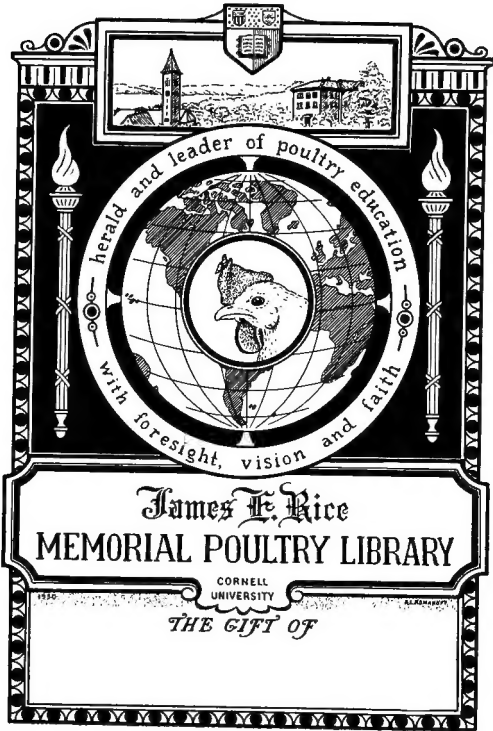


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DEDICATED TO THE YOUNG AND INEXPERIENCED FANCIER
OF THE ALMOND TUMBLER.

A
TREATISE
ON THE ART OF
BREEDING AND MANAGING
THE
ALMOND TUMBLER.

BY
JOHN MATTHEWS EATON

"All that a Man knows, or ever will know,
is by Observation or Reflection."

LOCKE.

PUBLISHED FOR THE AUTHOR,
7, ISLINGTON GREEN, LONDON.

—
1851.

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TO THE
YOUNG AND INEXPERIENCED FANCIER
OF THE
ALMOND TUMBLER.

The study and science of the Almond Tumbler is productive of a great amount of pleasure, and in the present day there are many gentlemen of highly cultivated minds, have proved by their engagement in the breeding and rearing, sparing neither pains or expense, have fostered and cultivated, with the utmost care, this truly beautiful pigeon called the Almond Tumbler. That it is a science well worthy the attention of those who might be induced to engage in this delightful recreation or fancy.

My object in publishing this Treatise on the breeding and rearing the Almond Tumbler, is to place it in the hands of the young Fancier, who is desirous of cultivating a knowledge, and endeavouring still further to improve their beauties; at the same time, I am fully sensible that there is not a copy of a work, worthy to be placed in the hands of the young Fancier, can be obtained without the utmost difficulty, owing to their being out of print. At one time I should have hesitated at the thought of writing upon so difficult a subject, for it requires a very nice judgment to form a true estimate of the Almond Tumbler; and, it must be confessed, they labour under the greatest disadvantage in not having their perfections and properties properly understood by the gentlemen of the Pigeon Fancy in general. Being fully aware of the great disadvantages that some of the young Fanciers residing in some parts of the country labour under, not having the advantages of attending societies and seeing and examining the birds that are put into the pens on show days, and joining in cheerful conversation with experienced Fanciers, who are both able and willing to instruct, by pointing out what are good properties and what are bad in a bird; under these circumstances this treatise will not be unacceptable to the young Fancier, provided he has made up his mind to be a Fancier and rank A. 1.; he must carefully read, mark, learn, and inwardly digest what is written in this treatise, to guide his judgment, for as there is no royal road to learning, so there is no possibility of gaining a thorough knowledge of the Almond Tumbler but from long study and experience.

I shall here endeavour to rivet, as it were, on the minds of those who will engage in this delightful study, some great facts; the first thing especially to be attended to, is the selection of really good birds—they should be young, healthy, vigorous, and bred from as pure and good a stud or strain as can be obtained. From the highly artificial state of the Almond Tumbler in the present day, there is a tendency to degenerate, or throw back, as it is termed in the Fancy. For even when good birds are put together, they do not invariably throw birds equal to those they are bred from; but if inferior birds are matched together, the produce must necessarily be unworthy the attention of a Fancier. Nonpareils will not always produce nonpareils, but nonpareils cannot be expected from inferior birds. Much attention and great care are necessary with these birds to insure success; especially if the young Fancier raises a standard in his mind to surpass those who have tried before him, and has made up his mind not to rank second best; but the satisfaction of producing the best bird must be very great, and will amply repay him for all the care and labour that has been expended.

There are many gentlemen now engaged in breeding and rearing the Almond Tumbler, and the amateur has an opportunity of obtaining superior birds to commence with, and which is so indispensable to insure success. This he may do, by following the remarks made in this treatise, and the information he may obtain

among his brother Fanciers. The value of the birds, as usual with matters of taste, will depend much on the estimated qualities of the birds; and if they should be of extraordinary beauty and excellence in the five properties, the price will be proportionably high, as there are many gentlemen in the fancy who know how to appreciate a good bird, and do not hesitate to give a good price for it; therefore, you must not expect to obtain a bird for five pounds, that other fanciers would give ten pounds for.

I have now arrived at a difficult point, and that is how to instil the knowledge of a bird possessing good properties into the mind of the young Fancier when he sees it, and should he be anxious to purchase the bird, I should advise him to consider whether he really stands in need of the bird, and believes it will improve his stud or strain of birds, if so, buy it at any price, for it cannot be dear. From my experience, combined with the conversation of some of the best and most experienced Fanciers, the only way to obtain an extraordinary bird, is to give more than it is worth, comparatively speaking. The first time I attended a Grand Show, there was, as I thought, such a particularly pretty neat looking pair of birds, nothing gaudy about them; they appeared so remarkably neat and quiet, that the thought struck me of Friends or Quakers; I became anxious to obtain this pair of birds, and seeing the gentleman to whom the birds belonged, I politely asked him if he considered it a fair question whether he would part with them, and he as politely, said he would as he was desirous of bringing as many gentlemen into the fancy as possible, and would favor me being a young and inexperienced Fancier, and the price would be five pounds; he greatly astonished me when he uttered "five pounds," for if he had said five shillings, I think at that time I should have had spirit enough in me to have offered four shillings and sixpence; but since then, I have had the honor of that gentleman's acquaintance, have been repeatedly in his aviary, and seen the pair of birds I am writing of, and after having acquired some knowledge of the Almond Tumbler, my experience has taught me that the birds were worth more money than he had asked; for, in fact, they were a pair of extremely short faced and beautiful Golden Duns, bred from a splendid pair of Almonds, but I was at the time too inexperienced to know it; and here I would particularly caution the young Fancier, on entering the societies where the shows take place, not to give offence to any of its members, by asking what do you want for that bird? you would be treated with contempt and not get an answer, for you might as well ask some gentlemen to part with half their fortunes, as a bird they highly estimate. But there are ways of doing things without giving offence, and I think the best way to put the question to the owner of the bird, is politely to ask him, whether he considers it a fair question, if he would part with the bird, and then you will receive a polite answer.

The best and cheapest bird I ever bought cost me five pounds, why I say the cheapest, is, because I bred twelve young ones from him, and all good birds. I have given more, and know some gentlemen that have given still higher prices than myself, and I saw a few evenings since, at one of the societies, a Pigeon, the gentleman to whom it belonged, stated he would not take twenty pounds for it. But to return to the young Fancier, I would advise him to purchase good birds, and, if he is acquainted with experienced Fanciers, to solicit their assistance in obtaining birds that will be serviceable to him; if, on the other hand, he would rather trust to his own judgment, all I can say, is, I wish him luck, for it will prove a lottery, as the most experienced Fanciers have acquired their knowledge with care, trouble, and expense; neither can the young and inexperienced expect to escape unscathed, till time and experience shall improve his eye, and mature his judgment.

This bird is called the "Almond Tumbler" by the gentlemen of the Fancy; in my researches I have traced it back to the year 1735, and as the gentlemen of the Fancy have assigned this name to this truly beautiful bird, after a mature consideration I think it would be injudicious to alter it, for if a meeting of all the

Almond Tumbler Fanciers was called together, I very much question whether any one of them could assign a better name. For what is it that we Fanciers allow to constitute the Almond Tumbler, the three colors, black, white, and yellow, variously and richly interspersed; but the greatest difficulty, amounting almost to an impossibility, is to obtain a rich bright yellow, nevertheless the ardent and indefatigable young Fancier should strive to reach the standard, authorized by the gentlemen of the Fancy, namely black, white and yellow, and in his efforts to obtain yellow will produce a rich almond colour usually called the ground, and from which the bird derives its name. There are three colors in the bird, and it would be folly to find a new name for it, as the oldest and best informed Fanciers are of opinion that a better name could not be found, and shows the good sense of the Fanciers centuries ago. I sincerely hope the name of the bird will for ever be set at rest, as it is known by the name in every clime where the English tongue is spoken, as the "Almond Tumbler." It will not be my fault, should the old and experienced Fancier happen to make a mistake, and sit in judgment upon this Work, or become severely critical, for comparatively speaking, I am but a young Fancier, my object is a pure one in publishing this treatise, that it may find its way into the hands of the young and inexperienced; the idea struck me that I might give him my experience, from actual observation and reflection; but for a better and more experienced Fancier than myself, to suppose for one moment, that I had the audacity to endeavour to instruct him, "is his mistake—not mine," as I sincerely hope that I am entirely free from such intention.

But a person not acquainted with the beauties of this study or science, should not take upon himself the character of judge, and condemn a study or science of which he is utterly ignorant; should he make his remarks freely, they would most probably be characterised by a gross want of information, and only meet with that contempt which they deserved. I am fully aware there are gentlemen who cannot see any beauty in Pigeons, except in a pie, "these are Belly Fanciers"; and, although very numerous, with these I shall have nothing to do.

That it is an innocent amusement and recreation, well adapted to the professional gentlemen of law, physic, and divinity, or any other person engaged in long continued and excessive exertion of the intellectual faculties. The relief this delightful recreation gives is truly astonishing, by unbending the mind after close and intent application to abstruse subjects; for the mind of man is incapable of constant application either to study or business, and it is therefore highly necessary to relieve it. I am of opinion that many of the brightest luminaries that have suddenly been lost to society, would not have been so, had they been engaged in this Fancy, by way of recreation or relief to the mind. I have known some very old gentlemen in the Fancy, but never yet knew a Fancier that was troubled with hypochondriasis.

There is nothing so base as ingratitude, and I cannot allow it to pass over without calling upon the young Fanciers to join me in acknowledging the debt of gratitude we owe to the old and experienced Fanciers of past ages, for handing down to us young Fanciers such a beautiful strain of birds to commence with; for when we reflect for a moment, that these beautiful birds were originally produced from the common Pigeon, and when you consider that at one time the beak should not exceed seven-eighths of an inch, (meaning the distance from the iris, or circle round the pupil of the eye, to the end of the quick on the beak.) Now if the beak was limited to seven-eighths of an inch, which I presume was considered short at that time, what is the length it might not have run out to! and this is another proof of the debt of gratitude we owe, as I said before, to the old and experienced Fanciers, and in a most especial manner to the gentlemen of the Columbarian Society, who have had so great a share for the last hundred years in bringing the Almond Tumbler to the standard it has now arrived at. And now, my young Fancier, with these great advantages on your side at your commencement, I hope and trust by your spirit, attention, and perseverance, you will still more contribute

to increase its beauties and perfections. I will endeavour to stimulate and cheer you on, by informing you that the most experienced and accomplished Fancier that ever lived at one time, knew no more about the Almond Tumbler than the Almond Tumbler knew about him, or the little knowledge you are in possession of, provided you know any thing of the Almond Tumbler; and here I will tell you another great fact, and that is, that the field is still as open for fresh competitors now, as it was one hundred years ago. I am fully sensible that there are among the Fanciers, gentlemen infinitely more able in every sense of the word, being more experienced and having more leisure time, therefore could have produced a better Treatise on the subject of the Almond Tumbler than I shall be able to do, but, from some cause or other they have not thought fit so to do; at the same time I must keep in view the expence of the Work, so that it shall not be beyond the reach of the humble Fancier. Prudence has dictated to me to address my work to the young and inexperienced, being fully sensible that I was incompetent to offer remarks to the old and experienced Fancier; but, I believe, that the young Fancier may, with advantage to himself, digest every remark in this Treatise.

There is another consideration that has flashed across my mind, to accelerate my work, so as to be able to bring it out by the first of May, when all the people in the world, comparatively speaking, are striving to produce something that will be acceptable to those who take an interest in those subjects that come nearest and dearest to their hearts; and as I have not heard of any Fancier's intention to produce a similar Treatise at the time of the Great Exhibition, when "all the World will be our country, and doing good our Religion," I was determined to offer my mite on such an auspicious occasion. When we consider the deep interest that the most illustrious Prince and Consort of the best Sovereign that ever graced the British Throne, takes in the Exhibition, surely it would be unpardonable in us Fanciers to let the present opportunity pass away, without endeavouring to throw in our mite or offering. It is well known that there are beautiful Pigeons at the Aviaries at Windsor, and I have heard it stated that Napoleon was a Pigeon Fancier. However, it is one thing to have Pigeons, but quite another thing to understand them. If it was possible for noblemen and gentlemen to know the amazing amount of solace and pleasure derived from the Almond Tumbler, when they begin to understand their properties, I should think that scarce any nobleman or gentleman would be without their aviaries of Almond Tumblers, and which would form a splendid ornament in their beautiful gardens or grounds. Having wandered a little, I will return again to my more immediate subject; it is with Fanciers as with others, that they do not exactly think alike upon some of the points or properties; all that is wanted is honesty. If those great and eminent ministers, Whitfield and Wesley, after a college education could not exactly agree upon the same text, is it surprising that you and I should not exactly agree upon the remarks we may make from our experience derived solely from actual observations, taking the Almond Tumbler as our text; but one thing is certain, provided we are Fanciers in the true acceptance of the word, we must go hand in hand upon the five properties, allowing each of us to choose our favorite point of property; for which of the five properties could we part with in producing a good bird—it is absolutely necessary to have the five properties to constitute a really good bird.

That the Almond Tumbler may be improved beyond what it has hitherto been,—that new beauties may be discovered, and a higher standard taken as the beau ideal of each amateur,—and that it may as far exceed the present standard, as that which is now looked up to does that of half a century back,

Is the sincere and hearty wish of a brother Fancier,

Who has devoted time, care, and attention to the subject,

7, ISLINGTON GREEN,
LONDON.

JOHN MATTHEWS EATON.

May 1st, 1851.

A
TREATISE
ON
BREEDING AND MANAGING
THE
ALMOND TUMBLER.

DESCRIPTION OF THE BIRD.

FEATHER.

Imagine to yourself, taking into your aviary or loft some inexperienced friends who have expressed a great desire to see some Almond Tumblers, what would be the first thing that would attract their attention, Feather would strike some—Shape or Carriage would rivet the attention of others; but if, on the contrary, you took experienced Fanciers into your aviaries or lofts, and asked them which they considered the grandest property of the five, my impression is that they would say, Shape or Carriage; nevertheless, it is my intention in giving a description of the five properties to take Feather first; not that I consider feather the grandest property of the five, but from the bird deriving its name from the feather, and from the rich and variegated colours striking the eye of the general observer.

It is the decided opinion of all Fanciers, that the ground or foundation of the feather should be, strictly speaking, a rich bright yellow, but the difficulty to obtain it, and intermix, split or break the yellow feather with a decided black, I think is scarcely attainable: a fact, that has been established by many careful and oft repeated experiments by the most able Fanciers that have ever lived; we must, therefore, be content with having the ground of the bird a rich bright almond colour, but the inside of the shell of the almond nut is the best colour, and the oldest Fanciers are unanimous in opinion that this beautiful and very valuable species derived its name—"Almond," because the ground of the bird is, or should be, a rich bright almond colour.

The standard authorised or laid down by the Columbarian Society, as regards the Feather, is as follows, three colours, namely, black, white, and yellow, in the nine first feathers of each wing, counting from their extremities, and twelve in the tail; the aforesaid three colours well developed would constitute a standard, but the back, breast, and rump, should be likewise variegated to be complete in feather; the hackle or neck feathers should be bright and well broken with the same colours, and should resemble the delicate touches of the pencil of a fine artist.

There are gentlemen in the Fancy who have asserted, that they have had some so truly beautiful and spangled, that have had few feathers in them but what have contained the three colours that constitute the Almond—black, white, and yellow, variously and richly intermixed; and that after breeding them a considerable time, rejecting those that ran from feather, and judiciously matching the good feathered ones together, have brought them to such great perfection, that they should have been surprised to have bred any others than Almonds. There are some so magnificently elegant in feather that their flight, tail, back and rump, have resembled a bed of the finest and best broken tulips that can be imagined, or a piece of the best and most highly polished tortoiseshell, for the more they are variegated, particularly in the flight and tail, provided the ground be yellow or a

rich bright Almond, through hackle, shoulder, and rump, the whole to be equally spangled and broken with black and white, the more they are esteemed; but the yellow is a colour most difficult to attain.

SHAPE OR CARRIAGE.

The Almond Tumbler ought to be a very small Pigeon, and the more diminutive the better, provided it maintains its other noble properties boldly, and, which is essential to constitute a good bird, for the more snug and compact, the more they are appreciated, and the more the value of the bird is enhanced. It should be very short in the back, and the lower it stands the better, with small round body, but particularly with a fine prominent full and extremely broad, or, as the Fanciers term it, a square chest, the lower the neck the better, and should be shorter than any other Pigeon, with a particularly thin or slim neck, and beautifully curved under the throat and thrown back, the shorter the flight and tail feathers the better.

It is my opinion that shape or carriage is the grandest property in the Almond Tumbler, and would be one of the best criterions to judge of a bird coming from a good stud, for as I observed before, there is a tendency in the Almond Tumbler to degenerate or throw back in some of their properties, notwithstanding being bred out of the very best strain of birds; for on examining an Almond Tumbler, should some of its properties run out as expressed by Fanciers, yet the bird still maintaining shape and carriage, are evident proofs of its coming from a first-rate stud of birds.

The shape or carriage of most things living is the most beautiful property, save the mind, and to my fancy I am not aware that there is anything under the Sun, or that you can imagine or conceive, that is so truly beautiful and elegant in its proportion or symmetry of style, as the shape or carriage of the Almond Tumbler approaching perfection, in this property, (save lovely woman) and has been most happily selected as the emblem of beauty, tenderness and affection, and is depicted as the appropriate attendant of Venus.

HEAD.

The head should be as broad as possible, and not only broad, but as high and lofty as possible, and not only broad and lofty, but at the same time should be as round as possible, like a marble. It should have a good dig, chop, or stop, or any other technical term that the Fanciers understand and are pleased to call it. The front of the head should appear as it were overhanging a portion of the beak, at that beautiful part of the bird, which in the estimation of the best Fanciers is not excelled by any. I allude to that grand point, the stop, in front of the head, or more properly speaking, under the head; the feathers forming the front of the head should make a dead stop, and above all things not run in a slanting direction into the wattle on the beak, which is a defect, and is called a needle point. Looking at the head in front, should it happen to present an angular or slanting direction towards you, it is called by the gentlemen of the Fancy thin-faced or mousey; it is one of the greatest imperfections that a bird can possibly have, and is the very opposite of a round head and quick stop. There are but few birds comparatively speaking that have these beautiful dead and decided stops, and still further to add to the beauty and finish of the head, the feathers under the eye and about the lower jaw should be full and a little curved upwards, which is called "muffy." For a broad lofty round headed bird with a good stop, is in a fair way to be considered a wonder, and more particularly so by the head and beak Fanciers, who constitute at least three-fourths of the Almond Tumbler Fanciers. To produce a bird as above described, some of the gentlemen of the fancy have said it has been the work of a season, and have considered themselves amply rewarded.

But there are other gentlemen in the Fancy, who have asserted that head and beak is to be produced at any time. "Any time" is rather hard to define, but, if

they mean the longest time, then they are right, but on the contrary, if they mean the shortest time, then they are decidedly wrong; nothing is easier than to assert a thing, but they would experience the difficulty, if they attempted to produce head and beak.

For, SIR JOHN SEBRIGHT said he would produce any given feather in three years, but it would take him six years to obtain head and beak.

BEAK.

The beak of a first-rate Almond Tumbler ought not to exceed five-eighths of an inch, and it would be infinitely better, if it was possible, to breed them that they did not exceed half an inch, from the iris of the eye to the point, or more properly speaking, to the end of the quick on the beak. I repeat again, if it was possible to have them so short faced, as it is termed by Fanciers. It is possible for a bird to be considered a pleasant or neat bird, even at three quarters of an inch, but exceeding that length must be looked upon as unworthy of attention. The beak should run in a straight line from the head, be extremely fine and pointed; I have some in my aviaries that have astonished me, nor could I have believed it possible that the beaks could have been so fine, had I not have witnessed it myself; but there are beaks on birds apparently short, that has no more style in them than your thumb nails. There are many of the first-rate Fanciers, who are particularly partial to what is called the goldfinch beak, which is very beautiful; others say, take a full size round cherry, then take a barley corn, and judiciously placing and thrusting it into the cherry, form as it were your beak, and that is not all, for it will form a good head and beak, provided, as I said before, it is judiciously done; others take an oat, but as I think the goldfinch beak the handsomest, I would advise the inexperienced Fancier to get the head of a goldfinch and keep it by him for his observation.

The wart or wattle on the beak should be very fine and as little of it as possible, resembling as it were a thread drawn across the beak, and where this fineness of wattle can be obtained it adds greatly to the beauty of the bird, and a sure mark of its being well bred, besides giving the appearance of a more decided stop.

THE EYE.

The brighter and more prominent the better, like the eye of a fish, (take for example the bright eyed Perch,) and it is the general opinion among the Fanciers, that the eye should be fixed in the centre of the head. I will here endeavour to show you what would apparently give the appearance of a loftier, broader, and less "behind the head,"—suppose, for argument sake, that the head was an inch perfectly round, divide the one inch into sixteen equal parts, and if you place the eye one sixteenth more or less below the centre of the head, the more lofty headed the Almond Tumbler will appear, or the reverse; and the same holds good if the eye is placed back in the head, giving the head a broader appearance in front, and less "behind the head," which is opposite to what is called "duck-necked," by the Fanciers; but the effect is still greater where the beak is found placed low on a round headed Almond Tumbler, for it gives that truly beautiful and striking stop, which is not eclipsed by any other portion of the bird, and which is held in such high estimation by the best Fanciers.

The eye should be free from a thick skin or flesh around it, which to Fanciers is a great defect, a beading may look very pretty on a miniature frame, but is the very reverse to the eye of the Almond Tumbler; the eye should be feathered close to the edge and the more bright and silvery or pearl coloured the iris of the eye is the better.

THE HEN.

The Hen is inferior to the Cock in some of the properties and superior in others, which I shall endeavour to shew; and it is with the Almond Tumbler as with most other birds, that the male is more impudent and audacious, coarser in his looks, beak, and wattle, the Hen is more delicate, finer in her beak and wattle, and though generally a more spare appearance, comes very little short in shape or carriage. She is smaller than the cock, which is an advantage. The cock and hen are equal as regards the eye; that is to say, the eye of the male is not more wicked than the females; but with regard to feather, the cock has a deal more ground, more break or variegation in his flight and tail feathers; although there are hens equal in feather to the cocks, they are very few, they are the exception to the rule. Should it so happen that two birds possessing the five properties, namely, head, beak, eye, carriage, and feather, equally alike, I have no hesitation in saying that the hen is worth double the money of the cock. There are hens in feather that come up to the standard of the cock, but, as I observed before, they are the exception, and not the rule, being very scarce and not quite so brilliant in feather.

MATCHING OR PAIRING.

There are several things here to take into consideration; the first would be, how many pairs of birds you intend to match up? What is the temperature of your aviary or loft? How are you circumstanced for room? The reason why I ask how many pairs you intend to match up is this, if you intend only matching a few pairs, and have ample room for them, then match them by the beginning of March, or should the place be warm, then the middle of February; but if you match up forty pairs, as I have done, and require the birds to keep the penns you assign them, then match up the first of February, as you will experience much trouble and it will take considerable time before you can get the birds steady to the places you have assigned them.

The first or second round of eggs, as it is termed by the Fanciers, seldom produce anything, owing to their being thin-shelled, soft or lush eggs. Should they break or destroy their eggs, it is necessary either to give them addled or bone eggs, made on purpose, and make them set their time, if possible, and then it is absolutely necessary to give them a young one to feed off their soft food, which they will generally do in a week or ten days; there is a great difference in their feeding, some feed well, whilst others, comparatively speaking, will not feed at all. I said it was absolutely necessary to make them set their time and feed off their soft food, otherwise they will only lay soft shelled eggs, and that so frequently through the breeding season, that you will ruin the constitution of the hens for ever.

On the knowledge you possess of matching and shifting will depend your success as an Almond Fancier; these are the two grand secrets or great facts—the first, to produce it; the second, to raise. It is needless for me to tell you, that you must first breed a good bird before you attempt to raise it, consequently I shall endeavour here to assist you, how to breed a good bird. I stated in a former part of this work, that you have no right to expect a Wonder or Nonpareil from inferior birds. Fanciers widely differ in their attempts to breed a good bird; there are some Fanciers that would sacrifice every other property in a bird to obtain head and beak, by matching the two best head and beak birds in the aviary or loft, while there are others, sacrificing the other properties to obtain feather, this is the cause of our observing such good head and beak birds, but running from feather; on the contrary, those Fanciers who sacrifice every thing for feather, breed birds with beautiful feather, but they run out in head and beak. Fanciers, in looking at good head and beak birds, will tolerate the bird and overlook feather; but if it was the best feather possible to obtain and ran out in the head, thin-faced

or mousey, the remark many of the Fanciers would make, as I have heard it observed, they would give ten pounds provided the bird was as good in head and beak as it was in feather.

There are some of the young Fanciers who are over covetous, who go for all the five properties at once, they have their reward by getting nothing; others breed to a feather, but they forget to say what feather. I will here mention a case to show the uncertainty of breeding to a feather, as it is called; the best pair of Almonds—cock and hen, extra good in all properties, that I ever possessed, keeping them matched together for three years, bred three beautiful almond cocks, two kite hens, yellow and red whole feather, yellow and red agates, all coming from the same pair of birds. Is this what they call breeding to feather? Now, if this pair of Almonds had bred all the young-ones as near alike for feather as they did head and beak, then that would be nearer breeding to feather. I will give you another instance that occurred, I matched up a beautiful head and beak splash cock to a rich kite hen, and in the same nest or round, produced two young ones—the one pure white, the other as black as a coal; I thought this breeding to feather with a vengeance. The inexperienced Fancier may say, that they did not come from a good stud of birds; when he knows more he will say less, for I question very much whether he ever will be able to obtain such birds as I am writing of.

Counteraction is a grand thing to be observed, but this must have its limits; for it would be unwise to match up a bad cock to an extra good hen, for if you split the difference in their young, you make half-and-half of them; "Half-and-half" may be very good to a Fancier on a long dusty road and his throat parched with thirst, when he comes up to a Pig and Whistle Shop, and can get nothing better, but half-and-half Almonds will not do for the Fancier, besides throwing away the use of the hen for the season. A gentleman, a member of the original Columbarian Society, to whom we owe so much, stated, that the best Almond supposed ever to have been bred was bred from a white agate cock and kite hen; but we are not to consider this surprising, for the agate cock and kite hen, for ought we know, may have had the blood of the Almonds, in a direct line for the last hundred years; and do not Fanciers, who say they cannot have too much of a good thing, match up the most plum puddingy Almonds, as they call it, cock and hen; and do they always throw Almonds? certainly not, but all colours in feather, such as rich kites, duns, yellows, reds, whole feathers, and agates. These birds having the blood of the Almonds, and coming from good feathered Almonds, as far as you are able to ascertain; if you are acquainted with their pedigree, so much the better; these young birds, being judiciously matched, are as likely to throw Almonds, as the Almonds themselves; and there are some of the best and most experienced Fanciers express it as their opinion, that the amazing power of the Almond Tumbler to throw all shades of colour—whole feather, agate, splash, broken, or spangle, is one of the chief causes that keep Fanciers so long in the fancy; propels or induces the Almond Fancier to persevere, owing to the uncertainty of throwing the feather; for, as they observe, if it was reduced to a certainty, the zest would be lost; and, as I observed before in another part of this work, that the Almond Tumbler Fancy is as open now for fresh competitors, as it was a century ago. There are Fanciers who condemn me, and say that I match up too high for feather; be this as it may, I am one of those who think we cannot have too much of a good thing, and may be rewarded like the man who reasoned,—“That if a little physic was good, what must a great deal be?” why, do every thing but what it was intended to do. The Fancier may draw his inference, that I am a Head and Beak Fancier, and despise Feather, I am a great admirer of Head and Beak, but am not insensible to Feather; for, as I observed before, which of the five properties could we afford to lose? and is not feather a grand property?

It unfortunately sometimes happens that on exhibiting a bird on a grand show night among the Fanciers, that if the bird possesses four good properties out of the five, namely:—head, beak, eye, and carriage, but should fall short in feather, a

"Feather Fancier" would remark the deficiency of feather, apparently overlooking the four other properties; nevertheless do not lose your command of temper, but do as I have done this season, provided the strength of your aviaries and lofts will allow you to pick out of seventy pairs of birds as mine will, match up expressly six pairs of the best feather, and most likely to throw feather, you will probably be in a condition to challenge them to show for feather.

I will be very brief in touching on the delicate subject of exhibiting a bird as their own, although borrowed from another, for my own part I would as soon challenge all England to show a bird, as some, (very few I hope in the Fancy,) who would make a bet to show a bird of their own breeding, and then borrow the best bird they could procure for the occasion; I sincerely hope as I stated before that this rarely occurs, but it has occurred. If you fall in challenging all England, you fall nobly, but if you are outwitted by a trick, you fall ignominiously. And while I am treading on this delicate ground, in an especial manner I would call upon the young Fancier that if ever you are placed in a position, not the most pleasant in the science of the Almond Tumbler, I allude to that of being appointed one of the umpires, let honesty and integrity be as the breath of your soul, and if there is no doubt on your mind that the two birds are equal, wash your hands as it were of the responsibility, provided you are not already outvoted by calling in another umpire or referee, and, above all things, err rather from want of judgment than design, for be assured the eyes of the Fancier would be upon your decision, and should your decision be manifestly partial, you will bring down the detestation of the whole Fancy upon you, and be stamped with infamy to the end of your days.

It might appear to you that I would almost write anything rather than grapple with the subject of matching and pairing the birds, I thought it would not be amiss to go into my aviaries to see how I had matched my birds, and found that I had nearly matched them all manner of ways, with the exception of head and beak, so that I cannot exactly recommend you to the matching from my own aviaries; it is better to have ten pairs of good birds well-matched, than fifty pairs by counteraction. Match up your aviary or loft of birds, commencing with your best cock and hen, and going down till you come to birds that you do not approve of, then discard them. I do not pretend to instruct you how to breed any given feather in the Almond, for after all, feather is only one property out of five, therefore, it is absolutely necessary to guard the other properties in producing an extra bird. It is possible that you may have a cock, so undeniably good in all the five properties, or particularly in feather, head and beak; and if it was possible that you had a hundred hens, you might exclaim that you had not a hen good enough, in head and beak to match over to him, and at last be driven to match a kite hen, simply because they often run better in the head and beak than the Almonds. The kite hen has the advantage over the dun hen, by producing better sound black. The dun hen will produce a more yellow and soft ground, and will not produce such good black in flight, tail and spangle, but appear smokey or dunnish, unless the cock is amazingly strong in feather. Good sound whole feather Almond bred Hens, with their rumps extra covered, namely: kites, duns, reds, or yellows, give a sound foundation or ground, and by matching them over to an Almond or Splash cock, you stand a great chance of breeding an Almond or Splash, and an Almond or Splash hen may likewise be matched to whole-feather sound Almond bred cocks; but I think it is absolutely necessary that the black feather should be visible either in the cock or hen. It is possible that two whole-feather Feather birds may throw Almonds or Splashes, but I think it is dangerous to try it, unless you are destitute of a bird, that would be more suitable, it is then better to buy a bird.

I cannot help thinking but that the ground of the Almond Tumbler, generally speaking, has greatly improved in the last few years, being more yellow. I say generally, for the gentlemen of the original Columbarian Society, always had good feathered birds, but there were other Fanciers who had not: although it was agreed that the feather should be black, white, and yellow; some appeared as

though the ground, flight, and tail feathers, were red, instead of yellow, and the black an olive; these are called too deep in colour, and may be called mahogany birds; but then there is another description of birds, such as is called bred too high for feather; it is easy to say to high for feather, and another thing, what you mean by it, do you mean to say that too deep colour bred bird, and the too high bred bird is the same thing? Certainly not; the effect shows itself when we produce a number of white or white agate young birds, that we certainly have matched the birds too high for feather, and too much blood in them, as it is called; but if on the contrary, you should happen to breed an Almond, it is generally an extra feathered bird. It cannot be reduced to a certainty how to breed for feather, but if a Fancier is very desirous of breeding for feather, I do not know that he could accomplish his object better than by matching an Almond cock, which is bred very high for feather, black, white, and yellow, but the black particularly good and strong, over to a rich golden dun hen, bred from two Almonds; the reason why I say that the black in the cock should be particularly good and strong, is, that while the dun is proverbial in softening a hard feathered Almond cock, and giving a beautiful and soft yellow or Almond ground, fails in producing the black. I am not aware of any match that is likely to throw better feather, provided as I said before, that the black is good, but it almost amounts to an impossibility to intermix a decided black with a rich bright yellow; there are many gentlemen of the Fancy, who know what a good black is, but I am fearful have not paid that attention to ascertain what is good yellow.

Now that I am writing on black and yellow, let us endeavour to illustrate or define it, and I think you could not do better than thus: suppose a grand show open to all England, to produce the best standard Almond Tumbler, and the two gentlemen Fanciers appointed umpires in a room by themselves, the birds being handed in for admissibility, the standard being black, white, and yellow, they have agreed in passing two birds at first sight into the penn, which are to be examined again prior to their being shown for the prize; another bird is now handed in, which is a standard bird, but is objected to by one of the umpires, and the other asks upon what grounds—the answer he received that it is not a jet or good black, that it is a faint, smoky, bad black; then the other umpire insists upon good yellow, and goes to the penn to examine the two birds that had passed to be re-examined, and declares them disqualified for showing, the other umpire requires the cause, and is answered that the ground of the bird, also the flight and tail is nearer a red than a yellow, and as the one would not pass a faint black, neither would the other pass a reddish bird for yellow.

To return to the matching of the rich Almond cock and golden dun hen, if on the contrary, the same cock was matched over to a good kite hen, they would throw in better black, at the same time producing more kites, it may be Almond and Kite in each nest. I think you will not be wrong even in matching up a Spangled or good Splash cock to a sound bright whole-feather hen, Almond bred, namely—duns, kites, reds, yellows, or even red and yellow mottled agate Almond bred birds, and reversing it with the hens and cocks. Not knowing how to produce a given feather myself, I experience the difficulty of instructing you, but I think what I have stated are the best rules to lay down, and it will assist you if you know how the birds have been bred; at the same time it is encouraging to the young Fancier, that he may come into the Fancy and throw a bird for feather from an agate cock and kite hen, with the most experienced Fancier, still, feather is but one property out of five.

OF LAYING.

Much will depend on the state of the weather; should it be mild or warm, the hens will begin to lay in about a week after matching. I have very little opinion of those eggs that come very soon after matching; on the contrary, I have experienced greater success with the eggs that have come later. Make them a

good nest of soft straw, well rubbed with the hand, for they seldom make a proper one themselves. Barley straw is best for this purpose, but of whatever you make it, let it be a good sound tight nest, for if it is loose and careless the eggs will get under the straw, the birds lose them, forsake the nest, and the eggs are not hatched, owing to a little carelessness. The hen mostly lays two eggs, missing one day between the first and second; after having laid her first egg, which is always between five and six o'clock in the afternoon, she and the cock alternately stand over it, to protect it from the intrusion of other birds; the second is laid, usually, at one o'clock, or soon after, on the third day, when they commence incubation in the following manner:—the cock sits from between nine and ten in the morning till four or five o'clock in the afternoon, when the hen sits till the following morning, and so alternately till the seventeenth day from the laying the last egg, when the incubation is complete, and the eggs will be chipped, and in general hatched in the course of that day, if they hatch at all, and this regularity and alternate relief is maintained during the feeding as well as the sitting.

I used, formerly, when the first egg was laid between five and six o'clock in the afternoon to take it away and put it into a pill box, lined with wadding, to prevent its breaking, and substitute a bone egg, for the birds to stand over, or sit upon, and on the third day, when the hen would lay her second egg, between one and two o'clock; prior to this, on the same morning, restore the first egg about nine o'clock, so that it might acquire the same warmth of the last egg, and both hatched together. I know I was a great gainer by this method, but having many birds, it was too troublesome; but if you have a few birds and time on your hands, it will reward you for your trouble.

OF HATCHING.

The Fancier should be very particular, and be certain of the day of hatching. The way I do is to keep a book on purpose, and in looking at the nest pans, where I expect them to lay after six o'clock in the evening; if an egg is laid, I put in the book the number of the penn to which the birds belong the day the first egg is laid; suppose the first egg on the first of the month, the second egg on the third, then add seventeen days for sitting from the last egg which is laid on the third, making it the twentieth; and while you are going your round to look after fresh laid eggs, look to those eggs that are to hatch that day, for be assured that in nine cases out of ten the birds will be hatched if hatched at all, unless the weather is unfavorable and the birds do not sit close; on the contrary, should the weather be very hot, and the birds sit close with a good warm nest, they will rather hatch before. We will suppose the seventeenth day from the hen having laid her last egg now arrived, and the young ones beginning to hatch, much attention is now necessary to be paid, and a little judicious assistance is sometimes requisite to assist the young bird in extricating itself from its prison-house, and particularly in the spring, when the young ones even in the shell are more delicate and weakly than they are at a later period of the season, and consequently less able to disengage themselves. If an egg does not spring or chip by the time it ought, namely, in the course of the seventeenth day, the Fancier should hold it to his ear, and if the young one makes a crackling kind of noise, and that pretty briskly, he may conclude it will soon chip; when it has so chipped, if the young one should not proceed in its endeavours to break the shell as much as the Fancier thinks it ought to have done in the time, and does not continue to make so brisk a noise, it is a sure sign that the young one is weakly and almost exhausted, requiring immediate assistance; in that case he should gently dent his thumb or finger nail, or the head of a pin, in a circle round the egg, in the same manner as if it had been done from within by the beak of the young one itself; remembering to let in a little air, which may be safely done at the part where its beak lies, and no blood will issue from it, by which means it will be greatly assisted in extricating itself, and many a valuable bird may be thus saved; particular care should be taken not to pick a

hole in any other part of the shell than above mentioned or make it bleed, although I have heard some Fanciers say they have taken them out of the shell and they have bled like pigs, but it is extremely dangerous. If it has been moving about in the shell so long as to have absorbed all the moisture or blood, and has by its circuitous motion rolled up the little caul or membrane in which it is enveloped whilst in the egg, it may safely be set at liberty, taking care to expose it to the air as short a time as possible. When it is disengaged from the shell, a portion of the yolk will be seen attached to its navel, which will nourish it for a day or two, if the old ones should not happen to feed it immediately. It happens from some cause or other, that the young ones do not get fed, in these cases if the Fancier is anxious to save the produce of the pair, and has no means of shifting them under another pair, he must take some crumb of bread, and some yolk of an egg boiled hard, and masticate them in his mouth till they become of the proper consistence to pass into the crop of the young bird, and by applying its beak to his mouth it will in general suck its crop full very readily, and by the time he has repeated this a day or so, the chances are greatly in favor of the old ones feeding it, either from a more abundant supply of soft meat, or from some other cause; but if the Fancier neglects this too long, the young bird will become weak and will not thrive upon his experiment, even though it should have taken some of this artificial food into its crop in the way before mentioned; but when once the old ones have fed it after him, it is astonishing to see the alteration that takes place in the young bird for the better, in a few hours.

If one should hatch considerably before the other, which it will do if the old ones have rather sat upon, than merely stood over the first egg, and it should happen to be a bad head and beak bird, which is not very promising, kill it, although an Almond, and rather take the chance of what the other egg will produce; it being in his favor that the produce will be a short-faced good head and beak bird: the reason I recommend this is, because the rough and strong bird being first hatched, will acquire too much strength, get all the food and starve the one most wished to be raised. For you do not stand in need of rough Almonds, any more than queer Kites; should you have plenty of feeders that can bring it up you may do so, and make a feeder of it, but do not hazard the rearing of a valuable bird through it. The more you kill, comparatively speaking, however strange it may appear to you, my experience teaches the greater will be your gain; otherwise, as I stated before, you will raise the rough long-faced, and lose the valuable short-faced birds, but I advise you to have plenty of feeders.

OF SHIFTING.

Hatching a little wonder is one thing, to raise it another; and in a former part of this work I laid great stress on the shifting, when you consider how early the old birds begin to decline sitting on their young; this is more particularly the case with the Almond Tumblers, who will rarely bring up their own young, except in the height of summer, by reason of their quitting them sooner to go to nest again; they begin to get restless as early as the sixth day, and the ninth or tenth they will be off the nest for an hour or more at a time, and get calling to nest again by which the young ones are left exposed to the air before they have a feather upon them, and die of cold with their crops full; to obviate this he should shift them under another pair that have not hatched so long, and kill the young ones he takes away from such other pair, if he has not a shift for them also; in doing which he gets these shifted young ones an additional supply of warmth from being sat on, and of soft meat, from the fresh pair not having hatched or fed so long, and consequently their soft meat not being exhausted. Some Fanciers are very unwilling to kill a bird, by which means they frequently lose two; but, surely, it is better to kill one to save the other, than not to kill it, and so lose both.

If he has not Almonds enough, it is better to get some common Tumblers for feeders or nurses, such as bald-heads or beards, and by killing their young, which

he will do without reluctance, he may be certain of bringing up his young Almonds, and if he is judicious he may generally have a succession of feeders, by taking away the hens of his feeders, and confining them awhile, and when any of his best Almonds are within a day or two of laying, turn the feeder hen to her mate, they will go to nest immediately, and lay in a week or less after the others, by which means he will get a certain shift for his young Almonds at the distance of six, seven, or eight days, which is just the time the old ones begin to desert them, and thus bring up a pair of good birds, which without such feeders he probably would have lost, he should let the common birds feed their own young a day or two after hatching to bring on their soft meat.

There are Fanciers, who, by no means approve of shifting oftener than once, if it can be avoided, but sometimes the course of shifting throughout the whole loft, will necessarily be such that it cannot be prevented. Too great a supply of soft meat is very detrimental, and frequently fatal, by causing the canker or putrescence in the throat of the young bird. It is very necessary to give the young ones fresh nests when you shift them, and here I will just throw out a hint—I sincerely hope you have no insects, for if you scrape up your aviary, loft, or breeding places daily, by attention to these rules you will not be troubled with these insects in any material degree; the best way is to burn the old nests, and a few hot cinders dropped into the nest pan, and shaken round, will kill all that remain in the porous parts of the pan. Some Fanciers assert that shifting the nests of the young birds is apt to give them the scowers, but I cannot say I have ever experienced that to be the case, on the contrary they have always thriven greatly.

OF MOULTING.

This, though not a disease, but natural to all the feathered kind, is more fatal to the Almond Tumbler than any disease that afflicts them, they moult, or in other words, cast their old feathers, and acquire a new set every year. Numbers of them die under this painful operation of nature, before they can accomplish the change, and most of them are rendered more or less unwell, particularly the hens, which are generally more delicate and less capable of bearing such a change; if they are old it is mostly fatal to them. They begin to moult about May or June by casting the flight feathers, and no further moult is perceptible till the middle of July or so, when the body feathers begin to appear pretty thick about the aviary or loft, in August they get considerably into moult, and in the month of September, they are what is called deep in moult, many of them being very ragged about the breast and hackle, and some of their necks are featherless, but full of stumps of the new feathers, which gives them a very disagreeable appearance for a short time, greatly altering the proportions of their shape, and disguising them so much that the Fancier scarcely knows his own birds. Should he chance to go out of town for a month or six weeks at this particular season, he would on his return have great difficulty in distinguishing one from another, from the great alteration that takes place, for in general they acquire more colour, and get darker every year, particularly the cock birds. They do not get completely out of moult till November, and I have seen them moulting even later than this. Towards the close of the season, when the birds are in the worst stage of their moulting, and the weather is gradually getting colder, warmth is particularly necessary in order to assist them in casting their feathers kindly. Notwithstanding this, I do not think it right to shut up the aviary or loft, running the risk of affecting the health of the birds in general, and making them tender on account of a few that are not so well as the others, for air is as necessary as warmth; but such as are unusually ill should be taken and put in a pen, in a room where there is a fire, giving them a pill or two of aloes, with some seed. If they do not begin to moult freely with this treatment, some of their rump and tail feathers should be pulled out, which will sometimes set them into moult; it will be proper to give all the

birds a good handful of hemp or rape seed every day, which will warm and make them comfortable, and greatly assist by such warmth to cast the feather.

Some birds that are rather delicate will not blow their flights and tails kindly, which will be seen on examining them, and they will be found covered with a sheath or cylinder to the very tip or extremity of what should be the feather, giving it the appearance of a thin skewer; when this is perceived it is a sign of weakness, and the bird should be kept warm if it could be spared from the loft, and the feather will blow freely, as warmth assists the feather in blowing, so cold and damp weather will make the husk or sheath tough, and prevent its drying and scaling off as it will do in hot weather, and the feather will perish. If the bird cannot be spared from the aviary or loft to be kept warm, so that the feather may disengage itself; the husk should be peeled off as far as it is tolerably dry, and care must be taken that the feather is not pulled out, as the one that succeeds it (if any does succeed) will be worse than the one so drawn, and most likely be nothing more than a mere stump or perished feather, care must also be taken not to make it bleed. The best way I have found out in endeavouring to moult the birds, was to imagine that I was fattening the birds for the spit, believing from observations that a bird would not die of moulting, provided it was fat; on the contrary, I am certain that a poor lean emaciated half-starved bird cannot by any possibility throw its feather, and the only way I ever found out to cause it to moult, was to get it in high condition, and then it moulted without any further trouble of mine, and I believe that I could never get the birds so fat as when I gave them wheat; be this as it may, if you want to get your birds well through the moult, get them as fat as you possibly can, and a little saffron in their water is likewise very beneficial.

OF VERMIN.

These birds, like every other kind, have their peculiar species of vermin, the most troublesome are a sort of louse, not unlike in colour those found upon persons of filthy habits, but of a different shape, being nearly round, and about half the size, they run incredibly swift, and on turning up the feathers on the belly of the bird, disappear in an instant, they harbour in the short feathers on the underpart of the rump close to the quills of the tail feathers; but are to be found in greater abundance on the belly, near the vent, where the bird cannot very well reach them, and if the bird is very foul the roots of the feathers will be clotted with nits or eggs, and swarms of these insects will run away in every direction the moment the feathers are turned up; they also inhabit the neck, where they likewise deposit their eggs in great abundance, being there perfectly safe, from destruction till they arrive at maturity, when they descend to the belly-part for sustenance. Birds with wry, crooked, or hooked beaks, are most subject to these vermin, being from those defects less able to destroy them, and should therefore be particularly attended to.

The best remedy, beyond all doubt, is the *unguent. mercur.*, commonly called blue ointment, rubbed, on the parts, but not in such quantity as to affect the bird, a small portion is sufficient; this should not be rubbed about the head or neck, but only on the belly, and the clotted or nitted feathers pulled off, which will clear the way for the application of the ointment, and by the next day he will not be able to find any vermin of that kind upon the birds. They should be examined every now and then, as the nits in the neck which were not affected with the unction will be continually coming to life, and create a new brood, and over-run the birds again very shortly, therefore, as often as any signs of vermin appear, rub a little of the ointment on the belly to receive them, which will infallibly kill all that touch it, by these means the Fancier will always keep his birds clear.

This is particular necessary for the hens, as many of them suffer, and are exhausted so much by this little blood sucker that they will not breed, but upon

cleaning them they recover their health, and breed as well as ever. I have seen birds so devoured with them, as to have large crusts or scabs formed by the ichor that flows from the wounds these little animals inflict upon their bellies, under which scabs, forming a sort of canopy, they run for shelter, and remain in safety when the bird is picking itself; another purpose is also answered by these incrustations, covering parts of the belly of the bird in a circle beyond where the wounds are, by rendering the parts so covered softer to the piercers of these little insects, and affording them a more ready, as well as a safe opportunity, of satisfying the cravings of their voracious appetites. The blue ointment not only destroys the vermin, but heals the wounds under the crusts before mentioned, in a day or two. Some Fanciers are afraid of venturing upon this remedy, and have recourse to the usual ones of snuff, tobacco dust, snuff and hog's-lard, smoking their feathers, &c.; but I am satisfied these are of very little, if any use, because they are not fatal to the insects, if they come in contact with it, and, besides, they are very troublesome and prejudicial in the application, by getting into the bird's eyes, nostrils, &c., disfiguring them, and discolouring their plumage, which must be turned back to get the snuff down to the quills of the feathers.

I know a good Fancier that always uses a strong decoction of tobacco water. I formerly used sweet oil, and the heat of the body caused the oil to spread all over the skin of the bird, and the insects could not escape; but I fancied the oil rotted the roots of the feather, and caused them to come off. I mentioned the circumstance one evening at a grand show, and was informed that if I used animal oil, instead of vegetable, it would not happen—such as neat's-foot oil; I think this would be worth trying. Of late I have used nothing but the blue ointment, and have anointed upwards of one hundred at the same time, but only on the belly, never having used it on the neck, and never saw any of them tremulous or paralytic; but there are Fanciers who have ventured to rub some of the ointment about the neck feathers; if the Fancier does this, it must be done very cautiously and sparingly, otherwise it will affect the birds so far as to make them tremulous and paralytic, and even kill them. I therefore recommend the young Fancier not to apply the ointment to the neck at the same time that he does to the belly, but wait two or three days first.

I am bound to acknowledge, after the most mature consideration, that I cannot possibly do better than give verbatim, some of the remarks on the management of the Almond Tumbler, contained in a work now out of print, dedicated to the "Gentlemen of the Columbarian Society;" those remarks are so true, taken from actual observations, and constitutes a complete fund of experience; nevertheless, I shall add a few ideas, which I trust will not be found unacceptable or unworthy of following the excellent remarks I here allude to.

THE LOFT

Should be very airy, and at the top of the house, and if it is large, it would be better to divide it, as the Fancier will find two rooms very convenient upon many accounts, particularly in cross-matching, in the middle of the breeding season, if the produce of his birds should not please him; and he will find his birds more familiar if they have not too much wing room; and when he wishes to catch any of them, he should entice them into the area with a little rape or hemp seed, by which he will avoid hurrying them about the room, and may catch them at pleasure, and prevent the probability of a hen who is near laying, dropping her egg on the ground. The area should, if convenient, have a south west aspect, that the birds may have the benefit of the Sun in the spring mornings, when they are near laying, which will greatly assist them if the weather should unfortunately set in cold, soon after matching. And besides, it is very great service to the young ones as soon as they are able to fly up to it; but if it is convenient, I should recommend a separate room or loft for them, as soon as they are fit to be drafted off, as they will certainly thrive better, where they have no old

birds to contend with, and knock them about. The pennis should be two feet square at the least, with fronts to them, and a pitching board, and a small place to go in and out at, which should be made to fasten up as occasion requires. The lighter the work is, consistent with the proper degree of strength, the better, and the work should be let in, in order to give it a neat appearance. There are people in the Fancy who are carpenters, and understand that sort of work better than a man who is not a Fancier. The bars should not be more than two inches asunder. I prefer a shelf midway between the flooring and the ceiling of the penn, big enough to hold a nest pan, and a little over, for the birds to pitch upon when they fly up to it; by this means the young ones may always be prevented getting into the new nest with the old ones, when they are gone to nest again, and thus many a pair of eggs may be saved. When the old ones begin to leave their young, which they will generally do in nine or ten days time, and frequently sooner, remove the pan with the young ones from the shelf to the floor of the penn, the old ones will not forsake them, but continue to feed them as before, and the hen will sit on them at night as usual. A few days afterwards, when you perceive they are very anxious to go to nest again, put them a fresh pan on the shelf, which they will readily take to, and this plan may be pursued all through the season, and save a vast deal of trouble and loss. Though I have said it is desirable to have a warm aspect for the areas, I by no means wish it to be understood that I think the loft should be kept warm; on the contrary, it should have a free current of air, and in winter, except in very coarse days, I think the birds cannot be kept too cool, being convinced it braces them, and particularly the hens. It is only at the laying time in the spring, that I recommend the loft being shut up, to keep out the cold and searching winds, as the hens are at this time frequently very ill.

The loft and areas should be scraped every day, and kept thorough clean, the birds will be much more healthy, and never get clogged with dirt, and the Fancier will have greater pleasure in going into his loft; besides all this, it will prevent the possibility of fleas and other vermin infesting him. A little water should be sprinkled on the floor in the hot summer months, provided the Fancier does not gravel his loft. Some use this method of gravelling the floor, which I disapprove, on account of the dust it makes, and the harbour it affords for vermin, but the birds should always have access to gravel.

Above all, take care that the loft is not infested with rats or mice, the former of which will not only destroy the eggs, but the young ones also, and even the old ones, if no young ones are to be had; but a good cat trained up in the loft, and well disciplined, will remedy all this. I recommend a boar cat, but he should be castrated, that he may not be hankering to get out after the females, or entice others to the loft. A she cat is objectionable on the same account as an uncut boar cat is. These are more formidable enemies in their natural state than any other, and the loft on that account should, if possible, be inaccessible to the approach of cats. If this cannot be managed, they must be trapped, and all means used to prevent their ravages, not omitting to make the bars of the areas proof against their paws.

OF PENNING THE BIRDS.

The birds being paired, the next care must be to make them well acquainted with their respective pennis, and for this purpose they should be penned up for a few days, or longer if necessary, in the pennis designed for them, during which time they will match strong, and become well acquainted with their habitations. The Fancier should then begin by opening two of the pennis, that are most remote from each other, and the birds, finding no entrance to any other, will readily learn to know the places they came out of. When these two pair are well acquainted with their pennis, they should be fastened up again, and two other pair let out, remembering to let out such as are most distant from each other, by which means

they will be less liable to mistake each other's home; and so he must proceed, till the whole are well acquainted with their respective abodes. Great care should be taken to prevent a cock getting master of two pennis, for if once he gets a habit of going into another bird's penn, be assured he will never rest till he has driven that cock and hen from their house, and spoil their eggs or killed their young ones. When this is become very troublesome, the only remedy is, to put him and his hen into another room, for it is almost impossible to break him of this trick, if once he gets master. Thus the advantage of dividing the loft is clearly shewn, for without this convenience, he must be under the necessity of keeping that pair of birds constantly penned up, which would be very prejudicial to their health, and fill them with vermin. During this period, the young Fancier must bestow a little time in watching them, and putting them a few times into their own pennis, if they are at a loss to find them. By attending to these rules, the birds will soon become steady and settled. Particular care should also be taken always to give the cock the same habitation he had last year, if not, he will get master of two pennis, and occasion the difficulty just mentioned. The same care is not necessary with regard to the hens, they will always follow their cocks, when thoroughly matched.

OF THE NEST PANS.

Every pair of birds should be provided with a nest-pan, which should be put on the shelf in the penn, and the birds made to go to nest there, as pointed out in my observations upon making the pennis. These pans should be about eight inches in diameter at the top, and between three or four inches in depth; they should not be perpendicular, but slope inwards from the top to the base, and should be rough on the inside, for the better retention of the straw. These can be made at any pottery, upon giving a model, or proper instructions how they are to be made. Some Fanciers have used little nests, in the shape of a pan, made with straw bands after the fashion of a bee-hive; these are very objectionable, on account of the harbour they afford for vermin, and from which it would be impossible ever to clear them.

MARKS,

BY WHICH TO ASCERTAIN THE COLOURS OF YOUNG BIRDS IN THE NEST.

If the beak has no mark on it, but is quite white, the bird will be an Almond.

If the beak is white, and has a little patch of black somewhere about it, this will probably be a Splash; but, should it be an Almond, it will most likely have a great deal of black about it.

If the beak be crossed on the point with a black stripe, or cross, rather inclining to blue, this bird will be a black, and not a Kite.

If with a deep blue mark, it will be a blue, which colour is very objectionable; and, if the pair should throw this colour more than once, they should be parted, and were they mine, I should part them the first time.

If with a black mark, rather inclining to, or having a faint tinge of red, it will be a Kite, and most likely a rich one.

If with a slaty-coloured mark, it will be a Dun.

If with a straw-colour, a Yellow.

If with a deeper straw-colour, inclining to red, an Agate. And,

If with a deep red, it will be a Red, or Red-mottled bird.

By minute attention to these marks, the Fancier will seldom fail in his prediction of the colour, long before any signs of feathers are visible.

With respect to such young birds turning out good or bad, that cannot be reduced to so great a certainty, as they alter so much in the nest, that a person

would sometimes scarce think it was the same bird he had seen a day or two before, was he not certain that no one could have changed it. These alterations are sometimes for the better, and sometimes for the worse, so that there is no saying, with any precision, which will, or will not, be a good bird, until after it has moulted, when the bird is seen in full beauty, and to the best advantage. Notwithstanding this, I am inclined to think that a good Fancier, who has made his observations, can give a pretty good guess, so far as head and beak only are concerned, because they are apparent, and the other properties occult, and not to be discovered till the bird arrives at maturity. But, if the young one is chubby about the beak, and has very little space between the head and the wattle, he may be assured it will be a short-faced bird, and may, in general, tell whether the beak will be coarse or fine.

OF DRAFTING

THE YOUNG ONES INTO ANOTHER LOFT.

This is very desirable, provided the Fancier is not straightened for room. As soon as the young ones can feed themselves, they should be taken into the loft provided for them, and have plenty of gravel and mortar, and their area should be kept thorough clean, where they will pick themselves, and bask in the sun, and thrive prodigiously.

Their food should be the best tares; or if sound beans could be procured that are small enough, I should prefer them, but it will be better to let them have both, as I do not think tares alone, a wholesome diet, being apt to make them scour.

An additional reason for drafting the young ones off, is, that the old ones should not continue feeding them, till they are on the point of hatching again, which they will do, even though they can feed themselves, and which is very injurious to the old ones, as they have no time to recruit from their labour, which, in feeding two or three large birds on the floor, as is often the case, is very great, and pulls the birds down very much, and throws them out of condition, particularly the hens, who are not equal to it, and have frequently seen them very ill from so great exertion, and on taking them in hand, have found them considerably wasted, which by taking off the young birds, has been remedied in a few days, and the old ones have picked up their flesh as before. For want of an additional room to draft them off, the Fancier must, if his loft is divided, put them in the contrary side, where they will be prevented teasing the old ones, and learn to feed well in two or three days.

OF BARREN BIRDS.

It sometimes happens that the Fancier has a pair of barren birds in his loft, that is, a pair that from age, or some other defect of nature, will not breed. This is more frequently attributable to the hen, as she is more liable to be weakened from too much breeding, and laying too quickly, and perhaps not having had sufficient care taken to sit and feed her off. But if she lays regularly, and the eggs do not come to perfection, after the usual time of sitting, it is clear it is not her fault, and must be attributed to some defect in the cock. If she does not lay, and only wants to be continually going to nest, it is her fault, and the best way is to give her a pair of eggs, and let her sit on them, and provide her a young one to feed off, when her time for sitting is out; and repeat this when she wishes to go to nest again for a few times, and if the hen is curable without flying her, this will make her lay again. If she is very valuable, the Fancier should send her to some friend in the country who keeps pigeons, and match her to one of the common birds, and let her fly; and if she is not past breeding, it will bring her round. When the Fancier has a hen of this description, and the cock is not too good to lose the use of in this way, he may make them very useful as feeders, by sitting them at almost any time he wishes, which office, by a little management, they will very readily perform, and when their time of sitting is expired, will be ready to take a

pair of good young ones off from some other pair, that are beginning to desert them. Should he not like to keep a pair of this description, he must discard the faulty bird; but before he does this, he should examine it, to see if it has any vermin, as they are sometimes the cause of barrenness.

OF WASHING.

The Fancier should take notice, that nothing contributes more to cleanliness than frequent washings, in which the birds delight amazingly, and plunge into the water with great eagerness; but this must not be permitted to be done in a slovenly way, if it is, they will not be benefitted. The pan should be put into the area, and the birds made to wash there, that the waste water may run away, and not be suffered to wash in the loft, and make a wet place, that will not be dry in three or four days, by which they will draggle their flights and tails, and make themselves more dirty, instead of cleaner. The water should not be given them more than twice a week, or three times at most, for if they have it too frequently, they will not use it. Another inconvenience that would result from their constantly having water to wash in, would be, that some would be washing one day, and some another, the area would never be dry, and the same evil would arise as if they were permitted to wash on the floor of the loft, for nothing soils their plumage so much as constant wet, particularly their flights and tails. I think the cistern water for this purpose is best, because it is softer and more likely to assist in removing the filth from their plumage, than pump-water.

OF FLYING THE BIRDS.

Some Fanciers prefer flying their birds, but to this I cannot assent, either in town or country, more particularly in town, as they are extremely weak and timid, and the least blast of wind would blow them down the chimneys; or one bird playing up against another, would have the same effect, and the Fancier would be continually losing birds of value, to his great mortification, and be constantly getting into disgrace with his neighbours, and perhaps into difficulties, add to this, that the birds would be ten times more dirty, and washing is of no use; therefore, as no advantage whatever can possibly be derived from it, I object to it entirely. In the country it is different, because it is clean, and may benefit the plumage; but even there, I would not fly them constantly, as it tends to make them coarse, which is the reverse of what is wished to be obtained in these birds, viz.—delicacy; I should therefore fly them only occasionally, which would answer all the purposes of keeping them healthy, and beautiful in their plumage. And a further reason is, that it tends to make them wild, instead of what is so desirable, perfectly familiar. Some have doubted whether the Almonds will tumble in the air when flying like the common Tumblers, but I can solve that doubt, by assuring them, that they will, and that I once had one of my own, that tumbled remarkably well, and very clean, never losing any way in the air, so as to be distanced by the rest of the flight, which is a great perfection in tumbling.

OF LOAM.

The birds should be furnished with loam, of which they are remarkably fond, which should be put into a garden or flower-pot, and well soaked, and when the water has drained off, and the loam become solid, lay the pot on its side, and they will eat the loam very greedily, especially if there is a little salt in it, of which they are also immoderately fond; but as they are already of a hot nature, and sufficiently thirsty, I do not approve of increasing that thirst by artificial means, unless some good reason could be given for it, and which I confess I am at a loss to find out. Some Fanciers say, that obliging them to drink is very useful to them; but I cannot say I agree with them, as it seems to me to stand to reason, that a bird will drink sufficiently if it can get it, without any unnatural

means to provoke it. There are loam-pots to be had at the earthenware shops made on purpose, they are of a conical form, part of the cone or cap takes off, for the reception of the loam, and there are holes in the side for the birds to get at it.

I am of opinion, that loam should be given only in the summer time, or breeding season, and not in the winter, having good reason to think it occasions the roop, or at least promotes it, and retards the cure when the bird is troubled with that complaint, and the reason that occurs to me, seems to be feasible enough, which is, that the roop being a sort of cold in the head, and the nose, or nostrils rather, having a communication with the mouth, and being in that complaint always stuffed with rheum or phlegm, I think it is fair to presume, that the constant eating of cold loam may sometimes occasion the roop, or at least may tend to make it worse, when a bird is already affected with it. I used formerly to suffer my birds to eat it all winter, and they all had this complaint more or less. It afterwards occurred to me that this might possibly be the reason, and since that time I have not allowed them any, after the cold weather has set in, and have had the satisfaction of finding, that none of my birds have been affected with it since, in a general way, but only now and then one. Some Fanciers make a composition of loam, gravel, and mortar, adding some salt, but I think it is far preferable to give them each of these (except the salt) in their crude or natural state.

GRAVEL.

Is essentially necessary for the birds to have always by them; and unless they have, or some substitute in lieu of it, as sand or mould, I am inclined to think they would not be healthy. It is absolutely requisite for the purpose of grinding and digesting the food, which enters the stomach from the crop, in a whole, though soft state, and was it not for the particles of gravel, little stones, and other hard substances which they pick up, and which passes through the gizzard with the food, and assists maceration and digestion, I should think birds would not only become very unhealthy and indolent, but not live in our lofts to that age which they frequently do, some of them living with us nine, ten, and even eleven years.

MORTAR.

From the eagerness with which these birds search for, and from the avidity with which they devour mortar, one would think it was as absolutely necessary to their existence as gravel, but reflection will teach us that it is not, for before the mortar can reach the stomach it must be rendered soft, if not entirely dissolved, and thereby become unfit for the purpose of grinding the food, which is the use of the small stones in the gravel, but it may possibly, from its heat, assist in promoting maceration and digestion. Some Fanciers assert it will harden the eggshell, when a hen is near laying; but to this I cannot readily subscribe, conceiving that mortar from its hot nature would rather corrode, than indurate the shell. I do not however perceive that any ill effects arise from their eating it, and on that account perhaps it may be fair to conclude, that it is of some service to them. There is no doubt but their fondness for mortar arises from the quantity of salt-petre, or saline particles, which it contains, and their immoderate partiality for salt being universally known and admitted, I should think, that although they are so fond of it, yet it is by no means absolutely necessary to their existence; but where Fanciers fly their birds, it is absolutely necessary to supply them well with mortar, as a matter of policy, otherwise they will shortly unroof the house they belong to, and greatly damage those adjoining, and bring their keepers into difficulty. The mortar should not be new, but should be got on purpose from the rubbish of some old house or wall that is pulling down, which has lost the greater part of its original heat, and which is therefore preferable to fresh made mortar.

OF THEIR FOOD.

I shall now call the young Fancier's attention to a matter which is most material of all to the health of his birds, and upon which the speedy and vigorous increase of their young greatly depends, I mean their food.

If the throats of the young birds were not so small, I have no hesitation in saying, that beans of the best quality, and as small as they could be obtained, would be the best food that could possibly be given them; and was it not for the difficulty the old birds have in feeding their young entirely upon beans, I would never give them any thing else. This might possibly be objected to by some, from a supposition, that beans alone would not so readily furnish a sufficiency of soft meat, from their solidity, but I should think this reason would not bear them out, as it is notorious that the birds of the common Fanciers are fed upon nothing else, and they are always furnished with as much soft meat as those that are otherwise fed. But in the breeding season, the Almond Tumbler should be supplied also with good sound old tares, and to the hoppers containing these, as well as the beans, they should have free access, that they may satisfy themselves as often as occasion requires, which is almost incessant whilst they are feeding their young, being very voracious feeders, which may be accounted for, from their great heat of constitution, the food being quickly digested and converted into excrement, and continually passing through them; care should be taken not to purchase such beans or tares as have been at sea, and got damaged with salt water, as they will infallibly scour or purge the birds, and probably kill some of them. In order to ascertain this, the Fancier ought always to put some of them into his mouth, and chew them, by which means he will readily discover it, should it be so.

In order, in some measure, to prove my argument as to the beans being the best food, and preferable to any other, I shall state the observations I have made upon the excrement of the birds as soon as voided.

I have noticed the excrement of birds that have been fed upon ordinary beans, and found that it was tolerably hard and good, but that it was not attended with much mucus or slime, from which I infer, that the food was not sufficiently nutritious to afford the proper quantum of mucus necessary for the easy discharge of the fœces; but the fœces of birds fed upon prime hard old beans, have been very different, and according to my idea have worn a much more healthy appearance than the former; the fœces of birds so fed have been voided in a solid lump, surrounded with a plentiful quantum of fine oily, or slimy mucus, from whence I think the operation of digestion is better performed by the best food, and consequently that the birds must be more healthy.

Tares, if of ever so good quality, are very improper to feed birds upon alone, for they are very laxative, and never produce a solid excrement, which in a great measure tends to prove my argument as to the superiority of the first mentioned food; for whoever has made any observation upon the ordure of birds fed upon tares alone, will, I trust, allow, that it is never solid, but generally of a pasty consistence, and sometimes very thin; I think it thence follows, that birds in this constant state of laxation, can never be so hearty and vigorous as those fed upon good old beans, which produce a solid excrement.

From what I have above advanced, it will readily be supposed that I prefer beans alone for their constant food, when the breeding season is over; I certainly do, and with great reason, as I attribute my having been particularly fortunate to the observations of the before-mentioned rules, and may venture to say, although my birds are kept in the heart of this great city, enveloped in constant clouds of smoke from chimnies, foundries, furnaces, &c., no Fancier's birds are more healthy, and few have raised so many young ones in proportion to their stock, or lost so few old ones from diseases, &c. The only inconvenience which I can complain of is, the utter impossibility of keeping the plumage of my birds so clean and

beautiful, as those kept in a clearer atmosphere, which is certainly very much to their disadvantage, and a great detraction from the beauty of their colours.

OF THEIR DRINK.

I prefer pump water for the drink of the birds, conceiving it to be more bracing, and less impregnated with animalculæ than cistern, or river water, consequently less subject to putrescence in the hot water. They are very great drinkers, not drinking like fowls by little sips, but in continued draughts, like quadrupeds, moving their mouths very quick, and swallowing the water greedily. Particular care should be taken to keep their fountains or bottles clean, as it is not at all improbable that diseases may arise from the foul state of a fountain, which will become greatly furred, and even stink, when the weather is hot, if not frequently cleaned. The fountains or bottles should not be filled too full in hot weather, so that the water may be soon drank, and replaced with fresh, which will prevent the possibility of its becoming putrid. Some put a lump of chalk into their water, this may be very well, where there is none but river water to be had, but I should think no great degree of astringency could be communicated to the water by it. If any scourings take place amongst the old birds, the Fancier may break plenty of chalk and mortar on the floor, which they will eat readily; and as to the young ones, he must adopt the remedy laid down on treating of this complaint.

They are exceedingly fond of urine, and will drink it greedily, if they can get at it; some Fanciers soak their loam with it, which induces them to eat a great deal of it, and they will scarcely ever leave the place where it is to be obtained. This may be very well for those Fanciers who keep common birds and fly them, but I object to it for the Almond Tumbler, on the same ground as salt, viz that of creating an artificial thirst to birds already sufficiently thirsty. Pigeons drink much at all times, but particularly when feeding large young ones; they then run to the water, and take five or six hearty draughts, and immediately feed their young; this assists in soaking the food, and also in the easy discharge of it from the crop of the old ones into those of the young.

OF PARTING THE BIRDS

AFTER THE BREEDING SEASON.

I am a great advocate for this measure, having found my account in it, and thence been thoroughly convinced of its beneficial effects, great utility, and convenience; and I shall endeavour to convince the young Fancier also, of the propriety and advantage of this plan, by a few observations to that point. In the first place, a great deal of plague and trouble is saved to the Fancier, by the impossibility of the birds going to nest, which they will do, if not parted, in spite of all his efforts to prevent them; he is then under the necessity of continuing them another round, as the Fanciers term it, (though he is convinced of the impropriety of it, at that late season of the year) to the great detriment of his hens, and without a chance of bringing up what they may happen to hatch. In the next place, should the weather set in cold, the birds remain a little inactive for the moment as it were, but the first warm day that comes, though in December or January, they are all alive, calling to nest, copulating, &c. which is very prejudicial to both, but particularly to the hens, as it must necessarily tend to weaken and enfeeble them, and make them what is called pappv, which is caused by their being over salacious, and having too frequent connection with the males without going to nest, as they would do if the weather was not so cold. Thus we plainly see, that the only advantage to be derived from keeping the birds together in the winter, is, ironically speaking, to spoil the hens.

And further, as few Fanciers match their birds in the manner they were matched the preceding season, from the number of young ones they may have bred, which by the following season are become matchable, and occasion the necessity of

altering the old matches, and from other causes, the advantage of parting the birds in the winter, is here, I think, particularly conspicuous; it will enable him to cross-match all his birds without the least difficulty, as they will cross-match ten times more readily when they have been asunder two or three months, than when they have been kept together.

When I have had occasion to cross-match two or three pair of birds in the height of the breeding season, on account of their produce not pleasing me, I have frequently had great difficulty in obtaining my point, from the strong recollection the birds have had of each other; and though I have at last succeeded, the moment the hens have been turned into the loft they have flown to their former pennis and mates, and it was a considerable time before they were reconciled to their new mates and abodes. To prevent this, the new matched pair should be fastened into their own penn, taking care that the cock has the same penn as he had before. This evil will be completely remedied by parting the loft, as the Fancier may then put a pair or two of the cross-matched birds into the contrary side to which they have been accustomed, and by this means avoid the intercourse that must necessarily take place between the new matched birds, and their former mates.

Another thing is necessary to be attended to by the Fancier, in cross matching, viz.—he should have two or three matching pennis in some other part of his house, if not too inconvenient, in order that the birds he is about to cross match, may be out of the hearing of their former mates, and of the other birds in the loft, which will greatly facilitate their speedy matching to their new mates. They will frequently be a very long time in matching in the loft, where they can both see and hear each other, and sometimes will not match at all.

If they continue obstinate, a handful of rape or hemp seed should be given them occasionally; and if the cock is very violent, and fights his hen, an open lath partition should be put across the penn, to separate them, so that they may only see each other, and they will soon match by this method, which will be ascertained by the hen sweeping her tail, nodding her head, &c. which is called shewing.

OF THEIR DUNG.

Their dung is so valuable, and in so great requisition, that if it is preserved genuine, and as little straw and other rubbish as possible suffered to get amongst it, tanners and others will give five shillings per sack for it, and will fetch it whenever they are informed there is any ready for them. It is used by the tanners to separate the hair from the hides, being of an extremely hot nature, and answering their purpose better than most other things they make use of. It is also an excellent manure for cold, wet, and clayey land, and if it could be procured in any quantity, the farmers of such sorts of land would give almost any price for it.

OF THEIR DISEASES.

The Almond Tumblers are not naturally liable to many diseases; the majority of those which do attack them, I attribute to a want of sufficient cleanliness, and good management in their masters, but if taken care of in these respects, they will live nine or ten years, and sometimes longer, and are generally taken off at last by the moult.

The first and most fatal that has come under my observation is, what is commonly understood and called by the name of the Canker. This disorder is very much confined to the young birds in the nest, and does not very frequently attack the old ones, and as it originates in the œsophagus or throat, it seems to me to arise from the putrefaction of a redundancy of the soft meat, and that putrescency communicating itself to the throat, and causing a core, I am inclined to think, it ought with greater propriety to be called a sore throat, and perhaps, from the intolerable fœtor emitted from the throat and crop, not improperly a putrid sore

throat; be this as it may, if the complaint is suffered to go on without any attempt to relieve the bird, the core will enlarge, the throat swell, and the bird soon die of suffocation.

Some people are apt to pick off the core, or cut it out, but this is not only of no use, but fatal, as the core soon becomes larger than before, and could it all be cut clean out, the bird would die very shortly, if not in a few minutes.

I have more than once opened the throat of a bird that died of this disease, and all the information I could obtain was, that the core adhered so tight to the fleshy or muscular parts of the throat, that it actually appeared like a part of the flesh, being as it were incorporated with it, except that the colour of the core, being of a yellow, distinguished it from the throat itself: the core was perfectly hard, and would separate from the flesh, by pulling, or picking it with a knife, but this was with some difficulty, on account of the adhesion, and when it did separate, it left a large and deep hole. I have been surprised that I never should have been able to discover any pus in the throat, which induces me to think that no suppuration takes place, but this is probably because the bird must die of suffocation from the swelling in the throat, before the matter can have had sufficient time to form, and discharge itself.

My researches therefore have not been attended with any certain success, but have left me still to conjecture.

One thing however I have ascertained, that to cut or pick the core, is fatal sooner or later, from the great pain and quantity of blood the bird loses from these operations.

Although as I have at first observed, this disease is more particularly incident to young birds in the nest, yet it is by no means uncommon in old birds; it does not in general attack the throat, as in the young ones, but appears in a different way, and usually comes about the mouth and beak, and is not to be discovered very readily at first, but when it begins to enlarge, the bird will not be able to close its mouth, and seems as if it was panting for breath, and on examining it, the core will soon be discovered. I once had a bird that was attacked with this complaint, and I discovered a core as big as a pea, on the outside of the beak or lower jaw, which was much swoln, and it was with great pain and difficulty that the bird could swallow: this had no doubt been some time forming, but it soon gave way on applying the remedy I have under written.

Not being sufficiently able to trace the cause of this disorder, I must endeavour to make some amends to the Fancier by communicating a cure when the effect is produced: and which, if attended to, and frequently and patiently administered, will, I have no doubt, generally succeed.

I cannot describe the quantum and proportions of the ingredients in the way a medical man would do, but must content myself with telling the Fancier in a plain way—to take

A half-pint phial, and fill it three parts full of the best vinegar, drop into it as many drops of spirit of vitriol as will make it sufficiently pungent, which may be ascertained by trying it on the tongue a few times, sweeten it with a little honey, which will make it adhere to the throat, shake them well together, and take a feather, and anoint the inside of the throat of the bird affected, two or three times a day, and in general a cure will be accomplished; hang the phial up in the loft, where it will be ready for future occasions, as I do not perceive that the specific loses its virtue by keeping.

That this complaint is contagious, I have no doubt, for it generally attacks a number of young birds at the same time, and is most prevalent in the hot months. Formerly this complaint used to infest my loft every season, by which I lost many good birds, but from what cause it arose I never could discover, the same degree

of cleanliness having been observed, and the birds having been treated in every respect the same then, as since, as far as I can recollect, and I have not had a single instance of the kind for many years past. The only possible conjecture I can make, is, that possibly I might not have been so particular about the food I then gave them, and most unquestionably, the quality of the food is very material in the prevention of complaints.

THE ROOP.

The next disorder that comes particularly under our notice is, the Roop. This, as I before observed, is a kind of cold or influenza, and is more frequent in cold, damp, and wet weather, therefore in such weather the loft should be kept particularly clear of dung, which if suffered to remain will increase the damp, and make the birds worse, and perhaps spread the complaint through the whole loft, for I am of opinion, that this disorder is also contagious, therefore, on its first appearance the infected bird or birds should be taken away, and kept warm, and should occasionally have a handful of seed given them. Some put rue into their water, but I do not think this is of any use; the only remedy with which I am acquainted, is to keep them warm, and squeeze the rheum out of their nostrils, and also from the orifice in the palate or roof of the mouth, which communicates with the nostrils, by pressing which with the thumb and finger, and at the same time opening the mouth, a lump of rheum like jelly, will be seen obtruding itself from the orifice, which should be removed, and the bird will then breathe freely. This should be repeated about twice a day, and a pill of bitter aloes, the size of a pea, given once in two days, which will warm the inside, and the bird will soon recover. A few pepper-corns are not amiss to be given the intervening days. This is by no means a dangerous complaint, if attended to when discovered. It seems to me to be very similar to a violent cold and stoppage in the head.

THE VERTIGO, OR MEAGRIMS.

These birds are subject to a complaint called the Vertigo or Meagrims, which is an involuntary turning or twisting of the head towards the back, accompanied with a blinking of the eyes, and the bird flutters and flies indiscriminately against any thing that comes in its way. It is very disagreeable and painful to see them in this situation; as I have yet to find out a certain cure for this complaint, and as the bird seldom if ever gets the better of it, was it mine, and an indifferent bird, I should think it best to put it out of its misery, and not torture it with useless experiments.

THE STAGGERS.

This is another complaint, and is a constant turning round or staggering, when the bird attempts to walk or fly; but as I am in the same predicament with respect to the cure of this complaint as of the other, I should be necessitated to adopt the same remedy.

Both the above complaints are very rare, and have never happened in my loft, although I have seen them, so that I have never been driven to the necessity of considering what would be proper to administer upon these occasions. By what information I have gathered upon the subject, I am inclined to think that these complaints are rarely, if ever cured; I think it probable, that making a small puncture in the roof of the mouth, to let out a little blood, might be attended with beneficial effects, as the disorders both seems to me, to arise from a giddiness in the head. Was a valuable bird of mine to be in either of these situations, I should certainly be induced to try the experiment, notwithstanding what I before said about useless experiments; indeed the experiment would be hardly worth making upon an ordinary bird, unless for satisfaction sake, and for the purpose of knowing how to treat a better bird, was it to be in that situation.

SCOURING OR PURGING.

Pigeons are sometimes subject to scouring or purging, particularly young ones, which is generally accompanied with a fœtid smell; when this is perceived, put down the throat a lump of chalk of the size of a bean, three or four times a day, which will effectually stop it, and the bird will soon be as well as before. Pump water, as before observed, being more astringent, should be given them, and the clotted feathers, if any, should be plucked from about the anus, to prevent their being cold and wet, which the constant purging will occasion, and their nests should be kept dry, as from weakness in this complaint they are frequently unable to dung over the side of the nest-pan.

THE SMALL POX.

The young birds are also subject to a complaint, which, from its similarity, is by Fanciers called the Small Pox; it generally makes its appearance just before the birds begin to fledge, and comes out pretty thick in little pustules filled with matter, about the head, neck, and back; but I never observed that the birds were the least ill with it, and it usually disappears in six or seven days, without having had the smallest effect upon them that I could perceive, the birds thriving and growing all the time as if nothing was the matter with them.

They have some other little complaints too trifling to notice, but if a bird is unwell, and I cannot discover what the cause of its illness is, I generally administer a pill or two of rheubarb, of the size of a pea, and repeat it on the alternate day, which purges them, and generally sets them right.

OF ODD OR UNMATCHED BIRDS.

The Fancier should avoid keeping too many odd or unmatched birds in his loft, for they will be continually getting into the pens of the other birds that are sitting steadily, and fight them, and if not break the eggs, in all probability cause the hen to forsake her nest, by which she will be liable to lay again too quickly, and without having sat a proper time to recruit herself; or if she was near hatching, her crop will be filling with soft meat, which the Fancier will have no means of getting rid of, for her, and she will be in danger of being sick and ill, in consequence of it. To remedy this, he had better buy a common bird or two to match to his own that are odd; and they will thus be prevented doing him mischief, and be attended with the advantage of being serviceable to him as feeders.

Some Fanciers fit up their lofts with mere shelves, and partitions between them, without any fronts, so that each division is open to the intrusion of every bird in the loft, as well as to the pair it belongs to. This, in my opinion, is an extremely erroneous notion, as the Fancier must be in a much greater degree of uncertainty as to the genuine produce of his birds, and of course much less able to give their true pedigree, than if the pens were enclosed, for I have more than once been witness to the attempt of a strange bird, to tread a hen, which has squatted to receive the tread of her own mate, and no doubt but this sometimes actually takes place when the Fancier is not present to prevent it. Add to this, that the birds are frequently prevented treading their own hens, by the interference of other birds, who will always fly at them, and prevent them, if they are any where about the loft exposed to their view, which must ever be the case in open pens; but where the pens have fronts to them, the birds can copulate in quiet, and the strain is rendered much more certain. The birds will also sit better, and be less likely to forsake their eggs, which they will sometimes do, if they are too much exposed. And another advantage is thereby derived; the pens have fronts of good workmanship, takes off that naked look, and give the loft a much more finished and neat appearance.

A bird has sometimes a crossed or wry beak, which is a very great disfigurement and of course must be as great an imperfection. This may be remedied whilst the bird is young, and running about the floor, and is to be done in the following manner:—That part of the upper beak which projects over the side of the under one, must be pared off neatly, and the like done to the lower beak, which in general curves upward on the contrary side, something similar to the tush of a hog, but they must not be pared so close as to make them bleed; then give the upper beak a gentle bend the contrary way to which it inclines, serving the under beak in the like manner, and by repeating this several times a day, and keeping the curved parts of the beak constantly pared off, as they shoot again, the beak may be got perfectly straight. This remedy will not answer for an old bird, as the horn of the beak is not sufficiently pliable, but is become hard and brittle, and in the attempt to bend, would snap off.

If the Fancier should have any young birds on the floor that are deserted, and not fed by the old ones that should feed them, and are unable to feed themselves, he must get a few beans down them once or twice a day, to prevent their losing ground, and getting poor. This is to be done by putting some beans into his own mouth, and then applying the beaks of the birds, at the same time opening them, and as soon as the birds feel the beans, they will in general swallow them readily; but he must take care not to stop their breath by feeding them too long at a time, their throats being very small just at the swallow, and one bean sticking in that part would choak the bird and kill it; he must also give them some water in the same way, and occasionally put their beaks into the water in the fountain, and they will soon learn to go to it themselves; this is necessary only with such birds as above described, that are backward from having been left too soon. Birds that are obliged to be thus treated, are very apt to get under the feet of the Fancier, as they run to him directly he goes into the loft; he should therefore put such into the area, that he may not tread upon them, particularly if he has any person in the loft with him.

There is a Society of Gentlemen of great respectability formed for the encouragement of the breed of the Almond Tumbler, under the title of THE COLUMBIAN SOCIETY, who meet almost monthly throughout the year, to dine and spend a cheerful day together, chiefly in conversation upon the Fancy, and to produce such young birds as they may have bred since their last meeting, for the inspection and entertainment of the Society. These gentlemen have a subscription among themselves, for the purpose of giving premiums to such persons as shall have bred (that season in which the subscription is made) the best birds, according to the standard laid down by the Society. The prizes are generally four in number, and divided into two classes, viz. Two cocks and two hens; and the subscription is usually ample enough to allow the first cock and hen, ten guineas each; and the second, five or six each. Sometimes there are six prizes, which are divided in the same ratio, making the prize for the first bird in each class, considerably larger than the others. These prizes are adjudged and determined by a committee of three gentlemen chosen from among themselves, prior to the shew-day, who have not any birds of their own, qualified as candidates for the prizes. On the shew-day the committee assemble, and the birds which are candidates for the prizes are then put into the pens in an adjoining room, the cocks by themselves in one penn, and the hens by themselves in another, whither the committee adjourn alone, to decide upon the birds qualified to take the respective prizes, according to the standard acknowledged by the members, which the committee have before them, to remind and guide them in their decision. When they have made up their minds, the birds are respectively marked, so as to ascertain which is first, second, &c. And the members at large are then admitted into the room, to claim their own birds, and receive a prize for such of them, as from the before-mentioned marks shall appear to be entitled to one. There is sometimes also a private subscription, or sweepstakes, amongst some of the members, for the best cock or hen bird that has

not taken a prize, which has frequently amounted to ten guineas ; so that it is no uncommon thing to divide between forty and fifty guineas for prizes on the shew-day.

This Society is now, and has been for some years past, held at Gray's Inn Coffee-house, Holborn, London, on the first Tuesday in every month in the year, with the exception of one or two, when the members are likely to be out of town.

I am aware, that in some parts of the country, Fanciers live at too great a distance from each other to meet once a month ; but surely they could meet once a quarter, and by forming themselves into a society, showing their birds, &c. which would improve their knowledge of the Almond Tumbler, and greatly facilitate the study of this bird. I would here suggest that a society might be formed, open to all the world, to show the best Almond Tumbler for the five properties, on one day in the year ; the meeting to take place in the most central part of the country—say Birmingham, supposing it to be the most central for the London, Manchester, Liverpool, Scotch and Irish Fanciers ; but if not approved of—say London, or any other place ; taking care that there are facilities to get to and from, for it might not be convenient for some gentlemen to stop, dine, and spend a cheerful day together in conversation upon the Fancy.

It is not my intention to enter into particulars how a society of this sort is to be carried out, it may be done by subscription, or by Fanciers having to pay a certain sum on the entering of each bird competing for the prize, or both combined. I have no doubt that many gentlemen who are not Fanciers, but great admirers of the Almond Tumbler, would subscribe to carry out the object, and have the gratification of seeing some of the best birds under the Sun.

GENERAL OBSERVATIONS.

I sincerely hope that I should be the last Fancier to instil into the mind of the amateur, (provided I had the ability, or more properly speaking dishonesty) how to make up a bird ; nevertheless I could not conscientiously pass over without informing you of your privileges. You have a right to cut or shorten the beak to the end of the quick, and to scrape the sides of the beak with a sharp instrument, or broken glass, to show it off to the greatest advantage ; at the same time, you have no right to cut or scrape through the quick ; if by accident, you should do so, the bird would not die, yet the experienced Fancier will discover it. The cause of my mentioning this circumstance is, that the young Fancier should not be disheartened, and lamenting that he cannot breed such short faced birds as he sees ; but from his want of knowledge, he may look at the head and beak of birds that have been cut to the end of the quick, and look at his own birds, whose beak have been allowed to grow or run out, and he could have wished his own birds were as short faced. It is possible it might be shorter, but he took his distance for the one to the quick, and the other to the end of the horn. I hope I have said enough here to open the eyes of the amateur, without giving offence to the more experienced, or practical Fancier.

The young Fancier has also the right to pluck or withdraw any objectionable feather, provided he keeps the bird in his own aviary or loft, but has no right to show it for feather ; but if he does, it may be discovered, and if he has done so by way of selling the bird, it amounts to a fraud ; this is what is called in the Fancy, weeding, or gardening.

In your time you may hear some things that will appear strange, and greatly surprise you, listen to their remarks, but I caution you not to repeat them, unless you have been an eye witness. It is possible you may hear of the making up of birds ; I believe the only properties that it is possible to alter is Feather, Head, and Beak. The feather we will take first, by plucking or withdrawing any objectionable feather, called weeding or gardening ; secondly, the head, as I have heard it stated, by employing caps, placed on the heads of young birds in the nest to grow to. It is possible it might have been tried, but as I never saw it

done I discard it and throw overboard as unworthy of belief. But last, the beak; notwithstanding the above remarks as regards feather and head, there are some few Fanciers, of whom it is asserted they make the beak, (which is so much admired), by breaking the upper mandible when the bird is a few days old; but it may be detected, from the injury it has received, similar to our own flesh, when we have received a severe pinch; it may also be detected in the bird when grown up, by the position of the beak, it has an unnatural appearance, the beak pointing upwards. Having made these remarks, (the reason I shall inform you by-and-bye,) I again caution you, my young Fancier, not to make a charge by hearing, or even reading this Treatise, but keep a still tongue and put the question to yourself, how it is possible that you might discover a bird made up as regards head and beak. I informed you just before that the beak has an unnatural appearance of being thrust upwards, which is the opposite of its natural tendency, and likewise at the same time appearing as though thrust further back into the head; but I will endeavour to give you a better rule or criterion to judge by,—my experience teaches me that these tricks cannot be played upon the head and beak of the Almond Tumbler, without greatly distorting the eye, making it appear very unnatural and greatly offending the eye of the Fancier; it appears, as though it was a weak watery eye, always winking and blinking: at the same time should you, on looking at a bird, believe tricks have been played upon it, but has a full bold beautiful fair eye, I think you would be drawing a wrong conclusion, and if the bird was for sale, you are not bound to buy it, being in doubt.

There are Fanciers who have time on their hands, scarcely ever look at their young birds in the nest, but have got into the habit of stroking the beak upwards; if they do nothing more than this I do not find fault; but I know it is the very contrary of what I do, being determined to see what the beaks will come to in a natural way; owing to this and having very fine beak birds, I should not think there was a Fancier who bred more cross or wry beaks than myself. It is not the fault of the Almond Tumbler, but of the Fancier, in not keeping the beak straight, for they are not hatched crooked or awry, but are wrenched by the feeding of the old ones, and those beaks that we see crooked it shortened and pared to the end of the quick, would look very different. If I examined a crooked beak bird, and saw by trimming its beak to the quick, if it did not exceed five-eighths of an inch, or a little over, I would as soon breed from or sooner, than from a straight beak bird that I knew nothing about; well knowing how easy it is to keep the beak straight while the bird is young and the horn is sufficiently pliable, but will not answer for an old bird, as the horn is hard and brittle, and in the attempt to bend would snap off. I do not know that it is possible to make up the head of an Almond Tumbler, but this much I do know, that it would be utterly impossible to produce first-rate birds from such. The cause of my making these remarks is, you may suppose that the Fanciers of the present day had not heard of these reports, and this is the reason of its appearing in this Treatise, for I do not like writing on such a dishonest subject, and as I informed you before, that if I possessed both ability and dishonesty combined, I would not instruct you how to make up a bird; the only way I know of making a good bird is to breed it from two first-rate birds.

I believe there are Fanciers at this time whose judgment of the Almond Tumbler has never been surpassed, and is not likely to be eclipsed; yet it is possible that the head and beak Fanciers of the present day may persevere in breeding such short-faced birds, as to enable the young and rising Fanciers to breed birds whose distance shall not exceed the half-inch from the iris round the pupil of the eye to the end of the quick on the beak. I have some in my possession as short-faced as I have ever seen, but I never witnessed more than two or three birds whose "Head and Beak," as it is called, did not exceed the half-inch in the whole course of my life. Still, I believe in the course of a few years, that the head and beak will be shortened, and that half-inch distance birds will not be so rare, or considered so great a curiosity as they are at the present time.

When you are going your round at six o'clock in the evening to see if eggs are laid, observe at the same time the eggs that you expect to be hatched on that day; if they are not sprung or chipped, place the egg to your ear, and if you hear a brisk crackling noise within, put the eggs into your mouth, one after the other, and well saturate them with your spittle, repeat this, and it is to be hoped as the shell dries and becomes brittle that it will burst and let out a *little wonder!* I particularly cautioned you to know the day the eggs were to hatch, and that without doubt. If I was in your aviary or loft with you in the evening, and you showed me a pair of eggs that you believed were to hatch that day or the following day, if these eggs had not sprung or chipped, and on putting the eggs to my ear did not hear so brisk a noise in the shell, I should conclude it was to-morrow. It is said to-morrow never comes, but it comes a day too late for you when you find the two birds dead in their shells. I am convinced that better head and beak birds have perished in the shell than ever were hatched, the reason is the amazingly short-faced bird cannot reach the shell with its beak, and perishes in the shell, if the judgment of the Fancier does not extricate it; while, on the contrary, the bird that only comes out to be killed by a good Fancier, (I allude to the rough long-faced bird), soon sticks its beak through the shell, and extricates itself.

Owing to my being pressed for time in preparing this Treatise for publication, I neglected entering into my register the days on which the eggs ought to be hatched, and which has given me both trouble and loss. I will give you two instances of this:—On looking at the eggs, that I knew by my experience were near hatching, I discovered an egg with a large hole in it, the bird alive, strong, and hardy, I considered it was to all appearance time it was out of the shell, I gently dented the shell of the egg all round with my finger nail, it bled profusely, and I placed it back in the nest pan with the other egg, which was addled. At four o'clock next morning I looked to see if the young bird had extricated itself from the shell, the blood had caused the broken shell to adhere closely, and my opinion is, that the parent birds had set heavily, so that it appeared to me as though the bird and shell were jammed together, and the bird apparently dead. I took it to the light, and the fresh air caused the bird to open its mouth, I then extricated it from the shell, but the bird only lived a few hours. In this case I considered that I was a little too fast. In the evening of the same day, on looking at the eggs that I considered were near hatching, and placing some to my ear, I found one egg with the young one within making a sharp crackling noise, this egg not being sprung or in the slightest degree chipped, I could not perceive where the beak was placed, and recollecting that I condemned myself a few hours before for being too fast, placed the egg back, and at four o'clock the next morning, on again placing the egg to my ear, all was quiet and has remained so ever since. I then blamed myself for being too slow. I would caution you against being too fast or too slow, and my advice to you is to "*Remember the Seventeenth*" day from laying the last egg. I lost these two birds from a little neglect, not having entered in the book the day on which the eggs should have been hatched, owing to my time being so much occupied as before alluded to. Had I known for certain, that in the first case I have mentioned it was only the "sixteenth" day from laying the last egg, I might have been more cautious how I dented the shell, and in the second case, if I had known that it was the "eighteenth" day from the laying the last egg, I would not have hesitated in breaking off a small portion of the shell, where to the best of my judgment the beak lies, to let in a little air.

The idea struck me of communicating to you how many hours a bird will live in the shell without being sprung, chipped, or a small hole made in the shell to let in air. I am fearful that the Printer will require this part before I shall be able to define it to my own satisfaction, but I am convinced that it is not long before, or otherwise the bird will be suffocated in the shell; but a bird may live comparatively speaking a considerable time in the shell, where the beak has protruded through the shell and obtains air.

The greatest difficulty you will have to encounter with, is when the birds have set their full time, viz. the seventeenth day from the laying the last egg, and when you place it to your ear a sharp crackling noise is heard from within the shell, by the bird endeavouring to extricate itself, and yet the egg is not sprung, or the least rise on the shell to shew you where the beak lies; under these circumstances I would advise you to put it back for an hour, in the hope that it will become visible where the beak lies, and when you examine the egg again, if you can perceive the rise where the beak lies, pick off a little of the shell on that part to let the young one have air. On the contrary, should it so happen that you cannot by any possibility discover where the beak is, and placing the egg to your ear, you believe that it does not make so brisk or sharp a crackling noise as before, it is a certain sign that the bird is becoming more weakly, that its short beak cannot by any possibility reach to puncture the shell, and that it will be dead in a short time, if it does not immediately receive air; under these circumstances the young Fancier must make a small hole, to the best of his judgment, where he supposes the beak lies.

Of the two evils—"A little too Fast, or a little too Slow," I should advise you to choose the little too Fast; but, remember, I said "little," and the better to rivet it on your mind, would say "very little." The greater part of this trouble may be avoided by a little care on the part of the Fancier, by recollecting the "seventeenth day," and letting the birds have good warm nests, which will greatly assist in hatching the eggs; but with regard to the particularly short-faced birds, whose beaks cannot by any possibility reach the shell, it is otherwise, and no fault of the Fancier. He must pay great attention, by observing the eggs that are hatching, to endeavour to ascertain where the beak lies, and when he is necessitated to puncture a hole in the shell of an egg where the beak is not visible, he should use the greatest caution.

It will not answer to put an egg into your mouth that is much chipped, or more properly speaking, a little smashed, owing to the old birds having set too heavy on the eggs, and the blood within will cause the shell to adhere so tight to the bird; in this case the young Fancier must exercise his judgment, how far he can judiciously and with care (where the smashed shell is dry) pick it off. Again where a bird has sprung the shell, which is always where the beak lies, and the bird appears fixed so tight in the shell that it cannot move about, take a drop of sweet oil, after picking off the shell, if not already off, passing it between the head and the shell, by which means it will be greatly assisted in extricating itself, and many a valuable bird may be thus saved. The cause of my writing thus much on this subject is, that if you are not careful you will lose the birds most desired to be saved, as my experience teaches me, that if the bird to be hatched on the last day (that is the seventeenth from the laying of the last egg) is not out of the shell by the eighteenth day, it must be under particular circumstances that I would leave it there so long; I should not expect to see it out alive. But this requires great judgment. To the best of my recollection, I never heard the bird alive, in the shell, more than twenty-four hours, or so long; and if the beak does not puncture the shell—or you, to let in a little air, the bird is suffocated in the shell.

There are Fanciers who take the eggs from the Almond two or three days before hatching, and place them under a pair of their feeders—such as baldheads or beards which set closer, consequently hatching sharper than the Almonds. It is done by placing the eggs of the Almonds under the baldheads or beards, and *vice versa*; and when the Almonds eggs are hatched, then exchange again. At the same time, it does not follow that their soft meat, or food, is up; although they have set their time—seventeen days. It sometimes happens that their soft food does not come on for two or three days after; nevertheless, you must get them fed from somewhere, otherwise they will perish. It would be uncharitable in me to expect the young Fancier will know all at once; experience keeps a dear school,

and the most experienced Fanciers that ever lived, had more or less to learn in this school. Some of the Almonds do not set close, particularly the old and valuable ones (why I say old and valuable ones, had they been otherwise they would have been discarded); besides they do not appear to have sufficient heat in their bodies to hatch their eggs. When this is discovered, you had better set their eggs at the commencement under feeders, that have laid at the same time, by exchanging their eggs; and this must not be done in a forgetful manner. You may always know when you begin to understand the birds, whether their soft food is on or not, by trying the craw or crop of the birds, and if on, it appears soft and pappy; on the contrary, hard, but will come on in a few days.

When I get a little nonpareil out of the shell, I am lost in wonder and astonishment how I shall get it fed. I have heard it stated that there are Fanciers who keep doves to feed their short faced birds, and I am assured that they feed well, and longer than the pigeon. As I never tried I do not know; but if they will many a valuable short faced bird would be saved. I have before now been placed in such a difficulty with a particularly short faced bird, that after trying half a dozen pair of birds that had hatched at the same time, and yet could get none of them to feed it. I have thought that if I had canary birds hatching at the same time, I would have tried them; and if they fed it for a day or two, then have placed it under pigeons to bring it up. It may be worth trying doves, as they have eight broods a year. The shorter faced your feeders the better, I think they ought not to exceed six-eighths: for if you feed with strong, long-faced, take for example a dragon, one inch and a quarter, or one and a half, you will observe when the little short-faced birds leave their pans, and if very hungry, chase the old ones either in their penn, aviary, or loft, and in their haste to obtain food will thrust its head into the old bird's mouth, or comparatively speaking, down its throat, to meet the food, by which means the young bird's head is flattened, (being soft at the time), quite the contrary of what could be desired, a lofty head; it therefore follows, that by having long-faced feeders, you flatten the head and wrench the beak; but on the contrary, having short faced feeders the young ones cannot thrust their heads into their mouths, neither will the beaks be so wrenched. If the owl pigeon was not so shy, I should prefer it for a feeder. But short faced hardy blue tumblers, beards, or baldheads are very good.

There are some few Fanciers who would not shift oftener than once, neither would I, provided I thought it safe to trust to that shift to finish the birds; but as I do not, I shall write my remarks:—I approve of shifting the young birds at six days; yet giving the old ones an older bird to draw off their soft food, which they generally do in about ten days. It is evident by this that their soft food is not off; but the danger of their being off the young ones a considerable time, suffering them to die of cold, with their crops full, while the old ones are calling to nest again. In your experience you will find as many or more die of cold crammed full, than those that are not fed, and the reason is this: that they require warmth by being sat on, as much or more than they do food. I think crammed as they are, and the food getting chilled or cold, is the cause that accelerates their death. I give the young birds another shift when they are twelve or thirteen days old, under a pair of feeders that have fed three or four days, for the sake of warmth; and now my last shift, however well apparently, the pair of birds feed that have the shift of the birds twelve days old, you will have to ask yourself the question will this pair of birds finish them, by feeding four weeks till they can feed themselves—it may, or it may not be so. You cannot help your thoughts on this or any other subject; but as I do not think it safe, I endeavour for the last shift, to get them at twenty-one days old under a pair of good tempered birds, (for there is a vast difference in their tempers) after they have fed a week or so; calculating that they will feed them well for three weeks, which will finish them and by this time they will feed themselves.

My experience teaches me that I can take extreme cases, and I will give you two that happened, one in my aviary, the other in my loft:—I had a black mottle that picked up the tares, and fed well for three weeks; but at five weeks it left off feeding itself, and as it had lost all idea of being fed, it died. The other happened in my loft where I flew my feeders, a pair of short-faced red agates, bred from Almonds, which would not learn to feed themselves, although would fly round with the feeders, they were fed by one or another in the loft, until they would feed them no longer, and they both were starved to death at two months old. These are not the rules but the exceptions; sometimes it happens that you experience difficulty in shifting a bird so old as three weeks. I am aware that it is easier for the last shift, to shift them at seventeen or eighteen days, the feeders taking to them more kindly. When you shift the birds that have grown pretty old, comparatively speaking, do not let the old birds come and take a sight of them, for here you would witness a strange scene at times, but put the hen upon the young. And it is infinitely better to shift these large birds, at dark, or as near dark as possible, and be sure to put the hen on, and in the morning she will not discover the exchange, or else be reconciled to it; it is very important to change at dark and put the hen on. Should the colours of the birds shifted vary much, my experience teaches me that it is not so much in the size of the bird as the colour—was it it not for the fighting attitude the bird puts itself into at about three weeks—therefore you will see the propriety in shifting these large birds at dark. Generally speaking, it would not do to exchange under your feeders a young white bird, where before they had a black one; and the reverse by shifting a black one, where before they had a white one; the result would very likely be, that a good tempered pair of feeders after looking at and going from it many times, might at last take to it: while the ill tempered pair would kill it at once. You will see the impropriety of shifting colours differing so widely; but endeavour to shift by giving the colour as near as possible.

It is important in your shifting that your nest pans should be the same size and height; for if before your feeders had a nest pan only two inches high, and in your shifting you gave them a pan four inches high, the one comparatively they could walk into, while they would have to jump up to the other and would cause them to be suspicious that all was not right, forsake the pan after killing the birds, owing to a little neglect on your part. You will find it a good plan to put the shifted birds into their pans, till the feeders are reconciled to the birds shifted, and then you can with safety exchange the pans if necessary, owing to being dirty.

I observed before, the young ones vary much as regards feeding themselves and here I will inform you of my method of treating the young birds to learn to feed themselves. I have a penn two feet square and nine inches high, made of strong wire, the wires not more than one inch and a quarter apart, for the birds will get out if further apart, the wires up and down, and no bottom to it, the floor will form the bottom besides being easier to clean. Let it be wired over the top, as it will give more light; I have mine made in two halves, owing to my aviary being parted, but have an opening in the partition large enough to let a pigeon through, by placing one piece on each side of the partition it again becomes a square, then form within and without the wire-work a frame work of wood, one inch and a half, making three inches together. There is not any need of its being a fixture whether you have them in squares, or halves as I do, for then I can place the half against the wall or any where else; you will find the advantage in having them made in halves. Let this frame work be one inch and a half high from the flooring where the wire work rests, and it will form a kind of trough, fill it up with the best old tares, and at the same time so constructed that the water from your carboys, fountains or other proper vessels, shall come within the wire work; now make all the old birds come to feed and drink where you fix this penn. I informed you before that there is not any fixed rule or time when the young birds will begin

to feed themselves, much will depend on the strength and forwardness of the birds, otherwise, writing from observation, the hardy and forward ones at a month old are more inclined to pick up than at a more advanced age; therefore, it is policy to look round your aviary or loft for these birds and place them inside the penn constructed for them. You will now observe what I have been driving at, and that is, the old birds coming to feed and water, taking care that they cannot get it elsewhere, (only water on the days you allow them to wash,) teaches the young birds to feed and drink.

It does not follow because you have placed them under this penn for the old ones to teach them, that they will feed, but you must have your eye and judgment upon them, and feel their crop or crops if it is filled out with food. To assist you I will now suppose a case, that you have brought down six young Almonds, their ages differing a little, and placing them in a penn in the morning, between five and six o'clock in the evening examine them by feeling their crops, which is easily felt by your hand; should only one have fed full, leave it under the penn, and put the other five back to their places from whence you took them, and the old ones will fill them full for the night; repeat this plan, by putting them under the penn in the morning, and if there is not sufficient food in them in the evening, place them back from where you took them, continue this plan till they feed themselves, which will prove my assertion, that while some birds will feed at a month, others are not safe to be trusted at six weeks; be sure before you draft them off to another place that they feed themselves, for it may turn out that they are fed from old birds about the place (that have lost their young by death or being shifted) through the wires of the penn, as some will feed any young ones about the place, I have tried experiments by way of enticing them to eat, giving them hemp, rape, wheat, &c. but I think these are bad, and often prevent their feeding on tares, which is to be desired while they are young, of which I will give you an instance; I bred a very rich bright yellow whole-feather, beautiful in head and beak, I was very desirous of rearing it, and I decoyed it to feed by giving it hemp, rape, wheat, and tares: it took to wheat, and would eat nothing else; it was now three months old, I was determined to break it off wheat and that it should feed upon tares—it beat me, by dying, for it would not take to tares; nevertheless a little of these might not do harm. The best plan I ever found was to get or sift the tares as small as possible, put some in a small pipkin, pour boiling water over them, and put them into the oven by the side of the fire over night, and in the morning when the young birds were under the penn, I made them a little heap of these tares (taking care that the old pigeons could not reach them) as I supposed about the same warmth as though they had come from the feeders, and the young birds would eat them freely while they continued warm. I think you will find your interest in trying this. You will act unwisely if you put the young birds into the places in the evening from where you took them in the morning, provided they are full; for if they feed themselves keep them to it for a week, and then if you can put the young into an aviary, loft, or parted place, to prevent the old ones from worrying them, they will improve rapidly. The sooner your young birds feed themselves the better, they are likely to be smaller, the beak less wrenched, and at all events the head not less round.

You are not to expect the head of a bird at three months old, to appear as beautifully formed as a bird's head that is three years old; for they fill out, or, more properly speaking, as it is termed by the Gentlemen of the Fancy,—“Make Up,” therefore it will be clear that you require time and experience to know these things. Again, the Almond Tumbler does not arrive at its highest pitch of plumage till it has moulted three or four times; some will still increase in beauty, while others will decline till they become mottled, splashed, or whole-feather. I have now endeavoured to instruct you how to breed and rear the Almond Tumbler.

There are some rich Fanciers who will stand at nothing as regards expence, and where they breed on the floor, cut away the flooring to let in the nest pan flush or nearly so, similar to the basin in wash-hand stands. It can be done in any of the pennis above, by letting the bottom of the pan come through the penn below; or you can have false bottoms to your pennis. The cause of their adopting this plan is, that some of the young birds are restless by some means, and get out of their pans, and after rambling about in their pennis, fall again into their nest pans; on the contrary, if this plan is not adopted, the birds that could not regain possession of their pan owing to being young, or badly fledged, and if the night is cold, you would most probably find them dead in the morning. Many valuable birds are lost, which otherwise would have been saved, had the former plan been adopted. I do not approve of pitching boards projecting before the pennis, but would rather them made flush with the pennis; for merry cocks would be pitching on any of these boards, consequently being higher, would, if they did no further mischief, tantalize or worry the birds to whom the penn belonged.

I think there is no occasion for a penn to be two feet square, it is larger than there is occasion for and appears unsightly. I will endeavour to give you an idea of what I think would look better, a penn two feet long, eighteen inches deep, sixteen inches high in the clear, shifting fronts, the bottom of the door five inches from the bottom of the pen, to prevent the young ones getting out; let the doorway be open to the top, which will be eleven inches high; let it be ten inches wide and placed in the centre of the penn, rabbetted and fastened with two buttons on the outside, the bars not exceeding one inch and a half, mortised in to give a neater appearance. Although I have shewn the advantages derived by sinking the nest pans, I would still have a shelf half way between the top and the bottom of the penn, just big enough and nothing to spare, with a hole in it to receive the pan, and the birds to fly up on the edge of the pan, direct over the pan that is sunk in the bottom of the penn, for it might be that the old ones were setting in the above pans, while finishing off young ones below; the rail of the small door framing forms the pitching board which is flush with the pen; this is one cause why I approve of large entrances to the pennis, but there is still another and greater, and that is preventing them from striking the joints of their wings, greatly injuring them, causing wens and crippling them for life. I should advise the young Fancier to look round and see if there was any thing in the aviary or loft, provided the bird flew or came in contact with; above all things have no sharp edges, let every thing be rounded, even the door ways to your pennis, or perches in your aviary or loft, if you have any. My advice to you is to have as few of these as possible, unless, ironically speaking, you are blessed with a wilderness sort of place for your Almonds, and even then there is danger by a friend but stranger to your Almonds, who might frighten and cause them to injure themselves against these uncalled for and dangerous places. Although I said strangers to your Almonds, it is possible might know more about the Almond than you that are reading, or I that am writing this Treatise, still he is strange to your birds.

I will suppose my birds would be dirty if I gave them a chance, I will set my wits to work and defy them by removing every thing out of their way which would in the slightest degree soil their plumage, I have my aviary and loft scraped up twice a day, and would have it scraped up three times or oftener if occasion required it; on the flooring in my aviaries and lofts, I have eleven-inch deals, sawed into three equal widths, which is nearly three inches and three quarters each, and fixing them edgways on the floors, about twelve inches apart, now these boards being three inches and three quarters high from the ground floor and as the pigeon is fond of resting upon something, prevents their tail and flight coming in contact with their dirt on the floor, provided we would allow any to be there.

Some Fanciers have small deal boxes, similar to boarding-school boys boxes, with a logger hole cut for the birds to go in and out at; it opens at the top, being on hinges, to put in the nestpans or look at the young birds. I formerly used pots in my loft amongst my feeders where I shifted the young Almonds; these were pots similar in shape to a bee-hive; the dimensions were twelve inches high, and ten in clear at bottom, with a flat knob at top to lift it up by; but without any bottom, the flooring forming the bottom, with a logger hole five inches wide, and reaching seven high from the bottom, I could place them anywhere on the flooring of the loft and put the nest pan under them. I used them also in my pens with Almonds, which kept them very warm, but it is too troublesome to lift off to look at a number of young birds. It did not answer amongst the feeders, the young birds getting out and were killed by the birds in the loft.

So much depends on the circumstances and spirit of the Fancier, and the difference is so great between the prince and the peasant (although a spirited Fancier) if it was their intention to prepare a place for the Almond Tumbler, the prince might construct a place that would astonish those who are not Fanciers, more than the Almond Tumblers; while the peasant would be compelled, comparatively speaking, to breed in a rabbit hutch.

The Fancier best knowing how he is circumstanced for room, will be more competent to mature his own plans; but having tiers of pens is decidedly the best, as they can be made portable and shifted from one place to another.

I have found in my experience, that after taking great pains in the making of good nests in the pans, that the birds going into other pens, robbing and destroying each others nest, or by "calling" and making their nest otherwise than I could have desired, that in a week after they had scarce a bit of straw left in their pans; now having many birds this annoyed me, and caused me to think how I could alter it, and here I will inform you how, this season, I have constructed their nest.— My pans are seven inches in diameter at the top, and four inches in depth (both in the clear) but sloped inwards, the bottom of the outside five inches, that they may stand firm if placed on a shelf or the flooring; they are very stout, so that if a bird flew upon the edge of a pan it would not pull it over. I get rush matting (which may be obtained at upholsterers or other shops) and placing the top of the pan upon it cut it round, then getting fresh yellow deal sawdust that has the turpentine in it, which the insects will not come near, take a pint of this and put it into the pan, work it round, still maintaining the shape of the pan by a small pan or wooden bowl, (I once heard a *Professional Gentleman* state that he made the nest in the pans with his lapstone) and then carefully placing the rush matting which will cover the saw dust, forming a lining within the pan, and at the same time retaining the shape of the pan.

While I was thinking of this plan, I had made up my mind to paste in the rush matting, but fortunately for me, in placing it in the inside of the pan, found it spring and adhere so closely that I abandoned the paste. It may be objected to by some Fanciers that the rush matting would harbour the vermin, (they have no right to be in the aviary or loft,) I believe the turpentine in the fresh yellow deal sawdust would prevent that; and at the same time cause great warmth to the eggs or young birds. If through your neglect you have allowed vermin in your aviary or loft, you must exercise great care or the vermin will beat you. It is otherwise with me, for I have declared war against and will exterminate them, should the sawdust fail in keeping away the insects. I will, after having cut a score or two of these rush mattings, place them one upon another in a pail, and then getting the strongest tobacco water, pour it on the matting, letting it absorb as much as it will, then taking them out and putting a few bits of lath or stout wire placed over the pail, placing the matting judiciously so as to drain into the pail that none of the tobacco water is lost (for you will find ample room for economy in the breeding and rearing the Almond Tumbler), and when dry or nearly so, place this over the sawdust and form the inner lining of your nest pan;

and should the tobacco water drain into the sawdust so much the better. I think this would effectually keep them from the nest pans, for it is to them anything but a sweet savour. Nevertheless, if this should fail, they will drive me to argue the cause with them; I will consider what will kill a young pigeon in the nest, or one of these insects; and if there was not any other way left to exterminate the vermin, I would rub a little of the blue ointment on that side of the matting that comes next the sawdust—I said "little" so as not to affect the young hatched bird, a very little would do, and kill all that touch it, without the possibility of injuring the young bird, for it is on the other side of the matting, and if the insects is on the top side of the matting it will most assuredly pass through, where there will be something that will give it a warm reception, and effectually kill it. I do not expect that you will be driven to such extremities, for I think you will find that the sawdust, or the sawdust and the decoction of tobacco combined, will cause the insects if any, to leave the birds that are setting, and get at the bottom outside the pans. You will therefore perceive that it not only keeps the young birds free from insects, but absolutely cleanses the old ones likewise during their setting. It will be as well to put a little straw in the bottoms of their made-up pans; one reason is, they like to set on straw—and the other is, there may be a doubt in your mind as to the injurious effect of the blue ointment; besides it appearing as natural as any thing that I am aware of to the birds. I would not on any account have the straw longer than six inches for the better laying in the nest pans.

You will find your interest in it if you let them have on the floor a small round basket, the wicker about one inch and a half a part, and filling it with straw as before observed, six inches long, it teaches them to find their pennis, they appear to take great delight in carrying it to their nest pans, and leave off robbing their neighbours; it is necessary at times to cast your eye round to see the nest pans, for some few of the birds will carry so much straw to their nest, that it will surprise you how it was that the eggs did not roll off, and if they hatched, the young would be in great danger of falling off the nest, when this is discovered remove a portion, still leaving them a good nest, for fear they should desert it; my pan may likewise be objected to as being too deep, with the sawdust and matting I can make it any depth, as occasion requires.

I observed, in a former part of this work, how restless some of the young ones were, and would get out of their pans and die of cold; might not this restlessness arise from the belly ache? for why should not young pigeons have the belly ache as well as other things? I have now the advantage in having deep pans, for I can take the sawdust and matting away and putting a little straw at bottom will confine them to their pans, for they could not get out of a pan four inches deep in the clear; likewise, the pan being only seven inches diameter at the top, quite large enough for Almond Tumblers, proves the advantages to be derived from these snug pans. When the pans have become dirty and it is necessary to clean them, lay hold of the rush matting and pull it out, scrape it and lay it in the tobacco water, which will kill the vermin, should there happen to be any, dry it and it will be ready for use again; it will be advisable to turn the sawdust out of the pan into the fire: now with respect to the cleansing of the pan, should there be any insects in the porous parts of the pans, either in the inside or outside, attempting to destroy them with clear water would be useless. I formerly used (after my nest pans were washed) to place them in a large tub of tobacco water which I obtained from the tobacco manufacturers, it being stronger than I could make it, this effectually destroys the vermin and nits; some Fanciers wash their pans with soda and water, others after washing the pans thoroughly clean, put them into the copper amongst the soap-suds and soda after "a Great Wash," as it is called, not forgetting to give the fire an extra poke. If you make your nests as I do with saw dust and rush matting, instead of putting a little straw on the top of the matting use wormwood, a small quantity will do, and it will cause the

insects to leave the nest; be careful in shifting young birds that you do not give a pan with the nest made of wormwood where before it was made of straw, for from the strong smell, the old birds may discover it; but put a little in all the pans.

Whenever you shift young Almonds, be sure and put the number of the penn, or a mark on the pan, by which you will know the pedigree of the young birds, and as soon as pretty well feathered, enter them into a book kept for that purpose: it is useless to attempt to trust to memory if you have a number of birds. You will in your experience find that birds on some days would feed half a dozen young birds, and other days not feed at all; and *vice versa*, with other birds; you must therefore shift the pan with the young birds where they will get fed, otherwise they will die; those old birds that did not feed will sit on and keep the fed birds warm, and feed well the next day; therefore you will perceive that it is quite immaterial where the pan is shifted to, having the number or mark on it; you must also mark the pan when you give them a clean one, and should you be very particular about your nest pans, or use pots to cover the nest pans, have a model made at a turner's, and take it to any pottery, they will make it to your pattern; have plenty of nests made in the pans, and by placing them one in another, say twelve high, the weight and pressure forms them nicely—do not spoil a ship for a halfpenny's worth of tar, or else I leave you to guess what will follow. I am at a loss to know why I should have written so much on the subject of insects and cleanliness, for my birds are not allowed to be dirty, unless it is to put you upon your guard against them. The plan I have adopted with regard to making the nests in the pans with matting, sawdust, and wormwood, this season, has answered the purpose beyond my utmost expectations.

You will have observed in a part of this work, treating on the marks by which to ascertain the colours of young birds in the nest, if the beak has no mark on it but is quite white, the bird will be an Almond; this is true and false at the same time: the Almond will have a white beak, and the white Agate coming from Almonds, also will have a white beak, but the experienced Fancier will, at a few days old, discover whether it is an Almond or white Agate, and so will you my young and inexperienced Fancier. For it is all plain to him who understands, and I will inform you how to discover it,—look at the eye or eyelid, if a white Agate it will appear ferrety, red, and fiery; while the Almond will be the contrary. The other remarks as to the colour of the birds by the beak, my experience teaches me is correct, and the Fancier who first discovered it must have been a very close observer, and entitled to great credit. If you match extraordinary rich feathered Almonds together, you will breed more or less Agates, of various colours—yellows, reds, &c. some of these birds have beautiful pearl eyes; but if you breed a pure white, which is still termed an Agate (owing to its coming from Almonds) which rarely have pearl eyes, otherwise would be considered a curiosity, a proof that you had matched your birds too high, as it is called.

I feel great pleasure in seeing how heartily my birds engage in washing themselves, and should think that a bird was not well that did not wash with great earnestness; if I became possessed of a fresh bird, the first thing I should observe is whether the bird took delight in washing; and if not, should say to myself, this is no favorite of mine, unless possessing some undeniable properties, for I cannot endure a bird dirty in body with a scrubby flight and tail. Deep earthen pans are extremely dangerous, there being no foothold for the birds to get up the sides, and many a good bird is drowned. I will endeavour, my young Fancier, to guard you against such a calamity, by informing you of the construction of my tubs for the washing and cleansing of the birds, my tubs are twenty inches in diameter, six inches high, both in the clear, with four steps all round the tubs equal distances and one inch wide (similar to steps to go down into a bath or a staircase); and should some of your pigeons stand low, and enter the tubs with avidity, and if they get out of their depth, they rush to the sides and climb up the steps, otherwise they would be drowned. There is a small brass plug at the bottom of the tub to

let off the water gently after washing, for you would find the tub and water heavy if you attempted to turn it over, making a terrible mess, besides splashing yourself in the bargain; take especial care that the waste water is drained off cleverly, so as not to make the slightest mess in your aviary or loft; the tubs have lids to cover over after washing, which forms a kind of pitching place for the birds; let the tubs be thick, or place a kind of beading all round the top of the tub about three quarters of an inch wide; if you do not adopt this plan let the top of the tub be rounded, (it is dangerous to have any sharp edges where there are Almonds) for as the birds are coming out of the water after washing they rest upon the top of the tub, which cleanses their flight and tail; if they should happen to draw their wings on the floor, (this is called by the gentlemen of the Fancy drop wings); in the greatest probability they would not do this if the top of the tub was sharp and hurt their feet. I employed a plasterer to form the steps or stairs inside my tubs for washing, who used compo, and it set as hard as stone; it is possible a carpenter or cooper would accomplish it.

I believe few Fanciers ever tried so many experiments as I have, and here I will give you one:—I considered if it was possible to put anything into their water to clear their plumage, and at the same time to destroy the insect, if any were there, without affecting the health of the birds when they drank it. I consulted an eminent chemist upon the subject, it was more than a dose for him; and therefore I had to prescribe, which bothered me a good while in thinking—at last a thought came into my head that if I put soap into their water, believing that it would not hurt them if they drank it, but it might give them a gentle purge, (and recollecting that some Fanciers adopt the plan of taking their shaving box and make a strong lather, and then with their shaving brush rubbing the bird all over to destroy the insects) I got half a pound of soft soap, put into a quart pot, filling it up with boiling water, stirring it up to cause it to dissolve, leaving it in the pot the overnight and then in the morning mixed it with the water they were to wash in; the birds did not approve as I suppose the colour of the water and did not wash. I cannot help thinking if I had acted more prudently, that when I had pulled out the plug to let off the water after washing, then filling up the tubs again and putting in the quart of soap and water, well mixing it, placing the lid over it to let it settle, and keeping the birds an extra day back from washing, but what they would have eagerly plunged into the water—however, I have not tried it. I would advise that the birds should not have the water to wash in oftener than three times a week, unless it is the hens that are parted from the cocks, for some of them are rank sooner than the cocks; but it would not be judicious to match them up so early in the spring, and by letting the hens have the water four or five times a week, greatly cools them and somewhat prevents their calling to nest.

Should it so happen that your taste or fancy lies in having coarse, long-faced, mousey-headed and fiery-eyed birds, then fly them by all means, and not only fly them, but fly them hard, for the harder you fly them, the more rough and coarse you make them. But if, on the contrary, you want them little wonders or nonpareils, short-faced, lofty-heads with good stops, pearl eyes, fine beaks, and less wattled, then above all things “Do not let them fly.”

As regards loam, spare neither pains or expense to get it as good as possible, and soak it in brine, which you can get from your butcher; turn it out to dry, and then only let your pigeons have it during the breeding and feeding season, believing that it is a great help to old ones in assisting them to feed their young, besides I believe in a measure preventing putrescence in the throat of the young birds; the brine in the loam, I think, sharpens the appetite of the old birds, and I know causes them to drink more, which I think assists the feeding of young birds; besides the brine or salt cleansing the throat or craw of the young birds. I let my birds have it only during the breeding season.

I cannot see the utility of mortar where the birds have loam soaked in brine, besides having gravel and grit; on the contrary, I have experienced in my birds

the loss of many an eye through it. Formerly I used to give my birds crushed mortar, and some of them having weakly eyes, I examined them, when there did not appear the slightest sign of a peck from other birds, but appeared weakly, as though dust was in them; I washed them with alum and other eye waters, some of them baffled me, and the birds lost their sight. I began to suspect there was something wrong, and, after consideration took away the mortar, the result taught me that I had removed the cause.

Gravel or grit is absolutely necessary; my birds have always gravel. I think it would be an improvement in getting the grit or small stones that are washed up after a storm or dry windy weather, by the paths or gutters, and taking half gravel and half grit, mix it together; my object in this is, that some of the gravel is so fine, not possessing sufficient little stones, which are so essential to assist in grinding and digesting their food. In giving them gravel and grit this must not be done in a careless or slovenly way, or you may experience what I complained of as regards the eye; for where there is a number of birds flying about the aviary or loft, and coming in contact with gravel and grit causes the dust to get into their eyes, but place the gravel and grit out of their way in flying.

There is scarcely any thing that I would sooner call your attention to, than not to allow, if possible, a single particle of dust in your aviary or loft. I would not have the gravel or grit in my aviary or lofts was it not absolutely necessary, and it is placed very cautiously, after my aviary or lofts are well scraped and swept. It will take you some years before you have tried as many experiments as I have—some to my sorrow, but would occupy too large a space here to give an account of all the results.

With regard to their food, I think there cannot be two opinions, but that beans, unquestionably are the best food possible to give the Almond Tumbler, (provided you can procure them small enough) and I would give them nothing else, even through the breeding season, running the risk of choking a few young ones in the nest, provided I could get all the old ones to feed upon beans, but as some of the very short-faced breeders will not, you are under the necessity of letting them have tares as well. Let your beans and tares be old, and of the best quality that money will purchase, for it will be cheap in the end to you. If the laying out of money is not a consideration to you, and if you ever saw a beautiful sample of very small beans (although new) buy them and lay them aside for two years, and it will more amply repay than laying down wine, or money in the funds. The food next to best small beans, is sound old tares, and prime hard peas; old wheat is nourishing and fattening. It is well to give your birds a change of food, particularly when they are feeding their young, they eat more and feed their young better; but small hard beans invigorates, braces up, and makes your birds hardy.

I will inform you the manner in which I feed and water my birds, after trying all kinds of hoppers, or other utensils, I found the most simple way the best; I informed you that I parted my aviary. I have pieces of wood five feet long, one inch and a half high, placed parallel with the partition, not exceeding two inches distance from the partition: should you find that one inch and a half is enough so much the better, it prevents the birds dirtying the food; there are pieces of wood at each end the width you have it—no bottom, and not a fixture, that you may be better able to free it from dust at times, and by placing bits of wood you can make as many partitions as you please, and give them various kinds of food in the partitions, such as beans, tares, peas, &c. &c. likewise gravel and grit; there is no top or board overhanging it as there is to a hopper, but it is more lightsome, which is an important thing on dark days, amongst the short days.

With respect to the manner in which I water my Almond Tumblers, I am fearful I shall give you a lame account; I use a kind of earthen carboy with an earthen

stand to receive it, (they are both made at the same time at the pottery,) which has holes all around it for the birds to put their heads in to drink out of; it is a clever contrivance, for when I give them fresh water, turning the carboy upwards, the stand receives it; it is easily filled, and prevents the making a mess on the floor. It appears to me that the makers of these drinking utensils have left off making these things, as I cannot possibly obtain one, any more than I can loam pots. Some Fanciers use a stone bottle and making a hole the height they wish their birds to drink from, say one inch and a half from the dish in which you place this bottle. You must make it air tight at top, by placing a bung in, and sealing wax it over; but it is apt to make a mess on the flooring by filling it. You can get a stand made of hoop iron, with three or five legs to come into the dish from which the birds drink, and should the legs not be sufficient to prevent the birds from dirtying the water, which is very important, have a few wires affixed to the stand and make the birds drink through them. Carboys, which can be obtained of the chemist, the size according to the number of birds you keep, and having a stand judiciously made is a very good thing, otherwise a three-legged stool; but whatever you use, keep the water clean and sweet. These are the most simple, and at the same time the best way I have discovered in feeding and watering my birds, besides their partaking of their food and water clean. I have an opening in my partition for the carboy to be placed in the centre, that the birds on either side of the aviary may drink out of the same utensil.

I have observed the great difference in the feather of two birds, the one fed upon beans and the other upon tares; the plumage of the bird feeding upon beans would be rich, bright, and shining—while the other, feeding upon tares, on the contrary, would appear dull, cold, and without any gloss on the feather; the inference I draw is, that beans are to the plumage of the Almond Tumbler, what nitre is to the horse's coat.

It is admitted by all Fanciers that spring water is best for their drink, while soft water is better for them to wash in. I was desirous, if possible, to put something into the water to make it more stringent and bracing, without injuring the birds, I consulted my old friend the chemist, if he would inform me how I could carry my plan into effect, I shall never forget how emphatically he answered me, (looking round the premises at the same time), by saying there was nothing in his warehouses that would so effectually answer the end, as putting into the water a handful of rusty old screws; this I have adopted with great advantage, with the addition of a few lumps of chalk. Some put a handful of green rue into their water, this may be very well, but if you let it remain too long it will become stinking and furr the fountains, or whatever utensil they drink out of. Especial attention must be paid to keep the water sweet and clean, in the first instance to have the utensil from which your birds drink, scalded and kept thoroughly clean; do not let them have more water than will last them one day, and let it be so constructed that the birds cannot by any possibility get into it to wash (which they certainly will do if not prevented) and make it dirty. There cannot be a doubt but that some of the diseases which unfortunately take place in the Almond Tumblers of some Fanciers, arise entirely from a want of cleanliness on the part of the owner of these birds, the putrid state of the water produces the canker in the old birds, by the slime adhering to their beaks.

I object, for fear of adding to this fatal disease, (however clean their aviary or loft may be scraped and swept up), of making a constant practice of feeding the Almond Tumbler by hand, as it is called, of throwing the food on the floor, only letting the birds have as much food as they will pick up at a time. The argument in its favor is, as some assert, that it keeps the bird sharper, and that it will eat with greater avidity; even if this was true I should object to it, for however clean the floor of the aviary or loft might be, when you begin to feed them by hand, some of the birds would dung at the time of feeding, and the beans and tares mixing with the dung might cause or accelerate the canker or other diseases. I am fully

sensible that you cannot avoid occasionally feeding them on the floor, as for instance, if the mornings were exceedingly cold, or the birds deep in moult, you would be desirous that all your birds should share alike when you gave them hemp seed to warm and make them comfortable, for it would be unwise to give them a hopper full as you could wheat; under these circumstances you would be obliged to throw it upon the floor as the birds eat it up, taking care that if the birds dung while eating, not to throw any near that place. I will now return to the subject of their drink. Years back I put rue into their water, I fancied they did not like the rue, and I know they did not drink so much. It may be that I made it too bitter and overdid this as everything else, (prior to my attempting to write a treatise on the breeding and management of the Almond Tumbler, and in this I have caught a tartar.) There is not the shadow of a doubt in my mind, provided I had the ability, strictly adhering to truth, derived from observation that I should overdo this treatise also; but unfortunately for me, I see no fear of that owing to my want of ability, and therefore my young and inexperienced Fancier you must take the will for the deed by having it under-done.

As a preventive is acknowledged to be better than a cure, and having endeavoured to instruct you how to keep your pigeons free from diseases by cleanliness and good management. I should not have called your attention to the subject of their complaints if it was not to have mentioned a case that happened in my aviary, I had a celebrated black mottled cock (well known by many gentlemen in the Fancy by the name of "the schoolmaster") and it was seized with a violent attack of vertigo, or meagrim; not knowing what to do I put it into a round open wicker basket, and took it to one of the most experienced gentlemen in the Fancy, living at Highbury, he said that in all his experience he never had seen one so "drunk," as he called it, and advised me to put it in the dark. I thought it stood in need of something more than putting it in the dark, so taking it to my friend, the chemist, and showing him the bird, we consulted what to do, and came to the determination that if the bird did drink, it should drink that which the chemist prepared for it, as it should have nothing else. The bird did not like the preparation, but thirst beat it and not being able to get anything else, was compelled to drink when it became thirsty, and that freely; it continued in this state about a fortnight without appearing to get better: it pained me to see it in this condition, and very late one night, or early in the morning, after attending a show, and being assured that there was not any cure for it, and if there was, the chances were so great against its breeding, that under these circumstances I made up my mind to kill it. While dressing myself in the morning I heard my groom coming down stairs, and ordered him to kill the bird; but before he got to the bottom of the stairs to the kitchen, where the bird was kept by the fire, I called out to him not to kill it till I had seen it, we both looked at it (for he was a good fancier) and thought it better, we shook the basket and the bird kept on its feet, from this time the bird gradually improved and became as well as ever.

There was something rather remarkable about the hen that I matched to this cock. A Fancier, whom I knew, and am sure he wished me well as a young Fancier, called upon me one evening at my house, and stated that he had a black mottle hen, so good that he could not afford to buy a cock that was a match, and should like me to have the hen, for he was sure that it would do me good; I purchased it, and being very green in the Fancy, took it to a Grand Show, and put it in the penn to hear its merits or demerits, for I knew as much about the properties of the bird, as the bird knew about me, being so "Raw" in the Fancy at that time; the first remark that was made was by one of the most spirited, and I believe not second best, with regard to his judgment, to any Fancier living; his remark was, as soon as I placed the bird in the penn, "I will give you fifty shillings for that black mottle hen." I did not expect to hear that, and therefore reasoned silently that if the bird was worth to him fifty shillings with his great experience, what must it be worth to me? Being desirous of making progress in the fancy, I therefore declined parting with the bird, although a still higher price was offered.

Looking back to my early days in the Fancy I am sure of this, that I oftener got a good bird by accident than by judgment: besides the inexperienced Fancier, when he becomes experienced, can recollect how he has been treated by Fanciers, who ought rather to have encouraged any young Fancier than otherwise. Having occasion to have some alterations in my aviary and lofts, amongst the workmen there was a carpenter who was a flying Fancier, and on shewing him my birds when we came to the black mottle hen, he said, "You bought that of Mr. ——" I asked him, how he knew that? He said he had sold it to him for half a crown, as it did not fly well with his bald-heads, that a charwoman, knowing that he kept pigeons, had brought it to him to see if he would buy it, and he gave her one shilling for it. She said that she had picked it up, while it was eating the oats from some horse-dung in the Holloway Road, one bitter snowy winter's morning; that the poor bird was nearly starved, and might have perished, had not this good woman have saved it. There is not the shadow of a doubt but that this beautiful black mottled hen had made its escape from some good fancier's aviary or loft in Holloway or the neighbourhood; the bird could not fly well, owing to having been confined.

Now, from the cock that would have been dead in two minutes after I had ordered it to be killed (had I not called out) and which I cured of the Vertigo, and the hen nearly lost in every sense of the word, I obtained my strain of black mottled tumblers, which I believe is not surpassed by that of any other Fancier living. My young Fancier, I have two objects in view, in informing you of this, the first is not quickly to despair of curing a bird; and the second is, that it is possible you may obtain a first-rate stud of birds, even through accident, if you will only persevere and become A. 1. in the Fancy.

With regard to the canker, it arises from dirty feeding and putrid drinking, of which the unclean Fancier ought to be ashamed, and it is to be hoped that he will never do so any more. In a former part of this work I called your particular attention to cleanliness. Remove the cause that produces evils, and the effect would follow. But the Fancier may say that this advice comes too late, for his birds have got it, which nobody can deny; this unfortunately being the case, I will endeavour to instruct him how to cure it:—take burnt alum and honey, and rub the part affected every day, and most likely it will be cured; should this not have the effect, dissolve five grains of Roman vitriol in half a spoonful of best white wine vinegar, add it to the former composition, and rub the part affected. Or take half an ounce of burnt alum, half an ounce of gunpowder, a gill of best white wine vinegar, and mix them well together, take one of your pigeon's flight or tail feathers that you will find about your aviary or loft, and anoint the part affected; and if even in the throat, you must use one of these prescriptions with the feather, and anoint the inside of the throat, twice a day. I do not object to the raising the scurf, and cause it to bleed a very little where it can be got at, believing it more effectual. I am aware that there are Fanciers who object to this, thinking it searching enough without. You can try it without, and if it does not succeed, then raise the scurf a little; fortunately for me not having occasion to use these prescriptions, I have never tried the burnt alum, gunpowder, and vinegar, but entertain a high opinion of its effects, owing to the strong assurances I have received from some of the best Fanciers. It is absurd and childish twaddle to assert that the canker arises from the birds fighting; call things by their right name and then I do not object. You may say that the cocks fight, and get pecked on the head; this is true, and if you like to call it sores on the head, I have no objection, and if you apply the prescription, or use a little alum and water, will cure it, but do not on any account say that it is the cause of canker, for if you do you assert anything but the truth.

With cleanliness and care I think your birds will not be troubled with diseases, besides the delight it will afford you of seeing your birds healthy, vigorous, and clean; but if on the contrary—Woe be to you! Fanciers differ with regard to

the treatment of their birds, if unwell, some giving pills made of rhubarb, others giving pills made of bitter aloes, my favorite pill is a compound of both. The way I do is to take a good many at once, when they are not breeding I remove their water overnight, and keep them some hours in the morning without, and when I think they are very thirsty, give them their water as usual, with this difference: dissolve some Epsom salts, and mix it with their water, they being very thirsty will not discover it until after they have drank very heartily; I cannot tell you what quantity to mix not knowing how many birds you intend giving it to; should you have any birds in your aviary, or loft, that are scoured or purged, remove them while the salts are in the water, if any is left, throw it away at night and let them have their water as usual without any salts, then restore the birds that you consider too loose.

I hinted before in a former part of this work that it was possible that I might have over done some things, nevertheless on reasoning, I am not afraid of killing a pigeon, which I would treat as mankind; I will suppose my having a stomach full of hard old beans and a pigeon with a stomach full of hard old beans, and the pigeon got rid of the beans before I did, (for ought I know the beans might kill me), the inference I should draw was, that the pigeon was stronger, or at all events its digestive powers, although I should not be alarmed for fear of killing an old bird, I should act very cautiously where there were young ones, from one hour to one week old, and not give the salts and water where these young birds were, not knowing the effect, it might purge and kill them. If it was possible that in a loft were there were no young birds under three weeks old, the feeders partaking of the salts and water, and then feeding these big young ones, my opinion is, that not any evil would arise, but on the contrary good, inasmuch as it might cleanse, the craw, prevent canker in the throat, and cool the young bird which is very hot, but freely purged, at the same time the Fancier can exercise his own judgment.

Peppercorns are very good to give to your old birds, or those that appear cold, every other day, giving three or by no means exceeding four at a time. They should be taken from the aviary or loft and judiciously placed near the fire for a few days. In my experience if birds are kept too long before the fire they seldom recover, for air is more important to their health than heat—but changes are requisite at times. You will find in your experience some birds that may live one or two years with you that are never hardy or vigorous, and will not match up, but moping about and that even from the nest; unfortunately it happens they have some good properties about them, otherwise we should effectually cure them by cutting off their heads. I consider more birds die of consumption, or wasting away, than any other complaint, and that is a reason why I endeavour to keep my birds fat. There is some little danger here, but not a tenth part to where the birds waste away and die of a decline; sometimes it happens that a bird will fall from its perch on the floor like a stone, and on picking it up will be dead and as fat as butter, no doubt the cause of it was the overflow of blood to the head, and might be called apoplexy. The vertigo or meagrimis arises from the same cause. If I happen to be in my aviary, or loft, and a bird should fall off its resting place, or taken in a fit, I plunge it into cold water as quickly as possible, and give it two compound of rhubarb and bitter aloes pills. There cannot be a doubt but that making a small puncture in the roof of the mouth to let out a little blood might be attended with a good effect, as apoplexy, or vertigo, arises from too great a fulness of blood in the vessels of the head; if you do not let blood, well drench them with the pills.

There are many absurd things recommended for the cure of pigeons too numerous to mention, I will give you one or two—such as spiders wrapped in butter. Where would you find a spider in a genteel house, unless you went into the wine cellars, and there your cobwebs are ornaments, as mirrors or glasses are to your drawing room. If there is any charm it arises from the butter; then again giving them three or four cloves of garlick. When I got garlick for my pigeons it so happened

that it was the first and last time, for when I had stripped it and came to the clove, I thought I would give it if I wanted to choak my bird, but not having such a desire I refrained from giving it; likewise giving them a purge of tobacco—these things are too troublesome. It is possible you might get the garlick down the throat by quartering it, and then four cloves making sixteen pieces: a pretty treat to a Fancier if he has anything else to do, or to crown all, get tobacco water down their throats to give them a purge.

I am fully sensible that the Almond Tumbler Fancier has a great command of temper and patience, but he need have the patience of Job to try these things. My young Fancier, I have not the power or right to prevent you from trying all you hear or read as to cures, but shall content myself with following my old fashioned way of considering a preventive better than a cure. I am aware that there are complaints over which we have no control—for instance: a bird even from the nest never having a sound constitution, the vertigo or meagrim, fits, &c.; but if I have a bird very ill, from whatever cause, or bad eyes, &c, I take it to my friend the chemist, and he treats it as he would you or me, and I should advise you, my young Fancier, to do the same, and the sooner you take it after you have discovered something wrong in the bird the better. According to your station in life, you may have an intimate friend or companion a physician, surgeon, &c, and as they are gentlemen by education, their good sense will teach them if you broach the subject to them, that it was not intended to insult them. I cannot inform you, otherwise I would, what it was that cured the black mottle cock of the vertigo or meagrim, not considering it a fair question to put to my friend the chemist. Very old tallow the size of a bean is an excellent thing for the roop, (whether it is the wet or dry roop, which is a cold and cough,) put down their throat, heals their breast, and eases their breath; and it is possible some good may arise from the butter (but the spider?)

It is possible, from reading this Treatise, that if two birds were in the penn, the one a carrier, the other an Almond Tumbler, you might be able to discover the Almond Tumbler, from the great difference of the birds, but when you come to know that the one-sixteenth part of an inch excites the admiration of good Fanciers, it is infinitely more appreciated, and greatly enhances the value of the bird. I have endeavoured to root and ground you in the most important things connected with the Almond Tumbler, by calling your particular attention to the five properties to breed a good bird; how to raise it by its food and drink, and then to preserve it alive for nine, ten, or more years by good management and cleanliness, besides other things connected with the management of the aviary or loft.

If you do not keep a man or boy to look after your birds, when you go into your aviaries or lofts whatsoever you have to do, do quickly; not to saunter or idle away your time as though to shew how lazy and sleepy you can be, but let "quick" be the word. It will avail you nothing, whether the Author thinks little or much upon the subject, provided you do not think for yourself. If you have never thought before, and the perfections or imperfections of the five properties of the Almond Tumbler cause you to begin thinking, the Fancy will be a blessing to you, for you cannot think hard or deeply on the Almond Tumbler, without thinking on more important matters.

Should you, after reading this Treatise, be in doubt on the properties of an Almond Tumbler, the only thing left me to do is, to advise you to look to the Portrait at the beginning, to guide your judgment in the choice of such birds as are likely to be of service to you. With my Friends I have often stated it to be my intention to write a Treatise on the Almond Tumbler, I abandoned it, after finding it was my master-piece; but the Exhibition, comparatively speaking, in everybody's mouth; I could not take up a newspaper, periodical, or any new work, without its appearing to me all Exhibition: that some of the people of All Nations were about to exhibit something, I thought I should like to Exhibit too;

but what to exhibit bothered me: after some little consideration the idea struck me of the Almond Tumbler, believing that the people of All Nations had not contemplated bringing out a work of this kind, and that it would be too bad not to present the young and inexperienced Fancier with a Treatise on the Almond Tumbler, at the time of Exhibiting; for these reasons I would make an attempt even should I fail; when the work is printed, and I come to read it over, I expect to be vexed, owing to omissions, which I should have had great pleasure in communicating to you.

“There is a time for all things,” as the Wise Man observed, and the time has now arrived for us to part; but in bidding farewell to my reader allow me to suggest, has the perusal of the foregoing pages been the means of making you, my young Fancier, a more ardent admirer of the Almond Tumbler? do you see fresh beauties while studying the properties of this much admired bird? and do you feel a determination to excel in this pleasing and intellectual study? if this is the effect it has produced in your mind, I shall consider myself fortunate in producing such a result, and I do most sincerely hope that you may experience as much pleasure and satisfaction as I have myself enjoyed.

Hoping that you may long enjoy this pleasure and the intercourse of intelligent and agreeable Brother Fanciers, and that you may be able to exclaim,—Happy is the man that forsakes his vices, and becomes an enthusiastic admirer of the Almond Tumbler, is the sincere wish of

THE AUTHOR.

FINIS.

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