

SF

461

.H7

Copy 2

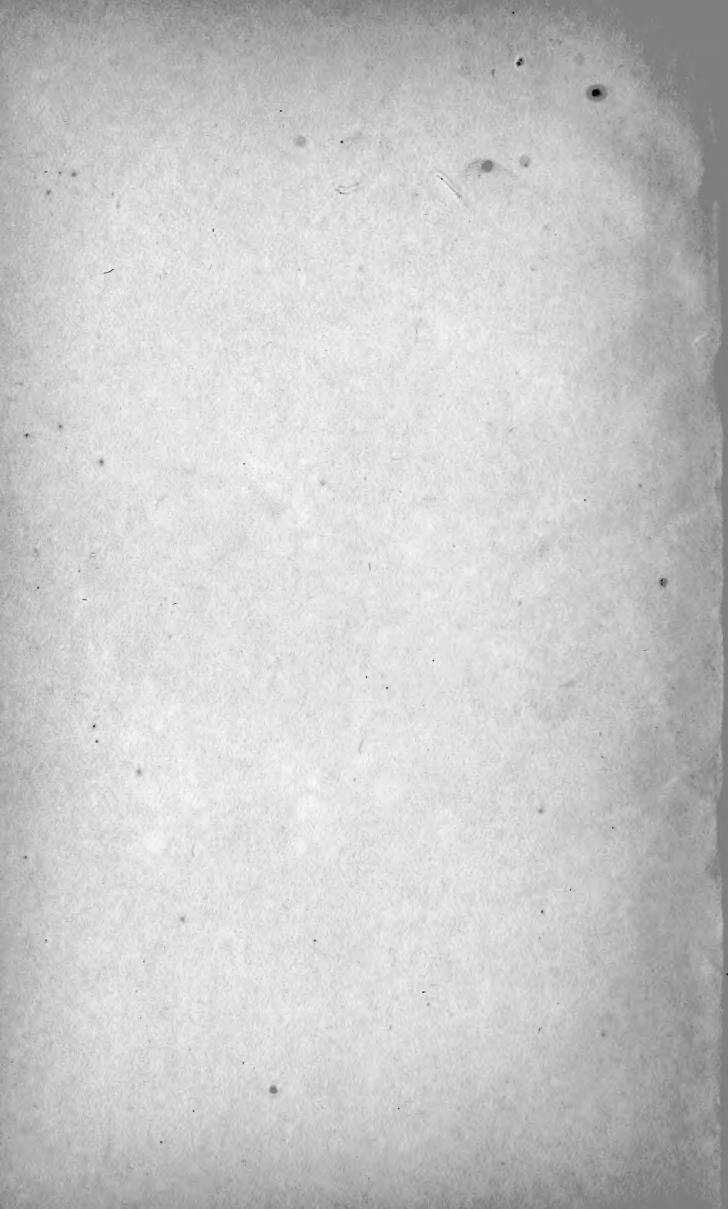
HOLDEN'S

BOOK ON BIRDS



Class _____

Book _____





CHARLES F. HOLDEN.

HENRY REICHE.

CHARLES REICHE.

HOLDEN'S
BOOK ON BIRDS.

BY
CHARLES F. HOLDEN.

“If you have knowledge, let others light their candles at it.” — FULLER.

“Little dewdrops of celestial melody.” — CARLYLE.

“I envy no man that knows more than myself, but pity them that know less.” — SIR THOMAS BROWNE.

PUBLISHED BY
CHARLES REICHE AND BROTHER,
55 CHATHAM STREET, NEW YORK,
9 BOWDOIN SQUARE, BOSTON.

MDCCCLXXIII.

Copy 2

SF461

H7

copy 2

Entered according to Act of Congress, in the year 1873,

By CHARLES F. HOLDEN,

In the Office of the Librarian of Congress at Washington.

Source unknown
July 31, 1940

5030

BOSTON :
RAND, AVERY, & Co., STEREOTYPERS AND PRINTERS.



PREFACE.

THERE are few persons who have not, during some portion of their lives, nourished and cherished a pet of some kind ; and birds, from their elegant and beautiful coloring, the graceful ease of their flight, their beautiful music, their tender solicitude for their young, their susceptibility of domestication, and engaging instincts, have for ages attracted the universal attention of the human family ; and to those who treat them kindly they become greatly attached, and manifest much affection, and without doubt stand foremost of the entire range of animated nature.

To those who love these, "God's joyous warblers," the succeeding pages of this book are dedicated. If the bird-fancier of mature years or the younger student in ornithology can find one new idea, or if our little caged prisoner can be made more happy,

or the causes of its illness removed, or the propagation of caged birds be reduced to a satisfactory result, — then the work of the author has not been in vain.

The publication of this book has been in the author's mind for many years ; and it is now placed before the public, not with the finish of the classical scholar, but of as an every-day affair of life. In its arrangement, I do not claim to have consulted any authors, either ancient or modern, and believe the pages devoted to the mocking-bird and parrot to be the first treatment ever written on these much-loved and universally-kept birds.

Before closing these prefatory remarks, I would embrace the opportunity here offered to thank the numerous admirers of the "bird family" with whom I have been brought into business relations during the last three years for their admiration of the feathered pets intrusted to my care, and would modestly suggest the hope that their interest may ever continue.

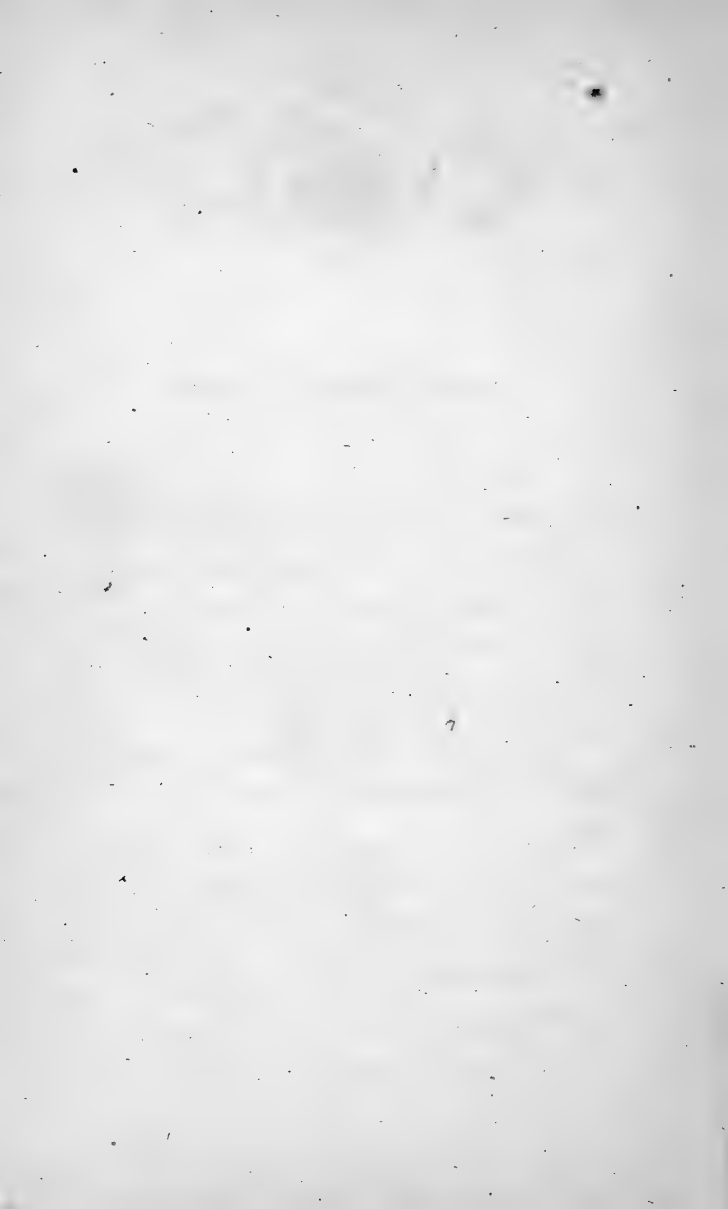
To the gentlemen of the press in Boston and the New-England States, I am under obligations that cannot easily be set aside. Had it not been for their earnest efforts in behalf of the

" Little dewdrops of celestial melody,"

my efforts would have indeed been futile. It is a pleasure for me to here publicly express the indebtedness under which I am placed, and to beg that they will, one and all, accept the heartfelt thanks of

THE AUTHOR.







INTRODUCTION.

THE author has studiously avoided in this work the habit, or error, of all other authors on works of a similar character, — of copying bodily from Bechstein and other European authors ; and as this error has been repeatedly made, and the history of the discovery of the canary-bird, &c., told so many times, this Introduction will bring before the public MESSRS. CHARLES and HENRY REICHE, to whom every portion of the civilized world is indebted for birds of song from foreign countries as well as its own.

In the spring of 1842, Mr. Charles Reiche ventured to export birds from Germany to America, it being the first enterprise of the kind that had ever been undertaken. Of course they had to be sent in a sailing-vessel ; and the voyage lasted several months, landing the first importation of canaries that ever reached America, in quantity sufficient to call it an importation, at New Orleans. But the

taste for foreign, and especially German, singing-birds was as yet only shared by a few; and it required the most strenuous exertions to dispose of this first lot of one thousand.

There were no cages to be had, and there was a great scarcity of bird-food: the people did not know how to treat them, and failed to appreciate their music; but it required only a few years to change all this, and the fashion of keeping singing-birds is now universal and constantly increasing.

In 1843 the second exportation of birds was made; part being landed in Charleston, S.C., and part in New-York City. This was a successful operation; and in 1846 Mr. Charles Reiche associated with him his brother Henry, and the business of exporting birds began to be carried on in a strictly systematic manner, and was encouraged by a constantly-increasing sale.

In 1849 the first large lot of birds was landed in Boston; and the formerly well-known bird-store in Scollay's Building was opened by Mr. Henry Reiche, who, after a most successful business, sold out to the late well-known Henry Bradshaw, who for so many years dealt in baked beans, birds, doughnuts, cages, soft-bottom apple-pies, and bird-seed, in a stall adjoining the fish department in Quincy Market.

In 1852 the now well-known Mr. Henry Reiche, of 55 Chatham Street, New York, made his first trip to California, *viâ* the Old Nicaragua Route, starting with an invoice composed in part of canaries, goldfinches, and bulfinches, the total value of the

shipment being thirteen hundred and fifty dollars. After all kinds of ill-luck, and the discouraging advice of his brother Charles, some eight years his senior, who looked upon the speculation as one that must prove a total loss, he, neither discouraged nor disheartened, started on his (then a long) journey, and reached California with half the number of birds he started with, — a stranger and in a strange land. But imagine his surprise and delight at hearing his name called out from a window in the Bank of California by a clerk, formerly an old resident of Boston, who, after the ordinary congratulations, told him “he had struck gold.” And indeed it so proved, for none of his birds were sold for less than twenty dollars, many for a much larger sum; and, losing but one steamer, he returned to New York, and counted out to his brother over five thousand dollars in gold. This cash was then as much to them as is fifty thousand dollars to-day: it gave them their first start in business in a large way.

In 1853 there were 10,000 birds imported; in 1860, 15,000; in 1865, 30,000; and the imports since July, 1872, of canaries alone, amount to 65,000. And, when it is known that the total number raised for the American market cannot exceed 95,000, it leaves the house of Reiche the bird-dealers for America. And it is not canaries alone, but all other kinds of European birds of song and plumage, which were imported this bird-year, 1872-73, to the number of 15,000.

The greatest drawback to the Messrs. Reiche in

their early days was to find cages of any kind, much more those of a suitable kind. Mr. G. Gunther of New-York City was the first man who could be induced to make a cage. He was finally persuaded, and is now one of the largest, as well as the oldest, manufacturers in the country. His japanned cages, as well as his recently-improved brass cages, are found on sale in all parts of the United States. This cage business has become of such immense dimensions, that several large firms are constantly engaged in their manufacture, employing hundreds of operatives, and using a capital of nearly a quarter of a million of dollars. The most prominent ones are Messrs. O. Lindeman & Co. and the Osborn Manufacturing Company, whose unique brass cages are always found in all well-kept bird and house-furnishing-goods stores; the American Cage Co., Messrs. Maxheimer & Co., besides several others, all of whom carry on the business in New-York City, and whose business-cards will be found in the back part of this book.

But it is not the trade with birds in North America alone that has attracted their attention; for, aside from the thousands annually sold in Germany, many thousands each year find their way to England and Russia, and quite as many are every year exported to South America, to the Indies, and Australia; so that from 200,000 to 250,000 canary-birds are exported from Germany to trans-oceanic ports every year.

In the month of January, 1873, Mr. Henry Reiche

sent, in charge of several competent men, a car-load of birds and cages to Salt Lake, Denver City, and other places in that vicinity; and, aside from his early California experience, these were the first birds that were ever shipped west of the Mississippi River.

Messrs. Reiche may well look back with pride at the time when they first commenced business; the base of their operations being St. Petersburg, Russia. Since that time they have sent birds to Lisbon, Rome, Turkey, Cape-Town, Bombay, Calcutta, Singapore, Pekin, Melbourne, Sydney, and other prominent places in the Eastern Hemisphere; and to Lima, Peru, Rio Janeiro, Venezuela, and other places in South America; as well as to the more prominent points in the West Indies; and from all of which places, not omitting Japan, they have always brought back beautiful birds.

These two brothers have made three trips round the world; and the elder one, Mr. Charles Reiche, is now, and has been since 1858, permanently located at Alfeld, Germany; and Mr. Henry Reiche, with a sufficient accumulation of this world's goods, makes his permanent home in New York. He is at No. 55, Chatham Street, daily; and his frequent companions during the winter and early spring are the great showmen of America, who are constantly importing animals through this firm, who are the only animal-dealers in America.

Without offering an apology for the seeming length of this Introduction, the author feels that

those who have been so instrumental in making many firesides happy are at least entitled to sufficient prominence to record, for the first time, the important part they have taken in supplying to the world "God's sweet and joyous warblers."





THE NEW-YORK BIRD STORE,
9 BOWDOIN SQUARE, BOSTON, MASS.



CONTENTS.

	PAGE.		PAGE.
PREFACE	4	Cut-throat	65
INTRODUCTION	7	Celestial	65
Advice to Purchasers	77	Cuba	64
Avadavat	62	Cause of Disease	20
Amandava	64	Colds	20, 21
Australian Paroquets	56	Costiveness	22
For treatment, see Parrot	53	Claws, require cutting	24
Ants' Eggs	43	Caged Prisoner	79
Appetite, loss of	24	Cracked Corn	71
Aldom's Spring Perch,	81	Cracked Wheat	71
end of book and	81	Cannon, Birds fire	76
Aquarium, end of book	81	Cleansing Brass Cages	82
Artificial Mother, end of book	81	Crowley, David	71
Adams's Express	72	Cage, one suitable	80
Breeding, Establishment of C.	18	Diamond Sparrow	65
Reiche	18	Diarrhœa	22, 45
Bulfinch	32	Dogs, Diseases and Training,	end of book
Black-Cap	38	Egg-bound	22
Blackbird	41	Egg-paste	21
Brazilian Cardinal	57	Epilepsy	24
Bobolink	47	Eggs, Price of	end of book
Bishop-finch	67	Express, Safety of	71
Banded Finch	64	Fire-Bird	50
Bird-Lice	23, 45	Fire-Finch	64
Best Singers	79	Fascinated Finch	65
Bird-Seed	69	Finches for Aviary	63
Bird-Cages	80	Female Canary, will mate with.	27
Breeding Cages	27	Food for Birds	26
Bird Call	74	Fountain	end of book.
Birds' Prison-life	79	Goldfinch	31, 34
Canary	17	Goldfinch Mules	35
Canary, Longbreed	30	Goldfinch Diseases	35
Cardinal Bird	47	Grosbeak, Rose-breasted.	49
Cardinal Brazilian	57		
Chaffinch	30, 37		
Courdon Bluefinch	62		

CONTENTS.

15

PAGE.	PAGE.		
Grosbeak, Cardinal	47	Postage on Seed	71
German Rape-seed	69	Poor Luck with Birds	23
Gunther, G.	end of book	Queen Island Finch	64
Gravel Paper (Singers)	81	Quaker Finch	63
Good behavior	75	Raising Birds	25
Hatching-Birds	28	Robin Redbreast (English)	40
Handsome Birds, how raised	26	Robin (American)	49
Hartz Mountains	18	Robin, Golden	50
Hemp-Seed	69	Red Bird	47
Hildreth and Rice	end of book	Rockhampton Finch	64
Indigo-Bird	48	Red-tail	63
Indian Sparrow	65	Ringling a Bell	77
Indian Silver-bill	63	Song most admired	19
Insects for soft-bill Birds	43	Siskin	31, 37
Incubator	end of book	Song-Sparrow	50
Java Sparrow	58	Sparrow, Java	58
Lark, Sky and Wood	39	Sparrow, English	58
Linnet, Gray or Green	30, 36	Poem on	60, 61
Linnet, Red	51	Starling	42
Little Doctor (finch)	65	Spotted-sided Finch	65
Loss of voice	21	Saffron	64
Lice on Birds	23, 45	Silver-bill	63
Lindeman's Cages	end of book	St. Helena Wax-bill	62
Ladies' Dress	79	Spice-bird	63
Mocking-bird	42	Sexual Desire	19
Magpie-finch	65	Selecting Birds	77
Moulting, when a bird should	23, 29	"Smothering" Birds	82
Mating Birds	26, 28	Seed for Birds	69
Mating Fever	25, 45	" Sicily Canary	69
My Bird is Sick	20	" German Rape	69
Mockingbird-Seed	43	" Hemp	69
Maw-Seed	70	" Millet	71
Meal Worms, how raised	44	" Maw, or Poppy	70
Nightingale	37	" Paddy	70
Nonpareil	48	" Cracked Corn	71
Negro Finch	64	" " Wheat	71
Nun	65	Spring Perch	81
Osborn's Cages	end of book	Singer's Gravel Paper	end of book
Parrot, Gray and Green	52	Temperature for a Bird	21
" Yellow-head	52	Tropical, South American	31, 56
" Suitable food	53	Thrush, Pony	41
" Pulling out Feathers	53	Taming Birds	73
" Diarrhœa	54	Training "	73
" Dove-feet	55	Teaching "	73
" Lice and Fits	55	Virginia Nightingale	47
Parquets, for Treatment, see Parrot.		Waxbill	62
Paradise Whydah Bird	66	Wrapping up Birds	82
Patience in Training	73	Young Birds	26
Paddy-seed	71	Young Yellow-birds	50
		Your Bird-store	78



PERFECT MODEL OF THE
LONGBREED, OR FRENCH CANARY.



THE CANARY.

THE original home of this bird is the Canary Islands, where, in the later part of the fifteenth century, they were wont to breed on the banks of the island rivulets, and would have continued so to do, had not bird-catchers (there were bird-catchers even in those days) trapped them, and sent them to various parts of Europe, mostly, however, into Germany, where, as you have been informed in the Introduction, they have been massed, and exported to all parts of the habitable globe. And we might with truth say, that, among the musicians who come to our shores to charm us with their notes, the largest orchestra is that of the singing-birds. They ask very little of our money, and never demand a Music Hall as the only theatre worthy their performance. A few dollars will buy one of these sweet singers, and a few more will build or buy a Music Hall for its performances. It charges

nothing for its singing, and is not fastidious as to its accommodations, carolling just as sweetly in the attic of the tired sewing-woman as in the boudoir of the fashionable lady. It becomes a friend to the lonely, and a comforter to such as are in trouble. From his cage, as well as from the wildwood, it sings of the love and care of Him without whose knowledge not one of its feathered friends can fall to the ground. Like flowers, birds are a beautiful gift to a friend, with this advantage over them, — they live longer, and, by their constant voice, recall to mind the giver. Very few persons have any idea of the trade carried on in these frail wares between our own and foreign countries ; and how few of our readers that are the possessors of some favorite songster ever gave a moment's thought to where they come from or how they came ! We refer now to that established, universal favorite, the canary. Reader, let me take you across the Atlantic to Germany, to a famous place called the Hartz Mountains. And now that you are here with us, we will take you to the immense breeding-establishment of Mr. Charles Reiche, which, in its arrangements, is similar to all other establishments. Here you will observe a quantity of rooms arranged very much after the style of the sleeping-apartments of a hotel. Each of the rooms is properly furnished with light, ventilation, a quantity of small trees, feeding-boxes, water for bathing and drinking, and on the sides of the room a quantity of nests, and the floor covered with fine sand to the depth of three or more inches.

In this room are placed twenty or more male birds, and three times their number of females ; and from this large feminine family every male chooses his mate, — and, reader, don't blush, for some of them choose even three and four mates, — all of which will hatch their young peacefully, and live one large, happy family together. The young birds (males) are taken at the age of six weeks, as they can then crack seed (and we will here remark, that, when they are fully feathered, they commence to warble ; that is, they fill their throats in the same manner as an old singing-bird : and this is the only way that male birds can be told from females when so very young), and placed in large cages, say twenty-five birds to a cage, and kept in rooms (these rooms hold about twenty such cages) until they are through moulting ; for a young bird, as soon as he is in full feather, commences to moult, or shed his body feathers : his tail and wing feathers he sheds the second season. This moulting process requires about six weeks, after which they are taken into a room away from the sound of all singing canaries, this room only having a small opening in the top ; and in the room above them there is kept a nightingale, skylark, or some other fine whistling bird, the best of his species, who acts as instructor for the young birds ; and it is from this instructor that they get these beautiful notes, the bow-trill, the bell-note, the flute, the water-note, &c., which are so much admired. At the age of six months they become adepts at singing, and are then taken to the immense warehouse

of Charles Reiche & Bro., situated at Alfeld, Germany, and placed in the little willow cages seen in all bird-stores, seven birds in a row or string. They are then placed in boxes or crates, four rows wide and six rows high, or a hundred and sixty-eight birds to a crate. They are then sent, in charge of a competent man, — who ordinarily takes twelve hundred birds, — overland to Bremen or Hamburg, and then shipped to the New-York house of Charles Reiche & Bro., located at 55 Chatham Street. The birds are cleaned, fed, and watered every day. And for this ocean business the Messrs. Reiche keep no less than eighteen men constantly employed.

The very general desire of the public to know how to take the best possible care of their pets, and the wish of the whole bird-trade for a treatise that could be implicitly relied upon, free from all the scientific attainments so freely shown in large works, and at a popular price, has led the author to publish what has been his own experience through a number of years.

First, we will commence with sick birds and their treatment. “My bird is sick: what shall I do for it?” This question is asked at the bird-stores times without number daily; and it is just as easy answered, without knowing *what ails the bird*, as it is for a physician to prescribe accurately for a disease when simply informed that a member of the family is sick, “and please send up some medicine at once.”

THE CAUSE OF MOST DISEASE is colds, which are

occasioned by either hanging a bird in a draught of air, near a loose-fitting window, or keeping him in a very hot room (sixty degrees is the proper temperature for a bird) through the day, and then in a cool one at night, — a variation of perhaps forty degrees in twenty-four hours. This cold, if not cured at once, leads to asthma, and from that to a disease known as the gapes. The best cure for the cold is to feed, in addition to their regular seed, rape and canary (no hemp), a paste made from a hard-boiled egg and one pulverized cracker, thoroughly mixed together, the same as you feed to birds when sitting. Sometimes a bird seems hoarse, and apparently has

LOST HIS VOICE. — This is occasioned by over-singing: a little pure rock-candy, not flavored, dissolved in the drinking-water, and a few kernels of red pepper put into the paste described above, will usually effect a cure. If, however, the cold is allowed to remain for several days without any attention or cure, it will pass rapidly from cold to asthma, and from that to gapes, which is best described by saying that the bird looks like a little puff-ball, with a constant panting, and his bill almost constantly opening and shutting, as if to catch breath. His food should be the same as described above. Many bird-fanciers have given small pieces of salt-pork with a very little red pepper thereon, and with beneficial effect. Messrs. Charles Reiche & Bro., however, can say, that, with nearly forty years' experience as bird-fanciers, importers, and dealers, they have, as yet, never found a cure for this disease.

BIRDS TROUBLED WITH A DIARRHŒA can be greatly relieved, and many times a permanent cure effected, by placing a rusty nail in their drinking-water ; and, should a bird be troubled with the reverse of this complaint, — costiveness, — a piece of sweet apple, a little chickweed, lettuce, or any green food, will usually afford full relief. Most ailments of birds commence with a cold ; and the old adage of the “ounce of prevention,” &c., is peculiarly applicable to the bird family.

Dealers in birds are constantly visited by owners of feathered pets to seek information on a subject to which their human instinct should furnish the answer. This is particularly the case in breeding-season ; and a question asked daily is, —

“MY BIRD IS EGG-BOUND : what shall I do for it ?” A few questions from the dealer reveals the fact that the female has been fed upon dry seed and food of a clogging nature ; and the information given at once is, Feed your bird some green stuff or a piece of apple, thereby loosening it (which should have been done before mating), and, carefully taking the bird out, rub the passage gently with warm sweet-oil. At times birds are egg-bound from having taken cold : should this be the case, apply also the remedies for a cold.

Birds, when proper care is taken of them, are rarely attacked with disease. If owners of feathered pets would first see that the cage is perfectly clean and well supplied with plenty of gravel or gravel-paper for the bird to pick upon, and that the seed

is of the very best quality, and that they are fed and given a bath at a regular hour daily, — then your birds, if kept from draughts of air, and no trash, such as sugar, candy, figs, raisins, cake, &c., fed them, will sing from ten to eleven months out of the year, which they always do with the poor families in Germany, who find it impossible to get such luxuries. It is only the wealthy and better classes that have so-called “poor luck with birds.” And why? Because they kill them with kindness, — though it is very unkind to the bird, — never, never by neglect.

One source of great annoyance to a bird and also to his owner is the

LITTLE RED BIRD-LICE. — Messrs. Reiche now put up a powder which can be sprinkled on the bottom of the cage, and effectually rid the bird of these annoying pests. It is put up in envelopes, and will be sent to any address by mail, prepaid, on receipt of twenty-five cents.

Another way to rid the bird of them is to place at night a white towel on top of the cage; and, when you arise in the morning, you will find it well covered. These should be shaken into the stove, and the same thing repeated every night; and in two weeks, at farthest, you will be entirely free from them.

A question often asked is, —

WHEN SHOULD A BIRD MOULT? — Most birds shed their feathers in the months of September and October; and though it is perfectly natural for them so to do, still the operation is accompanied with a

slight disease. They should be fed on the soft paste before described ; and, as they are not well covered with feathers, great care should be taken to keep them out of all draughts of air, but kept where it is comfortably warm. With these precautions, a bird will fully moult in from four to six weeks. Should a bird not shed his wing and tail feathers readily, it is well to pull them out, — pulling, however, only one at a time.

It often happens that a

BIRD'S CLAWS GROW VERY LONG, and require cutting. This is a particular operation ; and care should be taken not to cut up into the blood-veins, which can be easily seen by holding the bird's claw in front of a strong light, and then not cutting within at least a sixteenth of an inch of the red vein.

Occasionally a canary is troubled with epilepsy. A sure cure for this has never been discovered. The author has taken a bulfinch and other birds affected, and cut the birds' claws, — one on each foot, — just sufficient to draw the blood, and, holding the foot in warm (not hot) water until the blood ceased to flow ; then a slight sprinkling — with the hand — with cold water : feeding only on rape-seed which had been previously soaked in water, and a liberal supply of apple and green-stuff, as recommended above, has generally effected a cure.

During and after moulting, and sometimes after breeding, a bird will seem to have

LOST HIS APPETITE. — At such times, it is well to give a very little hemp, and all the millet-seed a

bird will eat ; and, if convenient, change the location of his cage to a more cheerful place.

From the 14th of February to the middle of May, all birds have what is known as the

MATING FEVER. — This fever, or sexual desire, is the strongest during the latter part of April and early in May ; and, if not mated, they sit moping with ruffled feathers, cease singing entirely, refuse their food, and often, in their silent sorrow, pine away and die. If their attention can be diverted from this "lovesickness," it should always be done. The better cure is to mate your bird. If this is inconvenient, place him in the cheerful sunlight, tempt him with dainty morsels of food, talk and whistle to him ; and, if you have a friend who owns a bird, let your bird visit him, and cheerful company will soon restore him ; or a better way still is to leave him at a well-kept bird-store.

These comprise about all the diseases that the canary is subject to ; and we will here state, that all of the family of seed-eating birds have about the same ailments, and require similar treatment.

As many who own birds have a desire to breed them, a little information may not be amiss to the new beginner.

AMERICANS RAISE BIRDS wholly for pleasure ; and it certainly is a pleasure. What greater amusement can be furnished children, and, in fact, children of a larger growth, than the mating and rearing of a nest of beautiful young canaries ; to watch the busy weavers make their nest ; the

constant care and attention given to it by the mother-bird during the season of "sitting," who is so regularly relieved by her loving mate, who ever and anon covers the eggs while she is seeking food or rest? Alas! our little canary-bird has taught many a lesson to the human family; and the constancy of a bird to its mate is rarely equalled by the lords of creation.

IN MATING BIRDS, a young male and old female produce mostly male birds; and those of about the same age produce about equal proportions of both males and females.

The food for your birds, in addition to their regular canary and rape seed, — *no hemp*, — should be the following: one hard-boiled egg — the whole egg — grated on a coarse horseradish grater, and one common soft cracker, rolled fine with a rolling-pin, or carefully grated, and then mixed together, and fed to the birds in small quantities at least twice per day; and this food must be continued to the old birds until you are through breeding; and the same food must be continued to the

YOUNG BIRDS until they can crack seed, which they can do with ease at the age of six weeks. It is, however, an advantage to soak some rape-seed, and put it in for the young birds as soon as they leave the nest.

TO PRODUCE A HANDSOME YELLOW BIRD, your male should be a Jonquil, which is a deep-yellow bird with almost an orange crown, and the female a mealy bird, which is a whitish yellow, and has the

appearance of being frosted or powdered all over. A clear yellow male and a mealy female will usually produce a *pure yellow* bird; while a clear yellow male mated with a gray or green female will usually produce a very handsome mottled bird. A deep yellow or orange-colored male with a very dark-green female often produces the highly-prized cinnamon bird.

A FEMALE CANARY WILL MATE with the following birds, and produce a very beautiful songster, which is known as a mule, — the linnet, goldfinch, bulfinch, siskin, our native bobolink, indigo bird, and other birds of a similar size; and the male from these birds is very highly prized on account of his beauty and song.

A suitable cage for breeding can be either of wood, wired, or the ordinary japanned tin cage, or brass. Should you use an old wooden cage, it should be thoroughly scalded with hot soda-water, to kill all vermin, and then varnished over. The birds should have a nest—wire is the best—securely fastened into one corner of the cage, first covering the nest with canton, or cotton and wool flannel, and hung up against the wall, at least a foot above your head, and in a southern aspect if possible, and not moved until you are through breeding for the season. There should always be placed in the cage, from a wall of some *very old building* that is being torn down, a piece of mortar to make eggshells from, as, without this, the female would lay soft-shell eggs.

Another question often asked at bird-stores is,

“HOW DO YOU MATE A PAIR OF BIRDS?”—The reader is supposed to own a male canary. If such supposition be true, then go to a first-class bird-store, and buy a female canary and breeding-cage; and the very best way to mate a pair of birds is to place the female in the breeding-cage and hang it up on one side of the room; and, *leaving* the male bird *in his cage*, hang him up on the other side, and *within sight* of her. If he sings and calls to her, and she calls back in return, as much as to say, “May I come in your cage?” then you can put them together; and, though they may quarrel at first, this will be only of short duration, and they will very soon mate.

After mating your birds, a period of only seven to eight days elapses before the female commences to lay; and she will lay from four to seven eggs, one each day, at about the same hour, and sit upon them for thirteen days, when the operation of hatching commences; and the

BIRDS ARE HATCHED ONE EACH DAY, until all the eggs are hatched. If it should happen that one or more eggs remain in the nest, and do not hatch at the proper time, it would be well to take them (the eggs) out of the nest carefully, using for this purpose a teaspoon, so as not to handle the eggs, and hold them before a strong light; and, if there is the appearance of blood-veins in the egg, place it back carefully; for it may yet be hatched. If, upon the other hand, the egg be clear and transparent, it

can be thrown away as worthless. It is a rule in Europe to never throw away an egg until it has been laid at least twenty-one days.

From the time the young birds are born, the male bird helps feed them, if he is a good father, and so partially relieves the female. If he should at times seem quarrelsome with his mate, or show *too much attention* of a loving kind to her, it would be well to separate them, putting him in his own cage until the young birds are nearly feathered, when, after they have perched a few nights, they can be removed to other cages, and the male returned, and another brood raised; and the same operation repeated. Cases have been known of raising seven broods in a season.

We are often asked the question, —

“DOES A YOUNG BIRD MOULT?” — Our answer is, Yes. A young bird is usually in full feather at the age of six weeks (we will here state, that, when he is four weeks old, he will swell up his throat, and try to warble; and by this you can tell the males from the females); and, when he is in full feather, he commences to moult, or shed his body feathers. The wing and tail feathers he does not shed until the *second season*: this process is slow in a young bird, and usually requires about eight weeks to change all the body feathers, during all of which time they should be fed, at least twice a week, on the hard-boiled egg and cracker, as described above, and kept out of all draughts of air.

If your bird—the father^r of the young—is a

good singer, the young birds will learn readily, and at the age of six months become fine songsters.

THE LONGBREED, OR FRENCH CANARY, has had his day, and is now about "run out" in France. His high, square shoulders give him an ungainly appearance; and his great length and delicate frame make him a very weak bird, and not well adapted for a parlor bird; while, in powers of song, he is far, far inferior to the short, or German canary, so generally admired the world over for his exquisite song.

There is a very general desire among all owners of a canary for some other bird that sings; and how often are bird-dealers asked the question, "What other kind of bird can I buy that sings nicely?" There are many very beautiful songsters among the seed-eating birds; and the one that more, perhaps, has been written about than any other is

THE CHAFFINCH.—Who that has ever read the letter of Michelet to his good wife, in his work entitled "The Bird," could have failed to read his vivid description of a poor blind chaffinch that was offered for sale in the great bird auction-rooms in Paris. This bird had been a pet; and poverty in the family had compelled its sale. This bird is one of the many European song-birds, and for the sweetness of his song, as well as for his sleek plumage, should be generally kept. Other favorite birds are the

ENGLISH GRAY AND GREEN LINNET.—They are both remarkably fine singing, or rather whistling,

birds: their tone is very sweet and soft, and they will sit perched upon one limb for hours together, and sing so sweetly that one almost falls in love with them. Two other English birds very much admired are the

GOLDFINCH AND SISKIN. — **THE GOLDFINCH** is an exquisite songster, and, mated with a canary, produces a bird of remarkable beauty, and really a fine songster.

THE SISKIN can also be mated with the canary, and produce a very strong and hardy bird, and one that is much admired in Europe.

All of the above birds, as well as the canary, are taught tunes by the poorer classes in Germany; and some of the birds sing, or rather “pipe,” their tune as nicely as a boy could whistle it.

Amongst the soft-bill birds, — *those that have a long bill*, — there are many beautiful songsters, first among which comes our own loved American mocking-bird. The bird which ranks next to our mocking-bird is the

SOUTH-AMERICAN TROOPIAL. — This bird has a beautiful rich plumage, and looks very much like our American golden robin, or what is known as the Baltimore oriole, the chief difference being that it is much larger in size, and the orange of the body being more of a yellow. It is one of the feathered tribe of the tropics, gifted with great powers of song; being extremely docile, they are great favorites for the cage, and, in confinement, become so tame that they will hop on your hand at call.

Their song is a very powerful yet pleasant whistle of clear and varied notes. They are extremely active, and very graceful in their movements, and require a cage the same size that a mocking-bird is usually confined in.

Following this bird in attractive qualities of song, come the nightingale, black-cap warbler, wood and sky lark, Irish blackbird, thrush, English robin red-breast, starling, and hosts of others.

The first of these birds that attracts our attention is the

BULFINCH. — This bird has no natural song, but is gifted with the ability of imitating, with an astonishing accuracy, in a sweet and flutelike tone, almost any air that is whistled, or played to them on an instrument. This has made him a great favorite among all lovers of birds.

In Germany, particularly in Hesse and Saxony, a large number of these birds are taught, and by the dealers brought to various parts of the world. The raising and teaching is generally accomplished by shoemakers, tailors, and weavers, who, being confined to their rooms, are thus enabled to take care of them. The teaching begins from the time they are taken into the house. The tune that it is intended they should learn is whistled to them — *whistling* is always preferred, as instruments are generally too shrill — several times a day, more particularly in the morning and evening. The tune must be whistled always in the same key, and no other tune whistled in the hearing of the bird, which is kept

in rather a dark place during the process of training.

Taken as they are when quite young, and brought up by hand, they are always tame, and will take food from the hand of any one, and may be trained to sing or pipe their tune at command: they very soon learn to know the person who feeds them,—and we will here remark that the same person *should always feed them*,—and will pipe their tune, making beautiful and elegant gestures, now moving the body, and then the head, first to the right, then to the left, spreading the tail like a fan, and seemingly “fanning” with it, when they commence with a short flourish, or prelude, and pipe their tune through perfectly.

The bulfinch should be fed principally on summer rape-seed, to which may be added a little canary, and occasionally one or two hemp-seed, as a reward for piping his tune. Sugar, sweet-cakes, or such-like delicacies, spoil their taste, and should not be given to them. A little greens in the summer, or sweet apple in the winter, is very wholesome, *both of which must be fresh*. As their claws grow very fast, and also very hooking, they must be cut at least twice a year. They must always be handled very gently, as they are easily frightened, and harsh treatment often causes their death.

These birds usually moult in the month of September; and, as they shed their feathers very rapidly,—sometimes becoming *almost bare* in one day,—great care must be taken to keep them from all

draughts of air; and, in addition to their regular seed, a little of the yolk of a hard-boiled egg should be fed them at least three times a week.

The bulfinch has diseases. These, however, are usually caused by improper care; for if the bird be fed and watered regularly every day, at the same hour and *by the same person*, and plenty of dry sand freely used, the cause of disease is greatly reduced. Occasionally these birds are troubled with a diarrhœa, and can be greatly relieved, and many times a permanent cure effected, by placing a rusty nail in their drinking-water: a nail should also be placed in their drinking-water during moulting season; and, should a bird be troubled with the reverse of this complaint, — costiveness, — a piece of sweet apple, a little chickweed, lettuce, or any green food, will usually afford full relief. Occasionally this bird will appear dumpish, sitting all day upon his perch with ruffled feathers: the best mode of treatment is to give him a supply of maw, or what is sometimes called poppy-seed, which will in most cases quickly restore him to his usual spirits.

The next bird that is generally admired and kept is the

GOLDFINCH; and, of all parlor birds, he is certainly one of the most delightful, alike for the beauty of his plumage, the excellence of his song, his proved docility, and remarkable cleverness. He is also very easily tamed, and is capable of great attachment to his owner, and may be taught various amusing tricks, such as dragging a little wagon up

an inclined plane into his cage to supply himself with food, or to ring a bell whenever he requires attention, and to haul up water from a little well underneath the cage. All these he will learn very readily, and without any coercion.

GOLDFINCH MULES. — The goldfinch will pair with the canary, and the mule-birds produced are frequently very beautiful, and are also particularly good singers. The mixture, so to speak, of the song of the two birds is particularly sweet, fine, and pleasant to the ear. In breeding mule-birds, it is true that it requires some patience, and also good judgment, for the successful rearing of choice mules ; but, when a satisfactory result is obtained, it is well worth the pains. Like other birds, the

GOLDFINCH HAS DISEASES. — They are very subject to epilepsy ; and sometimes, when closely confined, have swollen eyes. By anointing the eye with fresh butter, the ailment will be removed. They are greedy eaters, and are sometimes apt to overdo the matter. A cold bath will soon put them to rights. Goldfinches have been known to live confined in a cage for sixteen or twenty years ; and, though they may lose their bright colors, they retain their activity and cheerfulness of disposition. Their food, in their wild state, consists of all kinds of seeds, &c. : in a cage they should be fed upon mawseed. As their bill, though as sharp as a needle, is, in young birds, quite soft, — and, although very fond of rape and canary seed, they cannot readily crack it until they are at least two years old, — it would

always be well to soak a little canary and rape for them, thereby softening the hull, and making it a matter of no trouble for them to crack ; and occasionally, as a reward for some trick or display of affection, a few crushed hemp-seed, which he should be made to take from the hand. Most wild birds, when captured, become in confinement sullen and dispirited : want of exercise and of a peculiar kind of food so alters the quality of the fluids, that fits and ailments ensue ; and the bird mopes and soon dies. Not so with the goldfinch : immediately after its capture it commences to feed on its canary or hemp seed (food which it could never have tasted before), nibble its sugar in the wires, like an enjoyment which it had always been accustomed to, frisk about its cage, and dress its plumage, without manifesting the least apparent regret for the loss of companions or liberty. Its beauty, its melody, and its speedy reconciliation to confinement, render it a desirable companion ; and it is captured to cheer us with its manners and its voice in airs and regions very different from its native thistly downs and apple-blossom bowers.

THE LINNET, either gray or green, is a beautiful songster, and is very generally kept throughout Europe. It is of a hardy constitution, easily domesticated, a most lovely and constant singer, uttering many very sweet, flute-like notes ; and if fed principally on canary and rape seed, with occasionally a *very few* hemp seed, it will remain in comparative health.

Another bird which is attracting considerable attention in America is

THE SISKIN.—This, as well as the goldfinch and linnnet, is one of the species used in crossing with the canary. In Europe, it is a favorite cage-bird, and really a beautifully-plumaged one. Their song is short and low, though very agreeable, and they imitate with facility the notes of various birds. Caged, they should be fed on maw-seed, mixed with crushed hemp. As they are a greedy bird, care must be taken not to feed them too much. In health or sickness, their treatment, except feeding, should be the same as the canary. A very beautiful bird, for his sleek plumage, as well as for his agreeable song, is the

CHAFFINCH.—They are extremely docile, and can be trained or taught to perform many amusing tricks. Their food should be the same as the canary, adding, however, in the spring, a few hemp-seed to induce them to sing more freely.

These comprise about all the European seed-birds of song that find their way to America.

Amongst the soft-bill birds (those that live on mocking-bird or other soft food), the first in the hearts of his countrymen is the

NIGHTINGALE.

“Night from her ebon throne stoops down to listen
 To this the sweetest songster of the grove ;
 And pulses thrill, and eyes with rapture glisten,
 As forth she pours her plaintive song of love.”

This bird is decidedly the most melodious of all singing-birds. The compass, flexibility, prodigious variety, and harmony of his voice make him the greatest favorite of the lovers of the beauty of nature. Coleridge wrote thus of this bird :—

“ The merry nightingale,
That crowds and hurries and precipitates,
With fast, thick warble, his delicious notes,
As if he were fearful that an April night
Would be too short for him to utter forth
His love-chant, and disburden his full soul
Of all its music.”

He will sometimes dwell for several seconds on a strain composed of only two or three melancholy tones ; beginning in an under voice, and swelling it gradually by a most superb crescendo to the highest point of strength, he ends it by a dying cadence. His very striking musical talent, surpassing all other singing-birds, has acquired for him the name of the KING OF SONGSTERS.

When caged and well treated, they will sing for six or eight months during the year : some begin in December, some in January, and some in February, and sing till the month of July.

The next of old England's warblers is the

BLACK-CAP. — He is a most delightful singer, and is called the next best to the nightingale. His notes, though quite different, are no less admirable, and are heard throughout the year, during the whole day, except in the moulting season. He begins quite piano, with several strains of warbling, and ends

with loud, most joyful, flutelike notes. Caged, he requires the same food as all soft-bill birds.

The next favorite of the Old Country — and he also has hosts of friends in America — is

THE SKYLARK, —

“The crested herald of the morn, that springs
Up from his grassy flight,
Seeming to rain down music from his wings,
And bathe his plumage in the fount of light.”

This beautiful warbler is spread all over Europe, and has the most peculiar manner of flying of any of the feathered tribe, his movement being invariably upwards in a perpendicular line; after leaving his grassy abode, beginning his melodious song, which he continues unceasingly till nearly out of sight, looking like a mere speck, towards the heavens, and even then you may hear his sweet voice dying away as if in the clouds; when he descends in like manner, still continuing to gratify his hearers below with his own peculiar melody till within a short distance from his nest, then, silently alighting, hiding himself in the grass, fearing, as if by instinct, some straggling wanderers were watching his movements, to find out the spot to “rob a bird’s nest,” when he creeps along, quite unseen, to visit his home and little family.

THE WOODLARK is also a beautiful bird, and resembles the skylark in color, but is smaller, and is one of the sweetest singers in Europe, his song

being a combination of beautiful, thrilling, and soft, flutelike notes, and quite free from any shrill or unpleasant ones. The food of both birds is the same as the American mocking-bird.

Another English bird that is becoming popular with Americans is

THE ENGLISH ROBIN REDBREAST. — This bird is thought very much of in Europe, particularly in England, being lively and a very handsome bird. It is easily tamed, so as to be let out of its cage, and play about a room. It possesses a sweet warbling song. This bird is very fond of bathing, and should therefore be daily provided with a bath ; but, when allowed to fly about a room, care must be taken not to leave a pitcher, or any large vessel with water, within its reach, as it is very apt to take to such, and frequently gets drowned. It being a soft-bill bird, its food is the same as the preceding birds.

The following verse is an extract from a very pretty and pathetic poem, written on the far-famed story of “The Death of the Babes in the Wood :” —

“No burial these pretty babes
Of any man receives ;
But Robin Redbreast painfully
Did cover them with leaves.”

The family of thrushes have long been known to Americans, and require from us but a few lines. We can certainly say that the

SONG THRUSH is a most melodious singer, being gifted with a more powerful tone than any of the feathered choristers of the European forest. This speckled musician pleases with delight, and satisfies, as it were, the very soul of the listener. In the wild state, it only sings during the spring ; but, when caged and properly treated, will sing eight or nine months of the year, commencing about December or January. It is for this reason, as well as for its beautiful song, that the thrush is so much kept in cages, and domesticated. Food same as preceding.

THE BLACKBIRD, whose plumage is of a pure velvety black, with an orange-yellow bill, is a fine songster. The notes, though not so various as those of the thrush, still are of a more sweet, flutelike tone. Besides this, he possesses the ability of imitating airs which are whistled to him : these he executes to great perfection. When in a wild state, this bird only sings about three months in the year ; when caged, sings nearly throughout the year. His food and treatment may be the same as we described for the thrush.

We consider the blackbird, when in full plumage and in good health, a very handsome bird, and therefore are scarcely inclined to agree with an anonymous poet who says, —

“ I could not think so plain a bird
Could sing so sweet a song.”

And now comes the last of the European birds that find their way to America, —

THE STARLING. — His natural song is rather poor ; but he has a wonderfully good memory. He will learn to repeat several airs that are played to him, with great ease, — nay, more, he learns to pronounce words very distinctly, or imitate the song of other birds, or any sounds when repeatedly heard. Besides this, he becomes very tame in the house, so as to be let out of the cage, and walk about the room. He soon knows all the persons in the house, is always gay and wakeful, and as docile and cunning as a dog. His *food* and treatment may be the same as that of the thrush. He is a very hardy bird, and will sometimes attain the age of fifteen years.

Having treated quite thoroughly the songsters of old England, Ireland, and Germany, we will now take up our own loved American birds ; and to America belongs the finest and best bird in the world, —

THE AMERICAN MOCKING-BIRD. — This unrivalled songster, though he may not possess the melodious sweetness of the nightingale and lark, or the beautiful pipe of the blackbird, yet in himself he unites all the excellences to a greater extent than any other living bird. Who, on passing through the streets of any large city on a bright night in June, has not heard the shrill scream of the eagle, the mourning note of the turtle-dove, the delicate warble of the blue-bird, the cackling of the domestic hen, followed by the quarrelling of a dozen or more *grimalkins*, each seeming to vie with the other as to the quantity of noise ; then the cry of the

katydid, the mellow whistle of the cardinal, the grunt of the maternal porker searching for her juveniles, the creaking of some rusty swing-sign-board, the pipe of the canary, and the cry of some lost puppy wailing in the midnight air, and each succeeding the other with such rapidity, that the listener wonders if such a variety can come from so small an object. All this the mocking-bird is capable of. The mocking-bird is a general favorite, and deserves to be attentively cared for. He is particular, and should be fed and watered at the same time *every day*. His cage should be large, and kept very clean, with plenty of gravel. His food should be

REICHE'S PREPARED MOCKING-BIRD FOOD. — All other mocking-bird foods are only worthless imitations of this, and, in many cases, have been found to be very injurious to the bird. It is in bottles all ready for use. In boxes, it will need the addition of grated carrot. The box food is the cheapest and best. A good way is to change every few weeks from one to the other. An addition of ants' eggs occasionally with their food (Chas. Reiche & Bro. are the *only importers* of them) is very beneficial; a little sweet apple grated up with the food gives it a very fine flavor, and often restores the appetite when it seems quite poor.

A SUPPLY of INSECTS should be gathered during the proper season, such as flies, grasshoppers, spiders, &c., and put loosely in a paper bag, and hung up to dry; and, when used in winter, they should

have boiling water poured over them, which will soften them, and make them as palatable as if they were still alive. A grasshopper thus prepared is a Thanksgiving dinner to your bird. Zante currants, the same as used for cake, washed clean, soaked over night, and *wiped dry*, also make a dainty morsel.

MEAL-WORMS give a bird a great deal of life, and, being the richest of food, should only be given occasionally, say six to ten worms in a week. Every owner of a soft-bill bird should raise a stock of meal-worms. The process is very simple, and consists in first taking an old box or jar, and placing therein a quantity of bran or meal, — in fact, any farinaceous meal, — a few biscuit or part of a loaf of bread, a few pieces of leather from an old, worn-out boot or shoe, and some woollen rags; place therein a few meal-worms, — say fifty, — and then cover the opening tightly with a thick cloth. If this cloth is moistened with water occasionally, they will breed faster; and, if not disturbed, at the expiration of from four to six months, you will have thousands.

MOCKING-BIRDS HAVE DISEASES. — Should your bird's feathers stand loosely all over, and he still seem healthful, give him cooling food only. Should your bird be dumpish and stupid, a few spiders will usually cure him. Should he refuse to eat, examine his tongue,* and you probably will find on it a horny scale: this must be removed with great care, as, if allowed to remain, your bird will surely die. To remove this scale, hold the bird on his back firmly

with one hand, and, with the finger-nail of the other hand, gently peel this scale from the tongue. Carefully watch the bird's droppings, and immediately apply the cure for illness.

DIARRHŒA IS CURED by a very rusty nail placed in his drinking-cup, and the reverse by insect food, or water with a few ants' eggs soaked in it. Blindness is not to be cured; and the bird thus attacked will shortly die, its spirit being broken by the illness.

During the month of May, sometimes earlier, all birds have what is called the

MATING FEVER. — They grow melancholy, allow their feathers to grow rough, cease to "plume themselves" before retiring, waste away, and die. All lovers of birds must have observed that a bird never goes to sleep without arranging, just before dark, every feather. The uniformity and tediousness of a bird's life, confined in a cage, that was not bred in one, is the cause of this mating-fever. They have an ungratified sensual desire. In many instances they forget their inclination for freedom and a mate, by simply changing the cage, and hanging near a window, where their time will be taken up in watching new surroundings.

MOCKING-BIRD LICE are a great annoyance to a bird, and should be gotten rid of. This is best done by placing the bird in what is known as a mocking-bird box; then steep some fine-cut chewing tobacco in water, and, with a very strong solution, wash the bird very thoroughly, particularly under the wings; then place a white cloth or towel on top of the box,

and they will crawl up, and in a few days you will be rid of them. Clean your cage very thoroughly before you replace your bird therein; and, with proper attention to cleanliness, you will not again be troubled with them.

Experience has taught us that nine-tenths of the ailments of birds are caused by improper feeding. Bits of sugar, candy, daily green food, grapes, meat from the table, — all are bad for any bird. Birds need plain food, regularly given. Seed-birds require seed free from dust; other birds, food mixed daily in clean vessels. A bath should be given the mocking-bird daily; and the vessel *should be removed* from the cage when the bird has bathed. You can soon teach any bird to bathe directly when you give him his bath, if you give it to him at the *same hour* each day. If irregular yourself, the bird will contract the same habit.

These remarks on the mocking-bird will also apply to the thrush, starling, lark, nightingale, robin, black-cap, and, in fact, all the family of soft-bill birds. In doctoring your sick bird, ascertain as nearly as possible what his complaint is, and apply the remedy; if it does not succeed, try another. Birds have been known to be at the point of death with costiveness, when a small spider has been forced down their throats, and a large knitting-needle, dipped into oil, inserted into the passage as an injection, and the bird caused to fly a few feet, when immediate relief followed, and in a few hours the bird was again in song.

The bird which, in quality of song, ranks next to the mocking-bird, is

THE BOBOLINK. — This bird has received his name from a peculiar song of his own, in which he expresses very distinctly the words “*bob-o-link*” several times in succession. They are found all over the United States in the summer season in great numbers, but migrate southerly when cold weather approaches. Their song is a confused, merry jingle of notes, of about the quality of the canary, but without any method whatever. They are easily domesticated to cage-life, and, when fed on nothing but canary-seed (no hemp), will sing about eight months of the year. They are hardy, and will live many years. The author owned one that was sent to the World’s Fair in 1851, and, after taking the first prize in Europe, came safely back to America.

Following this bird in attractive qualities of song as well as of plumage is the

VIRGINIA NIGHTINGALE, sometimes called the Virginia red-bird, sometimes the cardinal. It is a native of the Southern States, and one of the handsomest birds of the New World. Its color is of a brilliant red, with the exception of the throat and the part round the beak, which are black. The head is ornamented with a tuft, which it is capable of raising, giving it a very commanding appearance. Together with its beautiful plumage, this bird is gifted with a very sweet, pleasing song, or rather whistle, which sounds almost like the playing of a flageolet, being very pleasant to the ear. It is a

very hardy bird, and easily taken care of, and is kept in cages in this country as well as in Europe. It should be fed with a mixture of canary and hemp seed and rough (unhulled) rice, to which may be added a little fresh green food, or a piece of apple occasionally. When properly treated, this bird often attains the age of fifteen years ; though it will fade away from the beautiful scarlet red to a delicate shade of pink. The next attractive bird is

THE INDIGO BIRD. — This is one of America's sweet-voiced warblers, and is a native of our own sunny South, visiting the Northern States when warm weather has fairly established itself. Its color is a beautiful shade of indigo blue, and its size the same as the canary. Its song, though short, is quite agreeable, and by many considered very sweet. It will become very tame, and live many years in confinement. If fed upon nothing but canary, millet, and rape seed, with occasionally a little green stuff, with the addition of a bath daily, it will keep in excellent condition and song. Another favorite of the Southern States, and one which is never seen north of Southern Virginia, is the

NONPAREIL. — He is what his name indicates, — “without an equal ;” his many hues giving him, in 1872, the name of “Dolly Varden.” They are the most beautiful cage-birds, and have only to be seen to be admired. Their song, though not so strong as the indigo-bird, is equally agreeable, and their food the same, with the addition, in summer weather, of live flies, of which they are passionately fond.

Another beautiful bird, but rarely seen caged, is the

ROSE-BREADED GROSBEEK. — This very elegant bird is but little known ; yet but few of our domestic birds much surpass it in sweetness of song or beauty of plumage. It sings by night as well as by day, and its notes are very clear and mellow. Its great rarity in the wild state accounts for the fact that it is so seldom seen caged ; yet no bird can be more highly prized, its bright carmine breast and deep black and snowy white body forming such a rich contrast. During the summer it wanders into the high northern latitudes, wintering in the Middle States. Caged, it becomes very tame in a remarkably short space of time, and, being well contented in confinement, lives many years. It usually keeps in the best of health if fed upon nothing but canary-seed. Being rather a greedy bird, if hemp or unhulled rice (unless it seems to require it) is fed it, it will eat until it is with difficulty that it can move from the bottom of the cage.

THE AMERICAN ROBIN, from his proved docility, and power to imitate even tunes that may be taught him when young, is becoming, as well as the mocking-bird, a favorite for the cage. When taken from the nest and brought up by hand, and consequently tame, he can in a short space of time be taught a tune of considerable length, which he will whistle with accuracy, and in its accomplishment exhibit considerable musical ability. Their treatment is the same as the American mocking-bird.

THE GOLDEN ROBIN, sometimes called the Baltimore oriole, sometimes fire-bird, and several other names in different parts of the Union, is very similar in appearance to the South American troopial, being, however, but two-thirds its size, and not of as hardy constitution, nor has it the capacity for learning tricks. Its song is a low, sweet, mellow whistle. It is, however, kept more for its beauty of plumage than song. In confinement, it should be treated the same as a mocking-bird.

The bird that ranks next in song is

THE SONG SPARROW.—It is seldom that he is seen caged, probably on account of the plainness of his wardrobe. He has for a song, though a short one, quite a variety of notes, commencing very much like the admired water-note of the canary. This he will repeat many times in succession, and also an endless number of times a day. He is a playful bird, and hours can be pleasantly passed in watching his antics. Caged, he should be fed the same as the canary.

Next in order comes the bird of all birds for the boys,—

THE AMERICAN YELLOW BIRD, or what in reality is the American goldfinch. This beautiful lemon-colored bird, with a black cap and black and white wings, has always been a favorite with Americans; and thousands are caught every season by means of trap-cages, using almost any bird for a decoy. They are a sweet though very quiet songster. If fed upon maw, millet, and a little canary-seed (the

two latter should be soaked a little), and otherwise treated as a canary, they have been known to live ten years in confinement.

The next American bird that is usually kept as a cage-bird, and almost wholly for his song, is the common

RED LINNET. — This beautiful singing, or we might almost say whistling, bird, is one that should be as universally kept as the canary. Its song is equally as sweet, and it will sing for ten months of the year, or the whole season, excepting during the time of moulting. Its song consists of a variety of low, connected, sweet-sounding notes, which are never harsh to the ear; and if kept near other birds, its power of imitation being very good, will soon add many beautiful notes to its already sweet song. If kept near fowls, it will soon learn the cackle of the domestic hen, and even give a very good imitation of the crowing of chanticleer. In confinement, it becomes very tame, and, if fed sparingly, will live a great number of years. It should be fed almost exclusively on rape and canary seed, and at times even a *short allowance* of that. As before remarked, it becomes tame, and also very indolent; and, though a constant singer, it is no exertion for it to sing, and it in reality has no exercise. If it has hemp-seed fed it, it very soon has a giddiness followed by epilepsy, and shortly after by death. It is fond of bathing, and we might say of two kinds: first, like the skylark, in plenty of gravel (of which there must be an abundance in the

cage); and second, it is very fond of water, and a bathing-dish must be given it daily. Its diseases are similar to all seed-eating birds in confinement; and the treatment must be the same, for which see article on Sick Birds. This bird finishes the American birds of song usually kept in cages.

The bird which next attracts our attention, and one that is found the world over and universally kept, is a native of Africa, known as the

GRAY PARROT, which, by its docility and affectionate conduct towards those who treat it kindly, and its wonderful power of imitating the human voice, has, with all its awkwardness, a very strong hold upon the human family. The very best species of the parrot is the African, which has a fine ashen-gray color, with a black bill, white face, and scarlet tail. These birds, either male or female, make excellent talkers: they can also be taught a tune, which they will sing or whistle perfectly; and while they will seemingly forget many words and sentences which they have once pronounced perfectly, yet they never forget a song if it is once thoroughly taught them. The next parrot in attractive qualities is the green, with white over his bill. This bird makes an excellent talker, is equally as docile as the gray, and attains a great age. Another species very much admired is the yellow-head parrot. This, as well as several other varieties, is universally kept and admired. The parrot, like all other birds, is liable to disease; but with care it can be kept in nearly perfect health. In order to take

proper care of a bird, cleanliness first always; then place plenty of gravel in the cage, feed at a regular and stated time, always feeding the most simple and plain or coarse food. In its native country it feeds upon the seeds of the sunflower and the various grains, and with its exercise in its wild state does not grow too fleshy. Caged, it must be fed vastly different. A good food for parrots is cold boiled potatoes, stale bread or crackers soaked sometimes in water, sometimes in milk, and sometimes in coffee, using the coffee just as it is leached or boiled, without the addition of milk or sugar. Bread soaked in coffee is a delicate morsel, and one of which a parrot is very fond. They also like canary-seed, unhulled rice, cracked corn, and hemp-seed. Of the two latter, *very little* should be given them; and they should *never have fed to them greasy food* from the table,—sugar, cake, candy, or any such trash. A piece of apple or a little green stuff *occasionally* does no harm. Peanuts, forming a part of their native food, can always be given them. These rules followed, your parrot should be healthy. There are but two diseases that alike annoy the parrot and its owner; and a constant inquiry at bird-stores is, “What makes my parrot pull his feathers out?” The reply invariably is, “You feed your bird too highly.” And we will here remark that the parrot, like almost the majority of the human family, is afflicted with some kind of a skin disease, and the feeding of rich food drives this disease to the surface, causing an eruption, and a

consequent itching sensation, which the parrot relieves by pulling out its feathers. The only remedy for parrots addicted to this habit is to feed them on either raw or boiled carrots and well-roasted peanuts. These are both cooling foods, being entirely free from grease of any kind. They also require showering with cold water from three to six times per day; and, as they should only be showered with a spray of water, it would be well to put a piece of rubber tube on the end of a faucet, and, holding the finger nearly close across the end, cause the water to fall in a spray upon the bird. When it is not convenient to thus shower a bird, a mouthful of water blown over the bird will answer every purpose. Should your parrot be attacked with diarrhœa (which, if he is properly cared for, he will not be), he should have all green food, fruit, &c., taken away, and be fed upon milk which has been boiled away, say at least a quarter, and thickened with the *least mite* of Graham flour, so called, with the addition of a *very, very* little red pepper. If this does not effect a cure in from one to three days, then give him stale bread soaked in warm sherry-wine, which has had a very little burnt sugar added thereto,—not, however, giving this until the other has failed.

Even these remedies usually efficacious have failed at the time when a parrot was shedding his feathers; and whole peppers and spices of various kinds are given the bird, but without the desired effect. The last remedy for this painful disease is laudanum or

paregoric. If the latter, five drops in a teaspoon of milk, poured down the bird's throat, and the dose repeated every half-hour until relief comes, when discontinue, and feed a little plain food, and keep the bird covered up in a shawl or piece of blanket, and in a warm place, until again restored to health.

If the bird has sore feet, occasioned only by a dirty cage, and not using sand freely, first put sand into the cage, then wash his feet in lukewarm water, first adding a little tincture of arnica thereto. If your parrot is troubled with costiveness, green fruit and exercise outside the cage is the best remedy. If gouty, which they will show by their feet swelling, and a partial closing of the claws, immerse the feet in quite warm water once or more per day, and soak them for ten or fifteen minutes; dry thoroughly, and in a week or ten days a cure will be effected. Sometimes with old cases it takes even longer. If your bird is troubled with fits, a sprinkling with cold water usually effects a cure. Should you be troubled with lice on your parrot, you can wash him with a strong solution of tobacco, made by steeping a little chewing-tobacco in water, or a very little flower of sulphur can be sprinkled among the feathers.

These comprise about all the ailments of the parrot family; and the remedies here laid down for their treatment also apply to the dwarf parrot, or what are more commonly known as paroquets: but with care (not too much care) you will be relieved of these troublesome complaints.

THE AUSTRALIAN PAROQUET. — This very beautiful and eccentric bird has but recently been introduced into this country ; yet it possesses so many desirable qualifications that it has at once become a well-known member of the “bird family.” This bird is a native of the island from whence it takes its name ; and in its wild state leads a retired and sequestered life, sometimes alone, and again in pairs. During mating season, they are found in pairs, and in immense numbers, the male and female each singing to the other incessantly. As they are inhabitants of the earth, where they build their nests, they are rarely found in trees. Their plumage is a beautiful shade of green, with a few brownish or black feathers upon the back, and the feathers of the head a bright lemon color ; which, added to the bright blue spots around the head and neck, make them a beautiful and attractive bird. They easily become domesticated to cage-life, and are capable of being taught many amusing tricks. They are hardy birds, and easily endure the cold winters of the north ; the author once having placed a pair where water froze to the depth of an inch, and this, too, without any perceptible injury to the birds. They should be fed wholly upon canary-seed, and allowed frequent baths. With this treatment they will continue in perfect health for many years.

A bird that is now very much admired for the beauty of his plumage, as well as his exquisite powers of song, is the pet of the tropics, —

SOUTH AMERICAN TROOPIAL. — This bird has a

beautiful rich plumage, and looks very much like our American golden robin, or what is known as the Baltimore oriole, the chief difference being that it is much larger in size, and the orange of the body being more of a yellow. It is one of the feathered tribe of the tropics, gifted with great powers of song. Being extremely docile, they are great favorites for the cage, and in confinement become so tame that they will hop on your hand-at call.

Their song is a very powerful yet pleasant whistle of clear and varied notes. They are extremely active and very graceful in their movements, and require a cage the same size that a mocking-bird is usually confined in. In their wild state their food consists of insects and berries ; caged, they require the same food and treatment as the mocking-bird. There are few wild birds, which, when confined, become so thoroughly domesticated as the troopial. They can be taught with little trouble to accept food from the hand, to fly to and perch upon the one who regularly attends to their daily requirements ; and their extreme docility is a fact proven beyond a doubt.

THE BRAZILIAN CARDINAL. — This is one of the beautiful whistling birds of the tropics, and is justly admired as a cage-bird. His brilliant scarlet head, which is ornamented with a tuft or crest, forms a beautiful contrast with the snowy white of his body. In addition to his beautiful plumage, he is also gifted with powers of song, which consist of a series of connected, low, sweet, whistling notes. If fed upon nothing but unhulled rice and canary-seed,

and given plenty of bathing water, he will live many years in confinement. Another very pretty bird, a native of the East Indies, and very much kept in cages, — mostly, however, for their beauty, — is the

JAVA SPARROW, who takes his name from the Java Islands, where they abound in immense numbers. Their chief recommendation is the great neatness, and, you might say, beauty, of plumage; their glossy black head, with clear white cheeks, and delicate rose-colored bill, that looks like a piece of wax-work; and their light-slate or almost ashen-gray body, forming one of the richest combinations of colors. They become very tame in confinement, and occasionally one is seen that can in reality be called a bird of song. They can be taught a variety of amusing tricks, and, perhaps more than any other caged bird, will perform their tricks at command, with the seeming fear of a child.

THE ENGLISH SPARROW. — The English sparrow, now so commonly seen in all of the parks, and in fact streets, of New York, Brooklyn, Jersey City, and Hoboken, was first introduced by the Messrs. Reiche in 1858. The cost of the first importation was partly paid by Mr. W. H. Scheiffelin, who had a quantity of them set free in the garden of his palatial residence in Madison Square, New-York City. The quantity of sparrows now seen around the Fifth-Avenue Hotel are descendants of this first importation. The remainder of the sparrows were given their liberty by Mr. Henry Reiche in the Central Park. How they have increased and multiplied, we

need not inform our readers who are in the habit of visiting the metropolis of America, and how faithfully they have devoured all worms and insects that formerly ruined the beautiful trees; and we might say they have been the saving of the fruit-crop the whole length of the Hudson River. Gardens which had not a currant in them for years, and apple-orchards that had ceased to bear,—were all in fine bearing order the same season the sparrows were introduced. The question is often asked, “Do these birds destroy seed after planting?” We answer, No: they are an insect-eating bird, and never eat or scratch seed. They are consequently the farmer’s best friend.

In reply to a question, “How many broods do they raise in a year?” In New York and vicinity they raise four broods in a season, and will doubtless do the same in any part of the country; and they never rear less than four to a brood, oftentimes six birds. If our farmers and gardeners knew how destructive they were to insects, and how their crops would be increased by their introduction, they would give the subject their earnest consideration. The sparrows now sold are all raised in New York and its vicinity, and of course are thoroughly acclimated; so no fears need be entertained of their dying from change of climate.

What the “Old-World Sparrow” will do was very happily told by William Cullen Bryant, after passing an evening with the late Mr. Sheiffellin in 1858. His beautiful poem tells a better story of the sparrow than we possibly could.

To those who propose introducing this bird, either private individuals or town or city authorities, we would suggest the propriety of sending their orders during the months of January and February. The sparrows ordered at that time will be ready for delivery at a date not later than the 15th of April. At this time they begin mating, and are engaged in building their nests, and consequently cannot be caught and transported to other places without danger to them, and loss of life, which, if persisted in, would speedily exterminate all the sparrows which have cost America immense sums of money. Lovers of sparrows who desire introducing them, and have neglected ordering during the months of January and February, and who do not reside north of Portland, can order at any time in the summer, and receive them during the months of October and November. The birds sent at this time are hardy, and require but little care, the main point being to supply them with soft food, such as stale bread, &c. If the snow should remain for a considerable length of time, it would be well to sweep a piece of ground, thereby enabling them to procure gravel, which is of the utmost importance for proper digestion and consequent health.

THE OLD-WORLD SPARROW.

BY WILLIAM C. BRYANT.

WE hear the note of a stranger bird,
That ne'er till now in our land was heard :
A winged settler has taken his place
With Teutons and men of the Celtic race.

He has followed their path to our hemisphere, —
The Old-World sparrow at last is here.

He meets not here, as beyond the main,
The fowler's snare and the poisoned grain ;
But snug-built homes on the friendly tree,
And grubs for his chirping family
Are strewn when the winter fields are drear ;
For the Old-World sparrow is welcome here.

The insect legions that sting our fruit,
And strip the leaves from the growing shoot, —
A swarming, skulking, ravenous tribe,
Which Harris and Fitch so well describe,
But cannot destroy, — may quail with fear ;
For the Old-World sparrow, their foe, is here.

The apricot, in the summer ray,
May ripen now on the loaded spray ;
And the nectarine on the garden-walk,
Keep firm its hold on the parent stalk ;
And the plum its fragrant fruitage rear ;
For the Old-World sparrow, their friend, is here.

That pest of gardens — the little Turk
Who signs with the crescent his wicked work,
And causes the half-grown fruit to fall —
Shall be seized and swallowed, in spite of all
His sly devices of cunning and fear ;
For the Old-World sparrow, his foe, is here.

And the army-worm and the Hessian fly
And the dreaded canker-worm shall die ;
And the thrip and slug and fruit-moth seek
In vain to escape that busy beak ;
And fairer harvests shall crown the year ;
For the Old-World sparrow at last is here.

FINCHES FOR THE AVIARY. — These pretty little creatures are charming pets for the drawing-room, and of the utmost interest to the lover of birds. They are kept more particularly for their beauty of plumage. They are thoroughly happy in each other's society, and sit all together in a row, on a long perch, packed as closely as possible, caressing and pluming each other. There are many varieties; and they may be classed under the general terms of

WAXBILLS AND AVADAVATS. — Chief among the many, we would mention the waxbills, which do not, as a general rule, sing any thing like a song; but they chirp considerably, and it is a soft, pleasant warble. The orange-cheeked waxbill is a beautiful smooth little bird, always as neat as possible, with every feather in its place, vermilion beak, gray head, neck and throat brown. The female is about the same in general appearance. The zebra, or orange-breasted waxbill, is quite small, but very pleasing; and, as he is scarcely three inches long, he is considered desirable. The St. Helena waxbills are considerably larger, being about four inches and a half in length. A remarkable feature of this species is, that all the feathers have transverse, blackish, wavy lines over them, and look very soft and silky. The gray-blue is of delicate slate-color over the whole body, with silvery-white spots on the sides. The courdon bleu, or, as some call this well-known finch, crimson-eared waxbill, is also an African bird, and one of great beauty. The male has a soft, pleasing song, and is usually to be heard

cooing, as if for his own amusement. This little fellow has a peculiar habit of singing with a bit of twine, or something which he can hold, in his bill. If he can find a piece of cotton, or a stalk of any kind, he will hop about his cage, and sing to his utmost. The spice bird, also known as the "nutmeg" and "cinnamon bird," and described by some authors under the name of "gowry" or "gowry grosbeak." These birds are somewhat larger than the African finches, and are equally entertaining. They are of various colors, but are generally found with the head, neck, throat, and upper part of the body a rich brown, the breast and sides white, wings and tail brown. The male has a peculiar song, which will hardly attract attention, save that the female regards it as pleasing; for she always places her head close to her mate's while he is singing, and is evidently unwilling to lose a single note. The silverbill, or quaker bird, somewhat resembles the spice bird in shape and size. The male has a pretty warbling song, and he will often dance upon his perch, as if keeping time to his melody. When kept in couples, they become very affectionate, and devote the greater part of their time to preening and caressing each other. There is also an Indian silverbill; but they are not as common, though occasionally they can be found. The red-tailed finch is also a pretty bird, having a vermilion beak. The wings, back, and head are grayish, the breast nearly the same color, dotted with whitish spots; the under part of the body a pale straw color;

the tail a bright red. The male has an agreeable song. The amandava finch is a native of India. They are somewhat smaller than the St. Helena waxbill. As they vary somewhat in color, and as it is not until they are two or three years old that they come to their perfect plumage, it is somewhat difficult to describe their appearance so that it would be of use to those in search of this charming little warbler. As a rule, the best birds have the head and under part of the body a bright red, with an occasional black feather; the back a light brown, and the tail black. The fire finch bears a strong resemblance to the avadavats, at certain seasons of the year. It is somewhat larger, but has little or no song. They are kept particularly for their beauty and cheerful disposition. The saffron finch is in many respects similar to the canary, though not quite as large. In point of color, however, the finch is more desirable, as the shades are of brighter tints. These birds come from Brazil, and are greatly sought after for the aviary, as they are of the most sociable disposition, and live in the utmost agreement with their comrades. The Cuba and negro finch have recently been introduced into this market, and with a good degree of success; also the Queenisland or Rockhampton finches, which are brought from Australia. The banded finch is another choice bird, and one which will speedily become a favorite. The whole body is of a rich chestnut-brown, both above and below; the upper and under tail coverts white, and the tail black. The dia-

mond sparrow, or "spotted-sided finch," is also a native of Australia. It is a short, stout bird, somewhat larger than the St. Helena waxbill. The under part of the body is white, and the sides under the wings quite black, with oblong white spots; the lower part of the back and upper tail-feathers are of a deep carmine. They have the utmost desire to catch flies, and, if allowed the liberty of a room, will rush to the window, and remain by the hour catching them. They can be made remarkably tame, and can be trusted without their cage to a considerable extent. Their song is limited. The cut-throat sparrow, sometimes called "Indian sparrow," or "fascinated finch," is about half the size of an English sparrow. It is of a delicate grayish-fawn color, spangled with white spots. They have a soft, delicate twitter, which can scarcely be called a song. The "little doctor" is from the South-American ports. The plumage of the male is of a beautiful shade of bluish-black, with an occasional white spot. They have a habit of sitting in the middle of their perch, and holding up one foot, singing to each other for hours. They can easily be tamed. There are numerous other varieties, including the magpie finch, celestial, negro, nuns, both black and white capped, &c., &c. These birds can be kept in one cage, and indeed they are miserable without companions; and, if two birds of different species lose their respective mates, they are almost sure to console themselves and to consort together. They should be fed upon millet-seed, and given a bath

daily ; but great care should be taken that they are kept in a warm room, and, if possible, in the warm rays of the sun. When moulting, a pinch of Cayenne pepper, sprinkled on the sand in the bottom of the cage, once or twice a week, will be found beneficial. They are fond of the sun, and delight to bask in its warmth ; but care must be taken not to leave them exposed to cold draughts or the dampness of the night air. With the above precautions, all these birds can be kept in cages for many years.

THE PARADISE WHYDAH BIRD is a well-known cage-bird, and one of great beauty. Some fanciers have given this bird the name of "the widow," from its quiet manner and its general color of plumage. The name is really that of a kingdom on the east coast of Africa. The great beauty of the paradise whydah bird is in its curiously-formed tail, the two centre-feathers of which are very broad, and about four inches long: the outer feathers are in some cases from thirteen to sixteen inches in length, broad in the centre, and tapering down to a delicate point. These birds are easily kept in aviaries, and in Southern France they have been bred in cages. The shaft-tailed whydah is a smaller and much more delicate bird: the tail is entirely different from the paradise whydah, yet quite as interesting. It is short and fan-shaped; the body of the middle feathers is extended into naked quills, which are about seven or eight inches long. The song of this species is of excellent quality. The weavers are a most companionable bird: they are brought from

Africa, India, and parts of the Asiatic islands. Their weaving instincts are exhibited upon every possible occasion : they will gather every piece of thread, blade of grass, or whatever of that nature may come in their way, and weave it into the wires of their cage after the most fantastic fashion. One could pass the entire day watching the workings of these ingenious and industrious little fellows. If their friends do not provide for their weaving wants, they will resort to the most extraordinary means whereby they can supply themselves. They will try to steal the trimmings of ladies' dresses, and will be continually pilfering grass and straw from other cages, which they will weave into the most fantastic forms. The author once owned a pair, which he kept in a cage with larger birds. These little fellows would weave the legs of the larger birds so tightly together that their bonds required cutting. There is a species of the weaver which is called by some the grenadier grosbeak. This bird should be termed the bishop bird, and, when in full plumage, is certainly very beautiful. It will live with other birds, and is apt to become very sociable with its companions, who will be caught in the meshes of its weaving if not upon their guard. So far as possible in a volume of this size, the description of finches will be found to be complete and reliable. These birds are all suitable for the aviary ; but the following birds can be placed with them by those who desire to make a more extended collection : canary, goldfinch, linnet, bulfinch, chaffinch, greenfinch,

siskin, American goldfinch, indigo bird, nonpareil, song sparrow, Java sparrow, Australian paroquets, love birds, mountain finch, rose bunting, cardinal grosbeak or Virginia nightingale, red-breasted grosbeak, Brazilian cardinal, crossbill, pine grosbeak, hawfinch, and sparrow. Of course the bird family, like all others, is liable to domestic troubles. Sometimes a bird of certain species will become troublesome, and destroy the quiet and happiness of the entire family. When such a one is found, he should be taken out and exchanged at a first-class bird-store for another of its kind: by this means the aviary will become a model of quietness and harmony.

The house of Charles Reiche & Brother have experienced a great deal of trouble, especially in earlier years, from the enormous duties which they were obliged to pay as customs for the importation of foreign birds. In order to facilitate the importation of choice birds from the different countries, this house for many years paid heavy duties under protest, while they carried on a suit with the government of the United States. It was only after a number of years, and after the case had passed through every court to the Supreme Court of the United States, that Chief Justice Chase decided, in 1872, that a bird was not an animal, and therefore, by the letter of the law, exempt from duty. Since that decision, the lovers of birds have been able to procure them at a low rate in comparison to that which they would have been obliged to pay, had it not been for the perseverance of Messrs. Charles Reiche & Brother.

BIRD-SEED. — Very few persons are aware how much a bird's health, and consequently its song, depends upon the selection of seed. There are as many qualities or grades of canary-seed as there are qualities or grades of flour. *Is all flour alike?* If it is, then all seed is alike. The quality of canary-seed is usually based by dealers in seed upon the price per bushel, — it varying from \$2.15 to \$4.70 at present writing (May, 1873). The very best seed is the

SICILY CANARY. — It is a very plump and heavy-feeling seed, and is extremely palatable to the bird. A sample of this seed — enough to last *one bird two months* — will be sent by mail, prepaid, on receipt of twenty-five cents.

THE GERMAN SUMMER RAPE-SEED is excellent for birds, and should always be given them. It is their only food in Germany, where they are reared, and, being of a very cooling nature, will always keep the bird in excellent condition; though, if fed on this exclusively, he will not sing as much as if his seed were mixed with canary, — the canary giving the bird life and animation. A PACKAGE OF CLEAR RAPE, or rape and canary mixed, will be sent the same as the clear canary, and at same price. The next seed which is used, and often by persons entirely ignorant of its nature, is

HEMP-SEED. — This is a very rich, oily, sweet seed, and very much loved by birds of every species. When mixed with other seeds, the bird never fails to scatter all other around the room, searching

for this dainty morsel, and, so long as he has one seed, will not taste either rape or canary. This, being the richest of all seed, should be fed very sparingly. If the bird is in health and song, never give hemp; for it only fattens, and, if constantly fed, will ruin the song. Occasionally a bird seems delicate, and is a very small eater: in such a case give a few hemp, — *and only a few*, unless the bird be a long breed, in which case give about a thimbleful, *not oftener* than twice a week. Goldfinches and siskins are fed upon

MAW-SEED, sometimes called poppy. These two little climbing birds have very soft bills, — that is, the young birds, — and it is with difficulty that they crack rape and canary seed, unless it has been previously soaked, until the birds are at least two years old. All birds are great lovers of maw-seed; and it must be fed sparingly; for, being a powerful opiate, they will feed upon it until they drop from the perch from its intoxicating effect. The few birds that require this seed, besides the preceding, are the bulfinch, canary, and occasionally some other seed-eating bird; for which see Treatment of Birds. The next seed used is called

PADDY, — unhulled or rough rice. This seed is fed to most of the seed-eating birds of the rice-fields of the Southern States, and also those that come from China, Java, or in fact from any part of the world that rice is grown. All of the family of grosbeaks are particularly fond of it, as is also the Java sparrow and rice bird. Our native bobolink is not

averse to a bountiful supply ; but, with the feeding of this in any quantity, his vocal powers are ruined. For the family of finches,

MILLET-SEED is used exclusively. It is the size and color of mustard-seed, very sweet ; and birds thrive remarkably well upon it, though many of them will also eat readily of rape and canary seed. This seed, being nutritious, can be fed to any seed-eating bird, and without detriment to them. The only other food required is

CRACKED CORN and cracked wheat. This is fed principally to macaws, parrots, paroquets (of the larger species), cockadillos, cockatoos, lories, &c. The corn, being of a heating nature, should only be given in small quantities.

By the present postal laws, seed can be sent safely through the mail ; and all orders intrusted to us will be filled with the very best quality, and the largest possible amount forwarded for the money sent.

To those living remote from a bird-store, and desiring one of "God's joyous warblers," it is with pleasure that we here state that they can be safely sent by express to any part of the United States or Canadas. All any party need do is to give an order to an express company, accompanying the same with a five-dollar bill, — this is very important to the express company, — and for this sum he will procure you a first-class singing canary. I am aware that many people are reluctant to trust a bird to the *supposed* rough handling of an expressman. The

expressman may handle a trunk roughly, and throw packages around in a careless manner, but not the little innocent bird.

Could you but see, as the author has so many, many times, on a cold, bleak winter's day, an express-messenger, clad in an ordinary under-coat, drive to the store door, and take from his wagon a package of birds closely *wrapped in his overcoat*, remarking as he placed the package within the door, "I could not bear, Mr. Holden, to see the little things suffer such a terrible day as this." Or had you been with the author one stormy night last winter, when coming eastward from New York by steamer, upon which was a large shipment of birds in charge of the Adams Express Company, you might have seen the messenger, on arriving at Fall River, carry the package with the utmost care into the cars, and place it near the stove in that part of the car usually occupied by himself. The comfort and safety of these helpless creatures was to him of the utmost importance. Having some curiosity, I asked him why he was so particular about the package, he replied, without knowing to whom he was speaking, "Ah, sir, I love those little birds! they cannot take care of themselves, and God knows my first duty is to them." A call at the office of the company revealed the fact, that the messenger was Mr. David Crowley, one of the three survivors of the fated "Lexington," which was burned in 1842. The house of Charles Reiche & Brother have shipped nearly *half a million birds*; and this immense number

without any loss worthy of mention. If our experience is worth any thing, do not hesitate to order ; for the express company will always purchase at the point nearest your residence, and get them to you with as little exposure as possible.

Almost all fanciers take a delight in having their birds so tame that they will not only take their food from the hand, but will readily fly to, and remain with, the person from whom they daily receive attention. When wild birds are first caught and placed in a cage, it is not well to begin at once upon their education. It requires some little time for them to become accustomed to their new mode of life : the change of food, together with a diminishing of their usual exercise, so changes the fluids that the bird is not in a healthy condition, and is therefore wholly unfit for mental training.

There are some birds which seem thoroughly incapable of learning the important fact, that their attendant is their friend. When it is discovered that such is the nature of the bird in hand, it is as well to give up all hopes of attaining favorable results. Patience will, however, accomplish much ; and it is best to give a long and careful trial before pronouncing final judgment. Young birds can be taught more easily than old ones. Yet with siskins, goldfinches, Java sparrows, and chaffinches almost any age will answer. One of the best ways to teach a bird to fly and return, or to go out of doors perched upon the finger or shoulder, is first to tease it with a soft feather in its cage, leaving the door open. The

bird at first will appear frightened, but, on finding that no harm is intended, will peck at the feather, which should be quickly withdrawn. The bird, soon thinking that it has mastered the feather, thereby gains confidence, and will peck at the finger: soon it will come out of its cage, and perch upon the hand. A few choice morsels should be laid down for it; and in this way it will soon learn to eat from the hand itself. The bird should then be made acquainted with some call, which should invariably be used whenever the training is going on; after a short time the bird can be placed upon the shoulder, and carried from one room to another, care being taken to close the windows and outside doors. In this way it will speedily become accustomed to being handled, and can be allowed to fly about the room, inviting it to return by the previously-arranged call or whistle. As soon as it attends to the call without appearing nervous or frightened, it can be taken into the open air, and gradually accustomed to being carried abroad without its offering to fly.

Adult birds should not be carried into the open air in the spring or in pairing time; for at this season of the year they show indications of resuming their native wildness. A siskin, goldfinch, or canary can easily be tamed by cutting away more or less of the inner web of the pinion-feathers, care being taken that the bird shall have sufficient power to fly from the hand without injury. The nostrils are then smeared with any essential oil, — bergamot is as good as any, — which will render it partially insensible for a

time. It should then be placed upon a finger, and changed from one to another. It may fly a few times, but should be brought back, and kept upon the hand until the effects of the oil have wholly passed away, when the bird, finding no harm is intended, will sit quietly. A few crushed hemp-seeds should be given for its good behavior, and the above repeated from day to day until a satisfactory result is obtained. Hunger will speedily teach a bird to take food from the hand. Place it in a small cage, — one that has a door large enough for the hand to pass through, — then remove all food. In a few hours try putting a seed-dish into the cage with your hand: if the bird flutters wildly about, and refuses to accept your offering, remove your dish, and wait a few hours longer. You will not be compelled to remain long in suspense, for two or three trials will generally effect a good result. After food has been accepted from the dish, try your hand; and as soon as you have convinced your pupil that only from you can food be procured, and to you, and you only, must he look for all his goodies, a friendship will be formed which he will not be first to break. Birds that are desired to be tame should be talked to and made of: they should be placed upon your writing-table, and every now and again a little notice taken of them. It is surprising how speedily these little fellows will learn the difference between neglect and attention. Some of the best birds which have been placed on exhibition have been those owned by tailors and shoemakers, who, owing to the nature

of their business, could keep their feathered pupils constantly with them.

Thus far I have spoken only of taming these "little dewdrops." They are capable of still greater things, and can, with little or no coercion, be taught to perform many amusing tricks. The goldfinch and siskin may be taught to fire off small cannon, to imitate death, to draw up their food and water in a little bucket. The apparatus consists of two lines of broad, soft leather, in which there are four holes, through which their feet and wings are passed, and the ends are held together beneath the belly by a ring, to which is attached a delicate chain that supports the buckets containing the food and drink. A bird thus equipped will draw up the chain by its beak, retaining the draw links by its feet, and thus succeeds in obtaining what he wishes. A cage can be made with a bay-window, in the floor of which have a hole: across this place a narrow bridge of wood, to which attach a small chain or piece of cord to hold the bucket, which should be about the size of a thimble. By drawing up the bucket filled with water, and letting the bird drink, then lowering it and pulling it part way up, he will soon acquire the habit of working at it. And, by gradually leaving a longer and longer length of chain between the bridge and the bucket, the bird will soon discover that he must pull the chain up into the cage, and hold it after it is there; and he readily comprehends the necessity of holding the chain with his foot. As soon as this is done, his education is complete.

Birds which are taught in this way never forget, and are always unhappy if out of their cage. Care should be taken to see that the working of the apparatus is not hard, and that it is always in order, otherwise a serious result might follow. A chain attached to a little wagon may be drawn into the cage and held in the same manner; and the bird may be taught to ring a bell by suspending it in a corner of the cage, and leaving him without seed until he is hungry, pulling the string attached to it and ringing it, and putting some favorite food into the glass. He will soon discover, that, whenever the bell rings, he gets his food, and will seize the string and ring it whenever he is hungry.

A few words of advice to those about purchasing a bird. All lovers of birds desire one with beautiful plumage, as well as one gifted with exquisite powers of song. There are times when it is impossible to secure both advantages in one bird, and, when this should be the case, always select the bird for his beauty of song, never for plumage. In visiting a bird-store to make a purchase, — perhaps your first one, — if the dealer has a large stock, and there is an incessant singing, it is almost an impossibility for any person to select just such a bird as he desires. One that the purchaser may think is an elegant singer may, after you have him alone, prove to be only a “twittering” bird, and his song composed of only six or eight notes. Again, you may select a bird for a sick friend who desires something quieting, — something that will sing

“words of comfort for hours of sorrow:” you may possibly select just such a bird ; but nine times out of ten you are liable to select a loud, shrill singer, whose notes seemingly pierce the brain.

How are you to obtain that which you so much desire? You have a friend whose bird just suits you ; but that particular song you cannot by any possibility select in a bird-store. You have but one resource left ; and that is, your confidence in the dealer : tell him plainly what you wish ; and, if he has such a bird, you may depend upon his giving it to you ; for he knows, even better than the purchaser, just what is required ; and he will strive to please you, thereby not only gaining your esteem, but also the patronage of your friends, whom you will assuredly send to “your bird-store.” One source of great annoyance to a dealer is, after having selected such a bird, for the purchaser to turn to some other patron (*always a perfect stranger*) and ask his or her opinion of the bird, and then take the advice of a person whom they never saw before, and probably will never see again, and select a bird which the dealer knows is not what is desired, and in a few days — a week at furthest — return to exchange it ; when, by taking the dealer’s first selection, and holding no conversation with a stranger whose knowledge of a bird may have been as profound as the bird’s knowledge of him or her, thereby causing a “little unpleasantness” between dealer and patron, which was as needless as it was unnecessary.

Many persons have an idea that a bird with clear

yellow feathers is the best singer, while others maintain that those with dark-green feathers are the best, and yet others think that a mottled bird is the best singer ; and many times it is hard to convince people otherwise. Upon inquiry, we find these ideas usually based upon the fact, that a friend of theirs once had a bird such and such a color, and it was a very fine singer, and they have been repeatedly told, that that colored bird was the best singer. To those who labor under this delusion we will simply state, that there are birds of every color that are inferior singers, and also those of every color that are very superior singers. The fact is, a bird's feathers have no more to do with his song than a lady's dress has to do with her voice. If a lady cannot sing with a plain dress, I doubt very much whether a *moire* trimmed with real lace would give her that much-wished-for accomplishment. In selecting a cage for a bird, always look first to his comfort, never forgetting that he is our little caged prisoner, and our first duty is to make his prison-life happy. The canary and many other birds will live happily in a cage of any size or shape ; while there are many birds that must be confined in a flat-top cage ; others again that must be kept in a cage the top of which must be of wood. The bird-dealer is always the best judge of the kind of cage best adapted to a bird's requirements ; and, if you follow his advice, you cannot go amiss. The improvements made in cages for the comfort of its occupant during the past three years have been very many ; and, in mak-

ing these improvements, style also has been consulted. We have the beautiful moresque, the Chinese pagoda, the Swiss cottage, the mansard, gothic, and in fact styles after every order of architecture, and many of them are very beautiful, and certainly pleasing to the eye. A bird's comfort, however, should be consulted a little, never forgetting that he is your caged prisoner; and your first thought always must be to make his prison life happy. Very few who own a

“Little dewdrop of celestial melody”

give a moment's thought to the fact that many of the song-birds require vastly different cages. A canary will pour forth his chant in any cage in which you place him. True, he loves a large cage, and will fly from one end to the other for joy. He will even take a bath several times a day if the opportunity is given him, and plume his feathers times without number. All this he will do, as well as eat, and sing occasionally. Should you keep such a bird for a pet, such a cage would answer every purpose: if you keep the bird for his song, then he must be kept in a small cage.

Owners of feathered songsters must have observed that many of them constantly flutter their wings, and look up as if about to fly upwards; others again look up, and turn their heads backwards, until you think they will fall backward, which they sometimes do. Did it ever occur to the owner of such a bird that he was not in a suitable cage? for

such is the fact. To those who have not studied this branch of natural history, and buy for the first time a bird and cage, always take the bird-dealer's advice as regards the cage. Your bird will then sing readily, remain quiet, and not fly as if afraid of his life, and ruin his ^{pl}umage the first day that you possess him.

Amongst the many recent patented improvements for a bird's comfort, none are more worthy of mention than the Singer gravel-paper, and Aldom's Patent spring perch. The gravel-paper is cut of suitable sizes to fit cages of almost every shape.

The paper is a very superior quality of heavy manila, and the gravel, or bird sand, is of the choicest. It is so placed as to loosely adhere to the paper by a very small quantity of paste, made from the best of flour, which allows the bird to pick it off very readily; and this gravel is just as essential to a bird as his seed or bath. It also keeps the bottom of a cage in excellent condition; and last, though not least, it keeps the bird's feet perfectly clean, thereby keeping him, as the inventor claims, "in health and song."

The Aldom spring perch is an ingenious device at imitating the swaying of the limb of a tree: it gives to the bird a very graceful appearance; and is unlike the old-fashioned swing, which has broken so many limbs of birds. With this perch such an occurrence is an impossibility. An illustration can be seen at the end of this work.

A few words more, and we say — well, never mind what we say until you read the last line.

The few words are on the subject of carefully wrapping the paper around the cage in which he is taken from the store.

There are very many people who think that a bird will “smother” if covered up closely. Such, however, is not the case. A dealer knows better than any one else possibly can. And, if the purchaser would only remain quiet until the package was ready to deliver, he or she would always discover that the last thing done was to make a few small holes in the top to let out the hot air, but by no means let in cold; if so, a bird would assuredly *catch cold*. And lastly I will say to all who now own birds, or ever expect to, that all they require is suitable seed, as you have been informed in the body of this work, clean water for drinking and bathing daily, gravel-paper or sand on the bottom of the cage, a little green stuff or sweet apple, once in three or four weeks, — not oftener, — and *nothing else*.

TO CLEAN A BRASS, SILVER, OR GOLD PLATED CAGE, always wash with a sponge or piece of old towel, using clear cold water, and wipe dry. The surface of these cages being varnished, if hot water is used, they will have the appearance of being spattered with milk, which can never be removed. If they are scoured the same as brass ware ordinarily is, the varnish will be removed, and the cage commence to corrode, and require polishing daily.

WE HAVE CONSTANTLY ON HAND :

German and French, or Long-Breed Canaries,	Amandava, or Avadevet,
Bulfinches, Trained and Un-trained,	Red and Blue Macaw,
Nightingales,	Blue and Yellow Macaw,
Goldfinches,	White Cockatoo,
Gray and Green Linnets,	Red and White Crested Cockatoo,
Chaffinches,	Leadbeattle Cockatoo,
Siskins,	Cockadillas,
African Finches in variety,	Parrot, Ash-colored,
Java Sparrows,	“ Yellow-headed,
Thrushes,	“ Half Yellow-headed,
Black Birds,	“ West-India,
Starlings,	“ Carolina,
Mocking-Birds,	Red-crested Parrot,
Troopials,	Whiskered Parrot,
Black-Caps,	Pavouan Parrot,
English Robins,	Great Green Macaw,
Skylarks,	Great White Cockatoo,
Woodlarks,	Great Red-crested Cockatoo,
White Throat,	Parrakeets, Australian (or Shell),
Purple Finch,	“ African (or Love Birds),
Song Sparrow,	“ West India,
English Sparrow,	“ South America.

The following Birds we are constantly buying for exportation : —

Indigo Bird,	Red Linnet,
Blue Robin,	Bobolink,
Oriole,	Blue Jay,
Red-Bird, or Virginia Cardinal,	Meadow Lark,
Nonpareil,	Scarlet Tanager,
Yellow-Bird,	Red-winged Starling.

CHARLES REICHE & BROTHER,

55 Chatham Street New York,
9 Bowdoin Square . . . Boston, Mass.,

IMPORTERS AND DEALERS IN ALL KINDS OF

Rare Birds, Animals, Reptiles,

SEA SHELLS, STUFFED BIRDS, AND CURIOSITIES.

MR. CHARLES REICHE is now located permanently in Europe, for the purpose of collecting CANARIES, and other European Song-Birds. Also BIRDS OF PLUMAGE, as well as ANIMALS of all kinds, suitable for

**Zoological Gardens, Menageries, and
Private Game-Parks,**

As we have exclusive contracts with the Bremen Line of Steamers, it enables us to keep up our importations very regular; and dealers, as well as the general public, can rely on obtaining the Choicest Birds, and at the lowest prices.

Connected with our BOSTON STORE is a

DEPARTMENT OF TAXIDERMY.

Those having Pet Birds or Animals die, and wishing to have them preserved in a superior manner, can do so by forwarding them to us by express.

A good assortment of STUFFED BIRDS constantly on hand.

CHAS. REICHE & BRO.

Are the Sole Manufacturers of

Reiche's Prepared Food

For Mocking and other Soft-Bill Birds.

Also Wholesale and Retail Dealers in

CANARY, RAPE, HEMP, MILLET, AND
POPPY SEED.

C A G E S,

GOLD AND SILVER PLATED, BRASS, BRONZE,
ENAMELLED AND WOODEN,

Of all Shapes and Sizes, and adapted to all kinds of Birds.

Bathing-Dishes, Cups, Jars,
Fountains, Bottles, Nests,
Cuttle-Fish, Gravel,
Perchwood, &c.

The public are respectfully invited to examine our stock.

CHAS. REICHE & BRO.

CHAS. REICHE, ALFELD, GERMANY.

HENRY REICHE, 55 CHATHAM STREET, NEW YORK.

CHAS. F. HOLDEN, BOSTON, MASS.

G. GUNTHER,

NO. 104 WILLIAM STREET,
NEW-YORK CITY,

MANUFACTURER OF THE

Improved Japanned Bird-Cages,

WITH RECENTLY-PATENTED FASTENING,

which prevents that great annoyance,

THE BOTTOM DROPPING OFF.

Also Exclusive Manufacturer of

Brass Cages with Spring-Door

AND SPRING-CATCHES FOR THE CUPS,

The arrangement of which renders it impossible to ever lose
a bird, as

ALL THE OPENINGS ARE SELF-CLOSING.

ILLUSTRATED CATALOGUES SENT ON APPLICATION.

ESTABLISHED IN 1848.

AT OUR STORE IN BOSTON,

WE WILL RECEIVE ORDERS FOR THE

PATENT

Incubator and Artificial Mother.

This Incubator has always

TAKEN THE FIRST PREMIUM

Wherever Exhibited.

PRICES OF INCUBATORS AND ARTIFICIAL MOTHERS.

No.	Eggs.	Heat	all around			Boxing.
No. 1.	50				\$60.00	\$3.00
" 2.	100	"	"	"	85.00	3.50
" 3.	200	"	"	"	100.00	3.75
" 4.	400	"	"	"	125.00	4.25
" 5.	600	"	"	"	150.00	4.75
" 6.	1,000.	"	"	"	200.00	5.25

ARTIFICIAL MOTHERS.

No.	Without Regulator					Boxing.
No. 1.					\$7.00	
" 2.	"	"			15.00	
" 1.	With Regulator				30.00	\$2.75
" 2.	"	"			40.00	3.00
" 3.	"	"			50.00	3.25
" 4.	"	"			60.00	4.00

THE CONSTANT AND INCREASING INQUIRY

FOR

Eggs from Premium Imported Fowls

Has induced us to make arrangements with one of

THE LARGEST BREEDERS OF FOWLS

IN THE UNITED STATES;

And we will send by express, safely packed, on receipt of price, as follows :—

	Per doz.
Partridge Cochin Eggs	\$6.00
Buff Cochin Eggs	6.00
White Cochin Eggs	6.00
Black Cochin Eggs	6.00
Golden Hamburg Eggs	6.00
Dark and Light Brahma Eggs	6.00
Black-breasted Red Game Eggs	5 00
Black Spanish Eggs	5.00
White and Brown Leghorn Eggs	5.00
White-crested Black Poland Eggs	5 00
Dominique Eggs	5.00

BREEDING, TRAINING,
MANAGEMENT, AND DISEASES
OF
D O G S.

THIRTY-ONE ILLUSTRATIONS.

WITH AN EASY METHOD OF INSTRUCTING IN A GREAT
VARIETY OF AMUSING AND USEFUL
PERFORMANCES.

By FRANCIS BUTLER.

Cloth, 250 pp. \$2.00. By mail, free of postage.

Address,

9 BOWDOIN SQUARE,

BOSTON, MASS.

AQUARIUM, BRONZED.

No. 3.



Large. — Height, 32 inches ; Diameter, 34 inches. Price \$45.00.

Small. — Height, 24 inches ; Diameter, 24 inches. Price \$25.00.

Samples of various styles can be seen at

No. 9, BOWDOIN SQUARE.

HILDRETH & RICE,

MANUFACTURERS OF

Wooden Bird-Cages,

NO. 16 MIDDLE STREET,

LOWELL, MASS.



CAGES ADAPTED TO ALL KINDS OF BIRDS.



MOCKING-BIRD AND BREEDING CAGES

A SPECIALTY.

H. A. HILDRETH.

F. E. RICE.

O. LINDEMANN & CO.,

MANUFACTURERS OF

Japanned and Patent Bright Metal

BIRD-CAGES.



Patented Oct. 4, 1870; Nov. 7, 1871; March 12, 1872.

Re-issued Oct. 29, 1872.

OFFICE AND SALESROOM:

No. 254 Pearl Street, New York.

Factory, Nos. 252, 254, & 256 Pearl Street.

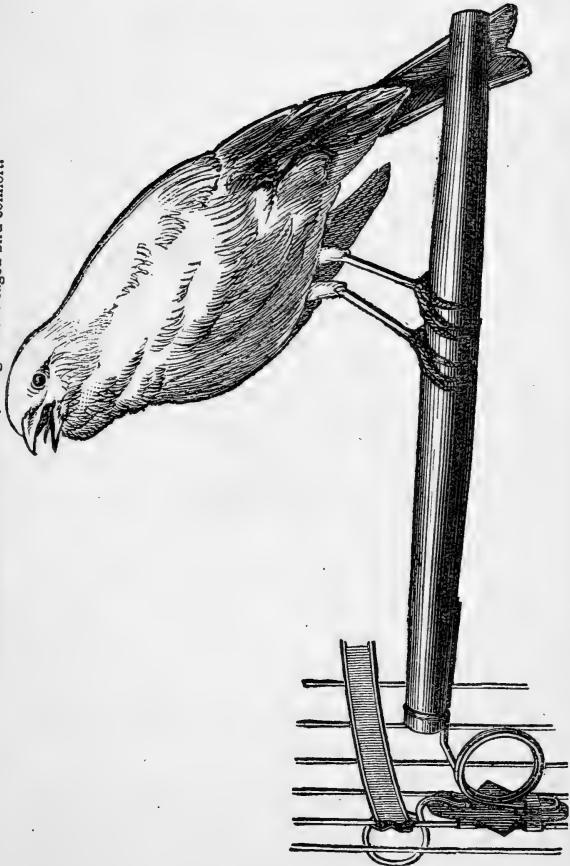
ALDOM & BROWN,

62½ CARMINE STREET, NEW YORK,

SOLE MANUFACTURERS OF

ALDOM'S PATENT SPRING BIRD-PERCH.

Imitates the swaying of a tree-branch, and gives the caged bird comfort.



First Premium awarded, in 1872, at the American Institute and Brooklyn Fairs. For sale by all Bird-Dealers and House-furnishing Stores throughout the country.

PATENTED

April 14, 1863; Feb. 28, 1865; Sept. 27, 1870; May 9, 1871;
Sept. 5, 1871; Sept. 5, 1871; March 26, 1872;
July 30, 1872.



Three doors West of Broadway,

NEW YORK.

SOLE MANUFACTURERS OF THE CELEBRATED

“OSBORN” CAGES,

FOR BIRDS AND ANIMALS.

PLATED AND BRIGHT METAL CAGES.

ALVAN DRAYTON, GENERAL AGENT.

LIBERAL DISCOUNT TO THE TRADE.

SINGER'S PATENT GRAVEL PAPER,

FOR THE

BOTTOM OF BIRD-CAGES,

PREVENTS filth, disease, sore feet, and vermin. Forms an artificial ground for the bird to scratch and pick in. Saves time and trouble, and keeps the bird in health and song.

Put up in the following sizes :—

Round, $8\frac{1}{2}$ inches diameter.	Round, $9\frac{1}{2}$ inches diameter.
“ $8\frac{3}{4}$ “ “	“ 10 “ “
“ 9 “ “	Square, 10 inches by 10 inches.

500 packages of any special size made to order.

PRICE LIST.

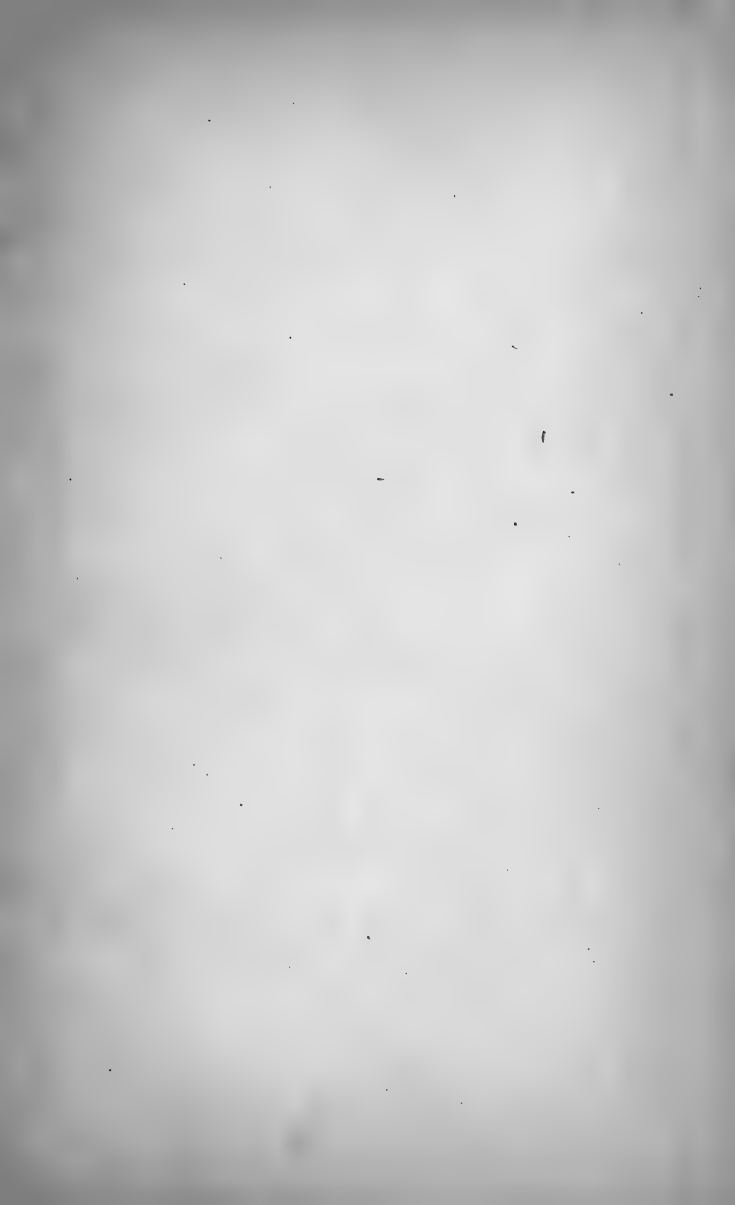
We will hereafter designate 12 packages, of 12 papers each, a dozen; price to the trade \$1.80: 144 packages, a gross; price \$21.60; &c. Parties, in ordering, will be careful to state the exact quantity of each size they require.

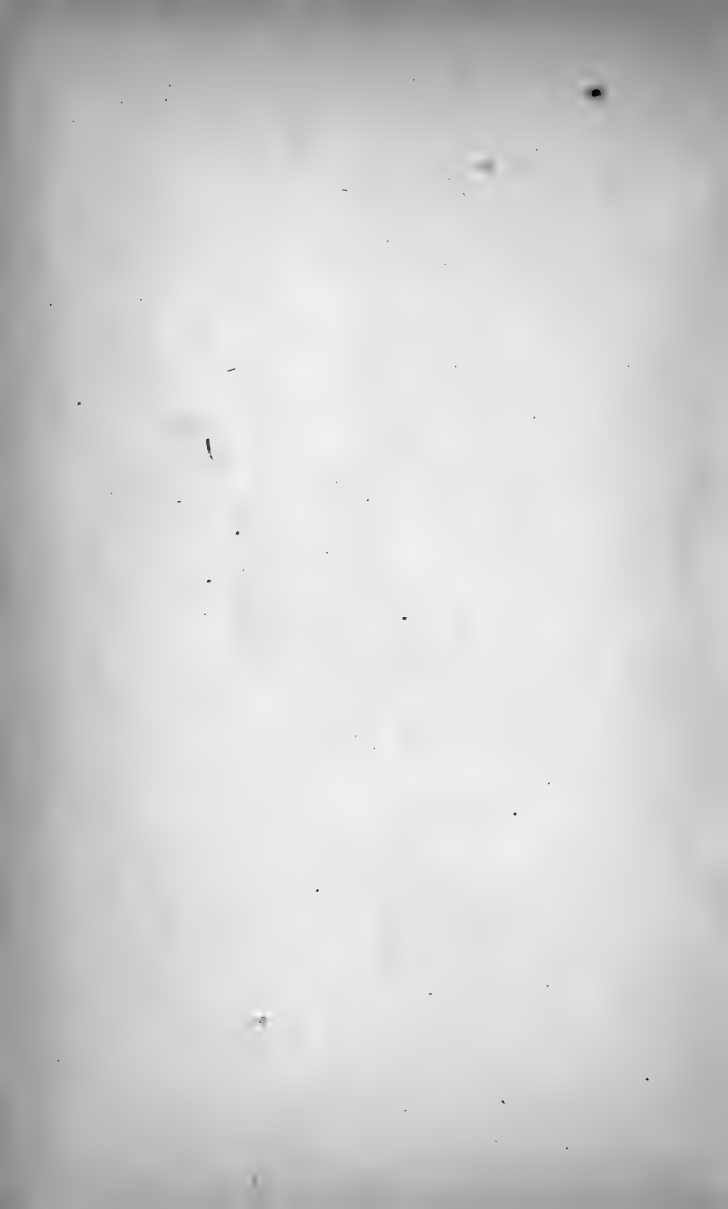
CAUTION.—Be careful not to purchase INFRINGEMENTS, AS WE SHALL PROTECT OUR PATENT.

SINGER GRAVEL PAPER CO.,

582 HUDSON STREET, NEW YORK.











LIBRARY OF CONGRESS



0 002 844 257 9