken there from Belgium. At first it was bred more for its meat, but later people began to admire it for its beauty of shape, and a discussion arose as to what the proper standard should be. In 1882 the English breeders succeeded in agreeing upon certain points which were formulated and published as the standard. We will call that the original Belgian hare standard. The animal was not known as a Belgian hare much before then. The real Belgian hare fanciers date from this time and their stated object was to produce an animal with the appearance of the beautiful English hare and having the easy-breeding qualities of the rabbit. Englishmen who bred for quantity of meat alone, leaving out of their calculations quality of meat and beauty of animal, settled upon the Flemish Giant rabbit. If today you take a Flemish Giant and cross it with the Belgian hare, and thoroughly mix the strains you obtain about the same animal, in size, quality, color, etc., as existed under the name leporine. I have met these animals in various parts of the country, notably while holding my Boston class in January, 1901, and the fact that they are leporines is quite unmistakable. One of my Boston pupils told me he had bought some from a breeder who represented them as Belgian hares. In body color they were distinguishable at a glance from the Belgian, being of a light grayish cinnamon color, with little or nothing of the true rufous red, and having little or no body ticking, and almost no ear lacing. There was some black in their fur, but it was not ticking, which is the black ends of the hairs, but rather the middle of the hairs, and nothing like what the standard calls for. By condensing the fur between the hands, it is easy to see that an animal of this description has no ticking, for the condensed patch of fur shows no black as it always does in the case of a Belgian with true ticking.

When I was judging the San Diego, Cal., show in 1900, the president of the club informed me that he was about to receive an importation of real Belgian hares from Belgium. When they arrived, they proved to be the leporines above described, being a cross between a Flemish Giant and a Belgian. They were of a dull grayish color with ticking on their front feet clear down to their toenails and would not score either as Flemish Giants or Belgian hares. I advised the importer to advertise them as leporines. I know that quite a number of these leporines have come over from Belgium and purchasers of Belgian hares should be on their guard lest they are deceived by

ignorant breeders.

No sooner had the standard been formulated in 1882 in England than there arose differences of opinion which found their expression in continuous discussion, and before long all the fanciers were dissatisfied with the standard. The discussion was kept up for seven years, until 1889, when there occurred a revision. The revised standard called for a Belgian more like the English wild hare, more racy in shape than the breeders had been producing, and ticked more like the wild hare, the ticking being distributed in waves. Other points settled upon were a bold eye, greater length of limb, no ticking whatever on either front limbs, ears or hind feet and only a small amount on the head. The real life of the fancy, begun with the adoption of this standard, was stimulated by its revision and has grown constantly since 1889.

About 1888, Mr. E. M. Hughes of Albany, N. Y., now dead, brought the first Belgian hare to America and devoted the rest of his life to its introduction into the United States, as best he could. Shortly after Mr. Hughes' importation there took place the first organized attempt at introducing the Belgian into this country, by the formation of the American Belgian Hare association, with Mr. W. N. Richardson of Troy N. Y., as secretary. From the best information I can gather, the efforts of the club extended over a period of only one year. Although started in a liberal spirit, and with the best of intentions it became disorganized on account of the wide scattering of the membership making it difficult to obtain a quorum at meetings.

The credit for the foundation of the fancy should be given to Messrs. Hughes and Richardson and Mr. G. W. Felton of Barre, Mass. Messrs. Hughes and Felton were the original exhibitors and Mr. Richardson the original publisher. The latter's publication was known as *The Rabbit*. These three fostered the fancy industriously and creditably. The Belgians which they bred and wrote about were exhibited at poultry shows in New York and Boston.

In 1897 occurred the second organized effort of the fancy at introducing the Belgian. It was in the nature of the formation of a National Belgian Hare Club of America, with headquarters at Denver, Col., myself being elected secretary. We took the standard as we got it from Mr. Hughes. We were confronted with many difficulties, first of which was the exact definition of "rich rufous red." When we came to ticking, the

standard said "plentiful and rather wavy," but did not say what it was. We gave it the best thought of which we were capable and decided to import of pair through Mr. Hughes. He referred me to Mr. J. I. Lawrence of Worcester, Mass., who had furnished us with a great deal of the history of the Belgian. I asked Mr. Lawrence who was the winner of first prize on buck, first on doe, second on buck and second on doe at the Crystal Palace shows in England in 1896 and 1897. Mr. Lawrence replied that he could not tell, but that if I would write to Mr. Ernest Wilkins, Wantage, Styles & Howe, Banbury, and A. J. Kilby, also of Banbury, England, I would probably learn the information I was seeking. To the three letters which I sent, I received three answers, two from Mr. Kilby, stating that two firms of English breeders (Styles & Howe and A. J. Kilby) had combined, with Mr. Kilby as manager. Both he and Mr. Wilkins defined rufous red as "a cherry red with golden shade." In further correspondence, I asked Messrs. Kilby and Wilkins about the various points of the standard. We found out what ticking was. We became much interested and Mr. A. W. Gilman of Denver made up his mind he was going to have a fine pair of imported Belgians, and invested \$100. Soon after, Mr. Gilman obtained the buck, Champion Yukon, called a champion because he had won at least five first prizes under at least three different judges. In Champion Yukon and his mate we had a good object lesson in color, ticking and shape. Mr. H. A. Stearns, then of Salt Lake City, imported shortly after that a fine lot of Belgians from England.

We considered then, as we have since, that the terms in which the standard was expressed were not explicit enough. The disqualifications (lopped or fallen ears, decidedly wry front feet, white bars on front feet and wry tail) we arranged in a paragraph and placed at the top of the standard. In regard to qualifications we took 100 as the sum of perfection. The 100 points we covered by 29 specific requirements. These 29 specific requirements are covered by a special list of four requirements—size, shape, color and quality—of the various sections of the animal.

I arranged a score card tabulating the 29 different requirements in accordance with the terms of the standard and this score card was adopted by the national organization and is now in general use. The score card is simply the standard sub-divided, and in a comprehensive form. A judge who uses the score card simply jots down with a pencil the estimates

which a comparison judge makes but keeps in his head, where they cannot be seen. The score card is an index to every part of the Belgian, and the judge must be able to give a reason for the estimate which he makes and their records, in the 29 blanks provided. As I will demonstrate in detail further along in these lessons, this manner of estimating the worth of a Belgian is of absolute preciseness. A score card judge, judging the same Belgian twice on the same day, even if a dozen animals meantime disturb his memory, will arrive at the same result. It is impossible to rely on memory when using the score card, and this in a great measure safeguards the reliability of the score. Men's judgments may differ, but not a man's judgment of the same Belgian, conditions being equal. I have found in my classes that when the judge understands the standard thoroughly, and is taught to arrive at a certain conclusion always by the same mental route, his estimate of a Belgian will differ little or not at all from mine, and seldom more than one-half of one percent, even in classes which have been learning only 10 days and started with the members absolutely green. The score card is mathematically precise when once the judge's mind and method are educated, and I know there are dozens of my graduates all over the country who, if the same hare were offered them in rotation, would score it without a variation of more than one-half a point. On the other hand, I know of comparison judges who differ as much as eight points in their estimates of a Belgian under discussion.

In conceiving the terms of the standard, and in talking or writing about them, never mix the terms sections, requirements and points.

Never mix your language in expressing your meaning by the words defect and disqualification.

A disqualification prevents an animal from competing in the show room and deprives it of a score card in all instances. Never score a Belgian which has one or more disqualifications.

A defect is punishable on the score card.

A section of an animal is a particular location on that animal.

A requirement is a necessary feature of some section of the animal.

A point is one of the units which constitute the ideal animal.

In the lesson on scoring, I will go into the details. My object in this lesson is to give simply a bird's eye view of the subject.

This standard should be firmly fixed in the mind, for it is

the foundation of the Belgian hare business. It is like a foot rule with which a man starts to build machinery. If foot rules were of different lengths, objects made by one workman would not fit into places constructed by others, and chaos would result. If each section of the country had its own way of measuring, or judging, Belgian hares, then claims, terms, price-lists, arguments, etc., would not mean the same, and ambiguity and deception would follow.

DISQUALIFICATIONS—1. Lopped, or fallen, ears. 2. White front feet or white bar or bars on same. 3. Decidedly wry front feet. 4. Wry tail. Note: A specimen should have the benefit of any doubt.

COLOR—Rich rufous red (not dark, smudgy color) carried well down sides and hindquarters, and as little white under jaws as possible..... 20

TICKING—Rather wavy appearance and plentiful.... 15

SHAPE—Body long, thin, well tucked up flank and well ribbed up; back slightly arched; loins well rounded, not choppy; head rather lengthy; muscular chest; tail straight, not screwed; altogether of a racy appearance..... 20

EARS—Five inches long, thin, well-laced on tips and as far down outside edges as possible; good color inside and outside and well set on..... 10

SIZE—Eight pounds 5

EYES—Hazel color, large, round, bright and bold.... 10

LEGS AND FEET—Fore feet and legs long, straight, slender, well colored and free from white bars; hind feet as well colored as possible..... 10

CONDITION—Not fat, but flesh firm like that of a race-horse, and good quality of fur..... 5

WITHOUT DEWLAP—..... 5

TOTAL 100

It will be noticed that in expressing the standard in the above terms, I have eliminated the word "about" in two places. The ears should be at least five inches long. (There is no punishment for excess in length.) The size should be eight pounds. (No punishment for excess in weight, as such. If an animal is too fat, the sections to be punished are those encroached upon, as will be explained later.)

By ticking is meant the black ends of the hairs. If we examine a hair from the back of a Belgian, we will find the end tipped with black. So when the ticking has a wavy appearance and is plentiful, as the standard calls for, the

animal has a blackish, as well as a tawny appearance, the black being distributed in waves. You might think of the waves of the ocean having a red body, with a black surface where they break. The "whitecaps" of the waves of the coat of the Belgian are black. Get that picture fixed in your mind and you will have no difficulty in understanding what "ticking" is, and how it should look.

As to dewlap, Shakespeare, you remember, said: "On her withered dewlap pour the ale," giving a burlesque reference to the flesh upon the human throat when flaccid, or flabby, with age. As usually applied, dewlap means the pendulous skin under the neck of the ox, which laps or licks the dew, in grazing.

If a specimen has any one of the four disqualifications mentioned, it is not good for breeding and therefore is regarded as worthless, good only for meat and hide, and not worth judging for points. Wry (twisted, distorted) front feet or tail would be reproduced in the progeny.

The striking features of the Belgian are the hare-like shape and the rufous color. The term "rufous" may not be perfect, but it is better than "reddish-yellow," or "yellowish-red," which even more lack precision.

R-u-f-o-u-s is a good dictionary word. It is often seen incorrectly spelled rufus.

The Belgian hare is the most useful of rabbits, and that is why there is good reason for concentration of efforts in developing and beautifying him. Breeders of cattle seek to raise the kind that will give the most and richest milk, the most and best-flavored meat and the biggest and best hide. According to the same reasoning, the Belgian hare is being developed. Of all rabbits, the Belgian is the most nicely balanced with respect to pelt, smallness of bone and flavor of meat.

Neither the Belgian hare, nor any other animal, would be bred in quantities on a large commercial scale simply for good looks, or adaptability as a pet, but because it is useful as well as ornamental.

The ultimate destiny of the Belgian hare is the table and the manufactory.

That is why the Belgian hare industry is founded on a rock.

If it were a fad, like the collection of rare coins, beautiful porcelain, tulips, or postage stamps, it would have died out long ago, to be engaged in only by people of wealth or leisure.

or both, who are the favored few that can afford the aesthetic or the beautiful in preference to the useful.

Just now, breeders of Belgians strive to keep them alive, because more breeders are coming forward all the time to get stock for a start in business, and the only Belgians that find their way to the table and the hat and fur factories are those which are rejected for breeding purposes because they are faulty in color, markings, shape or breeding habits.

A rabbit still larger than the Belgian may be obtained by crossing it either with the Patagonian, the Flemish Giant or the Lop-Eared rabbit, but what is gained in weight is lost in extra weight of bone, quality of meat and good looks, or non-conformity to the accepted standard, the color being faulty, or something else being the matter. Still, the critic may say, it has more meat and a bigger pelt than the true Belgian. Nevertheless, breeders have agreed not to sacrifice the beautiful hare-like shape and handsome color of the true Belgian.

Fix the foregoing first principles and definition of terms firmly in mind and you will be able to comprehend intelligently the next lesson on how to buy.



Photograph by the Author. By Permission of Mr. and Mrs. J. S. Brothers.

DUMBLETON, AN ENGLISH WILD HARE.

(For Description See Opposite Page.)

When the English fanciers first formulated the standard of breeding Belgian hares, they took for their model in shape, size and some minor requirements the beautiful wild hare of their country.

DUMBLETON.

THE upbuilding of the Belgian hare to its present standing in show room requirements has been so closely allied with the wild English hare as regards many of its most important characteristics that the latter becomes, for that reason, a most interesting specimen to the fancier. It was at the revision of the English standard in 1889 that the most particular stress was thrown on the characteristics as show in the wild hare on the requirements of length of limb, fineness of bone, boldness of eye, alert disposition and waviness of ticking. They since apply. In order to show just the exact type that was considered the ideal in this respect, I decided to bring one to America, photograph him and give the public the benefit of an object lesson in that respect. Dumbleton was born near Banbury, England in March, 1900. By nature he is an athlete, as you may know by his shape. By force of habit, the exercise he takes keeps his muscles almost as hard as wood. He habitually bumps his head against the top of a 26-inch hutch while standing flat-footed. He is kind in disposition, and will eat from your hand as long as you will leave him free, but the moment that you undertake to hold him forcibly he will squeal like a hog and would fight to the death. The first time I undertook to apply Belgian hare treatment to him I of course took him by the ears and shoulders and received a cut on the arm over five inches in length. When nearing New York harbor I began to give the shipping crates a final cleaning out before landing and Dumbleton got frightened at the small shovel which I was using and attacked my hand. I was in a hurry and proceeded to scrape the box, holding the door tightly against my wrist, and was shocked on withdrawing my hand and shovel to see that he had my hand bleeding in just 23 places. He is a veritable Fitzsimmons. He was taken into captivity when about three or four weeks of age, and being the only living specimen on exhibition in America he very naturally creates a great deal of curiosity and furnishes much amusement. I wish to call attention to the requirements after which we copy and can only show them to moderate advan-

tage in this halftone, as the photographing of the beast was almost as big a job as the trip to England, although it did not require so much time. In moving him from one enclosure into another the only way possible to handle him without killing him is to slip a large bag over him, then handle the bag, pouring Dumbleton out where you wish him transferred to. Of course he gives the bag a real "drubbing," but the bag doesn't hurt Dumbleton, and neither I nor Dumbleton would have any bark left on us, after about the third round, were I to try to handle him otherwise.

LESSON THREE.

HOW TO BUY.

HAVING become interested in the Belgian hare business, and desirous of engaging in it, the beginner will look around for stock, and he will need help on how and where to buy.

There are two ways of buying: First, by mail; second, by personal examination.

Everybody can form his or her own opinion of what he sees and handles. By comparison and asking questions, you can get good results, and at the same time you take full responsibility. Still, shrewd and unprincipled salesmen have no difficulty in palming off inferior goods of all kinds on innocent and credulous shoppers. They can make a sale to some foolish persons by enthusiastically claiming that this or that article is "fashionable," or they can convince others by the same glib tongue that stocks of a worthless company are going to pay dividends. The shrewdest of the confidence men depend upon meeting their victim personally for success. They fail when they write letters. The hypnotic influence of personal contact is missing from a letter.

So in many respects the mail order method of buying Belgian hares is to be preferred. At this time, and this stage of the business, it is almost necessary, for the reliable breeders are scattered. A beginner who makes up his mind to buy only after personal examination will find himself compelled to make a railroad journey at more or less expense and loss of time, and even then he may be disappointed, for he will not wish to go home empty handed, and may "take anything" to have something to show for his pains.

In ordering by mail, there are many advantages in favor of

the buyer, now. In the first place, the postal laws of the country are so strict that a swindler cannot conduct a business from his attic lodging room, hiring a cheap postoffice box, and giving nothing for the money of his dupes, without being brought up with a round turn. There are some swindles which the law cannot reach, but they are simple, for instance, the sale of a "diamond" for fifty cents. The swindler has a right to call his diamond a fanciful name, and may sell it, but only the young, foolish and credulous, or people looking for something for nothing, buy it. A person with any sense knows that a diamond cannot be bought for fifty cents. There are always plenty of people looking for something for nothing, and on this class the mail order sharper plays, getting as close to the line as he can. If these people will stop for a moment and consider that all business is entered into for the sake of a profit somewhere, they will see the utter absurdity of getting something for nothing.

Another safeguard is the newspapers and other periodicals in which Belgian hare dealers advertise. Most of them will not take advertisements from an irresponsible party. Some of them will refund to their readers money which those readers think has been taken from them unjustly by advertisers. Such periodicals make it a point to investigate the reliability and standing of every advertiser who applies for space in their columns.

Advertising is expensive, and as a rule, the Belgian hare dealers who advertise largely are responsible, having capital and business at stake, and dealings with them may be opened and carried on by correspondence with confidence. The buyer however, should not be prejudiced against the small dealers, many of whom are handling choice stock and attending to a small business carefully, and with a good knowledge of what they are doing. Some small dealers, having a fanciful conception of the value of their pets, ask prices entirely out of proportion to the value of their stock. The large dealers, as a rule, know the state of the market and are satisfied with a smaller profit than those who have only a few Belgians.

Do not forget that a reputable dealer in Belgian hares is anxious to please you. A pleased customer is the best advertisement. If the buyer is not treated well by the dealer, he will tell his friends, and they will tell others, and the whole neighborhood soon will be on guard against trading with the man who failed to please. On the other hand, let a dealer be

honest, and represent his stock just as it is, and he will find orders coming in from people who have personal knowledge of his squareness in treating others.

Look out for the sharper who is anxious to sell anything with four legs and a pair of ears that looks like a hare. The prospect of getting rich quick by selling all kinds of stock at high prices tempts the unscrupulous to dispose of anything. Be sure you get a sound, healthy specimen from a reliable dealer.

It is not practicable for the beginner to import his own hares, if he is determined to start with an imported selection, but he can deal on this side of the Atlantic with an importer and accomplish his purpose just as well.

Remember, in buying, that the label does not make the goods. An imported hare may be as worthless as the most worthless scrub in America.

In buying, the test is, does the animal measure up to the standard stated and explained in the preceding lesson? The nearer it comes to scoring 100 points, the more valuable it is, provided, of course, that it is in a healthy condition, and reared safely to maturity.

Now a word about scoring. You might think you were qualified to be a good judge of points. You would take the hare out of the dealer's hutch, place it on a table, take out your pencil and notebook and mark up the points of the animal. Suppose you were generally pleased, and arrived at a score of 94. You might say you felt like buying the hare, and the dealer, if he wished to make a sale regardless of principle, might say: "You are right; it is a great hare; my judgment makes the score 95 points. I think it is worth fully \$100."

You should ask the dealer what he means by "his judging." Some dealers have so-called "judges" of their own who, for some reason, probably because they are in the employ and pay of their patrons, put wonderfully high scores on Belgians belonging to said patrons, but remarkably low scores on the Belgians of rival dealers. Beware of such "judges." They are mercenaries and will put a score on an animal in proportion to the size of their fees.

The true judge is a man of honor and principle, as well as extraordinary good judgment. He must not only be well-meaning and square in his dealings, but also of quick perception, and skilled in the art of detecting tricks. The ideal judge would be a gentleman of culture, experience and stand-

ing, financially entirely independent of the Belgian hare business. Such men are hard to find. An admirable substitute is the thoroughly reliable, trustworthy gentleman, poor, maybe, but determined to do the square and the honorable thing at all times.

We will have more to say about judges and judging in a special lesson. The point which we wish to make clear now, and to emphasize, is, that the buyer must make sure that the judge who scored the animal he wants was a reliable one, and that the points for which he is paying good money will maintain their value in fair competition. An exhibition under the direction of a reliable society is a good test. Belgians judged in such places, with full publicity and criticism, are more reliable than those judged when not in competition.

The Belgian hare associations will do their most important work in the registration of judges and pedigrees. The stricter the discipline and the surer the punishment, the more reliable will both judges and pedigrees become.

Do not be fooled by pedigrees, and do not be guided wholly by them. You would not feel cheerful to pay quite a sum for a wonderful pedigree, and find on getting your Belgian from the express company that it was a sickly animal which had contracted disease since the recording of its pedigree. Remember that you are buying an animal, as well as a pedigree.

Get a fair foundation and trust to yourself for improvement.

You can improve your stock at any time by sending one of your best does away to be bred to a prize buck.

Don't figure that you will put \$100 into a doe and \$100 into a buck, and that in six months you will have forty Belgians worth \$100 apiece. Such reasoning may look all right on paper, but it is misleading.

Start with as good stock as you can afford without using up all your resources. Leave a little money for emergencies. Use ordinary business common sense. If you have only \$10, and feel that you want to start, it is better to buy two bred does at \$5 than one at \$10. In the course of a few months, you will be able to sell meat stock enough to pay for a fancy buck or the fee of breeding a high-scoring buck to your best doe.

If the Belgians which you have bought have been exposed during shipment to extraordinary variations of weather, or if they were shipped by unscrupulous dealers, they may have the snuffles (otherwise known as catarrh, or influenza) when they arrive. If they are running at the mouth, they have the slob-



Photograph by the Author.

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TYPE NO. 1.

Large doe, very fine in bone, moderately coarse in ear, well-colored feet, but a very full-breasted animal, the result of large dewlap, which should always be avoided as much as possible.

bers. If either nose or mouth is running, or the animals are sneezing, or refusing food, turn over these lessons until you come to the one on diseases, and you will see how to treat them. Belgians shipped by reputable dealers have neither the snuffles, slobbers nor pot bellies. If your purchase shows any bad symptoms, give the dealer the benefit of the doubt and by careful feeding for a few days strive to cure, meantime writing the facts to the dealer of whom you purchased. As a rule, Belgians which are healthy when shipped will remain healthy. The express companies have no difficulty in handling them. The shipper sends a bag of oats and hay with the box to the express company and during the journey the express company's employes feed and water the animals.

Do not be frightened if the does have a little dewlap, in some cases. Such does, it is found, make good mothers. The body should be long, and the back should rise in a well-moulded curve. The belly should be well up, not pot or fatty, and the animal should have the clean lines suggestive of the thoroughbred race-horse. The startled look of the eyes is characteristic. The eye should be bright and bold.

When you have ordered your stock, and are awaiting its arrival, you ought to be getting the box or hutch ready, and this will be the subject of our next lesson.

LESSON FOUR.

SHELTERING.

BEFORE your Belgians arrive, make ready a home for them. The interval of time between ordering and the receipt of the animals can be employed to good advantage in building a box or hutch.

There are certain fundamental rules which must be followed, and observation of model rabbitries will convince one that the best breeders are agreed on a simple form of hutch for a unit which may be multiplied as many times as desired as the Belgians increase in number.

Do not be deluded into believing that you can invent a hutch that will be self-cleaning, or one that will do away with attention in the matter of cleanliness. Some amateurs have planned a hutch of a so-called self-cleaning pattern, the chief characteristics of which are, first, a wire screen on which is laid the hare's bedding, and, second, a zinc-lined drawer immediately underneath into which the urine percolates and the dung falls. In practice, it is found that it is as much trouble to keep the zinc-lined drawer sweet as if the hare sat in the drawer, and besides, the animal's hocks are liable to become sore through contact with the wire screen.

Bear in mind that it is the urine, and not the dung, which if neglected, will give rise to a foul odor. The dung gives little or no trouble. When the Belgians are in their ordinarily healthy condition, it is hard and may be removed without difficulty.

No matter what you provide or build, be sure it is off the ground, so as to keep out dampness, and have holes in the top, or at the tops of the sides, to let pure air in and bad air out.

Belgians may be kept out of doors all the year round, except

in places where the thermometer remains below zero for days at a time. In winter it is necessary to give them plenty of warm bedding. In the Northwest, does have kindled in the coldest days of midwinter safely. The Belgian is a hardy animal. If a poultry house is used, or an upstairs room, do not feel obliged to provide artificial heat, no matter where you live. Cold is not harmful, so long as there are no draughts. The sides of the hutch always should be closed at the bottom, if they are open at the top, so that the occupants will be protected. In winter, a strip of canvas or carpeting hung over the wire front of the hutch, to keep off the winds and snow, will be found ample protection.

There should be a rack in each hutch for hay, and a feeding trough or dish, and water should be given in crockery dishes. Do not use tin dishes for drinking water, except when shipping hares (when they are in use only a short time).

Set the hutch in a dry, cool place. Sunlight at certain parts of the day, but not the hot rays all the time, will do no harm.

My practice concerning hutches is different from what it was when I started in the Belgian hare industry. I believe in smaller ones now than I did then. The Belgians do better, the expense is less and the care of the hutches is reduced to a minimum.

The hutch for the breeding doe should be three feet broad, two and one-half feet high and three and one-half feet deep or long. Half of the front should be of wire, one-inch mesh, hinged door, the other half boarded up. In the centre of the boarded up portion take out one of the boards, from top to bottom of the front, and put it on hinges, making a door. The use of this door in the solid front of the hutch will be explained later.

For a nesting box, there is nothing better than what is known in the western part of the United States, and is found in every grocery store there, as a coffee case. It is 22½ inches long, 13½ inches high and 11 inches wide. The top or lid is fastened on with two nails and is easily taken off. Tear off the front of the case and set this open front in the forward part of the hutch directly behind the boarded front, with its door. At the rear of the coffee case cut a hole four and one-half inches wide and seven inches high. Be sure this hole extends clear to the floor. Leave the lid on the box. This forms a shelf for the doe to jump upon when her young nag

her, as they will when over three weeks old. The hutch is high enough so that there will be room for the doe to sit on top of the nesting box without bumping her head on the top of the hutch. There are cleats on the under side of the coffee case which are just what is needed to provide a small dead air space between the bottom of the coffee case and the floor of the hutch, and keep the urine out of the nest.

The object of the hole in the back of the nesting box is to provide a means of egress and ingress for the doe, and it should be cut clear to the floor, so that the youngsters, if they crawl out of the nesting box, as they frequently do, even when blind and barely able to crawl, can feel their way by instinct back to the nest. If there is a cleat or other projection which has not prevented them from falling out of the nest, but which does prevent them from getting back into the nest, they will be obliged to stay out on the floor of the hutch, where they will starve, or in winter, freeze to death.

The doe, when she builds her nest, goes as far as she can from the light, and from what she reckons is the place for interference. In other words, she enters the hole at the back of the box and proceeds clear to the front of the box to build her nest. This is just what the breeder wants, and which he takes advantage of by the arrangement of nesting box and hutch above described. By opening the door in the middle of the solid front of the hutch, the nest is discovered close at hand, only the breadth of the fingers from the front of the hutch, and the easiest place imaginable for inspection. While the doe is out of the nesting box, the front door of the solid part of the front of the hutch may be opened and the young inspected, dead ones being removed, if there are any.

This arrangement of nesting box and hutch is the simplest and best. It is far better than a nesting box at the back of the hutch, the interior of which can be reached for inspection only by pulling the box forward and lifting a lid at top or door at side. By the arrangement described, it is not necessary to disturb the nesting box at any time.

In a hutch arranged this way, I have never had any trouble with the doe or young. I have taken the young out and handled them in sight of the doe, and she has never objected. I have seen the statement that the doe will eat the young if they are handled, but I never saw a case of that kind. If the doe destroys her young there are other causes for it.



Photograph by the Author.

Copyright, 1901, by the New England Belgian Hare Co.

TYPE NO. 2.

Shows grand long, cylinder-shaped body, beautiful arch of back, good ear carriage and one of the most beautiful heads to be seen.

At six weeks, when the young are weaned, take them from the doe's hutch and place them in a rearing hutch, both sexes. This rearing hutch has no nesting box and is a little smaller in frontage than the breeding hutch. It should be two feet wide, two feet high and four feet deep. Make the floor of fencing, which is three or four inches wide, unmatched, and when laying it leave between each board an open air space the width of a pencil. Set the boards so that they will run from front to back. Incline the floor slightly, making it one-half inch lower at the back than at the front, so that the tendency of the drainage will be toward the back. The youngsters will go to the back of the hutch to urinate and deposit dung. In a new hutch, or in case of every new litter, take some fresh dung and urine on a shovel and smear the floor at the back of the hutch. This ought to lead all the litter to the back of the hutch.

The flooring should project half an inch at the front of the hutch, to make cleaning easy. Take a straight garden hoe and scrape the dirt towards the front, where you have a pail or bucket for it to drop into.

The object of the spaces the width of a pencil between the floor boards is to allow of a circulation of air. This circulation is not enough to cause a draught. It is just enough to dry up the urine and carry off all odor. The urine runs onto and around the boards, but does not drip down upon the Belgians in the hutch underneath. It is not necessary to put a layer of sawdust in the bottom of the hutch. Sawdust saturated with urine quickly becomes foul and unpleasant. By the circulation of air obtained through means of the arrangement described, there is never any trouble experienced from urine.

The hutches should be in tiers, three high, the lower hutch being raised eight inches from the ground.

I believe in outdoor rabbitries every time, no matter how cold the climate. I never have had any snuffles or other sickness in my rabbitry at Denver, where the thermometer in winter time frequently drops to 24 degrees below zero. It is a mistake to house Belgians in an air-tight place, artificially heated, or heated by the warmth of their bodies at night and cooled by fresh air in the day time. It is the difference in day and night temperature of closed rabbitries which causes sickness. I was a poultry fancier for many years before tak-

ing up Belgian hares, and I learned then that all the ills of poultry are caused by a poultry house which is shut at night and open in the day time.

A hollow square or rectangle is a good arrangement for a rabbitry. A shed with three sides enclosed, the third side open and facing the south, is the best arrangement. That rabbitry in England which breeds the healthiest animals is in the form of a hollow square, open the year round. I heard no sneezes at that rabbitry. The heavy fogs in England, especially in the winter time, bank up on the ground and are almost as tangible as a light snow storm, but they cause the open air breeder no anxiety. He simply closes half of the open front of each hutch with a sheet iron movable screen or shield.

If you have a sneezing Belgian, put him in a free, open air hutch and it will cure him, if the case has not gone so far as to be incurable. It is a waste of time, and a mistake, to doctor sneezing Belgians continually with medicines.

If a heavy storm comes up, or extremely cold weather, I have pieces of galvanized iron (which pack away easily) two feet by one in size. By hanging them on the front of the hutches, I shut off half the air, and the animal has no trouble in keeping warm. Youngsters warm each other. If there is only one buck Belgian in the hutch, give him a nest. If there is a doe, she has a nesting box and nest.

There is only one time to watch an outdoor hutch, and that is when the weather is extremely cold and the doe is about to kindle. Were she to give birth to her young with the thermometer much below zero, even in the warm interior of the nesting box, there would be a chance that the moisture of kindling time would freeze. To avoid all chance of such freezing, a doe about to kindle in freezing weather should be taken into the barn or cellar. You may take back her and her litter to the outdoor brood hutch four days after she has kindled.

An outdoor rabbitry should be protected against intruders, particularly burglars. Build a fence 10 feet away from the open side of the rabbitry and carry it around each end so as to make a hollow rectangle. There should be a door or gate at one end. Place a spring and a catch on this gate so that it will fly open if the catch is released. Arrange an electrical circuit so that the opening of the gate will give an alarm.

The arrangement known as the "closed circuit" is best; then you will get an alarm even if a wire is cut or broken. The alarm bell may be at the head of your bed. The current may be furnished by two or three cells of a closed circuit, blue vitriol battery, such as is used in telegraphy, and which you may see at any telegraph office. These cells cost about 60 cents apiece, complete. Take a small copper wire and stretch it the whole length of your rabbitry, fastening one end to the fence, the other to the catch of the door. This wire may be hung on hooks out of the way during the day time and dropped into place at night. This is for the purpose of giving an alarm if anybody climbs the fence or gets into your rabbitry by any means other than the gate. Should an intruder climb the fence, he will strike the wire. If he cuts it or breaks it gently, he will break the circuit and you will get an alarm. If he strikes it, the catch of the gate will be released and the gate will fly open, and the circuit opened, thus giving an alarm.

This arrangement is so effective that an alarm will be given by the body of a cat striking the wire. A cat has awakened me in this manner several times. It is impossible for a burglar to enter without an alarm being given. If you use an open circuit battery, the burglar may outwit you by cutting a wire, but he is powerless in the case of the closed circuit.

Anybody with a smattering knowledge of electricity may run the wires successfully. Two pieces of spring brass, or the interior of the common push button may be used on the gate for a contact breaker. Your battery is not in use during the day, but only at night, and will last indefinitely with occasional renewal of solution.

Breeders call the wire stretched through the centre of the rabbitry a "trip."

LESSON FIVE.

EXPERIENCES IN SHELTERING.

No. 1—"My hutches (outside ones) are simply ham or bacon boxes. I use whole ones for my breeding hutches, and divide into two compartments, by means of a partition, for the use of two single inmates. I make my doors of solid one-inch matched flooring boards, and bore a row of three-fourths inch holes opposite the top of each compartment, in order to allow each occupant as much fresh air as possible. I place the ventilation holes at the top of the compartments so that the air will go in over, instead of at the inmate. For inside hutches, I simply build or partition next a wall. I allow each adult rabbit not breeding 36 inches by 20 inches, and 20 inches deep; for youngsters, five or six together, 36 inches by 36 inches, and 20 inches deep, and for breeding does, about the same extent. I do not use either false or sloping bottoms, but simply plain, smooth, pine ones."

No. 2—"It has been considered by many ignorant people, not belonging to the fancy particularly, that any kind of hutch, situated in almost any unhealthy corner, is good enough—which, in course of time, turns out to be a great mistake. It should be remembered that human beings enjoy better health when their homes are made comfortable, in airy localities, and with plenty of ventilation; and this rule applies to the proper hutching of rabbits. I keep my rabbits in an outhouse. My hutches are in double tiers and are made of boxes in which toys are packed. I prefer these to bacon boxes, which are generally saturated with fat and salt, while toy boxes are made of good, clean wood and are free from unpleasant smells and dirt. These boxes are of various sizes, and if the fancier prefers to have his hutches made fixtures, he cannot do better



Photograph by the Author.

SIMPLEST AND MOST COMPACT ARRANGEMENT OF HUTCHES.

than buy the large size toy boxes, which he can cheaply utilize. My hutches are movable. For single rabbits, a box measuring 4 feet 10 inches long, 3 feet 4 inches high and 3 feet wide, can be divided by a wooden partition, and this would give sufficient room for two rabbits not used in breeding. The hutches for breeding are of the same dimensions, but without a division; and inside of these hutches I put a small box for a kindling box, while I have others of them with a little divisional breeding compartment at one end. But I like the former plan, because when you want to examine the litters of your breeding does a movable box is more convenient, as it can be lifted out of the hutch without much annoyance to the doe. These hutches have small-sized wire netting fronts, with one end fronted with wood, in order to make them a little darker opposite the breeding box. When hutches of this description are made, they should be well white-washed inside; and after they have got saturated with excrement, the floor should be well washed with hot water and carbolic acid, and kept empty for a few hours until the odor of the acid has evaporated, when the hutch will be sweet again for the little tenants. The fancier should always place his hutches so that the north and east winds will be avoided, and to escape all draughts. In the winter, I have light wooden shutters, to reach within 6 inches or 8 inches of the wire-door top, sufficient to give plenty of fresh air; and an old sack may be nailed over the open part in any severe weather, taking care not to exclude the fresh air, which is highly necessary to promote health in the rabbitry. Badly-ventilated hutches are very injurious, and where too many rabbits are kept together, the effect is fearful."

No. 3—"To insure health, there is no reason why any rabbitry should not, with due care, be as free from disagreeable smells as any well-arranged stable in the care of a competent groom. After a hutch has been cleaned, a sprinkling of pine sawdust, which contains much turpentine, is useful, and acts as a disinfectant, to a certain extent. If the rabbits are kept in outside hutches, care should be taken to give them a south aspect, if possible. As previously mentioned, shutters for use in the winter weather must be provided, and ventilation, which should always be above the head of the rabbit, must not be forgotten. The roof should be well slatted and pointed and it should project three inches at both front and back, as warmth is of great importance, and perfect protection from cold winds must be secured. The projecting eaves greatly shelter the in-

side of the hutch from driving rain and wind."

No. 4—"When we started in the Belgian hare business, we began in a small way one spring. When fall came, we had between 30 and 40 hares cooped up in covered wire runs, each about 12 feet square and three feet high, with a box inside about two feet square that could be used by hares when stormy, or by the does for nests. Later in the fall, as it began to grow colder, we were rather perplexed as to what kind of a rabbitry it was most advisable to build in which to winter the stock. We finally remodeled a poultry house in the following manner: To begin with, the house was 21 feet long, 8 feet wide, 5 feet high at the front, 7 feet high at the ridgepole and 6 feet high at the back; the board floor a foot from the ground, and the door at one end, next to back. We took the boards off the five-foot side and covered that side with our inch-mesh wire. We then made a second floor $2\frac{1}{2}$ feet above the one already there. This second floor ran the length of the house, was $4\frac{1}{2}$ feet wide and was made of matched boards. We partitioned off the two floors we now had and made 14 pens, seven on a floor, each pen being $4\frac{1}{2}$ feet deep and three feet wide at the open wire front, and $2\frac{1}{2}$ feet high. The partitions between the pens were boarded up for about a foot, and the rest was covered with one-inch mesh wire. In back of these pens we had left a space running the length of the house and $3\frac{1}{2}$ feet wide, where we could keep supplies. The doors in the different pens were made of a framework covered with wire. These doors were $2\frac{1}{2}$ feet high and 3 feet wide, and opened into the alley way inside of the house. In each pen we had a nest box 12 inches wide and 18 inches long, with a hole about 6 inches square in one side. We use sawdust on the floors, cleaning twice a week, feed principally on second crop hay, oats and water, besides a few old vegetables. In this way, with an open front house, we wintered our stock, breeding the does every two months. They stood the two great storms and all the cold weather without any trouble, were never sick, and we lost only one or two very young ones. We think this shows pretty clearly that the Belgian hare is very hardy and will stand, and breed in very cold weather. We sustained no heavy losses until hot weather came, but even then we got along fairly well."

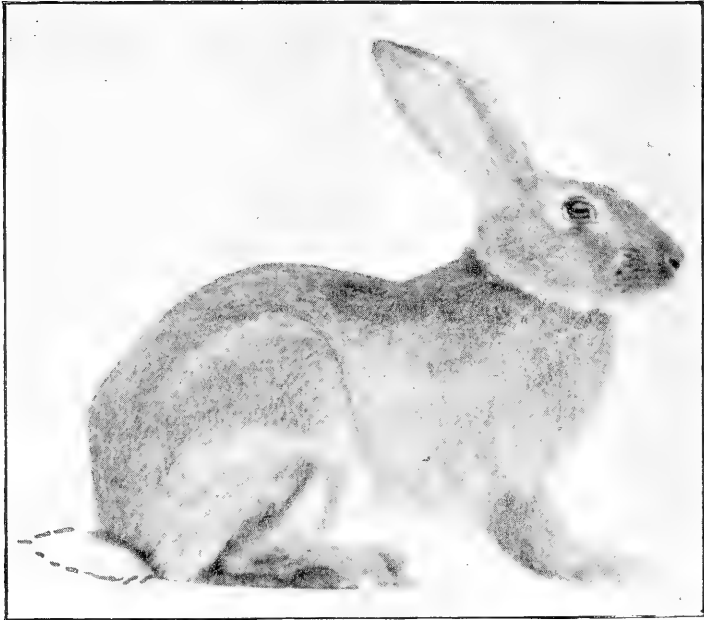
No. 5—"An inexpensive place may be provided by building a frame shed if there is no old one that can be used. A shed 10x20 feet is large enough for quite a number of hares. I

have frequently had as many as 60 old and young in one of that size. Some prefer a shed with three sides enclosed and open on the east, with a curtain to drop down when it is cold and stormy. A cheap hutch may be made by taking a large dry goods box, say about 3x4 feet, 2 feet high. Take out one side. Make a door about half the size of one-inch mesh poultry netting. Let the door come clear to the bottom of the box so as to be easy to clean out the hutch, which should be done every two or three days. Inside of this large box put a small box 12x14x20 inches for a nest box. In the back end of this cut a hole about 6 inches square for the doe to enter. This box should be put at the front of the hutch on the side not used for the door. Board up the half of the front beside the door with a small door into the nest box so the nest can be got at readily. Give the doe plenty of good, clean straw about two weeks before she is due to kindle. She will build her nest with the straw and line it with fur pulled from her own body. Sometimes, if the weather is cold, they will not pull fur enough to keep the young warm, and they are chilled to death. After one has killed a hare for meat and saved the pelt, this can be remedied by cutting the fur from the dry pelt and putting it in the nest the day the doe is due. Many valuable litters have been saved this way. These instructions are only for the beginner with but little money to start. A fancier with ample means at his disposal can build his rabbitry and hutches to suit his fancy."

No. 6—"Light, air and ventilation are the three requirements absolutely necessary to life, vigor and health. And this applies to the Belgian hare as well as mankind. Housed in a small, dark, ill-ventilated handbox with never a ray of God's sunshine, and most of the time rank with filth, is it any wonder that the owner spends half of his time dosing his hares to keep them alive?"

No. 7—"It is one of the fundamental principles of ventilation that air does not circulate and flow freely from point to point unless openings are so arranged as to allow free ingress of air and a free outlet for air. To make it still plainer, the air in such a hutch simply banks up in the hutch and becomes and remains foul. If any one doubts this statement, let him simply place his head inside such a hutch, well towards the back wall, and breathe the air for a moment. He will be convinced in short order. The air soon becomes foul, and as it has no means of purifying itself by a fresh current in any di-

rection, it remains foul all the time. As further proof of this, observe your hares in such a hutch. They lie close to the wire netting in front, and are trying to get a whiff of fresh air, which they stand so much in need of. The way to remedy this is to cut off the back wall of your hutch about four inches down the back, beginning at the top and cover opening with wire, or arrange a door to swing down from top of hutch so it can be opened. As a matter of fact, it should remain open all the time. If the hutches are made of chicken wire all around, this objection does not hold. In the warm climates a building with good height if ceiling (ten feet is none too high to afford good ventilation), with a double roof (with air space between roofs) for free ventilation, without direct draughts, is the ideal home for the Belgian. Take your windows out of rabbitry entirely in summer on south side and east of rabbitry, replacing them with strong wire screens (not fly screens, but heavy screens such as banking rooms use) and these will admit plenty of fresh air, and keep out dogs and burglars. Then arrange outlets on the side walls near the ceiling, for the foul air. Remember, warm foul air rises, and if you get the currents of air going in the right direction, you will always have fresh air, without draughts. Place the hutches out of the direct current of air, but where the air will sweep around them, and your bunnies will take on new life, and be as happy as clams at high tide. The same kind of house is applicable to the cold climate, with the addition that walls can be lined with paper in very cold weather, to keep out severe cold, but still arrange for ventilation even in cold weather. Belgians enjoy cold weather, even a temperature of forty below, if kept in a dry, warm place. As to the necessary hygiene of the hutch itself, there is a chance for great improvement. For the hutch made with a flat floor, straw as litter is best for warm weather, because bunny loves to brush the straw one side and stretch himself out at full length on the bare floor. It is cooler and he enjoys it very much. For winter, on the flat-floored hutch, a layer of clean sawdust with straw over that is the best. The droppings fall through the straw, and leave a clean, dry place. The sawdust alone soon becomes wet and dirty, and the animal is compelled to walk and lie in this dirty, wet litter. Change such hutches at least once a week. Take the hare out. Clean out thoroughly. Scrub it out with soap and hot water. Allow it to dry thoroughly, and then sprinkle some good disinfectant all over the side walls.



Photograph by the Author. Copyright, 1901, by the New England Belgian Hare Co.

TYPE NO. 3.

A neat little animal, unusually trim and clean in shape of neck and breast. Front feet are somewhat defective in shape. Eye is good, but ears are rather spoon-shaped, which is not a desirable feature.

Pure water is essential. Hares are great water drinkers. Have a nice, clean pail for watering your hares. Do not use the slop or mop pail to water them with and then wonder they are sick."

No. 8—"We secured a large number of packing cases from the merchants of our city free of charge; the business men seemingly glad to have them taken out of their way. Of these boxes we used only the largest for hutches, 3x4 feet being the size preferred, tearing the smaller ones to pieces and using the boards for roofing. After knocking out the front side of the box, a board one foot high was nailed along the top edge, and extending upwards. Boards were nailed to this, slanting back to the rear of the hutch, and this roof was covered with tar paper, the roof boards being allowed to extend out from the hutch about one foot, both front and rear. This gives you a splendid tight roof for shedding the rain, and also a large air space between the two roofs. For the door, we secured pine strips 1x2 inches and made a frame over which was stretched one-inch mesh wire. This door is hung with common strap hinges, and fastened with a button. Each hutch is also supplied with a heavy oiled muslin curtain, for cold or stormy weather, which is fastened with buttons and can be rolled up and fastened under the roof with a strap, similar to a carriage curtain. For the nest boxes, we used the smaller boxes gathered in our trips, such as those used for crackers, shoes, etc., about 12x18 inches, and a foot high. A board ten or twelve inches high, sawed from opposite corners, and nailed to the edges of the box, gives a nice slant. Near the top of the box proper are fastened cleats on which a false roof rests, and in cold weather this space between the two roofs is packed tightly with hay or straw. The cover is made large enough to extend over the nest boxes two or three inches, and extends up under a one-inch cleat nailed to the hutch, to which it is hinged after being covered with tarred paper. The hutches are all provided with buttons, fastened to the side, for holding the feed and water dishes, and we find that this saves considerable in the cost of feed, doing away with the loss necessitated by loose dishes being tipped over and the grain scattered in the litter. For feed boxes we use cigar boxes, the small and shallow kind. It is a well-known fact that Belgians will stand cold far better than heat, and with its curtained front this hutch is plenty warm enough for the most severe weather, and the double roof, with the air space between, gives

a fine circulation of air continuously during the hottest days of summer."

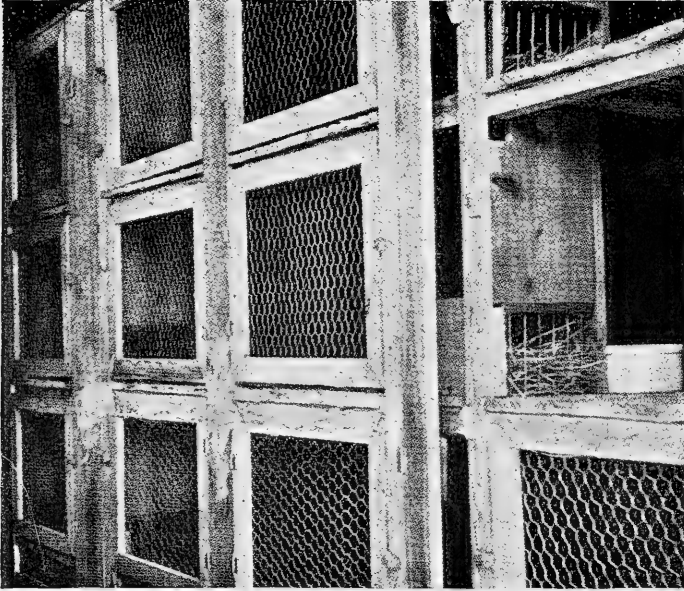
No. 9—"It is quite plain to me that Minnesota breeders are too fearful lest their animals take cold, and are altogether too precautions about a little fresh air getting to them. I find doors at the rabbitries nearly closed all the time, all well as the windows, and one would think from the way a draught, however slight, is feared, that they were expecting a draught from Greenland would creep in upon them at any time if an opening were left. While we believe a certain amount of care should be given to Belgians on their arrival from the coast, yet the difference in climate is not so great as to necessitate the extreme precautions which we find everywhere. No wonder there are snuffles and sneezes, for where they are housed so closely the least draught causes them to sneeze, the same as an infant that has been cared for in the same way and suddenly gets a breath of a nor'-west breeze. The sooner the breeders get the idea of the Belgian being a fur-bearing animal and not of necessity requiring a blanket at this season of the year, and begin to give them lots of air, in fact, better have a number of runways out doors, where a number can be put each day, the better prepared they will find their stock to stand our coming winter. We always have plenty of winter, and the idea of having pampered your Belgians to such an extent that our summer weather causes them to take cold if exposed in the least makes us smile when we think how they will shiver and shatter their teeth a few months later. Do these breeders presume to think they are going to provide artificially heated quarters for their Belgians this winter? If so, I want to discourage this idea in every possible way. Isn't it ridiculous to suppose that a fur-bearing animal whose fur falls, or sheds, according to the season, should require an artificially heated place of habitation in the winter time? You will find that they will not thrive nearly so well under such conditions, as those who have houses, or hutches, built on a plan suitable to the winters we always have. Mark my prediction that an artificially heated rabbitry will be as conducive to snuffles and sniffles as a hen house on the same plan is to roup and swelled head, or similar diseases, because the fowls are made tender and subject to every little draught that creeps in upon them by being kept under conditions that are not natural."

No. 10 (with illustration)—"Cleanliness is one of the most important matters the hare breeder has got to look out for.

The reasons are many. First and most important the neat, clean rabbitry will be selling hares when the dirty, unsanitary dry goods box establishment will be complaining that the hare business is a fraud and no one wants a Belgian hare even if given to him, which would be so in a great many cases from that kind of an establishment. Second—No human, animal or fowl thrives on filth, not even a hog. Filth breeds disease, wherever you find it. Disease costs money wherever it gets a foothold, and you get no returns for money thus spent. So watch the cause and pay but little attention to cures, and you will always come out a winner. Third, and not last by any means, the true fancier will take as much pride in the cleanliness of his rabbitry as he does in the various good points in his Belgian hares. Now the question is how to build a rabbitry and hutches so it can be kept clean and in the proper sanitary condition with the least possible work. Nine-tenths of the Belgian hare breeders will be people who have other work to do which takes up their time except the few minutes devoted to the hare night and morning, which by the way is my own case. Therefore, I have built to suit all conditions for my own convenience, which I have found highly satisfactory. I will give you a cut of one row of hutches, together with a description of how they are arranged. My building is 24 feet long by 12 feet wide, running east and west, with a shed roof tipping to the north; the north side is seven feet high and the south side nine feet high. I put a partition in the centre, making two rooms 12 feet square, and a door three feet wide in the centre of each room, opening to the south. On each side of the doors I built hutches three feet high and four feet long, making 24 hutches in each room; each hutch has a depth of three and one-half feet, with a frontage of three feet wide and 22 inches high. The bottom floor is 18 inches above the ground, and each succeeding floor 22 inches above that. I have two sets of hay racks arranged for each set of 12 hutches, as you can see by the inside view of my rabbitry. The rack for the hay is the same on both sides, so by opening one door you can feed hay to six hutches. The door to the hay rack is eight inches wide and the two pieces on each side of the door are two inches wide each. The back and sides of the hay rack are made out of 12-inch boards, and where the hares pull the hay is made of good stiff wire seven inches long and set about

one and one-quarter inches apart. In getting the wires in place bore a small hole the size of your wire halfway through the floor then take a 1x1 strip and bore holes through it the same distance apart as the ones through the floor. Place this on the top ends of the wires and the lower ends in the floor, then spring it in place and put a couple of small nails through the top piece, and your hay rack is complete except the six-inch board in the front part to keep the hay from dropping out when the long door is open. The hutch partitions are behind each hay rack and behind the six-inch place that the doors between the hay racks swing on. A drain and ventilator is arranged behind each hay rack, which drains and ventilates six hutches. This is made to fit against the back wall. The outside of the drain and ventilating pipe is six inches square, with a partition through it. The back half drains the three floors by tipping each floor to it, and the front half is arranged with ventilating holes to ventilate the back portions of every hutch. I will not attempt to give a detailed description of how this drain and ventilator is built, further than the above notes. With a rabbitry built as I have mine, you have no smell, no wet floors, doors and front all gummed up, four times as much hay wasted as the hare really eats, and best of all, you have a nice, clean place to take your visitor into, and a fine healthy lot of Belgian hares to show him. All this is fully worth the time and expense you have gone to if you expect to make a thorough success of Belgian hares."

No. 11—"The Belgian hare pays," says the owner of a large rabbitry in Cahuenga valley (California). No obnoxious effluvia meets one on entering his rabbitry. Night and day doors facing east and west are wide open and plenty of ventilation on either side assists to bring about a happy freedom from the catarrh which is the sure result of close air. Note this: Not merely uncleaned cages will encourage development of that disease, the snuffles, for which, once contracted, there is no sovereign remedy, only contamination of the breathing organs consequent on over-crowding in, it may be, an absolutely clean space suffices to provoke every symptom of catarrh. The breeder has experimented and found after trial that hares resting during the day in a too-confined space, although that same space was kept in a condition of perfect cleanliness, developed the symptoms of snuffles. Cure was effected by oc-



Photograph by the Author.

A LABOR-SAVING HUTCH ARRANGEMENT.

Belgians in six hutches are fed at once in this rabbitry. The narrow hinged door is opened and hay thrown into three spaces. The Belgians reach their front feet through the wires and pull the hay toward them, but not out into the hutch. The grain is fed on a slanting board and is eaten up clean at the wires. The floor of the hutch is kept free from hay and grain, and there is no waste of feed.

cupation of a larger space, proof positive that the inbreathing of lung-contaminated air was the sole cause of the trouble. Clean eyes, sleek pelts and healthy breathing organs are sure witness of sound constitutions and these hares are blessed with all three. Belgian hares, heavy breed, well kept, should in time pay the raiser. If life must be taken that life shall be, the stupid hare may as well be sacrificed as that the bird be stayed on her wing. The meat, as is well known in the older countries, is nutritious and light. Twelve cents a pound for the dressed animal means profit. A hare weighing 12 pounds, such being a well-fattened specimen, may dress down to nine. Poorer ones reduce to little over half their original weight. Less than the 12 cents cancels profit. No guest-respecting caterer will make a smaller offer and no self-respecting breeder will take anything under that price. A cheaper article will mean diseased flesh. Butchers paying five cents a pound are not discriminating.

LESSON SIX

HOW TO FEED.

BELGIANS have incisor teeth, and no molars nor grinders. They will eat almost anything in the way of field or garden stuff, green or cured.

Here is the fundamental rule in feeding:

Give plenty of hay and good oats daily, together with some green food.

The secret is, to balance the cured with the green food so that no trouble results. You will find some breeders of limited experience objecting to green food, but it is the abuse, not the use of green stuff that makes trouble.

Green food does not mean wet food.

By green food is meant uncooked or fresh-gathered stuff, such as carrots, celery, beets, turnips, turnip tops, cauliflower leaves, dandelion leaves, parsley tops, green clover, weeds, etc.

Wet food of any kind, except damp meal mixtures (fed warm or cold) are poisonous. If you cut fresh hay, clover or garden tops, or fresh feed of any kind, be sure it is dry when you feed it. Don't have a particle of moisture in it. Let all the dew and rain evaporate before you place anything inside the hutch.

The test is the appearance of the dung. If it is hard and comparatively odorless, everything is well with the feed. If it is soft and foul smelling, there is too much green food.

Fall back solely on oats and hay when the condition of your Belgians gets off,

Feed twice a day, night and morning. Do not throw in food every time you go to the hutch. Place the hay in the rack, giving enough to last two or three hours. Give oats in the proportion of one handful to each. Belgians do not care to eat all the time. After the morning meal they will rest quietly

until late in the afternoon. Give the second feed between 6 and 7 o'clock. Sunrise and sunset are good feeding times. Some breeders feed three times a day, but the great majority advocate two. It is less trouble to feed two, and the nature of the animals is to need rest through the day, especially during the summer months. They suffer on hot days. When evening comes they become frolicsome, the mother feeds her young, and they exhibit all the characteristics of twilight prowling animals.

Too much green food will cause slobbers, and pot belly.

Don't feed frozen carrots, beets, cabbages, or other frozen vegetables. They are sure death to young Belgians.

Don't overfeed, and don't starve. It is better to give them too little than too much. You can tell by watching their appetites.

Pea vines, including the pods, are relished, and are healthy. Pea vine hay can be raised anywhere, and where many Belgians are bred it is a sensible and cheap food.

Don't feed so plentifully that the bottom of the hutch will be littered with scraps. The Belgians are dainty and will not eat food that they have stepped on or befouled, or which has been allowed to remain in the hutch.

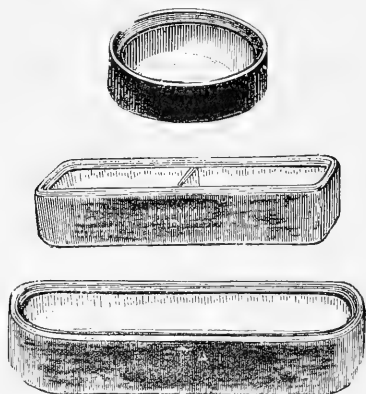
WATER—Clear, cool water is never harmful. The dishes should be rinsed and filled with a fresh supply at each feeding time. A dish of cold water is a preventive and cure of diarrhoea, in nine cases out of ten. A little nitre added to the drinking dish is an added help in diarrhoea. Give the drinking dishes a thorough scalding and drying once a week, and use earthenware dishes. Always keep plenty of water before the doe at kindling time, or she will destroy her young to allay the intense, gnawing thirst which comes upon her at this time.

MILK—Bread and milk is a good dish for nursing does, but it should be fed sparingly. Avoid the plentiful feeding of milk to all Belgians, young or old. Young Belgians fed on milk from cows that are on a diet of ensilage will be attacked with diarrhoea and die, usually within two days after the diarrhoea begins. Be careful of the quality of the milk at all times and let the dish containing it stay only a short time in the hutch, so as not to absorb foul odors. Milk takes up foulness quicker than water. Scald and keep scrupulously clean all feeding dishes used for milk.

LINSEED MEAL—An excellent condiment is made as follows: Take one pound of linseed meal which has been

crushed in its own oil and mix it thoroughly with eight pounds of any other good meal, say barley or corn, together with one ounce of gentian, one ounce of nitre and two ounces of aniseed. Mix with water into thick, damp (but not sloppy) paste, and feed twice a day, giving each time as much as they will eat, removing what they leave as soon as their appetites are sated. This condiment is a tonic, makes their coats glossy and smooth, clears their kidneys, produces milk and gives a good appetite.

PEAS—Uncooked peas are a good flesh-producing food. Use always the gray peas, not the white ones. The dung of Belgians fed on white peas is pasty and foul. Continued use



GRAIN AND WATER DISHES, OF EARTHENWARE.

of the white peas will result in diarrhoea. The gray peas should be covered with water for a day and a night, then rinsed with fresh water, drained and set away to remain until they begin to sprout. Then they may be fed, a handful to each Belgian, night and morning.

OATS—These are a staple article of diet.

CARROTS—An excellent food. They are fed uncooked. They are especially good when the doe is suckling her young, as they aid the secretion of milk.

HAY—Clean clover, or timothy, or alfalfa (common in California, Texas and the Southwest) are good foods. Put a

bunch in the hay rack night and morning.

BREWERS' GRAINS—Thoroughly dry them and mix with meal of some kind. The sugar in them helps to fatten. Don't feed too many, or they will sour on the stomach.

BRAN—Use little of this, as it does not have much nourishment. It may be mixed with meal.

RICE—Should be boiled and allowed to stand until it is cold and with the least amount of moisture—drier than when used on the table. Should not be fed more than once in ten days. Some Belgians will eat it, others will not care for it.

Make an effort to give your Belgians a variety of appetizing food. Their improved condition will well repay you.

I prefer and always advise the use of the best oats, and good, bright, clear hay, clover hay or timothy in the East, alfalfa in the West. At one feeding time, sprinkle slightly with water the hay for the next feed. This will take out the dust and the hay will go into their stomachs, and none of it into their lungs.

Hay does not distend the stomachs of Belgians and cause pot-belly, as in the case of a horse. A horse that is taken from its stall and worked becomes hungry and if given an unlimited supply of hay will gorge and the result is a distended stomach. On the other hand, a squirrel, which has plenty of food within reach at all times, never loses its trim, racy shape. There are certain animals that will gormandize. The Belgian will gormandize on grain and develop a pot belly, which is caused by fat on the kidneys and entrails. A Belgian which has stuffed itself with grain will be found to be lined with fat. I have seen them so fat that the lungs could hardly move, so thick were the layers.

They should not eat dirty hay, and usually will not. A hay rack or manger is a good thing. To feed oats, you can put into each hutch a self-feeder, if you wish, which lets the oats down as they are eaten.

Water twice a day in the case of each Belgian. Water the young from the time they are able to crawl.

The drinking water should be milk-warm in winter, cool in summer.

During the last 10 days of pregnancy, feed the doe only grain and hay, as much as she wants. But do not feed her all the time. Build her up. She should not be too fat.

Always feed all the good, bright hay a Belgian will eat. You

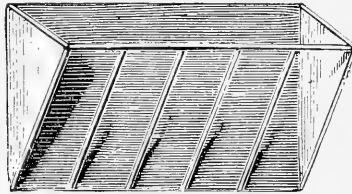
will not hurt a Belgian by feeding it hay at all ages.

I feed pregnant does all they will eat, of both hay and grain, while the young are nursing.

At 15 days of age, the young Belgians begin to eat oats with their mother. I do not believe in fussing with rolled oats. They make a paste which usually causes trouble in the stomachs of the young Belgians, making a lumpy mass which is indigestible. Use the whole oats. If they are too hard for them, they will husk them and bite off the hard ends.

Belgians from six weeks to three months old should have all the feed they will clean up, morning and night. At the end of three months, when the bucks and the does should be separated, shut off their feeding and feed a limited amount, or they will get too fat.

Feed nursing does and young stock until three months of



MANGER OR RACK FOR HAY, NAILED TO SIDE OF HUTCH

age full feed twice a day, all they will clean up. Water twice a day. Feed all other Belgians grain in the morning and hay in the evening and water twice a day.

If you use a manger, keep hay before them all the time. A buck extensively used for breeding wants full feed twice a day.

If you feed your Belgians too much, you will put too much kidney fat on them and you will miss the racy look which you are after.

Full rations for those that need it, as before specified, and half rations for all others, is the correct proportion.

A breeder can raise tons of carrots cheaply, and they are good at all times. Parsnips are fine for nursing does, but they are too expensive for steady diet. Swede turnips (or rutabagas, the large turnips) are all right, but do not feed

the common table turnip. As a rule do not feed apples, table turnips, lettuce and cabbage. Keep those things away unless you wish to take chances on their gorging and killing themselves.

Improper feed will cause dysentery. In feeding swedes, or rutabagas, begin lightly. They will not give dysentery like common turnips.

Never feed more than is cleaned up in a reasonable time, say 20 minutes, when feeding green food.

Stick closely to the rule with hay when you are also feeding green food.

Salt Belgians once a week by putting salt in their drinking water. Do not place a piece of rock salt in the hutch. In some cases they will lap a piece of rock salt, in other cases they will not. The breeder is never sure that the salt is being eaten. The object of salt is to purify the blood and that is why it is given. Incidentally it stimulates the appetite. You will know that the salt gets into the blood of the Belgians when you give it to them in their drinking water. Mix up the salty water in a drinking vessel, and taste the mixture yourself to see that it is not too briny. You want a pleasant saline solution, such as you could drink yourself, and which would do you good if you did drink it. You will find them lapping greedily a salt mixture made just right.

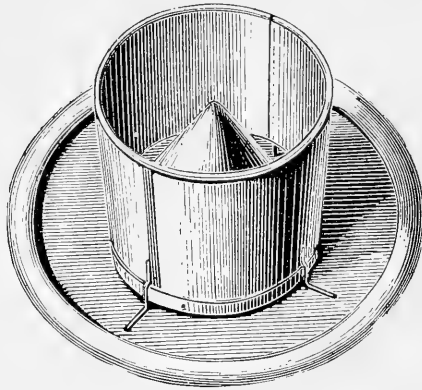
By observing the habits of wild rabbits, we know that they peel the bark off trees. This craving for tonic bark should be satisfied in the case of all Belgians by feeding them bark once in 10 days. Cottonwood bark is bitter and a fine tonic for Belgians. Sumac is all right. In the West you will find the sumac trees stripped by rabbits. Peach, apple or willow bark may be used. Some varieties of willow need to be fed cautiously, if at all. Taste the bark, whichever it is, yourself, to determine its bitterness and tonic qualities. If you are in doubt about a bark, feed it to a cheap Belgian, and if it survives, you will be justified in using it generally. Put the limbs into the hutches once ever 10 days, to be peeled by the Belgians. The effect of this bark is to tone up the system of the Belgian and produce a smooth coat of fur.

I use a feed trough in the rearing hutch. The best thing I have found to be small earthen crocks or butter jars which may be had for 60 cents a dozen.

When six weeks old, place the whole litter in the rearing

hutch, and keep them there, both sexes, until three months old. They will get plenty of exercise playing and hopping over each other. No hurdle is needed. One Belgian in a hutch of that size would get less exercise than six.

If a doe has more than eight young, which is all nature permits her to accommodate, do not kill off the extra ones at random right away. Watch them from day to day and kill the little ones that are not strong enough to reach the moth-



SELF-FEEDER FOR OATS.

As the Belgians eat at the base of the rim the grain falls down in the chamber as needed, and none is wasted.

er's milk, and which are crowded out of the way at every feeding time by the others. Some does have no trouble in raising 10.

In feeding her young, the doe arches her belly over the nest, and the young rise up on their haunches to grasp the teats.

It is well known that we can feed a certain amount of laxative and make the fur of an animal sleek and glossy. If the animal is in moult, the laxative will make the moult slip out quicker. Remember that in feeding for exhibition when show time approaches.

LESSON SEVEN.

EXPERIENCES IN FEEDING.

No. 100—"I keep mine upon the best food obtainable, namely, oats, sweet hay, dry clover, swedes, carrots, sprouted gray peas, sow-thistles, dandelions, green tares, and I consider the above by far the best of all kinds of food for rabbits in every variety. Swedes never scour (produce diarrhoea); carrots are capital diet for improving the condition of the fur, producing a silky, glossy appearance to the coats, and should be given sparingly when moulting or shedding the fur. Does, in a few days after eating sprouted peas freely, will be ready for pairing. I like sow-thistles for does and young ones, as they contain a quantity of juice or milk. They should be given two or three times daily, fresh and sparingly. Green tares I highly approve of, for milch does and their offspring especially, and I consider that, provided they are fresh, not wet, they are the best of green meat for producing nourishing milk, but they should be given sparingly night and morning, or, if possible, even three times daily. All roots should be carefully washed and wiped quite dry, or diarrhoea may soon set in. Should that appear, a dish of cold water should be at once placed in the hutch and replenished twice daily. It is a positive cure. It will cure 95 per cent. of the patients so treated. Plenty of clean sweet hay, dry clover and oats, and a little barley meal mixed with warm water into a firm, thick paste should be supplied. But no other food must be given for a week at least after the attack has ceased. The above is well worthy of every rabbit fancier's attention. I cannot too strongly recommend such a valuable remedy, as its result is the most certain known. I have spent a little fortune over my animals, and have come to a decided opinion that, except in cases of

diarrhoea—when, as I have said above, water is a certain cure—ill specimens are best killed at once, as, though you may save an occasional one, you run the risk of losing many others from their taking the disease. Linseed meal crushed in its oil, say one pound, well mixed to eight pounds of best barley meal (or any other good meal) with aniseed two ounces, gentian one ounce, nitre one and one-half ounces, is my favorite condiment. Mix it into a thick paste and give it to the rabbits night and morning, as much as they will eat. It produces milk, it is most nourishing, it tends to produce coats glossy and smooth, it acts upon the kidneys, thus preventing colds, and lastly, it causes a good appetite, as it is sweet and bitter, with tonic qualities. A day or two before the does are due to kindle I like to place a pan of cold water in the extreme end of their hutch from the bed compartment, as they experience great thirst about their labor time, and will drink most freely of water, and this simple precaution will frequently prevent their eating their offspring."

No. 101—"My idea of feeding is as follows: First and foremost, regularity is of the utmost consequence. I feed twice a day—in the morning with whole oats and green food, swedes or turnips in the winter months, and at night I give meal mixed up with hot water into a stiff paste. They must be kept in a cool place, for if you keep them in a hot rabbitry they will never do well, and will be far from healthy. I always keep mine in a cool place, out in the yard—with just a wooden covering over the top of the hutches—and where the sun cannot reach them, so that I keep them very cool."

No. 102—"Malva and green alfalfa are good for nursing does if they are accustomed to green food, but don't give too much. If the doe is poor, a little bread and milk is the best thing for her. Of course, the milk must be sweet. A nursing doe should always have a plentiful supply of clean food in her hutch. Oregon oats I prefer to any other grain, but wheat is good for a change, and so is rolled barley, but too heating in summer. Youngsters at two weeks are very fond of rolled oats or wheat, and it is very good for them. They will soon learn to eat almost everything, enjoying carrots at three weeks of age. Do not feed too much green stuff, unless they come from stock accustomed to be fed on it. After weaning them, give bread and milk if possible,

for a week or so at least, and the warm morning mash and a little well cured hay. Bread and milk is certainly the best of food for a nursing doe and her young. Never let it sour in their pens. Every rabbitry should keep a cow. It would add considerably to the health and strength of the stock. Salt is essential to rabbits. It should either be given in their water once a week, or a piece of rock salt should be hung up in each hutch, so that they can help themselves if they need it, or the grain may be soaked in salt and water and then put on trays to dry before using. Some rabbits are raised entirely on malva and green stuffs, but I would not advise you to feed it to fine stock unless it is accustomed to it. It produces slobbers in the young very often. A good warm mash for Belgians is made by mixing boiled flaxseed with sufficient feed meal and bran so that it will crumble in your hand. Add a little salt. Rabbits do not like any sloppy food. Give them only what they will eat up clean. If any is left over, it should be removed before it sours."

No. 103—"I do not advocate much green food, except carrots, during the time the young are suckling, as it often affects the milk, and deranges the bowels of the young, hence so many deaths through scours. Let the young stay with the doe until they are six or seven weeks old, and let the doe rest two or three weeks to recover her strength before breeding again, rearing and feeding. At six or seven weeks I take away my young and place them in a large hutch, and give them crushed oats, milk and bread, barley meal paste, and carrots occasionally, until about three months old, then I allow them the same diet as the older ones, which consist of oats, carrots, swede turnips, dandelion, sow-thistle, clover, tares, hare parsley, acorns and barley meal paste mixed with crushed linseed. I always feed twice a day about 8 o'clock in the morning and the same time in the evening, and those which have not quite eaten all up get no more until the next meal. For my young rabbits I use a trough with five partitions from the edge of the dish to the cylinder, so that when they are feeding they do not push one another away, but each rabbit has just room for its own head. I also prefer a lid on the top, as it prevents the young ones getting inside and injuring themselves, and thus often saves the fancier much anxiety and loss."

No. 104—"Feed no damaged hay or grain, nothing but clear, bright hay and sound, plump grain. Don't keep old

does to take up room at three years of age; their usefulness is about over. Do not feed all they will gorge of cabbage. It will bloat the old ones and give the young ones scours. Dampness and dirt is a Belgian's worst enemy. Avoid these and many difficulties will be overcome. Watch for barren does, but don't give them up too soon, some prove in the end to be excellent breeders. Do not forget to feed salt. We would soon crave it if deprived the taste of it for an indefinite length of time. Cottonwood branches and leaves are well liked by the hares, and must be beneficial. They seem to crave something bitter."

No. 105—"The following will make a good diet table for ordinary purposes, but of course it may be varied according to the resources of the fancier.

1st day: During the winter give a portion of swede turnip or a piece of carrot, and a handful of sweet meadow hay; that will do for the morning feed of one day. In the evening feed about 7 o'clock upon whole oats, if the animals be full grown or almost matured. Young rabbits, up to three months, may have crushed oats and a little bran, as their teeth are less able to masticate the hard, whole grain.

2d day: In the morning give a few oats and a little fine bran, turnip, beetroot or carrot; and in the evening give a handful of clover hay and a warm mash made as follows: Take half the quantity required of the leaf which falls from the clover hay, and scald it with boiling water, allowing it to remain in the water for about an hour; then add pollards, fine sharps, and patent rabbit food (of each one-third), a small quantity of whole linseed (which has previously been boiled to a jelly), and a small quantity of food for cattle (prepared and sold at the stores). Mix the whole into a stiff crumbly mass and give, while it is still warm.

3d day: Gray peas, soaked for 24 hours, and then laid out until sprouted, may be given on the morning of the third day. About two tablespoonfuls of these peas may be allowed to each adult rabbit at any time, but to the large varieties may be given a little more. Too many peas so prepared are injurious to health, as they tend to swell more than fatten, although they are very valuable for producing fine, short coats, if given in moderation. Evening feed, oats and a little turnip or carrot.

4th day: Morning. Again turnips or mangold, with a little bran and oats, not forgetting some hay, which, if they



Photograph by the Author.

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TYPE NO. 4.

A Belgian with excellent length of limb, arch of back and fineness of bone.
Shape of front foot is absolute perfection.

do not care to eat will serve for bedding. Evening (especially if cold weather). Give them a supper of warm mash made as directed for the second day, omitting the purchased prepared food, but adding a good handful of clover hay. A small pinch of flowers of sulphur for each rabbit.

No. 106—"In feeding mash, I have found that to give the food immediately after mixing, and whilst in a warm state, is the more beneficial and satisfactory. After the food has become cold, as a rule, the animal does not eat it with half the relish that it does when given warm. Also, the swelling process goes on chiefly during the mixing, and what little, if any, takes place after does not do the slightest injury. Rabbits, when in a confined state, should have at least one warm meal during the day."

No. 107—"There has been a great deal written about feeding some fanciers recommending such a variety of food, both in green meat, corn and meal of various sorts, they seem to forget that the majority of fanciers are people with limited means and income. This great variety of food is not essential to keep rabbits in good condition. I have been in the fancy some years now, and I think I may safely say no one has been more successful than I have, and my rabbits have been fed on a very limited variety of food. My plan of feeding is as follows: I feed twice a day, morning and evening. The morning meal consists of green meat, such as cauliflower, broccoli, or savoy leaves, a handful of barley, and a piece of nice sweet hay or clover. The evening meal, same as morning. There are many other green stuffs, such as dandelion, sow-thistle, wild parsley, etc. In winter, when green food becomes scarce, I give swedes, turnips or carrots, with corn and hay as before. I am not a believer in pollards, sharps, bran, barley meal, etc. Barley meal sometimes consists of all the mouldy and fusty sweepings of the mill, and the others are very little better. These things will, if not good, put the rabbits out of sorts very quickly, and in many cases prove fatal. I can speak with some authority on this subject, having had some experience in the corn trade. A little hemp seed is very nice for them in the proportion of a pint to a gallon of corn. This will make the coat look very nice and glossy."

No. 108—"I venture to make a few remarks on the subject generally, having been a successful breeder for many years. My remarks may, perhaps, be worth reading, al-

though my experience may differ from many of our great fanciers. To prove my statement is not far wrong, I can safely say I seldom lose a rabbit, except a few years since, when I followed the advice of a great rabbit keeper who recommended that the houses should be kept at a certain temperature, with diets at regular times. Acting on his advice, I built a house, and kept to my instructions, but oh, what a fate was mine. I lost nearly all I bred. Old ones moulted out of season, and all my stock got in a bad, weakly state, suffering from colds, etc. I was so disgusted that I felt inclined to give up the fancy altogether, but nil desperandum. I went back to my old system, and can now show any one who pleases a stock not to be laughed at in their rough and ready state. The first and main thing in rabbit keeping is to get good hard and healthy specimens, not those brought up in such houses, and treated as I have before mentioned. Keep them outdoors in the fresh air, with certain protection against wet and wind. They will then live and thrive on almost any kind of food given them. My rabbits have almost everything a garden produces, in season, and as much as they can eat, but to counterbalance the effects of so much green food I always give them any amount of good, sweet hay, and as much as they will eat of old, hard clover. If I find the least signs of looseness I give a little flour mixed with their evening meal, which consists of good fresh brewers' grains, and sharps or ground oats. As to feeding, my system is to feed twice a day only, between 7 and 8 in the morning, and 6 and 7 in the evening. The remainder of the day they are left quiet, as Nature intended them to be. My morning meal is whole oats as good as can be got; they are the cheapest. As soon as they have eaten enough to stay them, they have any amount of green food in season, namely, wild parsley, dandelion, poppies, hogweed (the latter by far the best of any wild food). The poppy is one of the most valuable rabbit-feeding stuffs we have. At certain times of the year I feed on scarcely anything else but that and oats for their morning meal, and grains and ground corn for their evening meal (always keeping plenty of hay in the hutches). I used to send out into the cornfields twice a week for a cartload of the red poppy. We seldom see the white about here. I feed almost solely on this for months. A great many of the fine young fat tame rabbits in the market are fed on nothing else but hay and poppies at certain

times of the year. Of garden produce, I give cabbage, cauliflower and broccoli preferred, pea and bean haulm, lettuce in moderation. In addition to above, I grow a good deal of chicory and comfrey, which I consider the best all-around foods for rabbits, and all true fanciers, if convenient, should grow them largely. My winter green food is carrots, swedes and celery."

No. 109—"As the entire South is interested in Belgian hare raising, and so many inquiries as to feed and care of hares come to me by every mail, I wish to state that pea vine hay is equal, if not superior, to alfalfa. I started feeding one feed of nice, new, clean, alfalfa hay, and one of pea vine hay, with pea pods mostly matured. In less than ten days, they would eat pea vines, pods and all, clean, while the alfalfa was partly eaten and pulled about. I watched this for nearly eight weeks, and am persuaded that pea hay is excellent for Belgian hares and I believe they will flourish upon it. Now, as to the advantage of the pea vines over alfalfa, for the South here, is the fact that good hay of any kind is a scarce article in the Southern states generally, and is very hard to get in many parts, but pea vine hay can be raised three crops a year anywhere, and one square rod will raise enough to sustain all the hares needed for a family, and is as cheap in proportion for the more extensive breeder. I am sure this information will be welcomed by all owners of Belgian hares, and those who are studying the industry, especially in the Gulf states, which, by reason of the short, wild winters, are so well adapted to the raising of Belgian hares."

No. 110—"In about 2½ to 3 weeks the young will begin to eat. Now watch that young do not get too much green food. I prefer feeding dry clover hay until young are at least five weeks old. I give them every morning, mash composed of one-half fine cut clover hay (but not mouldy), the other half oats, better rolled oats for very young hares, cornmeal and bran, in equal proportions. I put up a little bit of salt in it and mix it good. Then I moisten the whole with one-half sweet milk and one-half water, but only moisten it; do not make it mushy. This stale bread soaked also partly in milk and water, and good clover hay, is sufficient to make them grow. See that the little hares cannot run over drinking vessels, as it will kill them if they get frequently wet. Do not be afraid to feed your young growing stock oats once a

day. It will make them strong. Hares do not get sick from eating oats. The trouble must be looked for somewhere else. Give your young hares freedom, that is, to a certain extent, and you will see them growing wonderfully and be healthy. When I have several does with young about six weeks old, I put about two dozen young hares in a wire run about 15 feet square, and put a long box, or hollow log, in centre, but see that rain does not get in."

No. 111—"My method of feeding is to give them, both in summer and winter, a little sweet oat straw, and they seem always to relish it right well; and then what is left does for bedding. I then give them a little sweet hay, and this they take eagerly, by way of a change. In the summer time I feed them on dandelion, grass, prickly comfrey, cauliflower leaves, common dock, parsley, chicory, and give occasionally a few sprigs of red or green sage, mixed with other green food, which has a tendency to warm and nourish them. This green food I give at midday. In the morning I feed on whole oats—good oats, for they are the best and cheapest—and in the evening I repeat the feeding, and my does with litters I again supply with green food. The young fancier, and the old one as well, should never give an excess of cabbage, lettuce or turnip tops, unless he wishes to scour his rabbits to death. I never feed on this detelerious food, and many eminent fanciers I find denounce the cabbage diet. In the winter I give oats, soft meal of brain, Indian meal, oatmeal, barley meal and linseed meal, mixed into balls just sufficient for one rabbit. This I supply three times a week, besides plenty of good oat straw and hay swede turnips and carrots; but too many swede turnips have a tendency to scour the rabbits, and when this is perceived they should not have any more of them for a day or two, but should be supplied copiously with cold water, oats and hay, and they will soon be right. Some fanciers are fond of giving soaked and sprouted peas, but I have a strong objection to them, on account of their causing flatulence, although they are very nutritious, and quickly form flesh."

No. 112—"Breeding of the hare in Southern California has many of the advantages that breeding of poultry does, owing to our mild climate. We have no snow and freezing weather to guard against, but bunny will catch cold here same as elsewhere. By taking time by the forelock and bunny by the back of the neck, and applying a mixture of

one part turpentine and two parts coal oil, with a free use of salt, we have been able to check and subdue this affection, thus preventing its assuming its worst form, snuffles. We also feed occasionally both eucalyptus leaves and hoarhound, which are both excellent tonics and correctives, and avoid all sloppy foods, and use care in feeding green foods. Hares must become accustomed to green foods gradually, and we prefer to feed nursing does no green foods whatever. Belgians oftentimes display marked individual tastes in regard to their rations. For instance, we have one buck that under no persuasion will eat oats, while another is particularly fond of this food. California breeders feed alfalfa hay mostly, and crushed barley forms the leading ration, which the hares like very much."

No. 113—"The doe should have good, sound grain, fresh water and sweet, fresh hay that is well cured and not watery. If green food is fed it should be done sparingly. The best vegetable food is carrots. It will be but a few weeks when the young will begin to run around the box and out into the runs. They will relish the carrots. Care should be taken with the water dish. One should be used that will not allow the youngsters in their frolicking to fall in and die in the spring time of their youth."

No. 114—"When first I commenced to keep rabbits, I used to feed them three times a day, and often found they had only half eaten up what I had given them. Then I tried twice—night and morning—but still found that much I had given them was left. Then I decided to feed only once a day, and have found it not only better, but much cheaper, as they in almost every case eat all up, and are ready for the next meal. Thus I have not half the waste, and the rabbits are in better condition, having more rest during the day. I, of course, do not include the does with young in this rule. I give to each doe bread and milk or other soft food (extra) each day. My general mode of feeding is as follows: At 8 p. m., a handful of best white old Scotch oats, a little green food or swede, a handful of sweet hay, and, twice a week (extra) a ball of fine sharps, mixed very stiff with well boiled linseed. This last-named mixture will prove of great benefit to stock, both in respect to health, and keeping the coats in proper order. I have also found, especially in summer time, when a rabbit is off its meat, and skulking in one corner, that a drink of cold water will often put it right.

In preparing rabbits for show, give, in addition, each day, a few gray peas which have been steeped in water for 24 hours, and then taken out and dried. To the bucks you may give a good handful, but with the does you must be more careful, as the peas are very heating and if given in too great a quantity, will cause the does to pull off their fur and make a false nest, thus spoiling them for show for some time. Place the specimen you intend to exhibit in a rather smaller hutch, keep it extra clean, with a good supply of fresh hay daily. Take it out at least once a day, and give it a real good grooming, first with a rather hard brush, then with one rather softer and finish with a clean wash-leather. After keeping thus for a week, you will find it wonderfully improved, and ready to meet the keenest judge. Always be careful to give them a good feed before sending them to a show."

No. 115—"I have never found any feed for rabbits that keeps them in better health and condition than corn fodder, middlings and bran with cornmeal. This I prepare in the following manner: Take one-half bushel of bran, one peck of middlings, two quarts cornmeal. This I mix, and add two quarts to a bushel of corn fodder cut to one-half inch with feed cutter. Add a pinch of salt, and water enough to stick feed to corn stalks. I never had anything outside of this feed for eight months in the year, and never have a sick rabbit while using this manner of feeding. My rabbitry is 132 feet long by 18 feet in width. On each side of feedway, I have spaces for each pair of hares, 6x8 feet, enclosed by wire netting. My feed room is 16x18 feet, one and a half story high with a well of water in one corner of the room. I never fail to give my rabbits fresh water at least once a day. I have no trouble with diseases, and believe most diseases are caused by over feeding and improper care. Give a rabbit plenty of room to exercise, feed twice a day, see that they have plenty of clean water, and above all things keep away from them and let them alone, and you will have less complaint of sick rabbits."

No. 116—"My bunnies are kept in out door hutches, summer and winter, sheltered alike from damp, cold and wind. They are fed three times a day. In morning, as early as possible, I give a good feed of whole oats (the best that money can buy) or barley. At midday I give them as much greens as they can eat. In winter, of course, in 'greens', I include car-

rots, swedes, celery, beet and other roots. At night, I give a meal consisting of bran, oatmeal and Indian meal, equal parts of each, and well mixed with boiling water, and give warm; or, mixed with bran, barley meal, and pea or bean meal. I give my rabbits any greens that a vegetable garden produces, with the exception of rhubarb leaves, and one other difference, that I give very moderately of cabbages, cauliflower leaves and turnip tops to my rabbits until they are four months old, but after that age they have as much as they like. I always bed my rabbits with sawdust, and I have proved (by a trial of some years) this to be, without exception, the best, cheapest, and by far the most healthful. I often give a handful of good sweet hay, old clover, or dried lucerne to each rabbit, which they much enjoy; and I find, given this way, the hay, clover, etc., prove a cheap and good kind of food. As a change, bread and milk, given occasionally, is also very good for rabbits. The secret of successful feeding is so small that it lies in a nutshell, and the secret is this: Have large and well-ventilated hutches, in a warm and ventilated spot. Give your rabbits nothing but good sound food (whether green or dry) and feed in such small quantities that they will eat up readily what you put into their hutches, and so be eager and ready for their next meal. Anyone with common sense will see two good reasons for doing so. (1) That by giving them what they can eat at once, you do away with the sight and smell of food, thereby saving your purse. (2) That rabbits with the sight and smell of food always in their hutches (like people) lose their appetites, and therefore, by not seeing and smelling food always in their hutches between meals, their appetite increases, and they enjoy each meal. Keep your rabbit hutches scrupulously clean, give as much green food as the inmates can eat, at the same time taking great care to give such a quantity of dry food as will overrule and keep down the tendency to looseness which too much greens are apt to produce. And lastly, bear in mind this rule, that the greater variety you give your rabbits, the more they will thrive. In conclusion, I would advise all fanciers able to do so, to grow chicory, comfrey, carrots cauliflowers, cabbages, parsley, and potatoes, in large quantities."

No. 117—"Good food is unquestionably essential, but the best is certainly not the most expensive. Between the two extremes of what a rabbit will not eat, and what is best to

give it, there is a wide ground for difference of opinion. The real secret lies in the fact that the conditions under which they are kept—i. e. temperature, locality and time of year—all have to be and are taken into consideration, and in their entirety form the perfect plan characteristic of the intelligent, and who is bound to be in time, the successful breeder. Rabbits require much more moisture than is generally supposed. Many complaints, such as scurf, etc., are engendered by too much dry food. The grand point to be observed is the proper portion between the two, and here I advise as a simple rule to be observed, that when green food is given, a handful of good sound hay or clover should accompany it. Much discussion has arisen as to the best green food, and my answer to the question, 'What is the best?' is, 'That which the individual breeder finds he is most successful with. Dandelion I am especially fond of, particularly for does with young, and frequently make long excursions to obtain it. I strongly recommend rabbit keepers who have a garden to cultivate chicory. When green food is scarce or bad, I give the matured rabbits, with satisfactory results, water in its place, and does in and with young, milk, with one-third warm water added; but I prefer, when obtainable, green food, for the properties it contains other than moisture. I conclude my notes on green food with the following, which does not tend to show that the peculiarities of rabbits' taste or appetite are very limited. An old doe, for the benefit of her health, was allowed the run of my yard; meanwhile, those responsible for the domestic part of my establishment threw out the whole of the leaves of a bundle of rhubarb. This was not discovered by me till she had devoured at least half, and I naturally anticipated some serious results. As she appeared all right so, in order to experiment, I let her have the remainder the day following. This was several months ago, and she is still alive and well. Nevertheless, I do not recommend rhubarb or its leaves as a diet. Of dry foods, clover stands at the top of the list, and before corn, that is, if you get the right sort. Oats should be given moderately and should not be the bleached ones. I am rather partial to the Russian oats (black husk). Too many oats rather tend to precocity with the young, and the husk is, moreover, of a very irritating character to the digestive organs. I have stopped scouring by discontinuing them. In any case, select those with thin husks. Barley, though successful with some few, I never use except when



Photograph by the Author.

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TYPE NO. 5.

A long-bodied, rather coarse-boned Belgian with too flat an arch of back, too full and square in breast, and showing a distinct dewlap. Has a beautiful round eye and good ear carriage.

rabbits husk their oats. I consider them of too dry and heating a nature, most especially for indoor rabbits when kept in warm temperatures. Wheat is a good food, and I occasionally vary it by giving a little buckwheat. Gray peas, soaked 24 hours, and strained, are also a capital food. Rice I totally object to, neither do I care for potatoes, much less their peelings. I have never yet found it necessary to follow a diet table which gives a constantly varying food, but adhere to the plan I have successfully adopted almost continuously since I first kept rabbits, now nearly 20 years. It has the merit of economy, and that the results attained are equally advantageous the specimens produced by me, extending over a lengthened period, are, in my estimation, abundant proof."

No. 113—"In the first place, youngsters are ready to be taken away from their mother when six weeks or two months old. The first meal should be about 8 a. m., and should consist of hay. Rabbits are particularly fond of hay, more so if it be sweet. After it has been trampled on, bunny, who is a very particular animal, will refuse to eat it; so in order to get over this, throw in just as much as will last the day. Along with the hay, in winter and beginning of spring, give the rabbits swede turnips and carrots, cut up into small pieces; in summer, give them a small quantity of green meat. Mind, I say small quantity, because we are now dealing with young stock. I do not advocate the disuse of green meat altogether, but I warn the inexperienced against giving young stock too much of it; and I reiterate what I have previously said, that if you do the effect will be disastrous. Evening feed should consist of either crushed oats or a mixture, in equal quantities, of barley meal, pollard and bran, prepared with boiling water, and of a consistency which may be understood by the use of the term 'crumbly.' Now, before proceeding further, let me say that after I clean my hutches, by scraping and brushing out of all accumulation of matter, I sprinkle the floors plentifully with sawdust, more particularly in the corners which have obtained the most refuse. (Rabbits also in this are very clean, nearly always going to one particular corner.) The sawdust absorbs all moisture, and so tends to keep the inmates comfortably dry under foot—a very important thing. Chopped straw is a very fair substitute for sawdust, but there is a difficulty connected with it, which is the inability of the majority of fanciers to obtain it. On the

other hand, sawdust is equally as good, and easier to be procured. If a rabbit is seen to grow big about its belly, discontinue the use of green meat altogether for some days. Give the subject or patient plenty of exercise, and thus save its life, because, if this is allowed to go on for any long period, it terminates fatally. The poor little thing, suddenly tumbling on its back, begins throwing itself violently about, and exhibiting all the symptoms of a child taken with a convulsive fit. The disease does not attack an old rabbit except very rarely, when its existence finishes by a wasting or pining away. I keep my young stock until they attain the age of from four to five months in warm lofts, and they have always water to drink. The portion of my pets which I keep in hutches I give water to drink, in warm weather, once or twice a day. My *modus operandi* of feeding for exhibition is as follows: Morning, plentiful supply of hay, and a piece of turnip, carrot, or green meat. Evening, a mash consisting of either barley meal and pollard, bran meal, or pollard and bran in equal quantities, prepared with boiled linseed. If rabbits are fed according to the above, they will always be healthy, with a bright look about them, and withal shapely, plump, grand, and always a source of pleasure."

No. 119—"It is now about 49 years since I bought my first rabbit, a doe. She had seven or eight young ones, and I was cautioned particularly against giving them too much green meat. I fed them on the best of food—oatmeal, barley and pea meal, with a little green meat; at three weeks old they showed signs of pot bellies. I gave them less green meat. They grew poorer and worse, and at last nearly all died. I went on for years with but indifferent success, and through the teaching of an old friend I at last found that I was starving them on the best of food, namely, feeding them against their nature, and not giving sufficient water to nourish them. I altered my course, and have had the best of success. I do not lose one a year, and a pot bellied one I have not had for years. I feed my does well with barley, oats or pea meal, mixed with pollard, wet with cold water just sufficient to roll in crumbs. I feed them with this, night and morning, and with as much green stuff as they will eat, from the day the young first crawl from their nest until I kill or sell them. They have always green stuff before them, taking away each time I feed them what is left from the previous meal; but it should not be given wet. I as a rule get it one day before I want it, and

spread it abroad, to get thoroughly well dried before feeding with it. With most rabbit keepers, their rabbits will leave anything for a bit of green meat. Mine will leave green stuff for any dry food. I lately killed a common prick-eared rabbit, nine weeks old, for a pie. The kidneys were covered with fat, and larger than those of a common wild one. Rabbits can in this way be raised to give a good profit for eating purposes. All they require is good room, not too confined for air, to be kept clean, and regularly fed according to my rule, and they will pay the keeper. Let some four rabbit keepers try this. But I must caution them against one thing—not to give their pets a lot of green stuff one day, and the next none, or they will gorge, and come to grief; but if regularly fed, and plenty is always before them, they will thrive and prosper. Do not scald their food—it is against nature; and instead of littering them with sawdust, use short, cut straw; they like it better, and amuse themselves by nibbling a bit here and there.”

No. 120—“As one of the largest breeders of poultry and rabbits in France, I use this method of feeding: The dry fodder, such as hay, etc., is always placed in the rack, the grain and oats in the trough. The soup and potatoes are given in a dish. The trough and dish are kept scrupulously clean, so that the food has a good flavor; and above all, care is taken that it is not contaminated by the urine of the animal. The midday meal comes from the kitchen garden. By preference the mothers have milk producing plants, such as lettuce, groundsel, bindweed, plantain, vetches, the vine of French beans and scarlet runners, pimpernel and fennel. Parsley is also very good, but it is only given to the does weaning their young, as we know the property of parsley is to dry up the milk. Cabbage stalks should be divided and, like cabbage, given in small quantities at a time; as also should the young shoots which come from the pruning of fruit trees—the peach excepted—the vine, young shoots of the elm, poplar, mulberry, lime, nut and the willow. The roots are carrots, parsnips, turnip, cabbage and beet root. This last is very watery and cold, and should be mixed with bran or meal. All these, accompanied with oats, barley and after-grass, form an excellent and very varied food. It is good to accustom the young rabbits to eat soup; those which begin early are not affected when separated from the mother. This soup can be made from the water in which the plates

and dishes are washed, and in the water are boiled the peelings of vegetables—leeks, potatoes, etc. In the winter, to excite the appetite, I occasionally mix thyme with the dry food. The winter food being very dry, liquid must not be forgotten. Water is indispensable in the summer, also for the doe's when littering, to calm the fever, and even during suckling, which causes must thirst. When the young are obliged to be weaned before they are six weeks old, they should have milk given in small troughs which have been well scalded and cleansed after each time of using. The food should be distributed with care, attention being paid that all are able to partake of it at the same time, or some would pine. After each meal, the racks and troughs must be emptied. Should any food be left, the animals having breathed on it, would not touch it after. Potatoes must always be boiled. In a raw state they are hurtful. Wet grass or herbs, as well as that mowed or cut, and left in the sun, are bad. The most injurious herb is the red chickweed, found with the wild endive."

No. 121—"When the bowels are relaxed by the frequent use of green food, I advise the use of a mixture of meal and water, or better still, porridge made from Indian meal; and, for the benefit of those who do not understand the approved mode of making meal porridge, I will explain the manner in which I make mine. In the first place, I take a saucepan which holds half a gallon, three parts fill it with water, and place it on the fire. When the water boils, I put in it a packet of cattle spice. The meal should then be taken up and sprinkled in with one hand, while the contents are being stirred with the other. In this manner proceed until the porridge has boiled so thick that it cannot longer be stirred. It is then poured or spread out on a board or piece of iron to cool. This quantity is sufficient as a meal for 20 full-grown rabbits. Some people may say, why go to the trouble of making porridge for rabbits? These people little know that it is the least troublesome method of feeding them. I can make the above quantity in about ten minutes. During the summer months I give this porridge as the evening meal to my rabbits at least four times a week. I sometimes pour boiling water (in which I mix a teaspoonful of curry powder) over barley meal, and mix into a dry mess with bran; and this is very good as a change. Oats, and what few vegetables they get, constitute the morning meal all the year around. I have

also plucked the wild sorrel and dried it for winter use, having found it a capital preventive against scurvy, which in some rabbitries is very prevalent during the winter months, although I can safely say that with my mode of feeding rabbits they are seldom or never troubled with this disease.'

No. 122—"I fearlessly assert that rabbits require a preponderance of moist food; that a great bulk of the diseases to which they are subject and many deaths occur through giving so much dry food. Clover I place at the top of the list, from the large quantity of saccharine matter it contains, which I have mentioned is requisite for the development of animal heat. It should be the first cut, as fine and leafy as you can get, and take care also to have it as green as possible, discarding at once any brown or heated stuff, as you might almost as well give them sawdust to eat as this. The same remark applies to hay. Middlings is one of the most essential dry foods, and contains a large proportion of bone-forming substances (5 per cent.) and contains, also, 18 per cent. of flesh forming material, of which latter peas contain the highest, 25 per cent. while in bone-forming substances, only contain 2 per cent. Care must be taken to get the right sort. Biscuit middlings must be insisted upon. The following has been for the last ten years, and is now, my method of using the above: I infer a truss of clover has been selected. I have a box that will contain sufficient for the day's supply. At the bottom is fitted a drawer, immediately above which, nailed to the side of the box, is some one-half inch mesh wire netting—in point of fact, it resembles, and is to all intents and purposes, a sieve. The clover being put in at the top, the small or heavy particles pass through into the drawer. One handful of this to three of middlings is scalded, and thoroughly mixed together—not wet, let it be crumbling—and given warm to each rabbit the first thing in the morning (the earlier the better) and a similar allowance about 7 in the evening. Naturally they live chiefly on vegetable diet, I contend that any food which interferes with what Nature has prescribed for them should be looked upon with suspicion, even though they are kept in hutches. With this mixture of clover and middlings, their appetite for green food is increased. The last thing at night they have a similar feed as at midday, and those that have young six weeks old have at both these meals, in addition to the oats, some gray peas that have been soaked for 24 hours in cold water and strained. I observed just now that green food

should be liberally given, and I wish this to be accepted in its full sense. They will not eat too much of it. It must be continued with scrupulous regularity. It is the departure from this rule that generally produces pot belly—all today, and then none for two or three days. If by any chance you have a break of this kind in supplies, a small quantity must be given at first when you resume, increasing the supply gradually till you work up to the regular allowance. I might add, where oats are used as the staple food, a little water given twice a day will be found beneficial. I have adopted a similar plan when green food is scarce, and strongly recommend it at that time, whatever the system of feeding may be. At seven or eight weeks, does with young on them should have added to the middlings and clover one part of barley meal, which will assist the young in moulting. 'How much am I to give them each time of feeding?' some of our friends will ask. They must find this out for themselves. No rule of quantity can be given. And here I must enter my protest that rabbits are enormous eaters, and I meet it with the retort that their keepers are not infrequently enormous wasters. Of course, it is easy enough to throw in two or three handfuls of oats and a little green food, repeating this at intervals, ad infinitum; but such feeding is expensive, and is not productive of good results. A simple rule of feeding is to observe whether any food remains from the previous meal, and if such should be the case, keep reducing the quantity given. I like to see an empty trough when I go to feed, and the rabbits come up to it when I open the hutch door. It is quite desirable to let the youngsters have some milk while still on the doe; in fact, a favorite food with a few of our breeders is a mixture of middlings, barley meal and milk, from the time the doe kindles. I prefer getting them to drink it before the morning and evening meals, commencing directly they leave the nest. Some will not take it, but those that will gain a considerable advantage. If cows' milk is used, a little warm water should be added. Continue with either as long as you perceive beneficial results derived thereby and also remember that it considerably helps more matured animals, especially when out of condition. After they are weaned, gray peas soaked for 24 hours in cold water and strained may be given them at pleasure. Give also the mixture of clover, middlings and barley meal, only particularly observe that none is left from the previous meal. Do not be afraid of green food, but let them have plenty of dry clover at

the same time. It is advantageous to let them have peas as soon as they can eat. There is one disadvantage, however, attending this plan. The peas act as a stimulating food on some does, who eat them greedily. A method adopted by some is to shut her in the bed place while the young eat the peas; but does not infrequently resent this estrangement which sometimes is very objectionable. For this and similar reasons I lay great stress on giving the young milk until they are taken from the doe, and, where obtainable, that of the goat. When the young are about four months old, or even before, they must, if kept together, be closely watched, particularly if you have two bucks occupying the same hutch; and if once separated, they must not be put together again. A buck and doe can generally be kept longer. Carrots, of which white ones are the best, may be given them when green food is scarce, but I object to many of either. There is just one word of caution that must be given as to giving gray peas. Of course, it will be generally understood of what a forcing nature they are, and therefore, should the rabbits run at the eye, or have any apparent complaint, in whatever form it may present itself, discontinue the peas at once, otherwise the disease will be aggravated."

No. 123—"Rabbits that are reared for the table should, if practicable, be kept in large quantities, loose, and not in single hutches. When the doe is suckling, all should be well supplied with food, which should be soft and succulent, but of not too aperient a nature. Young rabbits' teeth are not strong enough to masticate whole oats or barley, and if grain be given them, it should be bruised or crushed until the rabbit has attained the age of two months. They should be fed with a good selection of green, succulent food, a large supply of clover and hay, and enough corn to keep them in condition; the latter should be crushed until the young rabbits are about three months old. The profit will depend greatly upon the judgment with which this matter is managed. They may be put up for fattening at any age between three and six months. When taken from their mothers, two or three litters should be allowed to run together in either a pit or shed, care being taken that it is perfectly dry, or diarrhoea and rot will ensue. The average age when taken from their mothers will be two months. It is difficult to say exactly what amount of corn should be given, but it may be stated as an average that a little under half a pint a day will be amply sufficient for young

ones of this age. A peck—16 pints—should last nearly five weeks for each one. A peck and a half, then, will do for seven or eight weeks, and this will bring the young ones up to four months old. They may be fattened then, or they may be kept a month or two. With reference to the corn for these two months, oats and barley are about the best. Let these be given alternately, either daily or weekly, and for a change a little meal may sometimes be substituted. Oilcake is very good, if you can get them to take it, but their appetites have first to be educated. Bread crusts are very good and very profitable; they can be bought almost at a nominal price, and are very good flesh producers. If very stale, the crusts should be slightly soaked, but should not be given with too much moisture in them, although, if you can afford to give milk, there is nothing better to bring them on, and in this case they may be given as moist as possible. Tea leaves mixed with the corn are also cheap and beneficial, as are also potatoes and potato peelings. An arrangement can easily be made with a baker for his refuse potato peelings, and among these will be found a good deal of the vegetable itself. Boil these and give them hot, mixed with bran. Scrupulously exclude bran from the corn trough; it is often given to make the corn go further, but it will be found to have quite a different effect. A great amount of the success will depend upon the judicious administration of roots and green stuff. It is important that green food should always be given dry. Some advocate the cutting of it a day or two before it is required; but it would be better to give it as fresh as possible so long as it is free from moisture. Apples and pears are very much liked, but are not advisable for a regular food. Hay should be given very liberally, as it will counteract any bad effects produced by too much green stuff. Keep the place scrupulously clean, and give straw or sawdust for bedding. This treatment will do nicely till the rabbits are selected for fattening; they will then be not fat, but fairly plump, and in a thoroughly healthy condition. The males should then be cut, an operation which is very easily effected, and improves both the flesh and the temper of the animal. Then place the selected ones in rather small hutches, not too many together, and commence the cramming process. Oat and barley meal are the two best and cheapest flesh producers. Mix these with tea leaves or boiled potatoes, and give twice a day, warm; also supply well with sweet hay. Milk sweetened with a little sugar is an excellent fattener, but

rather expensive, but a little now and then will be greatly relished. Select the green stuff carefully, and do not give it either too liberally or too sparingly, as the former will cause looseness, and the latter constipation, both of which, the former especially, will greatly hinder your work. If fed carefully and judiciously in this manner, it is surprising how rapidly they will put on flesh, and that of the best quality. As soon as each one is fat enough, he can be taken away and killed.

No. 124—"Here in this section (Maryland), whenever the winds bring continued rains from over the Atlantic ocean, the dampness is too much for the constitution of the hare unless comfortably housed, but through the perfectness with which Nature has endowed its mind with contentment, renders this species of rabbits capable of much confinement, for as certain as I can keep their minds contented and in a healthy condition, their bodies are sure to thrive. Thus weather cannot prevent the keeping of them; for here a house can be built which for a small amount will keep a surprising number happy and thrifty, if well cared for. One article of diet that I find to be very healthy for my Belgians, that probably many breeders and fanciers do not use, is the southern black cow-pea hay. It is easily grown, even on poor land, and can be cured so that the hay does not lose its green shade. I give my rabbits nothing but pea hay in the evening, and the next morning it is all gone—leaves, stalks, stems, pods, peas and all. The rabbits seem to be fond of eating at night, and I have an idea that they spend more time sitting out on a pile of hay chewing away with a never tireless speed than they do in creaming."

No. 125—"Two years ago I had the chicken fever, just as I see so many around me having it today. We lived in sunny Kansas at the time, and my poultry certainly did do well. I had it all planned out how I would buy or build an extensive plant and give up the tedious practice of medicine, and make my living and that of my family by raising fancy and market poultry. I believe I would have succeeded had I remained in Kansas, but alas! for me, ill health seemed to point to a change of climate as advisable, and in coming to Colorado I brought my poultry ideas with me. I see now that it would have been better if I had left them in Kansas, where the rearing of poultry is as easy as the proverbial "rooling off a log." for Colorado is not an

ideal poultry climate, and there are few who succeed here. After purchasing as good an incubator as I could get and buying hens from my neighbors at from \$4 to \$6 a dozen, I started in the early spring, to raise chickens. How I worked with that incubator! First in the cellar, and then in one of the living rooms, succeeding in getting 50 percent hatches only to have the poor little things die one by one, until at the end of my summer's work I had raised in all less than 50 chickens. I did not regret my wasted work so much as my complete humiliation at having made so flat a failure. Different methods were tried—incubator hatching, hen hatching, brooder raising, hen raising, dry feeding, moist feeding, whole grain, such as wheat, corn, millet seed and the same cracked or in meal, the result was always the same. In the meantime, we had been hearing a good deal about the Belgian hare. Others around us had been breeding them with satisfactory results, and had much to say about the quality of their meat, and we began to wonder if they would not be more successful as meat producers for us than poultry. We were not at all confident of the result of our experiment, but finally ventured to invest in a trio, which we obtained from a neighboring breeder. Shortly afterward, seeing that they were such economical feeders, that almost anything would make a meal for them, we made another visit to the rabbitry and purchased four more young does. As the possibilities of the industry began to dawn on us we began to transfer our attention from poultry to hares. Meanwhile, our neighbor of the rabbitry, having interests in another portion of the state, and wishing to move there, offered me his entire rabbitry, but I felt that I could not afford to make such a liberal investment, so inducing another neighbor, who was getting the hare fever, to take one-half, I purchased the other half, making for me some 58 or 60 Belgians. This was some more than I cared to keep on hand, as my does were breeding and rearing young ones all the time, so I began to sell off my surplus stock. I soon disposed of what I had to spare at good prices as breeders, and with the money thus obtained I began to invest in California stock, bred mostly. I have at present a fine lot of hares from all the leading strains, and have not had any cause whatever to regret my original or any subsequent investment in Belgian hares. My reasons for taking up the Belgian hare against poultry or any other branch of live stock are many. In fact,





Photograph by the Author. Copyright, 1961, by the New England Belgian Hare Co.

TYPE NO. 6.

The leading Belgian of the world in color; slightly coarse in head and front limb, but splendid in general style and shape of back,

the advantages of hare raising are so many compared with the disadvantages, that no other branch can compete with it. Perhaps the foremost of these is economy in feeding. The cost is much less than the cost of rearing poultry, and when the industry reaches a meat basis, this alone is so much in favor of the hare that the profit can be easily seen. Hares utilize much that would otherwise be wasted. Weeds, weed hay, refuse from vegetables, tree and shrub limbs, prunings, in fact, almost anything in the line of forage, with but little grain, will raise a hare to killing age. The hare can be raised in small space. A barn will accommodate enough stock for one's own table, and one need not be seriously inconvenienced by having them in odd corners, either. A small, low building, wired in front and boarded up ends and back makes a good run for young stock. You do not have to wait for a doe to raise her litter of young before she will bring you another. You can breed her six times a year and she will never have less than six to offer you at weaning time. If you do your part by them after that time they will soon be ready for the table, and the loss is comparatively small. They are perfectly sweet and clean, eating nothing that is suggestive of filth. Give them room to stay out of filth and they will always be found spotlessly clean. How many of our meat-producing animals can you say this of? And yet, this is an important item. The flesh is, to my mind, at least, incomparable for table use. Such fine-grained, white, delicate, juicy meat cannot be found in any other animal. It is Belgian hare, pure and simple, and there is nothing else like it. There are no lice or mites to fight in rearing Belgian hares. There are few diseases to combat, and what there are can be checked or avoided, as a rule, by change of diet and guarding against draughts. They can be fed at any hour of the day or night, thus making them the business man's friend. They are beautiful and rich colored, symmetrical and graceful, making them favorites of the fancier. As the poor man's boon there is nothing that can take the place of the Belgian hare. I think and hope that prices for breeding stock will soon be low enough for every poor man to own some. These are a few of the reasons that I am a breeder of Belgian hares. There are many other reasons for my being an enthusiastic fancier, Belgian hare writer, member of Belgian hare clubs.

LESSON EIGHT.

HOW TO MATE.

A FUNDAMENTAL rule in breeding is, that like begets like. While care, attention and feeding mean a great deal, it is impossible to find in the offspring standard qualities lacking in buck and doe.

Mate only sound, healthy specimens. They should be at least seven months old when mating.

Take the doe to the buck's hutch for service. Being in a strange place, she will be less liable to fight if not in season. Do not leave them together more than a few minutes. If the doe is unwilling to breed, take her away and try again next day. One good service is enough.

Half the battle in producing fine specimens is in the mating. It is a branch of the breeding which requires the most thought and attention of the fancier, as goes without saying. Fine Belgians are not the result of chance, but of scientific mating.

When the list of prize winners of a show is announced, you will find many breeders, particularly the inexperienced ones, seeking out the owner of the first prize buck, and showing themselves willing to pay the prices which he asks for service. Now, that is all right if it is done with care and discrimination. However, in many cases people go astray. How foolish it would be, for instance, to mate to a top-scoring buck a doe of lower score which, perchance, was strong in qualities in which the buck was strong. The result would be offspring "one-sided." The young would have the strong points of both doe and buck clearly defined, but the weak points of both would appear in the young.

Contrast the strong and weak points of each, when you mate. If the buck is strong in certain requirements, mate

him to a doe which is strong in the requirements where he is weak. Then there will be some science in the mating.

To illustrate, it would be foolish to mate solely for red feet because both buck and doe were strong on red feet, but both weak in, perhaps, ear lacing.

I have known buyers to order from a price list, saying, for instance: "Please send me such-and-such a doe, mating her before shipment to such-and-such a buck." The buyer who gives such an order usually lives some distance from the breeder. That desirable young will result from such mating is wholly a matter of chance. It is very foolish for a buyer to give such an order to a breeder.

The object of ever reputable breeder is to please his customer, and if he is a capable breeder, as the buyer expects, he should have the right to use his judgment, breeding the customer's doe to a buck so that desirable results will be produced in the offspring.

Many of the breeders in this country engage my services from time to time to mate their stock. I visit their rabbitries, examine their stock and advise the proper matings. This is a branch of the industry requiring the most thought and skill. It is impossible to lay down a set of rules for the guidance of the breeders, for conditions differ with each mating.

There is one matter in connection with breeding which I regard as very important but I do not remember ever having seen anything in print about it. It is a subject about which the average breeder is entirely in the dark. Breeders of horses, cattle, poultry and dogs, if they have had any experience at all in producing fine specimens, know all about it. I mean the contamination of the blood of the female by improper mating. If a poor buck is mated to a good doe, whether by design or accident, her blood, which circulated through her unborn progeny, bears the qualities transmitted to her young by the buck. Suppose a mating of this kind to have taken place, and the young born from it are found to be short of body and deficient in ear lacing. Suppose the breeder notes the failure of the mating and resolves to do better next time, so mates the doe to a better buck. When the young come along, they will have in their blood the taints transmitted to the doe by the first buck, and which she has not had time enough to get rid of. It will not take more than two or three undesirable matings like this to ruin, for breed-

ing purposes, the best doe that ever stood on four feet. This shows that the breeder must be extraordinarily careful in his matings. If he buys the finest stock in the world, he will ruin the blood of his does by improper matings unless he is on his guard. This is one of the hidden causes which drive many amateurs out of the business. They put in a lot of money into the finest stock and then proceed to ruin it in the manner described.

It takes some time for the female to throw off the blood points in her system transmitted by a buck to the young through her. The length of time is a matter that cannot be stated exactly. I have known a mare, months after the death of a stallion, to be bred to another stallion and produce a colt with all strong points and faults of the dead animal.

When poultry breeders, by accident, find their best hens mixed up with undesirable roosters, they let from eight days to two weeks elapse before trying to do anything with the hen's mating.

The breeder must study the points of mating for himself and make matches which experience teaches him produce results. Every breeder has his own secrets for getting famous specimens.

Belgians usually may be mated when six months old.

The does should be bred, as a rule, once in 10 weeks.

Belgians are most useful as breeders for about two and one-half years.

As to in-breeding and line-breeding, the careful fancier, wishing to take no chances on deteriorated stock, will follow the latter course, and will not inbreed. I have known in-breeding, practiced to a mild degree, to do no harm, but there is always a doubt. There certainly is no doubt in case of line-breeding.

LESSON NINE.

EXPERIENCES IN MATING.

No. 200—"An advantage in does littering about the same date is, that should any of them have too many young, one or two of them may be transferred to does with small litters. If it is at all advisable to do this, the sooner it is done after birth, the better. A doe may show signs of debility, and so the rearing of two or three less will assist restoration to her original strength. If any nurses should be found requisite, the little Dutch rabbits are better than any, for they are of a kind and tractable disposition, have generally an abundance of milk, and are strong and hardy. As a rule, each doe will bring up her own litters the best. Sometimes only one or two of the most promising in the litters are left with the doe, in order that they may be larger, and more fit for exhibition or stock purposes, the others being destroyed or put out to nurse. Between the 15th and 18th day from birth, the young rabbits may be seen peeping out from their nest, which in a few days more may be moved, and the hutch given a thorough cleaning. If another well-ventilated equally warm hutch is ready to receive them, it will be found convenient to shift the family bodily in order to allow the recently occupied hutch to be thoroughly cleansed and disinfected, and again made ready for use. When the young rabbits begin to leave their nest, they soon commence to feed with the mother, and when they are from six to eight weeks old, they may be removed from her. Taking away one or two of the stronger ones each day is perhaps the best plan, as this gradual removal seems better to dry up the milk; and when all the family are removed, a little salt in the does food will be beneficial, as it tends to dry up any milk that remains. With good feeding, she may in ten days again visit

the buck, although a few extra days of delay are an advantage to a doe which has brought up a large litter. The young rabbits may be allowed to run together until four months old, but after that age should be separated, for they are rather pugnacious, especially the bucks, and require a hutch for each sex, and even then they will frequently quarrel and fight. In a few weeks' time it is the safest method to give each buck a hutch to himself, for to allow them to remain together is to run the risk of their injuring each other, and totally destroying their usefulness for stock purposes. The does are less quarrelsome, and half a dozen of them may remain together until selected for pairing.

When from eight to ten weeks old, young rabbits pass through a moult. This is a critical time, during which they require extra care, but after that period is over they will probably thrive, with the proper attention. For the first few weeks at least, they should have a liberal supply of crushed oats, carrots, turnips, etc., will be a safe diet; and the warm mash, sweet hay, and plenty of fresh (not cold) air, must be freely given. This last is highly important, as a great proportion of the deaths of young rabbits are attributable to the want of fresh air, and to want of cleanliness and due care as to the right kind of food. Giving improper food is an error commonly committed, young rabbits being more frequently seen suffering from the effects of injurious food than from a super-abundance of the right kind. Only a very small percentage of the rabbits should be lost, except from an epidemic or a series of accidents. Young rabbits consume a great deal more food than the matured ones, in proportion to their size, and although they are constantly eating, they will not injure themselves, for they have to provide for the building up of their frames, and not merely to maintain them, as is the case with adults. Very few will suffer from pot belly if the food be good, and given in proper proportion. The quantity to be given to half a dozen ten or twelve week-old rabbits will soon be ascertained. Young rabbits are very fond of scratching their food out of the dish, and the latter should, therefore, be so constructed as to prevent such waste. There are many kinds of troughs which may be devised to prevent waste of food, and secure individual, orderly eating."

No. 201—"Breeding stock should be bought with care and judgment, as on this will depend the future success of the rabbitry. The selection of young rabbits from four to six months



Photograph by the Author. Copyright, 1901, by New England B. H. Co.

NEST OF YOUNG BELGIANS.

The camera was poised over the nest and pointed vertically. The young are shown in characteristic attitudes. In feeding her offspring, the doe arches her belly over the nest and the little ones rise on their haunches to suckle.

old is advised, as they have then passed through their first moults, which are often so fatal to them. It is not desirable to pair rabbits too young, as experience shows that, when fully grown, or nearly so, they have greater strength, and the breeder gains in quantity of the progeny what he would seem to have lost in number by not having had litters when the does were two or three months younger. It need hardly be added that, the more perfect and healthy the pair is, the greater the certainty of good litters. The buck and the doe should not be together in the same hutch many minutes. For pairing, the months of February or March are the best to insure healthy stock. Yet, when rabbits are kept in warm, healthy hutches, they may litter at any time during the year, though it is not desirable. Four litters during the 12 months are ample; and if any longer time than three months be allowed between any litter, it should be during the coldest weather, when it is decidedly advantageous to give the does (especially old ones) a little extra rest. During the inclement weather of January, extra care and warmth and feeding must be given to does with young, or which are about to kindle, and any little additional attention will be amply repaid by the health of both mother and offspring. When within a few days of the time for littering, the doe will furnish sufficient evidence of the fact by biting the straw of her bedding into short pieces, and carrying it and the hay—of which she should have an abundance in her mouth to some favorite corner of the hutch. As soon as this is observed, the hutch should be at once cleaned and disinfected, for this will be the last thorough cleansing it will have for some time. The precise day of kindling will be known by reference to the stud book, in which are entered the dates of the various does visiting the buck. This stud book should always be kept; and, in addition, it is a good plan to fix to each hutch labels of wood or of slate, 2 and 1-2 inches square, bearing dates corresponding to those in the stud book. The book should also give the number brought forth at each litter, and it thus becomes a valuable record of the yearly total produced by the doe. The hutch labels can be easily cleaned and prepared for other dates as required. This plan is by far the best, and the least trouble, as by it you at once can see when the interesting event may be expected."

No. 202—"The length and weight of a doe should regulate the time to breed. As a general thing, a doe should not be bred until she weighs at least eight pounds, and has an alto-

gether racy appearance. If you are breeding for the fancy, and wish those extra long hares, wait until both buck and doe are eight months old. An important part is to mate the doe to a buck that is strong in those parts where the doe shows a weakness, and vice versa. This will tend to eliminate the defects of both the parent stock in the offspring. Another point: The foundation stock should be of some good pedigreed strain. This is all important. Fortune never smiles on the haphazard breeder. One must know what the particular marking strain has accomplished in the past, and the proper way to keep posted in the matter is to have a complete record of your stock. One strain may be weak in a certain point, and oftentimes reproduce it with startling regularity. To avoid this, you must know to a certainty what other strain you mate to that is free from this weakness, or you will never reach the top round of success. Thus you may readily see the importance of pedigrees. In selecting your brood doe, the first property to receive attention is color. She should have a rich red coat, rather inclined to a dark shade, should be of good length, not too fat, and her coat possess a lustre. She must have good under as well as top color. Next for consideration comes shape. The doe should be of good size, long bodied, and limbs as fine as possible. The more nearly perfect your doe in this respect, the better your chances for getting shapely youngsters. If it is not the lot of the doe to possess the desired color, be sure you get the fine front and gracefully rounded haunches at least, as in the transmission of this property she is very strong. Taken as a whole, your brood doe should have good length of body, be fine limbed, have plenty of ticking and ear lacing, well colored front and hind legs, rich body color, slim, neat head, eye large and full. Let the buck be a shade lighter, but possessed of good general body color carried well down the sides and haunches. Don't tolerate the grayish coat for a moment. The fore legs should be free from ticking, and the hind feet well colored up to the hock. He should possess good shape and be of lively disposition. Try and get a buck with as lean a head as possible. It has been found that a young buck is best to transit this property. You will also get more vigorous and lively progeny from such an animal. To sum up, your buck must be of the highest excellence, being particularly strong in head properties. When bred, the doe is placed in the hutch where she is to rear her young, which are supposed to arrive after 30 days have elapsed. During gesta-

tion she should be provided with nourishing food. About a week before the family is expected, place a handful of clean, soft straw in the doe's hutch, with which she is to build her nest. She may not use it immediately, but don't worry; just allow her to pursue her own course. Water vessels and feed cans should be fastened to the side of the hutch, as she sometimes sees fit to use these also. Fresh water should be kept continually before a bred doe, as an abnormal thirst is apparent at the time of kindling. For best results, she should be kept as quiet as possible during the whole period of pregnancy. Look into the nest box after the doe has kindled and ascertain if any dead are present; also note the number of youngsters. Any undesirable ones may be killed. In case of 10 to 14, a nurse doe is necessary. She can be a cull Belgian or a common white or Dutch rabbit, and both being bred at the same time will kindle together. If the nurse is needed, her young may be destroyed and those of the pure bred Belgian divided between the two. The doe possesses accommodation for but eight young, and it would be the height of folly to allow her to raise more. Better results are obtained by allowing but six youngsters to a doe. An important point to be observed in rearing the youngsters is the feed and care of the nursing doe. She requires milk-producing feed, such as carrots, peas or any of the numerous succulent plants which abound on all sides. Bear in mind, she not only has to supply nourishment for her own body, but also a good-sized family. Plenty of food should be before her at all times, that she may help herself when so inclined. Too much stress cannot be placed upon this point, and if you desire quick maturing, vigorous stock, give proper attention in this respect. A little bread and milk is much relished by a nursing doe and aids her in supplying nourishment for the youngsters. This may be fed two or three times a week if convenient. At the age of two or three weeks, the youngsters begin to show themselves. They may be rather timid at first, but this soon wears off as they become accustomed to their surroundings. At this time, it is well to place a small dish, or box of dry bran, before the entrance to the nest box. This not only encourages their remaining out and enjoying a breath of fresh air, but it is also an excellent feed. Of course, other feed, such as oats, alfalfa hay, etc., will answer the same purpose. The youngsters may, under ordinary circumstances, be weaned at the age of six weeks. They should by this time, have a good start and be able to look out

for themselves. Give them a good runway, say six to ten feet long by two to three feet wide, so they may exercise and lengthen out. This also promotes early maturity and aids their attaining that racy appearance so much coveted by all real fanciers. At the age of ten weeks, separate the bucks, as they may cause much mischief if allowed to remain with the does. If raising stock for market, caponize the bucks when about four months old. They will fatten quicker and make much better meat if this method is followed. Always keep the little ones covered with the fur provided by the mother until they begin to grow their own coat. Keep your young hares until they are about three months old before you sell them, and both you and the purchaser will get a fair idea of what they are going to look like when grown."

No. 203—"It is always better to breed from rabbits aged about ten or twelve months, for the offspring are generally much stronger and get on a great deal faster. The young fancier should always put the doe to the buck, and never the buck to the doe, and the latter should remain only a few minutes in his hutch. The spring time is always the best season to pair the does, although, if a rabbitry is kept warm and comfortable, litters may safely be reared, but never as well as in the months of February, March and April. I generally allow my best does to have only two litters in the year, while the second-rate ones have three. I always take care that my does suckle only about three, and in some cases four, but never any more, so that the young ones—if the mothers are good milkers—become large ones, and if of the right exhibition color, they fetch a good price, and amply repay me for those I have destroyed. During cold weather, the doe and her young should be made warm and comfortable, and well fed on good food. Satisfactory results will then follow. I keep a few Dutch does. They are excellent mothers and very good milkers, and by this means all the litters from the other does are reared. When does are only allowed to breed two litters in the year, the young may remain with their mothers until they are almost through the moult, and I find that they thus do much better, and retain more strength in battling through, scarcely a young one being ever lost. The fancier should have his hutches cleaned for his does before they are about to kindle, and the time for kindling should be recorded in a stud book, so that the proper dates may not be overlooked. Mice should be kept out of the breeding hutches if possible, for breeding does do not like

them, and often scatter their litters about the hutch floor, with the notion, no doubt, of protecting them. It is a good plan to bring a kitten up among the rabbits, and this can be done very safely by putting a new born kitten to a doe rabbit just kindled, for she will suckle and bring it up to a given period, and thus domesticated it will do the rabbits no injury when matured, but will only kill the mice in the rabbitry. Before the doe kindles, I take care to let her have a copious supply of cold water, because after kindling she becomes very thirsty, and if the thirst is not quenched, either in this way or by giving succulent food, she may destroy her young to satisfy her craving. When I have my does in kindle, I am always mindful, in entering my rabbitry, especially with strangers, to go in quietly. Above all, keep strange dogs out of the rabbitry, or much alarm and mischief may occur. When my does kindle, I wait four or five days—unless I have Dutch foster mothers ready at the time—before I peep at them, because some does do not like their young ones disturbed; but some old breeders I have will look on while you examine the little family, apparently unconcerned and will, when you replace the nest box, carefully inspect them and, finding all right, will leave them and retire into the feeding and sleeping compartment of the hutch. I have found that it is a very good thing to give young rabbits a little green parsley, which tends in many instances to prevent pot belly among them. During the whole of my experience, I have had only one case of this kind in my rabbitry; but scours I have had in abundance, but never after I gave up feeding on cabbage, lettuce and turnip tops."

No. 204—"I would advise you to buy some good does to start with, and be sure they are pedigreed stock, and have them bred to the finest bucks possible. This is the cheapest way to begin. If your means are limited, buy a few really good does rather than a number of inferior ones. It certainly pays to get the best. A fine buck from imported stock, or imported himself, is always a good investment. They cost money, but bring in an income from the start. If you can't afford to buy a mature buck, a good way is to purchase a youngster from celebrated stock. In a few months he will be useful and profitable."

No. 205—"Belgian hares may be used at seven or eight months, but not before, if it can be avoided. Bucks that have been once used stop growth, and rarely improve in condition.

I like an aged buck and a young doe, then we get by far finer specimens as far as ear and size go. I may add, for the information of amateurs, that they will often find rabbits born without hair (fur) while others will have quite long coats, like satin. I attribute the cause to the does being in ill-health, and kindling too soon after a previous litter. The young in this case always appear puny and delicate for days. I am of the strongest opinion that no rabbits of any class should be mated during their changing of fur, as this, I well know, interferes most unfortunately with their offspring's future coats. I never like to be without foster mothers (nurse does) and I like them to kindle a few days before (which is the best) or a few days after my valuable does do. Sometimes we are very glad to obtain them even ten to 14 days after—that is, if we cannot procure them to suit us earlier. This is how I manage: I have say eight young in a litter. As soon as practicable, I take out the does, both the nurse and the valuable one—place them in hampers out of the way, and carefully select two or three of the young for each nurse doe, taking care to blow the fur of the nest off them, or the foster parents would smell it and see it, and instantly destroy them. I then put them in among the nurse does little ones, and placing some tempting food in their run, I put back the does and then if they are left alone, they bring up the newcomers. On about the second or third day after, I take away some of the nurse does own litter and destroy them, as the others thrive faster from the extra supply of milk. If litters are small, I do it at the time I put the others to their new mothers."

No. 206—"A new enemy to the Belgian hare has come to the front lately. Several parties have told me they had entire litters just kindled, killed by mice. The only sure remedy I can suggest is to cover the front of the breeding hutches with fly screen, and then go for the mice with traps and rough on rats. It is well for breeders to be on the lookout for mice. That reminds me that about one year ago one of our leading breeders was about to trade some hares for some fancy mice. His better half told him if he did, she would set a trap and kill all of them. He didn't trade. Some breeders seem to worry a great deal about 'what shall we do with our pelts?' or 'is there a market or pelts?' That part of the business does not worry me a little bit. The fur clipped from a dry pelt, and put into the nest of a doe about due to kindle, if the weather is cold, is worth ten times what a dealer will pay for the pelt.

Very few does will pull enough fur on a real cold night to keep the little ones from freezing. A little help goes a long way to save the new born litter, which is worth dollars while the pelt is worth cents."

No. 207—"I never breed with sickly or ailing specimens but on the contrary strive to have my bucks as vigorous as possible, and my does I like to have as large, as healthy and as well bred, as it is possible to have them. I also like to have manifested in my breeding does that kind, tractable disposition which in almost all cases is the foreshadowing of a good, kind mother. I find great difference between doe rabbits with respect to suckling qualities. Some seem to be provided with better milk-giving qualifications than others and, by noticing and noting this, the next time they have young ones, if the bad milkers have large families, some of the youngsters can be taken away from them and given to nurse does. Dutch are a grand variety to keep as nurses, for this reason—they almost invariably have a great deal more rubbish than good ones. The bad ones can be killed and their places taken by offspring from bad milkers of other varieties. In all cases, I never allow my mothers to bring up more than four or five, and three is the better number. A few days (say three) before my does are due to kindle—the time for gestation running from 30 to 34 days—I clean their hutches well out, sprinkle the floors plentifully with clean sawdust, and give a generous supply of sweet, soft meadow hay, and every day up to the time of kindling, a dish of clean, fresh water. After a doe kindles, wait for a couple of days and, first thing at morning, go gently to her hutch, take her out therefrom, place her in another hutch, previously prepared, give her a feed, and leave her until dinner time. Now take the next box out of the hutch, part the top of the nest, and take a peep into it. Take the inmates out gently one at a time, and place them in an old felt hat. You can then make a selection of what are wanted, place them back, and give the remainder, over which the above modus operandi has been performed, to nurse does, and leave them. They will take no harm, as rabbits feed their young at night time. Consequently, the taking of the mother away till dinner time will not injure them but, on the contrary, the changed young ones will have had time to get the smell of the new nest on them, and their mothers or foster mothers will not have their suspicions aroused. This is an important part of the business, and a little trouble is never lost over it, as many

cases are known where, youngsters in the nest having been interfered with, the doe has left them. This is my treatment of suckling does and rabbits for exhibition. When the young ones have attained the age of eight months, I let the does visit the bucks, and am careful in setting down the exact date of visitation. On the evening of the 30th day of gestation, give each doe a feed of milk and bread, prepared as follows: Take a quantity of stale bread, pour over it boiling water, let it steep for ten minutes, pour off the surplus water, and add, say a pint of new milk for every six or eight does. I continue this feed every night until the young ones are taken from the mother. For breakfast, I give either oats or bean meal and bran in equal quantities, and made into a mash (crumbly) with boiling water. Dinner, hay and carrots, or turnips, in winter, or green meat when procurable. I may add here, that I never allow my does to bring up more than four, as quality, not quantity, should always be the object of the fancier. On the second or third day after birth, take the nest box out of the hutch and examine the young ones. If a doe has only two or three, then the number (four) can be made up from other different lots. I have done this for years, and never had a mishap. A subject of much importance to all interested in the production of show stock is the prepotency of sires over dams, and consequent serious influence over offspring. Having mixed a great deal among fanciers of every description of prize animals and birds, I have found that 99 out of every 100 of noted breeders are men who have given the subject much consideration, and the result of their reasoning has led them to conclude that the male bird or animal is the chief consideration. I was lately in the bird room of a noted canary breeder and in the course of conversation, this very subject was reverted to, and he stated he was always very anxious to have the cock birds of the very best type of the breed he was endeavoring to produce in all the glory of the required characteristics. He also stated that he would rather pair good cocks and moderate (though well bred) hens, than good hens and moderate cocks, because he had proved, beyond doubt, that this mode of procedure ultimately gave the best results. In my own particular rabbit fancy, I find it of very little use having good dams unless I have grand sires. The influence of a first sire sometimes extends for generations, i. e., influence of previous sires over offspring by other sires out of the same dam."

No. 208—"In classing Belgians according to color, of course the best of us run a little off on color, from light and dark, and I can say that I have never had a white one thrown in my hutches, and few black. When it is the case that an advertiser builds roomy hutches, constructs buildings to hold such and then gives a rabbit a separate hutch, it stands to reason that prices should advance on such. When the breeder takes pains to pedigree and rear stock not akin it is proof positive that that mode is more work, and in the end more productive than crossing at large and letting stock run together on a farm, as some advertise. I soften the light in all my buildings by coloring the glass, so as not to effect the coats of my pets—a simple matter which carries weight towards richness that the standard calls for. The best way for the young or old beginners to find the true colors of his pets, when in doubt, is to visit first class rabbitries or show rooms, or exhibit his stock and find which the judges give preference."

No. 209—"Most of the fine exhibition and breeding stock in England has found its way here in exchange for American dollars. Pedigrees count for just this much, they give one an idea of what may be expected from the young stock in advance, by knowing what their ancestors were, for like produces like, though all young will not be prize winners though their fathers were. But to have good pedigrees is not all. To have animals that fit their pedigrees is not all. The first requirement should be health, for the best animal that ever lived will degenerate into the veriest scrub if left to shift for itself. It is environment, food and attention that go as much to win prizes as does the long list of pedigrees and famous ancestors. All these things should be taken into consideration when buying stock, and while it is a good plan to buy from the acknowledged fine show specimens the work has but commenced. Good domestic breeding animals can be had in this market for \$10 up to \$300, bred to the fine bucks that are so numerous here. One of the best ways to get a good start, and the way I started, is to get a few good breeding does, and as fine a buck as I could find."

No. 210—"From date of birth, the care of young hares is left to the doe until the young begin to feed, which will usually be about the fourteenth day. If it is desired to push them forward, a little bread and milk once a day may be given. This may be alternated with plain corn bread or dry chop. These with oats, and now and then some oat flakes, will be

found an excellent diet for the doe and young. At six weeks old, the young must be taken away from the doe and put in pens by themselves. After they are taken from the doe, the most critical time for the young begins, and for some weeks the greatest care should be taken to avoid errors of feeding. If the doe has not been used to green food, no green food should be given to the young until they are past three months old, and then very sparingly until they are made accustomed to it. No soft feed should be given to a specimen intended for show purposes, as its flesh will be flabby. The best results are generally obtained by a strict dry food course. At three months old, the does and bucks must be separated and a record kept, so that they can be known and no mistake made as to parentage. This can be done by putting in separate pens, but then room is not always available and marking must be resorted to in order to avoid losing track of the parentage."

No. 211—"In their eagerness to get a lot of 'em and get 'em quick,' as one amateur explained it, many breeders of Belgian hares are doing an irreparable injury to their stock. Breeding a doe when she is only four or five months old weakens her, and her offspring start out with a constitution weakened and impaired, consequently, if sickness or disease overtakes them, they have little or no vitality to withstand the attack. A doe should never be bred before she is six months old, and it is better to wait until she is seven months old. When a doe has a family of more than six, it is better to kill all above that number, as the six will grow rapidly, will be stronger and more vigorous than with eight, ten or a dozen in the nest. When a doe has an extra large family she will wean them at an earlier age than with a less number to suckle, and this is one prolific cause of slobbers in your hares. Being deprived of the mother's milk, and forced onto dry feed before their little stomachs are prepared for it, causes the food to become impacted in the stomach, which produces irritation and slobbers. A less number and better quality of stock will give better returns in the long run."

No. 212—"Looking for some Plymouth Rock fowls about a year ago, I stumbled onto a Belgian hare doe with eight two-year-old youngsters. She was a very pretty thing and at once won my interest, and learning that she was for sale I bought her and her family. Having an empty stall in the barn, I made that into two temporary pens and thus made bunnies quite comfortable. I next looked around for a good



Photograph by the Author.

By permission of Mr. and Mrs. J. S. Brothers.

TYPE NO. 7.

This Belgian shows a very clean neck, a bold, open eye, very alert ear carriage, an unusual length of limb, a thin head and a beautifully arched back. Perhaps a Belgian cannot be found which carries the body higher from the ground.

buck, and having found one to suit me I bred the doe. I soon found that if I would avoid trouble I must separate the youngsters, so put in another partition and commenced to separate according to sex, but to my great joy (for I had the breeding fever) found only one male. The next thing was to provide a suitable male to head this tribe, and an active search resulted in the finding of a very good specimen for which I exchanged my male, and I was ready for business on an independent scale. As soon as the young reached the age of five months, breeding commenced, and I had to look around for more hutches, as I supposed each mother must have separate quarters. Dry goods boxes obtained at the nearest town for 15 to 25 cents each seemed to supply this need nicely, and a little work in remodeling them made them quite comfortable. Well, here they come, three, five, six, seven and even nine at a clip, rabbits everywhere, but not satisfied with this, I here made my first fatal mistake by again breeding my does at once, and the result was that when the youngsters of No. 1 most needed a mother's care, crop No. 2 was at hand, and crop No. 1 had to be pushed off to care for themselves, and the result was a fatal check. But how about the mothers? Poor things, they resented the abuse in different ways, namely, the mothers of six, seven and nine had only one, three and four, while others abandoned the second litters entirely, and still others threw them out of the nest to perish, and instead of 45 as at first, I only saved 17. Don't breed too soon. Six months of age is soon enough and two months between litters is little enough. Well, the old mothers had eight and six, so here I had 76 youngsters, and expectations of hundreds more, so when a man came along and offered me six dollars a dozen for them, I let them go and thought I had done well. Today I could sell them all for five dollars a pair, and doubtless many of them for double that, as I cannot near fill by orders for breeding stock. Don't sell too soon. So it goes, and I am still learning, but this I know, that a small cash investment in Belgian hares, a little time nights and mornings expended in their care and a small cash outlay for bran has netted me over one hundred dollars cash profit in one year, and I could sell my stock on hand for two hundred dollars more. I still have my Plymouth Rocks and credit them with leading me to the Belgians, but I have lost my interest in them."

No. 213—It has been said, I believe truthfully, "that color is what sells." But as it requires perfect parts to make

a perfect whole, and as color is only one part of the requirements of the Belgian hare, we will do well to consider, in our matings, the other requirements. The name Belgian hare implies an animal that in style and shape closely resembles the wild English hare. The word "hare" brings to our mind a long, slender animal, possessed of great length of limb and capable of remarkable speed. Bearing the above in mind, let us consider the type of animal we should use in breeding for the show room. Length of coupling and slenderness of flank and rib are of vital importance, and we believe these two sections, together with color, should come first in our selection of a stud buck. He should also possess a long, narrow head. If impossible to find one with a very narrow head, let it at least be as long as possible, as length is far more difficult to secure than narrowness. We can greatly aid in securing the latter by the use of a doe possessing a fine narrow head. Length of head, however, comes largely from the buck. Look well to his ankle joints; see that they are short, and that he stands well up on his toes. His ears should not exceed five inches in length. He should be capable of holding his ears erect, close together, and not spread apart or loosely set on. Lop ears are quite likely to result from the use of an extra long eared male. Look over the score cards of many of our best bucks and you will find a cut of one-quarter or one-half point on size or shape of eye. This small cut may prove to be the cause of our losing first premium. Let the eye be large and round. If you note that your stud buck sits around with his eyes partly closed, giving him a sleepy appearance, it means that you are overworking him. Give him a rest and exercise.

Color of jaw is a section most of us overlook in our matings. A perfect colored jaw would be one with the red carried down clear to the lower edge, showing no white or cream color from a side view. The color underneath would be cream and confined to the space between the jaw bones. We have described perfect jaw color, but freely admit that we seldom see it. Contract the white under the jaws to as small a compass as possible, and by breeding along this line a perfect jaw color will eventually result.

Lacing of ears is also a section of prime importance in an exhibition specimen. Perfect lacing is scarce, and means that the black is carried as far down the thin edge of the ear as on the back side, and that it is a lustrous, jet black extending over the edge, not black to the edge and then a smudgy gray

color. The ears should be of a red or golden tan, practically free from ticking and carrying the color up sharply to the black lacing. This, I admit, is difficult to secure, but if there were no difficulties where would be the fascination of breeding or the excitement of endeavoring to excel?

In color of body the buck should be a bright tan or red, containing much fire. Breed this stud to a doe deeper in color, quite heavily ticked, long in head, limb and body and we have a mating safe to count on to produce a good percentage of fine youngsters.

I have not attempted to touch on color to any degree, as that will be well handled elsewhere in this work, and is something all are breeding for, and, sad to relate, some of us are after color to such an extent that we lose sight of many other sections. When I say "us" I mean English as well as American fanciers, as some of the poorest formed hares in the country have been imported from England.

Let us unite in our efforts to produce typical hare shape as well as rich color, and there is no reason why we should not export instead of import Belgian hares.

LESSON TEN.

HOW TO CAPONIZE.

MALE hares when caponized at the age of three months, or thereabouts, when the testicles are developed, grow to an extra large size, weighing 10 or 12 pounds, and their meat is better flavored. A large number can be kept in a single hutch without their fighting, therefore by caponizing, the breeder will economize his space. People prefer fat caponized hare to eat just as they prefer fat caponized chicken.

Do not caponize an ailing Belgian. Be sure he is sound and healthy.

Before performing the operation, take the hare to a place out of sight and hearing of the other hares, and make as little fuss about it as possible.

Use a razor, or a very sharp knife. The knife is better. Make certain that it is chemically clean by dipping it in a disinfecting solution, or by passing it through the flame of an alcohol lamp. Of course, do not heat the blade enough to draw the temper.

It is best to have an assistant when performing the operation. Let him hold the Belgian in his lap, turning its back towards him and its rump towards you, and holding one front and one hind foot in each hand, spreading the legs apart, thus exposing the parts to be operated upon.

Your assistant should have good nerves, and should grasp the hare firmly, but not too tightly. If you decide to begin the operation, be sure and carry it through at once to a successful finish.

Seize with the thumb and first two fingers of the left hand one of the testicles, which the animal will endeavor to draw up into his body. When you have succeeded in grasping it,

divide the skin of the outer pouch, or scrotum, with a single stroke of the knife. It is necessary to cut deep enough to make a good-sized opening in the scrotum and in doing this the testicle will be laid open more or less. With the left hand take the testicle from the scrotum, drawing it out about two inches. With the knife separate the artery and the spermatic cord, cutting upward, and leaving a little, pea-shaped bulb on the end of the spermatic cord. Then cut between this bulb and the testicle, allowing the cord to drop and return to the scrotum.

Next commence about two inches from the testicle to scrape on the sides of the artery downwards with the edge of the knife, making a light and slow drawing stroke, touching the artery a little lower or nearer to the scrotum with each stroke. Perhaps a dozen or twenty of these little fine cuts will be necessary to wear down before severing the artery, which should be done well down, close to the scrotum. In this way, but little blood will be lost, while if the artery is cut square off, much blood would be lost, and the hare might die.

Repeat above operation with second testicle.

The testicle on the left side should be taken out first.

Apply a little hogs' lard or vaseline to the wound. If it is summer time, apply a little pine tar to keep the flies from doing injury.

Do not put any water on the wound.

The wound ought to heal, and usually does, in four or five days. The percentage of loss by caponizing is very small.

Be gentle, but firm and quick, in performing this operation. The sooner it is over, the better for the Belgian.

LESSON ELEVEN.

THE MEAT MARKET.

WHEN raising Belgians for the meat market, remember that, as in the case of fine poultry, you want a carcass with freshly-formed meat cells if the most delicious flavor is desired. Let your Belgians grow gradually, feeding them a bit lightly, then put them onto full feed and force them, and kill them as soon as they are fat, before the meat cells have had a chance to grow old. Fed this way, the meat of a Belgian will be as sweet, tender and juicy as possible.

Flemish Giant rabbits are impracticable for meat purposes, because the meat is coarse and of poor quality and is unhealthy. This variety has fewer litters, and fewer young to the litter, than the Belgian. The Flemish Giants also eat more than twice what they ought to, in proportion to their size. They are not to be compared to a Belgian in amount of meat produced by a certain quantity of food. The Belgian produces the most meat per pound of food consumed of any domestic animal. Do not be misled by the great size of the Flemish Giant. There are other factors to be taken into consideration. It costs as much, if not more, to raise one Flemish Giant, than three Belgians, and the quality of the meat is poorer.

In raising for meat alone, always keep the brood does in single hutches, but put the growing stock in pens, about 30 to a pen. Have a manger for hay, and a large watering trough. Have several of these pens, and as soon as the young are weaned in the doe's hutch, put a bunch of 30 of about the same size into a pen. In constructing the manger, do not set the bars so close that the heads of the Belgians are cramped

when they eat.

Belgians are best to fry when eight weeks old. For roasting, they should be at least five months old. Most of the big roasters are from six to seven months old.

Do not sell meat stock under eight months of age.

There are 10 percent of culls in the best of stock, and in an active market, in a large rabbitry, the breeder will use 50 percent for the table.

There is only one way to kill and dress a Belgian properly. That way is not only correct, but neatest and quickest and most practical when the butcher is handling a large number a day. First, prepare a place to dress the animal. Drive two spikes into fence or beam on a level with your shoulders.

Grasp the hind feet in the left hand and with a stick of wood or light iron bar strike the animal's skull sharply, stunning it. Lay the carcass immediately with the left hand on a chopping block and with hatchet or cleaver cut the head completely off. Cut the front feet off at the joint, on the chopping block. While the carcass is still on the block, insert a knife carefully at the back, just below the neck, about two and one-half inches down, and cut the hide. Put the knife into the hide and cut out. Do not cut in from the outside, for if you do you will carry in hairs from the fur which will stick to the skin. Insert the first two fingers of the right hand in the slit made, and hang up the animal on your spikes, rump downwards.

Cut off the tail at the vent. Pull the skin down and off with both hands, without further cutting, except at joints of hind legs. This will enable you to get the skin off whole, like a bag. Cut a quarter-inch twig about three feet long, bend it double, insert the bend or bow into the pelt, push it to the neck, and you will have the pelt stretched for further use.

Dress the carcass that remains as a sheep is dressed. Insert the knife into the skin at the belly, taking care not to puncture the belly, and slit the skin of the abdomen, cutting out from within. The entrails will fall down and may be separated without puncturing. Do not remove the diaphragm, but split it from the brisket to backbone. Leave the liver, heart, diaphragm and kidneys in the animal. Be sure and take the gall bladder off the liver, and without breaking it, otherwise the contents are liable to permeate the flesh and cause a rank taste. Slip the carcass off the spikes and into a kettle or pail of cold water, and leave it there for 20 minutes

to harden and whiten, and drain out the blood.

Take the flaps of skin on the under side of the carcass and pin them around on top of the back, leaving the kidneys and liver exposed, as the carcass of a sheep is exposed in the markets.

A Belgian dressed like this makes an appetizing appearance on the butcher's counter. Housekeepers should refuse to buy Belgian meat unless it is properly dressed like this. The meat of a Belgian is always white, like chicken meat. The meat of the jackrabbit is red, while that of the cottontail rabbit has a bluish tinge. The meat of either is not to be compared to that of the Belgian in either texture or flavor.

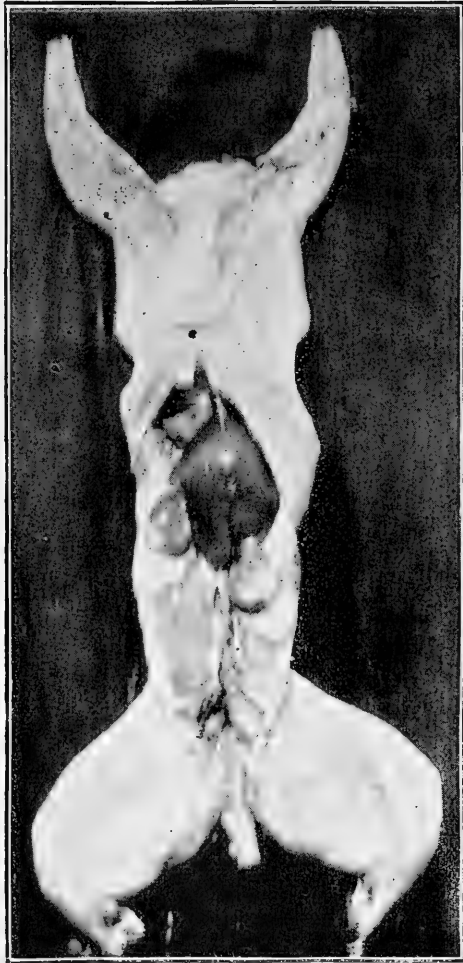
In localities where the Belgian is making its way, it is common for the marketmen to treat it like game. It is knocked in the head and hung up by the hindquarters to await a purchaser. They were selling Belgians killed this way in the Boston markets in the winter of 1900-1901. The price of such a carcass was \$1.25 the first day. As the meat grew older the price dropped until in about two weeks it was being offered at a quarter. The purchaser at that time, if there was one, probably got a carcass which had putrified inside and turned the flesh of the belly green. The whole carcass must have been poisoned with bacteria, and become a menace to health.

BUILDING UP AN OPEN MARKET.

The first and foremost need of the fancier is to establish an open market for the meat, otherwise the fancy will be injured. We have seen sections of the country where the fancy has risen, dropped and risen again, but to stay only when there was a sure and certain market for the meat. The fancy in every line of breeding of practical animals is founded on the fact that there is a market for the product in large quantities. Unless beef and milk were in steady demand, there would be no incentive to breeders to produce fancy cattle.

The Belgian hare fancier should be the first to move toward the establishment of an open market for the meat, because he is the most interested, having the most money invested. The Belgian hare must have a solid foundation and it has wherever a meat market has been established. In a practical industry, such as the Belgian hare is, one can safely build up even an extravagant fancy and not fear for its future.

Suppose there is no demand for Belgian hare meat, because the people know nothing about it. You must proceed wisely



Photograph by the Author.
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A BELGIAN HARE PROPERLY DRESSED.

and rightly. There is no sense in getting a big supply ready, for if you do, there will be no demand and the dealers will soon drop the meat. Go to the best market in your town or city and you will find a successful, practical business man as its owner, otherwise it would not be the best market. His name will give your industry a reputation, if you approach him in the right way. Say to him: "We are interested in building up a market for Belgian hare meat, because we are raising them and wish to sell the meat." He will break in and tell you he has no calls for the meat. Tell him you do not wish to have him buy of you. Tell him the meat is like that of young turkey and will find appreciation, as it always has. Ask him if he has any objections to your inserting in his advertisement in the papers a line saying that on Thursday of each week he will have Belgian hare meat for sale at his place, properly fattened and dressed and inspected. Do not allow him to have it on his counter every day. Your association can afford to pay for the line in the advertisement, if he does not care to pay for it himself. If you approach him in this way, he will see that you are in earnest. You have not been in his way, have not loaded him up with something which he cannot sell, have not asked him for a cent of money. He is a practical man and he will accept your proposition and work with you to make the market a success. Fix your price for the meat. Make the price which he will pay you say 20 cents a pound, and retail it at from 25 to 40. As a rule, the meat will find its way readily at the prices at which the best chicken, turkey and game are selling.

Build up the demand and the supply side by side. Your object at first is to get the meat cleared off the dealer's counter every Thursday by the time night comes. If the demand is worked up to the point of buying all the meat that is offered on one day in the week, choose a second day and advertise that also, and so on, working gradually up to the time when the market will be open every day in the week for Belgian hare meat.

That is the way we worked up the Denver market, selecting as the place for the experiment John Thompson's place, No. 1129 Fifteenth street, Green Brown, manager. This market has 65 clerks. The demand for Belgian hare meat grew from the first day, and as it grew, so the supply grew, keeping pace with it. Now seven breeders are raising Belgian hare meat for that market alone, and tons of the meat are sold

every week, it being purchasable at all times. It is possible for the breeder to unload any amount of the meat in Denver on 15 minutes' notice and receive his money for it at the rate of from 15 to 18 cents a pound. It is retailed at from 18 to 20 cents a pound. The Denver marketmen, being unable to get meat enough at home, are now sending as far away as Iowa.

In December, 1900, I dropped in on Mr. Brown, at Thompson's. He reported all moving well, business at home good, but asked me to send him all the people who have hares to butcher. He wrote all over the state and to several other states in order to be able to hustle enough meat for Thanksgiving, and came out nicely, supplying most of his customers, but was short on supply again through December.

The open market in Kansas City was built up in the same way and the demand there is brisk all the time.

It is not true that the Belgian has caused apprehensions in Los Angeles. The real trouble in Los Angeles was that the hundreds of breeders would not sacrifice their stocks for meat. They were looking for good prices from eastern people, and eastern people were slow to send so far for breeders when they could get them nearer home. The fancy in Los Angeles is going to be on an unsatisfactory basis until the breeders there get their open market flourishing.

I do not take much stock in the Belgian fur business. The pelt of a Belgian is worth from 50 cents to \$1 for the breeder if for no other purpose than to strip so that he may save the young by providing pregnant does with fur for their nests, and also prevent show specimens from stripping their bellies.

I have seen lap and carriage robes, and rugs, made from Belgian pelts, and if any breeder has the time and the inclination to experiment, he may get up something which will interest him. Breeders who have experimented have told me of a good way to get the pelt off whole and tan it. They say:

To take the skin off whole, cut from hock joint to hock joint across vent and draw the pelt off over the head and cut off at a point back of the ears; or, if the ears are to be left on the pelt, let the cutting be done on a line extending around to point of nose. Then place the pelt on a stretcher made of half-inch board six inches wide at the top and four inches at the bottom. Cut this in two parts, from end to end. Stretch the pelt over the two, place edges together and rub salt over the pelt when fresh, and then sprinkle with powdered alum and allow to dry. When about dry, remove from boards and rub

with the hand until dry. The skin will then be as soft and pliable as buckskin. Place the pelts where there will be plenty of fresh air, yet not in the direct rays of the sun.

After the hide is removed, apply common table salt to the flesh parts and rub in well with the hand or an old cloth. This is what causes the hair to remain intact on the pelt. The salt strikes through and binds down the epidermis in which the roots of the hair are fixed, and if the salt is not allowed to strike directly upon the flesh side of the skin at all points, these places will soon be denuded of fur. Roll the skin up flesh to flesh, and allow it to remain a day or two, and if upon examination the second day any soft spots are to be found, salt again and work well with the hands. The pelt should now be scraped with a knife to remove all flesh and fat. The skin should be thoroughly relaxed before scraping. After relaxing and scraping, place the hide in a solution of one part salt and four parts water, to which, when the salt has become thoroughly dissolved, add a few drops of sulphuric acid. Care should be taken in handling the acid, as it is a deadly burning poison. Allow the skin to remain in this solution for a few days, after which remove and cleanse with water and partially dry. Then the real labor comes in. Work the skin while in a semi-moist condition, stretching and pulling in all directions and working it into a flexible condition. Should the skin become dry before thoroughly worked, apply a little fresh water on the flesh side. Never work the skin when dry, as it is very brittle and tears easily. A good way to break all the fibres is to rub over a square corner of some hard substance, such as a planed plank or an iron bar. This leaves the skin soft.

If the hair becomes soiled by handling, it may be cleaned with gasoline or a very weak solution of oxalic acid. Be very careful not to have the oxalic solution too strong. Use about one ounce of oxalic acid to two quarts of water. Allow the acid to dissolve thoroughly before using.

The pelts of the common rabbit cannot be used in the manufacture of fur garments as the skin is tender, and while dressing comes off in pieces, and is therefore almost useless for that purpose. The skin of the Belgian hare is the reverse. It is tough and comes off intact, and can be used in the manufacture of garments, such as ladies' boas, muffs, capes, etc. The fur is also used in the manufacture of hats. The machinery consists of a hollow cone of copper, of the size of the

felt cones required by hatters. The cone is covered with perforations and it fits onto a metal shaft of the diameter of its base by means of a collar, which can be turned round by a belt, so as to carry the perforated cone with it. At the bottom of the metal shaft is a fan, moved by machinery, which produces a strong downward draught, so that if the hairs are thrown against the cone, they are held tightly by the currents of air through the perforations and as the cone revolves, its outer surface becomes entirely coated with the hair. When a sufficient thickness is secured, the smooth copper cone is easily drawn out, leaving a cone of wool, which is felted by the usual process of wetting, heating, etc. Another ingenious contrivance in this machine is to make the draught of air caused by the fan blow the rabbit fur forward to the cone so as to distribute it with an evenness which could not otherwise be obtained. The skins, after the hair has been removed from them, are sold to glue makers and are used, mixed with shreds of other skins, in the manufacture of glue and size.

LESSON TWELVE.

HOW TO COOK.

FOR stuffing, take the liver, heart and kidneys, cut them up and fry them in an ounce of butter over a low fire, with a teaspoonful each of minced onion and carrot, and a quarter of a pound of minced mushrooms. After five minutes of frying, moisten with a sherry glass of sauterne, and add half an ounce of glaze. Continue to cook slowly and as soon as the meat is soft, let it get cold, and then empty the contents of the sauce-pan into a mortar, pounding and passing the whole through a wire sieve. The puree thus obtained, seasoned with salt and pepper, should be stirred into a bowl with the usual six ounces of breadcrumb, minced or powdered herbs, zest of lemon, two ounces of butter and two eggs. Before packing the hare with this, line the inside with thin strips of cooked streaky bacon.

ROAST HARE (NO. 1).

Stuff as directed, or fill with veal forcemeat, sew up and truss. To truss properly, skewer the head tightly between the shoulders, and skewer the legs closely to the body. Fasten bacon on the back. Baste liberally while cooking. When partly done, dredge over with flour and baste again. Have the fire a hot one. Serve at once from oven, placing the bacon on a separate dish.

ROAST HARE (NO. 2).

Fill with oyster or bread dressing and sew up. Skewer the neck under the hindquarters and place in covered roasting pan. Mix butter and flour in a smooth paste and cover lightly over the hare. Add water as you would for any roast and bake from one to two hours, according to the age of the hare. Remove cover the last twenty minutes and brown over nicely,

garnish with cress or parsley.

ROAST HARE (NO. 3).

Place a layer of onions in the bottom of the pan, then a layer of the meat neatly cut. Add another layer of onions and alternate with meat until the pan is full. A double roaster is best, as it keeps the steam in more thoroughly. No water is needed, as that is furnished by the onions.

ROAST HARE (NO. 4).

Prepare a stuffing by chopping fine one-quarter pound salt pork and a small piece of onion. Pour boiling water over six Boston crackers, then chop with the pork, seasoning with sage, salt and pepper, adding what boiling water is necessary to moisten it, and stir in one egg. Wipe dry the hare, fill it with the stuffing and lard with small strips of salt pork. Allow 20 minutes for each pound when cooking. Put a piece of butter as large as an egg in a cup, fill with boiling water and use it to baste the hare while roasting.

BOILED HARE (NO. 1).

Skewer as heretofore directed. Put in kettle with enough hot water to cover. Boil until tender, time according to age. Dish and smother with mushrooms, onions, liver sauce or parsley and butter, as preferred. If liver sauce is used, boil the liver a little while and mince or rub through a sieve before adding the sauce.

BOILED HARE (NO. 2).

Slice one large onion, one chile pepper and four medium-sized tomatoes into a stew pan, and bring to a boil. Cut the hare in pieces and put in as soon as it boils; add one teaspoon of salt and enough hot water to cover. When nearly done, thicken with flour and add butter the size of an egg.

BOILED HARE (NO. 3).

Boil the pieces in a small amount of water, using a covered vessel to retain the steam. When thoroughly done, pour over a cream gravy to which has been added a little sherry. A flour gravy will answer if cream is not at hand. Serve hot.

JUGGED HARE (NO. 1).

Cut in pieces and season with pepper and salt. Fry brown and season with a little thyme and chopped parsley, nutmeg, cloves, mace, grated lemon peel, and add a couple of anchovies. Put a layer of the pieces in a wide-mouth jar, then a layer of thinly sliced bacon, and so on with alternate layers. Add two gills of water, cover and put in cold water, and boil three or four hours. Remove the jar, take out the unmelted bacon

and make a gravy of a little butter, flour and ketchup. Some add a little grated lemon peel.

JUGGED HARE (NO. 2).

Skin, wipe with a towel dipped in boiling water to remove the loose hairs, dry thoroughly and cut in pieces. Stew with pepper and salt. Fry brown. Season with two anchovies, a sprig of thyme, a little chopped parsley, nutmeg, mace, cloves and grated lemon peel. Put a layer of the pieces with the seasoning into a wide-mouth jug or jar, then a layer of bacon, sliced thin, and so on till all is used. Add a scant half-pint of water. Cover the jar close and put in cold water. Let it boil two or three hours, according to the age of the hare. Take the jar out of kettle. Pick out the unmelted bacon and make a gravy of a little butter and flour, with a little catsup. A teaspoonful of lemon peel will heighten the flavor.

JUGGED HARE (NO. 3).

Cut in pieces and place in a stone jar. Fill the space between meat pieces with veal and bacon, a pound each, cut to dice; mix with liver of hare, also cut fine; add a teaspoonful each of mace, cloves and black pepper and salt. Place thin slices of bacon on top. Cover with a lid of plain paste made of flour and water. Set the jar in pan or pot containing water, and bake in slow oven. Keep from burning by placing a greased paper over the paste. Put no water to the meat. When done, set away to cool, then pound pieces of the hare, bacon and veal to a paste, mix in gravy from the bottom when boiled almost dry. Add more seasoning when needed. Press solid into cups or small jugs, covering top with melted butter, and set away in a cool place.

JUGGED HARE (NO. 4).

Bone a hare and cut in small pieces. Cut also an equal weight of fat and lean ham, put in a stew-pan with a little butter. One cup of stock, pepper, salt, allspice and mace. Let it draw for an hour over a slow fire, then add a pint of port wine and boil very gently until the liquor is reduced to a glaze. Pound the meat tender in a mortar till very smooth. Add seasoning if required. Pack closely in small porcelain pots. Pour a tablespoonful of clarified butter into each, and place in a slow oven for half an hour. When cold, fill up the pots with clarified butter. This will keep a month in a cool place.

FRIED HARE (NO. 1).

Cut into joints, salt and roll in flour. Drop the pieces into boiling fat (butter and sweet lard), turning frequently the

first few minutes. Then let fry more slowly for about 20 minutes, or until satisfied it is well done. Pile on platter and garnish with sliced tomatoes, stuck through with sprigs of parsley. For frying, select hares about three months of age, and always let stand over night before using.

FRIED HARE (NO. 2).

Use equal parts of lard and beef suet and have it deep enough to cover the hare. Cut in pieces. Roll in flour and fry in the boiling fat, turning frequently, and keep covered until nearly done, salting lightly after the first turning.

FRIED HARE (NO. 3).

Dress a hare not over three months old. Cut it up, roll each piece in flour, pepper and salt, and fry as you would chicken, until nicely browned on both sides. Use butter and any kind of frying fat. Keep tightly covered when frying. When nicely browned, raise the cover and add a spoonful of water to prevent burning. Continue to add a little water as needed, keeping cover close. Cook three-quarters of an hour.

FRIED HARE (NO. 4).

Soak the hare over night in equal parts of salted vinegar and water. Put one-fourth cup of butter in a frying pan, add a sliced onion and fry till a light brown. Wipe the hare with a dry cloth, put in the pan and cover with claret, letting it simmer slowly for two or three hours.

FRICASSEED HARE.

Lay the pieces in cold water a little while, drain well and place in saucepan with pepper and thin slices of pickled pork. Cover with water and let simmer for 30 minutes. Add chopped onion and parsley, a blade of mace and a clove or two if liked. Make a smooth flour paste, stir in and let simmer until meat is tender, then add half a cup of cream. If too thin, add more flour. Boil up once and serve hot.

HARE SALAD.

Salt the hare and boil until tender, then shred very fine. Do not hash. Have ready your salad plates with fresh, crisp lettuce on each, and arrange thereon the shredded hare in a tasty manner. Sprinkle over with apple or any variety of chopped nuts. When ready to serve, add the following dressing: Place on the stove and heat one cup vinegar and water, equally proportioned, to which add piece of butter the size of a walnut. Beat up one egg, to which add heaping teaspoonful flour, one teaspoon mustard, dissolved in water, two table-spoonfuls sugar, salt and pinch of cayenne pepper. Heat vine-

gar and water to boiling point, add slowly the other ingredients. Thoroughly mix and stir constantly until thick. Set aside and when cool thin with sweet cream.

HARE ON TOAST.

In a chafing dish put a tablespoonful of butter. In this fry one-half an onion sliced finely. Stick the other half full of cloves. Roll young hare (previously cut in small pieces) in flour and fry a delicate brown. Then add sufficient water to cover meat and allow to simmer gently, adding water when necessary. The remaining half of onion, one scant half-teaspoon of allspice, cinnamon, three or four bay leaves, one small wine glass claret, salt and pepper to taste. If liked, throw one or two red peppers into boiling salted water for a few minutes, scrape out the inside of peppers and add. When done, thicken with a little flour and serve with slices of delicately browned toast.

HARE CROQUETTES.

Put a lump of butter the size of an egg in a saucepan over the fire and when hot stir in a teaspoonful of flour. Add cup of milk and when thick remove to cool. Pour over one pint finely chopped hare, into which has been stirred one beaten egg. Season with salt, pepper and a very little of onion. Shape in cones, roll in fine cracker crumbs and drop in smoking fat, frying a light golden brown. Arrange in rows on hot platter, sticking a sprig of parsley in top of each croquette.

HARE PATTIES.

Use the whitest meat and mince fine with suet. Braise the bones and cook in a stewpan with salt, pepper, nutmeg, grated lemon peel, etc., and let simmer until the flavor is secured. Thicken with flour and butter and stew until quite hot. Bake the patties in patty pans and half fill with the mince. Put on covers. The whole process will take about an hour.

HARE IN CHILE PEPPERS.

Select one-half or a dozen of large smooth green chile peppers. Lay inside the oven until wilted. Then with a fine knife, remove the shiny outside. Also cut one side open and remove seeds and veins. Lay a few moments in ice water, then dry and fill with finely minced hare, seasoned any way to suit individual taste. Lay filled peppers side by side in fancy dish and grate white cheese over all.

CURRIED HARE.

Cut into joints and place in stewpan with two tablespoonfuls of drippings, or butter, and sliced onions to suit. Brown

well and add a pint of soup stock. Mix a tablespoonful each of flour and curry, until smooth, in a little water. Place in a pan and add pepper and salt and a teaspoonful of mushroom powder. Let simmer for an hour or so. Add juice of half a lemon and a little parsley. Serve with boiled rice piled around it on side of platter. Water instead of soup stock may be used if the latter is not at hand.

HARE PIE.

Cut in pieces and boil until nearly done. Make a crust allowing a half cup of shortening, a half teaspoonful of baking powder and a teaspoonful of salt to a quart of flour. Roll to a quarter inch. Line the sides but not the bottom of a deep dish with the paste; fill with the meat, season with butter, salt and pepper. Fill with the liquor in which the hare was boiled, dredging over with flour. Cover with a thick crust and bake three-quarters of an hour.

HARE PIE, RAISED.

Cut hare in small pieces and season to taste with salt, pepper and nutmeg. Cut half a pound of bacon to dice, and when the raised crust is made, place in dish with the meat and intersperse yolks of three or four eggs. Pour over the top tomato sauce or some good gravy. Cover with pastry, brush with egg, and ornament if you wish. Bake in moderate oven until a skewer may be thrust through to the bottom—about an hour and a half. Serve either hot or cold.

HARE LIVER ENTREE.

Boil the liver until tender and cut into pieces. Make a brown gravy and pour over the pieces. Garnish with mushrooms.

HARE BAKED WITH RICE.

Cut up a hare. Stew gently in stock or water, with enough tomatoes to equal the amount of stock, and three green chile peppers, emptied of seeds and sliced fine. Salt to taste. While the hare is stewing, boil a cupful of rice in a quart of water, also boil one dozen eggs until hard. After the hare is about half cooked, line a baking dish, suitable for the table, with part of the cooked rice. Place the hare on the dish, with alternate layers of eggs, peeled and sliced. Pour over this the sauce, unstrained, and cover with a layer of rice and sliced eggs pressed well into the rice. Pour on the top half a cup of melted butter or thick sweet cream, and bake in a slow oven half an hour and serve hot.

JELLIED HARE.

Boil until the meat falls from the bones, and leave in the water over night. In the morning chop fine, season with butter, pepper and salt, and press in a mould until firm. Or, boil tender, cut in small pieces and season with salt and pepper. Add half a box of gelatine soaked in cold water to the liquor (not less than a quart) in which the hare was boiled. Strain through thin muslin and when it begins to thicken add the meat. Put in moulds and place on ice to harden.

HARE A LA CREME.

Clean and cut up the hare. Melt two tablespoonfuls of butter, fry it in a small onion, minced, then fry the hare until a light brown. When well colored remove the hare and add to the butter an equal measure of corn starch. Stir until smooth, then add milk to make a thin sauce. Place the hare in a baking pan. Pour over it the sauce, strain and bake in the oven until thoroughly done.

HASENPFEFFER.

Cut a hare in eight pieces and place in a jar with two or three sliced onions, a level tablespoonful of salt, teaspoonful of black pepper, half a teaspoonful of celery seed and allspice, and two bay leaves. Cover with vinegar. Let stand in a cool place for three days. Then place all in a saucepan, add a cup of water, and cook slowly one hour after it boils. Thicken the broth with flour or corn starch and serve.

LESSON THIRTEEN.

HOW TO CURE AILMENTS.

BELGIAN HARES have few ailments. All their troubles are traceable directly to improper housing and feeding. Belgians kept outdoors, where ventilation, the most important point, takes care of itself, are healthy, provided ordinary cleanliness is observed.

Hutches should be cleaned out regularly. The successful breeder in this, as in all other lines, is noted for the cleanliness of rabbitry and stock. The Belgian by nature is a cleanly animal and the breeder who cannot keep his place looking spick and span, and all his stock healthy, is either ignorant or lazy.

I seldom have ailing Belgians and have never cared for the fine points of doctoring stock. A knowledge of Belgian hare diseases is essential, however, to all buyers, for a good many salesmen are not above selling an ailing Belgian.

CONSTIPATION.

Symptoms: Absence of droppings. Patient sits quiet in corner of hutch and refuses food. Sometimes body is swollen.

Treatment: The cause of constipation usually is too much dry food without sufficient drinking water. Keep the patient warm and dry. Supply it with green food. There is little fear of its not eating, though caution must be exercised in not allowing too much, and when it has accomplished its purpose, it must be gradually discontinued, and a return made to the general mode of treatment and feeding. Should this vegetable diet fail to produce the desired result in a day or two, a more powerful remedy may be tried, as a little salt and water, which at this time will be drunk with a relish; or 12 dr. of Glauber salts may be dissolved in a pint of water, and two tablespoon-

fuls given twice a day. Generally, three or four doses will accomplish all that is requisite. Or the patient's hindquarters may be placed in a dish of hot water as hot as can be borne, for ten minutes. In severe cases, give a bowel injection of warm water and castor oil, in proportion of three tablespoonfuls of the water to one of oil.

DIARRHOEA, OR SCOURS.

Symptoms: Loose, watery dung, irregular appetite. Caused by too much green food, or food wet or stale.

Treatment: Place the patient in a warm and comfortable hutch, supply it with dry food—such as crushed oats and dry bran—with which mix a dozen crushed juniper berries; or mix a little oatmeal and pea meal into a stiff paste, as a more general diet for a short time, until a change is observed in the dung. In the dry oats and bran a powdered acorn of small size may be mixed with each feed. As this is a valuable astringent, no medicine chest for the rabbitry should be without it. Don't assist nature too violently by giving an excess of astringent. This will bring on constipation. When a favorable discharge is seen, a little water may be given, say two tablespoonfuls every third day. Sweet hay will be found of advantage and will be eaten freely. At little ground cinnamon, given in new milk, is an excellent remedy. Care should be taken to apply the remedies on the first symptoms of the disease. Summer time is generally the season in which rabbits are most troubled, because of the absence of green food at hand. Cold water, and cold water and nitre, are recommended by some fanciers as almost certain cures in cases of diarrhoea.

EAR CANKER.

Symptoms—The interior of one or both ears shows a red scab. There is inflammation in the ear and at the base of the skull. In feeling of the ears for quality, the judge often will detect the higher temperature which inflammation produces. The judge, however, before he scores the ears, should have examined the interior of them for canker.

Treatment—The cause of ear canker, in nine cases out of ten, is a burrowing insect. Flowers of sulphur sprinkled in the ear will kill the insect and help the Belgian to slough off the diseased skin. Sulphur is good for all skin complaints. Ear canker is entirely a local trouble and should cause the breeder no uneasiness. It is unknown in the clean, outdoor rabbitries of intelligent breeders.

MOULTING.

Treatment: When from eight to ten weeks old, Belgians begin their first moult, which is not always passed through without serious results. During this process of nature, care should be taken to keep the young ones warm, but it is by far the best plan to let them remain with the doe until they are safe through this trying ordeal, which will generally be about the tenth or twelfth week, after which the chances are that with due care and attention the patients will pull through. Feed the doe well with good nutritious food. It will be observed that the fur at three weeks is unlike that at ten weeks, and this, again, is more down-like than that of the moulted rabbit. In the second covering there will be the permanent shades and markings, from which there will be little or no deviation, except in a few instances. The rabbits can be assisted in their moult by giving them plenty of soaked peas and barley meal, with a little boiled linseed mixed with it.

A moult may be either loose or slipping. The times of moult are dependent upon the climate and also, if a doe, on the number of times she litters. A doe has a moult for each litter. The fur will be loose for about a week after kindling, when they begin to pick up. Starting to fatten a Belgian will produce a moult. The doe and litter are in best shape for exhibition purposes when the young are from five to six weeks old. Some mothers will nurse after six weeks. The usual weaning time is four weeks.

When the fur is getting ripe it loses its lustre. The new fur is not bright until it has been out some days.

For exhibition purposes, we do not wish the Belgian too near the moult, whether before or after.

An unnatural moult, or a dropping out of fur, is sometimes produced by over feeding, which also causes enlargement of the liver, water around the heart and on the brain, resulting in blind staggers, staring eyes, fits and death.

SLOBBERS.

Symptoms: Flow of saliva-like fluid from the mouth. Cause indigestion. Prevalent among young stock where litters are too large. The young, failing to get nourishment from the overworked does, help themselves to food from the pen, and their stomachs are not strong enough to digest the mass.

Treatment: Keep the patient in a cool, well-ventilated hutch, but sheltered from draughts, cold winds, or the direct

rays of the sun. See that its bowels are kept open by a regular supply of green food. For a local application, wash its mouth with alum and water every four hours, or rub a handful of powdered alum and salt, equal parts, well into the affected parts. Give half teaspoonful doses of syrup of figs until the bowels move freely. Feed mash with half a teaspoon of condition powder to every four ounces. Give food which is easy to digest. See that the salt supply is regular. Ten drops of oil of juniper and sweet spirits of nitre mixed with the drinking water morning and evening is another good remedy for slobbers.

SNUFFLES.

Symptoms: Sneezing or coughing followed by a discharge from the nose of a white, glutinous matter. This complaint is of two kinds. One comes from a simple cold in the head and it is not infectious. The other is hereditary or chronic and may be communicated. In its symptoms the disease bears a strong resemblance to influenza in the human subject, and is to be attributed to the same cause, namely, exposure to cold draughts, or sudden extremes of heat and cold. Belgians in damp hutches, without proper protection from cold draughts, are liable to this troublesome and often fatal complaint which, if not attended to as soon as observed, requires long and patient treatment. The rabbit is heard sneezing, while a moisture is perceptible around the nostrils. Loss of appetite follows, and in a few days the nostrils are apparently closed with mucus. Inflammation of the lungs frequently supervenes, and death. A slight cold, if allowed to run, will develop into snuffles.

Treatment: Keep the patient isolated, warm and well fed. Give a few boiled potatoes, with a little salt. Barley meal, mixed into a paste and given warm will be beneficial, and carrots should form at this time part of the vegetable diet. Wash the nose, mouth and forelegs well with carbolic soap. As medicine, give three grains of sulphate of copper, finely powdered, every day for three or four days. Then, when the mucus disappears, a cure is nearly certain, but care and special attention are required for a few days more, and it will be better if a grain of the sulphate be sprinkled with the bran every other day until the patient is perfectly restored to health. The disease sometimes will continue two or three weeks, especially in damp, foggy weather. A useful mode of treatment is to sponge the nose with vinegar and water in

equal proportions, as warm as the rabbit can well bear it. Give one of these powders three time a day, separate from food, with a teaspoon: Powdered licorice 36 grains, powdered nitre 24 grains, powdered ginger 12 grains, ipecacuana one and one-half grains. Mix thoroughly and divide into 12 powders. In hard cases, use two drops tincture of aconite in the food, twice a day, and the patient will stop sneezing. Feed warm mash with a teaspoonful of flaxseed in it.

CAKED UDDER.

Treatment: Feed sparingly for a few days and rub gently with marshmellow ointment, first sponging the udder with warm water and wiping dry.

URINE, RED OR UNNATURAL COLOR OF

Symptoms: Dark urine, red as if tinged with blood; patient out of sorts.

Treatment: Place the patient in a warmer hutch, if the one it occupies be not comfortable, and supply it with good food—as oatmeal, boiled potatoes, given warm, a few oats, a little endive, dandelions and carrots. Garden parsley, green in summer, dry in winter. A few drops of sweet spirits of nitre occasionally. Two tablespoonfuls of water in which bran has been soaked 24 hours may be given every day until the urine presents its natural appearance, which it should do in from four to eight days.

VENT DISEASE.

Symptoms—The outward manifestation of vent disease is ulceration. The red membrane is turned out and it is seen to be ulcerated.

Treatment—This is a serious disease of the blood, denoting true blood poison. It is infectious and care should be observed in handling an animal so infected. If it is a cheap Belgian kill it at once. If it is a valuable Belgian, it also ought to be killed, in nine cases out of ten. I have known mercurial treatment to cure some cases. In other cases, where carbolated vaseline or some other salve had been used as a local application, the outward manifestations had been concealed, but the poison was still in the blood and in case of a doe, her litter, when it came along, was a mass of disease, all the young dead.

Other manifestations of impure blood are festering abscesses. Poor blood is extremely prevalent in many English rabbitries and every imported animal should be closely ex-

amined for vent disease as well as ear canker. In some of the rabbitries which I visited while in England 75 percent of the Belgians were infected. The beginner seldom examines a Belgian for this trouble, principally because he does not know how to handle the animal for proper inspection, also because he suspects nothing because no sign of disease can be observed by superficial look. I have picked up Belgians in many rabbitries full of high-priced imported stock and made the owner acquainted for the first time with the fact that some of his stock was diseased. No breeder should sell an infected Belgian, and if he does, the purchaser should have his money back. A breeder who discovers vent disease in his stock should purge his rabbitry of it and find out the cause of it, if he can, and remove the cause. One imported buck, however valuable, if infected, will ruin a rabbitry and should be killed in short order.

LESSON FOURTEEN.

EXPERIENCES IN CURING AILMENTS.

No. 300—"I do not desire to pose as a final authority of this or any subject connected with the care and breeding of hares. I shall be willing at all times to give the results of my observations and study on all subjects connected with the Belgian. Snuffles is caused either by neglect and filthy hutches, overcrowding in pens, or exposure to sudden and extreme changes of temperature. It can be detected in most cases in its first stages, by examining the nose and front feet. If the nose discharges a sticky, white mucus, the proper treatment should be applied at once. The disease has not become snuffles at this stage. It is merely an indication, and if from dirt or exposure, the correcting of these ills will bring about a cure, but if left to itself will, probably, result in a genuine case of snuffles, Sneezing alone is not an indication of snuffles, and if not frequent need cause no alarm. Most all animals will sneeze. The best means of stopping the difficulty in the beginning is to take the individual and put it in a pen alone, where there is sunlight and air in plenty. Keep clean and fed regularly with the usual diet, and an addition occasionally of a quantity of fine oil meal, most cases will need no other treatment. If not checked, the disease will increase in severity, the discharge from the nose becomes offensive, the odor like decayed cheese, and can be easily detected. No matter how much care is taken to overcome the smell, it is unmistakable. At this stage, the subject looks dull, the fur on end, and though it eats well for a time, soon loses flesh. The disease goes to the lungs, or stomach, and then to the bowels, causes a fetid discharge which, in a few hours, will be fatal. My observations, which have extended to many of the largest

rabbitries in the country, have satisfied me that the disease will be found wherever overcrowding and filth abound. I find, also, that almost all have some of it, though among the older breeders I find none of that anxiety and fear about it that is prevalent with those newer in the business. If handled properly, the breeder has no cause for uneasiness, but I advise taking it up promptly, and if the subject does not show improvement after isolation and treatment for a reasonable time, kill it, but if be a valuable animal, I would not be too quick with that remedy. I believe if the subject be a doe, of fine strain, I would breed her promptly, and breed a nurse doe at the same time, and when the young come transfer the litter to the nurse doe, and raise them in that way. I do not believe that the disease is either contagious or infectious, but to be on the safe side is the best. In this way, you preserve her strain in your rabbitry. If she can stand another breeding, breed her again, following the same course. If she dies, as he probably will. You have lost only the doe. You have her young, and keep them clear of the disease."

No. 301—"I had a valuable rabbit that had been suffering from an obstinate case of constipation, cured completely by following the prescription of a friend. The rabbit had been ailing for some time. It had been fed with a variety of green foods, and had even had doses of salts and senna tea, but without result. My friend advised an injection of warm water and castor oil, in the proportion of three tablespoonfuls of the former to one of the latter, administered with an injection pipe fastened to a small sheep's bladder, to be followed, if this failed, in three hours, by an injection of warm water alone. And if this did not produce the desired result, the water and oil to be again tried. He further recommended, as a last resource, that the hind legs of the rabbit should be placed in warm water for about ten minutes. I gave the warm bath, as directed, with perfect success, and have since tried it in other cases with equally favorable results."

No. 302—"In a case of snuffles, first isolate the rabbit, and place it in a warm, dry hutch. Second, bed it down with sweet hay, and for a few days wash the discharge from the nose with warm green-tea lotion, feeding with good oats, swede turnips or carrots. If the discharge from the nose continues, then administer two drops of tincture of aconite in its food, morning and evening, until the patient gives up sneezing, and then continue the medicine every day until the rabbit

is restored to health. Third, should the rabbit discharge from the eyes, and soreness show itself on the nostrils, then wash with a sponge twice a day with carbolic acid lotion (one drop of carbolic to ten of water), being careful not to let the rabbit lick the lotion and the soreness in a few days will be removed. Examine the fore feet of the rabbit, and should any matter from the nose be clotted on them, wash it off with warm water to prevent it from irritating the wound on the nose, and good results will soon be observed. Fourth, should the rabbit have a bad appetite, give some warm tea leaves, and almost dry, or any similar tonic, in the food. I have known cases of hereditary or congenital snuffles resulting from breeding from a sire suffering from the disease at the time of breeding, and such cases are generally incurable."

No. 303—"Experience has taught me that hares, when they have their little sicknesses and troubles, are very easily cured if taken in time, and a little judgment and care used. Parties say to me: 'My little hares are dying. What is the matter?' Upon inquiry, I have ascertained in almost every case a very careless manner of feeding. One gentleman who had come to me for advice said: 'I keep food before them all the time. I do not know what more I can do.' The fact of the matter was that he had fed them to death. Hares can no more eat all the time than can people, or any other creature. Another gentleman said his little ones had the slobbers. 'Do you ever salt them?' was asked. 'No.' Therein lay one great cause of their having the slobbers."

No. 304—"Every breeder who has had experience in raising Belgian hares or rabbits of any variety has suffered more or less loss through slobbers. It is caused by the food becoming impacted in the stomach and forming an indigestible mass on which the gastric juice does not act, the result being that the saliva instead of passing into the stomach and aiding the digestion, oozes out of the mouth, forming an irritating, slimy substance which adheres to the fur. The hare in its efforts to clean itself with its front legs besmears its face, neck, chest and front legs. After an examination of the contents of the stomach of several hares after death from slobbers, the same impacted condition of food was found in each. Knowing that salt was used with nuts, popcorn, etc., to act as a disintegrator and to aid digestion in the human stomach, I arrived at the conclusion that it would have the same effect on the hare. I found that the young hares did not take enough from the

lump salt placed in the hutch to accomplish what I desired, namely, the disintegration of the contents of the stomach and thus prevent the slobbers. Even by adding a dish of common barrel salt, they would not in all cases eat enough of it to keep them from having the slobbers, therefore I have adopted this method: After they show symptoms of slobbers a teaspoon of salt water administered as it would seem necessary from the stage of the disease will usually effect a cure unless the condition is too far advanced. A rubber bulb syringe will be found very convenient in giving liquid medicines to hares."

No. 305—"For slobbers, wash outside the mouth and jaws with warm alum water twice a day. This will contract the glands and stop the flow of saliva. Powdered borax in water is also very good; give half a teaspoon of some simple laxative until the bowels move freely. Do not give any food hard to digest for a few days. Bathe their eyes with sulphate of zinc, about three grains to an ounce of water, and they will open immediately. This is a grand remedy for an eye trouble, but don't leave it where the rabbit can get near it, for it is poisonous."

No. 306—"Diarrhoea is best treated, not by cold water alone, as I first suggested, but by nitre in solution, which is much more efficacious, and the rabbit drinks it more eagerly. In snuffles I find powdered caraway, given in hot meal, superior to all other remedies."

No. 307—"If you wish to breed a first-class show specimen, refrain from giving green food, or give it only in moderate quantities, such food having a great tendency to make the blood poor. To obtain the dark color in the points, and soft silky fur, you must keep the blood of the rabbits in as rich a state as possible. Young ones especially cannot stand much green food, being very subject to get relaxed in the bowels, which will kill them off in an extraordinarily short time; and it will be well to watch them after each meal, in order to counteract such effect as it appears. This may be done in the shortest space of time by giving one or two acorns, which no well-conducted rabbitry should ever be without. They should also be kept in a clean, well-ventilated hutch,

LESSON FIFTEEN.

HOW TO MARK AND RECORD.

THE BEST way to mark Belgian hares is by punching a notch or half moon in the edges of the ears. This is the national adopted system of marking. A conductor's punch, which may be carried in the vest pocket, is needed. Usually, these punches have two sets of dies, one to punch a circular disk, the other a v-shaped notch, or other device. Anybody who has seen a through ticket at the end of the route will appreciate the variety of devices available to a purchaser of a punch of this description.

In using the punch, do not cut a hole in the body of the ear, but on the edge.

The operation gives little or no pain to the animal, draws no blood, is never outgrown or lost, and does not affect the carriage of the ear.

Every ear has a thick and a thin edge, and always speak of them as thick and thin edges. Never use the terms inner or outer edge in speaking of the ears, for whether the thick edge is the inner or outer depends on the manner in which the ears are carried by the Belgian, or handled by the breeder. The right ear, of course, is on the right side of the head as the Belgian is facing.

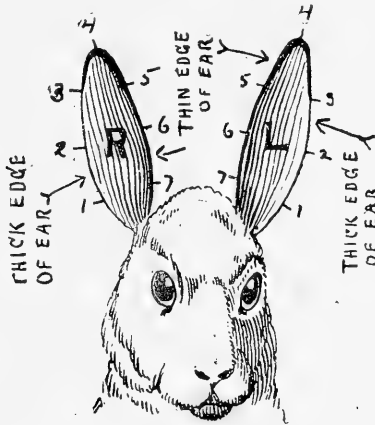
The tip edge of each ear is numbered 4 (see accompanying diagram). The first number on the thick edge of the ear is No. 1. Half way between No. 4 and the bottom of the ear, on the thick edge, is No. 2. No. 3 is on the thick edge of the ear, half way between No. 2 and No. 4, just as No. 1 is half way between No. 2 and the bottom of the ear.

On the thin edge of the ear, No. 6 is half way between the tip and the bottom of the ear. No. 7 is half way between No.

6 and the bottom of the ear, on the thin edge. No. 5 is half way between No. 6 and No. 4, on the thin edge.

Never use No. 1 and No. 2 unless you are short of numbers, because the ear is thick there, and bristly hair is on it there, and the mark is not a pretty one at those two points.

Sometimes silver wire is used, the ductile, soft-tempered kind which can be easily twisted without breaking. This



HOW TO MARK A BELGIAN.

This is the national adopted system of marking, and is by far the most practical, superseding buttons, tags or anything of that nature. Every breeder should mark his Belgians, and no judge will score a Belgian without marking it. As will be seen, there are seven positions on each ear, which may be varied indefinitely. A conductor's punch should be used and a small notch or half-circle cut in the ear at the desired location. The operation causes no pain and draws no blood. The mark cannot be effaced or outgrown and it does not affect ear carriage.

wire is run through the cartilage of the desired number, and twisted with a pair of pliers, or with the fingers. If wire is used, Nos. 1 and 2 may be employed, the objections mentioned in the case of notching with a punch noted previously not applying.

In numbering your Belgians, begin at No. 7 on the right ear and exhaust the available numbers on that ear. Proceed

next on the left ear from No. 7 and exhaust the available numbers on that ear. Then combine the numbers in this way:

R 7 and 5, R 7 and 4, R 7 and 3.

Same on left ear: L 7 and 6, L 7 and 5, L 7 and 4, L 7 and 3.

Then R 7, L 7; R 7, L 6; R 7, L 5; R 7, L 4; R 7, L 3.

Next R 6, L 7; R 6, L 6; R 6, L 5; R 6, L 4; R 6, L 3.

And so on. Always work from the right ear to the left.

Suppose your last marking was R 4, L 3. Then your next Belgian would be marked R 3, L 7.

In the rules and regulations of every show should be included the notification to exhibitors that every Belgian should be marked according to the national system.

According to the rules of progression, there is practically no limit to the number of variations of which this system is capable.

A certain number may be adopted for a litter mark and this should appear on each of the young from that doe, varied at other points on the ears to differentiate the members of each litter.

Mark the young when you take them away from the doe.

The book-keeping of a rabbitry is an important feature. Pedigrees and markings will not mean anything unless they are kept in a positive, accurate manner, available for reference and inspection of customers at all times.

A book is essential to order and accuracy, according to my experience, although I have no doubt that a satisfactory record could be kept by means of the modern card index.

The book I use was made in Denver and its pages are printed and ruled in a manner suitable for the entry of stock.

A feature of every system of book-keeping is a tin tag holder on each hutch with places for three tags which may be easily slipped in and out of the holder at will.

The brood doe has a card with hutch number at top, then her score, her ear mark, her name, when bred, name of buck, to which bred, and finally the number of young kindled and weaned.

On the back of the card you may put the price, or any data you desire.

The cards for young does and young bucks have five divisions each. When you take the litter away from the mother, each should have a litter mark which in turn is transferred

to the cards.

When you name the Belgian, set apart a page of the book, placing the name at the top and following with record. When the page is full, turn to the back part of the book, where the overflow pages are bound, and continue the record there. There is an index at the back of the book where is entered the number of page on which the Belgian's name and record appears.

At three months you separate the bucks from the does, and then you need cards marked (1) Bucks and (2) Does.

A breeding certificate should be given to each purchaser of a bred doe, or to a purchaser of service from a stud buck. On the stub of the breeding certificate the breeder keeps his own record, tearing off the larger portion for the purchaser.

LESSON SIXTEEN.

EXHIBITING.

ON classification, as surely as on judge, hinges the success of the Belgian hare show as regards satisfaction or dissatisfaction among the exhibitors.

Absolute satisfaction means much for the success, financial, of the future shows, consequently it behooves every association to see to it that their show has the proper classification arranged to give the best possible results. It is almost superfluous for me to mention the fact that the interesting part of competition is to have the stock so classified that similar ones are in direct competition as regards sex, size, age and condition.

The closer the competition the more interesting becomes the occurrence to the majority of the interested parties, and this is decidedly true of the spectators.

There are only two ways of doing anything—a right way and a wrong way; so experience being the best teacher, it is reasonable to suppose that the more experience we have had on these lines the more nearly perfect would we be able to arrange such a classification.

In poultry shows the matter is comparatively easy on account of the varieties being so numerous as to make the matter interesting, but when it comes to having an entire show of Belgian hares, it has taken considerable thought to get the matter so arranged as to bear evenly at every point touched and all recognize the advisability of the absence of friction.

The one which I herewith submit has been tried in whole or in part at numerous places where I have judged large shows and never in a single instance has there been a word

of criticism on the judge or the classification by any sane person.

On the other hand I have been compelled to meet a clumsy and incompetent classification at other shows with the consequent result of criticism on both judge and classification.

A person without experience will make mistakes at every possible point where they will undertake to change these classes, said mistakes being easily pointed out to them, and as easily discovered by them after it is too late to be applied to this show.

I do not wish to appear arbitrary in this matter and will freely say that any desirable thing may be added to it by show committees, but these classes should positively not be changed, unless you plainly want to run onto unforeseen troubles innumerable.

These are based on the following recognized facts, that

- (1) The best animal should win.
- (2) The owner is not what is being judged.
- (3) The most practical way is the best; hence
- (4) Do not tempt the owner to misrepresent the age of his stock any oftener than is absolutely necessary, but instead arrive at the classification by weight, said weighing to be done by a disinterested show committee.

The entry blank should contain the following information, when filled out:

- (1) Entry No.
- (2) Variety.
- (3) Date of birth.
- (4) Sex.
- (5) Exhibitor.

The coop-tag should contain the following, only:

- (1) Entry No.
- (2) Date of birth.
- (3) Weight.
- (4) Sex.

The classes should comprise the following verbatim, and may be added to, on these practical lines:

- (1) Mature buck, 1st, 2d, 3.
- (2) Immature buck, 8-pound, class 1, 2, 3.
- (3) Immature buck, 7½-pound, class 1, 2, 3.
- (4) Immature buck, 7-pound, class 1, 2, 3.
- (5) Immature buck, 6-pound, class 1, 2, 3.
- (6) Immature buck, 5-pound, class 1, 2, 3.

Next, same as above on does.

(13) Family of doe and litter (litter not weaned, and to consist of five or more, the same to be between the ages of 3 and 6 weeks, 1st, 2d, 3d.

(14) Collection of six bucks, weaned, as old as 6 weeks and not weighing as much as 5 pounds, 1st, 2d, 3d.

(15) Same as above on collection of does.

(16) Sweepstakes.

(17) Grand sweepstakes.

Make the basis of the 16th and 17th whatever is deemed most advisable.

Outside of the two latter this gives a list of 45 premiums to be competed for, 15 of which are firsts, 15 seconds and 15 thirds.

It is a most interesting one, and has been thoroughly tried.

The following should govern the arrangements:

RULES AND REGULATIONS.

(1) The judge must not be told of the name or ownership of any animal on exhibition until after the awards are made. (Disregard of this rule is punishable by the exclusion of such offending party and their exhibit from the privileges and benefits of the show.)

(4) Eight pounds is considered standard weight for mature specimens.

ship of any animal on exhibition until after the awards are made. (Disregard of this rule is punishable by the exclusion of such offending party and their exhibit from the privileges and benefits of the show.)

(2) Exhibits shall be weighed by a disinterested committee appointed by the management.

(3) In immature classes, a full ounce of shortage throws

(5) Official cut for shortage in mature specimens is at the rate of two points per pound on such shortage.

(6) Official age of maturity is 10 months.

(7) An animal seriously diseased will be thrown out of competition.

GENERAL POINTS.

Handle your animal a great deal and teach it the ideal pose, especially with regard to ear carriage. Do not waste time trying to get a cheap animal Belgian to pose. As a rule such time and effort are thrown away.

In the course of an exhaustive paper in one of the English pet stock papers, by Mr. J. Jennings of London, an old-time exhibitor and efficient secretary, I find the following admirable advice:

Having decided to hold a show, two points immediately present themselves for consideration—the accommodation and the judging. The number of entries selected will regulate the dimensions of the building; but, if possible, it should always be arranged that the specimens shall be in a single tier, for the convenience of visitors, and for the great advantage gained in light. The pens must be provided with doors, for rabbits can only be properly judged by removing each from each pen. The bottom of each pen should be liberally covered with sawdust, on the top of which is a good handful of hay, but not too much, else the rabbit will bury itself in it. Care should be taken to have good, sound food for them. Nothing is more disgraceful than to omit proper attention on this part. Good oats, carrots and swedes are the safest food to have on hand, though in certain parts of the country green food may be given moderately, providing it is fresh. Whenever it is possible, the pens should be fixed in position and arranged for the reception of their intended occupants before the latter arrive. The rabbits are generally long enough in confinement on their journey without being unnecessarily detained on their arrival.

The most important officer is the secretary, and while, on the one hand, no one should aspire to that office till he feels prepared to carry out to the letter such an undertaking, it should be borne in mind by those with whom he is associated that it least a hearty vote of thanks is due him at the finish.

Exhibitors must properly label their stock. They must also state the prices at which they will sell. The judges appointed to award the prizes will be instructed to disqualify any exhibit which, in their opinion, has been tampered or improperly dealt with, and no appeal from their decision will be entertained on any ground whatever, the entrance fees in each case being forfeited. In the event of any one lodging a protest against an award, the individual so protesting shall be required to deposit \$5 as security for its bona fide character. It shall then be examined by judge or judges, committee, and a nominee of protestor. The amount is to be forfeited if the protest turns out to be frivolous, but returned in full, and the exhibit or exhibits disqualified, where protest is found correct. No person will be admitted to the exhibition room during the judging, under any pretence whatever, except those actually engaged in the arrangements; and during the whole of the show all the specimens will be in the custody of the committee (who are non-exhibitors) and may not be touched or han-

dled by the owners, or any unauthorized persons, under any circumstances.

Rabbit exhibitors have just as much claim to have their specimens judged by those who have made rabbits their study as poultry or pigeon exhibitors have the right of refusing to submit their exhibits to rabbit judges.

Several weeks before the show takes place, it should be advertised, and the advertising continued until the show takes place. Another point—always advertise the judge or judges selected.

No specimen should ever be sent to an exhibition suffering from a contagious disease which, although not perceptible to the general public, is nevertheless known to its owner. Reverse the case, and suppose that a valuable rabbit of yours caught a complaint at a show, and died therefrom, what would you say or think?

The great point is to keep your rabbits when they are at home in as nearly the same conditions as they will be subject to in the show pen. This is highly important, and there is a great deal more in it than many credit. Of two evils, that of high temperature is the worst. It is apt to throw them into moult and produce loose coats. A medium course is the best to adopt.

Duly appointed judges, who for years have made rabbits their study, should always be engaged. The combination of natural gift and study that makes the judge, embraces a knowledge of the special features and points.



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SCORING COLOR OF BODY AND SIDES.

For Description See Page 147.

LESSON SEVENTEEN.

JUDGING—HOW TO SCORE.

GENERAL rules—Do not, unless forced, change the height of the scoring table. Raise it or lower it until it is right, then keep it so.

In regard to the condition of light, when scoring, select a condition which can more often and more nearly be met with than any other under the various conditions of weather. The best way to meet that condition is to examine the Belgian on a table three feet high, placed five feet from an open door, said door to be in north wall of building, with unobstructed frontage and to be seven feet in height, the time to be 3.30 p. m. in January, or on a clear afternoon. The top of the table should be dull in color not white. Never score with the sunlight or its reflection striking the floor, table or surroundings. Place your left shoulder towards the light. Unless you study the question of light and fix your judgment in this respect, you will arrive at different results. When impossible to meet the condition in light before named, and the light be stronger than required, be lenient in scoring the color requirements. If the light be weaker than required, punish more severely on color requirements than the color appears to you.

The indications which you make on the score card in the various requirements must not be considered exact, but the nearest possible fraction to reach, in cutting by one-quarter points. In scoring a Belgian, treat it fairly in the following manner: The first requirement you encounter that appears to you to deserve as near one decision as another, give the animal the benefit of it. The next place (on the same animal) where you encounter doubt, take advantage of the animal. Follow right along in this manner. You will have no trouble

in remembering whether the Belgian is in debt to you or you are in debt to the Belgian, as you go along.

When we pass anything as perfect, we mean that it is nearer perfect than one-quarter off.

In all cases, such as ears and front feet, in estimating quality, take a handful. That is to say, in estimating quality of ears, take them both together, four thicknesses. In estimating quality of front feet, which is fineness of bone, take both the feet in one hand, the left, and feel of them.

If you change your method of operation in arriving at results, you will arrive at different scores. Make every effort to arrive at the same thing in the same manner.

Where one requirement encroaches on another, punish the requirement encroached upon. Do not punish the requirement that encroaches. A good way to keep this rule in mind is to remember that it is the under dog which gets the punishment.

I have found the following to be the rule, with occasional exceptions: Always cut side color at least one-quarter; color of hindquarters, at least one-quarter; color under jaws, at least one-quarter; shape of flank and rib, at least one-quarter; shape of head, at least one-quarter; ear lacing, at least one-quarter; color of ears, at least one-quarter; color of hind feet, at least one-quarter; neck, at least one-quarter.

Immature specimens are those which are not 10 months old.

TESTING FOR DISQUALIFICATIONS.

To test a tail for wryness be on your guard when you see a tail decidedly white on one side and dark on the other. Take hold of the tail, pull it back and out and watch it as it flies into position. If it flies back askew on repeated trials, it is wry. A perfect tail, even if carried one side naturally, as it sometimes is, will be straight when it flies back after pulling out. The carriage of tail will determine whether or not it is wry if the specimen is timid.

White spots or bunches on the front feet disqualify. If you find a bunch as large as a half dollar, refuse to score such an animal, for it would be nearer a Silver Gray rabbit than a Belgian. If a Belgian is more than three points off in the matter of stray hairs I would not score it.

A Belgian blind in one or both eyes should not be scored.

The other disqualifications are self-explanatory.

GROUPS ON THE SCORECARD.

The first group on the scorecard, worth 20 points, is called "color proper." We have other things in other sections

which we call a color requirement.

The group headed "symmetry," worth 20 points, is known as "general shape."

If we fill out a card to the full valuation of each requirement, we find the total of the size column to be $11\frac{1}{2}$, the total of the shape column $31\frac{1}{2}$, the total of the color column $45\frac{1}{2}$ and the total of the quality column $11\frac{1}{2}$ points.

That is to say, we consider first, a fine-shaped racy appearance; second, redness; third, a combination of ticking and ear lacing; fourth, size and quality, which are worth the same. A cheap animal is known by its soft flesh, loose skin, heavy coat, full breast, sleepy eye and generally lazy disposition. These defects usually accompany each other. The color is the principal requirement, or $45\frac{1}{2}$ percent. Next in importance comes the shape, which is worth $31\frac{1}{2}$ percent. Next in equal importance come size and quality, each worth $11\frac{1}{2}$ percent. All colors but red are worth 15 plus 4 plus 2 plus $2\frac{1}{2}$, total $23\frac{1}{2}$, leaving red worth 22, as full cuts are reckoned.

STRAY HAIRS.

Stray hairs are white hairs. In looking for them, examine the Belgian particularly in body color, ear color, front feet and limbs, color of hind feet. Look in the fur of the top half of the body. You will have to look thoroughly and sharply to find stray hairs, but nearly every Belgian has some. Look at the fur in the places described closely and intently, using the fingers occasionally to aid you in the search. When you find one, it will be white all its distance, having no ticking or red color.

In the case of small patches, be one-half as severe as if the stray hairs were scattered. I mean by this that a bunch of 50 white hairs should be cut as much as 25 stray hairs scattered in the body.

Stray hairs are hard to see on a poor Belgian but are comparatively easy to find on a good red animal. Look harder and more carefully at a poor Belgian for stray hairs.

Cut one-quarter of a point for seven stray hairs, one-half a point for 16, three-quarters of a point for 30.

COLOR OF BODY.

Body color is estimated by looking at the fur from the point of the nose to the root of the tail, on the top part of the animal, for that part is not provided for elsewhere in the score-card. The line between body and side color is easily distinguished when you blow into the fur along the sides of the

Belgian. Stay above this line all the time when examining body color.

Rufous red is a reddish brown red. This means just what it says. The foundation color is red. "Brown" is the first qualifying adjective. Then "brown" is qualified by the word "reddish." It is not yellowish red. Artists use rufous red color and it is very nearly the exact shade of tin rust. By tin rust I do not mean the rust of tinned iron plates, but the rust of pure tin.

The rufous red is usually found nearest perfection on the back of the neck, and gradually grows less distinct as it spreads from this point to all parts of the animal. So look at the back of the neck, behind the ears, first.

In estimating body color, pick up the animal as indicated in the illustration, right thumb and fingers of right hand clasped firmly around jaw, left hand grasping and supporting the Belgian at the rump.

Blow into the fur on the top side, above the line marking the top from the sides, and see what you have for under color of fur.

We do not want a slaty under color.

We want red, but do not expect red clear to the skin.

We will be some time in reaching a Belgian with hair red from end of ticking to skin.

The ends of the hairs next the skin are now always of a dark shade, but, as said before, they should not be slaty.

Give preference to a flesh color, at the roots of the hairs next the skin.

The wild English hare is white next the skin.

COLOR OF SIDES.

Now as to values. For perfection in side color, require 60 percent of absolute perfection in body color. That is to say, do not expect to obtain the same fine color on sides which you find on body.

COLOR OF HINDQUARTERS.

For perfection in color of hindquarters, require 60 percent of absolute perfection in side color.

Sixty percent of 60 is 36, which represents the value of hindquarters. In other words, we should expect the hindquarters to be 36 percent of perfection.

COLOR OF JAWS.

In estimating jaw color, first back the Belgian up to you on the table. Use the middle fingers to pull the dewlap down out



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SCORING THE JAW.

For Description See Page 148.

of the way, then raise the Belgian on his hind feet as illustrated and look at the color.

The standard says that there shall be as little white under jaw as possible. Stand behind the Belgian and look down toward the jaw at an angle of 50 degrees with the horizontal, as the animal usually sits on the table, head horizontal. If you can see white or cream color at that angle, then it is called "color extending noticeably." If you see no white or cream color at that angle, then it is "color confined." Fifty degrees is five degrees more than half of a right angle, so the line of vision will almost bisect the right angle between the table and the perpendicular through the head of the Belgian.

An under jaw of rich deep cream color (always found confined) deserves estimate of perfection.

Bright cream color confined under jaw deserves one-quarter point cut.

Bright cream color extending out noticeably at sides deserves a cut of one-half point.

Pure white color confined under jaw deserves a cut of one-half point.

Pure white color extending out noticeably at sides of jaw deserves a cut of three-quarters.

TICKING.

For ticking, look at the coupling from behind, angle of vision perpendicular to arch of back. Do not hold up the animal to estimate the ticking. Leave it on the table.

In estimating ticking, it is the top effect which we want to get. Look at the Belgian directly at the centre of hump or coupling, the line of vision being perpendicular to the arch at that point, as before stated, and the judge standing behind the animal. Remember, it is the surface effect which we wish to see.

There are three factors in this effect, namely: quantity, quality and distribution.

In regard to quantity, we wish to see 25 percent of black and 75 percent of rich rufous red.

In regard to quality, we want the blackest black and the reddest red possible, in order to furnish the necessary contrast.

As to distribution, we wish it in waves or tones, so as to give a wavy appearance.

These three things make up, or fail to make up, the effect we want.

To illustrate: An animal having heavy ticking may be cut $1\frac{1}{2}$ points; or light, $1\frac{1}{2}$. Unless a person understands the point of view from which the estimate was made, he will not comprehend the decision arrived at.

The prettiest ticking we see in triangular ruffles, with the apex of each triangle pointing to the front of the Belgian. I found two Belgians in the Boston show which I considered perfect in ticking. In each case, the quality, quantity and distribution were perfect, and as regards distribution, the wavy appearance was such as a person would see from a balloon if he looked at a field of wheat on black soil through which a reaper had gone mowing irregular swaths in the wheat, leaving rows of wheat standing between the swaths.

SYMMETRY OF BODY.

Consider the length of the body proper from the neck at the point of the shoulder blades to the centre of the back.

It is the length of the spinal column from the shoulder blades to the centre of the back which we wish to get at.

Put the tip of one finger on the forward point, perpendicular to the plane at that point and the tip of another finger on the other hand at the centre of the back, the finger being held perpendicular to the curve at that point.

Consider this length, and also consider everything with regard to size, location and quality, with regard to the weight of the animal.

A heavy Belgian should have a longer back than a light one.

Be sure your front finger position is the point of the shoulder blades, where they join the spine.

SYMMETRY OF FLANK AND RIB.

In estimating flank and rib, remember that the body should be well tucked up flank and well ribbed-up.

The body should be well held up in front.

A slabby-sided and pot-bellied animal hangs down and shows the kangaroo shape, which we do not want.

The requirement is this, that the Belgian be as near as possible the same circumference at the stomach as at the heart, and this girth should be as small as possible in comparison to the weight of the animal.

A Belgian perfect in this requirement is seldom found.

SYMMETRY OF BACK.

The back should be slightly arched.

Look at the Belgian from the side, eyes on a level with the



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SCORING SYMMETRY OF BODY.

For Description See Page 152.

top of the back, and consider the curve from the point where the concave stops back of the shoulders and becomes convex, extending to the root of the tail.

Push the animal well together so it will show the best possible convex curve or arch.

The principal defect will be a flattening of the curve at some point, most often that portion of the curve between the point of coupling and a point half way to the tail.

SYMMETRY OF LOINS.

The loins should be well-rounded, not choppy.

Take the part where the tenderloin is on meat.

Feel of the flesh with the ends of the right fingers.

Feel from one floating rib to another over the spine, and at right angles to it.

We want it well-rounded, neither like a ridge-pole, nor like the sunken loin of a very fat horse.

SYMMETRY OF HEAD.

As to the head, the standard says rather lengthy. The fancier has surpassed that requirement and arrived at a beautifully long, thin head.

We want the head to be as long, and as thin through the jaw, as possible, always comparative to the weight of the animal.

The width through the lock of the jaws should be the same as from one eyebrow to another across the top of the head.

The unit of measure for the head is the distance between the eyebrows.

Then the depth of the head, from top to bottom, in a line passing through the centre of the eye, should be $1\frac{1}{4}$.

The length of the head, from the tip of the nose to the back of the skull, should be $2\frac{1}{4}$.

In estimating these distances for practice, take a pencil and measure off the unit.

Then turn the pencil vertically and measure through the eye the depth of the head.

For the length, place one hand behind the ears, close to the skull, and at right angles to a line through the centre of head, lengthwise, and measure this distance from the tip of the nose, along the side of the head, with the pencil.

After one has become accustomed to measuring these distances with the eye and arriving at a correct judgment, it is not necessary to use a pencil.

The width of the head through the lock of the jaw is quick-

ly arrived at by **backing the Belgian** up closely to one's body and gathering the flesh close.

EAR LACING.

To observe lacing properly, hold the ears by the thick edges with one hand, as shown in the illustration, and pull them forward, holding the right hand behind the ears so as to get a contrasting background on which the black hairs will show up distinctly.

Lacing should begin at point 3 on the ear and go to a point slightly past 5, averaging twice the width on the thick edge of the ear as on the thin. If it stops at 4, for example, it is half good and should be cut accordingly.

Perfect lacing is scarce.

Lacing is worth 2 points and the worst cut we can make is $1\frac{3}{4}$, for entire absence of lacing.

If the light hairs from the inner part of the ear extend over so as to be distinctly seen from the outside, lacing suffers in scoring. If the black extends out on the body of the ear, ear color is cut.

EAR SIZE.

The size of the ear should be five inches.

In determining size (which is length) of ears, use a wood measure (a piece of cigar box is best) cut just five inches long, and two inches wide—in fact, so wide that it will not slip down into the hollows back or in front of the ear, but will rest squarely across the back of the skull.

Do not use a foot rule or a six inch measure which is apt to be only one inch or less in width.

Catch the ears by their thick edges with the thumb and middle finger of the left hand and pull them up close to the measure, which is pushed down closely by the forefinger of the right hand.

Get a good grip and use the free forefinger of the left hand to nurse the rule and ears into a parallel position, close together at the top.

Shortness of ear should be cut as follows:

Shortness of one-quarter of an inch or less, cut one-quarter of a point.

Shortness of three-eighths of an inch, cut one-half a point.

Shortness of half an inch, cut three-quarters of a point.

Shortness of three-quarters of an inch, cut one point.

The foregoing cuts apply to a mature specimen. Cut one-half as severe on an immature specimen.



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SCORING SYMMETRY OF FLANK AND RIB.

For Description See Page 152.

Do not cut for an extra long ear, or any other requirement in excess of the standard.

EAR SHAPE.

The standard says "well set on." This is not definite enough. For perfection, imagine a line starting from a point on the nose one-quarter of an inch from the nostril and passing through another point three-quarters of an inch forward from the top of the skull. Position No. 3 on the ear should be on the line between these two points. Cut accordingly. Two points is the limit.

EAR COLOR.

For color of ear, we want as rufous a shade of golden as can be, inside and outside of ear.

There is no need to examine the color on the inside of the ear, for a good color on the outside will carry a good color on the inside, and a bad color on the outside will be accompanied by a bad color on the inside.

If the outside is rich in color, the inside will be creamy.

If the outside is smudgy, the inside will be white.

There should be no ticking on the ears.

Cut the ear for color if you find ticking there.

Look out for dim, washed-out, faded color about an inch up the ear.

Perfectly colored ears are not often found.

EAR QUALITY.

For quality of ear, we want the finest we can get comparative to the weight of the animal. What we find perfect in quality of ear of an eight-pound Belgian would not be perfect on a four-pound Belgian. That is to say, the heavier and coarser the animal as a whole, the heavier and coarser will be the ears.

In estimating the quality of the ears, grasp them four thicknesses at a time, as they set naturally, and you will have a better substance for estimating than if you feel of the thickness of each ear through one fold of flesh.

EYE SIZE.

As large as possible, compared to the weight of the animal.

EYE SHAPE.

In shape, they should be round and bold.

The eyeball always is round, but when the lid encroaches, as it does sometimes, most often at the top, but once in a while at the bottom, a flat appearance is produced.

Punish the animal if it does not show the eye round.

Some animals are pop-eyed, or a little in excess of the average boldness, but do not punish for that, for it is a requirement in excess of what the standard calls for. Some eyes are flat and appear to be in retreat, giving the Belgian a careless, slouchy appearance, and such eyes should be cut.

EYE COLOR.

The eye should be in color hazel, which is very close to chestnut.

The eye which is off in color may be grayish, or stone-colored.

One kind of eye often met with is of gray, greenish color. Watch out also for a reddish yellow eye.

EYE QUALITY.

The eye should be bright and healthy. Some Belgians have a dim eye. Always wake the animal up by joggng it under the chin or boxing it lightly on the side of the head, so it will show its eyes to best advantage, not only in quality, but size and shape.

LEGS AND FEET—FRONT—SIZE

In scoring the front feet, grasp the Belgian by the slack of the neck, holding down the ears, as this subjugates the animal, and pull the Belgian into a three-quarters upright position, with its hind feet remaining on the table.

Put the middle finger of the left hand under the foot, the thumb behind the "elbow" joint, and with the first finger at the other end of the limb measure the length (which is size) of the limb.

It is not practical to measure this length with a rule.

Simply estimate the length, removing the left hand after you have calipered it with your finger and thumb, and make up your judgment what this length ought to be, in comparison with the weight of the animal.

A heavy animal should have a longer limb than a light one.

It is length of bone from joint to joint which we wish to estimate.

LEGS AND FEET—FRONT—SHAPE.

Keep your right hand in the same grasp, over the ears and neck of the Belgian.

Test the front joint with the fingers of the left hand to determine, first, whether the limb "gives down," and second, how much, if any, it "gives down."

We want a joint that will show stiff when the Belgian is up on its front toes.



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SCORING SYMMETRY OF BACK.

For Description See Page 152.

We want a foot which is in line with the bone.

LEGS AND FEET—FRONT—COLOR.

Color of front feet and legs should be a rich rufous red, free from ticking.

Remember that white patches or white bars on legs, and white toe or toes, disqualify.

The bars of white, when they are found, run from side to side of the foot and leg, over the curve, and not in stripes from toe to joint.

LEGS AND FEET—FRONT—QUALITY.

As fine in bone, not body, as possible.

Bear in mind the weight of the animal. A heavy Belgian has coarser front feet than a light one.

Grasp both front legs in left hand when feeling and estimating for quality.

LEGS AND FEET—HIND—COLOR.

To look at the color of the hind feet, which is the only requirement for that section of the Belgian, grasp the Belgian with the right hand, as in the case of the front feet, then place the left hand under the rump, with the left thumb at the hip joint, and throw the leg out into full view, looking first at one foot, then at the other.

The hind feet, as far as the hock joint, should be, according to the standard, "as well-colored as possible." This is vague; they should have as much of the rich rufous red as possible.

The encroachments upon the rich rufous red on hind feet, which you may expect to find, are white on top of feet and blue or smudge on sides of hind feet.

Color of hind feet is worth two points.

Hind feet half rufous red and half white, that is to say, half bad, should be cut one point.

Hind feet wholly white should be cut one and three-fourths.

Hind feet half white, and whole of remaining half smudgy, should be cut one and three-quarters.

Hind feet half white, and half of other half rufous red, should be cut one and one-half.

Hind feet three-quarters rufous red, remaining quarter smudgy, should be cut one-half.

Hind feet three-quarters rufous red, remaining quarter creamy, should be cut one-quarter.

In estimating color of hind feet, never look at the under parts of the feet, on which the animal sits. Always look at

the top and sides only, holding the Belgian in the position indicated in illustration.

SIZE OF SPECIMEN.

The size of a Belgian should be just eight pounds, in a specimen that is mature, or 10 months or more old.

Unless a Belgian is up to weight, or over it, the best time to score it is before it is 10 months old, for until then it will not be cut for lack of weight.

Mature specimens are cut at the rate of two points per pound.

A full ounce or more lacking should be considered two ounces and the cut should be one-quarter. If the deficiency is less than an ounce, no cut.

Deficiency of three ounces or more should be cut one-half a point.

Deficiency of five ounces or more should be cut three-quarters of a point.

Deficiency of seven ounces or more should be cut one point.

CONDITION—FLESH—QUALITY.

The Belgian should not be fat, but flesh firm like that of a race-horse.

If the specimen is fat, cut it one-quarter.

If it is soft, cut it a quarter.

If it is fat and soft, cut it one-half.

If very fat and very soft, cut it three-quarters.

CONDITION—FUR—QUALITY.

As to quality of fur, two things are to be taken into consideration, one natural, the other accidental.

A natural variation of fur is caused by moulting.

An accidental variation may be caused by fur torn out in a fight, or by a doe for her nest, or by paint or clinging dirt.

Consider whether the fur is loose, or whether it is daubed, or bitten out.

Cut for an accidental as much as for a natural defect.

NECK—SHAPE.

Dewlap is worth five points, but the most a dewlap can be cut is $4\frac{3}{4}$ points.

There is always considerable amusement in my classes when first measuring dewlap. Amateurs do not realize, until they try, how much loose skin can be pulled out from the neck of the average Belgian, which may show little or no dewlap. Hold the Belgian as shown in the illustration. Push out the dewlap with the left fingers and pull with the right



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SCORING SYMMETRY OF LOINS.

For Description See Page 155.

fingers, proceeding slowly and thoroughly until you have got all the loose flesh pinched in sight by the right fingers. There is a little knack in getting hold of all the loose skin, and not letting it get away from you.

I have seen Belgians with such large dewlaps that the animals could not eat grain off the floor. As the neck is worth five points such a dewlap would have a four and three-fourths cut.

A Belgian with a perfect neck is very scarce. Loose flesh can be pulled out from the neck of all but the very raciest and firmest-fleshed. The average cuts are from one-quarter to two points, and use your judgment in determining how great a cut you shall make, bearing in mind always the weight of the animal. A dewlap of a given size would be cut harder on a small, racy animal than on a heavy, coarse animal.

IN CONCLUSION.

Timid Belgians usually lose on carriage of ear or stiffness of front limb. They won't "trim up" as they should. A Belgian should be handled and "trimmed up" constantly, so it will assume its most creditable attitude when being scored. Belgians nicely trained sit up in a firm, graceful poise when under inspection by the judge. Accustom your animals to handling so they will not be timid.

Look at the table of usual cuts (see illustration) and you will get an idea of the application of the score card which will firmly fix the points in your mind after you have mastered the foregoing explanations.

In starting in with a Belgian, first look for disqualifications, and if you find any, put the specimen aside and pass on to another.

At the top of the card have your clerk write in the name of the owner and age of specimen. Look for the ear notch or other marking and have that recorded in the blank provided for that purpose. Get the weight of the animal down. If it is an immature specimen, you do not need to know the weight.

Determine the sex of the animal next, and by that time you ought to know whether it is free from disease. I have seen specimens either blind, or suffering from ear canker, or vent disease, pass a whole company of judges. It is quite common, also, for bucks to be scored as does, and vice versa. Show catalogues are usually decidedly off in this respect. Always

get the foregoing primary points settled before you begin scoring.

The judge ought to have an assistant, even in private scoring, and if he is judging a show, he needs two clerks, one to check the other. The clerk reads, and the judge names the cut, and the clerk records it, and so on down the score card until the end is reached.

Suppose your clerk reads out, "Stray hairs," and that on examination you find seven stray hairs and wish to cut one-quarter of a point. Do not say to your clerk, "One-quarter." Instead, say, "Quarter." Then he will not (as he certainly will if the scoring is done rapidly) understand you sometimes to mean one and a quarter. For the same reason, always say "half" and not "one-half," when you cut half a point and wish it so recorded.

Look out for your weighing committee and be sure that careful, reliable, precise men do the work. If the weighing is done by irresponsible persons, some exhibitor is going to suffer unjustly.

Have your place of scoring where you can work rapidly and without the interference of interested parties. Set off a place where the light is best adapted and do not have a crowd of exhibitors at your elbows to take down your judgments and hinder you in your work. A judge should be left alone with his clerks in order that he may work rapidly and with the proper concentration which the nicety of the task demands.

All agree that the first requisite of a judge is to be perfectly conversant with the requirements of his subject, as set forth by its respective standard. Next is a natural keen sense of the beautiful inherent in the judge, a great development of the phrenological faculties of weights and measures, thus insuring very accurate estimates, and later comes the actual practice that enables a judge abnormally to develop those faculties and to become accustomed to the embarrassing incidents that are from time to time brought into the work, sometimes maliciously, but more often playfully, by owners interested in the matter financially or for sport. All the above mentioned things play a very important part in the matter of judge, but not as important a part, to my mind, as the method pursued in arriving at and making the awards. A standard gives an outline of the list of specific requirements of a specimen and



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SCORING SYMMETRY OF HEAD.

For Description See Page 155.

places a valuation, in points, on each requirement, thus allotting to some sections more points, giving them more importance and a consequent greater valuation. The 29 requirements each having its own valuation, one can readily see the impossibility of seeing, in one instant, all the various requirements of even one animal. Add to this the further complication of having a class of many animals placed before you at once to judge, and further remember that one will be defective in color and good in shape, another defective in both shape and color, to about the same extent; still another good in both shape and color, and yet another defective in shape and color, the complicated question begins to arise how defective (considered from all sources) is specimen No. 1, No. 2 and so on down the line, and how shall we arrive at their comparative values after all defects have been considered?

Obviously, if we have not considered every requirement (since every requirement has its allotted valuation in points), we have not entirely judged the animal.

In viewing the situation from a critical standpoint, I should say that never has there been invented a mechanical instrument, an implement of warfare or a legal document more thoroughly effectual, more applicable to its purpose, or more entirely indispensable than is the score card to the correct judging of Belgian hares.

The card is, to the judge, merely a recording sheet on which to jot down his estimate on each and every specific requirement of the animal in hand.

No one requirement encroaches on another, for they are taken one at a time, and no heed given to anything else at that time. A careful estimate is made on it, calculating wholly from its valuation as a basis of operation, and the result of the estimate jotted down on the record sheet (score card). When the 29 requirements have been estimated the judge's opinion is recorded on the whole animal, and positively nothing has been over-looked.

To the exhibitor the score card serves to show the animal through the judge's glasses, and if it lost because the judge considered it insufficient in shape of head or in condition at the time the exhibitor knows it, and also knows the judge's high appreciation of the animal's better qualities and consequently understands thoroughly its value as a breeder.

Out of the show room the score card is equally indispensa-

ble. A customer in a distant locality wishes a specimen attaining a certain percentage of perfection, he asks the owner as to its qualifications. Without the score card he cannot give the opinion of a competent, disinterested person relative to the animal in question.

Then, again, suppose the owner of the animal is a competent judge and his own opinion is wanted by the customer. A 16-page letter will not half as accurately serve in giving that description as will one little score card, intelligently filled out by the same person.

Judging, with us, depends for its value upon the ability of the judge to apply the standard of excellence according to a mathematical ratio. Judging in England, depends simply upon the reputation and ability of the judge, who announces his decisions without reference to the standard of excellence, although that standard has been adopted to serve as a universal test, both in England and this country. Make no mistake about this. The standard is the same in both countries. By the score card system the judge cannot depart from the standard of excellence without subjecting himself to the criticism of those interested, and the system is so simple, the standard of excellence being so clearly defined, that one need not be a practical judge in order to be an intelligent critic and able to discover a glaring error on the part of the officiating judge.

In the comparison system (valuable as it once was before civilization furnished us something better) seven animals were before the judge at once and 29 requirements—that of one animal—multiplied by seven, gives us the neat sum of 203 separate and distinct things to see at one instant, covering a total valuation of 700 points laid down in the standard, and the proportionate share of qualification possessed by each of those respective 203 requirements. I should say that it would take more than an "open mind" to grasp the situation, much less to handle it without making innumerable blunders, which, by the way, if made by the comparison system (where the judge is not required to show reasons for his decision), would never be discovered.

As has been suggested, a score card judge is put to test innumerable times and must necessarily know what he is doing and have a reason for all that he does.

The way to test a judge is to give him the same Belgian two or three hours or days apart, after he has scored other Bel-



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SCORING EAR LACING.

For Description See Page 156.

gians. If he arrives at the same decisions, you will know he is competent. If he does not, you will know that he has been taught by a poor teacher, or is "bluffing." It is impossible for a judge, no matter how good his memory, to carry in his head the valuation he puts on each of the 29 requirements of half a dozen Belgians. I have known so-called "judges," who have picked up the method of the score card without understanding its meaning, or vice versa, to mark certain requirements exactly the same on all Belgians, trusting finally to either hind feet or ear lacing, or both, to throw the animal they were scoring either forward or back of 92 points. Belgians scored by such judges are the kind you see offered in the daily newspapers, "scoring 95 for \$8 each."

It is quite common for sharpers to have a competent judge score a good animal, then keep the animal and send the score card with a cheap Belgian to the customer. There is no way to prevent such fraud, except to trade with a reliable dealer. It can be detected, of course, if the customer knows what a good hare is but it is hard to prove a case at law, and the sharper has the money. I have known of \$10 hares being sold for \$250 by the substitution of score cards, and I have known cases where my own score card, showing a low number, has been torn up or secreted, and the Belgian sold at a fancy price on the strength of a high score card made by a judge clear across the continent of notorious incompetency.

We have thought of many ways to fit a score card to a Belgian, but all are impracticable, if a sharper is bent on trickery. If you mark a Belgian in a certain way, and mark the score card in the same way, the sharper will take an unmarked hare and mark it to fit the score card. The buyer of hares will early in his experience come upon score cards with great seals in the corner, to give an appearance of legality. Such seals mean nothing to the sharper. They are, in fact, a real help to him, impressing youthful minds strongly. Usually the gaudier the pedigree blank and the bigger the seal on the score card, the poorer the Belgian. The honor of the judge and dealer is the only safeguard. In every new district where the Belgian is making its way, you will find beginners carrying around score cards and pedigrees in their pockets, and offering to sell or buy them, while the Belgians which they fit or do not fit may be pining away in some corner, entirely out of the discussion. Such people usually lose from \$10 to \$500

and then drop out of the business. They have a poor knowledge of human nature and will not succeed in business of any kind.



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SCORING SIZE (LENGTH) OF EAR.

For Description See Page 156

LESSON EIGHTEEN.

USEFUL HINTS.

IT is well to remember: That a Belgian should not be lifted by the ears.

That their amorous nature is perhaps their strongest characteristic.

That males are, as a rule, more numerous than females.

That they fight with their feet, and make the fur fly.

That the expression "As mad as a March hare" was coined by an observer, who watched them in March, their best mating time, when they are playful and full of antics.

That a cat deprived of her kittens will suckle a young rabbit.

That a kitten may be taken from its mother and given to a nursing doe. Such kittens, as they grow up, become accustomed to the Belgians and the hutches, live contentedly with them and guard against mice.

That they are susceptible to atmospheric changes, being restless and lively before a change of weather.

That they fraternize with dogs to which they are accustomed, but shrink from and are afraid of strange dogs.

That they may be trained to sit up at command and hold a small stick in the mouth, beat a tambourine, and perform other simple tricks.

That Cowper's hares, as he wrote about them, are famous in literature.

That the hare is an object of superstition on the Isle of Man. It is said there to be the favorite form of a witch. The most superstitious Manx people will not eat them, it is said.

That they are excellent swimmers when forced into the water, either fresh or salt, but prefer to avoid wetting their fur.

That they have no molars, or grinding teeth, but only cutting and gnawing teeth.

That when fresh killed, their flesh will be stiff, white and dry. When stale, it will be limp, and will have a bluish tinge.

That they may be made thin by a diet of acorns, which are rich in potash, lime and phosphoric acid, and are used as an astringent in cases of diarrhoea.

That white spots on the liver signify a tuberculous condition.

That they will defend their young fiercely, but are not fierce ordinarily, and do not retaliate out of vindictiveness, but only to escape.

That constant rearing in hutches has caused their meat to lose entirely the rank, savage flavor characteristic of wild rabbits.

That their skins make excellent glue.

That their dung is good for flowers, particularly vines and fibrous-rooted greenhouse plants.

That it takes forty or fifty hares to eat as much as one cow.

That they are polygamous, one buck being able and willing to attend to thirty does.

That a buck becomes impotent, as a rule, when five or six years old.

That a doe becomes impotent, as a rule, when five years old.

That the buck will kill the doe's young when they are blind and helpless, if allowed access to her hutch.

That if the doe is exhausted at the time of littering, and feels that she can suckle successfully only a limited number, she will kill the remainder. Some breeders claim she kills them to allay her thirst. Water should be plentiful at such a time.

That a doe breeding seven times a year and having eight young at each littering will find herself at the end of four years surrounded by 1,274,840, provided her offspring breed with the same frequency.

That the last remark shows how ridiculous is the contrast between figures and facts.

That the duration of their natural life is said to be from six to nine years.

That variety of food is essential to the production of the finest specimens.

That blood will tell, and that it is impossible to get points which are lacking in both buck and doe.

That starvation is something to look out for.



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SCORING SHAPE OF EAR.

For Description See Page 158.

That their voice is seldom heard, but when it is, it is usually a weak, plaintive cry. When irritated, the cry becomes piercing.

That in Belgium they are fattened for the market by being confined all their days on a shelf a few feet from the ground, so narrow that they cannot even turn around. Lacking any exercise, and being fed on meat-producing food, they attain large size.

That an old one is told by the general solidity and thinness of skeleton, especially at the joints, by a fat belly and extra length and extra thickness of nails. Sometimes the nails are cut by dealers to deceive the purchaser in the matter of age.

That Belgian hares are better than Flemish Giants because they breed younger, they breed oftener, they have more at a litter, they raise more of the young, they mature earlier, they have finer bones, they produce the whiter meat, they drsss away the least, they produce the finer fur, they are more active and more attractive pets, they produce more meat from a ton of food, and it is healthy meat.

That the flesh of a Belgian, not too fat, is not only all white, like that of a young turkey, but it much resembles it in flavor, although usually more tender and toothsome. The flesh of an older and fatter Belgian, roasted, is quite as white as that of a younger one, but, roasted, especially, tastes much like roast duck.

That Belgians are the most prolific breeders of any animal known, and therefore, the most profitable for those who raise them. At the end of a year one buck and two does should produce ready for marketing, or, at least, of marketable age, sufficient hares to weigh 800 pounds.

That Belgians in the same pen sometimes fight viciously, and have been known to kill each other. Does fight as fiercely as the bucks sometimes.

That hay should be sprinkled 10 or 12 hours before being fed.

That you should mate not to magnify, but contrast, defects.

That six weeks is the age to wean.

That you should provide means for the doe to get out of the reach of the nursing litter.

That you may mate at all times of the year.

That you should build demand and supply together, when solving the meat problem in your city or town.

That the show room should be cool and well ventilated, but not draughty, and that the scoring should be done in a slightly subdued light.

That in Germany and France, roasting pans made just to fit the shape of the dressed Belgian (see illustration on preceding page) are used extensively.

That every exhibition should be advertised, especially the name of the judge, so that breeders will have confidence that no favors are going to be arranged at the last moment.

That the price of the meat should top poultry prices.

That unnatural tusks which Belgians sometimes develop should be pulled. I have seen these tusks grow to such an abnormal length that the animal could not use its jaws, and would starve to death.

That Belgians are the most practical meat producing animal. They need small space, have no vermin, eat at night if necessary, do not gormandize, are the most cleanly animal living regarding what they eat, can be raised in the city as well as country, produce the most meat per pound of feed of any animal.



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SCORING SIZE OF FRONT FEET.

For Description See Page 160.

LESSON NINETEEN.

HOW TO DEVELOP A BUSINESS.

THE RABBIT fancier should watch the state of the market closely, and make up his mind to use his own judgment and not take sayso of others. He should welcome an exhibition, for there, if the judges are competent and honest, as they usually are, for no nonsense in judging is tolerated, and desirable animals will be indicated by the disposition of prizes.

The fancier then should make up his mind to get service from the prize bucks, or buy the offspring.

A beginner can make no better start than by buying animals that have taken prizes, or their offspring.

Most of the imported animals were bought in England, not from the original breeders, but from middlemen, or jobbers. The beginner should buy in the best place, where he can get the most for his money. Many who advertise as breeders and advise beginners to buy only from breeders fill up their own hutches from time to time by purchases outside, and retail the animals after having had them in their hutches but a short time. Good animals are not so plentiful as one would be led to think if he believed the advertisements of breeders. Good stock is advancing, and is sure to be appreciated at high figures when the exhibitions have weeded out "scrubs" for which absurd claims now are made.

Starting with a trio of hares is probably the best and quickest way to get returns without a long wait. A trio usually is made up of two does and a buck, and before shipping, the seller usually breeds the does to different bucks that are not related, so in a month the purchaser will have two litters, and with his own buck to draw on for service when needed, he is in a position to make quick sales.

A few rules are to be carefully followed in shipping Belgian hares, or trouble will result.

It is well to remember at the start that the animals are likely to pass through the hands of expressmen others who know little or nothing about them. So on the shipping tag, or on another tag nearby, in plain sight, write or print directions for feeding and watering.

Of course it is not necessary to use a large hutch in shipping, nor is it desirable. Use, for single hares, a small box or crate which may be procured from any merchant. If it is a right-angled box, cover the top with wire netting, and bore holes in the top and sides so that when the box is piled with other packages in an express car, the animal will not be suffocated.

When several hares are shipped together, use one long, narrow box or crate with partitions so as to keep each hare to itself.

The box or crate for use in summer should be lighter and more open than that for winter shipment.

Make the crate as light as possible, bearing in mind that it must be strong enough not to "buckle" when boxes and crates are piled on top of it.

On the wire front, at the bottom, easily accessible to the hare on the inside, should be securely fastened two tin cups, one for water, the other for oats. Oats are all the food necessary for a hare in shipment, if there is plenty of good hay for bedding. One of the tin cups is for oats, the other for water. A bag of oats should be shipped with each crate, and the expressman directed to feed and water so that the cups will have something in them all the time.

For a tin cup, most shippers use the ordinary, cheap hand drinking cup, cutting the handle with a pair of stout shears and bending the pieces flat and tacking them to the woodwork of the crate, thus making sure that the cups will be firmly fixed, and always in place.

If a box or crate with beveled top edges is used, the expressman cannot surround it with other boxes so as to shut off light and air.

The card of instructions to the expressman should caution him against subjecting the animals to sudden extremes of heat and cold.

In cold or cool weather, always use a box or crate entirely enclosed, save for breathing spaces at top. It is not necessary



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SCORING SHAPE OF FRONT FEET.

For Description See Page 160

to make provision for watering when shipping a three or four days' journey. Put in three or four carrots, as well as grain and hay, and the moisture in the carrots will satisfy the Belgian's thirst.

It is very important that the shipping crate not have a water tight floor. There should be cracks through which the urine can drain.

Make the crate as small as you can in order to get the lowest express rate, but always give the Belgian room enough to stretch and move.

The beginner making shipments will find a shipping guide essential. He should ship by that company which will carry the box or crate clear through to destination. If one company has to deliver to another, then the rate will be twice what it would be if entire carriage was made by one company.

Advertising is not always essential to the development of a business, but it is a great help and in some cases it is absolutely necessary. A good business is sometimes built up, however, by breeders, who secure such good specimens that their fame is spread by word of mouth.

The advertisement reaches a great many at the same time, and if the advertiser's story is intelligently and sensibly told, and he has something which is wanted, he is bound to interest people and begin to make sales.

It should be possible for the beginner to write an interesting, readable letter about what he has for sale, and encourage correspondence.

If the beginner is first in his neighborhood, he will be able to make a good many sales, and perhaps reap a great harvest, before competition sets in. When competition comes, he must remember that his stock and prices are to be judged by comparison, and he will be obliged to develop his business acumen.

The best way to get a reputation for handling good stock is to send it to an exhibition and there "beat the field." Preference by honest and reliable judges is a great thing for a breeder. He will find the buying public turning to him with a rush to get stock able to take prizes, and therefore of unquestioned grade.

Do not neglect the bookkeeping part of your business.

Records of breeding should be kept according to the calendar, so you will know just how your does are coming on. If

your records are kept as they ought to be, you will not be surprised by unexpected litters.

Blanks for recording pedigrees may be purchased of printers and filled in with the name of rabbitry.

Keep adding to your stock from time to time new blood, either by the purchase of young bucks, or by service from a famous stud. Usually the money spent for service may be regarded as a wise investment. A judicious amount of inbreeding is not harmful, when the stock is worth it, but it is best to go outside for characteristics which your stock lack, and which you have tried to get without result.

Your records ought to show how often you have to buy feed, and what you pay for it, and how long it lasts, so you can form an intelligent idea of the amount of profit you are making. You will be able to save a great deal by a wise choice of food. Learn to utilize what grows wild around you, in whatever part of the country you may be.

When you begin to invite buyers to inspect your stock, you will find money laid out on a handsome rabbitry to be a good investment. Try and have the surroundings as clean and attractive as possible, for such matters will appeal to a stranger strongly. Unless you can make a good profit yourself, in raising Belgians, and show signs of having made money, it will not be convincing for you to advise others to buy of you in order to make money.

Some parties write a woeful tale to me about a breeder shipping them bred hares that failed to have young, and ask my advice in the matter. Let us analyze the matter and reduce it to where we can look at it squarely. A writes to B and prices a doe, to be bred to B's best buck. B sets about breeding, but fails for a few days, then gets a roasting for delaying the doe that was ordered, through no fault of his. Again, C buys one of D on the same terms. D mates the doe and ships her out and she fails to kindle, and D gets a "roasting." To begin with, let us look at B's and D's motives. Is there any reason in the world why the seller should wish the doe not to kindle or not to breed? Is there not every reason why they should very much like the does to kindle promptly and raise successful litters and make a happy, well-pleased customer for him? Again, if he has entirely fulfilled his part of the transaction and Providence has not done the rest by "smiling" on the purchaser, should the seller of the stock get that unreasonable "roasting"? Then the buyer sullenly says:



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SCORING COLOR OF HIND FEET.

For Description See Page 163.

"What is the matter with the does?" He can't tell, and neither can I, unless they have some French blood in them; but is that any excuse for him being unreasonable about it? I don't think so. I am willing to believe that every living person is honest when there is every reason for them to be so, and positive reasons why they should not be dishonest, as in this case. Now, let me go a step further and ask the buyer whether or not he assesses himself with a fine of \$10 each time that he breeds a doe for himself and she fails to kindle, or does he show the good sense to "try, try again," until he gets a litter?

During my stay in Boston in January, 1901, a Belgian which had won first prize in a Los Angeles, Cal., show, was sold in Boston for \$150 on the strength of its Los Angeles winning. The purchaser, on receiving the animal, made the score 89. One of my Boston pupils made the score 89. Being appealed to by the purchaser, I scored the animal and arrived at 89¼. These figures are given from memory and may be off a quarter of a point from the facts. The point which I wish to make clear is, that the value of a Belgian for breeding purposes, or for any purpose, dropped from \$150 to \$10, and the salesman, who appeared willing to do the right thing, made his customer a rebate, or satisfied him with other stock. The front and hind feet of the animal were well-colored, particularly the hind feet, but the head was off decidedly in shape, and there were other defects, notably a profusion of stray hairs, of which I counted nearly a hundred in half the body, and without counting further estimated that there were fully 200. The California judge had called the animal perfect in this requirement, I was told. The breeder or dealer must be skilled, as well as honest, otherwise he is likely to do somebody an injustice in making sales.

I notice a great deal of stock which is being sent through Denver from the smaller cities of the country, which stops here to be scored which is very often represented to be very high scoring stock, but disappoints the purchaser very much. I would advise the breeder to be very particular in describing stock that he wishes to send out and to never over-estimate or under-estimate its value. Practically the people taken throughout the United States understand pretty well what is required to make a high scoring animal under the American standard of excellence for Belgian hares. Advertise liberally, advertise just what you have for sale, send out just what you

advertise and your efforts will be rewarded in any line of the industry. .

Of course persons with inferior stock have no reason to exhibit. A breeder who has really first-class stock and shows extensively during the winter, will be the one who will reap a rich harvest during the following year. Culling your stock for exhibition purposes for the coming season's shows, demands your strict attention to satisfy those calling for the very best if you cater to that line of trade. Make your selections in the most intelligent manner possible. Cull your stock closely. Cull it early and then give the best animals the very best of care. Furnish them individual hutches before they get old enough to do much fighting. Otherwise they will be badly sprinkled with stray hairs, and practically worthless for exhibition purposes. Feed on the choicest of grain and the very best hay. Do not feed too heavy. Do not keep in the direct rays of the sun, while on the other hand, do not exclude them too closely from the light. Give the animal what light is necessary for his health and no more. In preparing for the show do not make the mistake that is so often done, by neglecting to get the exhibition hutch ready until you are ready to exhibit so that you will have to place your stock in hutches newly painted. Have your animals in the best of condition possible.

In some states where I go (notably Massachusetts) it is intimated that the game officers will endeavor to apply the game laws to the breeders and sellers of Belgian hares, because the laws say that "hares" among other kinds of game named, shall not be offered for sale in the close season, which begins about the first of March and continues on for six months. I have advised the fanciers of Belgian hares in Massachusetts to take united action in going to the legislature and asking to have the law amended so as to read "hares, except Belgian hares," merely for the purpose of avoiding trouble and litigation. Failing to obtain the amendment, which in my judgment is not needed except as a precautionary measure, I have advised them to make a test case at the first opportunity, and go into court with the defence that Belgian hares are not game within the meaning of the law, for they are not.

Belgian hares are domestic animals strictly, as much so as sheep or chickens. They do not survive in a wild state, and the first arrest made for offering them for sale in the close

season will result in a judicial interpretation of the law to the effect that they are domestic animals and cannot be classed as game. The law as it stands, however, is likely to deter some prospective breeders from starting rabbitries.

In Colorado the legislature has passed a bill against indiscriminate breeding of Belgians, under the impression that they might become a pest, while in one or two other states bills to encourage the increase of the Belgians for the benefit of hunters has been proposed, and a resolution was introduced in the Maine legislature for an inquiry into the subject to see if there is any danger of the hares becoming a nuisance and to see, also, if there is any necessity for passing a law regulating the trade in them.

The best legislation with reference to Belgian hares is no legislation at all. They don't require legislation any more than a sheep or a hen. The Belgian hare never can be anything but a domestic animal. They do not survive in a wild state, for they are not combative, and fall a prey alike to dogs, cats, miuks, weasles, foxes, skunks, hawks and owls. It is frequently stated by people who do not know what they are talking about that Belgian hares breed so fast that they would speedily become a pest, but there is not the slightest danger of that. The animals which caused all the damage in Australia were English hares, an entirely different sort of animal, voracious, pugnacious and destructive. Nature put no animal enemies of the rabbit in Australia and all the trouble there may be laid at the door of those persons who took the English hares there. The English hare and wild rabbits everywhere are no more like Belgian hares in their habits and methods than a hedgehog is like a house cat. Belgian hares turned loose to shift for themselves speedily disappear, for every animal preys on them, and they have no defence against their enemies.

LESSON TWENTY.

FUTURE OF THE INDUSTRY.

AMERICA is a continent of vast natural resources, and the home of progressive, practical-minded people, who know no such word as failure, but who set about the production of whatever is wanted, with the knowledge that a short time is sufficient to see the fruits of their labor ready for use.

It is a fact that once it was the custom in this country, when in need of meat for food, to go into the forest or onto the plains, and by means of the rifle and skill of the hunter, secure the necessary amount for the purpose or occasion. Such, although the height of the sportsman's ambition, could not fill every requirement of the person engaged in a busy domestic life, from the fact that such supply was of irregular quantity and of variable quality, with the result that game later drifted into its proper destination, that of furnishing delight, pastime and recreation for the sportsman, and the supply of meat for domestic purposes was expected to be the product of domestic animals and fowls.

Very naturally the larger animals were first in favor, and later it came to be understood that they were not preferable, from the fact that their use must be confined to the cities or to the cool season of the year, in order to avoid loss on account of an over-supply.

Swine rapidly grew in favor on account of the more practical size, and well can we yet remember when there was considerable rivalry displayed in an attempt to produce the largest specimens of this animal, which, however, later died out, and the production of the medium-sized, quick-maturing hog was the crowning feature of the porker's ambition.

A demand for a smaller and cheaper animal followed until it is now true that sheep is a prime favorite for the produc-



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SCORING THE NECK.

For Description See Page 164.

tion of meat, and mutton is everywhere in use. But even the sheep was not destined to furnish the limit as the most practical meat producer for humanity's sake, but poultry was to be seen in every farmyard, and even in the suburbs of the city, it being the most practical size yet known—just right for one good meal, unless, perchance, one had a very large family or guests, in which case it could easily be doubled up, whereas you could not reverse the rule and butcher only a part of a larger animal at one time. Thus it was that poultry was finally considered indispensable to the comforts of the civilized races.

While all this was going on there had been springing into existence a little animal that was to be as much more practical, even than poultry, as poultry had been above all the other articles enumerated.

Three years ago I might have expected you to ask me what it could possibly be, but today you will not. You have of course heard that Belgian hare meat is as white as the breast meat of fowl, that it is as tender as the breast of young turkey, which latter it resembles very much in juiciness and flavor, and that a better meat has never yet been eaten, unless it be that luxurious edible, frogs' legs. All of these nice compliments will go a long way toward creating a favorable impression on you with the article, but not nearly so far as the actual experience gleaned from a treat to the sense of taste, which is so convincing to the person of a normal alimentive development.

The practical features of this little animal can partly be understood when one finds that it is fully as well adapted to city life as to country life; that the room necessary for the comfortable quarters of a dozen fowls is an over-abundance for a hundred hares; that much of the food necessary for the rearing of them would otherwise be waste from the kitchen, not utilized at all; that, unlike poultry, they breed every month in the year; that, whereas you must wage a constant warfare against poultry vermin, nothing of this nature touches hares; that they do not gormandize and starve alternately, as do poultry, but feed sensibly, as does a squirrel, regardless of how much is placed before them, thus enabling one, if necessary, to give them the proper quantity of food to last them for some days, at one time; that where it is necessary for a laborer to perform his chores after dark hares are as ready to receive their food then as at daylight,

and that one good brood doe will produce 400 pounds of meat (live weight) per year, and keep it up for some three years.

We will not proceed further, for we know that a few hints on the practicability of the Belgian hare are sufficient to set our readers thinking, and they will no doubt enjoy thinking out for themselves the numerous other features in which it entirely outclasses any fowl or any other animal living that, up to late, has been tried as a producer of meat.

Several things must be considered in order to arrive at an intelligent decision.

First, how much meat can be produced; second, how long will it take to produce it; third, what does it cost to produce it; fourth, what is the quality of it when produced, and fifth, what are the attendant expenses. In each and every one of these features our little favorite is so far ahead of all competitors as to render comparison unnecessary.

I cannot refrain from speaking a word relative to the misleading articles that are sometimes seen in the newspapers, maliciously published, and expected to prey on the ignorance of persons of over cautious tendencies and superstitious development. It is relative to the pest that the animal will soon become in America as a result of escaping from the breeders. It is really amusing to note that there are a few earnest, conscientious persons who are ready to believe anything of the kind if they can only see it in print.

I will here state that it has been repeatedly tried to stock certain localities with the Belgian hare for hunting purposes, and it cannot be done. They are so thoroughly domesticated that when a natural enemy approaches them they have not the instinct requisite for their self-preservation, and can only be used for park purposes where the premises are free from dogs, coyotes, minks, weasels, cats and reasonably free from hawks and owls.

They are, however, very intelligent, and were it possible for them to exchange intellect for caution with some of the people who now fear their becoming a pest, it would result in the betterment of both the creatures in question.

Let us use a few parallel examples to show the folly of jumping at conclusions when entirely ignorant of the subject.

There was a time when our faithful watch dog, or rather his ancestors, were not domesticated. Who is there who would now predict that he might get away from us and become a coyote? It has not been a very long time since our

Official Score Card of the National Belgian Hare Club

OWNER'S { Name

 { Address

 { Date of birth—Mo....., Day....., Year.....

SPECIMENS { No..... Name.....

 { Weight—Pounds..... Ounces.....

Denver, Colo.,

CLASS	SIZE	SHAPE	COLOR	QUALITY
COLOR	Stray hairs....	...	4	..
	Body .....	...	4	..
	Sides .....	...	4	..
	Hind quarter	...	4	..
	Jaws .....	...	4	..
TICKING .....	...	...	15	..
SYMMETRY	Body	4	..	..
	Flank and rib	4	..	..
	Back	4	..	..
	Loins	4	..	..
HEAD	Head	4	..	..
	EARS	Lacing	2	..
EYES	Otherwise	2	2	2
	Otherwise	2 1/2	2 1/2	2 1/2
LEGS AND FEET	Front	2	2	2
	Hind .....	...	2	..
SIZE OF SPECIMEN	5	...	...	...
CONDITION	Flesh .....	...	...	2 1/2
	Fur .....	...	...	2 1/2
NFCB	5	5	...	...
SUM OF COLUMN	11 1/2	31 1/2	45 1/2	11 1/2

Possible score, 100 Total out..... Score.....

JUDGE.....

PRESIDENT

SECRETARY

FULL VALUE OF EACH REQUIREMENT.

stately Thanksgiving bird, the turkey, was domesticated and roamed at will over North America. Where can we find a person so overburdened with caution as to predict his ultimate escape from the fancier and the devastation that would surely follow to the vegetation of beautiful America? It is as sensible to ask the passage of a law to impose a fine on a park keeper for allowing a buffalo to escape from his premises lest he once again become a pest, roving over the plains and trampling under ponderous feet the machinery and crops of the western farmer.

It would be vastly more reasonable for the people of California to have passed a law to prohibit the keepers of the ostrich farms from allowing an ostrich to escape from them than it would for them to have passed the law which they did, for an ostrich would stand some chance of being able to escape natural enemies, whereas the Belgian hare, in its thoroughly domesticated state, together with its characteristics, its helplessness for 10 days after birth, could stand no show whatever, as has been demonstrated, to the disappointment of many persons who would like to see the country at large stocked with them for game purposes, were it possible.

It is remarkable how many newspapers and newspaper correspondents take up a matter that they know nothing about, and to which they more than likely have never given a moment's thought, and yet write such lengthy and impractical fables as have appeared in print on this industry, with no evident object in view other than to create a sensation. The fact is that such articles do positive harm and block the wheels of progress by starting them to revolve in the wrong direction.

An instance of this occurred on my recent return from England with an importation of hares. I was asked to pay import duty on my arrival at the New York dock. Knowing that the law fully covered the point on "registered animals for breeding purposes," I entered a protest, and was accompanied by the navigation commissioner to the custom house, and there saw the official in charge, who said that he received a list of the names of animals not dutiable, and that although we had in every way complied with the law, it would have first to be included in his list, which neglect was on the part of the secretary of agriculture.

He then proceeded to say: "Moreover, I hope that it will

never be placed on the list, for the animal will soon escape and become a pest in this country." I paid the duty, which was the only thing to do under the circumstances.

Of course I knew that he had been reading one of those scare-crow articles and had "digested it without a grain of salt." I could but pity a business man of mature age for forming an opinion on a sensational article and without any information or investigation, but knowing the general trend of political life and the close attention claimed of the incumbents of political positions, I was not greatly surprised at the condition of things.

Just at the present time there is a carefully planned and general attack made on the Belgian hare throughout this entire country by the poultry fanciers in general, who fear that the meat of the hare is going to be given the preference to that of chicken, turkey and duck, particularly the latter, which class of consumers it comes in very close touch with.

But these people might as well fight the wind or the tide as to fight such an eminently practical industry. The proper thing for all those who are producing poultry to do is to fall in line and add Belgian hare to their list, take an active part in the upbuilding of an open market for them, insuring respectable and substantial prices and thus keep it from drifting into unorganized hands, thereby injuring the price of poultry.

In the attack made on the industry they have not failed to dig up all the grumblings of discouraged and defeated English exhibitors, who have later drifted into cheaper fancies, and to ventilate all the complaining articles that have been written in California papers, either for the reason that they were skeptical or that they were jealous of some more active publication getting more of the hare advertising than they.

As one who was there and judged their two great shows, was in touch with their every move, and personally acquainted with the persons who have taken active part in their every action, I will here briefly tell you what became the matter with the industry in California at one time.

The Californian was very enthusiastic right from the start, for the matter was taken up by very ambitious and practical people. They fully stocked the large cities very early, and the bad feature of it was that their enthusiasm greatly surpassed their knowledge of the animal, and among those who took up the industry were many unreliable and unscrupulous

Official Score Card of the
National Belgian Hare Club

OWNER'S { Name

 { Address

 { Date of birth—Mo..... Day..... Year.....

SPECIMENS { No..... Name.....

 { Weight—Pounds..... Ounces.....

DENVER, Colo.

CLASS	SIZE	SHAPE	COLOR	QUALITY
COLOR 25	Stray hairs....	...	- $\frac{3}{4}$	...
	Body .....	...	-$\frac{3}{4}$	...
	Sides .....	...	$\frac{1}{2}$ 1	...
	Hind quarter .....	...	$\frac{1}{2}$ 1	...
	Jaws .....	...	$\frac{1}{4}$ $\frac{3}{4}$	...
TICKING 15	...	...	1 2 $\frac{1}{4}$	...
SYMMETRY 20	Body .....	...	-$\frac{1}{2}$	...
	Flank and rib	$\frac{1}{4}$ $\frac{3}{4}$	...	...
	Back .....	...	-$\frac{1}{4}$	...
	Loins .....	...	-$\frac{1}{4}$	...
	Head	$\frac{1}{4}$ $\frac{1}{2}$	...	...
EARS 10	Lacing .....	...	$\frac{1}{4}$ $\frac{1}{4}$	...
	Other wise ...	- $\frac{1}{2}$ - $\frac{3}{4}$	$\frac{1}{4}$ $\frac{3}{4}$	- $\frac{1}{2}$
EYES 10	...	- $\frac{1}{4}$ - $\frac{1}{2}$	- $\frac{1}{4}$ - $\frac{1}{2}$	- $\frac{1}{2}$
LEGS AND FEET 10	Front	- $\frac{1}{2}$ - 1	- $\frac{1}{4}$ - $\frac{1}{2}$	- $\frac{1}{2}$
	Hind .....	...	$\frac{1}{4}$ $\frac{1}{2}$	...
SIZE OF SPECIMEN 5	...	- 0	...	...
CONDITION 5	Flesh .....	...	...	-$\frac{3}{4}$
	Fur .....	...	...	- 1
NECK 5	...	$\frac{1}{4}$ 2	...	...
SUM OF COLUMN	...	...	...	...

Possible score. 100 Total outs..... Score.....

JUDGE.....

..... PRESIDENT

..... SECRETARY

USUAL CUTS.

A dash (-) means perfect.
For example, the usual cuts on stray hairs
are from perfect to 3-4; on ticking from
1 to 2 1-4.

dealers who had no love for the animal and no real interest in its welfare. These people were ever ready to turn a few dollars regardless of the methods employed.

They strove to mislead others on the real standard requirements of the animal, in order that they might palm off cheap stock at exorbitant prices. They worked their way into the club, as members, and soon became a fermenting element, and finally, when it came to taking action on the coming year's show, they succeeded in sidetracking the effort, through jealousy, and voted to hold no show.

Unfortunately southern California has a warm climate, and the Belgian hare is a furbearing animal of cool climate proclivities, and a loss of animals from heat through ignorance of how to care for the animal, was occurring just at the time when the club voted to have no show.

Some persons suggested that the bottom had fallen out of the industry, and a general stampede ensued, by all hands trying to sell their stock at once.

Anyone informed of the geography of California knows that on the west is the Pacific, on the east is the desert, on the south is an unprogressive class of "greaser" population, and that the only outlet to the country for their stock was practically by the north. At that time southern California had on hand more stock than was contained in all the rest of the United States, and it had to be sold in a day, figuratively speaking. What was the result? Just what happened, of course.

It has not done any particular harm in the long run, other than to create a few cold water-pourers and to furnish a valuable lesson that may well be heeded by other people. Denver had always been considered the headquarters for strictly fancy stock, and the influx of the California product on the markets of the country was scarcely felt at Denver, from the fact that the industry was being so rapidly introduced in the other localities.

Today there is a greater demand for the animal than ever before, which will continue as it becomes better known. Prices run higher for the very choice animals now than at any previous time. From time to time fabulous prices have been reported to have been received by firms in this country well known to all the honest breeders and fanciers to be unreliable, and this had a bad effect on honest dealing, which, however, the industry is able to survive on account of its

practicability.

When I was in England in November I priced very nearly all the best ones there, and they ranged from \$100 to \$450 each, which price has actually been paid since the Crystal Palace show, and the animals are now in this country. As in all other industries, the investigating, practical, businesslike man will succeed, and the unscrupulous craftsman will be disappointed and end by attempting to injure the industry.

No.
 Mr.
 Bred Doe
 To
 Date
 Remarks

No. _____	CERTIFICATE OF BREEDING	
	_____ 190__	
	This is to certify that Mr _____	
	has this day bred one Doe _____	
to _____	}	Sire _____
		Dam _____
	Signed _____	
	Remarks _____	

BREEDING CERTIFICATE.

(Half Size.)

The breeder has a book of these cards, and when he sells a bred doe, or breeds a customer's doe, he fills out one and gives the main portion to the customer, retaining the stub for reference. Usually breedings are successful, but it is impossible to tell, and in case of the failure of the doe to kindle, it is customary for the breeder to give another service free.

The indolent, careless person who expects something to "just happen" will make a failure. To the wide-awake person who is willing to work for a good, lucrative net income, or to one who has considerable of money to invest, and who is a natural fancier and wishes to place his investment where it will bring the greatest returns and furnish him the greatest pleasure, the Belgian hare industry offers inducements to be found in no similar direction.

THE END

THE SCORE CARD AT A GLANCE.

[Compiled by JUDGE J. H. STODDARD, Boston.]

The following table shows the full value of each of the twenty-nine requirements of the score card, together with cuts that are commonly or invariably made in scoring a Belgian hare. The points not specified in this chart are frequently found to be perfect.

COLOR PROPER.		EYES.	
Stray hairs.....	4 points	Size.....	2 1-2 points
Body.....	4 "	†Shape.....	2 1-2 "
†Sides.....	4 "	Color.....	2 1-2 "
*Hindquarters.....	4 "	Quality.....	2 1-2 "
*Jaws.....	4 "	LEGS AND FEET.	
*Ticking.....	15 "	Size front feet.....	2 points
GENERAL SHAPE.		Shape.....	2 "
Body.....	4 points	†Color.....	2 "
†Flank and Rib.....	4 "	Quality.....	2 "
Back.....	4 "	Color hind feet.....	2 "
Loins.....	4 "	CONDITION.	
*Head.....	4 "	†Flesh.....	2 1-2 points
EARS.		Fur.....	2 1-2 "
*Lacing.....	2 points	*Neck (shape).....	5 "
Size.....	2 "	Size of specimen.....	5 "
†Shape.....	2 "	100 "	
†Color.....	2 "	† Usually cut.	
Quality.....	2 "	* Invariably cut.	

The experience of the most scientific breeders of Belgians up to the present time shows that with all their knowledge of careful mating certain points of the animal still fall short of the ideal specimen, although their efforts have been crowned with success in many of the features that combine to make a perfect animal, and today they are producing animals that will score much higher than they were able to do but a few years since. In these features which have already been accomplished and which can now rapidly be produced by a fancier who uses some judgment and care in mating (together with a good quality of breeding stock), we expect to see further improvement made in the near future. The most perfect specimen known, scores, according to the adopted "American system of scoring," 96 1-2 points, being 3 1-2 points below the "American standard of perfection." The defects that invariably appear in animals are: Color of sides, color of hindquarters, color under jaw, ticking, lacing, color of ear, color of hind feet and shape of neck. There are exceptions to the above which are color of sides, lacing, color of ear and color of hind feet, in which perfection is sometimes, but rarely found. The head and flank and rib are usually cut but less frequently than the other defects mentioned. An eye, not fully exposed, on account of a drooping lid, is often punished for shape, the other requirements, namely, size, color and quality, usually being perfect. A specimen arrives at maturity at the age of ten months, and the standard requires that it shall weigh eight pounds. No cut is required for animals that exceed this weight. Specimens that fall below eight pounds are cut two points to the pound, by 1-4 points. Animals in a show room suffer more under this requirement than in any other on the score card. Immature animals are not cut for weight. Careful attention being given to the several points referred to, will greatly assist a breeder in producing the finest specimens, which is the great desire of every Belgian hare fancier.

APPENDIX A

TO ENGLAND FOR BELGIAN HARES

I AM BACK AGAIN at my desk after having traveled some 11,000 miles through Colorado, Kansas, Missouri, Illinois, Indiana, Ohio, New York, New Jersey, Pennsylvania, Iowa, Michigan, Ontario, Canada, Ireland, Scotland, England and the Atlantic ocean. My trip in search of England's best was made for a Kansas City firm. Every selection was as carefully made as if I had made it for myself, and I had every animal registered in the stud books of England before bringing it away. I returned with the stock, gave it daily personal attention and care while en route, and never lost an animal.

The importation consisted of 34 head of Belgians and one wild English hare, but the cost, including all expenses, was sufficient to have brought over a thousand good hares.

From the great number of short-limbed, short-eared, yellow Belgians without ticking or ear-lacing that had for the past six or eight months been imported by dealers and sold at \$50 each, one would very naturally be led to believe that in England the fanciers had come to ignore those very important requirements, but not so. That kind is plentiful there yet, and they are glad to sell them at anywhere from \$2.50 to \$6 each, and are not very particular in regard to just which price you pay.

Of course a fancier would not pay transportation on such stuff, even if made a present of it, and when the insane idea that anything imported will do to "stick amateurs with" has run its course and subsided, there will be no further importing except of strictly first-class specimens.

The class of persons who have gone over after stock have in their actions produced two evil effects, viz., that of creating the wrong impression in the mind of the American regarding

the ideal of the English fancier and his best product, and also the impression on the Englishman that those dealers whom he met were representative of the American fancier—and of course the inference very naturally was that the latter did not know a good animal, did not know what he wanted, was a “cheap John” on general principles, a veritable kicker on prices whether high or low, on good animals or on poor ones. We were even told that there had really been but one American over there who had shown any accurate knowledge of a good hare and that he was a Californian.

One man told me this: “I was showing an American my stock and he kicked on prices regardless of quality or price, and I at once knew how to handle him. Later in the day he was given the opportunity to look over the same stock in another man’s rabbitry and a price was set on the stock that allowed him to haggle a while over prices with the result that he bought the same bunch, paying for them five times the price asked him for them when he saw them at home, and went away congratulating himself on getting a good bargain.”

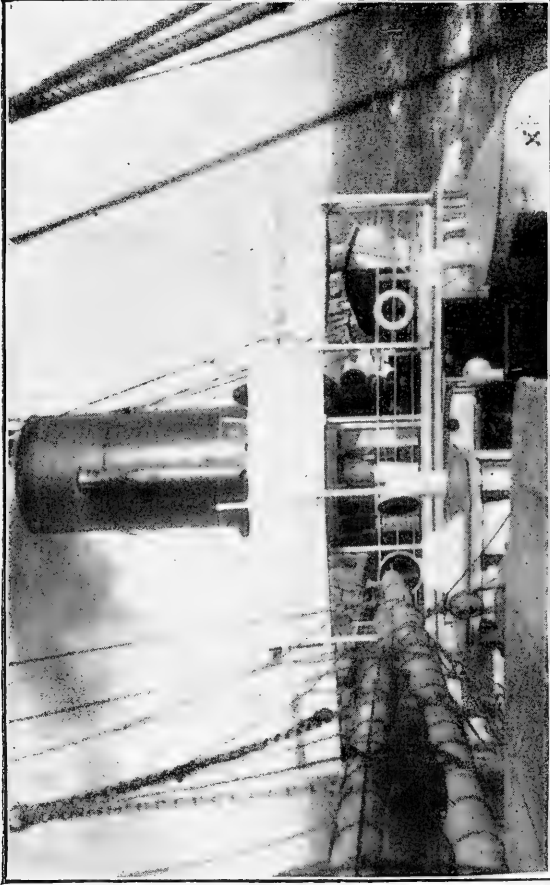
Is it any wonder that the actions of such stupid ignoramuses give the English fancier the wrong impression of the American fancy and fancier?

On the other hand, is it any wonder that the selling of \$6 hares to amateurs here for \$60 each, uniform price, with the assurance that they were “the thing” in England and that the dealer had never really seen a good hare before going to England, gives that amateur and a great many older American breeders a very bad impression of imported stock and English fanciers?

That impression is wrong. We are now prepared to say, knowingly, that a fancier is a gentleman, wherever you find him. He knows what he wants whether he lives in England or America. A poor animal there is a poor one here. A good one there is a good one here. The best one there would be the best one here.

There is absolutely no difference, whatever, in their choice and ours, and if American persons will use their heads and look at the Palace winners that have come to America from time to time, they will know this.

True, the National of England has made one transfer in a revision of standard later than ours covers, but which we will gladly adopt, and on which point I shall write in full later, but it does not change their choice of an animal in the least,



**STEAMER ANCHORIA, BRINGING MR. CRABTREE'S SHIPMENT OF BELGIANS
FROM ENGLAND.**

X Indicates location of hatches.

nor their application in judging, nor the real requirements of the animal, and I will tell you why. It was a point on which they had plainly, for years, deviated their requirements from the manner in which their standard worded it, and we, in turn, had followed suit. They simply fitted the wording to their and our application.

It is relative to ticking and dewlap and when I take it up in full I will make the situation very plain, indeed. In substantiation of the fact that I have mentioned regarding our choice of animals being the same, I shall bring some very telling evidence to bear. It is in this way:

I soon discovered, or rather confirmed the discovery that I had made long since, that whoever judged the Palace show was capable of picking out a good hare.

The gentleman, I found out, was Mr. Roberts, and the fact that he always gets the judging there shows that I was right. I soon discovered that too much dependence could not be put in the fact that an animal had won a first in any other show in England except the Palace. In many instances competition amounts to nothing in those small shows, and it remained for me to arrange a comparison of my work with theirs, and lest some critic should say that I scored good animals high after knowing their winnings at small shows, I determined to make the test on Crystal Palace winners, as it would necessitate me scoring them some 12 days before the Palace show and thus have my rating of the animals made and in possession of the various owners of those animals before Mr. Roberts had ever seen them and before the comments and criticisms of Judge Mason and Fur and Feather had an opportunity to be made.

Does any one wonder what the result was? It was no surprise to me; in fact, I don't often meet surprises, and neither does any one else who works and thinks from a cause-and-effect standpoint. The instances that I furnish you are undisputable and unquestionable, being contained in the show reports, Fur and Feather and on cards which I used on the animals there before the show, and any one wishing to investigate and know the truth of it can write to the owner of the animals in question and ask whether I gave those animals that rating at that time.

I prove it further to you and to all concerned from the fact that I was so sure of the winners there as to take their photographs at that time and keep for publication, accompanied with their score cards, photographs taken some 12 days before the

Palace show. I was unable to remain for the Palace, being compelled to return four days prior to it.

Now here are the winnings of the two fancy does shown in the photographs which were published, and which were taken by me at the time I scored them. Now one and all can draw their own conclusions about what might make one judge criticise the work of another, whether such criticism is or is not just, and from Roberts, Fur and Feather, Mason, Ambrose and Crabtree, it should not be hard to determine the standing of those handsome does very accurately.

I would ask you to answer the question silently, for your own benefit, who of the four gives the most accurate and specific reasons for the rating given the animal and also look at the photographs and see how "rabbity" that most excellent and graceful ear carriage appears to you in the taller photograph, which is the "Wilkins Doe," winner of first at Dunstable, first at Bristol, first at Palace, challenge cup in her class at Palace, 25 guinea challenge cup also at Palace for best Belgian in show, regardless of age, class or sex.

"Crystal Palace show—This year's Palace fixture, held November 12, 13, 14 and 15 was undoubtedly the best yet held, the entry in rabbits, taking them altogether, making a grand total. Belgians were really wonderful classes throughout; no other description adequately represents the collection of 233 entries in seven classes. The American boom, and the additional challenge trophy, the 25 guinea cup, will no doubt account for this, but we hardly thought the quality in keeping with the increase in numbers. The challenge cups were also responsible for considerable excitement, new faces making the race a tight one. In adult does Mr. Wilkins won and also secured the coveted honor of winning the champion cup the first time such has been offered for competition. Considerable difference of opinion existed as to its claim for such a position, and we must confess ourselves surprised at such being awarded to her, despite the fact that she has many excellent properties."—Fur and Feather, November 15, 1900.

"Doe, 43: 1—Challenge cup, and 25 guinea challenge cup best Belgian in the show, Wilkins the Dunstable and Bristol winner leading, stands on four lovely feet, full of color, which, however, lacks that desirable brilliancy on top, shape not by any means correct, inclined to squareness, lacks that graceful outline which beautifies a Belgian, ears moulted, and inclined to be rabbity, sparse even ticking; vhc. Lumb, very smart

shape, nice feet, dull on top."—Report, Comment and Criticism by Ambrose.

Between these two does, Mr. Wilkins comes in with a beautiful doe, winning third that scores $95\frac{1}{2}$, one-fourth point lower than his most wonderful doe above mentioned. The Lumb doe also scores $95\frac{1}{2}$ points.

Here is a copy of the score card of the best Wilkins doe, the challenge cup winner, the doe standing upright and looking toward the camera:

Stray hairs, perfect.
 Color of body, $\frac{1}{4}$.
 Color of sides, $\frac{1}{4}$.
 Color of hind quarters, $\frac{1}{2}$.
 Color of jaws, $\frac{1}{4}$.
 Ticking, $1\frac{1}{4}$.
 Shape of body, perfect.
 Shape of flank and rib, $\frac{1}{4}$.
 Shape of back, perfect.
 Shape of loin, perfect.
 Shape of head, perfect.
 Lacing of ears, $\frac{1}{2}$.
 Size of ears, perfect.
 Shape of ears, perfect.
 Color of ears, perfect.
 Quality of ears, perfect.
 Size of eyes, perfect.
 Shape of eyes, $\frac{1}{4}$.
 Color of eyes, perfect.
 Quality of eyes, perfect.
 Length of front limbs, perfect.
 Shape of front feet and legs, $\frac{1}{4}$.
 Color of front feet and legs, perfect.
 Quality of front feet and legs, perfect.
 Color of hind feet, perfect.
 Size of specimen, perfect.
 Condition of flesh, perfect.
 Condition of fur, perfect.
 Shape of neck, $\frac{1}{2}$.
 Possible score, 100.
 Total outs, $4\frac{1}{4}$.
 Specimen's score, $95\frac{3}{4}$.

P. E. CRABTREE, Judge.

The claim that I make is simply this—that hares get the

same rating, in the show room in England, that they do here, exactly; that the results sought and arrived at are absolutely the same and the only difference between there and here is the manner in which we arrive at that conclusion, the methods employed in arriving at it and I am willing to tell all Americans how they can further test it now in short order.

From correspondence shown me while in England I have every reason to believe that the Chicago show will be judged by Mr. W. Lumb of Cleethorpes, England, the eminent and highly-respected secretary of the National Belgian Hare club of England. (Later—Mr. Lumb, however, did not come over to judge the Chicago show.)

Mr. Lumb is one of the best judges of hares that I have ever met, and cannot be beaten in getting hold of the proper one quickly. That is my opinion of him.

Here follows the opinion of the members of their National club relative to the same. Their annual election was held in October, and the result is published in *Fur and Feather*, issue of November the 8th, page 329 and reference to it shows that on the vote for judges Mr. Lumb heads the list with a vote of 63 out of 66 votes cast.

That looks as though Mr. Lumb was as capable a judge as there is living, and I believe it. The point I wish to reach is this: Chicago holds a comparison show after the English plan and if Mr. Lumb judges it, you can wager that every animal will get just what it deserves—no more, no less.

Mr. Lumb will judge the specimens and not the owners, for he is built that way.

The Chicago show follows immediately after the Boston show, where I shall judge, and immediately after the Kansas City show, which will be judged by the best talent obtainable. Since the Kansas City and Boston shows occur on the same dates and just previous to the Chicago show, I will ask any one who is in doubt regarding American and English judges making the same decisions on the same specimens to send a string of stock first to Boston or Kansas City, and from there forward it to Chicago and have Mr. Lumb place it there. This will convince you that there is no difference in the conclusions arrived at, whatever, and that the method of arriving at that conclusion is the only difference between the two systems of judging.

With the American system of judging, the animal has a permanent rating at the age scored and the score card shows

the age of the animal and the date of scoring, as well as the condition of the animal at that time, and also shows where every defect is, how defective it is, proportionate to the standard points already allotted for each of the 25 requirements; so draw your own conclusions as to which is preferable; the mere assurance that an animal wins and is the best there, or that in addition a rating of how good that winning specimen was, as well as how good every other specimen on exhibition was, and the qualifications and defects of every specific requirement possessed by every animal on exhibition be given. Answer yourselves the question, "Which is the up-to-date, progressive, explanatory, most accurate and preferable system?" We occasionally see articles written derogatory to the score card system and purporting to have emanated from some one having discovered gigantic variations made by some one who has attempted to score hares and who knew not how. Let me call your attention to the various reports from Fur and Feather on the magnificent doe, "Furnessia."

This doe was judged by the different judges in England and made her remarkable record by winning under the various judges, but where the report and comments on her show the greatest variation was when they were written by the same man and he a Belgian hare judge.

Does that look as if the amateur judge of America, perhaps the one who is doing his first day's work in that line for pay, was the only man who makes variations?

The objections that arise to the score card system of judging emanate from two sources, viz., ignorance and jealousy. The former is honest, the latter is not. Neither is excusable. One of the fundamental principles that underlie our civil government is "ignorance of the law excuses no one."

Of course the ignorant ones will soon become disabused and favor our system more strongly than they ever opposed it. Right at present those who have fought the American system through jealousy have done so more largely with the object in view of getting a few shows to judge. Well, that is all right, and we have no objection to their having them to judge, knowing what kind of satisfaction that class of people will be able to give and the reaction that will inevitably follow, for intelligent exhibitors will invariably ask "Why?" and will expect to be told why and where.

We note in a number of our exchanges a systematic attack made on the score card system here in America by some few

people who have endeavored to get their articles into all the papers in the country. We also note that many editors have refused to allow the "cold water pourers" to cut off their own nose to spite their face by refusing to publish such stuff and cripple the industry and the system I have used in its introduction.

The plan has generally been to attack the institute work which I have used to introduce the industry by holding out the inducement that it is only an institution for the purpose of grinding out Belgian hare judges in short order for a stated price. Nothing could be more malicious, more unprincipled, more radically wrong.

It is just as sensible to declare that every child who has ever gone to school expected to become a school teacher; that every person who attends church expects to become a minister of the gospel; that every man, woman and child who has ever ridden on a street car is training for a street car conductor; that every one who has ever crossed the ocean is being trained for a sea captain.

Such is too ridiculous for me to waste time on further than a passing mention.

A few of those jealous persons had used their efforts to set the English fanciers against the American system of judging, by using falsehood and deception, not knowing that I would be permitted to personally give them a part of my attention for a month and undo the slight effects of their malicious efforts.

The facts in the case are these: The institute work is carried on for the purpose of introducing the industry, to give instructions regarding the care and management of the stock, that no fatal mistakes be made in feeding, breeding, buying, selling, building up a practical demand at open market for the meat, creating an interest in the fancy of the animal by the encouragement of shows, arranging a proper classification at shows to insure success to the enterprise and, lastly, to develop a knowledge of the standard requirements of the animal and their application by the score card system. All of these things should be known by every one who expects to rear and exhibit the animal, and more than half of it is very essential for a person to be able to successfully rear and market the animal without making blunders and bad investments that would cost one many times the expense of the institute course. Now among those graduates there will as naturally be an occasional one

who takes fondly to the scoring of hares as there is an occasional school teacher springs up among the pupils of our public schools.

Is there any one who is so shallow as to be duped by such argument as is used against the score card? They are comparatively few. The statement is sometimes made that the entire system is something new, an experiment; that it will soon run its course and die out. Don't you believe it! The score card is nothing new. It has been used on poultry for half a century and is most in favor in the most intelligent localities of our country and grows in favor as we become more highly civilized, better educated, more developed. It is now being used on cattle, hogs, horses, corn, butchers' displays, bakers' goods and hundreds of other articles and products, because it explains why such decision is made; it requires the judge to know his business or exposes his ignorance if he does not, and thus precludes an imposter from imposing himself onto earnest persons in the guise of a competent judge.

The leading breeders and judges of England, after having an understanding of the system as applied in America, agree that there can be no objection whatever to our progressive and advanced plan unless it be slower and thus require longer to place the awards.

If that be the case, there would be no real objection there, from the fact that many of their little shows there only last one day and a majority of them only two days.

However, in the shows which we attended there, competition was light and we would have experienced no inconvenience in scoring the displays in an average of two and one-half hours per show. I watched the process of judging while attending the shows there, and can agree with all the awards made to Belgians in my presence. However, it was a comparatively easy task, the competition running light. If the competition were very close I am inclined to the belief that I would not only get them more positively accurate by the American system, but also do it more speedily, to say nothing of the great advantages of the card to the exhibitor.

All in all, we had a most delightful time—we feel more akin to the English fancier than ever before. While there I joined the National Belgian Hare club of England, and feel that the trip will result in mutual good to the industry in both countries and to its commercial interests between the two countries. In regard to the number of animals there, they have

not near so many as in America. They raise about two or three litters per doe per year only, and often not more than three or four per litter.

As to their rabbitries, they are small compared to ours although they are generally well kept, and we will mention individual ones as we illustrate from time to time.

As to the quality of their stock, the best animal that I have ever scored was in England, reaching a score of $96\frac{1}{4}$, one-fourth point the highest that I have ever found. I have found a good many grand good specimens, but they are produced by only a few of the breeders, the great majority of breeders there turning out stock not near the high average of that produced by the American breeders.

The foremost breeders there appear to have secrets which they do not impart to the novice, but leave him to learn it from experience and thus the greater number of their breeders produce cheap stock, the kind that the dealer has landed here for the past 10 months or so. With us you see we have just the reversal of that plan. We wish to educate the novice through institute work, as to what is wanted, how to produce it, and then what we consider the sportsmanship in the whole affair is, to see who can produce the "top" animals after we are placed on a comparatively even footing. As an illustration I might say that in America we would not enjoy a race between a draft animal and a racehorse, or a fight between a giant and a pigmy. On the other hand we want to start on as nearly an even footing as possible and the more even this standing the more interest in the contest; in short, we prefer to see everything stringently classified and take no delight in craftiness.

As to prices there, one can get whatever he wishes and has the money to pay for, ranging from \$2.25 per head to \$450 per head.

The kind that our fanciers want for their own use will range from about \$100 to \$200 per head and the kind that the dealer prefers to buy and sell to the beginner here at a long price, declaring it to be "the proper thing" in England, will cost you about \$6 per head there. I will describe it so that you will know one when you see it. It is a yellowish red, has broad head, short limbs, short ears, almost no earlacing and very little ticking.

The use of such a buck in your rabbitry will undo the success that has attended your patient and persistent efforts in

producing fine specimens for the last few years.

Very naturally our English fanciers had noticed the rapid development of the industry here and the practical manner in which we follow it up and almost invariably asked me how I had brought it about so rapidly. I explained to them at length the various stepping stones of the industry here up to date, beginning at the time when I left the poultry fancy less than four years ago, to devote my time and attention to laying the foundation and other preliminary work of this already surprisingly active industry.

I explained to them how seemingly slow the first year's work was to me after I had ceased to be one of the organizing committee of the National Belgian Hare club of America and took up the duties of its first year as secretary; how the poultry press had turned me down, saying that "no one was interested in rabbits;" how we then began the publication of the Agricultural and Live Stock Herald, and had the only pet stock paper in America for more than a year; how I have always held tenaciously to fine illustrations as a taking feature of the publication; how I early originated the score card system of judging the Belgian hare and how I can credit fully 60 percent of the success that I have made of the industry throughout America, and indirectly the importations from England, to my origination and use of the score card; how my partner in the Herald, Mr. Devaon, served as the second secretary, thus giving me a much-needed rest; then how I again took up the duties of the club as the third secretary, and of my trip to California, the event of the great Los Angeles show and my first institute there; then of the general course of institute work which I have since followed, resulting in nearly 100 graduates in various parts of the United States, and how wonderfully they have assisted me in the introduction of the business, and lastly, I mentioned the fact that I had seen my work grow from the point where ours was the only publication interested in the work to the present time when there are about 90 pet stock papers and other papers with good strong pet stock departments in them printed in the United States and when all the great dailies of all the large cities in this country are devoting columns of space in their Sunday editions to the upbuilding of our practical industry. That values had advanced from the time when I had taken the matter up at which time \$5 was considered an exorbitant price for a hare, to the present, when a really good one is worth as high as \$700.

I explained to them that I really might divide my plan of introduction and pushing the whole matter into two eras, viz., that of the score card and that of the institute work, the former being really the backbone of the latter, and the matter of club work and my illustrated publication had accompanied my every move in the upbuilding of the industry to its present standing. I assured them that, as president of the National Belgian Hare club of America I was pleased to have them accept my application to become a member of the National Belgian Hare club of England and strive to have the two national clubs work together for the advancement of this most worthy undertaking. They took much interest in the prospects of our coming show season and made many inquiries regarding demand and prices over here and about how long it would take me to introduce the business as thoroughly throughout the eastern states as I have throughout the western.

Time slips away; tide waits for no one, and I was compelled to bid adieu to my English friends and turn my face homeward.

I left them as I had found them—striving to produce the highest possible type of Belgian hare for the American market.

P. E. CRABTREE.

APPENDIX B

BELGIAN HARE COLOR

IN SPEAKING on this subject I fully realize that I have undertaken to handle one of the puzzling features of hare culture. Not only are the breeders of America somewhat at variance as to what should constitute true exhibition color, but they are still more divided on how to produce the real rufous red. Not only this, the ticking is a very important item; and most important of all, has its proper abiding place.

The one thing that is, perhaps, most of all, responsible for an amateur going astray on color, is the fact that he does not understand the various changes undergone with an animal from the time of its birth to that of a finished exhibition specimen. The true color is almost a cherry red, but has a golden shade of rust in the effect that is very pleasing to the eye. Red should predominate largely, even where decorated with ticking, and the ticking should be entirely absent on lower sides, shoulders and front legs, with a clean, red neck and very little ticking about head, with none on ears.

Special attention should be given the production of choice red feet and legs, and a beautiful jet black lacing confined closely to the edge of a pure golden red ear is perhaps the crowning feature of a well bred specimen.

The ticking, which consists of the black points on the red hairs, should mount the "color proper" in tones or broken waves, and should be found on the following named sections in the importance of the order in which they are named, viz.: Rump, back, upper sides. Special color sections are a deep, rich cream color under jaw, a bright cream color under belly and a pure snowy white on under side of tail.

A dense blue under-color (next skin) should never be fos-

tered, as it has a tendency to smudginess throughout, accompanied by a cinnamon colored belly, which is not desirable, as it interferes with the clean-cut contrast that is so catching in correctly colored specimens.

The above color requirements, accompanied by a beautiful hazel colored eye, and these together with up-to-date symmetry, go to constitute an animal that is graceful, very beautiful and most useful.

My experience in judging this animal, both in and out of the show room, has led me to believe that the sections most generally overlooked, and consequently neglected in breeding, are shape of eye, quality of ear as regards thinness, fineness of bone in front legs, lacing of ears, waviness of ticking and color of jaw and belly.

I mention these things, not that they all bear on color, but because I find that many beginners who think themselves enthusiastic over either shape or color are neglectful on many of these points, which are all so essential to the make-up of a high scorer.

P. E. CRABTREE.

APPENDIX C

BELGIAN HARE SHAPE

IN TOUCHING on this subject I believe that we have one that is often lost sight of in the mad rush for color, which, of course, is also of vital importance.

In so speaking we do not mean that all breeders have lost sight of shape. On the other hand, a very few fanciers have kept tenaciously at work producing what, to their notion, was a decided improvement in shape until at present the contrast between the up-to-date exhibition animal of the standard variety and that of the heavy weight variety is something surprising as regards shape.

Even the contrast between the best shaped specimens of today and those of five years ago is very noticeable. As proof of this assertion we will call your attention to a comparison of the photo half-tones of Lady Symmetry and of Nonpareil, imported. The latter was a good specimen in his day and considered to have a very thin head, to possess long limbs, and produced many fine specimens as his offspring. Were he living today where would he stand on the score of symmetry? He would simply be outclassed. It is very evident that an intelligent fancier gets about what he goes after if he has the staying qualities essential to his particular line of work. No occupation offers a broader scope of conception, a greater range of possibilities or a higher gratification for a devoted ambition than the reproduction of a higher order.

No phase of hare breeding requires more skill, gives greater satisfaction or commands a better price than the production of specimens possessing really good shape. Then let us look carefully to the mating of our stock as regards shape, giving it the attention that it deserves, and in a few generations we will have a race of hares that will gladden the heart of the customer, the fancier and artist.

P. E. CRABTREE.

APPENDIX D

THE BELGIAN HARE INDUSTRY

MOST PERSONS are pretty well acquainted with the history of the Belgian hare industry and with the interest that has been manifested in this line, in the past two years throughout the United States. The matter of introducing the industry has had to be taken up, people had to become educated to its care and a demand had to be created for the flesh of the animal for eating purposes. Without this practical foundation, of course, the fancy would never have reached the proportions it has. This work was somewhat tedious in the beginning, but within a year after the work was properly taken up, there were a great many clubs organized throughout the United States, and the last two years have seen very satisfactory results from the efforts put forth by these clubs.

In the extreme West the industry is fairly well introduced at present, many thousand dollars' worth of stock have been sold and high priced animals are owned in almost every locality. The result will be that a splendid show will be held in many of the large cities on the Pacific coast this coming winter. This will complete the introduction in these localities. From the cities the industry will spread to the country and small villages, and the next one or two years' work in that line will be taken up the same as breeding poultry on the farms and in small villages, and everybody will know that the Belgian hare for home use is one of the most economical products.

Further east, while it may be that the animal has not been as rapidly introduced as it was in the West, it is being taken up in earnest, as it was on the western slope, especially in the vicinity of Los Angeles. For this reason we

have yet many large cities to begin the industry in. Many of the large cities are just now taking hold of the matter. Those in the South generally have just begun to wake up to the possibilities of the industry and that section of the country is calling on Colorado very heavily at present for breeding stock. Almost every locality has its fanciers who are willing to pay high prices for the best stock, and prices on best grades are still advancing in Colorado very heavily at present for breeding stock. While the Northwest has been buying heavily from California, it has also bought heavily from California breeders. They are paid some splendid prices and have taken some of the best stock out of our community. The inquiries which I receive at present are about equally distributed from the various sections of the United States.

The far East has not nearly come up to the prices yet that they are willing to pay in other localities, but they are gradually working toward it. At present the prices vary greatly from what they would have been willing to pay a year ago in the far East. I mean in localities east of Chicago. In Illinois and Indiana they are organizing splendid clubs and show evidence of having as active fanciers there as we have in Colorado and the extreme West. There will be several hundred shows during the coming season, no doubt, as I have constant inquiries as to the subject and in regard to organizing new clubs. I should say that it will take about two years yet to thoroughly supply the United States with breeding stock and properly introducing the industry; in fact, to introduce the industry as thoroughly throughout the United States as it is at present introduced in southern California. After that time, I would say that the matter would settle down to something of a practical standing, and that more attention will be devoted to the production of meat from the animal. No doubt that the talk that has been done in regard to canning, throughout the United States, will then be put into effect and the meat will be handled in that manner. In fact, there is no reason why this should not be done, and when breeders once turn their attention to the production of meat instead of the production of high-priced animals for breeding purposes, it will be surprising to see what quantities of meat this animal will produce in the cities or country where it would be most practical to locate such establishments. There will be practically no trouble in getting the product together in this manner for canning purposes, and there are fortunes going to be made

in the production of the meat from this animal, though may be not as rapidly as now in the production of high-class animals for breeding purposes. There were persons in our city who were turning their attention to the production of meat at the time of the beginning of this industry in our city. Some of these persons insisted on continuing to produce meat, even after the fanciers had been getting very satisfactory prices for their stock for at least a year. One man that I can call to mind was still running a regular slaughter house and going to market with his hare meat twice a week for this length of time after the fanciers were selling at high prices, and was urged by a number of breeders to drop that line of work and enter the fancy, and after a great many representations he did so. I am in a position to know that one fancier made sales of breeding stock in the month of May to the amount of \$1500 lacking \$1.50. I know of another in our city who has cleared something between \$7000 and \$9000 within the last 18 months on breeding stock. Now, of course, these are breeders of very fancy animals. This only shows one phase and the hare breeding for market purposes another.

It is my opinion that in some three or four years when the business settles down to market purposes, the people who are now breeding for fancy and who have not made sufficient from it to retire from business, will settle down to producing meat. They will be most thoroughly prepared to handle the little animal for meat purposes as they will understand its every requirement. They will have a natural fondness for the animal and will produce meat to better advantage than a beginner could possibly do. The wealth that is now represented in this industry in the way of high prices for breeding stock and in the manner of following up the shows, at that time no doubt will be turned largely toward the production of meat. At the same time enough of that will be retained in the fancy to make it very interesting in exhibition circles, and in carrying out first-class shows will proceed in this country on similar lines that it is carried out with poultry, horses and other stock, and with the fancy shows in England. There will also be a splendid demand, even a great demand, for the animal for meat purposes and the animal will always have this basis for a good demand and market values ranging from \$2 to \$5 for good healthy stock. The class of animal that has for the last year or two, and that will for the next two years have a good demand at from \$15 to \$75, is the branch of the

industry that will fluctuate mostly.

Los Angeles and vicinity, which a year ago was the heaviest buying locality, has for the past six months been a heavy producing locality which would naturally supply their part of the country. On the other hand, the demand from new localities has decidedly more than over balanced it and we are pressed at present to supply the demand more than we have ever been before.

P. E. CRABTREE.

Denver, 1900.

APPENDIX E

UTILITY OF HARES AND RABBITS IN ENGLAND.

IN MY RECENT TRIP to England I made it a point to investigate thoroughly the utility of hares and rabbits there. Not only did I sift the subject to the bottom in London and all the other large cities, but in the markets of the small cities and villages as well, and shall give it as I actually found it to exist.

Here lies the secret to the widely different opinions of the ones who have pretended to know and to tell us about the facts of the situation:

First, tons of hares and rabbits are there used for eating purposes and are there seen on all the markets throughout the country.

Second, Belgian hares, as bred by the English fanciers, are never seen on the open market, and recognized.

There are reasons for this state of affairs which I found out on investigation and will proceed to mention. First, I will make the statement that about one-seventh of the animals seen on the market are the wild English hare, it being there considered game and classed as a luxury, selling to the second-grade aristocracy most largely and bringing about 80 cents each. About three-sevenths of the article on the market is called by them wild rabbits, resembles very closely in size, shape and color our cottontail of America, and I was told that about 30 percent of this class came from their home country, England, Scotland, Wales and Ireland, and that some 70 percent of it was imported from Norway, Sweden and even Russia. These goods sell at about 18 to 22 cents each on their markets and of course are consumed largely by the poorer class of people.

The remaining three-sevenths of the article on the market is universally called Ostend rabbit, and they are sheep-dressed, the ones first mentioned being simply drawn, and the fact that many of them had the feet cut off caused a much closer observation and more extended investigation to arrive at the particulars in regard to them.

I found out that they were of various colors, among the ones having the hind feet left on, being white ones, gray ones, yellow ones and blue, black and slate colored ones. They vary largely in size at maturity, and are all domestic, being raised, I was told, in hutch, warren and park. A few of these are raised in England and appear to be a thorough mixture of breeds, but decidedly the larger part of them are imported, coming from France and Germany. They sell at about 65 cents each, average.

Now I will give you a few of the reasons why things are as we find them there, relative to this meat product.

In England the price of oats is double what it is in America and the price of hay is three and one-half times that which it is here.

This necessarily would make it cost much more to produce the meat for sale by the pound there than it would here, and as the price of the French and German article on their market is practically the same there as here the English breeder would not be able to compete with those products, in price, where fed on dry feed, purchased at market prices.

On the other hand we find that the Belgian hare fancier there feeds largely on carrots, which cost no more there than here, and on cauliflower leaves, which are plentiful and free for the gathering of them for a considerable season of the year, and that only a small amount of grain would be needed for fattening purposes, under which conditions it would still be entirely possible for them to produce the article at a profit, but a person who has never been among the English people in their native country has no idea how impractical their ideas are as compared with the ideas of the progressive American.

When you ask the laboring class there why they do not produce the best of meat by feeding the vegetables that are going to waste around them, they simply say, "Well, I don't know. I had never thought of it in that way," and that explains it in full, for they do actually think but very little, as a class, and that to very poor purpose. They drift along in the old rut.

Now we will give our attention for a while to the English fancier. He is a very different person, indeed, from the American fancier, in many respects.

The latter is proud to be classed as a laborer, as one who earns a livelihood by personal exertion, as a person who willingly employs himself in the production of some of the necessities of life, viz., food, clothing and shelter.

The former, on the other hand, is built on different lines. You could not insult him quicker than to call his chosen pastime in the direction of producing Belgian hares, an industry.

He prefers you to call it "an 'obby." If it be an industry and he caters to that industry, he is then a laborer.

If it be a hobby, and he is riding that hobby, he is then a "gentleman."

You can readily understand, from what I have said, that his sense of propriety precludes his entering the field of Belgian hare production for practical purposes, and you can bank on it that if he should sell a carcass it would be classed as an Ostend rabbit, and never as a Belgian hare.

On such impractical lines you will understand that there is no such thing as building up an open market over there for choice Belgian hare meat, and never will be.

If the entire population were living on Belgian hares that had been produced at the hand of the fancier it would still be an unknown article to them from the fact that the butcher was selling them as Ostend rabbits.

It is needless for me to repeat that in America the fancy is merely the crowning feature of a most practical industry. In England the fancy is the result of the favorite pastime of a person who likes a hobby.

They often criticise our application of the practical phase of the matter as an industry and freely suggested that such could but result in depriving the fancy of the fullness of its fascination and would sooner or later defeat the prime objects of the fancy, but I can never come any nearer agreeing with them on that point than I can on any other of their numerous impractical ideas.

In regard to the canning or pressing of meat, it will be seen that if such were done it must necessarily be done in France or Germany, where the meat is largely produced, and as the distance is so short as to make the transportation of it in a fresh and unprepared state an easy matter, I was unable to find the article in a prepared state and am therefore inclined

to the belief that canning and packing establishments there are not a necessity to the handling of the hundreds of tons of the meat there produced.

As to the value of the pelts, those of the wild English hare and of the best Ostends, in season of fur, are worth an average of about 12 cents each and are used for furs when dyed, and for the production of electric seal when plucked and dyed. The poorer grade of Ostends and the wild rabbit skins are **used only** for felting purposes and are worth the same there as here, about 6 cents per skin. The truth of the matter is that although the Ostend has the larger skin, the wild rabbit has fur of the best felting quality and is fully as desirable.

I found numerous ornaments made from the feet and skins of the animal, but such as would perhaps not add largely to the commercial value of the animal in considering its production.

P. E. CRABTREE.

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J. F. MOOAR,

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P. E. CRABTREE, ESQ.,

BOSTON, Jan. 28, 1901.

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N. B.—(The above furnished **FREE** to customers.)

Conductors' punches, for ear-marking, nickle-plated, with peep-hole to observe proper position of edge of ear, \$1.

We design and print Belgian Hare advertising of every description, the kind that sells the goods. The finest process illustrations at 15 cents a square inch; no work undertaken less than \$1.50. Send photographs of your Belgians and we will do the rest; fine illustrations of your stock are worth having, poor cuts are worse than none. Our firm, and our breeders, are graduates of the American Belgian Hare Institute.

We issue a revised stock price-list **WEEKLY**; send for it.

New England Belgian Hare Co.,

299 Washington Street, Boston, Mass.

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