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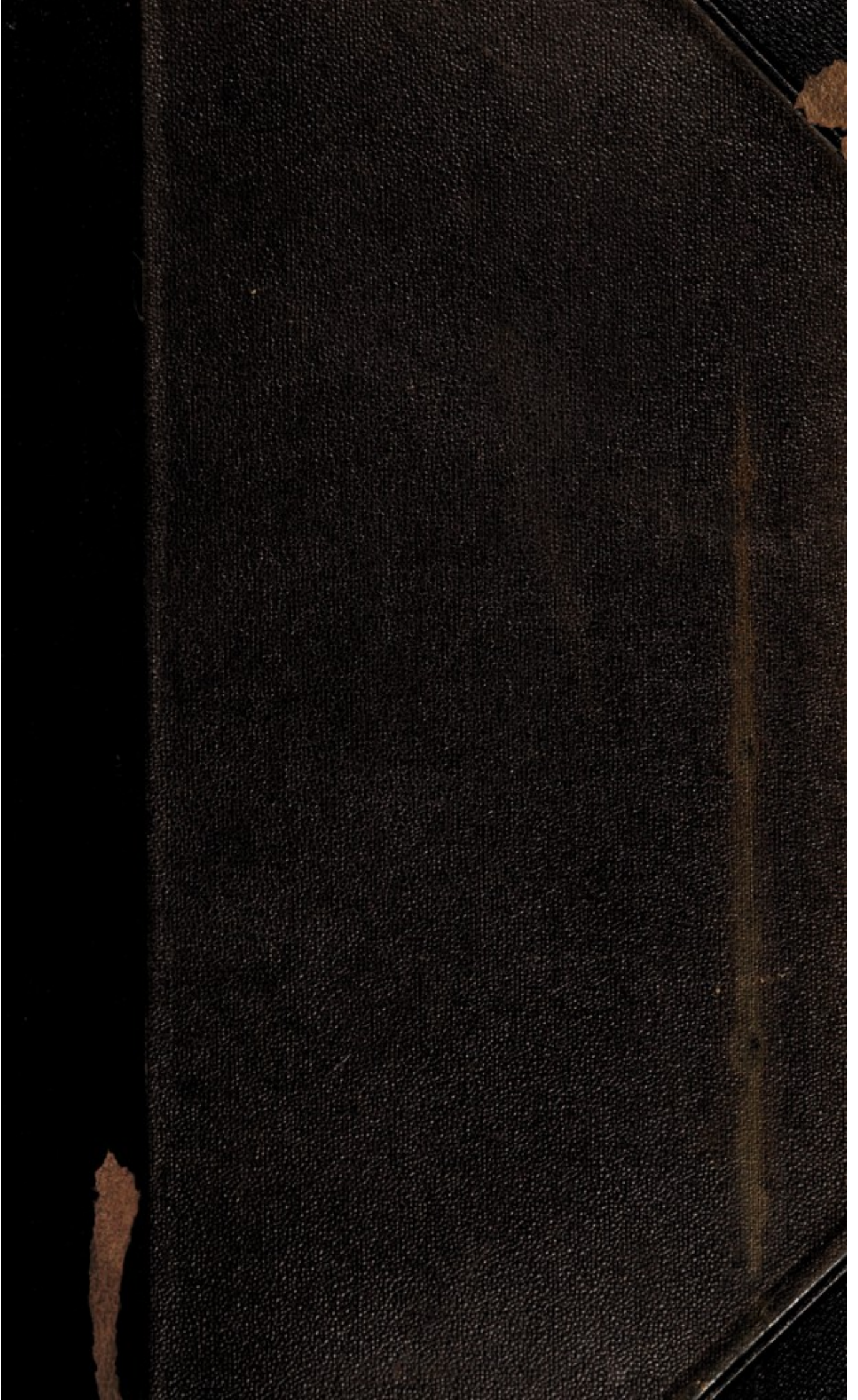
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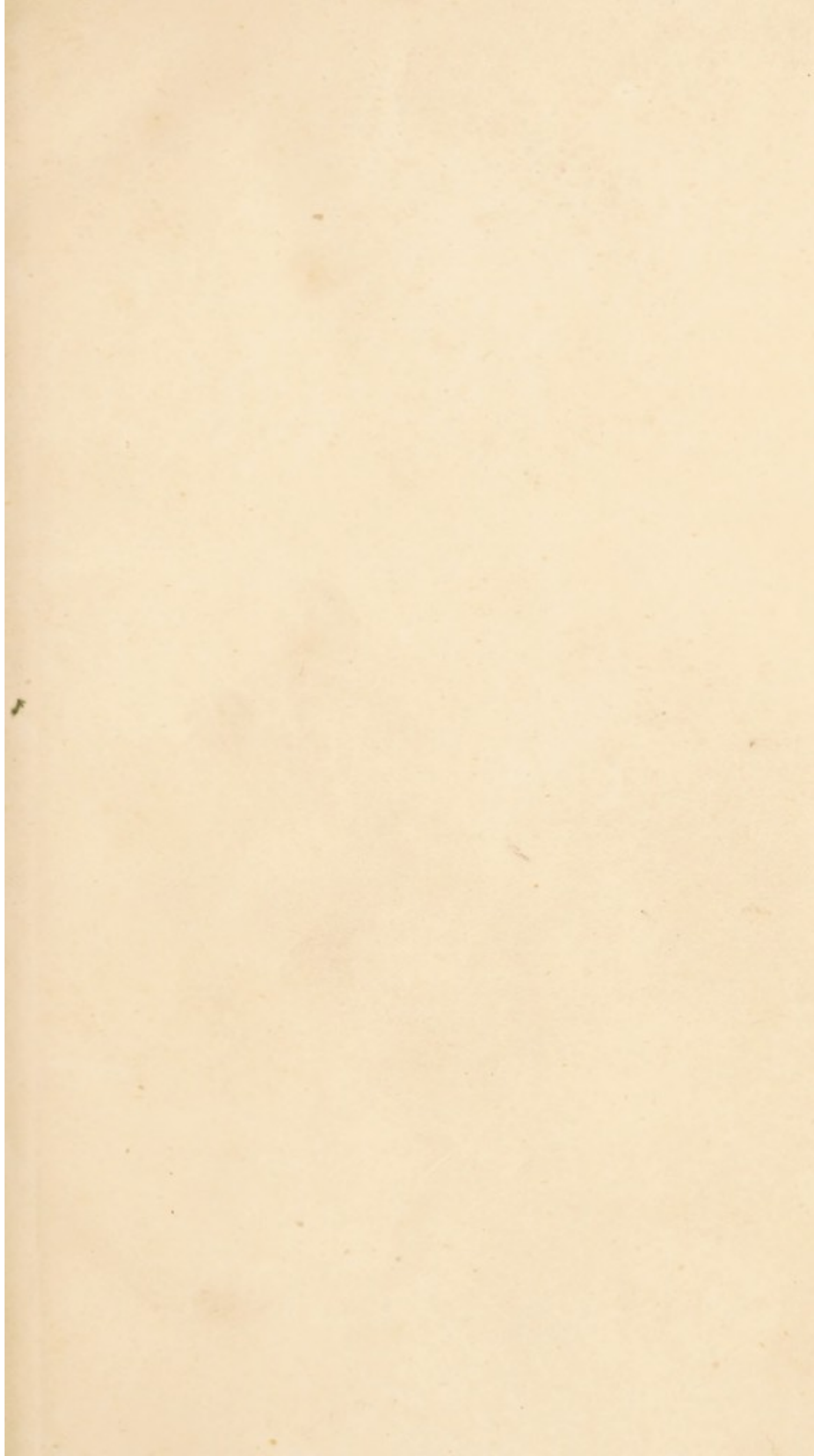
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BRITISH ZOOLOGY.

VOL. I.

Printed by S. Hamilton, Weybridge.

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CLASS I.

QUADRUPEDS.

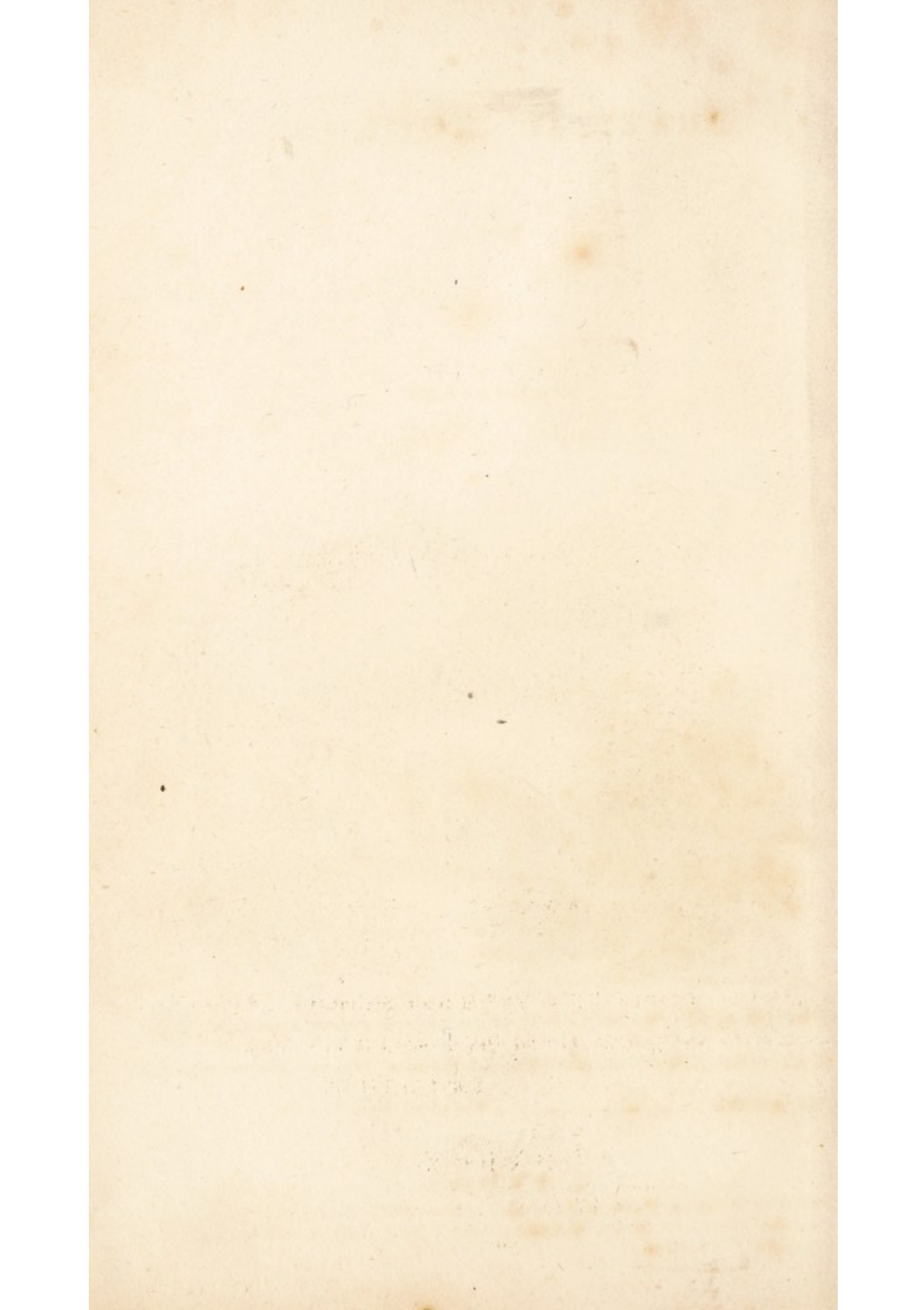


Si qui sint qui in urbe sua hospites. in patria sua peregrini. et cognitione semper
pueri esse velint tibi per me placeant. tibi dormiant. non ego illis hæc conscripsi
non illis vigilavi. _____ Camdeni Brit. Præfat.

L O N D O N.

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J. Mawman. and J. Johnson & C^o.

1812.



BRITISH ZOOLOGY,

BY

THOMAS PENNANT, Esq.

A NEW EDITION.

IN FOUR VOLUMES.

VOL. I.



CLASS I. QUADRUPEDS.

II. BIRDS. Div. I. LAND.

LONDON:

PRINTED FOR WILKIE AND ROBINSON; J. NUNN; WHITE
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J. RICHARDSON; J. MAWMAN; J. AND A. ARCH;
R. BALDWIN; AND J. JOHNSON AND CO.

—
1812.



TO THE
DUTCHESS DOWAGER
OF
PORTLAND,

THIS WORK IS DEDICATED,
AS A GRATEFUL ACKNOWLEDGEMENT
OF THE MANY FAVORS
CONFERRED BY HER GRACE
ON HER MOST OBLIGED,
AND MOST OBEDIENT
HUMBLE SERVANT,

THOMAS PENNANT.

Downing,
March 1, 1777.

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PREFACE.

AT a time, when the study of natural history seems to revive in *Europe*; and the pens of several illustrious foreigners have been employed in enumerating the productions of their respective countries, we are unwilling that our own island should remain insensible to its particular advantages; we are desirous of diverting the astonishment of our countrymen at the gifts of nature bestowed on other kingdoms, to a contemplation of those with which (at lest with equal bounty) she has enriched our own.

A judicious Foreigner has well remarked, that an *Englishman* is excusable should he be ignorant of the papal history, where it does not relate to *Great Britain*; but inexcusable should he neglect inquiries

into the origin of parlements, the limitation of the royal prerogative, and the gradual deviation from the feudal to the present system of government.

The observation is certainly just, and the application appears too obvious to be pointed out; yet the generality of mankind can rest contented with ignorance of their native soil, while a passion for novelty attracts them to a superficial examination of the wonders of *Mexico*, or *Japan*; but these should be told, that such a passion is a sure criterion of a weak judgement: utility, truth, and certainty, should alone be the point at which science should aim; and what knowledge can be more useful than of those objects with which we are most intimately connected? and where can we reason with greater certainty on such points, than in our own country, where a constant recourse may be had to the specimen of what we have under consideration? But these, and many other arguments for examining into the productions of our own island, may here

be waved, as the admirable LINNÆUS has displayed them at large in an oration,* which for masterly reasoning, and happy ingenuity, may vie with the best compositions.

Yet, as that great naturalist has, in the same tract, published an eulogium on *Sweden*; and as an incitement to his countrymen to apply themselves to the study of nature, enumerated the natural productions of that kingdom; we shall here attempt a parallel, and point out to the *British* reader, his native riches; many of which were probably unknown to him, or perhaps slightly regarded.

Do the heights of *Torsburg*, or *Swucku*, afford more instruction to the naturalist than the mountains of *Cumberland*, or *Caernarvonshire*? whose sides are covered with a rich variety of uncommon vegetables, while their bowels are replete with the most useful minerals. The *Derbyshire* hills, abounding in all the magni-

* *Amæn. Acad. Tom. II. p. 409. Stillingfleet's Swedish Tracts, Tr. 1.*

ficence of caves and cliffs; the mountains of *Kerry*, and that surprizing harbour the *Bullers of Buchan*,* may well be opposed to the rocks of *Blackulla*, or the caverns of *Skiula*. *Sweden* can no where produce a parallel to that happy combination of grandeur and beauty in *Keswick* vale,† or *Killarny*‡ lake; nor can *Europe* shew a natural wonder equal to the *Giant's Causeway* in the north of *Ireland*.

The excellence and number of our springs (whether medicinal or incrusting) are well known to common inquirers.

Our minerals are as great in quantity, as rich in quality: of gold, indeed, we cannot produce many specimens, yet sufficient to shew that it is found in this island;§ but silver is found in great abund-

* Between *Aberdeen* and *Peterhead*.

† In *Cumberland*.

‡ In the county of *Kerry*.

§ That our country produces gold, appears in *Dr. Borlase's History of Cornwall*, p. 214. So late as the year 1753, several pieces were found in what the miners call *stream tin*; one specimen was as thick as a goose quill; others weighed to the value of seventeen shillings, twen-

ance in our lead ores, and veins of native silver in the copper ore of *Muckrus*, on the lake of *Killarny*. The hæmatites iron ores of *Cumberland*, and the beautiful columnar iron ores of the forest of *Dean*, are sufficient to display our riches in that useful commodity. No country produces so great a quantity of tin as *Cornwall*; and that county, and several others in the north, have been long noted for their inexhaustible veins of copper: nor less famous are the lead mines of *Derbyshire*, *Cardiganshire* and *Flintshire*, which have been worked for ages, yet shew no sign of the decline of their stores.

In all these, nature sports with great luxuriance; the crystallized lead ore of *Tralee*,* the fibrous lead ore of *Tipperary*; the laminated lead ore of *Lord Hoptoun's* mines; the crystallized tins, and the figured ores of *Zink*, are equally noted for their elegance, scarcity, and richness.

ty-seven shillings, and another even to the value of three guineas.

* In the county of *Kerry*.

The ore of *Zink*, or *Lapis Calaminaris*, is found in vast quantities in the counties of *Somerset* and *Flint*; while *black lead* or *wadd*, a substance scarce known in other kingdoms, abounds in the mountains of *Cumberland*.

To the *Swedish Petroleum*, we may oppose the Well at *Pitchford*, and that of *St. Catherine's* near *Edinburgh*. Our amber and our jet, together with our inexhaustible strata of coal found in so many parts of this kingdom, will, in the article of bitumens, give us the superiority over these so much boasted productions of *Sweden*.

To avoid a tedious enumeration, we shall only mention our wonderful mines of rock salt; our allum and our vitriol works; our various marbles, alabasters, and stones; our most excellent clays and earths;* all which articles, and many

* If the inquisitive reader is desirous of a farther account of the number and excellence of our subterraneous productions, we refer him to the learned Dr. *Woodward's Catalogue of the English Fossils*, London 1729, particularly to p. 5.

more unnoted here, might have furnished us with an ample field for panegyric.

Our botanical productions are not less abundant; but the works of *Ray*, which have lately been much enlarged and methodized, according to the *Linnæan* system, by the ingenious Mr. *Hudson*, in his *Flora Anglica*, are a sufficient display of our vegetable riches.

Our Zoology would be a copious subject to enlarge on, but the work in hand restrains us from anticipating our reader's curiosity. We might expatiate on the clouds of *Soland* geese which breed on the *Bass island*, or *Puffins* on that of *Priestholme*: on our fish, and other marine animals; on our insects, and the various other sensitive productions of this kingdom; but we forbear a parade of useless declamation, and shall only add, that as few countries receive more advantages from their natural breed of quadrupeds, unmixed with any beast that preys on man, so, few can boast a greater variety of birds, whether local, or migratory.

This is a general view of the natural history of our own country; why then should we neglect inquiring into the various benefits that result from these instances of the wisdom of our Creator, which his divine munificence has so liberally, and so immediately placed before us? Such a neglect is certainly highly to be blamed, for (to express ourselves in the words of an eminent writer) “ the Creator
“ did not bestow so much curiosity, and
“ workmanship on his creatures, to be
“ looked on with a careless incurious eye,
“ especially to have them slighted or con-
“ temned; but to be admired by the
“ rational part of the world, to magnify
“ his own power to all the world, and the
“ ages thereof; and since the works of the
“ creation are all of them so many de-
“ monstrations of the infinite wisdom and
“ power of God, they may serve to us, as
“ so many arguments exciting us to a con-
“ stant fear of the Deity, and a steady and
“ hearty obedience to all his laws.”*

* *Derham's Phys. Theol. Book XI. c. 24.*

Much might be added to this subject, if considered in a theological light; but since the writings of *Boyle*, *Ray*, and *Derham*, fully prove that the study of natural history enforces the theory of religion and practice of morality, we had better refer to their works in general, than mangle them by imperfect quotations.

To exalt our veneration towards the Almighty, is the principal end of this sublime science; and next to that, the various benefits resulting from it to human society deserve our serious consideration.

To give an obvious instance: what wonderful changes have been made in human affairs by the discovery of an obscure mineral. The antients, ignorant of the application of the magnet, timidly attempted a mere coasting navigation; while we, better informed of the uses of it, traverse the widest oceans, and by the discovery of the new world, have layed open to science, an inexhaustible fund of matter.

The rise and progress of medicine, kept

pace with the advancement of this most important discovery; and though necessity was the parent of the mechanic arts, yet they also throve, and grew to maturity, under the same influence.

Many more instances might be added to this brief view of the utility of natural knowlege; but we shall only give some of its uses in the polite arts, which have hitherto been too little connected with it.

To instance particularly in painting, its uses are very extensive: the permanency of colors depends on the goodness of the pigments; but the various animal, vegetable, and fossil substances (out of which they are made), can only be known by repeated trials; yet the greatest artists have failed in this respect: the shadows of the divine *Raphael* have acquired an uniform blackness, which obscures the finest productions of his pencil, while the paintings of *Holbein*, *Durer*, and the *Venetian-school* (who were admirably skilled in the knowlege of pigments), still exist in their primitive freshness.

But these advantages are small, compared to those derived from the knowledge of nature in the representation of objects: painting is an imitation of nature; now, who can imitate without consulting the original? But to come to what is more particularly the object of our inquiries; animal and vegetable life are the essence of landscape, and often are secondary objects in historical paintings: even the sculptor in his limited province would do well to acquire a correctness of design with a perfect knowledge of the muscles of animals. But the painter should have all this and more; he should be acquainted with all their various tints, their manner of living, their peculiar motions or attitudes, and their places of abode,* or he will fall into manifest errors.

* That great artist, Mr. *Ridinger*, of *Augsburg*, exceeds all others in the three last particulars; nothing can equal his prints of animals for propriety of attitudes, for a just idea of their way of life, and for the beautiful and natural scenery that accompanies them. His finest works are, his *Wilde Thiere*, *Kleine Thiere*, and *Jagdbare Thiere*; but there are scarce any of his performances that can fail

Plurimus inde labor tabulas imitando juvabit
Egregias, operumque typos, sed plura docebit
Natura ante oculos præsens, nam firmat et auget
Vim genii, ex illâque artem experientia complet.*

Descriptive poetry is still more indebted to natural knowlege, than either painting or sculpture: the poet has the whole creation for his range; nor can his art exist without borrowing metaphors, allusions, or descriptions, from the face of nature, which is the only fund of great ideas. The depths of the seas, the internal caverns of the earth, and the planetary system, are out of the painter's reach; but can supply the poet with the sublimest conceptions: nor is the knowlege of animals and vegetables less requisite, while his creative pen adds life and motion to every object.

From hence it may be easily inferred, that an acquaintance with the works of nature is equally necessary to form a genuine and correct taste for any of the giving pleasure to all admirers of nature represented as herself.

* *Fresnoy de arte graph. lin. 537.*

above-mentioned arts. Taste is no more than a quick sensibility of imagination refined by judgement, and corrected by experience; but experience is another term for knowlege:* and to judge of natural images, we must acquire the same knowlege, and by the same means, as the painter, the poet, or the sculptor.

Thus far natural history in general seems connected with the polite arts; but were we to descend into all its particular uses in common life, we should exceed the bounds of a preface: it will be therefore necessary to confine our inquiries to the investigation of a single part of the material world, which few are so ignorant as not to know is divided into the animal, vegetable, and fossil kingdoms.

Vast would be the extent of the inquiries into each of these; but though ambition may tempt us to pervade the whole field of science, yet a little experience will open to our views the immense tracts of

* See the Essay on the origin of our ideas of the sublime and beautiful.

natural knowlege, and we shall find it an arduous task only to investigate a single province, so as to speak with precision and certainty ; without which there can be no real improvements in natural history.

For these reasons, a partial examination of this science is all that a considerate mind will aim at, which may perhaps be most naturally guided to give the preference to the most exalted subject of it.

Zoology is the noblest part of natural history, as it comprehends all sensitive beings, from reasoning man, through every species of animal life, till it descends to that point where sense is wholly extinct, and vegetation commences : and certainly none will deny, that life, and voluntary motion, are superior to a mere vegetating principle, or the more inactive state of the fossil kingdom.

Should we follow the train of reflections which naturally arise from the contemplation of animals, they would swell this preface into a volume : and should we only mention the various uses of *British* ani-

mals in common life, yet even these would greatly exceed the bounds to which we have thought it right to limit ourselves. The knowlege of *Diætetics* is a necessary branch of medicine, as by a proper attention to that article, an obstinate distemper may be eradicated, when common remedies have failed; but this can never be attained, without the study of Zoology, which assists us greatly in learning the different qualities of animal food; and how far a difference of nutriment may contribute to cure the disease.

Cloathing is essential, not only to our comfort, but subsistence; and the number of our manufactures, relative to this single article, demand our care for their extension and improvement; especially as the maintenance of thousands depends on these important branches of commerce; yet these may be enlarged, by discovering new properties in animals, or by the farther cultivation of those already discovered. The science of Zoology is requisite for each of these; and if we reflect

but a little on the unwearied diligence of our rivals the *French*, we should attend to every sister science that may any ways preserve our superiority in manufactures and commerce.

Domestic œconomy is an object of equal consequence; and the author* of the *Calendar of Flora* has established the uses of Zoology in this particular, with undeniable evidence. This excellent writer has united a happy invention, with the most solid judgement, and certainly merits the highest commendations, as a friend of human kind. Our ingenious countryman, and worthy friend, the late Mr. *Stillingfleet*, in the same year pursued almost the same plan as far as his time would permit, with equal success, and manifestly proved the utility of the project, in a learned discourse prefixed to his work.†

If then Zoology can suggest so many hints towards enlarging and improving our manufactures and agriculture; we shall

* *Alex. Mal. Berger.*

† *Swedish Tracts*, translated from the *Amæn. Acad.* second edition.

not think our time misapplied, in offering to the public, the NATURAL HISTORY of the *Quadrupeds* and *Birds* of GREAT BRITAIN. This compilation had its peculiar difficulties; but the labor of travelling through a dry arrangement of the subject, was very frequently alleviated by the beautiful specimens we met with in our progress: besides, we own with pleasure that we have been greatly aided by the lovers of natural history, who since the appearance of the first edition have contributed to enrich the present with several valuable observations: by collecting and digesting these materials, we have not only rendered the work more complete, but are also encouraged to trace the *British Zoology* through some of the remaining classes.

Let therefore every merit that may appear in the present edition, and every error that may have been suppressed from the former, be attributed to the kind informations we have received from our learned and ingenious friends; among

whom we are ambitious of naming the Honorable *Daines Barrington* ; the Reverend Sir **John Cullum*, Baronet ; the Reverend **George Ashby*, and the Reverend Mr. **Green* of *Cambridge* ; **William Constable*, Esquire ; Sir *Joseph Banks*, Baronet, and K. B. **Benjamin Stillingfleet*, Esquire ; **Thomas Falconer*, Esquire, of *Chester* ; Doctor *John Reinold Forster* ; the Reverend Doctor **Buckworth* ; the Reverend *Hugh Davies*, of *Beaumaris* ; Mr. **Travis*, Surgeon, of *Scarborough* ; Mr. *Latham*, Surgeon, of *Dartford* ; **Thomas Tofield*, of *Yorkshire*, Esquire ; Mr. **Plymly*, of *Longnor*, *Shropshire* ; **Owen Holland*, Esquire, of *Conway* ; **Henry Seymer*, Esquire, of *Hanford*, *Wilts* ; Doctor *Lysons*, of *Glocester* ; Doctor **Solander* ; Mr. **Peter Collinson* ; the Reverend **Gilbert White*, of *Selborn*, *Hants* ; and that Father of *British Ornithologists*, Mr. **George Edwards*, of the *College of Physicians*.†

† All marked with an asterisk I am now to deplore the loss of by death. Probably written about the year 1793. ED.

I unaccountably omitted the name of *Marmaduke Tunstall*, Esquire, of *Wycliff*, in *Yorkshire*, which I must now add to the said list; the excellency of his moral character, his uncommon liberality, and his deep skill and zeal in the study of natural history, made his loss most sincerely lamented by all who had the happiness of his acquaintance. At the same time I regret my particular misfortune, I gratefully acknowlege the benefit I received from his posthumous works. He did my *History of Quadrupeds* and my *British Zoology*, the honor of bestowing much time in illustrating them with notes. These his relative, *Edward Constable*, of *Burton Constable*, has, with great liberality, intrusted me with. The following pages will receive from them the utmost improvement. At the time I acknowlege the favor, I feelingly regret the loss of our common friend.

In the prosecution of our plan, we shall, to avoid the perplexity arising from forming a new system, adopt (as far as relates

to the *Quadrupeds* and *Birds*) that of the inestimable *Ray*, who advanced the study of nature far beyond all that went before him; and whose abilities, integrity, and mildness, were no less an ornament to the human species in general, than to his own country in particular. Yet, as this excellent man was in a manner the founder of systematic Zoology, so later discoveries have made a few improvements on his labors: wherever, then, he is mistaken in the arrangement, we shall attempt a reform, assisted by the more modern systems, all of which owe their rise to the plan chalked out by our illustrious countryman. It is unnecessary to detain the reader in this place with the reasons for our deviation from the order we observed in our last edition, for they are given at large in the Prefaces to our *Synopsis* and *History of Quadrupeds* and *Genera of Birds*.

We have, in our descriptions, wholly omitted the anatomy of animals; as that part, unless executed with the greatest skill, would be no small blemish to the

rest of this performance ; but the reader may judge of the extent of our plan, by the following heads : the character of the genus shall first be mentioned ; then the specific name ; the synonyms from different authors ; and the genera in which those authors have placed the animal. The names shall be given in several *European* languages ;* and we shall conclude with a brief, but sufficient description, adding, at the same time, the various uses, and natural history, of each individual.

If this plan succeeds, in promoting the knowlege of nature in this kingdom, we shall think ourselves amply rewarded. Could our exhortations avail, we should recommend this study most earnestly to every country gentleman. To those of

* In the ornithology the *European* names are prefixed to the author referred to in the synonyms,

Italian to Aldrovand, Olina, or Zinanni.

French Brisson, or de Buffon.

German Gesner, or Kramer.

Swedish the Fauna Suecica.

Danish and Norwegian Brunnich.

Carniolan Scopoli.

an active turn, we might say, that so pleasing and useful an employment would relieve the *tædium* arising from a sameness of diversions; every object would produce some new observation, and while they might seem only to gratify themselves with a present indulgence, they would be laying up a fund of useful knowledge; they would find their ideas sensibly enlarged, till they comprehended the whole of domestic œconomy, and the wise order of Providence.

To those of a sedentary disposition, this study would not only prove agreeable, but salutary: men of that turn of mind are with difficulty drawn from their books, to partake of the necessary enjoyments of air and exercise; and even when thus compelled, they profit less by it than men of an illiberal education. But this inconvenience would be remedied, could we induce them to observe and relish the wonders of nature; aided by philosophy, they would find in the woods and fields a series of objects, that would give to exercise

charms unknown before ; and enraptured with the scene, they will be ready to exclaim with the poet :

On every thorn, delightful wisdom grows ;
In every rill, a sweet instruction flows. YOUNG.

Thus would the contemplative naturalist learn from all he saw, to love his Creator for his goodness ; to repose an implicit confidence in his wisdom ; and to revere his awful omnipotence. We shall dwell no longer on this subject, than to draw this important conclusion ; that health of body, and a chearful contentment of mind, are the general effects of these amusements. The latter is produced by a serious and pleasing investigation of the bounties of an all-wise and beneficent Providence ; as constant and regular exercise is the best preservative of the former.

THOMAS PENNANT.

DOWNING,
March 1, 1776.

ADVERTISEMENT

OF

THE EDITOR.

IN the republication of the *British Zoology*, the Editor assumes little merit beyond that of a faithful transcriber, and a not unindustrious compiler. In the latter capacity he has to acknowledge his obligations to the labors of Dr. *Latham*, Mr. *Montagu*, Dr. *Shaw*, and of the various contributors to the valuable volumes of the *Linnæan* and *Wernerian* Societies: the sources from which he borrowed information have never been concealed. He has, moreover, the grateful task of expressing what is due for assistance from his friends; at the head of whom he is proud to place the name of Dr. *Latham*, who kindly revised the ornithological portion of the

work, and augmented it by his observations. To *Edward Hanmer*, Esquire, of *Stockgrove*, to *John Hawkins*, Esquire, of *Bognor Park*, and to Mr. *Henry Jenner*, of *Berkeley*, nephew to the philanthropic physician of the same name, he is also much indebted; but above all to that able and veteran naturalist the Reverend *Hugh Davies*, of *Beaumaris*, to whose labors the fourth volume owes, almost exclusively, its vast augmentation.

It is unnecessary for the Editor to add his praise to the well-earned reputation of the author of the *British Zoology*; but it must surprise the reader (who considers the small attention which had been paid to the science of Natural History at the time Mr. *Pennant* wrote), to perceive how few additions are made to the catalogue of Quadrupeds, Birds, and Fishes, and how few corrections have been necessary. The succeeding classes, unfortunately, had not obtained an equal share of his attention; and it must be confessed that the Divisions of *Crustacea*, -of Worms (properly

so called), and of *Mollusca*, are still imperfect. Much has been done by Mr. *Montagu* on these subjects; and the vast collection he has formed of marine productions, enables him to do much more. It is to be hoped he will not withhold what he is so able to communicate, and that he or other naturalists will prosecute Mr. *Pennant's* labors, and complete what is still deficient of the BRITISH ZOOLOGY.

THE EDITOR.

May 1, 1812.

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CLASS I.

QUADRUPEDS.

CLASS I

QUADRUPLES

CLASS I.

QUADRUPEDS.

- DIV. I. HOOFED.
II. DIGITATED.
III. PINNATED.
IV. WINGED.

DIV. I.

SECT. I. WHOLE HOOFED.

GENUS

- I. HORSE.

SECT. II. CLOVEN HOOFED.

* With horns.

- II. OX.
III. SHEEP.
IV. GOAT.
V. DEER.

** Without horns.

- VI. HOG.

DIV. II. DIGITATED.

SECT. I. TEETH *cutting*, six in each jaw;
Canine, two in each jaw, large,
distant from the cutting teeth.
Rapacious, carnivorous.

GENUS.

VII. DOG.

VIII. CAT.

IX. BADGER.

X. WEESEL.

XI. OTTER.

SECT. II. TEETH *cutting*, two in each jaw,
very distant from the grinders.
Usually herbivorous, frugivorous.

XII. HARE.

XIII. SQUIRREL.

XIV. DORMOUSE.

XV. RAT.

XVI. SHREW.

XVII. MOLE.

XVIII. URCHIN.

DIV. III. PINNATED.

GENUS

XIX. SEAL.

DIV. IV. WINGED.

XX. BAT.

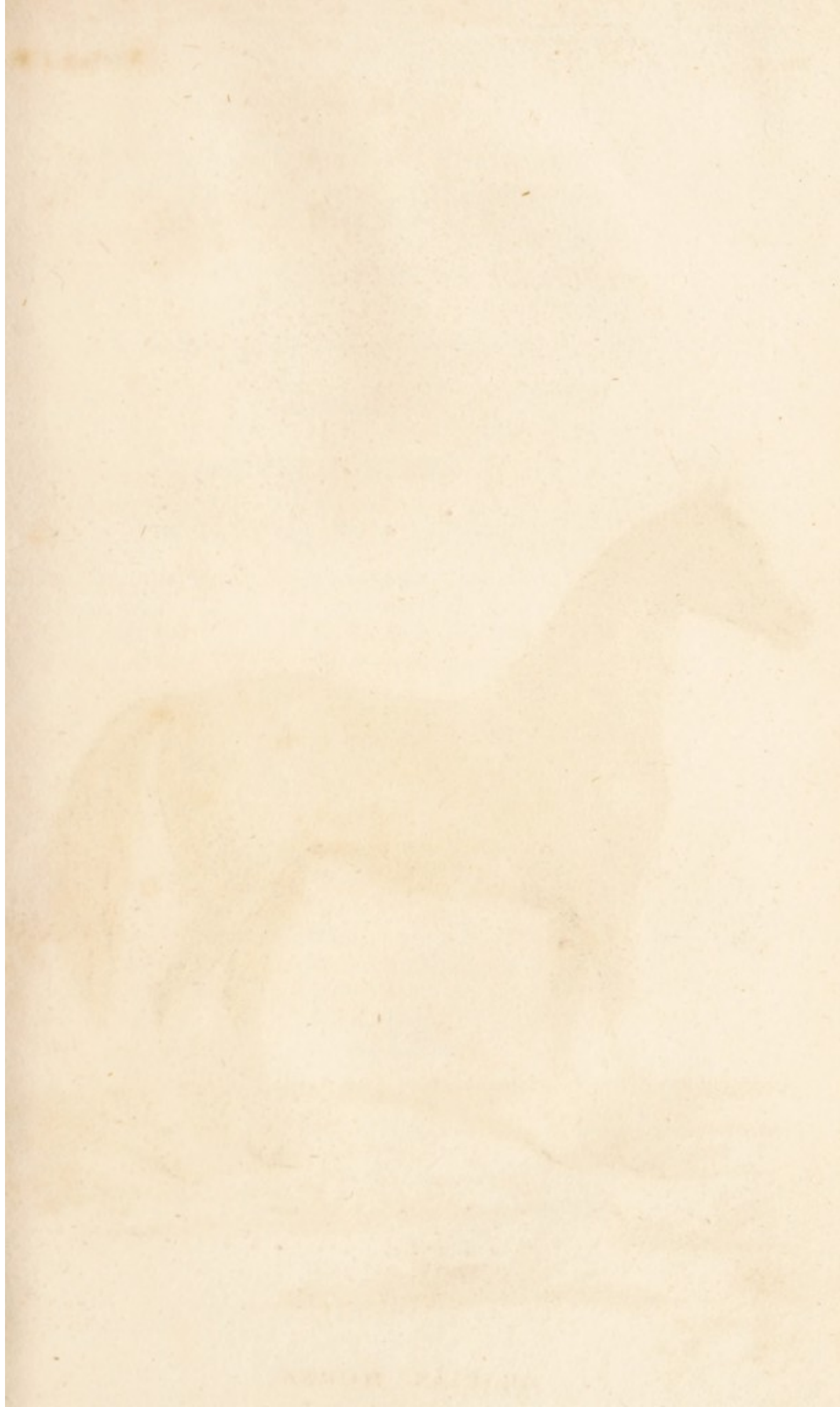
1841

DOUGLASS

THE
NEW YORK

DR. W. W. WOOD

NEW YORK





Stubbs p.

ARABIAN HORSE.

CLASS I. QUADRUPEDS.

DIV. I. HOOFED.

SECT. I. WHOLE HOOFED.

GENUS I. HORSE.

TEETH cutting six in each jaw.

<i>Raii syn. quad.</i> 62.	<i>Equus auriculis brevibus erectis,</i>	1. GENEROUS.
<i>Merret pinax.</i> 166.	juba longa. <i>Brisson quad.</i> 69.	
<i>Gesn. quad.</i> 404.	<i>Eq. Caballus. Gm. Lin.</i> 209.	
<i>Klein quad.</i> 4.	<i>Eq. cauda undique setosa. Faun.</i>	
<i>De Buffon tom.</i> iv. 174.	<i>Suec.</i> 47.	
<i>tab.</i> 1—10.	<i>Br. Zool.</i> 1. <i>Hist. quad.</i> I. 1.	

HORSE.	MARE.	GELDING.
<i>Brit.</i> March, Ceffyl	Caseg	Dyspaiddfarch
<i>Fren.</i> Le Cheval	La Cavale, Jument.	Cheval ongre
<i>Ital.</i> Cavallo	Cavalla	
<i>Span.</i> Cavallo	Yegua	
<i>Port.</i> Cavallo	Egoa	
<i>Germ.</i> Pferd	Stut, Motsch	
<i>Dut.</i> Paerd, Hengst	Merrie	
<i>Swed.</i> Hæst	Stood, Horss	
<i>Dan.</i> Hæst, Oeg, Hingst	Stod-Hæst, Hoppe.	

THE breed of horses in *Great Britain* is as mixed as that of its inhabitants. The frequent introduction of foreign horses has given us a

variety, that no single country can boast of: most other kingdoms produce only one kind, while ours, by a judicious mixture of the several species, by the happy difference of our soils, and by our superior skill in management, may triumph over the rest of *Europe*, in having brought each quality of this noble animal to the highest perfection.

SWIFTNESS.

In the annals of *Newmarket*, may be found instances of horses that have literally out-stripped the wind, as the celebrated M. *Condamine* has shewn in his remarks* on those of *Great Britain*. *Childers*† is an amazing instance of rapidity, his speed having been more than once exerted equal to $82\frac{1}{2}$ feet in a second, or near a mile in a minute. The same horse has also run the round course at *Newmarket* (which is about 400 yards less than 4 miles) in six minutes and forty seconds; in which case his fleetness is to that of the swiftest *Barb*, as four to three; the former, according to Doctor *Maty*'s computation, covering at every bound a space of ground equal in length to twenty-

* In his *Tour to Italy*, 190.

† M. *Condamine* illustrates his remarks with the horse, *Starling*; but the report of his speed being doubtful, we chuse to instance the speed of *Childers*, as indisputable and universally known.

three feet royal, the latter only that of eighteen feet and a half royal.*

Horses of this kind, derive their origin from *Arabia*; the seat of the purest, and most generous breed.†

The species used in hunting, is a happy combination of the former with others superior in strength, but inferior in point of speed and lineage: an union of both is necessary, for the fatigues of the chace must be supported by the spirit of the one, as well as by the vigor of the other.

No country can bring a parallel to the strength and size of our horses destined for the draught, or, to the activity and strength united, of those that form our cavalry.

* After *Childers, Eclipse*, the property of the late Mr. O' Kelly, was the swiftest horse known in *England*. He died *February 26, 1789*, in his twenty-fifth year, having won 25,000*l.* which is more than any other horse did for one person. After he was past running, he covered, in 1788, forty mares at thirty guineas each, exclusive of those of his owner. His heart was of an extraordinary size; it weighed thirteen pounds, which was supposed to have been the cause of his amazing powers. He never was beat. M. T.

† In 1787 Captain *Rattray*, of the *Phœnix Indiaman*, brought over a beautiful *Arabian* stallion of a grey color, the price of which, with the expence of the passage, amounted to the enormous sum of fifteen hundred and ten pounds. M. T.

For a particular account of the *Arabian* horses, the reader is referred to No. I. in the Appendix to these volumes,

STRENGTH.

In our capital there are instances of single horses that are able to draw on a level surface, for a small space, the weight of three tons, but could with ease, and for a continuance, draw half that weight.* The pack-horses of *Yorkshire*, employed in conveying the manufactures of that county to the most remote parts of the kingdom, usually carry a burden of 420 pounds, and that indifferently over the highest hills of the north, as well as on the most level roads; but the most remarkable proof of the strength of our *British* horses, is to be drawn from that of our mill-horses; some of these will carry at one load thirteen measures, which at a moderate computation of seventy pounds each, will amount to 910 pounds; a weight superior to that which the lesser sort of camels will bear: this will appear less surprising, as these horses are by degrees accustomed to the weight, and the distance they travel no greater than to and from the adjacent hamlets.

BRITISH
CAVALRY.

Our cavalry in the† late campaigns (when they had an opportunity) shewed over those of our allies, as well as of the *French*, a great su-

* *Hollingshed* makes it a matter of boast, that in his time, five horses could draw with ease for a long journey 3000lb. weight.

† Preceding the peace of 1763. We may proudly repeat the same observation at the present time. ED.

periority both of strength and activity: the enemy was broken through by the impetuous charge of our squadrons; while the *German* horses, from their great weight, and inactive make, were unable to second our efforts; though those troops were actuated by the noblest ardor.

The present cavalry of this island only sup- ANTIENT.
ports its antient glory; it was eminent in the earliest times: our scythed* chariots, and the activity† and good discipline of our horses, even struck terror into *Cæsar's* legions: and the *Britons*, as soon as they became civilized enough to coin, took care to represent on their money the animal for which they were so celebrated. It is now impossible to trace out the peculiar sort, for those which exist among the *indigenæ* of *Great Britain*, such as the little horses of *Wales* and *Cornwall*, the hobbies of *Ireland*, and the shelties of *Scotland*, though admirably well adapted to the uses of those countries, could never have been equal to the work of war; but probably we had even then a larger and stronger breed in the more fertile and luxuriant parts of the island. Those we employ for that purpose, or for the draught, are an offspring of the *German* or

* *Covinos* vocant, quorum falcatis axibus utuntur. *Pomp.*
Mela, lib. iii. c. 6.

† *Cæsar*. *Com.* lib. iv. *Strabo*. lib. iv.

Flemish breed, meliorated by our soil, and a judicious culture.

The *English* were ever attentive to an exact culture of these animals, and in very early times set a high value on their breed. The esteem that our horses were held in by foreigners so long ago as the reign of *Athelstan*, may be collected from a law of that monarch prohibiting their exportation, except they were designed as presents. These must have been the native kind, or the prohibition would have been needless, for our commerce was at that time too limited to receive improvement from any but the *German* kind, to which country their own breed could be of no value.

But when our intercourse with the other parts of *Europe* was enlarged, we soon layed hold of the advantages this gave of improving our breed. *Roger de Belesme*, created Earl of *Shrewsbury* by *William* the Conqueror, is the first that is on record: he introduced the *Spanish* stallions into his estate in *Powysland*, from which cause that part of *Wales* was for many ages celebrated for a swift and generous race of horses. *Giraldus Cambrensis*, who lived in the reign of *Henry II.* takes notice of it;* and *Michal Drayton*, cotemporary with

* In hac tertia *Walliæ* portione quæ *Powisia* dicitur sunt

Shakespeare, sings their excellence in the sixth part of his *Polyolbion*. This kind was probably destined to mount our gallant nobility, or courteous knights for feats of chivalry, in the generous contests of the tilt-yard. From these sprung, to speak the language of the times, the *Flower of Coursers*, whose elegant form added charms to the rider, and whose activity and managed dexterity gained him the palm in that field of gallantry and romantic honor.

Notwithstanding my supposition, in a former RACES. edition, races were known in *England* in very early times. *Fitz-Stephen*, who wrote in the days of *Henry II.* mentions the great delight that the citizens of *London* took in the diversion; but by his words, it appears not to have been designed for the purposes of gaming, but merely to have sprung from a generous emulation of shewing a superior skill in horsemanship.

Races appear to have been in vogue in the reign of Queen *Elizabeth*, and to have been carried to such an excess as to injure the fortunes of the nobility. The famous *George Earl of Cumberland* is recorded to have wasted more of

equitia peroptima, et equi emissarii laudatissimi, de *Hispanien-*
sium equorum generositate, quos olim Comes *Slopesburie* *Rob-*
tus de Belesme in fines istos adduci curaverat, originaliter propa-
 gati. *Itin. Camb.* 222.

his estate than any of his ancestors ; and chiefly by his extreme love for horse-races, tiltings, and other expensive diversions. It is probable that the parsimonious Queen did not approve of it, for races are not among the diversions exhibited at *Kenelworth* by her favorite *Leicester*. In the following reign, particular places were allotted for the sport : *Croydon* in the South, and *Garterly* in *Yorkshire*, were celebrated courses. *Camden* also says, that in 1607 there were races near *York*, and the prize was a little golden bell.

Not that we deny this diversion to have been known in these kingdoms in earlier times ; we only assert a different mode of it ; gentlemen being then their own jockies, and riding their own horses. Lord *Herbert* of *Cherbury* enumerates it among the sports that gallant philosopher thought unworthy of a man of honor. "The exercise, (says he), I do not approve of, "is running of horses, there being much cheating in that kind ; neither do I see why a brave "man should delight in a creature whose chief "use is to help him to run away."*

* The Life of *Edward Lord Herbert* of *Cherbury*, published by Mr. *Walpole*, p. 51.

Jarvis Markham, who wrote on the management of horses in 1599, mentions running horses ; but those were only designed for matches between gentleman and gentleman.

The increase of our inhabitants, and the extent of our manufactures, together with the former neglect of internal navigation to convey those manufactures, multiplied the number of our horses: an excess of wealth, before unknown in these islands, increased the luxury of carriages, and added to the necessity of an extraordinary culture of these animals: their high reputation abroad, has also made them a branch of commerce, and proved another cause of their vast increase.

As no kingdom can boast of parallel circumstances, so none can vie with us in the number of these noble quadrupeds; it would be extremely difficult to guess at the exact amount of them, or to form a periodical account of their increase: the number seems very fluctuating: *William Fitz-Stephen* relates, that in the reign of King *Stephen*, *London* alone poured out 20,000 horsemen in the wars of those times: yet we find that in the beginning of Queen *Elizabeth's* reign,* the whole kingdom could not supply 2000 horses to form our cavalry: and even in the year 1588, when the nation was in the most imminent danger from the *Spanish*

* Vide Sir *Edward Harwood's* memorial. *Harleian Misc.* iv. 255. The number mentioned by *Fitz-Stephen* is probably erroneous, and ought to be read 2000.

invasion, all the cavalry which could then be furnished amounted only to 3000: to account for this difference we must imagine, that the number of horses which took the field in *Stephen's* reign was no more than an undisciplined rabble; the few that appeared under the banners of *Elizabeth*, a corps well formed, and such as might be opposed to so formidable an enemy as was then expected: but such is their present increase, that in the late war, the number employed was 13,575;* and such is our improvement in the breed of horses, that most of those which are used in our waggons and carriages† of different kinds, might be applied to the same purpose: of those, our capital alone employs near 22,000.

PROPAGATION.

A horse can engender at two years, or two years and a half. Mares will breed at two years old, and will continue breeding till five and twenty, and even till thirty.

The learned *M. de Buffon* has almost exhausted the subject of the natural history of the horse, and the other domestic animals; and left

* The number of *British* cavalry employed in 1810, amounted to 23,807, of foreign and colonial cavalry, to 3,594, exclusive of horses attached to the artillery, and the waggon train. ED.

† It may be also observed, that the use of coaches was not introduced into *England* till the year 1564.

very little for after-writers to add. We may observe, that this most noble and useful quadruped is endowed with every quality that can QUALITIES. make it subservient to the uses of mankind ; and those qualities appear in a more exalted, or in a less degree, in proportion to our various necessities.

Undaunted courage, added to a docility half reasoning, is given to some, which fits them for military services. The spirit and emulation so apparent in others, furnish us with that species, which is admirably adapted for the course, or, the more noble and generous pleasure of the chace.

Patience and perseverance appear strongly in that most useful kind destined to bear the burdens we impose on them, or that employed in the slavery of the draught.

Though endowed with vast strength, and great powers, they very rarely exert either to their master's prejudice ; but on the contrary, will endure fatigues, even to death, for our benefit. Providence has implanted in them a benevolent disposition, and a fear of the human race, together with a certain consciousness of the services we can render them. Most of the hoofed quadrupeds are domestic, because necessity compels them to seek our protection : wild

beasts are provided with feet and claws, adapted to the formation of dens and retreats from the inclemency of the weather; but the former, destitute of these advantages, are obliged to run to us for artificial shelter and harvested provision; as nature, in these climates, does not throughout the year supply them with necessary food.

But still, many of our tame animals must by accident endure the rigor of the season: to prevent which inconvenience, their feet (for the extremities suffer first by cold) are protected by strong hoofs of a horny substance.

The tail too is guarded with long bushy hair that protects it in both extremes of weather; during the summer it serves by its pliancy and agility, to brush off the swarms of insects, which are perpetually attempting either to sting the animal, or to deposit their eggs in the *rectum*, and the same length of hair contributes to guard it from the cold in winter; but we, by the absurd

DOCKING. and cruel custom of docking, a practice peculiar to our country, deprive these animals of both advantages: in the last war our cavalry suffered so much on that account, that we now* seem sensible of the error, and if we may judge

* This odious custom has been for a long time abolished in our cavalry, and is at present confined to a few unfortunate draught horses. Ed.

from some recent orders in respect to that branch of the service,* it will for the future be corrected.

Thus is the horse provided against the two greatest evils he is subject to from the seasons. His natural diseases are few ; but our ill usage, or neglect, or, which is very frequent, our over care of him, brings on a numerous train, which are often fatal. Among the distempers he is naturally subject to, are the worms, the bots, and the stone : the species of worms that infest him are the *lumbrici*, and *ascarides* ; both these resemble those found in human bodies, only they are larger : the bots are the *erucæ*, or cater-

DISEASES.

* The following remark of a noble writer on this subject is too sensible to be omitted :—

‘ I must own I am not possessed with the *English* rage of cutting off all extremities from horses. I venture to declare I should be well pleased if their tails, at least a switch or a nag tail, (but better if the whole) was left on. It is hardly credible what a difference, especially at a certain season of the year, this single alteration would make in our cavalry, which though naturally superior to all other I have ever seen, are however, long before the end of the campaign, for want of that natural defence against the flies, inferior to all : constantly sweating and fretting at the picquet, tormented and stung off their meat and stomachs, miserable and helpless ; while the foreign cavalry brush off the vermin, are cool and at ease, and mend daily, instead of perishing as ours do almost visibly in the eye of the beholder.’

Method of breaking Horses, &c. by *Henry Earl of Pembroke*, p. 68.

pillars of the *æstrus*, or gadfly; these are found both in the *rectum*, and in the stomach, and when in the latter bring on convulsions, that often terminate in death.

The stone is a disease the horse is not frequently subject to, yet we have seen two examples of it; the one in a horse near *High Wycombe*, which voided sixteen *calculi*, each of an inch and a half diameter; the other was of a stone taken out of the bladder of a horse, and deposited in the cabinet of the late Dr. *Mead*, which weighed eleven ounces.* These stones are formed of several crusts, each very smooth and glossy; their form triangular, but their edges rounded, as if by collision against each other.

AGE.

The duration of the life of the horse seldom exceeds twenty-five or thirty years. M. *Tunstall* adduced an instance of a horse left at *Manchester* in 1745, which died there in 1788 at the age of forty-eight: it, almost to the last, carried goods daily to the market.

The all-wise Creator hath finely limited the several services of domestic animals towards the human race, and ordered that the parts of such, which in their lives have been the most useful, should after death contribute the lest to our benefit. The chief use that the *exuvie* of

* *Museum Meadianum*, p. 261.

the horse can be applied to, is for collars, traces, and other parts of the harness; and thus, even after death, he preserves some analogy with his former employ. The hair of the mane is of use in making wigs; of the tail in making the bottoms of chairs, floor-cloths, and cords, and to the angler in making lines.

Asinus. Raii syn. quad. 63.

Gesn. quad. 5.

Klein. quad. 6.

De Buffon tom. iv. 377.

tab. 11—13.

*Equus auriculis longis flaccidis,
juba brevi. Brisson quad. 70.*

Equus asinus. Gm. Lin. 211.

*Eq. caudæ extremitate setosa
cruce nigra super humeros.*

*Faun. Suec. 35.**

Br. Zool. 5. Hist. quad. I. 8.

2. Ass.

Brit. Asyn, fæm. Asen

Fren. L'Ane, f. L'Anesse

Ital. Asino, Miccio. f. Miccia

Span. Asno, Borrico. f. Borrica

Port. Asno, Burro. f. Asna, Burra

Germ. Esel

Dut. Eezel

Swed Asna

Dan. Asen, Esel.

THIS animal, though now so common in all parts of these islands, was entirely lost among us during the reign of Queen *Elizabeth*; *Hollingshed*† informing us that in his time, “*our lande did yeelde no asses.*” But we are not to sup-

* *Habitat in magnatum prædiis varius. Faun. Suec. 35. edit. 1746.* We imagine that since that time the species is there extinct, for *Linnaeus* has quite omitted it in the last edition of the *Fauna Suecica*.

† 109.

pose so useful an animal was unknown in these kingdoms before that period; for mention is made of them so early as the time of King* *Ethelred*, above four hundred years preceding; and again in the reign of † *Henry III.* so that it must have been owing to some accident, that the race was extinct during the days of *Elizabeth*. We are not certain of the time it was again introduced; probably in the succeeding reign, when our intercourse with *Spain* was renewed, in which country this animal was greatly used, and where the species is in great perfection.

The ass is originally a native of *Arabia*, and other parts of the East: a warm climate produces the largest and the best, their size and spirit declining in proportion as they advance into colder regions. “With difficulty,” says Mr. *Adanson*, speaking of the asses of *Senegal*, “did I know this animal, so different did it appear from those of *Europe*: the hair was fine, “and of a bright mouse color, and the black “list that crosses the back and shoulders had a “good effect. These were the asses brought “by the *Moors* from the interior parts of the

* When the price of a mule or young ass was 12s. *Chron. preciosum*, 51.

† In 1217, when the *Camerarius* of St. *Alban's* lost two asses, &c. *Chr. pr.* 60.

“country.”* The migration of these beasts has been very slow ; we see how recent their return is in *Great Britain* : in *Sweden* they are even at present a sort of rarity, nor does it appear by the last history of *Norway*,† that they had yet reached that country. They are at present naturalized in this kingdom ; our climate and soil seems to agree with them ; the breed is spread thro’ all parts, and their utility is more and more experienced.

They are now introduced into many services that were before allotted to horses ; which will prove of the utmost use in saving those noble animals for worthier purposes. Many of our richest mines are in situations almost inaccessible to horses, but where these sure-footed creatures may be employed to advantage, in conveying our mineral treasures to their respective marts : we may add too, that since our horses are become a considerable article of commerce, and bring annually great sums into these kingdoms, the cultivation of an animal that will in many cases supply their place, and enable us to enlarge our exports, certainly merits our attention.

The age of the ass may be equal to that of

AGE.

* *Voy. Senegal.* 212.

† *Pontoppidan's Nat. History of Norway.*

the horse. One which died in 1782, had been employed in turning the water-wheel at the deep well in *Carisbrooke* castle for forty years.

QUALITIES.

The qualities of this animal are so well known, that we need not expatiate on them; its patience and perseverance under labor, and its indifference in respect to food, need not be mentioned; any weed or thistle contents it: if it gives the preference to any vegetable, it is to the Plaintain; for which we have often seen it neglect every other herb in the pasture. The narrow-leaved Plaintain* is greedily eat by horses and cows; of late years it has been greatly cultivated and sowed with clover in North *Wales*, particularly in *Anglesey*, where the seed is harvested, and thence dispersed through other parts of the principality.

The ass goes full a year in foal,

* *Plantago lanceolata*. *Fl. Angl.* 52.

- Mulus*, *Raii syn. quad.* 64. *juba brevi. Brisson quad. MULB.*
Gesn. quad. 702. 71.
Asinus biformis, Klein. quad. 6. *Equus Mulus. Gm. Lin.* 212.
Charlton ex. 4. *Faun. Suec.* 35. edit. 1.
Equus auriculis longis erectis, Br. Zool. 6. *Hist. quad.* I. 8.
Brit. Mul, fœm. Mules *Germ. Maulthier, Maulesel*
Fren. Le Mulet *Dut. Muyl-Eesel*
Ital. Mula *Swed. Mulasna*
Span. Mulo *Dan. Muule, v. Muul-Esel*
Port. Mula.

THESE useful and hardy animals are the offspring of the horse and ass, or ass and mare; those produced between the two last are esteemed the best, as the mule is observed to partake less of the male than the female parent; not but they almost always inherit in some degree the obstinacy of the parent ass, though it must be confessed that this vice is heightened by their being injudiciously broke: instead of mild usage, which gently corrects the worst qualities, the mule is treated with cruelty from the first, and is so habituated to blows, that it is never mounted or loaded without expectation of ill treatment; so that the unhappy animal either prepares to retaliate, or in the terror of bad usage, becomes invincibly retrograde. Could

we prevail on our countrymen to consider this animal in the light its useful qualities merit, and pay due attention to its breaking, they might with success form it for the saddle, the draught, or the burden. The size and strength of our breed is at present so improved by the importation of the *Spanish* male asses, that we shall soon have numbers that may be adapted to each of those uses. Persons of the first quality in *Spain* are drawn by them; for one of which (as Mr. *Clarke* informs us*) fifty or sixty guineas is no uncommon price; nor is it surprizing, if we consider how far they excel the horse in draught, in a mountainous country; the mule being able to tread securely where the former can hardly stand.

This brief account may be closed with the general observation, that neither mules or the spurious offspring of any other animal generate any farther: all these productions may be looked on as monsters; therefore nature, to preserve the original species of animals entire and pure, wisely stops, in instances of deviation, the powers of propagation.

* Letters on the *Spanish* nation.



HIGHLAND BULL.



LANCASHIRE COW.



Mores Griffiths Del.

SECT. II. CLOVEN HOOFED.

* WITH HORNS.

GENUS II. OX.

HORNS bending out laterally.

SKIN along the lower side of the neck pendulous.

Raii syn. quad. 70.

Merret pinax. 166.

Gesn. quad. 25, 26, 92.

Taurus domesticus. Klein. quad.

10.

Charlton ex. 8.

Bos cornibus levibus tereti- 3. DOMESTIC.

bus, sursum reflexis.

Brisson quad. 52.

Bos taurus. Gm. Lin. 202.

Bos cornibus teretibus flexis.

Faun. Suec. 46.

Br. Zool. 7. Hist. quad. I. 16.

BULL.	Cow.	Ox.	CALF.
<i>Brit.</i> Tarw	Buwch	Ych, Eidion	Llo
<i>Fren.</i> Le Taureau	La Vache	Le Bœuf	Veau
<i>Ital.</i> Toro	Vacca	Bue	Vitello
<i>Span.</i> Toro	Vaca	Buey	Ternera
<i>Port.</i> Touro	Vaca	Boy	Vitela
<i>Germ.</i> Stier	Kuh	Ochs	Kalb
<i>Dut.</i> Stier, Bul	Koe	Os	Kalff
<i>Swed.</i> Tiur	Ko	Noot	Kalff
<i>Dan.</i> Tyr	Koe	Oxe, Stud	Kalv.

THE climate of *Great-Britain* is above all others productive of the greatest variety and abundance of wholesome vegetables, which, to

crown our happiness, are almost equally diffused thro' all its parts: this general fertility is owing to those clouded skies, which foreigners mistakenly urge as a reproach on our country; but let us chearfully endure a temporary gloom, which cloaths not only our meadows but our hills with the richest verdure. To this we owe the number, variety, and excellence of our cattle, the richness of our dairies, and innumerable other advantages. *Cæsar* (the earliest writer who describes this island of *Great Britain*) speaks of the numbers of our cattle, and adds that we neglected tillage, but lived on milk and flesh.* *Strabo* takes notice of our plenty of milk, but says we were ignorant of the art of making cheese.† *Mela* informs us, that the wealth of the *Britons* consisted in cattle, and in his account of *Ireland* reports that such was the richness of the pastures in that kingdom, that the cattle would even burst if they were suffered to feed in them long at a time.‡

This preference of pasturage to tillage was

* *Lib. 5.*

† *Lib. 4.*

‡ Adeo luxuriosa herbis non lætis modo sed etiam dulcibus, ut se exigua parte diei pecora impleant, ut nisi pabulo prohibeantur, diutius pasta dissilient. *Lib. iii. c. 6.*

Hollinshed says, (but we know not on what authority,) that the *Romans* preferred the *British* cattle to those of *Liguria*. *Dæc. Br. 109.*

delivered down from our *British* ancestors to much later times, and continued equally prevalent during the whole period of our feudal government: the chieftain, whose power and safety depended on the promptness of his vassals to execute his commands, found it his interest to encourage those employments that favoured that disposition; the vassal, who made it his glory to fly at the first call to the standard of his chieftain, was sure to prefer that employ, which might be transacted by his family with equal success during his absence. Tillage would require an attendance incompatible with the services he owed the baron, while the former occupation not only gave leisure for those duties, but furnished the hospitable board of his lord with ample provision, of which the vassal was an equal partaker. The reliques of the larder of the elder *Spencer* are evident proofs of the plenty of cattle in his days; for after his winter provisions may have been supposed to have been mostly consumed, there were found, so late as the month of *May*, in salt, the carcasses of not fewer than 80 beeves, 600 bacons, and 600 muttons.* The accounts of the several great feasts in after times, afford amazing instances of the quantity of cattle that were consumed in

* *Hume's history of England*, ii. 153.

them. This was owing partly to the continued attachment of the people to grazing,* partly to the preference that the *English* at all times gave to animal food. The quantity of cattle that appear from the last calculation to have been consumed in our metropolis, is a sufficient argument of the vast plenty of these times ; particularly when we consider the great advancement of tillage, and the numberless variety of provisions, unknown to past ages, that are now introduced into these kingdoms from all parts of the world.†

Our breed of horned cattle has in general been so much improved by a foreign mixture,

* *Polyd. Virgil Hist. Angl.* vol. i. 5. who wrote in the time of *Henry the VIII.* says, *Angli plures pecuarii quam aratores.*

† That inquisitive and accurate historian *Maitland* furnishes us with this table of the quantity of cattle that were consumed in *London* in the year 1725, when that city was far less populous than it is at present.

Beeves	98,244.	Pigs	52,000.
Calves	194,760.	Sheep and	} 711,123.
Hogs	186,932.	Lambs	

The number of cattle sold in *Smithfield* in 1809 is stated to have been,

Beeves	110,000	Pigs	60,000
Calves	210,000	Sheep and	} 776,000
Hogs	200,000	Lambs	

Middleton, in his agricultural survey of *Middlesex*, gives the following comparative statement of the number of cattle and sheep sold at the same market from the year 1750 to 1794 :—

that it is difficult to point out the original kind of these islands. Those which may be supposed to have been purely *British* are far inferior in size to those on the northern part of the *European* continent: the cattle of the highlands of *Scotland* are exceedingly small, and many of them, males as well as females, are hornless: the *Welsh* runts are much larger: the black cattle of *Cornwall* are of the same size with the last. The large species that is now cultivated through most parts of *Great Britain* is either entirely of foreign extraction, or our own improved by a cross with a foreign kind. The *Lincolnshire* kind derive their size from the *Holstein* breed; and the large hornless cattle that are bred in some parts of *England* came originally from *Poland*.

About two hundred and fifty years ago there was found in *Scotland* a wild race of cattle, which were of a pure white color, and had (if

WILD
CATTLE.

		CATTLE.	SHEEP.
1750 to 1758		73,331	623,091
1759	1767	83,432	615,328
1768	1776	89,362	627,805
1777	1785	99,285	687,588
1786	1794	108,075	707,456.

It must also be observed, that, owing to the cultivation of a larger breed, the weight of each animal is considerably more than double what it was at the commencement of the last century. ED.

we may credit *Boethius*) manes like lions. I cannot but give credit to the relation; having seen* in the woods of *Drumlanrig* in *N. Britain*, and in the park belonging to *Chillingham* castle in *Northumberland*, herds of cattle probably derived from the savage breed. They have lost their manes, but retain their color and fierceness: they are of a middle size; long leg'd, with black muzzles, and ears: their horns fine, and with a bold and elegant bend. The keeper of those at *Chillingham* said, that the weight of the ox was 38 stones; of the cow 28: that their hides were more esteemed by the tanners than those of the tame; and that they would give six-pence per stone more for them. These cattle are wild as any deer: on being approached they instantly take to flight and gallop away at full speed: never mix with the tame species; or come near the house unless constrained by hunger in very severe weather. When it is necessary to kill any they are always shot: if the keeper only wounds the beast, he must take care to keep behind some tree, or his life would be in danger from the furious attacks of the animal, which will never desist till a period is put to its life.

Frequent mention is made of our savage

* *Tour in Scotland*, ii. 124.

cattle by historians. One relates that *Robert Bruce* was (in chasing these animals) preserved from the rage of a wild Bull by the intrepidity of one of his courtiers, from which he and his lineage acquired the name of *Turn-Bull*. *Fitz-Stephen** names these animals (*Uri Sylvestres*) among those that harbored in the great forest that in his time lay adjacent to *London*. Another enumerates among the provisions at the great feast of *Nevil*† archbishop of *York*, six wild Bulls; and *Sibbald* assures us that in his days a wild and white species was found in the mountains of *Scotland*, but agreeing in form with the common sort. Bishop *Lessley* says, that in his time (1598), cattle in a wild state were found in *Sterling*, *Cummernald*, and *Kincairn*. I believe these to have been the *Bisontes jubati* of *Pliny* found then in *Germany*, and which might have been common to the continent and our island: the loss of their savage vigor by confinement might occasion some change in the external appearance, as is frequent with wild animals deprived of liberty; and to that we may ascribe their loss of mane. The *Urus* of the *Hercynian* forest described by

* A monk who lived in the reign of *Henry II.* and wrote a History of *London*, preserved in *Leland's Itin.* VIII.

† *Leland's Collectanea*, vi.

Cæsar, book VI. was of this kind, the same which is called by the modern *Germans*, *Aurochs*, i. e. *Bos sylvestris*.*

USES.

The ox is the only horned animal in these islands that will apply his strength to the service of mankind. It is now generally allowed, that in many cases oxen are more profitable in the draught than horses; their food, harness, and shoes being cheaper, and should they be lamed or grow old, an old working beast will be as good meat, and fatten as well, as a young one.

There is scarcely any part of this animal without its use. The blood, fat, marrow, hide, hair, horns, hoofs, milk, creme, butter, cheese, whey, urine, liver, gall, spleen, bones, and dung, have each their particular use in manufactures, commerce, and medicine.

The skin has been of great use in all ages. The antient *Britons*, before they knew a better method, built their boats with osiers, and covered them with the hides of bulls, which served for short † coasting voyages.

* *Gesner Quad.* 144. In *Fitz-Stephen*, *Urus* is printed *Ursus*.

† That these *vitilia navigia*, as *Pliny* calls them, were not made for long voyages, is evident not only from their structure, but from the account given by *Solinus*, that the crew never eat during the time they were at sea. *Vide C. Junii Solini polyhistor.* 56.

Primum cana salix madefacto vimine parvam
Texitur in Puppim, caesoque induta juvenco,
Vectoris patiens, tumidum super emicat annem :
Sic *Venetus* stagnante *Pado*, fusoque *Britannus*
Navigat oceano. *Lucan.* lib. iv. 131.

The bending willow into barks they twine ;
Then line the work with spoils of slaughter'd kine.
Such are the floats *Venetian* fishers know,
Where in dull marshes stands the settling *Po* ;
On such to neighboring *Gaul*, allured by gain,
The bolder *Britons* cross the swelling main. *Rowe.*

Vessels of this kind are still in use on the *Irish* lakes; and on the *Dee* and *Severn*: in *Ireland* they are called *Curach*, in *England* *Coracles*, from the *British* *Cwrægl*, a word signifying a boat of that structure.

At present, the hide, when tanned and curried, serves for boots, shoes, and numberless conveniences of life.

Vellum is made of calves skin, and gold-beaters skin is made of thin vellum, or a finer part of the ox's guts. The hair mixed with lime is a necessary article in building. Of the horns are made combs, boxes, handles for knives, and drinking vessels; and when softened by water, obeying the manufacturer's hand, they are formed into pellucid laminæ for the sides of lanthorns. The last conveniences we owe to our great king *Alfred*, who first invented them to preserve his candle time measurers, from

the wind;* or (as other writers will have it) the tapers that were set up before the reliques in the miserable tattered churches of that time.†

In medicine, the horns were employed as alexipharmics or antidotes against poison, the plague, or the small-pox; they have been dignified with the title of *English bezoar*, and are said to have been found to answer the end of the oriental kind: the chips of the hoofs, and paring of the raw hides, serve to make carpenters glue.

The bones are used by mechanics, where ivory is too expensive, by which the common people are served with many neat conveniencies at an easy rate. From the *tibia* and *carpus* bones is procured an oil much used by coach-makers and others in dressing and cleaning harness, and all trappings belonging to a coach; and the bones calcined, afford a fit matter for tests for the use of the refiner in the smelting trade.

The blood is used as an excellent manure for fruit trees,‡ and is the basis of that fine color, the *Prussian blue*.

The fat, tallow, and suet, furnish us with

* *Anderson's hist. commerce*, I. 45.

† *Staveley's hist. of churches*, 103.

‡ *Evelyn's phil. disc. of earth*, p. 319.

light, and are also used to precipitate the salt that is drawn from briny springs. The gall, liver, spleen, and urine, have also their place in the *materia medica*.

The uses of butter, cheese, creme and milk, in domestic œconomy; and the excellence of the latter, in furnishing a palatable nutriment for most people, whose organs of digestion are weakened, are too obvious to be insisted on.

GENUS III. SHEEP.

HORNS twisted spirally, and pointing outwards.

4. FLEECY. *Ovis, Raii syn. quad. 73.* *Aries, &c. Klein. quad. 13.*
Gesn. quad. 71. *Aries laniger cauda rotunda*
Ovis Aries, ovis anglica mutica brevi. Brisson quad. 48.
cauda scrotoque ad genua pendulis. Gm. Lin. 197. *De Buffon tom. v. tab. 1, 2.*
Ovis cornibus compressis lunatis. Br. Zool. 10. Hist. quad.
Faun. Suec. 45. *I. 37.*

MALE.	FEMALE.	LAMB.
<i>Brit.</i> Hwrdd. Maharen	Dafad	Oen
<i>Fren.</i> Le Belier	La brebis	L'Agneau
<i>Ital.</i> Montone	Pecora	Agnello
<i>Span.</i> Carnero	Oveja	Cordero
<i>Port.</i> Caneiro	Ovelha	Cordeiro
<i>Germ.</i> Widder	Schaaf	Lamm
<i>Dut.</i> Ram	Schaep	Lam
<i>Swed.</i> Wadur	Faar	Lamb
<i>Dan.</i> Vædder, Være	Faar	Lam, agna Gimmer Lam.

IT does not appear from any of the early writers, that the breed of this animal was cultivated for the sake of the wool among the *Britons*; the inhabitants of the inland parts of this island either went entirely naked, or were only clothed with skins; those who lived on the sea coasts,

and were the most civilized, affected the manners of the *Gauls*, and wore like them a sort of garments made of coarse wool, called *Brachæ*. These they probably had from *Gaul*, there not being the least traces of manufactures among the *Britons*, in the histories of those times.

On the coins or money of the *Britons* are seen impressed the figures of the horse, the bull, and the hog, the marks of the tributes exacted from them by the conquerors.* The Reverend Mr. *Pegge* was so kind as to inform me that he has seen on the coins of *Cunobelin* that of a sheep. Since that is the case, it is probable that our ancestors were possessed of the animal, but made no farther use of it than to strip off the skin, wrap themselves in it, and with the wool inmost, obtain a comfortable protection against the cold of the winter season.

This neglect of manufacture, may be easily accounted for, in an uncivilized nation whose wants were few, and those easily satisfied; but it is more surprising, that after we had for a long period cultivated a breed of sheep, whose fleeces were superior to those of other countries, we still neglected to promote a woollen manufacture at home. That valuable branch of busi-

* *Camden*. I. Preface, p. cxiii.

ness lay for a considerable time in foreign hands, and we were obliged to import the cloth manufactured from our own materials. There seems indeed to have been many unavailing efforts made by our monarchs to preserve both the wool and the manufacture of it among ourselves: *Henry II.* by a patent granted to the weavers in *London*, directed that if any cloth was found made of a mixture of *Spanish* wool, it should be burnt by the mayor:* yet so little did the weaving business advance, that *Edward III.* was obliged to permit the importation of foreign cloth in the beginning of his reign; but soon after, by encouraging foreign artificers to settle in *England*, and instruct the natives in their trade, the manufacture increased so greatly as to enable him to prohibit the wearing foreign cloth. Still to shew the uncommercial genius of the people, the effects of this prohibition were checked by another law, as prejudicial to trade as the former was salutary; this was an act of the same reign, against exporting woollen goods manufactured at home, under heavy penalties, while the exportation of wool was not only allowed but encouraged. This oversight was not soon

* *Stow* 419.

rectified, for it appears that, on the alliance that *Edward IV.* made with the king of *Aragon*, he presented the latter with some ewes and rams of the *Coteswold* kind; a proof of their excellency, since they were thought acceptable to a monarch, whose dominions were so noted for the fineness of their fleeces.*

In the first year of *Richard III.* and in the two succeeding reigns, our woollen manufacture received some improvements;† but the grand rise of all its prosperity is to be dated from the reign of queen *Elizabeth*, when the tyranny of the duke of *Alva* in the *Netherlands* drove numbers of artificers to seek refuge into this country, who were the founders of that immense manufacture we carry on at present. We have strong inducements to be more particular on the modern state of our woollen manufactures, but desist, from a fear of digressing too far; our enquiries must be limited to points that have a more immediate reference to the study of Zoology.

No country is better supplied with materials, and those adapted to every species of the cloth-

* *Rapin* i. 605. in the note. *Stow's Annales*, 696.

† In that of *Richard*, two-yard cloths were first made. In that of *Henry the VIII.* an *Italian* taught us the use of the distaff. Kerseys were also first made in *England* about that time.

ing business, than *Great Britain*; and though the sheep of these islands afford fleeces of different degrees of goodness, yet there are none but what may be used in some branch of it. *Herefordshire*, *Devonshire*, and *Coteswold* downs are noted for producing sheep with remarkably fine fleeces; the *Lincolnshire* and *Warwickshire* kind, which are very large, exceed any for the quantity and goodness of their wool. The former county yields the largest sheep in these islands, where it is no uncommon thing to give fifty guineas for a ram, and a guinea for the admission of a ewe to one of the valuable males; or twenty guineas for the use of it for a certain number of ewes during one season.* *Suffolk* also breeds a very valuable kind. The fleeces of the northern parts of this kingdom are inferior in fineness to those of the south; but still are of great value in different branches of our manufactures. The *Yorkshire* hills furnish the looms of that county with large quantities of wool;

* Four hundred guineas were repeatedly given to the late Mr. *Bakewell* of *Dishley*, for the use of an improved *Leicestershire* ram.

The excellent *South down* sheep which have of late years spread themselves over most parts of the kingdom, were at the period of the first edition of the *British Zoology*, either little known, or disregarded. The present rage for the *Merino* breed promises to ameliorate the wool at the expence of the carcase. ED.

and that which is taken from the neck and shoulders, is used (mixed with *Spanish* wool) in some of their finest cloths.

Wales yields but a coarse wool; yet it is of more extensive use than the finest *Segovian* fleeces; for rich and poor, age and youth, health and infirmities, all confess the universal benefit of the flannel manufacture.

The sheep of *Ireland* vary like those of *Great Britain*; those of the south and east being large, and their flesh rank; those of the north, and the mountainous parts, small, and their flesh sweet. The fleeces in the same manner differ in degrees of value.

Scotland breeds a small kind, and their fleeces are coarse. *Sibbald* (after *Boethius*) speaks of a breed in the isle of *Rona*, covered with blue wool; of another kind in the isle of *Hirta*, larger than the biggest he goat, with tails hanging almost to the ground, and horns as thick, and longer than those of an ox.* He mentions

* *Gmelin* describes an† animal he found in *Siberia*, that in many particulars agrees with this; he calls it *Rupicapra cornubus arietinis*; *Linnaeus* styles it *Capra Ammon. Syst.* 97. and *Gesner*,

† This animal, which, in the former edition of the *British Zoology*, and in the *Synopsis of Quadrupeds*, was considered as belonging to the goat genus, has since been described by Mr. *Pennant* in his *History of Quadrupeds*, p. 45. as a variety of the wild sheep. ED.

another kind, which is clothed with a mixture of wool and hair; and a fourth species, whose flesh and fleeces are yellow, and their teeth of the colour of gold; but the truth of these relations ought to be enquired into, as no other writer has mentioned them, except the credulous *Boethius*. Yet the last particular is not to be rejected: for notwithstanding I cannot instance the teeth of sheep, yet I saw in the summer of 1772, at *Athol* house, the jaws of an ox, with teeth thickly incrustated with a gold colored substance; and the same might have happened to those of sheep had they fed on the same grounds, which were in the valley beneath the house.

Besides the fleece, there is scarcely any part of this animal but what is useful to mankind. The flesh is a delicate and wholesome food. The skin dressed, forms different parts of our apparel, and is used for covers of books. The entrails, properly prepared and twisted, serve for strings for various musical instruments. The bones calcined (like other bones in general) form materials for tests for the refiner. The

p. 924. imagines it to be the *Musimon* of the antients; the horns of the *Siberian* animal are two yards long, their weight above thirty pounds. As we have so good authority for the existence of such a quadruped, we might venture to give credit to *Boethius's* account, that the same kind was once found in *Hirta*.

milk is thicker than that of cows, and consequently yields a greater quantity of butter and cheese; in some places it is so rich, that it will not produce the cheese without a mixture of water to make it part from the whey. The dung is a remarkably rich manure, insomuch that the folding of sheep is become too useful a branch of husbandry for the farmer to neglect. To conclude, whether we consider the advantages that result from this animal to individuals in particular, or to these kingdoms in general, we may with *Columella* consider it in one sense, as the first of the domestic animals. *Post majores quadrupedes ovilli pecoris secunda ratio est; quæ prima sit si ad utilitatis magnitudinem referas. Nam id præcipue contra frigoris violentiam protegit, corporibusque nostris liberaliora præbet velamina; et etiam elegantium mensas jucundis et numerosis dapibus exornat.**

The sheep as to its nature, is a most innocent mild and simple animal, and conscious of its own defenceless state, remarkably timid: if attacked when attended by its lamb, it will make some shew of defence, by stamping with its feet, and pushing with its head: it is a grega-

* *De re rustica, lib. vii. c. 2.*

rious animal, is fond of any jingling noise, for which reason the leader of the flock has in many places a bell hung round its neck, which the others will constantly follow.

DISEASES. It is subject to many diseases: some arise from insects which deposit their eggs in different parts of the animal; others are caused by their being kept in wet pastures; for as the sheep requires but little drink, it is naturally fond of a dry soil. The dropsy, vertigo (the *pendro* of the *Welsh*) the pthisick, jaundice, and worms in the liver* annually make great havoc among our flocks: for the first disease, the shepherd finds a remedy by turning the infected into fields of broom; a plant which has been also found to be very efficacious in the same disorder among the human species. The sheep is also infested by different sorts of insects; like the horse it has its peculiar *Oestrus* or Gadfly, which deposits its eggs above the nose in the frontal sinuses; when those turn into maggots they become excessively painful, and cause those violent agitations in which we so often see the animal. The *French* shepherds make a common practice of easing the sheep, by trepanning and taking out the maggot; this

* *Fasciola hepatica*, *Lin. syst.* 648.

practice is sometimes used by the *English* shepherds, but not always with the same success. Besides these insects, the sheep is troubled with a kind of tick and louse, from which magpies and starlings contribute to ease it by lighting on its back, and picking off the insects.

GENUS IV. GOAT.

HORNS bending backwards and almost close at their base.

MALE generally bearded.

3. DOMESTIC. *Raii syn. quad. 77.*

Meyer's an. i. Tab. 68.

Charlton ex. 9.

Klein quad. 15.

Gesn. quad. 266. 268.

De Buffon. Tom. v. 59. Tab. 8. 9.

Hircus cornibus interius cultratis, exterius rotundatis, infra carinatis, arcuatis. Brisson quad. 38.

Capra Hircus, Gm. Lin. 193.

Capra cornibus carinatis arcuatis, Faun. Suec. 44.

Br. Zool. 13. Hist. quad p. 60.

Arct. Zool. 1. 17.

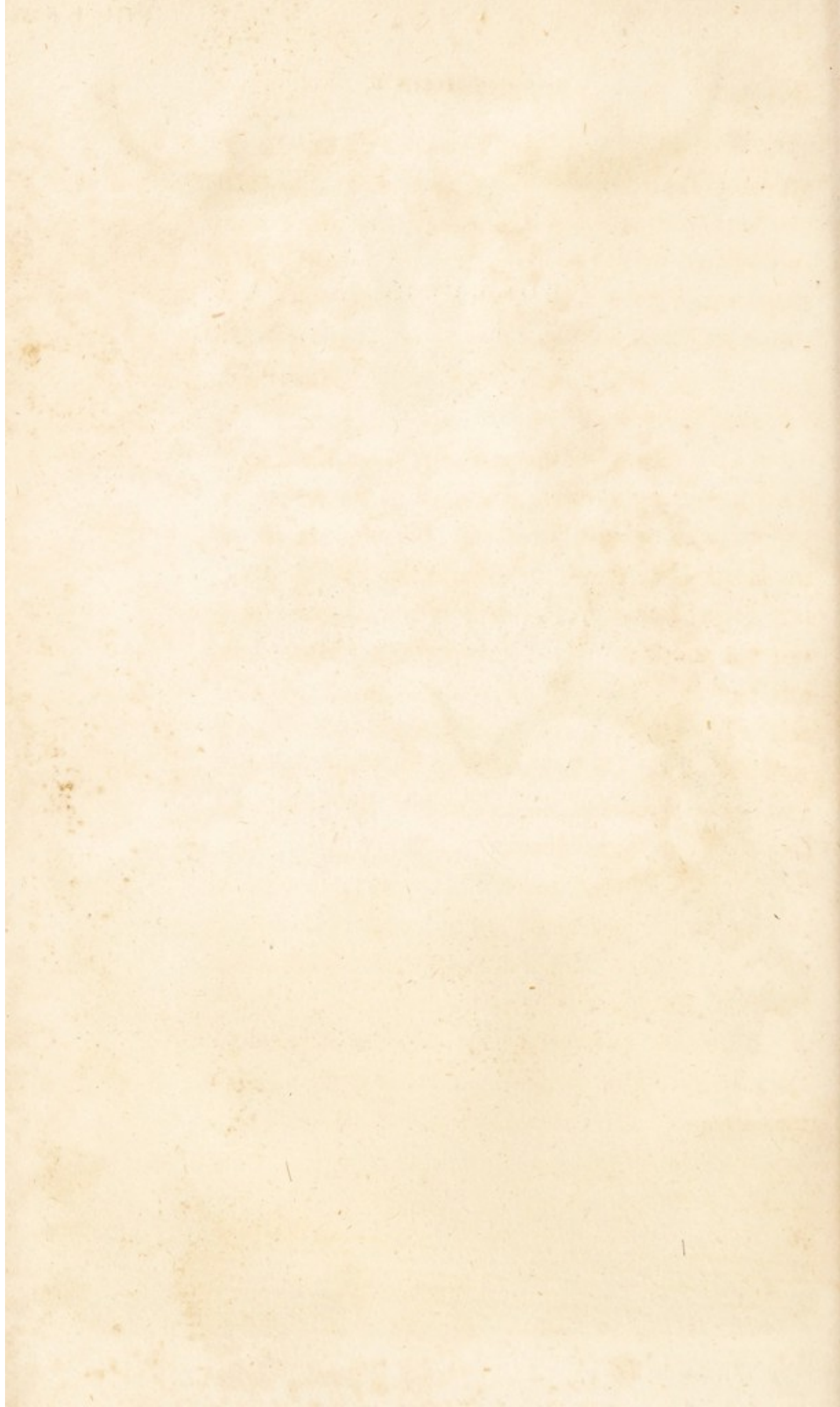
	MALE.	FEMALE.	KID.
<i>Brit.</i>	Bwch	Gafr	Mynn
<i>Fren.</i>	Le Bouc	La Chevre	Chevreau
<i>Ital.</i>	Becco	Capra	Capretto
<i>Span.</i>	Cabron	Cabra	Cabrito
<i>Port.</i>	Cabram	Cabra	Cabrito
<i>Germ.</i>	Bock	Geisz	Bocklein
<i>Dut.</i>	Bok	Giyt	
<i>Swed.</i>	Bock	Geet	Kiidh
<i>Dan.</i>	Buk, Geedebuk	Geed	Kid

THE goat is the most local of any of our domestic animals, confining itself to the mountainous parts of these islands: his most beloved food are the tops of the boughs, or the tender

GOAT.



M Griffiths del



bark of young trees, on which account he is so prejudicial to plantations, that it would be imprudent to draw him from his native rocks, except some method could be devised to obviate this evil. We have been informed, that there is a freeholder in the parish of *Trawsfynnydd*, in *Meireonethshire*, who hath, for several years past, broken the teeth of his goats short off with a pair of pincers, to preserve his trees. This practice has certainly efficacy sufficient to prevent the mischief, and may be recommended to those who keep them for their singularity; but ought by no means to be encouraged, when those animals are preserved for the sake of their milk, as the great salubrity of it as a medicine arises from their promiscuous feeding.

This quadruped contributes in various instances to the necessities of human life; as food, as physick, and as cloathing. The whitest wigs are made of its hair; for which purpose that of the he-goat is most in request; the whitest and clearest is selected from that which grows on the haunches, where it is longest and thickest; a good skin well haired is sold for a guinea, though a skin of bad hue, and so yellow as to baffle the barber's skill to bleach, will not fetch above eighteen-pence, or two shillings.

The *Welsh* goats are far superior in size, and

in length and fineness of hair, to those of other mountainous countries. Their usual color is white: those of *France* and of the *Alps* are short-haired, reddish, and their horns small. We have seen the horns of a *Cambrian* he-goat three feet two inches long, and measuring three feet from tip to tip.

The suet of the goat is in great esteem, as well as the hair. Many of the inhabitants of *Caernarvonshire* suffer these animals to run wild on the rocks during winter as well as summer, and kill them in *October*, for the sake of their fat, either by shooting them with bullets, or running them down with dogs like deer. The goats killed for this purpose, are about four or five years old. Their suet will make candles, far superior in whiteness and goodness to those made from that of the sheep or the ox, and accordingly brings a much greater price in the market: nor are the horns without their use, the country people making of them excellent handles for tucks and penknives. The skin is peculiarly well adapted for the glove manufactory, especially that of the kid: abroad it is dressed and made into stockings, bed-ticks, bolsters,* bed-hangings, sheets, and even shirts.

* Bolsters made of the hair of a goat were in use in the days of *Saul*; as appears from 1 *Samuel*, c. 19. v. 13. The species

In the army it covers the horseman's arms, and carries the foot-soldier's provisions. As it takes a dye better than any other skin, it was formerly much used for hangings in the houses of people of fortune, being susceptible of the richest colors ; and when flowered and ornamented with gold and silver, became an elegant and superb article of furniture.

The flesh is of great use to the inhabitants of the country where it resides ; and affords a cheap and plentiful provision in the winter months, when the kids are brought to market. The haunches of the goat are frequently salted and dried, and supply all the uses of bacon ; this by the natives is called *Cóch yr wden*, or hung venison. The meat of a castrated goat of six or seven years old, (which is called *Hyfr*) is reckoned the best ; being generally very sweet and fat. This makes an excellent pasty, goes under the name of rock venison, and is little inferior to that of the deer. Thus nature provides even on the tops of high and craggy mountains, not only necessities, but delicacies for the inhabitants.

The milk of the goat is sweet, nourishing and

very probably was the *Angora* goat, which is only found in the East, and whose soft and silky hair supplied a most luxurious couch. *Vide Hist. quad.* p. 61.

medicinal : it is an excellent succedaneum for ass's milk, and has (with a tea-spoonful of hartshorn drank warm in bed in the morning, and at four o'clock in the afternoon, and repeated for some time) been a cure for the pthisic. In some of the mountainous parts of *Scotland* and *Ireland*, the milk is made into whey, which has done wonders in this and other cases, where coolers and restoratives are necessary : and to many of those places, there is as great a resort of patients of all ranks, as there is in *England* to the *Spas* or *Baths*. It is not surprizing that the milk of this animal is so salutary, as it brouzes only on the tops, tendrils and flowers of the mountain shrubs, and medicinal herbs, rejecting the grosser parts. The blood of the he goat dried, is a great recipe in some families for the pleurisy and inflammatory disorders.*

Cheese made of goats milk, is much valued in some of our mountainous countries, when kept to a proper age ; but has a peculiar taste and flavor.

The rutting season of these animals, is from the beginning of *September* to *November* ; at that time the males drive whole flocks of the

* This remedy is taken notice of even by Dr. *Mead* in his *monita medica*, p. 35. under the article *pleuritis*. The *Germans* use that of the *Stein-boc*, or *Iber*.

females continually from place to place, and fill the atmosphere around them with their strong and ungrateful odor; which, though as disagreeable as *assa fœtida* itself, may be conducive to prevent many distempers, and to cure nervous and hysterical ones. Horses are imagined to be much refreshed with it; on which account many persons keep a he goat in their studs or stables.

Goats go with young four months and a half, and bring forth from the latter end of *February* to the latter end of *April*. Having only two teats, they bear generally but two young, sometimes three, and in good warm pastures there have been instances, though rare, of their bringing four at a time: both young and old are affected by the weather: a rainy season makes them thin; a dry sunny one makes them fat and blythe: their excessive venery prevents longevity, for they seldom live in our climate above eleven or twelve years.

These animals climb, with amazing swiftness and safety, up the most rugged rocks, and ascend the most dangerous places: they can stand unmoved on the highest precipices, and so balance their centre of gravity, as to fix themselves in such situations with security and firmness; so that we seldom hear of their

breaking their necks, or falling. When two are yoked together, as is frequently practised, they will, as if by consent, take large and hazardous leaps, yet so well time their mutual efforts, as rarely to miscarry in the attempt.

The origin of the domestic goat may be derived from the *Steinboc*, *Iber* or wild goat,* now found only in the *Alps* and in *Crete*, and also from the *Caucasan* goat,† which inhabits the loftiest and most rude points of *Caucasus*, the inhospitable hills of *Laar* and *Khorazan* in *Persia*, and, according to *Monardus*, is also found in *Africa*; it may likewise have formerly been a native of the *Alps* and of *Crete*.

* *Hist. quad.* No. 15.

† *Ib.* No. 16.

GENUS V. DEER.

HORNS upright, solid, branched, annually deciduous.

<i>Cervus. Raii syn. quad.</i> 84.	<i>Cervus cornibus teretibus ad</i>	6. STAG.
<i>Charlt. ex.</i> 11:	<i>latera incurvis. Brisson quad.</i>	
<i>Meyer's an. Tab.</i> 22.	58.	
<i>Gesner quad.</i> 326.	<i>Cervus Elaphus. Gm. Lin.</i> 176.	
<i>Grew's Museum,</i> 21.	<i>C. cornibus ramosis teretibus</i>	
<i>De Buffon, Tom. vi.</i> 63. <i>Tab.</i>	<i>recurvatis. Faun. Suec.</i> 40.	
9, 10.	<i>C. nobilis. Klein. quad.</i> 23.	
	<i>Br. Zool.</i> 15. <i>Hist. quad.</i> p. 114.	

	STAG.	HIND.	YOUNG, or CALF.
<i>Brit.</i>	Carw	Ewig	Elain
<i>Fren.</i>	Le Cerf	La Biche	Faon
<i>Ital.</i>	Cervio	Cervia	
<i>Span.</i>	Ciervo	Cierva	
<i>Port.</i>	Cervo	Cerva	
<i>Germ.</i>	Hirtz, Hirsch	Hind	Hinde kalb
<i>Dutch,</i>	Hart	Hinde	
<i>Swed.</i>	Hiort, Kronhiort	Hind	
<i>Dan.</i>	Kronhiort	Hind	Kid, or Hind kalv.

<i>Platycerata. Plinii, lib. xi. c.</i>	<i>Cervus cornuum unica et altiore</i>	7. FALLOW.
37.	<i>summitate palmata. Brisson</i>	
<i>Eurycerata. Oppian Cyneg.</i>	<i>quad.</i> 62.	
<i>lib. 11. lin.</i> 293.		

Fallow deer, or buck ; cervus platyceros. <i>Raii syn. quad.</i> 85.	Cervus Dama. Cervus cornibus ramosis recurvatis compressis : summitatibus palmatis. <i>Gm. Lin.</i> 178. <i>Faun. Suec.</i> 82. <i>Br. Zool.</i> 15. <i>Hist. quad.</i> p. 113.
Dama vulgaris. <i>Gesner quad.</i> 307.	Cervus palmatus. <i>Klein. quad.</i> 25.
<i>Meyer's an.</i> Tom. i. <i>Tab.</i> 71.	
<i>De Buffon.</i> Tom. vi. 161. <i>Tab.</i> 27, 28.	

	BUCK.	DOE.	FAWN.
<i>Brit.</i>	Hydd	Hyddes	Elain
<i>Fren.</i>	Le Dain	La Daine	Faon
<i>Ital.</i>	Daino		Cerbiatto
<i>Span.</i>	Gamo, Corza		Venadito
<i>Port.</i>	Corza		Veadó
<i>Germ.</i>	Damhirsch		
<i>Swed.</i>	Dof, Dof hiort		
<i>Dan.</i>	Daae Dijr.		

AT first, the beasts of chace had this whole island for their range ; they knew no other limits than those of the ocean, or confessed any particular master. When the *Saxons* had established themselves in the *Heptarchy*, they were reserved by each sovereign for his own particular diversion : hunting and war in those uncivilized ages were the sole employment of the great ; their active, but uncultivated minds, being susceptible of no pleasures but those of a violent kind, such as gave exercise to their bodies, and prevented the pain of thinking. As the *Saxon* kings only appropriated those lands to the use of forests which were un-

occupied, no individuals received an injury : but when the conquest had settled the *Norman* line on the throne, this passion for the chace was carried to an excess, which involved every civil right in a general ruin ; it superseded the consideration of religion even in a superstitious age : the village communities, nay, even the most sacred edifices were turned into one vast waste, to make room for animals, the objects of a lawless tyrant's pleasure. The New Forest in *Hampshire* is too trite an instance to be dwelt upon : sanguinary laws were enacted to preserve the game, and in the reigns of *William Rufus*, and *Henry I.* it was less criminal to destroy one of the human species than a beast of chace.* Thus it continued while the *Norman* line filled the throne ; but when the *Saxon* line was restored under *Henry II.* the rigor of the forest laws was immediately softened.

When our barons began to form a power, they claimed a vast, but more limited tract for a diversion, the *English* were always fond of. They were very jealous of any encroachments on their respective bounds, which were often the cause of deadly feuds ; such a one gave cause to the fatal day of *Chevy-chace*, a fact,

* An antient historian speaks thus of the penalties incurred ; *Cervum vel capreolum capienti, oculi eruebantur. Amabat enim ferus Rex, feras, quasi pater ferarum. Mat. Paris. 9.*

which though recorded only in a ballad, may, from what we know of the manners of the times, be founded on truth; not that it was attended with all the circumstances the author of that natural, but heroic composition hath given it, for on that day neither a *Percy* or a *Douglas* fell: here the poet seems to have claimed his privilege, and mixed with this fray some of the events of the battle of *Otterbourne*.

When property became happily more divided by the relaxation of the feudal tenures, these extensive hunting-grounds became more limited, and as tillage and husbandry increased, the beasts of chace were obliged to give way to others more useful to the community. The vast tracts of land before dedicated to hunting, were then contracted, and in proportion as the useful arts gained ground, either lost their original destination, or gave rise to the invention of Parks.* Liberty and the arts seem coeval, for when once the latter got footing, the former protected the labors of the industrious from being ruined by the licentiousness of the sportsman, or being devoured by the objects of his

* The largest park in *England*, about the year 1780, was that belonging to the Duke of *Ancaster*, at *Grimsthorpe*, which, it is said, contained not less than six thousand head of fallow-deer, and is annually enlarging. There is near it another park containing two or three hundred head of stags and hinds. M. T.

diversion : for this reason, the subjects of a despotic government still experience the inconveniences of vast wastes, and forests, the terrors of the neighbouring husbandmen ;* while in our well-regulated monarchy, very few chaces remain : we still indulge ourselves in the generous pleasure of hunting, but confine the deer-kind to parks, of which *England* boasts of more than any other kingdom in *Europe*. Our equal laws allow every man his pleasures, but confine them within such bounds, as prevents them from being injurious to the meanest of the community. Before the reformation, our prelates seem to have guarded sufficiently against the want of this amusement, the see of *Norwich* in particular, being possessed about that time of thirteen parks.† They seem to have forgot good king *Edgar's* advice, *Docemus etiam ut sacerdos non sit venator neque accipitrarius neque potator, sed incumbat suis libris sicut ordinem ipsius decet.*‡

It was customary to salt the venison for preservation, like other meat. *Rymer* preserves a

* In *Germany* the peasants are often obliged to watch their grounds the whole night, to preserve the fences and corn from being destroyed by the deer.

† *Peacham's Compleat Gentleman*, 261.

‡ *Leges Saxon.* 87.

warrant of *Edward* III. ordering sixty deer to be killed for that purpose.

The stag and buck agree in their nature; but the latter being more tender is easier tamed, and made familiar. They scarcely ever herd together. The stag is become less common than it was formerly; its excessive viciousness during the rutting season, and the badness of its flesh, induce most people to part with the species. Stags are still found wild in the highlands of *Scotland*, in herds of four or five hundred together, ranging at full liberty over the vast hills of the north. Some grow to a great size: when I was at *Invercauld* Mr. *Farquharson* assured me that he knew an instance of one that weighed eighteen stone *Scots*, or three hundred and fourteen pounds, exclusive of the entrails, head and skin. Formerly the great highland chieftains used to hunt with the magnificence of an eastern monarch, assembling four or five thousand of their clan, who drove the deer into the toils, or to the station their lairds had placed themselves in; but as this pretence was frequently used by them to collect their vassals for rebellious purposes, an act was passed prohibiting any assemblies of this nature. Stags are likewise met with on the moors that

border on *Cornwall* and *Devonshire*, and in *Ireland* on the mountains of *Kerry*, where they add greatly to the magnificence of the romantic scenery of the lake of *Killarny*.

The stags of *Ireland* during its uncultivated state, and while it remained an almost boundless tract of forest, had an exact agreement in habit with those which range at present through the wilds of *America*. They were less in body, but very fat; and their horns of a size far superior to those of *Europe*, but in form agreed in all points. Old *Giraldus* speaks with much precision of those of *Ireland*, *Cervos præ nimia pinguedine minus fugere prævalentes, quanto minores sunt corporis quantitate, tanto præcellentius efferuntur, capitis et cornuum dignitate*.*

[The rutting time of the old stags, begins the latter end of *August* or beginning of *September*, and ends about the 20th of that month: that of the next age, begins about the 10th of *September*, and ends the beginning of *October*: the younger stags are in rut from about the 20th of *September* till the 15th of *October*, after whom

* *Topogr. Hiberniæ*. c. 19. *Lawson* in his history of *Carolina* p. 123, mentions the fatness of the *American* stags, and their inferiority of size to the *European*. I have often seen their horns, which vastly exceed those of our country in size, and number of antlers.

none but the prickets are in rut, and the whole season terminates by *November*. The young hinds come into heat later than the old. Both stag and hind are supposed to be of an age to engender at eighteen months. The hind carries her young rather more than eight months, and produces mostly one, sometimes two at a birth. Stags seldom live longer than thirty or thirty five years, although many authors have attributed to them a much greater degree of longevity. The fallow-deer does not begin to rut till near three weeks after the stags, and exactly in the same order, the old bucks first and the prickets last. They also drop their horns later in the same proportion.] M. T.*

We have in *England* two varieties of fallow-deer which are said to be of foreign origin : the beautiful spotted kind, and the very deep brown sort, that are now so common in several parts of this kingdom. These were introduced here by king *James I.* out of *Norway*,† where he passed some time when he visited his intended bride, *Anne of Denmark*.‡ He ob-

* The above paragraph, and the notes marked by the initials M. T. were communicated to Mr. *Pennant* by his valued friend *Marmaduke Tunstall*, Esq. Ed.

† This we relate on the authority of Mr. *Peter Collinson*.

‡ One of the *Welsh* names of this animal (*Geifr Danys*, or *Danish* goat) implies that it was brought from some of the *Danish* dominions. Ed. *Llwyd. Ph. tr.* No. 334.

served their hardiness, and that they could endure, even in that severe climate, the winter without fodder. He first brought some into *Scotland*, and from thence transported them to his chaces of *Enfield* and *Epping*, to be near his palace of *Theobalds*; for it is well known, that monarch was in one part of his character the *Nimrod* of his days, fond to excess of hunting, that image of war, although he detested the reality. No country produces the fallow-deer in quantities equal to *England*. In *France* they are scarcely known, but are sometimes found in the north* of *Europe*. In *Spain* they are extremely large. They are met with in *Greece*, the *Holy Land*,† and in *China*;‡ but in every country except our own are in a state of nature, unconfined by man. They are not natives of *America*, for the deer known in our colonies by that name are a distinct species, a sort of stag, as we have remarked vol. i. p. 116. of our *History of Quadrupeds*.

The uses of these animals are almost similar; the skin of the buck and doe is sufficiently known to every one; and the horns of the stag are of great use in mechanics; they, as well as the horns of the rest of the deer kind, being ex-

USES.

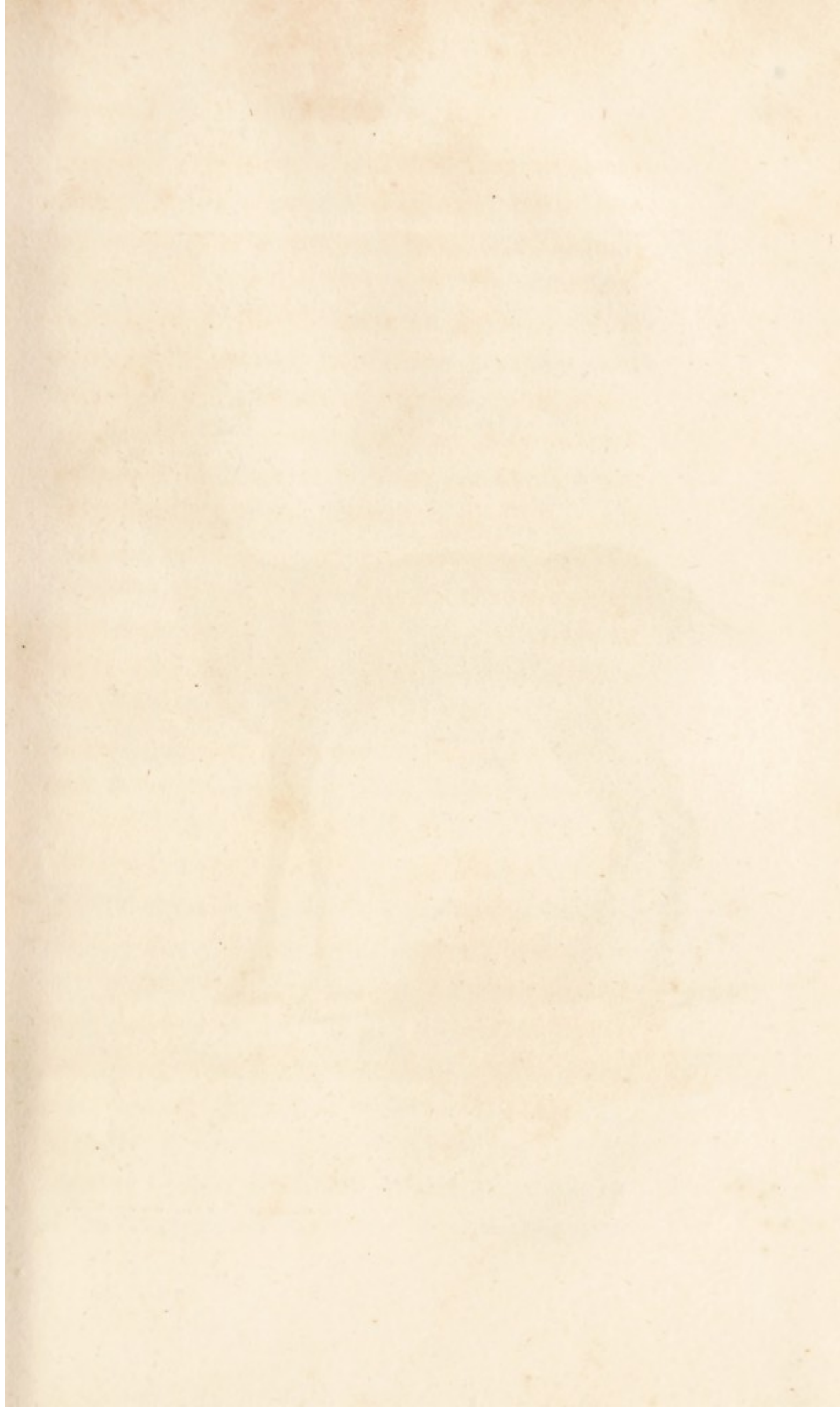
* *Pontop. Norway.* 11. 9. *Faun. Suec.* sp. 42.

† *Hasselquist. itin.* 290.

‡ *Du Halde hist. China.* I. 315.

cessively compact, solid, hard and weighty, and make excellent handles for couteaus, knives, and several other utensils. They abound in *ammonia*, which is the basis of the spirit of Hartshorn; and the remains (after the salts are extracted) being calcined, become a valuable astringent in fluxes, which is known by the name of burnt Hartshorn. Besides these uses in mechanics and medicine, there is an instance in *Giraldus Cambrensis*, of a countess of *Chester*, who kept milch hinds, and made cheese of their milk, some of which she presented to archbishop *Baldwin*, in his itinerary through *Wales*, in the year 1188.*

* *Girald. Camb. Itin.* p. 216.



ROEBUCK.



Mr. Griffith pinx.

Δορκας, <i>Aristotelis</i> de Part. lib. iii. c. 2.	Cervus cornibus teretibus erectis. <i>Brisson quad.</i> 61.	8. Roz.
Iorcas, Dorcas, <i>Oppian Cyneget.</i> lib. ii. lin. 296. 315.	<i>De Buffon</i> , Tom. vi. 289. Tab. 32, 33.	
Caprea, <i>Plinii</i> , lib. xi. c. 37.	Cervus minimus, <i>Klein quad.</i> 24.	
Capreolus Vulgo. <i>Raii syn. quad.</i> 89.	Cervus Capreolus, <i>Gm. Lin.</i> 160.	
<i>Camd. Brit.</i> ii. 771.	C. Cornibus ramosis teretibus erectis, summitate bifida, <i>Faun. Suec.</i> 43.	
<i>Meyer's anim.</i> ii. Tab. 73.	<i>Br. Zool.</i> 18. <i>Hist. quad.</i> p. 120. <i>Tour in Scotland.</i> 288. Tab. xiv. <i>Arct. Zool.</i> 1 37.	
Capreolus, <i>Sib. Scot. pars</i> 3. 9.		
Caprea, Capreolus, Dorcas. <i>Gesner quad.</i> 296.		
<i>Merret pinax.</i> 166.		
<i>Brit.</i> Iwrch, <i>fæm.</i> Iyrchell	<i>Port.</i> Cabra montes	
<i>Fren.</i> Le Chevreuil	<i>Ger.</i> Rehbock, <i>fæm.</i> Rehgeess	
<i>Ital.</i> Capriolo	<i>Swed.</i> Radiur, Rabock	
<i>Span.</i> Zorlito, Cabronzillo montes	<i>Dan.</i> Raaedijr Raaebuk.	

THE roebuck prefers a mountanous woody country to a plain one; was formerly very common in *Wales*, in the north of *England*, and in *Scotland*, but at present the species no longer exists in any part of *Great Britain*, except in the *Scottish* highlands. According to Dr. *Mouffet*, it was found in *Wales* as late as the reign of Queen *Elizabeth*, and in great plenty in the *Cheviot* hills according to *Leland* in that

of *Henry VIII.** In *France* they are more frequent; they are also found in *Italy*, *Sweden*, and *Norway*; and in *Siberia* in *Asia*.† The first that are met with in *Great Britain* are in the woods on the south side of *Loch Rannoch*, in *Perthshire*: the last in those of *Langwal*, on the southern borders of *Cathness*; but they are most numerous in the beautiful forests of *Invercauld*, in the midst of the *Grampian* hills. They are unknown in *Ireland*.

DESCRIP.

This is one of the lest of the deer kind, being only three feet nine inches long, two feet three inches high before, and two feet seven behind: the weight is from 50 to 60lb. The horns are from eight to nine inches long, upright, round, and divided into only three branches; their lower part is sulcated lengthways and extremely rugged; of this part is made handles for couteaus, knives, &c. The horns of a young buck in its second year are quite plain; in its third year a branch appears; in the fourth its head is complete. The

* The editor has been informed that seven or eight specimens of the horns of the roebuck have been discovered in the peat beds near *Romsey*, in *Hampshire*; a proof, that at some remote period, this animal inhabited the southern part of the kingdom. A complete head of a beaver with the teeth entire, was found in the same place. ED.

† *Bell's Travels*.

body is covered during winter with very long hair, well adapted to the rigor of the highland air; the lower part of each hair is ash-color, near the end is a narrow bar of black, and the points are yellow. The hairs on the face are black, tipped with ash-color; the ears are long, their insides of a pale yellow, and covered with long hair; the spaces bordering on the eyes and mouth are black. During summer its coat has a very different appearance, being very short and smooth, and of a bright reddish color. The chest, belly, and legs, and the inside of the thighs, are of a yellowish white; the rump is of a pure white; the tail is very short. On the outside of the hind leg, below the joint, is a tuft of long hair. The make of the roebuck is very elegant, and formed for agility.

These animals do not keep in herds like other deer, but only in families; they bring two fawns at a time, which the female is obliged to conceal from the buck while they are very young. They engender at the age of eighteen months, and the doe goes with young five months. They live twelve or fifteen years. The flesh of this creature is reckoned a delicate food.

It is a tender animal, incapable of bearing great cold. *M. de Buffon* tells us that in the hard winter of 1709, the species in *Burgundy*

was almost destroyed, and many years elapsed before it was restored again. I was informed in *Scotland*, that it is very difficult to rear the fawns; it being computed that eight out of ten of those that are taken from their parents die.

Wild roes during summer feed on grass, and are very fond of the *rubus saxatilis*, called in the highlands the *roe-buck* berry; but in winter time, when the ground is covered with snow, they brouze on the tender branches of fir and birch.

In the old *Welsh* laws, a roe-buck was valued at the same price as a she goat; a stag at the price of an ox; and a fallow-deer was esteemed equal to that of a cow, or, as some say, an he goat.*

FOSSIL
HORNS.

It will not be foreign to the present subject, to mention the vast horns frequently found in *Ireland*, and others sometimes met with in our own kingdom. The latter are evidently of the stag kind, but much stronger, thicker, heavier, and furnished with fewer antlers than those of the present race; of those some have been found on the sea-coast of *Lancashire*,† and a single horn was dug a few years ago out of the sands near *Chester*. Those found in‡ *Ireland*

* *Leges Wallicæ*, 258.

† *Ph. Tr.* No. 422.

‡ *Boate's Nat. Hist. Ireland*, 137.

must be referred to the elk kind, but of a species different from the *European*, being provided with brow antlers which that wants: neither are they of the Moose deer or *American*, which entirely agrees with the elk of *Europe*, as I have found by comparison. Entire skeletons of this animal are sometimes met with, lodged in a white marle. Some of these horns are near twelve feet between tip and tip.* Not the faintest account (traditional or historical) is left of the existence of these animals in our kingdom, so that they may possibly be ranked among those remains which fossilists distinguish by the title of *diluvian*.

Mr. *Graham*, factor to the *Hudson's Bay* company, once gave me hopes of discovering the living animal. He informed me that he had received accounts from the *Indians* who resort to the factories, that a deer is found about seven or eight hundred miles west of *York fort*, which they call *Waskesseu*, and which they say is vastly superior in size to the common Moose; but as yet nothing has transpired relating to so magnificent an animal. The difference of size be-

* A pair of this size is preserved at Sir *Patrick Bellew's*, Bart. in the county of *Louth*. The great difference between the Moose horns and the Fossil is shewen in Plate XVII. and XX. of my *History of Quadrupeds*.

tween the modern Moose, and the owners of the fossil horns may be estimated by the following account. The largest horns of the *American* Moose ever brought over, are only thirty-two inches long, and thirty-four between tip and tip. The length of one of the fossil horns is six feet four inches ; the space between tip and tip near twelve feet. The largest Moose described by any authentic voyager does not exceed the size of a great horse ; that which I saw (a female) was fifteen hands high ; but we must search for much larger animals to support the weight of our fossil horns. If *Josselyn's* or *Dudly's* Moose of twelve feet in height ever existed,* we may suppose that to have been a species, which as population advanced, retired into distant parts, into depths of woods unknown but to distant *Indians*.

* *Voy. to New England*, 88. *New England Rarities*, 19. See also Mr. *Dudly's* account in *Ph. Trans. abridg.* VII. 447.

* WITHOUT HORNS.

GENUS VI. HOG.

TEETH cutting in both jaws.

Sus, seu Porcus domesticus.	<i>De Buffon, Tom. V. 99. Tab. 6, 7.</i>	9. COMMON.
<i>Raii syn. quad. 92.</i>	<i>Klein quad. 25.</i>	
<i>Gesner quad. 872.</i>	<i>Sus Scrofa Gm. Lin. 217.</i>	
<i>Charlton ex. 14.</i>	<i>Sus dorso antice setoso, cauda</i>	
<i>Sus caudatus auriculis ob-</i>	<i>pilosa. Faun. Suec. 21.</i>	
<i>longis acutis, cauda pilosa.</i>	<i>Br. Zool. 19. Hist. quad. 75.</i>	
<i>Brisson quad. 74.</i>	<i>p. 140.</i>	

	BOAR.	Sow.	Hog.
<i>Brit.</i>	Baedd	Hwch	Mochyn
<i>Fren.</i>	Le Verrat	La Truye	Porc
<i>Ital.</i>	Verro	Porca	Porco
<i>Span.</i>	Berraco	Puerca	Puerco
<i>Port.</i>		Porca	Porco
<i>Germ.</i>	Eber	Sau	Barg
<i>Dut.</i>	Beer	Soch	Varken
<i>Swed.</i>		Swiin	
<i>Dan.</i>	Orne	Soë.	

ACCORDING to common appearances, the hog is certainly the most impure and filthy of all quadrupeds; but we should reflect that filthiness is an idea merely relative to ourselves. We form a partial judgment from our own sensations, and overlook that wise maxim of Providence, that every part of the creation

should have its respective inhabitants. By this œconomy of nature, the earth is never overstocked, or any part of the creation useless. This observation may be exemplified in the animal before us; the hog alone devouring what is the refuse of all the rest, and contributing not only to remove what would be a nuisance to the human race, but also converting the most nauseous offals into the richest nutriment: for this reason its stomach is capacious, and its gluttony excessive; not that its palate is insensible to the difference of eatables, for where it finds variety, it will reject the worst with as distinguishing a taste as other quadrupeds.*

This animal has, not unaptly, been compared to a miser, who is useless and rapacious in his life, but on his death becomes of public use, by the very effects of his sordid manners. The hog during life renders little service to mankind, except in removing that filth which other animals reject: his more than common brutality,

* The ingenious author of the *Pan Suecus*, has proved this beyond contradiction, having with great industry drawn up tables of the number of vegetables, which each domestic animal chuses, or rejects: and it is found that the hog eats but 72, and refuses 171 plants,

The Ox	eats	276.	rejects	218
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Goat	449.	126.
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Sheep	387.	141.
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Horse	262.	212.	<i>Amœn. Acad.</i> ii. 293.
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urges him to devour even his own off-spring. All other domestic quadrupeds shew some degree of respect to mankind, and even a sort of tenderness for us in our helpless years, but this animal will devour infants, whenever it has opportunity.

The parts of the hog are finely adapted to its way of life. As its method of feeding is by turning up the earth with its nose for roots of different kinds, so nature has given it a more prone form than other animals; a strong brawny neck; eyes small, and placed high in the head; a long snout, a nose callous and tough, and a quick sense of smelling to trace out its food. Its intestines have a strong resemblance to those of the human species; a circumstance that should mortify our pride. The external form of its body is very unwieldy; yet, by the strength of its tendons, the wild boar (which is only a variety of the common kind) is enabled to fly from the hunters with amazing agility: the back toe on the feet of this animal prevents its slipping while it descends declivities, and must be of singular use when it is pursued: yet, notwithstanding its powers of motion, it is by nature stupid, inactive, and drowsy; much inclined to increase in fat, which is disposed in a different manner from other animals, and forms

a regular coat over the whole body. It is restless at a change of weather, and in certain high winds is so agitated as to run violently, screaming horribly at the same time; it is fond of wallowing in the dirt, either to cool its surfeited body, or to destroy the lice, ticks, and other insects with which it is infested. Its diseases generally arise from intemperance; measles, impostumes, and scrophulous complaints are reckoned among them. *Linnaeus* observes that its flesh is wholesome food for athletic constitutions, or those who use much exercise, but bad for such as lead a sedentary life: it is however of most universal use, and furnishes numberless materials for epicurism, among which brawn is a kind peculiar to *England*.* The flesh of the hog is an article of the first importance to a naval and commercial nation, for it takes salt better than any other kind, and consequently is capable of being preserved longer. The lard is of great use in medicine, being an ingredient in various sorts of plaisters, either pure, or in the form of unguent; and the bristles are formed into brushes of several kinds.

This animal has been applied to an use in this island, which seems peculiar to *Minorca* and the part of *Murray* which lies between the

* *Hollingshed Descr. Brit.* 109.

Spey and *Elgin*. It has been there converted into a beast of draught; for I have been assured by a minister of that country, eye witness to the fact, that he had on his first coming into his parish seen a cow, a sow, and two *Troques* (young horses) yoked together, and drawing a plough in a light sandy soil, and that the sow was the best drawer of the four. In *Minorca* the ass and the hog are common help-mates, and are yoked together in order to turn up the land.

The wild-boar was formerly a native of our country, as appears from the laws of *Howel dda*,* who permitted his grand huntsman to chase that animal from the middle of *November* to the beginning of *December*. *William* the Conqueror punished with the loss of their eyes, those who were convicted of killing the wild-boar, the stag, or the roebuck;† and *Fitz-Stephen* tells us, that the vast forest which in his time grew on the north side of *London*, was the retreat of stags, fallow-deer, wild-boars, and bulls. *Charles I.* turned out wild-boars in the *New Forest, Hampshire*, but they were destroyed in the civil wars.

* *Leges Wallicæ*. 41.

† *Leges Saxon*. 292.

DIV. II. SECT. I. DIGITATED.

TEETH cutting six in each jaw : Canine two in each jaw, large, distant from the cutting teeth.

RAPACIOUS, carnivorous.

GENUS VII. DOG.

TOES five before, four behind.

CLAWS blunt.

VISAGE long.

10. FAITHFUL,

Canis, Raii syn. quad. 175.

Charlton ex. 26.

Merret pinax, 168.

Gesner quadd. 160, 249, 250.

Canis domesticus. Brisson

quad. 170.

Brit. Ci, fœm. Gast

Fren. Le Chien

Ital. Cane

Span. Perro

Port. Cam

De Buffon, Tom. v. p. 185.

Klein quad. 63.

Canis familiaris. Gm. Lin. 65.

Canis cauda recurva. Faun.

Suec. 5.

Brit. Zool. 23. Hist. quad. p. 235.

Germ. Hund

Dut. Hond

Swed. Hund

Dan. Hund, fœm. Tæve.

DR. Caius, an *English* physician, who flourished in the reign of queen *Elizabeth*, has left among several other tracts relating to natural history, one written expressly on the species of *British* dogs : they were composed for the use of his learned friend *Gesner*, with whom he kept

a strict correspondence, and whose death he laments in a very elegant and pathetic manner.

Besides a brief account of the variety of dogs then existing in this country, he has added a systematic table of them: his method is so judicious, that we shall make use of the same, explain it by a brief account of each kind, and point out those which are no longer in use among us.

SYNOPSIS OF BRITISH DOGS.

I. The most generous kinds.	Dogs of chase.	Hounds.	Terrier
			Harrier
			Blood hound
			Gaze hound
			Grey hound
			Leviner, or Lyemmer
			Tumbler
	Fowlers.		Spaniel
			Setter
			Water spaniel, or finder
II. Farm Dogs.	Lap Dogs.		Spaniel gentle, or comforter
			Shepherd's dog
			Mastiff, or ban dog
III. Mon- grels.			Wappe
			Turnspit
			Dancer.

The first variety is the *Terrarius* or Terrier, which takes its name from its subterraneous

employ; being a small kind of hound, used to force the fox, or other beasts of prey, out of their holes; and, in former times, rabbits out of their burrows into nets.

The *Leverarius*, or Harrier, is a species well known at present; it derives its name from its use, that of hunting the hare; but under this head may be placed the fox-hound, which is only a stronger and fleeter variety, applied to a different chace.*

The *Sanguinarius*, or Bloodhound, or the *Sleuthound*† of the Scots, was a dog of great use, and in high esteem with our ancestors: its employ was to recover any game that had escaped wounded from the hunter, or been killed and stolen out of the forest. It was remarkable for the acuteness of its smell, tracing the lost beast by the blood it had spilt; from

* Prince *Gryffydd ap Cynan* (who began his reign in the year 1079) divided hunting into three kinds: the first and noblest sort was the *Helfa ddolef*, which is hunting for the melody of the cry, or notes of the pack: the second sort was the *Helfa gyfartha*, or hunting when the animal stood at bay: the last kind was the *Helfa gyffredin*, i. e. common hunting; which was no more than the right any person had, who happened accidentally to come in at the death of the game, to claim a share. *Lewis's Hist. of Wales*, 56.

† From the Saxon *slot*, the impression that a deer leaves of its foot in the mire, and *hund* a dog. So they derive their name from following the track.

whence the name is derived. This species could, with the utmost certainty, discover the thief by following his footsteps, let the distance of his flight be ever so great, and through the most secret and thickest coverts: nor would it cease its pursuit, till it had taken the felon. It was likewise used by *Wallace* and *Bruce* during the civil wars. The poetical historians of the two heroes, frequently relate very curious passages on this subject; of the service these dogs were of to their masters, and the escapes they had from those of the enemy. The bloodhound was in great request on the confines of *England* and *Scotland*, where the borderers were continually preying on the herds and flocks of their neighbors. The true bloodhound was large, strong, muscular, broad breasted, of a stern countenance, of a deep tan-color, and generally marked with a black spot above each eye.

The next division of this species of dogs, comprehends those that hunt by the eye, and whose success depends either upon the quickness of their sight, their swiftness, or their subtlety.

The *Agasæus*, or Gazehound, was the first: it chased indifferently the fox, hare, or buck. It would select from the herd the fattest and fairest deer, pursue it by the eye, and if lost

for a time, recover it again by its singular distinguishing faculty; should the beast rejoin the herd, this dog would fix unerringly on the same. This species is now lost, or at least unknown to us.

It must be observed that the *Agasæus* of Dr. Caius, is a very different species from the *Agasseus* of Oppian, for which it might be mistaken from the similitude of names: this he describes as a small kind of dog, peculiar to *Great Britain*; and then goes on with these words;

Τυρόν, ἀσαρκότατον, λασιότριχον, ὄμμασι νωθές.

Curvum, macilentum, hispidum, oculis pigrum.

what he adds afterwards, still marks the difference more strongly;

Ῥινεσι δ' αὖτε μάλιστα πανέξοκος ἐστὶν ἀγασσεύς.

Naribus autem longè præstantissimus est agasseus.

From Oppian's whole description, it is plain he meant our Beagle.*

The next kind is the *Leporarius*, or Grehound. Dr. Caius informs us, that it takes its name *quod præcipui gradus sit inter canes*; the

* Opp. Cyneg. lib. i. lin. 473. 476.

Nemesianus also celebrates our dogs.

Divisa Britannia mittit

Veloces, nostrique orbis venantibus aptos.

first in rank among dogs: that it was formerly esteemed so, appears from the forest laws of king *Canute*, who enacted, that no one under the degree of a gentleman should presume to keep a gre-hound; and still more strongly from an old *Welsh* saying; *Wrth ei Walch, ei Farch, a'i Filgi, yr adwaenir Bonheddig*: which signifies, that you may know a gentleman by his hawk, his horse and his gre-hound.

Froissart relates a fact not much to the credit of the fidelity of this species. When that unhappy Prince *Richard* the second was taken in *Flint* castle, his favorite gre-hound immediately deserted him, and fawned on his rival *Bolingbroke*; as if he understood, and foresaw the misfortunes of the former. The story is so singular, that we give as a note the words of the historian.*

* Le Roy *Richard* avoit ung levrier lequel on nommoit *Math*, tres beau levrier oultre mesure, et ne vouloit ce chien cognoistre nul homme hors le Roi, et quand le Roy vouloit chevaucher, celluy qui lavoit en garde le laissoit aller, et ce levrier venoit tantost devers le Roy le festoyer ce luy mettoient incontinent quil estoit eschappé les deux pieds sur les epaules. Et adoncques advint que le Roy et le conte *Derby* parlans ensemble en la place de la court dudit chasteau, et leur chevaulx tous sellez, car ils vouloient monter a cheval, ce levrier nomme *Math* qui estoit coutumier de faire au Roy ce que dist est, laissa le Roy et sen vint au duc de *Lenclastre*, et luy fist toutes telles contenance que paravant il avoit acoustume de faire au Roy, et lui assist les deux

The variety called the *Highland* gre-hound, and now become very scarce, is of a very great size, strong, deep chested, and covered with long and rough hair. This kind was much esteemed in former days, and used in great numbers by the powerful chieftains in their magnificent hunting matches. It had as sagacious nostrils as the Bloodhound, and was as fierce. This seems to be the kind *Boethius* styles, *genus venaticum cum celerrimum tum audacissimum : nec modo in feras, sed in hostes etiam latronesque ; præsertim si dominum ductoremve injuriam affici cernat aut in eos concitetur.*

The third species is the *Levinarius*, or *Lorarius* ; the *Leviner* or *Lyemmer* : the first name is derived from the lightness of the kind ; the other from the old word *Lyemme*, a thong : this

pieds sur le col, et le commenca moult grandement a cherir, le duc de *Lenclastre* qui point ne cognoissoit ce levrier, demanda au Roy, et que veult ce levrier faire, cousin, dist le Roy, ce vous est une grant signifiance et a moy petite. Comment dist duc lentendez vous. Je lentends dist le Roy, le levrier vous festoye et reccult au jourdhuy comme Roy d'*Angleterre* que vous serez et ien seray depose, et le levrier en a cognoissance naturelle. Si le tenez deles vous, car il vous suyura et meslongera. Le duc de *Lenclastre* entendit bien ceste parolle et fist chere au levrier le quel oncques depuis ne voulut suyvre *Richard de Bourdeaulx* suyvit le duc de *Lenclastre*. *Chronique de Froissart*, tom. iv. fueillet 72. Edition de Paris, 1530.

species being used to be led in a thong, and slipped at the game. Our author says, that this dog was a kind that hunted both by scent and sight, and in the form of its body observed a medium between the hound, and the gre-hound. This probably is the kind known to us by the name of the *Irish* gre-hound, a dog now extremely scarce in that kingdom, the late king of *Poland* having procured from thence as many as possible. I have seen two or three in the whole island : they were of the kind called by *M. de Buffon*, *Le grand Danois*, and probably imported there by the *Danes* who long possessed that kingdom. Their use seems originally to have been for the chase of wolves with which *Ireland* swarmed till the latter end of the seventeenth century. As soon as those animals were extirpated, the numbers of the dogs decreased ; from that period, they were kept only for state.

The *Vertagus*, or Tumbler, is a fourth species, which took its prey by mere subtlety, depending neither on the sagacity of its nose, or its swiftness : if it came into a warren, it neither barked, or ran on the rabbits, but by a seeming neglect of them, or attention to something else, deceived the object till it got within reach, so as to take it by a sudden spring. This dog

was less than the hound, more scraggy, had prickt up ears, and by Dr. *Caius's* description seems to answer to the modern lurcher.

The third division of the more generous dogs, comprehends those which were used in fowling; first, the *Hispaniolus* or Spaniel: from the name it may be supposed, that we were indebted to *Spain* for this breed. There were two varieties of this kind, the first used in hawking, to spring the game, which are the same with our Starters. The other variety was used only for the net, and was called *Index*, or the Setter; a kind well known at present. This kingdom has long been remarkable for producing dogs of this sort, particular care having been taken to preserve the breed in the utmost purity. They are still distinguished by the name of *English* spaniels; so that notwithstanding the derivation of the name, it is probable they are natives of *Great Britain*. We may strengthen our suspicion by saying that the first who broke a dog to the net was an *English* nobleman of a most distinguished character, the great *Robert Dudley* Duke of *Northumberland*.* The Pointer, which is a dog of foreign extraction, was unknown to our ancestors.

* *Wood's Ath. Ox.* II. 27.

The *Aquaticus*, or *Fynder*, was another species used in fowling; was the same as our Water Spaniel, and was used to find or recover the game that was shot.

The *Melitaus*, or *Fotor*; the Spaniel gentle or comforter of Dr. *Caius* (the modern lap dog) was the last of this division. The *Maltese* little dogs were as much esteemed by the fine ladies of past times, as those of *Bologna* are among the modern. Old *Hollingshed* is ridiculously severe on the fair of his days, for their excessive passion for these little animals, which is sufficient to prove they were in his time* a novelty.

The second grand division of dogs comprehends the *Rustici*, or those which were used in the country.

The first species is the *Pastoralis*, or Shepherd's dog; the same which is used at present, either in guarding our flocks, or in driving herds of cattle. This kind is so well trained for those purposes, as to attend to every part of the herd be it ever so large, confine them to the road, and force in every straggler without doing it the least injury.

The next is the *Villaticus*, or *Catenarius*;

* In the reign of Queen *Elizabeth*.

the Mastiff or Ban dog; a species of great size and strength, and a very loud barker. *Manwood* says,* it derives its name from *mase thefese*, being supposed to frighten away robbers by its tremendous voice. *Caius* tells us that three of these were reckoned a match for a bear; and four for a lion: but from an experiment made in the Tower by *James I.* that noble quadruped was found an unequal match to only three; two of the dogs were disabled in the combat, but the third forced the lion to seek for safety by flight.† The *English* bull dog seems to belong to this species, and probably is the dog our author mentions under the title of *Laniarius*. *Great Britain* was so noted for its mastiffs, that the *Roman* Emperors appointed an officer in this island with the title of *Procurator Cynegii*,‡ whose sole business was to breed, and transmit from hence to the Amphitheatre, such as would prove equal to the combats of the place,

Magnaue taurorum fracturi colla *Britanni* ||.

And *British* dogs subdue the stoutest bulls.

Gratius speaks in high terms of the excellency of the *British* dogs,

* *Manwood's Forest Law.*

† *Stow's Annals*, 1427.

‡ *Camd. Brit.* in *Hampshire*.

|| *Claudian de laude Stilichonis. Lib. iii. Lin. 301.*

Atque ipsos libeat penetrare *Britannos* ?
 O quanta est merces et quantum impendia supra!
 Si non ad speciem mentiturosque decores
 Protinus: hæc una est catulis jactura *Britannis*.
 At magnum cum venit opus, promendaque virtus,
 Et vocat extremo præceps discrimine *Mavors*,
 Non tunc egregios tantum admirere *Molossos*.*

If *Britain's* distant coast we dare explore,
 How much beyond the cost the valued store !
 If shape and beauty not alone we prize,
 Which nature to the *British* hound denies :
 But when the mighty toil the huntsman warms,
 And all the soul is roused by fierce alarms,
 When *Mars* calls furious to th' ensanguin'd field
 Even bold *Molossians* then to these must yield.

Strabo† tells us, that the mastiffs of *Britain* were trained for war, and were used by the *Gauls* in their battles ; and it is certain a well-trained mastiff might be of considerable use in distressing such half-armed and irregular combatants as the adversaries of the *Gauls* seem generally to have been before the *Romans* conquered them.

The last division is that of the *Degeneres* or *Curs*. The first of these was the *Wappe*, a name derived from its note : its only use was to alarm the family, by barking, if any person approached the house. Of this class was the *Versator*, or turnspit ; and lastly the *Saltator*,

* *Gratii Cynegeticon*, *Lin.* 175.

† *Strabo*, *Lib.* iv.

or dancing dog, or such as was taught a variety of tricks, and carried about by idle people as a shew. These *Degeneres* were of no certain shape, being mongrels or mixtures of all kinds of dogs.

We should now, according to our plan, after enumerating the several varieties of *British* dogs, give its general natural history; but since *Linnaeus* has already performed it to our hand, we shall adopt his sense, translating his very words (wherever we may) with literal exactness.

“ The dog eats flesh, and farinaceous vegetables, but not greens: its stomach digests bones: it uses the tops of grass as a vomit.*
 “ It voids its excrement on a stone: the *album græcum* is one of the greatest encouragers of putrefaction. It laps up its drink with its tongue: it voids its urine sideways, by lifting up one of its hind legs; and is most diuretic in the company of a strange dog. *Odorat anum alterius*: its scent is most exquisite, when its nose is moist: it treads lightly on its toes; scarcely ever sweats; but when hot lolls out its tongue. It generally walks frequently round the place it intends to lye down on: its sense of hearing is very quick when asleep:

* It is not to be supposed that grass acts as an emetic, but merely occasions sickness by its irritation of the *fauces*, as when a feather is employed by mankind for a similar purpose; mixed with food it does not produce vomiting. ED.

“ it dreams. *Procis rivantibus crudelis: catu-*
 “ *lit cum variis: mordet illa illos: cohæret co-*
 “ *pula junctus:* it goes with young sixty-three
 “ days; and commonly brings from four to
 “ eight at a time: the male puppies resemble
 “ the dog, the female the bitch. It is the most
 “ faithful of all animals: is very docile: hates
 “ strange dogs: will snap at a stone thrown at
 “ it: will howl at certain musical notes: all
 “ (except the *South American* kind) will bark at
 “ strangers: dogs are rejected by the *Maho-*
 “ *metans.*”

- Vulpes. *Raii syn. quad.* 177. Vulpes auctorum. *Hasselquist* 11. Fox.
Morton's Northampt. 444. *Itin.* 191.
Meyer's an. i. Tab. 36. Canis Vulpes. *Gm. Lin.* 73.
 Canis fulvus, pilis cinereis Canis Alopex. C. cauda recta
 intermixtis. *Brisson quad.* apice nigro. vulpes campes-
 173. tris. *Lin. Syst.* 59.
De Buffon. Tom. vii. 75. Canis cauda recta apice albo,
Tab. 6. *Faun. Suec.* 7.
Gesn. quad. 966. Vulpes vulgaris. *Klein. quad.* 73.
Br. Zool. 28. *Hist. quad. p.*
 251. *Arct. Zool. i.* 51.

<i>Brit.</i> Llwynog, <i>fæm.</i> Llwynoges	<i>Germ.</i> Fuchs
<i>Fren.</i> Le Renard	<i>Dut.</i> Vos
<i>Ital.</i> Volpe	<i>Swed.</i> Raff
<i>Span.</i> Raposa	<i>Dan.</i> Rev.
<i>Port.</i> Rapoza	

THE fox is a crafty, lively, and libidinous animal. It begins to engender at the age of twelve

months; it breeds only once in a year (except some accident befalls its first litter) and brings forth, commonly in *April*, four or five young, which like puppies, are born blind; it continues bearing ten or eleven years. There is a commonly received opinion, that this animal will produce with the dog kind; which may be well founded; since it has been proved that the congenerous wolf will.* Mr. *Brook*, animal-merchant in *Holborn*, turned a wolf to a *Pomeranian* bitch then in heat: the congress was immediate, with the circumstances usual with the canine species. The bitch brought ten whelps, one of which I afterwards saw at the Duke of *Gordon's* in *Scotland*. It bore a great resemblance to the male parent, and had much of its nature: being slipped at a weak deer, it instantly caught at the animal's throat and killed

* *M. de Buffon* asserts the contrary, and gives the following account of the experiment he had made. *J'en fis garder trois pendant deux ans, une femelle & deux mâles: on tenta inutilement de les faire accoupler avec des chiennes; quoiqu'ils n'eussent jamais vû de femelle de leur espece, et qu'ils parussent pressés du besoin de jouir, ils ne purent s'y déterminer, ils refuserent toutes les chiennes, mais des qu'on leur presenta leur femelle légitime, ils la couvrèrent, quoiqu'enchainés, et elle produisit quatre petits.* *Hist. Naturelle*, vii. 81. The same experiments were tried with a bitch and a male fox, and with a dog and a female wolf, and as *M. de Buffon* says with the same ill success. Vol. v. 210, 212. but the fact just cited, proves the possibility past contest.

it. The fox sleeps much in the day, but is in motion the whole night in search of prey. It will feed on flesh of any kind, but its favourite food is lambs, rabbits, hares, poultry, and feathered game. It will, when urged by hunger, eat carrots and insects; and those that live near the sea-coasts, will, for want of other food, eat crabs, shrimps, or shell fish. In *France* and *Italy*, it does incredible damage in the vineyards, by feeding on the grapes, of which it is very fond. The fox is a great destroyer of rats, and field mice, and like the cat, will play with them a considerable time, before it puts them to death. When the fox has acquired a larger prey than it can devour at once, it never begins to feed till it has secured the rest, which it does with great address. It digs holes in different places, returns to the spot where it had left the booty, and (supposing a whole flock of poultry to have been its prey) will bring them one by one, thrust them in with its nose, and then conceal them by ramming the loose earth on them, till the calls of hunger incite him to pay them another visit.

Of all animals the fox has the most significant eye, by which it expresses every passion of love, fear, hatred, &c. It is remarkably

playful, but like all other savage creatures half reclaimed, will, on the least offence, bite those it is most familiar with. It is a great admirer of its bushy tail, with which it frequently amuses and exercises itself by running in circles to catch it, and in cold weather wraps it round its nose.

The smell of this animal in general is very strong, but that of the urine is most remarkably foetid. This seems so offensive even to itself, that it will take the trouble of digging a hole in the ground, stretching its body at full length over it, and there, after depositing its water, cover it over with the earth, as the cat does its dung. The smell is so offensive, that it has often proved the means of the fox's escape from the dogs, who have so strong an aversion to the filthy effluvia, as to avoid encountering the animal it came from. It is said that the fox makes use of its urine as an expedient to force the cleanly badger from its habitation: whether that is the means is rather doubtful, but that the fox makes use of the badger's hole is certain; not through want of ability to form its own retreat, but to save itself some trouble, for after the expulsion of the first inhabitant, the fox improves, as well as enlarges it considerably, adding several chambers, and providently making

several entrances to secure a retreat from every quarter. In warm weather it will quit its habitation for the sake of basking in the sun, or to enjoy the fresh air; then it rarely lies exposed, but chuses some thick brake, and generally of gorse, that it may rest secure from surprize. Crows, magpies, and other birds, who consider the fox as their common enemy, will often, by their notes of anger, point out its retreat.

This animal is common in all parts of *Great Britain*, and so well known as not to require a description. The skin is furnished with a soft and warm fur, which in many parts of *Europe* is used to make muffs and lining for cloaths. Vast numbers are taken in *Le Valais*, and the *Alpine* parts of *Switzerland*. At *Lausanne* there are furriers who are in possession of between two and three thousand skins, all caught in one winter.

There are three varieties of foxes found in the VARIETIES.
mountanous parts of these islands, which differ a little in form, but not in color, from each other. These are distinguished in *Wales*, by as many different names. The *Milgri* or Grehound fox, is the largest, tallest, and boldest; and will attack a grown sheep or wether: the Mastiff fox is less, but more strongly built: the *Corgi*, or Cur fox is the lest, and lurks about

hedges, out-houses, &c. and is the most pernicious of the three to the feathered tribe. The first of these varieties has a white tag or tip to the tail; the last a black. The number of these animals in general would soon become intolerable, if they were not proscribed, by having a certain reward set on their heads.

WOLF. In this place we should introduce the* wolf, a congenerous animal, if we had not fortunately a just right to omit it in a history of *British* quadrupeds. It was, as appears by *Hollingshed*,† very noxious to the flocks in *Scotland* in 1577; nor was it entirely extirpated till about 1680, when the last wolf fell by the hand of the famous *Sir Ewen Cameron*. We may therefore with confidence assert the non-existence of those animals, notwithstanding *M. de Buffon* maintains that the *English* pretend to the contrary.‡

It has been a received opinion, that the other parts of these kingdoms were in early times delivered from this pest by the care of king *Edgar*. In *England* he attempted to effect it by commuting the punishments for certain crimes into the acceptance of a number of wolves tongues from each criminal: in *Wales*, by converting the

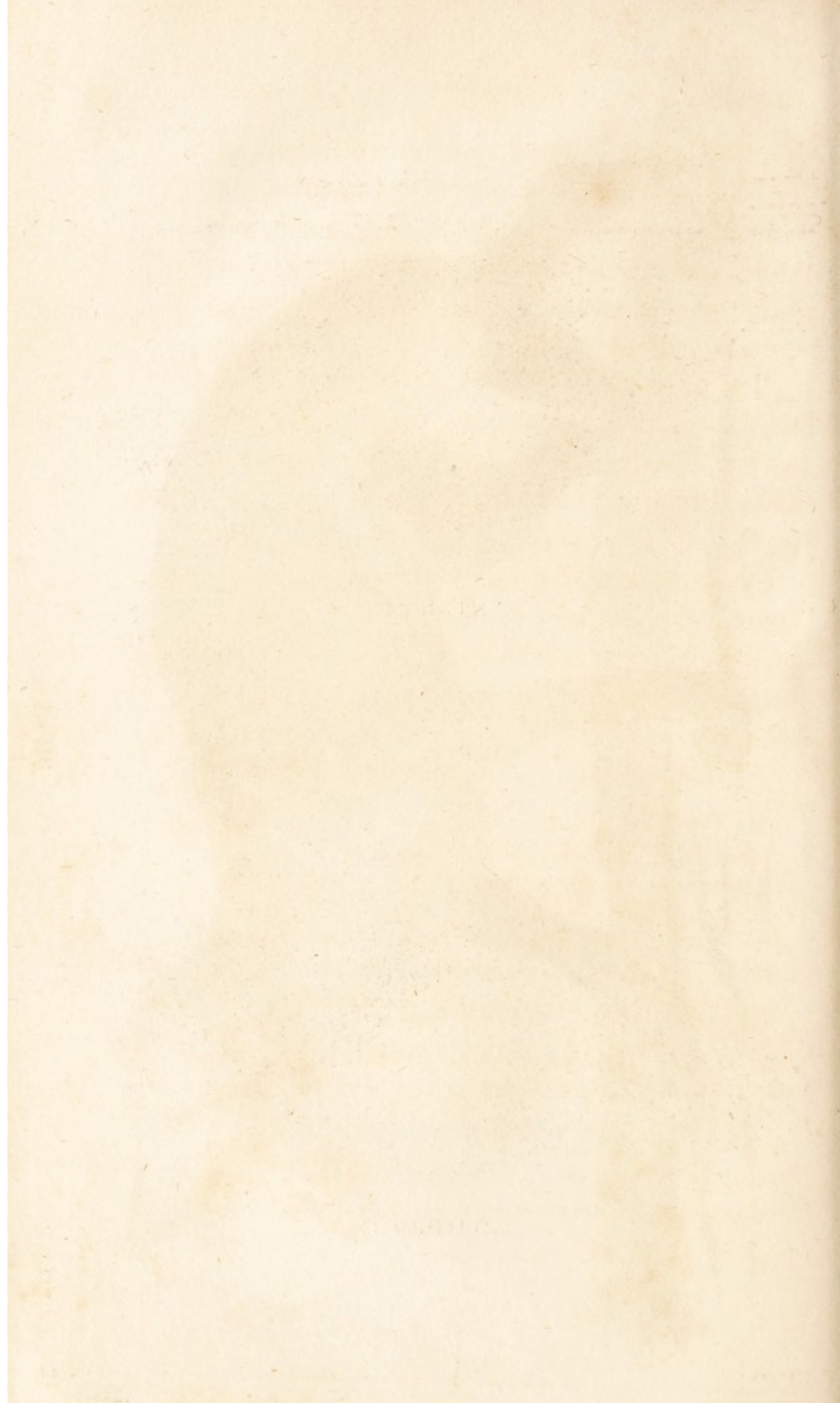
* *Hist. quad.* N. 159. p. 248. *Arctic Zool.* i. N. 9.

† *Disc. Scot.* 10.

‡ *Tom.* vii. p. 50.



Dermodon pum.



tax of gold and silver into an annual tribute of 300 wolves heads. Notwithstanding these his endeavours, and the assertions of some authors, his scheme proved abortive. We find that some centuries after the reign of that *Saxon* monarch, these animals were again increased to such a degree, as to become the object of royal attention; accordingly *Edward* I. issued out his mandate* to *Peter Corbet* to superintend and assist in the destruction of them in the several counties of *Gloucester*, *Worcester*, *Hereford*, *Salop*, and *Stafford*: and in the adjacent county of *Derby*, as *Camden*, p. 902, informs us, certain persons at *Wormhill* held their lands by the duty of hunting and taking the wolves which infested the country, whence they were stiled *Wolve hunt*. To look back into the *Saxon*

* *Pro Petro Corbet, de Lupis Capiendis.*

Rex, omnibus Ballivis, &c. Sciatis quod injunximus dilecto et fideli nostro Petro Corbet quod in omnibus forestis et parcis et aliis locis intra comitatus nostros Gloucester, Wygorn, Hereford, Salop, et Stafford, in quibus lupi poterunt inveniri lupos cum hominibus canibus et ingeniis suis capiat et destruat modis omnibus quibus viderit expedire.

Et ideo vobis mandamus quod eidem intendentes et auxiliantes estis. Teste rege apud Westm. 14 Maii A. D. 1281. Rymer, vol. i. pars 2. p. 192.

By the grant of liberties from king *John*, to the inhabitants of *Devonshire*, it appears that these animals were not then extirpated, even in that southern country. *vide Appendix No. II.*

times we find that in *Athelstan's* reign wolves abounded so in *Yorkshire*, that a retreat was built at *Flixtan* in that county, *to defend passengers from the wolves, that they should not be devoured by them*: and such ravages did those animals make during winter, particularly in *January* when the cold was severest, that our *Saxon* ancestors distinguished that month by the title of *wolf moneth*.^{*} They also called an outlaw *Wolfshed*, as being out of the protection of the law, proscribed, and as liable to be killed as that destructive beast. *Et tunc gerunt caput lupinum, ita quod sine judiciali inquisitione rite pereant.* *Bracton.* lib. iii. Tr. 11. c. 11. also *Knighton.* 2356.

Wolves infested *Ireland* many centuries after their extinction in *England*, for there are accounts of some having been found there as late as the year 1710; the last presentment for killing wolves being made in the county of *Cork* about that time.†

BEAR.

The Bear,‡ another voracious beast, was once an inhabitant of this island, as appears from different authorities. To begin with the more antient, *Martial* informs us, that the *Cale-*

^{*} *Verstegan's Antiq.* 59.

† *Smith's hist. Cork.* II. 226.

‡ *Hist. quād.* N. 208. v. 11. p. 1. *Arctic Zool.* 1. N. 20.

donian bears were used to heighten the torments of the unhappy sufferers on the cross.

Nuda *Caledonio* sic pectora præbuit urso
Non falsâ pendens in cruce *Laureolus*.*

Plutarch relates, that bears were transported from *Britain* to *Rome*, where they were much admired.† Mr. *Llwyd*‡ also discovered in some old *Welsh* MS. relating to hunting, that this animal was reckoned among our beasts of chase, and that its flesh was held in the same esteem with that of the hare or boar. Many places in *Wales* still retain the name of *Pen-narth*, or the bear's head, another evidence of their existence in our country. It does not appear how long they continued in that principality, but there is proof of their infesting *Scotland* as late as the year 1057,§ when a *Gordon*, in reward for his valor in killing a fierce bear, was directed by the King to carry three Bear's heads on his banner. They are still found in the mountanous parts of *France*, particularly about the *Grande Chartreuse* in *Dauphinè*, where they make great havoke among the oat-ricks of the poor farmers. Long after their ex-

* *Martial. Lib. Spect. ep. 7.*

† *Plutarch*, as cited by *Camden*, p. 1227.

‡ *Raii syn. quad.* 214.

§ *Hist. of the Gordons.* 1, 2.

tirpation out of this kingdom, these animals were imported for an end, that does no credit to the manners of the times: bear-baiting in all its cruelty was a favorite pastime with our ancestors. We find it in Queen *Elizabeth's* days, exhibited, tempered with other merry disports, as an entertainment for an ambassador, and again among the various amusements prepared for her majesty at the princely *Kenelworth*.

Our nobility also kept their bear-ward: twenty shillings was the annual reward of that officer from his lord the fifth Earl of *Northumberland*, 'when he comyth to my lorde
' in *cristmas* with his lordshippes beests for
' makynge of his lordschip pastyme the said xii
' days.*

MENAGE-
RIES.

It will not be foreign to the subject here to add, that our monarchs in very early times kept up the state of a menagery of exotic animals. *Henry I.* had his lions, leopards, lynxes, and *porpentine*s (porcupines) in his park at *Woodstock*.† The emperor *Frederick* sent to *Henry III.* a present of three leopards in token of his royal shield of arms, wherein three leopards were pictured.‡ The same prince had also an elephant which (with its keeper) was maintained

* *Northumberland Household Book.*

† *Stow's hist. London* 1. 79.

‡ *Ibid.*

at the expence of the sheriffs of *London* for the time being.* The other animals had their keeper, a man of fashion, who was allowed six-pence a day for himself and six-pence for each beast.

* *Stow's Hist. London*, 118.

GENUS VIII. CAT.

TOES, five before; four behind.

CLAWS, sharp hooked, lodged in a sheath, but may be exerted at pleasure.

HEAD round; visage, short; tongue, rough.

12. WILD. *Felis pilis ex fusco flavicante* *Morton Northampt.* 443.
et albido variegatis vestita, *Gesner quad.* 325.
cauda annulis alternatim nigris et ex sordide albo flavicantibus cincta. *Brisson quad.* 75.
 192. *Br. Zool.* 22. *Hist. quad.*
De Buffon Tom. vi. 20. *Tab.* 1. No. 195.
Felis Catus. Gm. Lin. 80.
Brit. Cath goed *Germ.* Wilde katze, Boumritter
Fren. Le Chat Sauvage *Dan.* Vild kat.
Span. Gato Montis

THIS animal does not differ specifically from the tame cat; the latter being originally of the same kind, but altered in color, and in some other trifling accidents, as are common to animals reclaimed from the woods and domesticated.

The cat in its savage state is three or four times as large as the house-cat; the head larger, and the face flatter. The teeth and claws, tremendous: its muscles very strong, as being

formed for rapine: the tail is of a moderate length, but very thick, marked with alternate bars of black and white, the end always black: the hips and hind part of the lower joints of the leg, are always black: the fur is very soft and fine. The general color of these animals is of a yellowish white, mixed with a deep grey: these colors, though they appear at first sight confusedly blended together, yet on a close inspection will be found to be disposed like the streaks on the skin of the tiger, pointing from the back downwards, rising from a black list that runs from the head along the middle of the back to the tail.

This animal may be called the *British* tiger; it is the fiercest, and most destructive beast we have, making dreadful havock among our poultry, lambs, and kids. It inhabits the most mountainous and woody parts of these islands, living mostly in trees, and feeding only by night. It multiplies as fast as our common cats, and the females of the latter will often quit their domestic mates, and return home pregnant by the former.

They are taken either in traps, or by shooting; in the latter case it is very dangerous only to wound them, for they will attack the person who injured them, and have strength enough to

be no despicable enemy. Wild cats were formerly reckoned among the beasts of chace, as appears by the charter of *Richard II.* to the abbot of *Peterborough*, giving him leave to hunt the hare, fox, and wild cat. The use of the fur was in lining robes; but it was esteemed not of the most luxurious kind, for it was ordained 'that no abbess or nun should use 'more costly apparel than such as is made of 'lambs or cats skins.* In much earlier times it was also the object of the sportsman's diversion.

Felemque minacem

Arboris in trunco longis præfigere telis.

Nemesiani Cynegeticon, L. 55.

* Archbp. *William Corboyl's* canons, A. D. 1127. quoted by Mr. *T. Row* in *Gent. Mag.* April 1774.

Felis domestica seu Catus. *De Buffon*, Tom. vi. 3. Tab. 2. DOMESTIC.

Raii syn. quad. 170.

Felis Catus. *Gm. Lin.* 80.

Charlton ex. 20.

Felis cauda elongata, auribus

Meyer's an. i. Tab. 15.

æqualibus. *Faun. Suec.* 9.

Gesn. quad. 317.

Br. Zool. 21. *Hist. quad.* No.

Brisson quad. 191.

195. p. 297.

Brit. Cath, mas. Gwr cath

Germ. Katz

Fren. Le Chat

Dut. Cyperse Kat. Huyskat.

Ital. Gatto

Swed. Katta

Span. Gato

Dan. Kat.

Port. Gato

THIS animal is so well known as to make a description of it unnecessary. It is an useful, but deceitful domestic; active, neat, sedate, intent on its prey. When pleased purres and moves its tail; when angry spits, hisses, and strikes with its foot; when walking, it draws in its claws. It drinks little; is fond of fish; washes its face with its fore-foot, (*Linnaeus* says at the approach of a storm). The female is remarkably salacious; a piteous, squalling, jarring lover. Its eyes shine in the night; its hair when rubbed in the dark emits fire; it is even proverbially tenacious of life; always lights on its feet; is fond of perfumes; *Marum*, *Catmint*, *Valerian*, &c.*

* Vide *Lin. syst.*

Dr. *Latham* communicated to me a singular instance of a cat in his possession, which was remarkably fond of camphor; when

Our ancestors seem to have had a high sense of the utility of this animal. That excellent Prince *Howel dda*, or *Howel the Good*, did not think it beneath him (among his laws relating to the prices, &c. of animals,*) to include that of the cat, and to describe the qualities it ought to have. The price of a kitling before it could see, was to be a penny; till it caught a mouse two-pence; when it commenced mouser four-pence. It was required besides, that it should be perfect in its senses of hearing and seeing, be a good mouser, have the claws whole, and be a good nurse; but if it failed in any of these qualities, the seller was to forfeit to the buyer the third part of its value. If any one stole or killed the cat that guarded the Prince's granary, he was to forfeit a milch ewe, its fleece and lamb; or as much wheat as when poured on the cat suspended by its tail (the head touching the floor) would form a heap high enough to cover the tip of the former.† This last quotation is

that substance or camphorated spirits were thrown on the floor, the animal would roll itself thereon in the greatest ecstasy, and would also lick a small portion in powder from the palm of the hand. Its offspring did not inherit the same taste. ED.

* *Leges Wallicæ*, p. 247, 248.

† Sir *Ed. Coke* in his reports, mentions the same kind of punishment antiently for killing a swan, by suspending it by the bill, &c. Vide, *Case des Swannes*.

not only curious, as being an evidence of the simplicity of antient manners, but it almost proves to a demonstration that cats are not *aborigines* of these islands, or known to the earliest inhabitants. The large prices set on them, (if we consider the high value of species at that time*) and the great care taken of the improvement and breed of an animal that multiplies so fast, are almost certain proofs of their being little known at that period.

* *Howel dda* died in the year 948, after a reign of thirty-three years over *South Wales*, and eight years over all *Wales*.

GENUS IX. BADGER.

TOES, five before; five behind.

CLAWS on the fore feet very long, strait.

ORIFICE a transverse between the tail and the anus.

13. COMMON. Badger, Brock, Gray Pate, *Gesn. quad.* 686.

Taxus sive *Meles*. *Raii syn.* *Ursus Meles*. *Ursus cauda*
quad. 185. concolore, corpore supra ci-

Meyer's an. i. Tab. 31.

Sib. Scot. 11.

Meles pilis ex sordidè albo et nereo, subtus nigro, fascia

nigro variegatis vestita, ca- longitudinali per oculos au-
pite tæniis alternatim albis resquenigra. *Gm. Lin.* 102.

et nigris variegato. *Brisson* *Coati cauda brevi. Kleinquad.*
quad. 183. 73.

De Buffon, Tom. viii. Tab. 7. *Meles unguibus anticis lon-*
p. 104. *Br. Zool.* 30. *Hist. quad. No.* gissimis. *Faun. Suec.* 20.

215. ii. p. 14. *Arct. Zool.*
i. p. 81.

Brit. Pryf Llwyd, Pryf pen- *Germ.* Tachs
frith

Fren. Le Taisson, Le Blaireau *Dut.* Varkens Das

Ital. Tasso *Swed.* Graf Suin

Span. Texon *Dan.* Grevlin, Brok.

Port. Texugo

THOUGH the badger is a beast of great strength, and is furnished with strong teeth, as if formed for rapine, yet it is found to be perfectly inoffensive: roots, fruits, grass, in-

sects and frogs are its food: it is charged with destroying lambs and rabbits, but on enquiry, there seems to be no other reason to think it a beast of prey, than from the analogy there is between its teeth and those of carnivorous animals. Nature denied the badger the speed and activity requisite to escape its enemies, so hath supplied it with such weapons of offence that scarcely any creature would hazard attacking it; few animals defend themselves better, or bite harder: when pursued, they soon come to bay, and fight with great obstinacy. It is indolent, and sleeps much, for which reason it is always found very fat. It burrows under ground, like the fox; and forms several different apartments, though with only one entrance, carrying, in its mouth, grass in order to form a bed for its young. It confines itself to its hole during the whole day, feeding only at night: it is so cleanly an animal as never to obey the calls of nature in its apartments, but goes out for that purpose: it breeds only once in a year, and brings four or five at a time.

The usual length of the badger, is two feet six inches, exclusive of the tail, which is but six inches long: the weight is fifteen pounds. The eyes are very small; the ears short and rounded; the neck short; the whole shape of the

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TION.

body clumsy and thick, which being covered with long coarse hairs like bristles, makes it appear still more awkward. The mouth is furnished with six cutting teeth and two canine teeth in each jaw; the lower has five grinders on each side, the upper four; in all thirty four.

The nose, chin, lower sides of the cheeks, and the middle of the forehead, are white: each ear and eye is inclosed in a pyramidal bed of black, the base of which incloses the former; the point extends beyond the eye to the nose: the hairs on the body are of three colors; the bottoms of a dirty yellowish white, the middle black, the ends ash-colored, or grey, from whence the proverb; *as grey as a badger*. The hairs which cover the tail are very long, and of the same colors with those of the body; the throat and under parts of the body are black; the legs and feet, of the same color, are very short, strong and thick; each foot is divided into five toes; those on the fore feet are armed with long claws, well adapted for digging; in walking the badger treads on its heel, like the bear, which brings the belly very near the ground. Immediately below the tail, between that and the anus, is a narrow transverse orifice, which opens in a kind of pouch, from whence exudes a white substance of a very foetid

smell; this seems peculiar to the badger and the Hyæna.

This animal is not mentioned by *Aristotle*; not that it was unknown to the antients, for *Pliny* takes notice of it.*

Naturalists once distinguished the badger by the name of the swine-badger, and the dog-badger, from the supposed resemblance of their heads to those animals, and so divided them into two species; but the most accurate observers have been able to discover only one kind; that, whose head and nose resemble those of the dog.

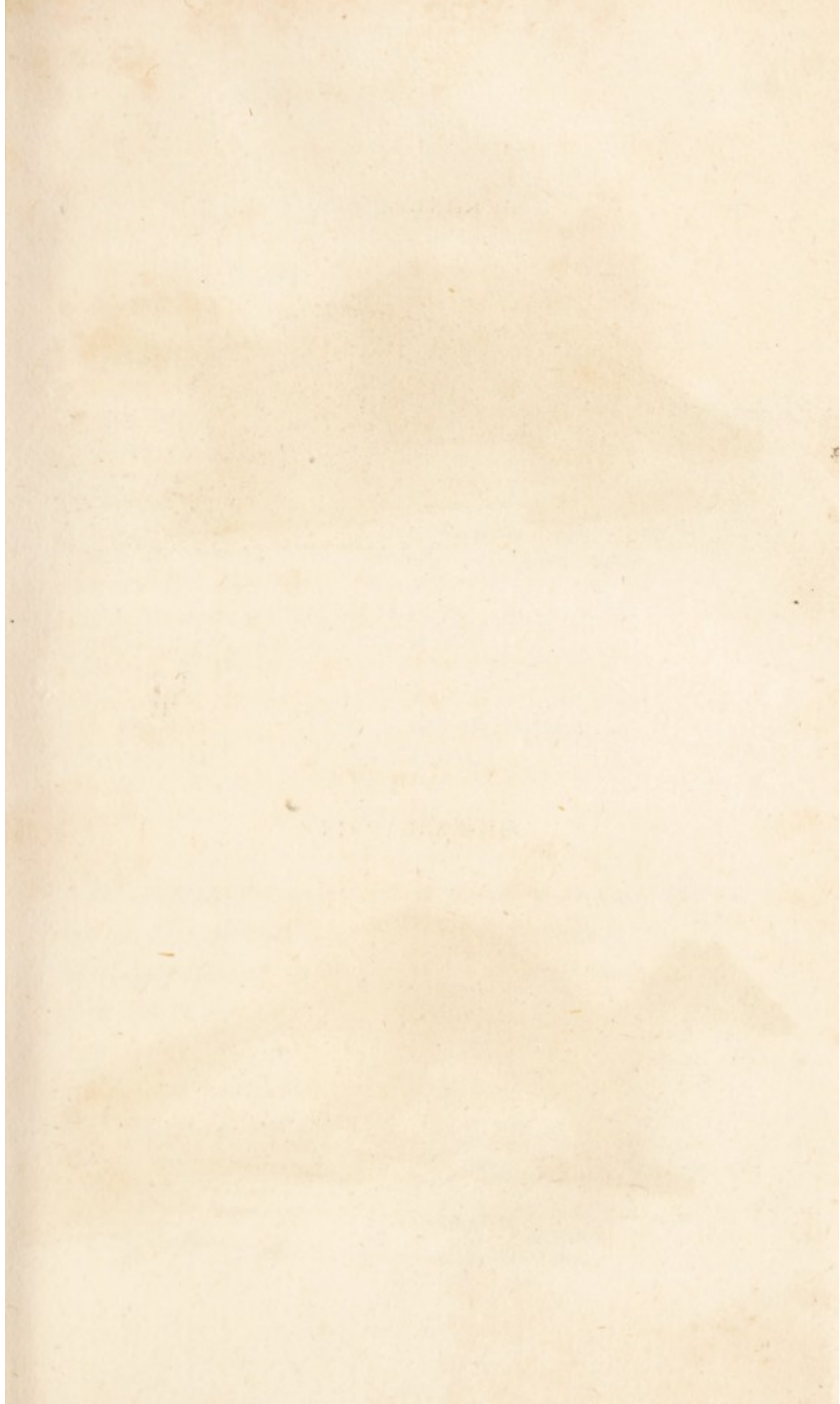
The skin of the badger, when dressed with the hair on, is used for pistol furniture. The Highlanders make their pendent pouches of it. The hair is frequently used for making brushes to soften the shades in painting, which are called sweetening tools. These animals are also hunted in the winter nights for the sake of their flesh; for the hind quarters may be made into hams, not inferior in goodness to the best bacon. The fat is in great request for ointments and salves.

In *China* it seems to be a more common food

* *Alia solertia in metu Melibus, sufflatæ cutis distentu ictus hominum et morsus canum arcent. Lib. viii. c. 38.*

than in *Europe*, for Mr. *Bell** says, he has seen about a dozen at one time in the markets at *Pekin*, and that the *Chinese* are very fond of them. It does not appear that this animal is found in the hotter parts of *Asia*, but is confined to the cold, or the temperate parts of the world.

* *Bell's Travels*, I. 83.



FITCHET.



MARTIN.

P. 108.



GENUS X. WEESEL.

NOSE sharp.

BODY slender.

TOES five before, five behind.

Putorius. Polecat or Fitchet. *De Buffon Tom. vii. 199. Tab. 14. FITCHET.**Raii syn. quad. 199. 23.**Meyer's an. ii. Tab. 6. Mustela Putorius. Gm. Lin. 96.**Charlton ex. 20. Mustela foetida. Klein. quad. 63.**Gesn. quad. 767. Mustela flavescens nigricans,**Mustela pilis in exortu ex ci-* ore albo, collari flavescens.*nereo albidis, colore nigri-* *Faun. Suec. 16.**cante terminatis, oris cir-* *Br. Zool. 37. Hist. quad. No.**cumferentia alba. Brisson 238. ii. p. 37.**quad. 180.**Brit. Ffwlbard**Germ. Iltis, ulk, Buntsing**Fren. Le Putois**Dut. Bonsing**Ital. Foetta, Puzolo**Swed. Iller**Span. Putoro**Dan. Ilder.*

THE length of this animal is about seventeen inches, exclusive of the tail ; that of the tail six. The shape of this species, in particular, as well as of the whole genus, is long and slender ; the nose sharp-pointed, and the legs short, in fine, admirably formed for insinuating itself into the smallest holes and passages, in search of prey. It is very nimble and active, runs very fast, will

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creep up the sides of walls with great agility, and spring with vast force. In running, the belly seems to touch the ground; in preparing to jump, it arches its back, which assists it greatly in that action.

The ears are short, rounded and tipt with white: the circumference of the mouth, that is to say, the ends of the lower and upper jaws are white; the head, throat, breast, legs and thighs, are wholly of a deep chocolate color, almost black; the sides are covered with hairs of two colors, the ends of which are of a blackish hue, like the other parts; the middle of a full tawny color; in others cinereous. The toes are long, and separated to the very origin; the tail is covered with pretty long hair.

MANNERS.

The fitchet is very destructive to young game of all kinds, and to poultry: it generally resides in woods, or thick brakes, burrowing under ground, forming a shallow retreat, about two yards in length, which commonly ends, for its security, among the roots of some large trees. It will sometimes lodge under hay-ricks, and in barns; in the winter it frequents houses, and makes a common practice of robbing the dairy of the milk; it also makes great havock in warrens.

It brings five or six young at a time. Warreners assert, that the fitchet will mix with the ferret, and that they are sometimes obliged to procure an intercourse between these animals, to improve the breed of the latter, which by long confinement will abate its savage nature, and become less eager after rabbits, and consequently less useful. *M. de Buffon* denies that it will admit the fitchet, yet gives the figure of a variety under the name of the *Ferret Polecat*,* which has much the appearance of being a spurious offspring. But to put the matter out of dispute, the following fact need only be related: the Rev. Mr. *Lewis*, Vicar of *Llan-sowel* in *Caermarthenshire*, had a tame female ferret, which was permitted to go about the house; at length it absented itself for several days, and on its return proved with young; it produced nine, of a deep brown color, more resembling the fitchet than the ferret. What makes the matter more certain is, that Mr. *Lewis* had no males of this species for it to couple with, neither were there any within three miles, and those were closely confined.

The ferret agrees with the fitchet in many respects, particularly in its thirst after the blood of rabbits. It may be added, that the ferret

* *La Furet Putois*, Tom. vii. Tab. 25.

comes originally from *Africa* ;* and is only cultivated in *Great Britain*.

Though the smell of the fitchet, when alive, is rank and disagreeable, even to a proverb, yet the skin is drest with the hair on, and used as other furs for tippets, &c. and is also sent abroad to line cloaths.

15. MARTIN. Martes, alias Foyna. The Martin and Martlet. *Raii syn. quad.* 200. *Meyer's an.* ii. Tab. 4. Martin, or Martern. *Charlton exer.* 20. The Mertrick. *Martin's West. Isles,* 36. *Gesner quad.* 764. *Mustela pilis in exortu albidis* *castaneo colore terminatis vestita, gutture albo.* *Brisson quad.* 178. *De Buffon, Tom.* vii. 161. Tab. 18. *Mustela Martes.* *Gm. Lin.* 95. M. Martes. *Klein. quad.* 64. M. fulvo-nigricans gula pallida. *Faun. Suec.* 15. *Br. Zool.* 38. *Hist. quad.* No. 242. ii. p. 41.
- | | |
|-------------------------------|---|
| <i>Brit.</i> Bela graig | <i>Germ.</i> Hauss marder, stein marder |
| <i>Fren.</i> La Fouine | <i>Dut.</i> Marter |
| <i>Ital.</i> Foina, Fouina | <i>Swed.</i> Mard |
| <i>Span.</i> Marta, Gibellina | <i>Dan.</i> Maar. |

MANNERS. **T**HIS is the most beautiful of the *British* beasts of prey : its head is small, and elegantly formed ; its eyes lively ; and all its motions shew great grace, as well as agility. When taken

* *Καὶ γαλας ἀγρίας ὅς ἡ λυβύη φέρει.* *Strabo, Lib.* iii. p. 144. *Edit. Casaubon.*

young, it is easily tamed, is extremely playful, and in constant good humour: nature will recur, if it gets loose, for it will immediately take advantage of its liberty, and retire to its proper haunts. It makes great havock among poultry, game, &c. and will eat mice, rats, and moles. With us it inhabits woods, and forms its lodge in the hollows of trees; it brings from four to six young at a time.

The martin is about eighteen inches long; the tail ten, or, if the measurement be taken to the end of the hair at the point, twelve inches. The ears are broad, rounded and open; the back, sides, and tail, are covered with a fine thick down, and with long hair intermixed; the bottom is ash-colored, the middle of a bright chesnut color, the tips black; the head brown, with some slight cast of red; the legs and upper sides of the feet are of a chocolate color; the palms, or under sides, are covered with thick down like that on the body; the feet are broad; the claws white, large and sharp, well adapted for climbing trees, which in this country are its constant residence. The throat and breast are white; the belly of the same color with the back, but rather paler; the hair on the tail is very long, especially at the end, where it appears much thicker than near the origin of it; the hair

DESCRIP-
TION.

in that part is also darker; but martins vary in their colors, inclining more or less to ash-color, according to their ages or the seasons they are taken in.

FINE SMELL.

The skin and excrements of this animal have a fine musky scent, and are entirely free from that rankness which distinguishes the other species of this genus: the skin is a valuable fur, and much used for linings to the gowns of magistrates.

16. PINE MARTIN.

<i>Martes abietum.</i>	<i>Raii syn.</i>	terminatis vestita, gutture flavo. <i>Brisson quad.</i> 179.
<i>quad.</i> 200.		<i>De Buffon. Tom.</i> vii. 186.
<i>Meyer's an.</i> ii. <i>Tab.</i> 5.		<i>Tab.</i> 22.
<i>Martes sylvestris.</i>	<i>Gesner quad.</i>	<i>Br. Zool.</i> 39. <i>Hist. quad.</i>
765.		No. 244. ii. p. 42. <i>Arct.</i>
<i>Mustela Martes.</i>	<i>Gm. Lin.</i> 95.	<i>Zool.</i> i. No. 27. p. 88.
<i>Mustela pilis in exortu ex cinereo albidis castaneo colore</i>		
<i>Brit.</i> Bela goed		<i>Port.</i>
<i>Fren.</i> La Marte		<i>Germ.</i> Feld-marder, wild-marder
<i>Ital.</i> Marta, Martura, Martora, Martorello		<i>Dut.</i> Marter
<i>Span.</i> Marta		<i>Swed.</i>

THIS species is found in *Great Britain*, but is much less common in *England* than the former; it is sometimes taken in the counties of *Meireoneth* and *Caernarvon*, as I was informed by my late worthy friend Mr. *W. Morris*, where it is distinguished from the other kind, by the

name of *bela goed*, or wood martin, it being supposed entirely to inhabit the woods; the *bela graig* to dwell only among the rocks. Tho' this is so rare in these parts, yet it is the only kind in *Scotland*, where it inhabits the fir forests, building its nest at the top of the trees.* It loves a cold climate, and is found in much greater numbers in the north of *Europe*, than in the other parts. *North America* abounds with these animals. Prodigious numbers of their skins are annually imported from *Hudson's bay* and *Canada*; in one of the company's sales † not fewer than 12,370 good skins, and 2360 damaged ones were sold, and about the same time, the *French* brought into the port of *Rochelle* from *Canada*, not less than 30,325.

The principal difference between this and the former kind, consists in the color of the breast, which is yellow; the color of the body is also much darker, and the fur in general greatly superior in fineness, beauty, and value.‡

* Vide *Sibbald's Hist. Scot.* Part II. Lib. iii. p. 11.

† In 1743. Vide *Dobbs's* account of *Hudson's bay*, 200.

‡ The length of a male, which the editor had an opportunity of seeing in *Suffolk*, was nineteen inches, exclusive of the tail, which measured ten inches; the total length of the female the same, but the tail longer in proportion to the body. The breast of the latter was of a paler yellow, and the color extended higher behind the ears. ED.

17. COMMON. The Weasel or Weesel, *Mustela* *Mustela supra rutila, infra*
vulgaris: in *Yorkshire*, the *alba. Brisson quad. 173.*
Fitchet or Foumart. Raii syn. De Buffon, Tom. vii. 235.
quad. 195. Tab. 29.
Girald. Cambrens. 149. Gesner quad. 753.
The Whitred. Sib. Scot. 11. Mustela vulgaris. Klein. quad.
Mustela vulgaris. Gm. Lin. 99. 62.
Br. Zool. 39. Hist. quad. No.
244. Arct. Zool. i. No.
25. p. 86.
Brit. Bronwen Port. Doninha
Fren. La Belette Germ. Wisel
Ital. Donnola, Ballottula, Dut. Weezel
Benula Swed. Vesla
Span. Comadreia Dan. Væsel.

DESCRIP-
TION.

THIS species is the lest of the weesel kind, the length of the head and body not exceeding six, or at most seven inches. The tail is only two inches and a half long, and ends in a point; the ears are large, and the lower parts of them are doubled in. The whole upper part of the body, the head, tail, legs, and feet are of a very pale tawny brown: the whole under side of the body from the chin to the tail is white, but beneath the corners of the mouth on each jaw is a spot of brown.

MANNERS.

This, like the rest of the kind, is very destructive to young birds, poultry, and young rabbits, and besides is a great devourer of eggs.

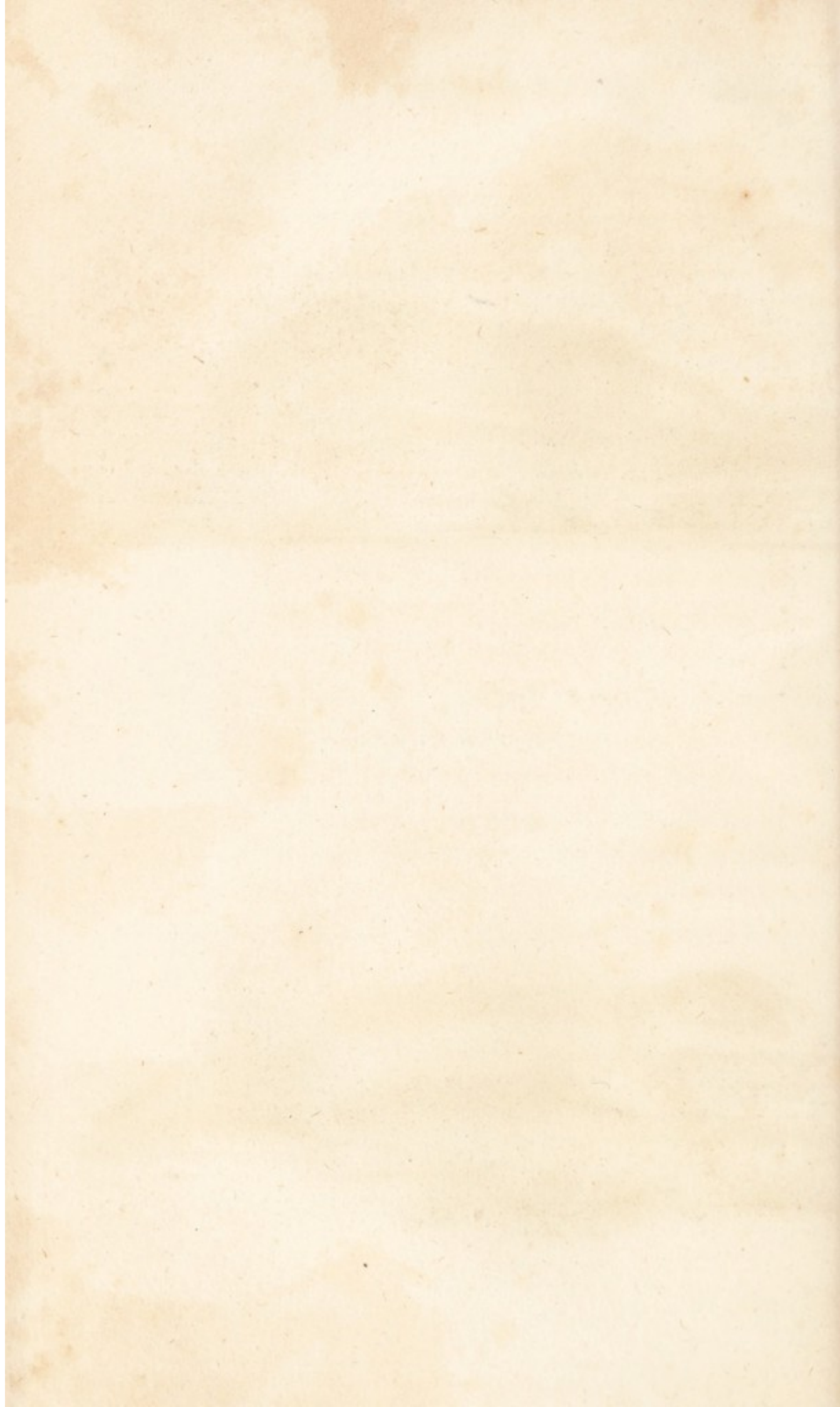
WEESEL.



STOAT. (P 114)



M. Griffiths del



It does not eat its prey on the place, but after killing it, by one bite near the head, carries it off to its young, or its retreat. The weesel also preys upon moles, as appears by its being sometimes caught in the mole-traps. It is a remarkably active animal, and will run up the sides of walls with such facility, that scarcely any place is secure from it; and its body is so small, that there is scarcely any hole but what is pervious to it. This species is much more domestic than the others; frequenting out-houses, barns, and granaries, where, to make as it were some atonement for its depredations among our tame fowl, it soon clears its haunts from rats and mice, being infinitely more an enemy to them than the cat itself. It brings five or six young at a time: its skin and excrements are most intolerably foetid.

This animal is * confounded by *Linnæus* with the Stoat or Ermine. He seems unacquainted with our weesel in its brown color; but describes it in the white state under the title of *Snomus*, or *Mustela nivalis*.† I have met with it so circumstanced, in the isle of *Ilay*.

* This error is corrected in *Gmelin's* edition of the *Systema Naturæ* of the illustrious *Swede*. Ed.

† *Simillima* Ermineo sed dimidio minor, caudæ apice pilis allis vix nigris. *Faun. Suec.* No. 18.

18. COMMON, *Mustela candida*, animal er- *Gesner quad.* 753.
 OR ERMINE. mineum, *Raii syn. quad.* 198. *Mustela erminea*. *M. plan-*
Mort. Northampt. 442. *tis fissis*, caudæ apice atro.
Meyer's an. ii. Tab. 23, 24. *Gm. Lin.* 98. *Faun. Suec.*
Mustela hieme alba, æstate su- 17.
 pra rutila infra alba, caudæ *Pontop. Norway. Part ii. p. 25.*
 apice nigro. *Brisson quad. Br. Zool.* 40. *Hist. quad. No.*
 176. 234. ii. p. 35. *Arct. Zool.*
De Buffon, Tom. vii. 240. Tab. i. No. 25. p. 86.
 29. *Fig. 2. Tab. 31. Fig. 1.*
- Brit.* Carlwm *Germ.* Hermelin, *Klein.* 63.
Fren. L'Hermine, Le Roselet *Swed.* Hermelin, Lekatt
Ital. Armellino *Dut.* Hermilyn
Span. Armino, Armelina *Dan.* Hermelin, Lekat.

DESCRIP-
TION.

THE length* of the stoat to the origin of the tail, is ten inches ; that of the tail is five inches and a half. The colors bear so near a resemblance to those of the weesel, as to cause them to be confounded together by the generality of common observers ; the weesel being usually mistaken for a small stoat ; but these animals have evident and invariable specific differences, by which they may be easily known. First, by the size ; the weesel being ever less than the stoat : secondly, the tail of the latter is always

* A stoat was brought to the editor in 1809 which measured twenty inches including the tail. It had a strong musky smell resembling that of the martin ; in color and other respects, it did not differ from the common kind Ed.

tipt with black, is longer in proportion to the bulk of the animal, and more hairy; whereas the tail of the weasel is shorter, and of the same color with the body: thirdly, the edges of the ears, and the ends of the toes in this animal, are of a yellowish white. It may be added, that the stoat haunts woods, hedges and meadows, especially where there are brooks, whose sides are covered with small bushes; and sometimes (but less frequently than the weasel) inhabits barns, and other buildings.

In the most northern parts of *Europe*, these animals regularly change their color in winter, and become totally white, except the end of the tail, which continues invariably black; and in that state are called Ermines: I am informed that the same is observed in the highlands of *Scotland*. The skins and tails are a very valuable article of commerce in *Norway*, *Lapland*, *Russia*, and other cold countries, where they are found in prodigious numbers. They are also very common in *Kamtschatka* and *Siberia*.* In *Siberia* they burrow in the fields, and are taken in traps baited with flesh. In *Norway*† they are either shot with blunt arrows, or taken in traps made of two flat stones, one being propped

ERMINES.

HOW TAKEN.

* *Bell's Travels*, i. 199.† *Hist. Norway*, ii. 25.

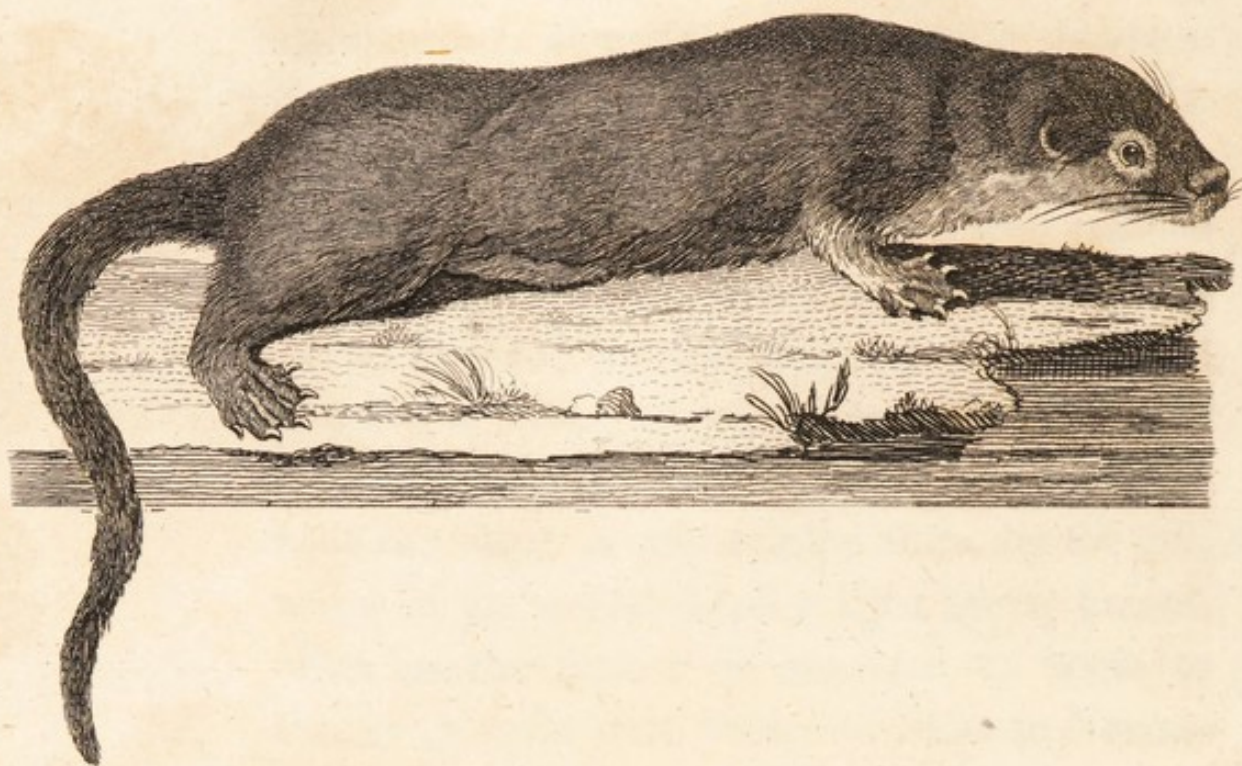
up with a stick, to which is fastened a baited string, which when the animals nibble, the stone falls down and crushes them to death. The *Laplanders* take them in the same manner, only instead of stones make use of two logs of wood.* The stoat is sometimes found white in *Great Britain*, but not frequently, and then it is called a white weesel. That animal is also found white, but may be easily distinguished from the other in the ermine state, by the tail, which in the weesel is of a light tawny brown. With us the former is observed to begin to change its color from brown to white in *November*, and to begin to resume the brown the beginning of *March*.

The natural history of this creature is much the same with that of the weesel, its food being birds, rabbits, mice, &c. its agility the same, and its scent equally foetid: it is much more common in *England* than that animal.

* *Oeuvres de Maupertuis*, iii. 187.



OTTER.



BADGER. (P. 100.)



GENUS XI. OTTER.

TOES five on each foot; palmated, or connected by a membrane.

- Le Loutre, *Belon* 26. pl. 27. *De Buffon*, Tom. vii. 134. Tab. 19. COMMON,
 Lutra. The Otter. *Raii syn.* 11. xiii. 322.
quad. 187. *Mustela Lutra.* *Gm. Lin.* 93.
Grew's Mus. 16. *Pontop. Norw.* 2. 27.
Morton's Northampt. 444. *Lutra digitis omnibus æquali-*
Sib. Scot. 20. *bus. Faun. Suec.* 12.
Gesner quad. 687. *Br. Zool.* 32. *Hist. quad.* No.
Lutra castanei coloris. *Bris-* 281. ii. p. 77. *Arct. Zool.* i.
son quad. 201. 99.

<i>Brit.</i>	Dyfrgi	<i>Germ.</i>	Otter, Fisch Otter
<i>Fren.</i>	Le Loutre	<i>Dut.</i>	Otter
<i>Ital.</i>	Lodra, Lodria, Lontra	<i>Swed.</i>	Utter
<i>Span.</i>	Nutria	<i>Dan.</i>	Odder.
<i>Port.</i>			

THE usual length of this animal is three feet three inches, including the tail, which is sixteen inches long. DESCRIP-
TION.

The head and nose are broad and flat, the neck short, and equal in thickness to the head; the body long; the tail broad at the base, tapers off to a point at the end, and is the whole way compressed horizontally. The eyes are very small, and placed nearer the nose than is usual

in quadrupeds : the ears extremely short, and their orifice narrow : the opening of the mouth is small, the lips muscular, and capable of being brought very close together : the nose and the corners of the mouth are furnished with very long whiskers, so that the whole appearance of the otter is something terrible : it has thirty-six teeth, six cutting and two canine above and below ; of the former the middlemost are the lest ; it has besides five grinders on each side in both jaws. The legs are very short, but remarkably strong, broad, and muscular ; the joints articulated so loosely, that the animal is capable of turning them quite back, and bringing them on a line with the body, so as to perform the office of fins. Each foot is furnished with five toes, connected by strong broad webs, like those of water fowl. Thus nature in every article has had attention to the way of life she allotted to an animal, whose food is fish, and whose haunts must necessarily be about waters.

FUR.

The color of the otter is entirely a deep brown, except two small spots of white on each side the nose, and another under the chin. The skin of this animal is very valuable, if killed in the winter, and is greatly used in cold countries for lining cloaths ; but in *England* it only serves for covers for pistol furniture. The best furs of

this kind come from the northern part of *Europe*, and *America*. Those of *N. America* are larger than the *European* otters. The *Indians* make use of their skins for pouches, and ornament them with bits of horn. The finest sort come from the colder parts of that continent; where they are also most numerous. Westward of *Carolina*,* there are some found of a white color inclining to yellow.

The otter swims and dives with great celerity, and is very destructive to fish; in rivers it is always observed to swim against the stream, to meet its prey. In very hard weather, when its natural sort of food fails, it will kill lambs, sucking pigs, and poultry. It is said that two otters will in concert hunt that strong and active fish the salmon. One stations itself above, the other below the place where the fish lies, and continue chasing it incessantly till the salmon quite wearied becomes their prey. To suppose that they never prey in the sea is a mistake; for they have been often seen in it both swimming and bringing their booty on shore, which has been observed in the *Orknies* to be cod, and congers. Its flesh is excessively rank and fishy. The *Romish* church permits the use of it on maigre-days. In the kitchen of the *Carthusian*

MANNERS.

* *Lawson's hist. Carol.* 119.

convent near *Dijon*, we saw one preparing for the dinner of the religious of that rigid order, who, by their rules, are prohibited during their whole lives, to eat flesh.

It shews great sagacity in forming its habitation: it burrows under ground on the banks of some river or lake, and always makes the entrance of its hole under water; works upwards to the surface of the earth, and forms before it reaches the top, several *holts*, or lodges, that in case of high floods, it may have a retreat, for no animal affects lying drier, and there makes a minute orifice for the admission of air: it is further observed, that this animal, the more effectually to conceal its retreat, contrives to make even this little air hole in the middle of some thick bush.

The otter brings four or five young at a time: as it frequents ponds near gentlemen's houses, there have been instances of litters being found in cellars, sinks, and other drains. It is observable that the male otters never make any noise when taken, but the pregnant females emit a most shrill squeal.

SEA OTTER.

Sir *Robert Sibbald*, in his history of *Fife*, p. 49, mentions a Sea Otter, which he says differs from the common sort, in being larger, and having a rougher coat; but probably it does not

differ specifically from the kind that frequents fresh waters. Did not *Aristotle* place his *Latax** among the animals which seek their food among fresh waters, we should imagine we had here recovered this lost animal, which he mentions immediately after the otter, and describes as being broader. Though this must remain a doubt, we may with greater confidence suppose the sea otter to be the *Loup marin* of *Belon*,† which from a hearsay account, he says, is found on the *English* coasts. He compares its form to that of a wolf, and says, it feeds rather on fish than sheep. That circumstance alone makes it probable, *Sibbald's* animal was intended, it being well known, the otter declines

* Τοιαῦτα δὲ ἐστὶν ὁ τε καλεόμενος καστῶρ, καὶ τὸ σαθέριον, καὶ τὸ σαῦριον, καὶ ἐνυδρίς, καὶ ἡ καλεμένη λαλαῆ. ἐστὶ δὲ τῆλο πλατυτέρον ἐνυδρίδος, καὶ ὀδονίας ἐχει ἰχυρεὺς ἐξίβστα γὰρ νυκτῶρ πολλακίς, τὰς περὶ τὸν πόλαμον κερκιδὰς ἐκλεμνέει τοῖς ὀδυσσίων. δακνέει δὲ τὰς ἀνθρώπους καὶ ἡ ἐνυδρίς καὶ ἔκ αφησιν, ὡς λεγέσσι, μέχρις ἀν ὀσθ ψοφὸν ἀκβση. τὸ δὲ τριχωμὰ ἐχει ἡ λαλαῆ σκληρόν, καὶ τὸ εἶδος μετὰξυ τῆς φώκης τριχωμάτος, καὶ τῆς ἐλαφῆ. *Aristot. Hist. Anim.* p. 905. A.

Sunt etiam in hoc genere (sc. animalium quadrupedum quæ victum ex lacubus et fluviis petunt) fiber, satherium, satyrium, lutris, latax, quæ latior lutre est, dentesque habet robustos, quippe quæ noctu plerumque aggrediens, virgulta proxima suis dentibus, ut ferro præcidat. Lutris etiam hominem mordet, nec desistit (ut ferunt) nisi fracti ossis crepitum senserit. Lataci pilus durus, specie inter pilum vituli marini et cervi.

† *Belon de la Nature des Poissons*, p. 28. pl. 29.

flesh when it can get fish. Little stress ought to be laid on the name, or comparison of it to a wolf; this variety being of a size so superior to the common, and its hair so much more shaggy, a common observer might readily catch the idea of the more terrible beast, and adapt his comparison to it.

BEAVER.

Beavers,* which are also amphibious animals, were formerly found in *Great Britain*; but the breed has been extirpated many ages ago: the latest account we have of them, is in *Giraldus Cambrensis*,† who travelled through *Wales* in 1188: he gives a brief history of their manners, and adds, that in his time they were found only in the river *Teivi*. Two or three waters in that principality, still bear the name of *Llyn yr afangc*,‡ or the beaver lake; which is a further proof, that these animals were found in different parts of it. I have seen two of their supposed haunts; one in the stream that runs through *Nant Francon*; the other in the river *Conwy* a few miles above *Llanrwst*; and both places in all probability had formerly been crossed by Beaver dams. But we imagine they must have been very scarce even in earlier

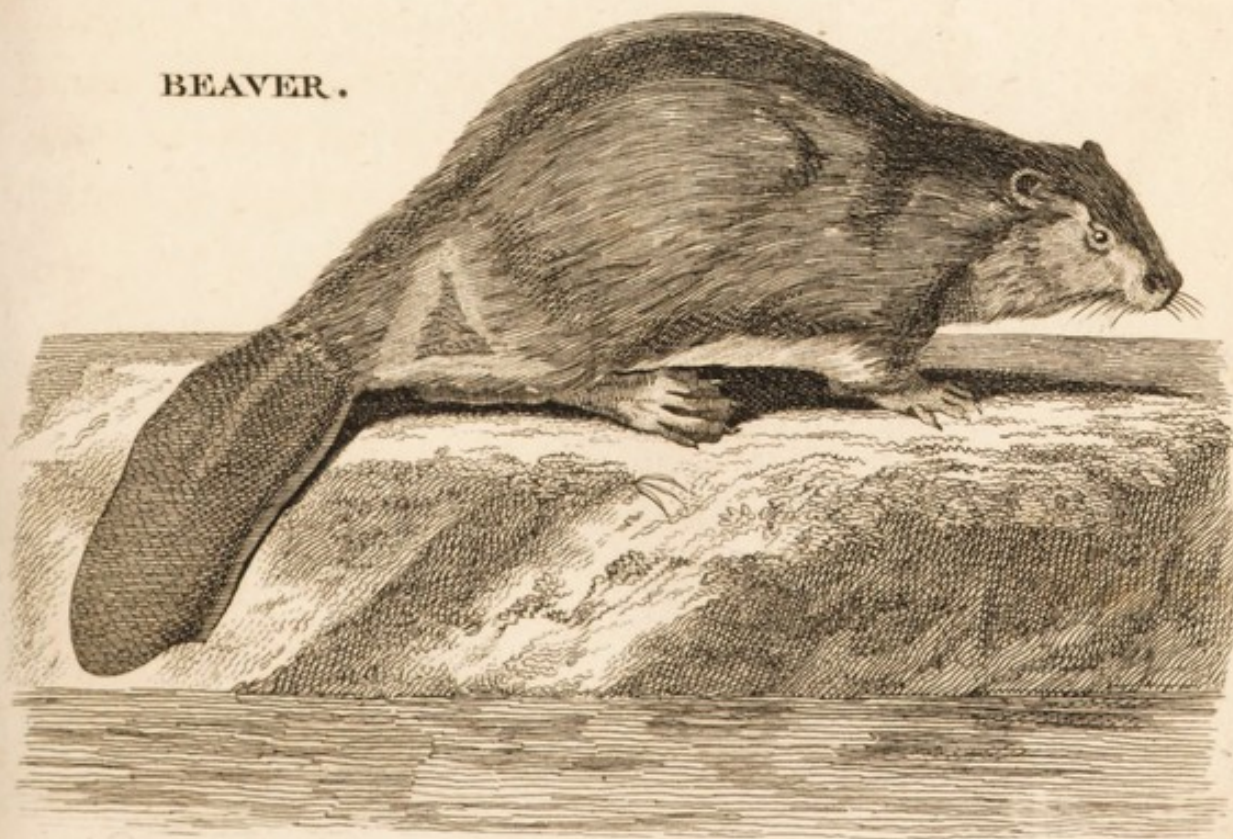
* *Hist. quad.* No. 311. ii. p. 114. *Arct. Zool.* i. 113.

† *Girald. Camb. Itin.* 178, 179.

‡ *Raii syn. quad.* 213.



MUSIMON. (P.38.)



BEAVER.

De Sève Del.



times; by the laws of *Howel dda*, the price of a beaver's skin (*Croen Llostlydan*)* was fixed at a hundred and twenty pence, a great sum in those days.

* *Llostlydan*, that is, the broad tailed animal. *Leges Wallicæ*, 261.

SECT. II.

GENUS XII. HARE.

TEETH cutting two in each jaw, very distant from the grinders.

USUALLY herbivorous, frugivorous.

TOES, five before, four behind.

EARS long.

TAIL short.

20. COMMON. *Lepus. Plinii*, lib. viii. c. 55. *De Buffon*, Tom. vi. 246.
The Hare. Raii syn. quad. 204. *Tab.* 38.
White Hare. Mort. Northampt. *Lepus timidus. Gm. Lin.* 77.
 445. *Lepus cauda abrupta pupillis*
Sib. Scot. 11. *atris. Faun. Suec.* 35.
Meyer's an. ii. Tab. 32. *Lepus vulgaris cinereus.*
Gesner quad. 605. *Klein. quad.* 51.
Lepus caudatus ex cinereo rufus. Br. Zool. 41. *Hist. quad. No.*
Brisson quad. 94. *299. ii. p. 98. Arct. Zool.*
i. 112.

<i>Brit.</i>	Ysgyfarnog, Ceinach	<i>Germ.</i>	Has, Haas
<i>Fren.</i>	Le Lievre	<i>Dut.</i>	Haas
<i>Ital.</i>	Lepre, Lievora	<i>Swed.</i>	Hare
<i>Span.</i>	Liebre	<i>Dan.</i>	Hare.
<i>Port.</i>	Lebre		

TO enter on a minute description of so well known an animal, would be to abuse the reader's patience, yet to neglect all notice of the admirable contrivance of its several properties and

parts, would be frustrating the chief design of this work ; that of pointing out the Divine Wisdom in the animal world.

Being a weak and most defenceless creature, it is endued, in a very distinguished degree, with that preserving passion, fear ; this makes it perpetually attentive to every alarm, and keeps it always lean. To enable it to receive the most distant notices of dangers, it is provided with very long ears, which (like the tubes made use of by the deaf) convey to it the remotest sounds. Its eyes are very large and prominent, adapted to receive the rays of light on all sides. To assist it to escape its pursuers by a speedy flight, the hind legs are formed remarkably long, and furnished with strong muscles ; their length gives the hare singular advantages over its enemies in ascending steep places ; and so sensible is the animal of this, as always to make towards the rising ground when started. As it lies always upon the ground, its feet are protected above and below with a thick and warm covering of hair. The various stratagems and doubles it uses, when hunted, are so well known to every sportsman, as not to deserve mention, except to awaken their attention to those faculties nature has endowed it with ; which serve

at the same time to increase their amusement, as well as to prevent the animal's destruction. It very rarely leaves its form or seat in the day, but in the night takes a circuit in search of food, always returning through the same meuses, or passes.

COLOR.

The color approaches very near to that of the ground, which secures it more effectually from the sight of men, and of beasts and birds of prey. Providence has been so careful in respect to the preservation of the species of animals, as to cause in northern countries these as well as many others to change color, and become white at the beginning of winter, to render them less conspicuous amidst the snow. Accidental instances of white hares are met with in *South Britain*.

Hares differ much in size: the smallest are in the isle of *Ilay*: the largest in that of *Man*, where some have been found to weigh twelve pounds.

FOOD.

Its food is entirely vegetable, and it does great injury to nurseries of young trees, by eating the bark: it is particularly fond of pinks, parsley, and birch.

The hare never pairs, but in the rutting season, which begins in *February*, the male pur-

sues and discovers the female, by the sagacity of its nose. The female goes with young one month, brings usually two young at a time, sometimes three, and very rarely four. Sir *Thomas Brown*, in his treatise on vulgar errors,* asserts the doctrine of superfetation; i. e. a conception upon conception, or an improvement on the first fruit before the second is excluded, and he brings this animal as an instance; asserting, from his own observation, that after the first cast there remain successive conceptions, and other younglings very immature, and far from the term of their exclusion; but as the hare breeds very frequently in the year, there is no necessity of having recourse to this accident† to account for their numbers. The antients were acquainted with this circumstance. *Horace* alludes to it in the fourth satire of the second book.

Fœcundi leporis sapiens sectabitur armos,

says the *bon vivant*, “every man of taste will “prefer the wing of the fruitful hare.” *Pliny* as a philosopher is more explicit, and assigning a moral reason for the great encrease of this ani-

* P. 118.

† For a further account of this doctrine, we refer the curious reader to *M. de Buffon's* works, vol. vi. p. 252, 279, &c.

mal gives the following elegant account of it. *Lepus omnium prædæ nascens, solus præter Dasypodem superfætat, aliud educans, aliud in utero pilis vestitum, aliud implume, aliud inchoatum gerens pariter.*

Hares are very subject to fleas; *Linnæus* tells us, that the *Dalecarlians* make a sort of cloth of the fur, called *filt*; which, by attracting those insects, preserves the wearer from their troublesome attacks.* The hair of this creature forms a great article in the hat manufacture; and as this country cannot supply a sufficient number, vast quantities are annually imported from *Russia* and *Siberia*.

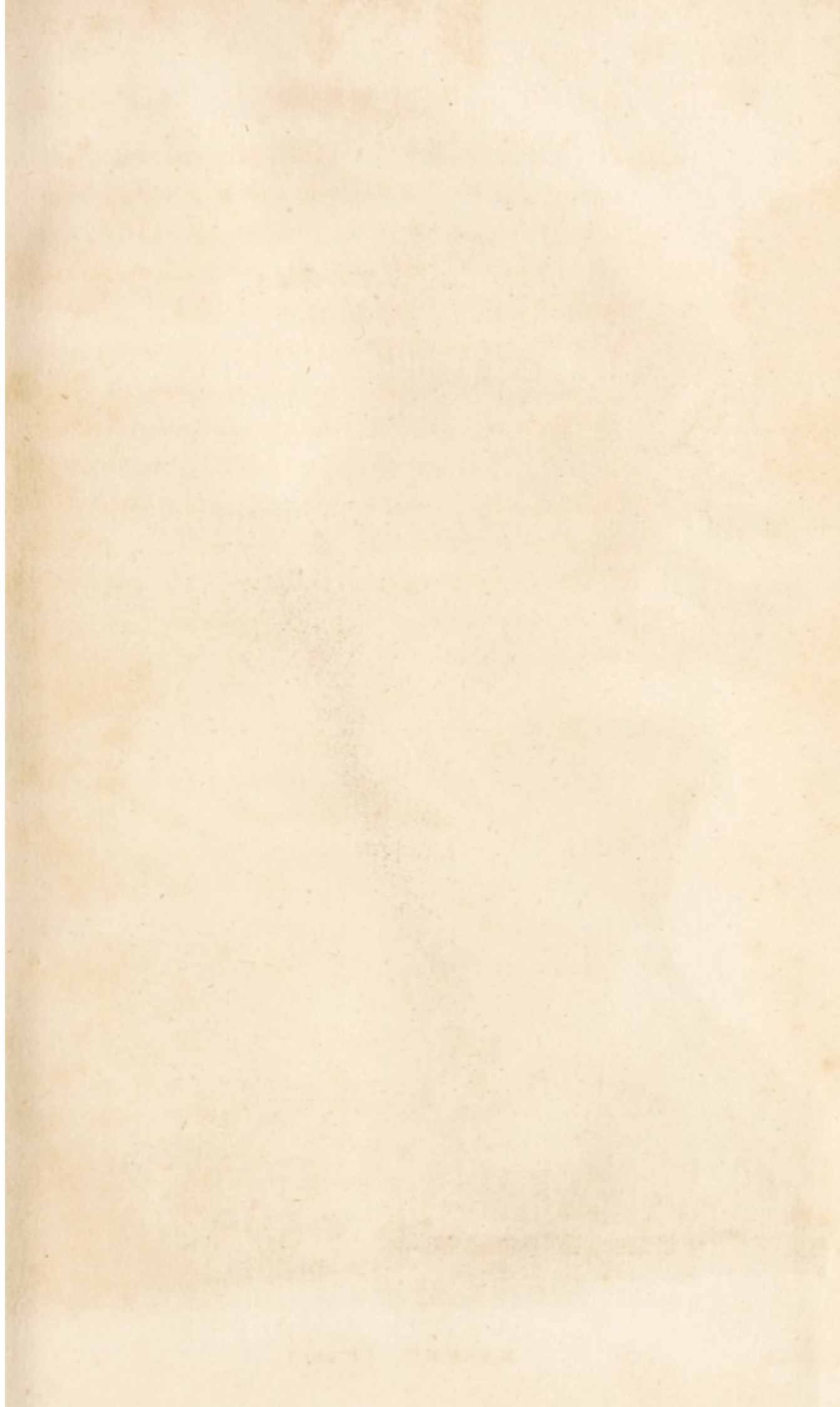
The hare was reckoned a great delicacy among the *Romans*;† the *Britons*, on the contrary, thought it impious even to taste it;‡ yet this animal was cultivated by them, either for the pleasure of the chase, or for the purposes of superstition, as we are informed that *Boadicea*, immediately before her last conflict with the *Romans*, let loose a hare she had concealed in

* *Faun. Suec.* 25.

† Inter aves turdus, si quid me judice verum:

Inter quadrupedes gloria prima Lepus. *Martial.* 13. 92.

‡ *Leporem et gallinam et anserem gustare fas non putant: hæc tamen alunt, animi voluptatisque causa.* *Cæsar.* Com. lib. v.



VARYING HARE



her bosom, which taking what was deemed a fortunate course, animated her soldiers by the omen of an easy victory over a timid enemy.*

Lepus hieme albus. <i>Forster hist. nat. Volgæ. Ph. Tr. LVII. 343.</i>	Alpine Hare. <i>Hist. quad. 21. VARYING. ii. No. 300. p. 100. Arct.</i>
Lepus variabilis <i>Pallas nov. sp. 1. Gm. Lin. 161.</i>	<i>Zool. i. 108.</i>

THE Varying hare inhabits the summits of the highland mountains, never descends into the vales, or mixes with the common species which is frequent in the bottoms: it lives among the rocks with Ptarmigans, natives of the loftiest situations: does not run fast, and if pursued is apt to take shelter beneath stones or in clefts of rocks; is easily tamed, and is very sprightly and full of frolick; is fond of honey, and carraway comfits, and is observed to eat its own dung before a storm.

It is less than the common hare, weighing only 6lb. $\frac{1}{2}$. whereas the first weighs from eight to twelve pounds. Its hair is soft and full; the predominant color grey mixed with a little black and tawny.

* Ταυτα ειπεσα λαγων μεν εκ τῆ κολπῆ, &c. *Xiphilini Epitome Dionis. 173.*

This is its summer's dress; in winter it entirely changes to a snowy whiteness except the edges and tips of the ears which retain their blackness. The alteration of color begins in *September*, and first appears about the neck and rump; in *April* it again resumes its grey coat. This is the case in *Styria*,* but in the polar tracts such as *Greenland* it never varies from white, the eternal color of the country. In the intermediate climates between temperate and frigid, such as *Scotland* and *Scandinavia*, it regularly experiences these vicissitudes of color.

22. RABBET. Cuniculus. The Rabbet or Lepus Cuniculus. *Gm. Lin.*
 Cony. *Raii syn. quad.* 205. 163.
Meyer's an. i. Tab. 83. Lepus cauda brevissima pa-
Gesner quad. 362. pillis rubris. *Faun. Suec.*
 Lepus caudatus, obscure cinere- 26.
 us. *Brisson quad.* 95. Cuniculus terram fodiens;
De Buffon Tom. vi. 303. Tab. Klein quad. 52.
 50, 51. *Br. Zool.* 43. *Hist. quad. ii.*
 No. 302. p. 103.
- Brit.* Cwningen *Ger.* Koniglein, Kaninchin
Fren. Le Lapin *Dut.* Konyen
Ital. Coniglio *Swed.* Kanin
Span. Conejo *Dan.* Kanine.
Port. Coelho

IT is well observed by *Pliny*, that nature 'hath
 ' shewed great kindness, in causing those things

* *Kramer Austr.* 315.

‘to be most prolific, that are the most harmless
‘and the properest for our food.’*

This excellent observation of his, cannot be PROLIFIC.
better illustrated than in shewing the great fruit-
fulness of this animal; as it far exceeds that
proof, brought by the ingenious author of the
œconomy of nature, in support of the same quo-
tation. The instance he produces is the pigeon,
whose increase, from one pair, may in four
years amount to 14,760:† but rabbits will
breed seven times a year, and bring eight young
ones each time; on a supposition this happens
regularly, during four years, their numbers
will amount to 1,274,840. By this account,
we might justly apprehend being overstocked
with these animals, if they had not a large
number of enemies which prevent the too great
increase; not only men, but hawks, and beasts
of prey, make dreadful havock among the
species. Notwithstanding these different ene-
mies, we are told by *Pliny*, and *Strabo*, that
they once proved so great a nuisance to the
inhabitants of the *Balearic* islands, that they
were obliged to implore the assistance of a

* *Benigna circa hoc natura, innocua et esculenta animalia
fœcunda generavit.* Lib. viii. c. 55.

† Vide *Swedish Essays*, translated by Mr. *Stillingfleet*, Ed.
1st. p. 75.

FUR.

military force from the *Romans*, in the time of *Augustus*, in order to extirpate them.* Their native country is *Spain*, where they were taken as we do at present, by means of ferrets, which animals were first introduced there out of *Africa*:† they love a temperate and a warm climate, and are incapable of bearing great cold, so that in *Sweden*‡ they are obliged to be kept in houses. Our country abounds with them; their furs form a considerable article in the hat manufactures, and of late, such part of the fur as is unfit for that purpose, has been found as good as feathers for stuffing beds and bolsters. Numbers of the skins are annually exported to *China*. The *English* counties that are most noted for these animals are *Lincolnshire*, *Norfolk*, and *Cambridgeshire*. *Methold*, in the last county, is famous for the best sort for the table; the soil there is sandy, and full of mosses and the *carices*. Rabbits swarm in the isles of *Orkney*, where their skins form a considerable article of commerce. Excepting otters, brown rats, common mice, and shrews, no other quadrupeds are found there. The rabbits of those isles are in general grey: those which inhabit the hills, grow hoary in winter.

* *Plin.* lib. viii. c. 55.† *Strabo*, iii. 144.‡ *Faun. Suec.* 26.

Formerly the silver-haired rabbits were in great esteem for lining cloaths, and their skins sold at three shillings a piece;* but since the introduction of the more elegant furs, the price is fallen to six-pence each. The *Sunk Island*† in the *Humber* was once famous for a mouse-coloured species, now extirpated by reason of the injury it did to the banks by burrowing.

* *Hartlib's Legacy.*

† *Ph. Trans.* No. 361.

GENUS XIII. SQUIRREL.

TOES four before ; five behind.

EARS tufted.

TAIL long cloathed with long hair.

23. COMMON. *Sciurus vulgaris. Raii syn. quad.* palmis 4-dactylis plantis
 214. 5-dactylis. *Gm. Lin.* 145.
Meyer's an. i. Tab. 97. *Sciurus palmis solis saliens.*
Gesner quad. 845. *Faun. Suec.* 37.
Sciurus rufus, quandoque griseo *Sc. vulgaris rubicundus.*
admixto. Brisson quad. 104. *Klein quad.* 53.
De Buffon, Tom. vii. 258. Tab. *Br. Zool.* 44. *Hist. quad. ii.*
 32. *No.* 329. p. 138. *Arct.*
Sciurus auriculis apice barbatis, *Zool. i.* 142.

Brit. Gwiwair *Germ.* Eichorn, Eichmerm-
Fren. L'Ecureuil lin
Ital. Scoiattolo, Schiarro, *Dut.* Inkhoorn
 Schiratto *Swed.* Ikorn, graskin
Span. Harda, Hardilla, Esquilo *Dan.* Ekorn.
Port. Ciuro

NAME.

THE squirrel derives its name from the form of its tail, *σκια* a shade, *εξα* a tail, as serving this little animal for an umbrella. That part is long enough to cover the whole body, and is clothed with long hairs, disposed on each side horizontally, which gives it a great breadth. These serve a double purpose ; when erected, they prove a secure protection from the injuries of

heat or cold ; when extended, they are very instrumental in promoting those vast leaps the animal takes from tree to tree. On the authority of *Klein* and *Linnæus*, we may add a third application of the form of the tail ; these naturalists tell us, that when the squirrel is disposed to cross a river, a piece of bark is the boat, the tail the sail.

This animal is remarkably neat, lively, active, and provident ; never leaves its food to chance, but secures in some hollow tree a vast magazine of nuts for winter provision. In the summer it feeds on the buds and young shoots, and is particularly fond of those of the fir and pine, and also of the young cones. It makes its nest of the moss or dry leaves, between the fork of two branches, and brings four or five young at a time. Squirrels are in heat early in the spring, when it is very diverting to see the female feigning an escape from the pursuit of two or three males, and to observe the various proofs they give of their agility, which is then exerted in full force. MANNERS.

The color of the whole head, body, tail, and legs of this animal, is a bright reddish brown ; the belly and breast white ; the ears are very beautifully ornamented with long tufts of hair, of a deeper color than those on the body ; the DESCRIP-
TION.

eyes are large, black, and lively; the fore teeth, strong, sharp, and well adapted to its food; the legs are short and muscular; the toes long, and divided to their origin; the nails strong and sharp, in short, in all respects fitted for climbing, or clinging to the smallest boughs; on the fore-feet it has only four toes, with a claw in the place of the thumb or interior toe, on the hind feet there are five toes.

When it eats or dresses itself, it sits erect, covering the body with its tail, and making use of the fore-legs as hands. It is observed, that the gullet of this animal is very narrow, to prevent it from disgorging its food, in descending trees, or in down leaps.

GENUS XIV. DORMOUSE.

TOES four before ; five behind.

EARS naked.

TAIL long covered with hair.

Mus avellanarum minor.	The	<i>De Buffon, Tom. viii. 193.</i>	24. DOR- MOUSE.
Dormouse or Sleeper.	<i>Raii</i>	<i>Tab. 26.</i>	
<i>syn. quad. 220.</i>		<i>Myoxus Muscardinus. Gm.</i>	
The Dormouse.	<i>Edw. 266.</i>	<i>Lin. 155.</i>	
<i>Gesner quad. 162.</i>		<i>Mus cauda longa pilosa cor-</i>	
<i>Glis supra rufus infra albicans.</i>		<i>pore rufo gula albicante.</i>	
<i>Brisson quad. 115.</i>		<i>Faun. Suec. 35.</i>	
		<i>Br. Zool. 45. Hist. quad. ii.</i>	
		<i>Nº. 359. p. 157. Arct. Zool.</i>	
		<i>i. 149.</i>	
<i>Brit. Pathew</i>		<i>Span. Liron</i>	
<i>Fren. Le Muscardin, Croque-</i>		<i>Germ. Rothe, Wald-maus</i>	
<i>noix, Rat-d'or</i>		<i>Swed. Skogsmus</i>	
<i>Ital. Moscardino</i>		<i>Dan. Kassel-muus.</i>	

THIS animal agrees with the squirrel in its food, residence, and in some of its actions : on first sight it bears a general resemblance to it, but on a closer inspection, such a difference may be discovered in its several parts, as vindicates M. *Brisson* for forming a distinct genus of the Dormice, or *Glives*. These want the fifth claw on the interior side of their fore-feet, nor are their ears adorned with those elegant tufts of hair

which distinguish the squirrel kind. These distinctions prevale in the other species, such as the *Lerot* and *Loir*.

MANNERS.

Dormice inhabit woods, or very thick hedges, forming their nests in the hollow of some low tree, or near the bottom of a close shrub : as they want much of the sprightliness of the squirrel, they never aspire to the tops of trees, or, like it, attempt to bound from spray to spray ; like the squirrel they form little magazines of nuts, &c. for winter provision, and take their food in the same manner, and same upright posture. The consumption of their hoard during the rigor of the season is but small, for they sleep most part of the time ; retiring into their holes at the first approach of winter, they roll themselves up, and lie almost torpid the greater part of that gloomy season. In that space of time, they sometimes experience a short* revival, in a warm sunny day, when they take a little food, and then relapse into their former state.

DESCRIP-
TION.

The size of the dormouse is equal to that of a mouse, but it has a plumper appearance, and the nose is more blunt ; the eyes are large, black, and prominent ; the ears are broad,

* Not as *Martial* says in *Epigram* 59. *Lib.* XIII.

Tota mihi dormitur hyems, et pinguior illo

Tempore sum, quo me nil nisi somnus alit. *Ed.*

rounded, thin, and semi-transparent : the fore-feet are furnished with four toes ; the hind-feet with five, but the interior toes of the hind-feet are destitute of nails : the tail is about two inches and a half long, closely covered on every side with hair : the head, back, sides, belly, and tail, are of a tawny red color ; the throat white.

These animals seldom appear far from their retreats, or in any open place, for which reason they seem less common in *England* than they really are. They make their nests of grass, moss, and dead leaves, and bring usually three or four young at a time.

NEST.

GENUS XV. RAT.

TOES four before ; five behind.

TAIL very slender; naked, or very slightly haired.

25. BLACK. *Mus domesticus major, seu Rattus. Raii syn. quad. 217. Meyer's an. ii. Tab. 83. Gesner quad. 731.* *Mus cauda longa subnuda corpore fusco cinerescente. Faun. Succ. 33.*
- Mus cauda longissima obscure cinereus. Brisson quad. 118. De Buffon, Tom. vii. p. 278. Tab. 36.* *Mus Rattus, mus cistrinarius. Klein quad. 57. Br. Zool. 46. Hist. quad. ii. No. 373. p. 176. Arct. Zool. i. 150.*

Brit. Llygoden ffrengig

Germ. Ratz.

Fren. Le Rat

Dut. Rot

Ital. Ratto, Sorcio

Swed. Rotta

Span. Raton, Rata

Dan. Rotte.

Port. Rato

MANNERS. **T**HE rat is the most pernicious of our smaller quadrupeds: our meat, corn, paper, cloaths, furniture, in short every conveniency of life is a prey to this destructive creature; nor does it confine itself to these, but will make equal havock among our poultry, rabbits, or young game. Unfortunately for us it is a domestic animal, always residing in houses, barns,

or granaries, and nature has furnished it with fore-teeth of such strength, as enable it to force its way through the hardest wood, or oldest mortar. It makes a lodge, either for its day's residence, or a nest for its young, near a chimney, and improves the warmth by forming in it a magazine of wool, bits of cloth, hay or straw. It begins to breed under the age of one year, and goes with young about six weeks, breeds frequently in the year, and brings about six or seven young at a time. They increase so fast, as to over-stock their abode; which often forces them, through deficiency of food, to devour one another: an unnatural disposition which happily prevents even the human race from becoming a prey to them: not but that there are instances of their gnawing the extremities of infants in their sleep.

The greatest enemy the rats have is the weesel; which makes infinitely more havock among them than the cat; for the weesel is not only endowed with superior agility, but, from the form of its body, can pursue them through all their retreats which are impervious to the former. The Brown rat has also greatly lessened their numbers, and in most places extirpated them: this will apologize for a brief description of an animal once so well known.

DESCRIP-
TION.

Its length from the nose to the origin of the tail, is seven inches ; the tail is near eight inches long ; the nose is sharp-pointed, and furnished with long whiskers ; the color of the head and whole upper part of the body is a deep iron-grey, bordering on black ; the belly is of a dirty cinereous hue ; the legs are of a dusky color, and almost naked ; the fore-feet want the thumb or interior toe, having only in its place a claw ; the hind-feet are furnished with five toes.

KING'S RAT-
CATCHER.

Among other officers, his *British* majesty has a *rat-catcher*, distinguished by a particular dress, scarlet embroidered with yellow worsted, on which are figures of mice destroying wheat-sheaves.

26. BROWN. *Mus sylvestris*, Rat de bois. *Mus norvegicus*. *Klein quad.*
Brisson quad. 20. 56.
 Le Surmulot. *De Buffon*, *Mus ex norvegia*. *Seb. Mus.*
Tom. viii. 206. *Tab.* 27. *Tom.* ii. 64. *Tab.* 63.
Mus decumanus. *Gm. Lin.* *Br. Zool.* 47. *Hist. quad.* ii.
 127. *No.* 375. p. 178. *Arct. Zool.*
 i. 151.

DESCRIP-
TION.

THIS is a very large species, thicker, and of a stronger make than the common rat : the length from the end of the nose to the beginning of the tail, is nine inches ; the length of the tail the same ; the usual weight eleven ounces : the

ears resemble those of the rat : the eyes are large and black : the color of the head and whole upper part of the body is a light brown, mixed with tawny and ash-color : the end of the nose, the throat and belly, are of a dirty white, inclining to grey : the feet and legs almost bare, and of a dirty pale flesh-color : the beginning of the tail of the same color as the back ; the rest of the tail is covered with minute dusky scales, mixed with a few hairs.

This is the species well known in this kingdom under the name of the *Norway* rat, but it is an animal quite unknown in *Scandinavia*, as we have been assured by several natives of the countries which form that tract, and *Linnæus* takes no notice of it in his last system. It is fit here to remark an error of that able naturalist in speaking of the common rat, which he says was first brought from *America* into *Europe* by means of a ship bound to *Antwerp*. The fact, is, that both rat and mouse were unknown to the new world before it was discovered by the *Europeans*, and the first rats it ever knew, were introduced there by a ship from *Antwerp*.* This animal never made its appearance in *England*

HISTORY.

* *Ovalle's Hist. of Chile in Churchill's Voy.* iii. 43.

till about forty years ago.* It has quite extirpated the common kind wherever it has taken its residence, and it is to be feared that we shall scarcely find any benefit by the change; the *Norway* rat having the same disposition, with greater abilities for doing mischief, than the common kind. This species burrows like the water rat, in the banks of rivers, ponds and ditches; it takes the water very readily, and swims and dives with great celerity; like the black species, it preys on rabbits, poultry, and all kind of game, and on grain and fruits. It increases most amazingly, producing from fourteen to eighteen young at a time, and breeds three times in the year. Its bite is not only severe, but dangerous, the wound being immediately attended with a great swelling, and is a long time in healing. These rats are so bold, as sometimes to turn upon those who pursue them, and fasten on the stick or hand of such as offer to strike them.

M. *Brisson* describes this same animal twice under different names, p. 170 under the title of *le rat du bois*; and again, p. 173 under that of *le rat de norvege*. M. *de Buffon* stiles it *le Surmulot*; as resembling the mulots, or field

* This species reached the neighborhood of *Paris*, about seventeen years ago, or about the year 1750.

mice, in many respects ; but exceeding them in bulk.

I suspect that this rat came in ships originally from the *East Indies*. They are found there and also in vast numbers in *Persia*, from whence they have made their way westerly even to *Petersburg*.

Le Rat d'Eau, *Belon* 30. pl. *De Buffon*, Tom. vii. 348. Tab. 27. WATER.
31. 43.

Mus major aquaticus, seu *Mus amphibius*. *Mus cauda*
Rattus aquaticus. *Raii* elongata pilosa plantis pal-
syn. quad. 217. matis. *Gm. Lin.* 132.

Sorex aquaticus. *Charlton* *Castor cauda lineari tereti. Faun.*
ex. 25. *Suec.* 25. *Ed.* 1. *Mus amphibi-*
Meyer's an. ii. Tab. 84. *bis* 52. *Ed.* 2.

Mus cauda longa pilis supra *Mus aquatilis*. *Klein quad.*
ex nigro et flavescente 57.
mixtis, infra cinereis ves- *Br. Zool.* 48. *Hist. quad.* ii.
titus. Brisson quad. 124. *No.* 380. p. 182. *Arct. Zool.*
i. 152.

<i>Brit.</i>	<i>Llygoden y dwfr</i>	<i>Germ.</i>	<i>Wasser mause. W. Ratz</i>
<i>Fren.</i>	<i>Le Rat d'eau</i>	<i>Dut.</i>	<i>Water-rot</i>
<i>Ital.</i>	<i>Sorgo morgange</i>	<i>Swed.</i>	<i>Watn-ratta</i>
<i>Span.</i>		<i>Dan.</i>	<i>Vand-rotte.</i>
<i>Port.</i>			

LINNÆUS from the external appearance of this animal, has in one of his systems placed it in the same genus with the beaver. The form of the head, the shortness of the ears, the

thickness of the fur, and the places it haunts, vindicate in some degree the opinion he at that time entertained, but the form of the tail is so different from that of the beaver, as to oblige him to restore the water rat to the class in which he found it, in the system of our illustrious countryman *Ray*.

MANNERS.

The water-rat never frequents houses, but is always found on the banks of rivers, ditches and ponds, where it burrows and breeds. It feeds on small fish, or the fry of greater, on frogs, insects, and sometimes on roots; it has a fishy taste, and in some countries is eaten; *M. de Buffon* informing us that the peasants in *France* eat it on *maigre* days.

It swims and dives admirably well, and continues long under water, though the toes are divided like those of the common rat; not connected by membranes, as *Mr. Ray* imagined, and as *Linnaeus*, and other writers, relate after him.

DESCRIP-
TION.

The male weighs about nine ounces; the length is seven inches from the end of the nose to the tail; the tail five inches: on each foot are five toes, the inner toe of the fore-foot is very small; the first joint of the latter is very flexible, which must assist it greatly in swimming, and forming its retreat. The head is large, the

ears small, and scarcely appear through the hair : the nose blunt, and the eyes little : the teeth large, strong, and yellow : the head and body are covered with thick and pretty long hairs, chiefly black, but mixed with some of a reddish hue : the belly is of an iron-grey : the tail is covered with short black hairs, the tip of it with white hairs.

A female that we opened had six young ones in it.

- | | | |
|----------------------------------|---|------------|
| Mus domesticus medius. | Mus sylvaticus, M. caudâ longâ | 28. FIELD. |
| <i>Raii syn. quad.</i> 218. | squamosâ, corpore griseo lu- | |
| Mus cauda longa supra e | tescente subtus lateribusque | |
| fusco flavescens infra ex | abrupte albo. <i>Gm. Lin.</i> 129. | |
| albo cinerescens. <i>Brisson</i> | <i>Pallas glires.</i> p. 94. n. 42. | |
| <i>quad.</i> 123. | <i>Faun. Suec.</i> 36. | |
| <i>De Buffon, Tom.</i> vii. 325, | <i>Brit. Zool.</i> 49. <i>Hist. quad.</i> ii. | |
| <i>Tab.</i> 41. | <i>Nö.</i> 383. p. 184. | |
| <i>Brit.</i> Llygoden ganolig. | <i>Fren.</i> Le Mulot | |
| Llygoden y maes | <i>Dan.</i> Voed. | |

THIS measures from the nose-end to the setting on of the tail, four inches and a half ; the tail is four inches long : the eyes are black, large, and full ; the ears prominent ; the head and upper part of the body, is of a yellowish brown, mixed with some dusky hairs ; the breast is of

DESCRIP-
TION.

an ochre-color; the rest of the under side is white; the tail is covered with short hair.

MANNERS.

These animals are found only in fields and gardens; in some places they are called bean-mice, from the havoc they make among beans when first sown. They feed also on nuts, acorns, and corn, forming in their burrows vast magazines of winter provision.

Sæpe exiguus mus

Sub terris posuitque domos atque horrea fecit.

Virgil. Georg. I. 181.

Often the little mouse

Illudes our hopes; and safely lodged below

Hath formed his granaries.

Doctor *Derham* takes notice of this wonderful sagacity of theirs, in providing against that season when they would find a defect of food abroad; but they provide also for other animals: the hog comes in for a share, and the great damage we sustain in our fields, by their rooting up the ground, is chiefly owing to their search after the concealed hoards of the field mice.

They generally make the nest for their young very near the surface, and often in a thick tuft of grass; they bring from seven to ten at a time.

Less long-tailed field mouse. cauda longa subpilosa, auri- 29. HARVEST.
Br. Zool. II. App. 498. Hist. culis vellere longioribus.
quad. ii. No. 384. p. 185. Shaw's Gen. Zool. ii. p. 62.
Mus messorius. M. supra Linn. Tr. vii. 274.
ferrugineus, subtus albus, White's Selborne, 33, 39.

THIS species is very numerous in *Hampshire*,* particularly during harvest.

They form their nest above the ground, be- MANNERS.
 tween the straws of the standing corn, and some-
 times in thistles; it is of a round shape, and
 composed of the blades of corn. They bring
 about eight young at a time.

They never enter houses, but are often carried
 in the sheaves of corn into ricks, and a hundred
 of them have been found in a single rick, on
 pulling it down to be housed. Those that are
 not thus carried away in the sheaves, shelter
 themselves during winter under ground, and
 burrow deep, forming a warm bed for them-
 selves of dead grass.

They are (except the Shrew) the smallest of the *British* quadrupeds; their length from nose
 to tail is only two inches and a half; their tail
 two inches; their weight one sixth of an ounce. DESCRIPTION.

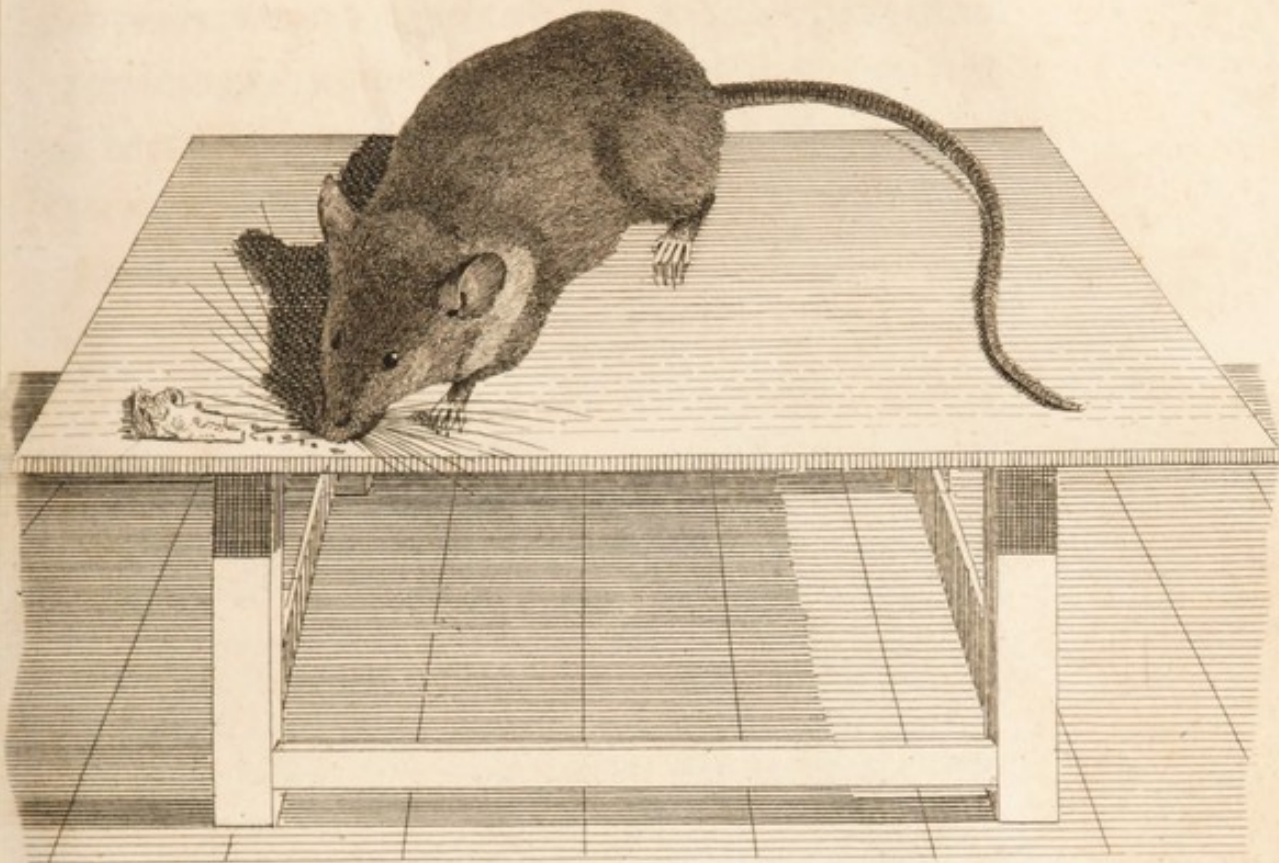
* It is said by the observant Mr. *Montagu*, not to be uncommon in *Wiltshire*, *Devon*, and *Glocestershire*. ED.

They are more slender than the other long-tailed Field Mouse; their eyes less prominent; their ears naked, and standing out of the fur; their tail slightly covered with hair; their back of a fuller red than the larger species; inclining to the color of a Dormouse: the belly white; a strait line along the sides dividing the colors of the back and belly.

- | | |
|--|---|
| <p>30. MOUSE. COMMON.</p> <p><i>Mus domesticus vulgaris seu minor. Raii syn. quad. 218. Seb. Museum, i. Tab. 111. f. 6. its skeleton. Tab. 31. Gesner quad. 714.</i></p> <p><i>Mus cauda longissima, obscure cinereus, ventre subalbescente. Brisson quad. 119. De Buffon, Tom. vii. 309. Tab. 39.</i></p> <p><i>Brit. Llygoden</i>
 <i>Frén. La Souris</i>
 <i>Ital. Topo, sorice</i>
 <i>Span. Raton</i>
 <i>Port. Ratinho</i></p> | <p><i>Mus musculus. M. cauda elongata, subnuda, palmis tetradactylis, plantis pentadactylis, pollice mutico. Gm. Lin. 128. Faun. Suec. 34.</i></p> <p><i>Mus minor, Musculus vulgaris. Klein quad. 57. Br. Zool. 50. Hist. quad. ii. No. 382. p. 184. Arct. Zool. i. 152.</i></p> <p><i>Germ. Maus</i>
 <i>Dut. Muys</i>
 <i>Swed. Mus</i>
 <i>Dan. Muus.</i></p> |
|--|---|

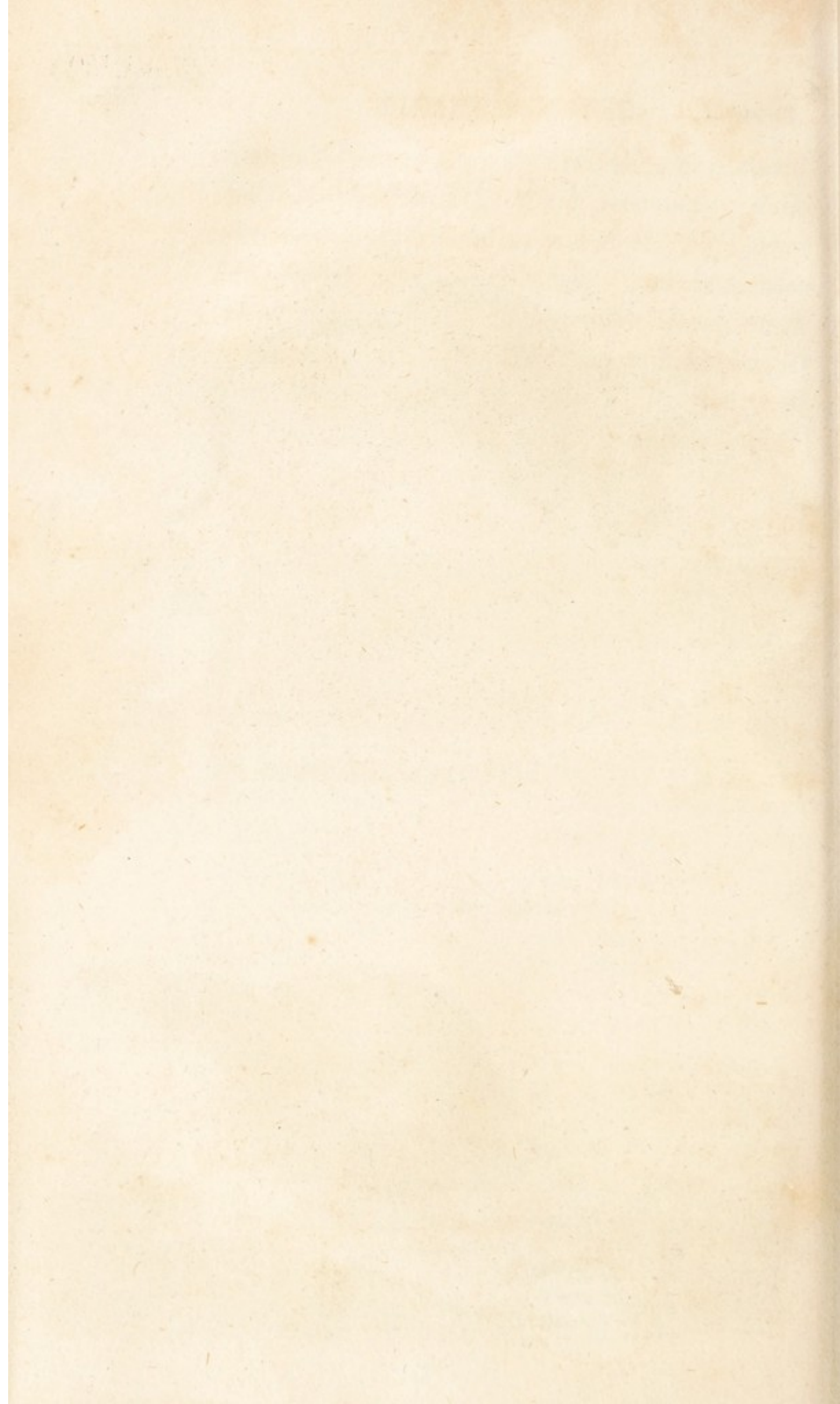
THIS timid, cautious, active, little animal, is too well known to require a description; it is entirely domestic, being never found in fields, or, as M. Buffon observes, in any countries uninhabited by mankind. It breeds very frequently

COMMON MOUSE



WATER SHREW (P 156)





in the year, and brings six or seven young at a time. This species is often found of a pure white, in which state it makes a most beautiful appearance, the fine full eye appearing to great advantage, amidst the snowy color of the fur. The root of white hellebore and staves-acre, powdered and mixed with meal, is a certain poison to them.

Mus arvalis. M. cauda unciali,	in ventre vestitis. <i>Brisson</i> 31. MEADOW.
auriculis vellere prominulis,	<i>quad.</i> 125.
palmis subtetradactylis, cor-	Mus agrestis. <i>Faun. Suec.</i> 30.
pore fusco. <i>Gm. Lin.</i> 134.	<i>De Buffon, Tom.</i> vii. 369.
Mus agrestis capite grandi bra-	<i>Tab.</i> 47.
chiurus. <i>Raii syn. quad.</i> 218.	<i>Klein quad.</i> 57. No. 50.
Mus cauda brevi pilis e nigri-	<i>Br. Zool.</i> 50. <i>Hist. quad.</i> ii.
cante et sordide luteo mixtis	No. 409. p. 205. <i>Arct.</i>
in dorso et saturate cinereis	<i>Zool.</i> i. 154.
<i>Brit.</i> Llygoden gwtta'r maes	<i>Fren.</i> Le petit Rat de
<i>Ital.</i> Campagnoli	champs, Le campagnol
	<i>Dan.</i> Skier-muus.

THE length of this species, from the nose to the tail, is about six inches; the tail only an inch and a half: the head is very large; the eyes prominent; the ears quite hid in the fur; the whole upper part of the body is of a ferruginous color, mixed with black; the belly of a deep ash-color; the tail is covered with short hair, ending with a little bush, about a quarter

DESCRIP-
TION.

of an inch long. The legs, particularly the fore legs, very short.

MANNERS.

This animal makes its nest in moist meadows, and brings eight young at a time: it has a strong affection for them; one that was seduced into a wire trap, by placing its brood in it, was so intent on fostering them, that it appeared quite regardless of its captivity. The manners of this creature much resemble the 28th species: like it, this resides under ground, and lives on nuts, acorns, but particularly on corn; it differs from the former in the place of its abode, seldom infesting gardens. It has been observed that in housing a rick of corn, the dogs have devoured all the mice of this species that they could catch, and rejected the common kind, and that the cats on the contrary would touch none but the last.

GENUS XVI. SHREW.

TEETH cutting, pointing forward.

Nose long, slender.

EARS small.

TOES five on each foot.

- | | | |
|--|---|------------|
| Mus araneus. Shrew, Shrew | Sorex araneus. S. cauda me- | 32. FETID. |
| Mouse, or Hardy Shrew. | diocri, corpore subtus albi- | |
| <i>Raii syn. quad.</i> 239. | do. <i>Gm. Lin.</i> 114. | |
| <i>Gesner quad.</i> 747. | <i>Faun. Suec.</i> 24. | |
| Mus araneus supra ex fusco ru- | Mus araneus rostro producti- | |
| fus infra albicans. <i>Brisson</i> | ore. <i>Klein quad.</i> 58. | |
| <i>quad.</i> 126. | <i>Br. Zool.</i> 54. <i>Hist. quad.</i> ii. | |
| <i>De Buffon, Tom. viii.</i> 57. <i>Tab.</i> | <i>No.</i> 428. p. 224. <i>Arct.</i> | |
| 10. | <i>Zool.</i> i. 161. | |
| <i>Brit.</i> Llygoden goch, Chwist- | <i>Port.</i> | |
| len, Llyg | <i>Germ.</i> Spitzmause, Zissmuss, | |
| <i>Fren.</i> La Musaraigne | Muger | |
| <i>Ital.</i> Toporango | <i>Swed.</i> Nabbmus | |
| <i>Span.</i> Murganho | <i>Dan.</i> Næbmuus, Muuse- | |
| | skier. | |

THE length of this little animal, from the end of the nose to the origin of the tail, is two inches and a half; that of the tail, near one inch and a half: the nose is very long and slender, and the upper part is much longer than the lower, beset with long but fine whiskers; the ears are short, and rounded; the eyes are very small, and,

DESCRIP-
TION.

like those of the mole, almost concealed in the hair. The color of the head, and upper part of the body, is of a brownish dusky red; the belly of a dirty white; the tail is covered with short dusky hairs; the legs are very short; the feet are divided into five toes. Above and below are two slender cutting teeth pointing forward, and on each a minute process; the rest of the teeth are so closely united, as to appear a continued serrated bone in every jaw; the whole number is twenty eight.

MANNERS.

The shrew inhabits old walls, heaps of stones, and holes in the earth; is frequently found near hayricks, dunghills, and necessary houses; is often observed rooting like a swine in ordure: it lives on corn, insects, and any filth; from its food or the places it frequents, has a disagreeable smell; cats will kill but not eat it. Brings four or five young at a time. In *August* there is an annual mortality of them, numbers being in that season found dead in the paths. The antients believed them to be injurious to cattle, an error now detected.

upper part of the body black ; the throat, breast, and belly ash-color ; beneath the tail is a triangular dusky spot.

[Mr. *Sowerby* in his "British Miscellany," p. 103. *Tab.* xlix. has described and figured an animal of this genus resembling the Water Shrew in some respects, but distinguished by being of an uniform greyish black color, and having a remarkable fringe of shortish white hairs on the under side of the tail, which is blackish with a white tip. The legs and toes are also fringed underneath with white hairs. It was caught in a ditch in *Norfolk*, by *W. J. Hooker* esq.]
ED.

GENUS XVII. MOLE.

Nose long, slender.

Jaw upper, much longer than the lower.

Ears none.

Fore-feet very broad, with scarcely any apparent legs before : hind-feet very small.

- | | |
|--|---|
| Talpa. The Mole, Mole-Warp,
or Want. <i>Raii syn. quad.</i>
236. | <i>De Buffon, Tom. viii. 81. 34. EURO-
PEAN.</i>
<i>Tab. 12.</i> |
| <i>Meyer's an. i. Tab. 2.</i> | Talpa europæa. T. cauda
brevis, pedibus pentadacty-
lis. <i>Gm. Lin. 110.</i> |
| Talpa alba nostras. <i>Seb. Mus. i.</i>
p. 61. <i>Tab. 32. f. 1.</i> | <i>Faun. Suec. 23.</i> |
| <i>Sib. Scot. 11.</i> | Talpa. <i>Klein quad. 60.</i> |
| <i>Gesner quad. 931.</i> | <i>Br. Zool. 52. Hist. quad. ii.</i> |
| Talpa caudata nigricans pedi-
bus anticis et posticis penta-
dactylis. <i>Brisson quad. 203.</i> | <i>No. 440. p. 229. Arct. Zool.</i>
<i>i. 164.</i> |
| <i>Brit. Gwadd, Twrch daear</i> | <i>Germ. Maulwurf</i> |
| <i>Fren. La Taupes</i> | <i>Dut. Mol</i> |
| <i>Ital. Talpa</i> | <i>Swed. Mulvad, Surk</i> |
| <i>Span. Topo</i> | <i>Dan. Muldvarp.</i> |
| <i>Port. Toupeira</i> | |

THERE are many animals in which the Divine Wisdom may be more agreeably illustrated, yet the uniformity of its attention to every article of the creation, even to the most apparently contemptible, by adapting the parts to its destined

course of life, appears more evident in the mole than in any other animal.

A subterraneous abode being allotted to it, the seeming defects of several of its parts vanish; which, instead of appearing maimed, or unfinished, exhibit a most striking proof of the fitness of their contrivance. The breadth, strength, and shortness of the fore-feet, which are inclined sideways, answer the use as well as form of hands, to scoop out the earth, to form its habitation, or to pursue its prey. Had they been longer, the falling in of the earth would have prevented the quick repetition of its strokes in working, or have impeded its course; the oblique position of the fore-feet has also this advantage, that it flings all the loose soil behind the animal.

The form of the body is not less admirably contrived for its way of life; the fore part is thick and very muscular, giving great strength to the action of the fore-feet, enabling it to dig its way with amazing force and rapidity, either to pursue its prey, or elude the search of the most active enemy. The form of its hind parts, which are small and taper, enables it to pass with great facility through the earth, that the fore-feet had flung behind; for had each part of the body been of equal thickness, its flight

would have been impeded, and its security precarious.

The skin is most excessively compact, and so tough as not to be cut but by a very sharp knife ; the hair is very short, and close set, and softer than the finest silk ; the usual color is black, not but that there are instances of these animals being spotted,* and a creme colored breed is sometimes found in my lands near *Downing*.

The smallness of the eyes (which gave occasion to the antients to deny it the sense of sight,)† is to this animal a peculiar happiness ; a small degree of vision is sufficient for an animal ever destined to live under ground ; had these organs been larger, they would have been perpetually liable to injuries, by the earth falling into them ; but nature, to prevent that inconvenience, hath not only made them very small, but also covered them very closely with fur. Anatomists mention (besides these) a third very wonderful contrivance for their security, and inform us that each eye is furnished with a certain muscle, by which the animal has the power of withdrawing or exerting them, according to its exigencies.

To make amends for the dimness of its sight,

* *Edw.* 268.

† *Aut oculis capti fodere cubilia talpæ.* *Virg. Georg.* 1.

Or sightless moles have dug their chamber'd lodge.

the mole is amply recompensed, by the great perfection of two other senses, those of hearing and of smelling; the first gives it notice of the most distant approach of danger; the other, which is equally exquisite, directs it in the midst of darkness to its food: the nose also, being very long and slender, is well formed for thrusting into small holes, in search of the worms and insects that inhabit them. These gifts may with reason be said to compensate the defect of sight, as they supply in this animal all its wants, and all the purposes of that sense. Thus amply supplied as it is, with every necessary accommodation of life, we must avoid assenting to an observation of a most respectable writer, and only refer the reader to the note, where he may find the very words of that author, and compare them with those of our illustrious countryman, Mr. Ray.*

* La taupe, sans être aveugle, a les yeux si petits si couverts, qu'elle ne peut faire grand usage du sens de la vue: *en dédommagement la nature lui a donné avec magnificence l'usage du sixième sens, &c.*

Mr. Ray makes the latter observation; but forms from it a conclusion much more solid and moral. *Testes maximos, parastatas amplissimas, novum corpus seminale ab his diversum et separatum natura concessit:—penem etiam facile omnium, ni fallor, animalium longissimum: ex quibus colligere est, maximam præ reliquis omnibus animalibus voluptatem in coitu hoc abjectum et*

It is supposed that the verdant circles so often seen in grass grounds, called by country people *fairy rings*, are owing to the operations of these animals, who at certain seasons perform their burrowings by circumgyrations, which loosening the soil, give the surface a greater fertility and rankness of grass than the other parts within or without the ring.

The mole breeds in the spring, and brings four or five young at a time ; it makes its nest of moss, and that always under the largest hillock, a little below the surface of the ground. It is observed to be most active, and to cast up most earth, immediately before rain, and in the winter before a thaw, because at those times the worms and insects begin to be in motion, and approach the surface ; on the contrary, in very dry weather, this animal seldom or never forms any hillocks, as it penetrates deep after its prey, which at such seasons retires far into the ground. During summer it runs in search of snails and worms in the night time among the grass, which makes it the prey of owls. The mole shews great art in skinning a worm, which it always does before it eats it ;

vile animalculum percipere, ut habeant quod ipsi inuideant, qui in hac supremas vitæ suæ delicias collocant. Raii syn. quad.
238, 239.

stripping the skin from end to end, and squeezing out all the contents of the body.

These animals do incredible damage in gardens, and meadows, by loosening the roots of plants, flowers, grass, corn, &c. *Mortimer* says, that the roots of *Palma christi* and white hellebore, made into paste, and laid in their holes, will destroy them. They seem not to have many enemies among other animals, except in *Scotland*, where (if we may depend on Sir *Robert Sibbald*) there is a kind of mouse, with a black back, that destroys moles.* We have been assured that moles are not found in *Ireland*.

* *Sib. Hist. Scot.* Part iii. p. 12. I did not find it was known at present.

GENUS XVIII. URCHIN.

TOES five on each foot.

BODY covered with short strong spines.

- | | | |
|---|---|---------------------------|
| Echinus sc. erinaceus terrestris. | Echinus terrestris. | <i>Gesner</i> 35. COMMON. |
| <i>Raii syn. quad.</i> 231. | <i>quad.</i> 368. | |
| <i>Meyer's an. i. Tab.</i> 95, 96. | Erinaceus europæus. | <i>Gm. Lin.</i> |
| <i>Sib. Scot.</i> 11. | 75. | |
| Erinaceus parvus nostras. | Erinaceus spinosus auricula- | |
| <i>Seb. Mus. i. p.</i> 78. <i>Tab.</i> 49. f. | tus. | <i>Faun. Suec.</i> 22. |
| 1, 2. | Acanthion vulgaris nostras. | |
| Erinaceus auriculis erectis. | <i>Klein quad.</i> 66. | |
| <i>Brisson quad.</i> 128. | <i>Br. Zool.</i> 51. <i>Hist. quad.</i> ii. | |
| <i>De Buffon, Tom.</i> viii. 28. | <i>No.</i> 446. p. 234. <i>Arct.</i> | |
| <i>Tab.</i> 6. | <i>Zool.</i> i. 165. | |

- | | |
|------------------------------------|--------------------------------|
| <i>Brit.</i> Draenog, Draen y coed | <i>Germ.</i> Igel |
| <i>Fren.</i> L'Herisson | <i>Dut.</i> Eegel-varken |
| <i>Ital.</i> Riccio | <i>Swed.</i> Igelhot |
| <i>Span.</i> Erizo | <i>Dan.</i> Pin-suin, Pin-soe. |
| <i>Port.</i> Ourizo | |

THE usual length of this animal, exclusive of the tail, is ten inches; the tail is little more than an inch long, but so concealed by the spines, as scarcely to be visible. The form of the nose is like that of the hog, the upper part being much longer than the lower, and the end flat; the nostrils are narrow, terminated on each side by a thin loose flap; the color of the nose is dusky,

DESCRIP-
TION.

it is covered by a few scattered hairs ; the upper part of the head, the sides, and the rump, are clothed with strong stiff hairs, approaching the nature of bristles, of a yellowish and cinereous hue. The legs are short, of a dusky color, and almost bare ; the toes on each foot are five in number, long, and separated the whole way ; the thumb, or interior toe, is much shorter than the others ; the claws long, but weak ; the whole upper part of the body and sides are closely covered with strong spines, of an inch in length, and very sharp pointed ; their lower part is white, the middle black, the points white. The eyes are small, and placed high in the head ; the ears are round, pretty large, and naked. The mouth is small, but well furnished with teeth ; in each jaw are two sharp pointed cutting teeth ; in the upper jaw are on each side four tushes, and five grinders ; in the lower jaw on each side are three tushes, pointing obliquely forward ; and beyond those, four grinders.

MANNERS.

The hedge hog is a nocturnal animal, keeping retired in the day, but is in motion the whole night, in search of food. It generally resides in small thickets, in hedges, or in ditches covered with bushes, lying well wrapped up in moss, grass, or leaves. Its food is roots, fruits, worms, and insects : it lies under the undeserved re-

proach of sucking cattle, and hurting their udders, but the smallness of its mouth renders that impossible.

It is a mild, helpless, and patient animal, and would be liable to injury from every enemy, had not Providence guarded it with a strong covering, and a power of rolling itself into a ball, by that means securing the defenceless parts. The barbarity of anatomists furnishes us with an amazing instance of its patience; one that was dissected alive, and whose feet were nailed down to the table, endured that, and every stroke of the operator's knife, without even one groan.*

* *Clavis terebrari sibi pedes et discindi viscera patientissimè ferebat; omnes cultri ictus sine gemitu plusquam Spartanâ nobilitate concoquens.* Borrich: in Blas; de Echino. 64.

DIV. III. PINNATED.

WITH fin-like feet; fore legs buried deep in the skin; hind legs pointing quite backwards.

 GENUS XIX. SEAL.

TEETH in the upper jaw, six, pointed; in the lower jaw, four, rather blunt.

TOES five palmated on each foot.

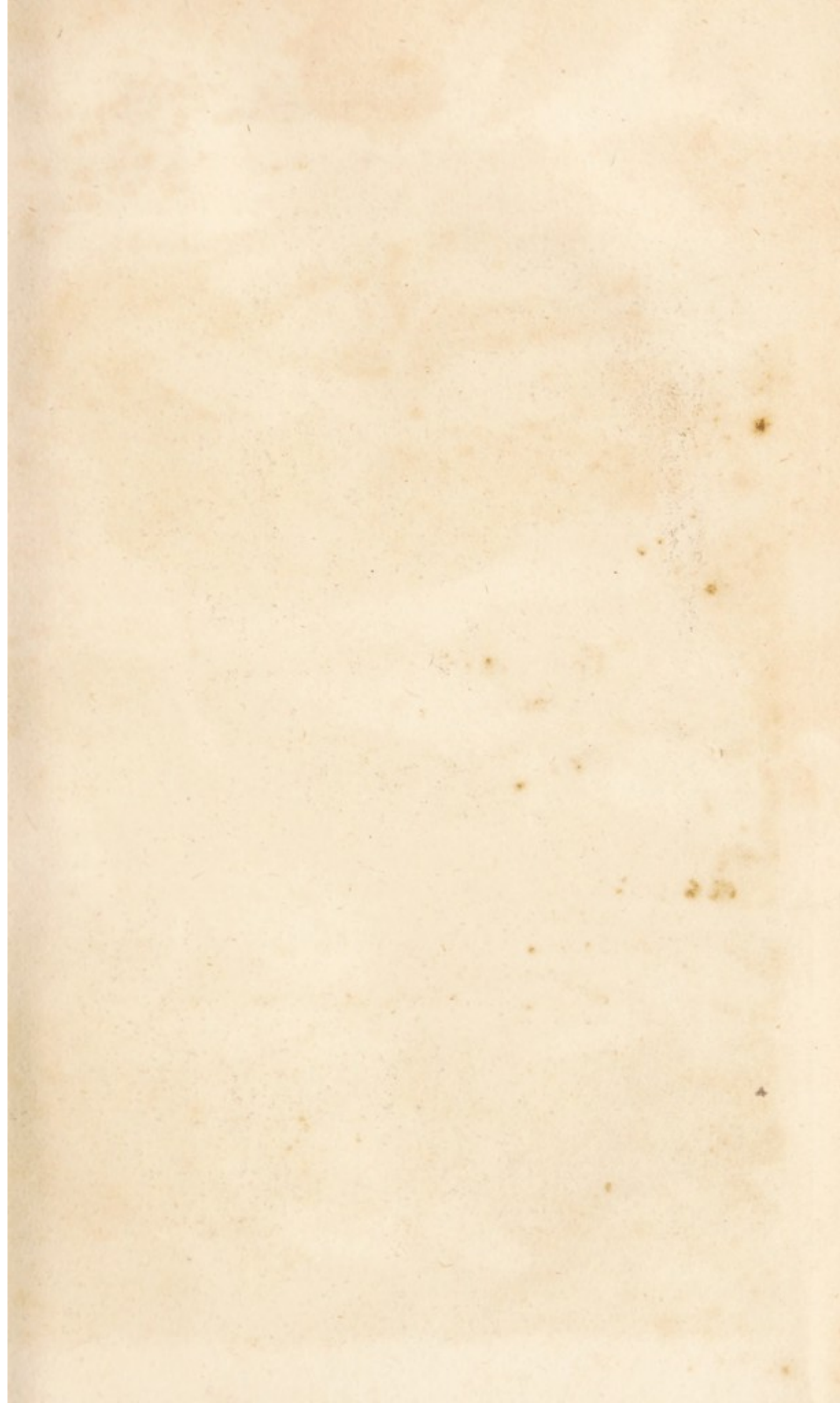
BODY thick at the shoulders, tapering towards the tail.

36. GREAT. Sea calf, *Ph. Trans.* ix. 74. Utsuk? *Crantz Greenl.* i. Tab. 5. 125.

Le grand Phoque, *De Buffon*, Great seal. *Hist. quad.* ii. Tom. xiii. 345. No. 478. p. 277. *Arct.*

Phoca barbata. *Gm. Lin.* 65. *Zool.* i. 185.

A SPECIES not very uncommon on the coast of *Scotland*, particularly about the rock *Hiskyr*, one of the western isles, where it grows to the length of twelve feet. One was some years ago shewn in *London*, and notwithstanding it was



SEALS



so young as to have scarcely any teeth, yet it was seven feet and a half long.

In my voyage among the *Hebrides* I frequently heard of this species, but did not meet with it. Mr. *Thompson*, our master, shot one, but it sunk, and we lost it.

Le Veau marin, ou loup de Mer. <i>Belon</i> 25. Pl. 26.	Le Phoque, <i>De Buffon</i> , Tom. 37. COMMON. xiii. 333. Tab. 45.
Seal, Seole, or Sea-calf. <i>Phoca</i> , seu vitulus marinus. <i>Raii syn. quad.</i> 189.	<i>Horr. Icel.</i> 88. <i>Pontop. Norw.</i> ii. 125. <i>Brisson quad.</i> 162.
Sea-calf. <i>Phil. Trans.</i> No. 469. Tab. 1. <i>Abridg.</i> xlvii. <i>Smith's Kerry</i> , 84, 364. <i>Borlase's Cornw.</i> 284. <i>Worm. muse.</i> 289.	<i>Phoca vitulina.</i> <i>Gm. Lin.</i> 63. <i>Phoca.</i> <i>Klein quad.</i> 93. <i>Phoca dentibus caninis rectis.</i> <i>Faun. Suec.</i> 4. <i>Br. Zool.</i> 34. <i>Hist. quad.</i> ii. No. 470. p. 270. <i>Arct. Zool.</i> i. 175.
<i>Kassigiak.</i> <i>Crantz's hist. Greenl.</i> i. 123.	
<i>Brit.</i> Moelrhon	<i>Germ.</i> Meer wolff, Meer hund
<i>Fren.</i> Le Veau marin	<i>Dut.</i> Zee hond
<i>Ital.</i> Vechio marino	<i>Swed.</i> Sial
<i>Span.</i> Lobo marino	<i>Dan.</i> Sæl hund.

THE common length of those taken on the *British* coasts, is from five to six feet. DESCRIP-
TION.

The subject that we took our description from, was a young one; allowance must therefore be made for the proportions of the measurements of those that have attained their full size. Its length, from the end of the nose to the end

of the hind feet, was two feet nine inches, to the end of the tail, two feet three inches; the head was seven inches long; the tail two and a half; the fore legs were deeply immersed in the skin of the body; what appeared out, was only eight inches long; the breadth of the fore feet, when extended, was three inches and a half; the hind legs were placed in such a manner, as to point directly backwards, and were ten inches long; each hind foot, when extended, was nine inches and a half broad; every foot was divided into five toes, and each of those connected by a strong and broad web, covered on both sides with short hair. The toes were furnished with strong claws, well adapted to assist the animal in climbing the rocks it basked on; the claws on the hind feet were about an inch long, slender, and strait, except at the ends, which were a little incurvated.

The circumference of the body in the thickest part, which was near the shoulders, was one foot ten inches, but near the hind legs, where it was narrowest, it measured only twelve inches. The head and nose were broad and flat, like those of the otter; the neck short and thick; the eyes large and black; it had no external ears, but in lieu of them, two small orifices; the nostrils were oblong; on each side the nose were

several long stiff hairs, and above each eye, were a few of the same kind. The form of the tongue of this animal is so singular, that were other notes wanting, that alone would distinguish it from all other quadrupeds, being forked, or slit at the end. The cutting teeth are singular in respect to their number, being six in the upper jaw, and only four in the lower. It has two canine teeth above and below, and on each side of the jaws five grinders; the total thirty-four.

The whole animal was covered with short hair, very closely set together; the color of that on the head and feet was dusky; on the body dusky, spotted irregularly with white; on the back the dusky color predominated, on the belly white, but seals vary greatly in their marks and colors, and some have been found* entirely white.

The seal is common on most of the rocky shores of *Great Britain* and *Ireland*, especially on the northern coasts; in *Wales* it frequents the coasts of *Caernarvonshire*, and *Anglesey*. It preys entirely on fish, and never molests the sea fowl; for I have seen numbers of each floating on the waves, as if in company. Seals eat their

* In the *Ashmolean Museum* at *Oxford*, is a good picture of two white seals.

prey beneath the water, and in case they are devouring any very oily fish, the place is known by a certain smoothness of the waves immediately above. The power of oil in stilling the waves excited by a storm, is mentioned by *Pliny*; the moderns have made the experiment with success,* and by that made one advance towards eradicating the vulgar prejudices against that great and elegant writer.

We must acknowledge the obligations we were under to the Rev. Mr. *Farrington* of *Dinas*, in *Caernarvonshire*, for several learned communications, but in particular for the natural history of this animal, which we shall give the public in his own words.

MANNERS.

‘ The seals are natives of our coasts, and are
 ‘ found most frequently between *Llyn* in *Caer-*
 ‘ *narvonshire*, and the northern parts of *Angle-*
 ‘ *sey*; they are seen often towards *Carreg y*
 ‘ *moelrhon*, to the west of *Bardsey*, or *Ynys*
 ‘ *Enlli*; and the *Skerries*, commonly called in
 ‘ the *British* language *Ynys y moelrhoniad*, or
 ‘ seal island. The *Latin* name of this amphi-
 ‘ bious animal is *Phoca*;† the vulgar name is

* *Phil. Trans.* 1774. p. 445.

† Doctor *Charleton* derives the word *φωκη* ex *βωκη*, *boatu* quem edit: vide *Exercitationes de dif. An. pisc.* p. 48. But I do not find any authority for his opinion.

' sea calf, and on that account, the male is
' called the bull, and the female the cow, but the
' *Celtic* appellation is *Moelrhon*, from the word
' *Moel*, bald, or without ears, and *Rhon*, a spear
' or lance.

' They are excellent swimmers, and ready
' divers, and are very bold when in the sea,
' swimming carelessly enough about boats; their
' dens or lodgements are in hollow rocks, or
' caverns, near the sea, but out of the reach of
' the tide: in the summer they will come out of
' the water, to bask or sleep in the sun, on the
' top of large stones, or shivers of rocks, and
' that is the opportunity our countrymen take
' of shooting them; if they chance to escape,
' they hasten towards their proper element,
' flinging stones and dirt behind them, as they
' scramble along; at the same time expressing
' their fears by piteous moans, but if they
' happen to be overtaken, they will make a vigo-
' rous defence with their feet and teeth, till they
' are killed. They are taken for the sake of
' their skins, and for the oil their fat yields; the
' former sell for four shillings, or four and six-
' pence a piece, which, when dressed, are very
' useful in covering trunks, making waistcoats,
' shot pouches, and several other conveniencies.'

The flesh of these animals, and even of por-

esses, formerly found a place at the tables of the great, as appears from the bill of fare of that vast feast that archbishop *Nevill* gave in the reign of *Edward IV.* in which is seen, that several were provided on the occasion.* They couple about *April*, on large rocks, or small islands, not remote from the shore, and bring forth in those vast caverns that are frequent on our coasts; they commonly produce two at a time, which in their infant state are covered with a whitish down, or woolly substance. The seal-hunters in *Cathness* have assured me that their growth is so sudden, that in nine tides from their birth (fifty-four hours) they will become as active as their parents. On the coast of that county are immense caverns opening into the sea, and running some hundreds of yards beneath the land. These are the resort of seals in the breeding time, where they continue till their young are old enough to go to sea, which is in about six or seven weeks. The first of these caves is near the *Ord*, the last near *Thrumster*; their entrance so narrow, as only to admit a boat; their inside very spacious and lofty. In the month of *October*, or the beginning of *November*, the seal-hunters enter the

* *Leland's Collectanea.*

mouths of the caverns about mid-night, and rowing up as far as they can, they land ; each of them being provided with a bludgeon, and properly stationed, light their torches, and make a great noise, which brings down the seals from the farther end in a confused body with fearful shrieks and cries ; at first the men are obliged to give way for fear of being over-borne, but when the first crowd is past, they kill as many as straggle behind, chiefly the young, by striking them on the nose ; a very slight blow on that part dispatches them. When the work is over, they drag the seals to the boat, which two men are left to guard. This is a most hazardous employ, for should their torches go out, or the wind blow hard from the sea during their continuance in the cave, their lives are lost. The seals of six weeks old, yield more oil than their emaciated dams ; above eight gallons have been procured from a single whelp, which sells from six-pence to nine-pence per gallon ; the skins from six-pence to twelve-pence.

The natural history of this animal may be further elucidated, by the following extracts from a letter of the Rev. Dr. *William Borlase*, dated *October* the 24th, 1763.

‘ The seals are seen in the greatest plenty on
‘ the shores of *Cornwall*, in the months of *May*,

‘ *June*, and *July*. They are of different sizes ;
‘ some as large as a cow, and from that down-
‘ wards to a small calf. They feed on most sorts
‘ of fish which they can master, and are seen
‘ searching for their prey near shore, where the
‘ whistling fish, wraws, and polacks resort.
‘ They are very swift in their proper depth of
‘ water, dive like a shot, and in a trice rise at
‘ fifty yards distance ; so that weaker fishes
‘ cannot avoid their tyranny, except in shallow
‘ water. A person of the parish of *Sennan*,
‘ saw not long since a seal in pursuit of a mullet
‘ (that strong and swift fish) ; the seal turned it
‘ to and fro’ in deep water, as a gre-hound does
‘ a hare ; the mullet at last found it had no way
‘ to escape, but by running into shoal water ;
‘ the seal pursued, and the former, to get more
‘ surely out of danger, threw itself on its side,
‘ by which means it darted into shoaler water
‘ than it could have swam in with the depth of
‘ its paunch and fins, and so escaped.

‘ The seal brings her young about the be-
‘ ginning of autumn ; our fishermen have seen
‘ two sucking their dam at the same time, as
‘ she stood in the sea in a perpendicular posi-
‘ tion.

‘ Their head in swimming is always above
‘ water, more so than that of a dog. They

‘ sleep on rocks surrounded by the sea, or on
‘ the less accessible parts of our cliffs, left
‘ dry by the ebb of the tide, and if disturbed
‘ by any thing, take care to tumble over the
‘ rocks into the sea. They are extremely
‘ watchful, and never sleep long without mov-
‘ ing; seldom longer than a minute; then raise
‘ their heads, and if they hear or see nothing
‘ more than ordinary, lie down again, and so
‘ on, raising their heads a little, and reclining
‘ them alternately, in about a minute’s time.
‘ Nature seems to have given them this pre-
‘ caution, as being unprovided with auricles, or
‘ external ears; and consequently not hearing
‘ very quick, nor from any great distance.’

In Sir *R. Sibbald’s* history of *Scotland*, we find an account of another species of the seal kind, which is copied from *Boethius*. The animal he mentions is the sea-horse,* *Walrus* or *Morse*: as this vast creature is found in the *Norwegian* seas, we think it not improbable but that it may have appeared on the *Scottish* coasts, but having no better authority for it, than what is above-mentioned, we dare not give it a place in a *British Zoology*. The teeth of that animal are as white and hard as ivory; but

* *Hist. quad.* 468. ii. p. 266. *Arct. Zool.* i. 162.

whether the ελεφάντινα ψάλια, ivory bits, which *Strabo** mentions among the articles of the *British* commerce, were made of them, or the tooth of the *Narhwal*, or of some of the toothed whales, is not at this time easy to be determined; but we may here remark that *Solinus*, in his account of *Britain*, informs us that the fine gentlemen of our island adorned the hilts of their swords with the teeth of sea beasts, which were as white as ivory itself.†

* *Strabo*, *Lib.* iv. 200.

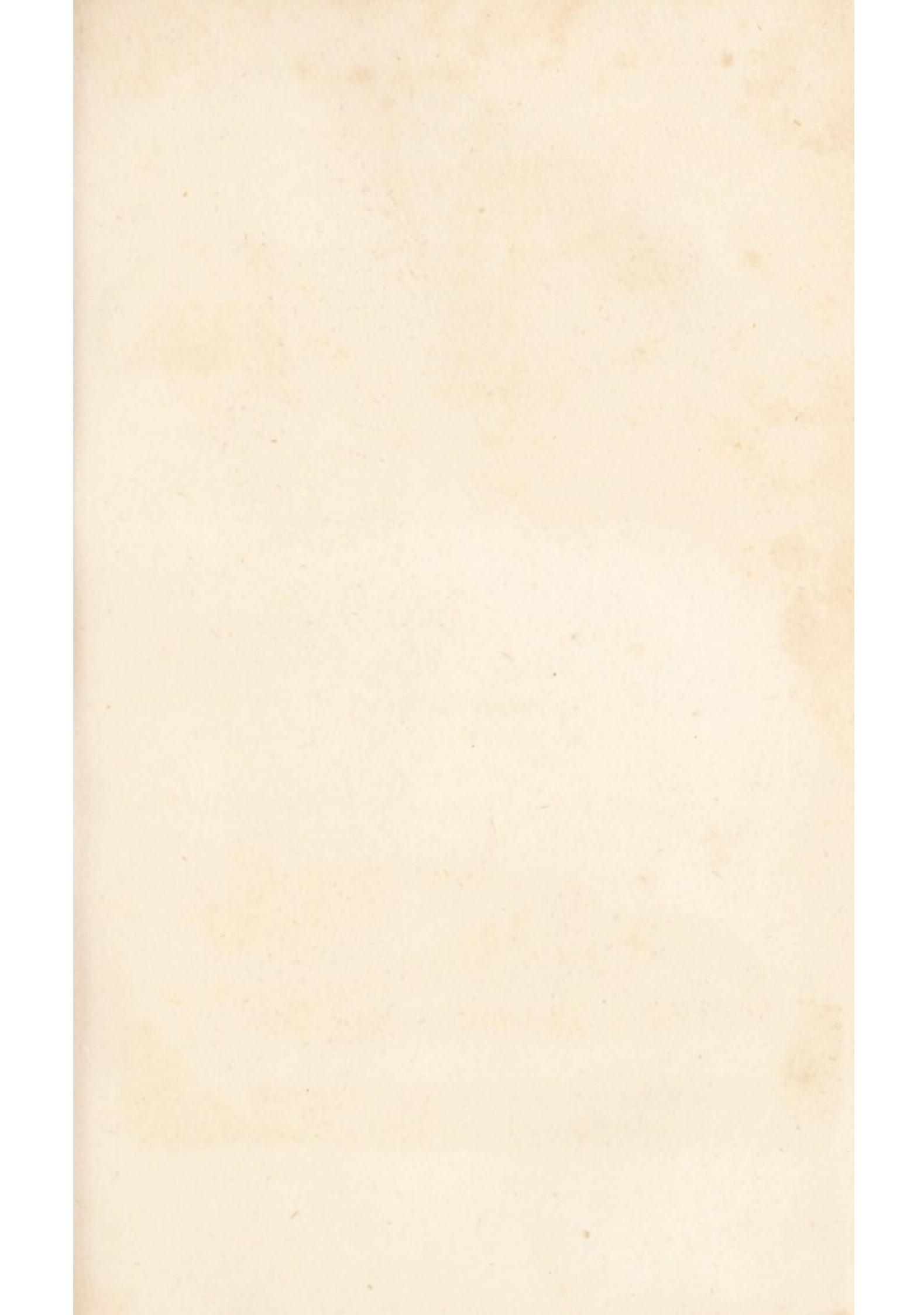
† *Polyhist.* c. xxxv.

- Pied Seal, *Br. Zool.* 4th ed. i. 139. *Hist. quad.* ii. No. 471. p. 273. *Tab.* 98. Phoca bicolor. P. nigra in-auriculata, albo varia, naso elongato, pedibus posterioribus lunatis. *Shaw*, *Gen. Zool.* i. p. 254. 38. PIED.
- La Phoque a ventre blanc. *De Buffon*, *supp.* vi. 310. *Tab.* xliv.

THE nose of this species is taper and elongated; the fore-feet furnished with five toes inclosed in a membrane, but very distinct; the claws long and straight; the hind feet very broad, with five distinct toes, the claws just extending to the margin of the membrane, which expands into the form of a crescent. This I saw at *Chester*; it was taken near that city in *May* 1766. On the first capture, its skin was naked like that of a porpesse, and only the head and a small spot beneath each leg was hairy; before it died the hair began to grow on other parts. The fore part of the head was black, the hind part of the head and the throat white; beneath each fore leg a spot of the same color; hind feet of a dirty white; the rest of the animal of an intense black. I believe they vary in the disposition of the colors; the animal given by *M. de Buffon* had only the belly white. These species, according

DESCRIP-
TION.

to that great writer, frequent the coast of the *Adriatic*: the length of that described by M. *de Buffon*, was seven feet and a half; that which I saw was much less, and probably a young one.

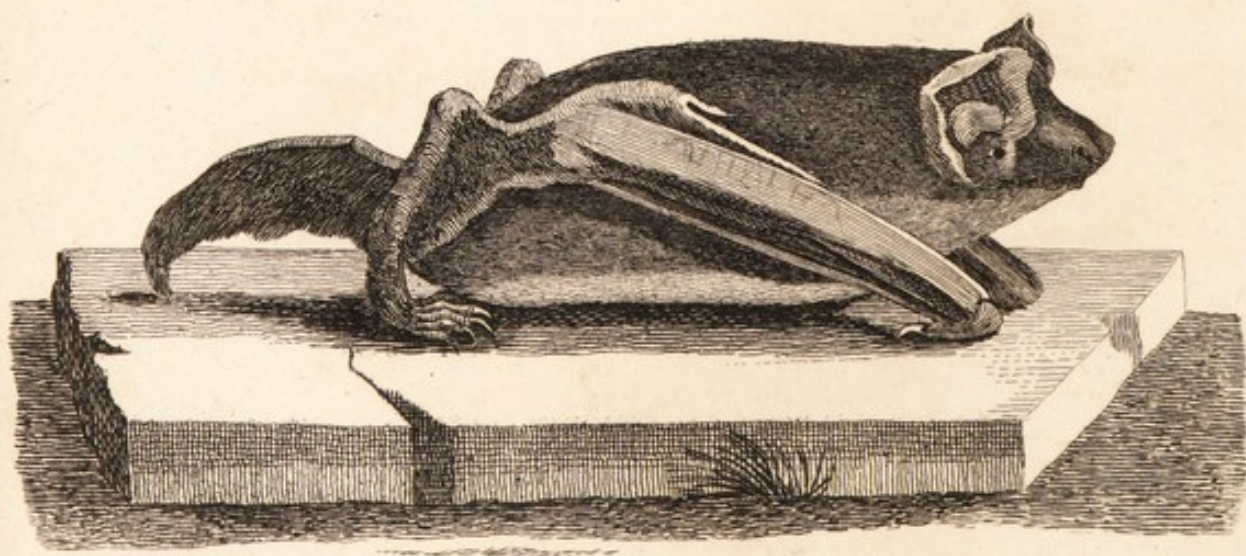


LONG EARED BAT. *Pl. 182*



GREAT BAT.

Nº 38



M. Griffiths del

DIV. IV. WINGED.

 GENUS XX. BAT.

TOES of the fore-feet long, extended, connected by a thin membrane continued to the hind-legs, and giving a power of flight.

Vespertilio Noctula. V. caudatus, naso oreque simplici, auriculis ovalibus operculatis: operculo exili. *Gm. Lin.* 48. La noctule *De Buffon* Tom. 39. GREAT. viii. *Tab.* xviii. p. 128. *Hist. quad.* ii. No. 513. p. 317. *Arct. Zool.* i. 215.

IS a species less common in *Great Britain* than the smaller. It ranges high in the air for food, and retires early in the summer. Is the largest we have; its extent of wing is fifteen inches; its length to the rump two inches eight tenths; that of the tail one inch seven tenths. The nose is slightly bilobated; the ears small and rounded; on the chin is a minute *verruca*. Hair on the body a reddish ash-color.

They collect under eaves of buildings in vast numbers. The Rev. Doctor *Buckworth* informed me that under those of *Queen's College, Cambridge*, he saw taken, in one night, one hundred and eighty-five; the second night sixty-three; the third, two.

40. HORSE-SHOE. La Chauve-souris a fer a cheval. operculatis, cauda dimidia
De Buffon Tom. viii. 131. corporis longitudine. *Gm.*
Tab. xvii. xx. *Lin.* 50.
 Vespertilio ferrum equinum. V. Horse-shoe Bat. *Hist. quad.*
 naso ferro equino simili, auri- ii. No. 512. p. 316.
 bus caput æquantibus non

THIS species was discovered by Dr. *Latham** at *Dartford, Kent*, who was so obliging as to communicate it to me. They are found in the greatest numbers in the salt-petre houses belonging to the powder mills, and frequent them during the evening for the sake of the gnats which swarm there. They have been also found during winter in a torpid state clinging to the roof. They often feed on *Chafers*, but only eat the body.

DESCRIP-
TION.

The length from the nose to the tip of the tail is three inches and a half; the extent fourteen. At the end of the nose is an upright membrane in form of a horse-shoe. Ears large, broad at their base, inclining backwards; but want the little or internal ear. The color of the upper part of the body is deep cinereous; of the lower whitish.

* The celebrated author of our best works on ornithology, now resident at *Romsey*. ED.



HORSE-SHOE BAT.

Vespertilio minutus. *Montagu.* *Lin.* 50. *Schreb. Seaughth.* 41. MINUTE.
Linn. Tr. ix. 163. *V. ferrum* i. p. 174. *Tab.* LXII. ic.
equinum. *B. minor.* *Gm.* *sup.*

MR. *Montagu*, to whom the lovers of natural history are so much indebted, has added this new species to the list of *British* animals. He has found it more than once in *Wiltshire* and *Devonshire*.

In color and general character, it strongly resembles the Horse-shoe Bat, but is much smaller, scarcely exceeding in length two inches and three quarters from the tip of the nose to the end of the tail; the extent of the wings is nine inches and a half; the weight from sixty-three to eighty grains. A material distinction also occurs in the formation of the nasal membranes, especially that which is posterior and transverse. To explain this, the editor has taken the liberty of copying the outline from Pl. xviii. of the *Linnean* Transactions. *Fig.* 1. in the annexed plate, represents the side view of the membranes of the Horse-shoe Bat, of which *a* is the posterior transverse one; the front is seen at *Fig.* 2. The same views are given of the nasal membranes of the Minute Bat at *Fig.* 3 and 4. where *b, b* represent the membranes in different points

DESCRIP-
TION.

of view. In these a very striking difference is observable, and it will also be perceived, that the anterior longitudinal membrane is by no means similar in both species. The Horse-shoe Bat has two small teeth placed at some distance in the upper jaw, which are not to be found in the Minute.

Mr. *Montagu* discovered four teats in a female of this species, a circumstance which draws from him some excellent observations on the fallibility of all general rules. It is well known, that the great *Linnaeus* had ranked the bats among the *Primates*, on the supposition that they possessed only two *papillæ*. ED.

42. LONG
EARED.

Edw. av. 201. f. 3.

Alb. iii. Tab. 101.

La petite chauve souris de
notre pays. *Brisson quad.*
160.

L'oreillar. *De Buffon, Tom.*

viii. 118. 127. *Tab.* 17.
f. 1.

Vespertilio auritus. Gm. Lin.

47.

*V. auritus, naso oreque sim-
plici, auriculis duplicatis,
capite majoribus. Faun.*

Suec. 3.

Br. Zool. 56. *Hist. quad. ii. No.*
519. p. 320.

THE length of this species of bat, exclusive of the tail, two inches and three quarters; the extent of the fore-legs ten inches and three quarters.

The principal distinction between this and

the common kind, is the ears, which in this are above an inch long, very thin, and almost transparent; within each of these is a lesser ear, or at least a membrane resembling one, which, as Mr. *Edwards* observes, may possibly serve as a valve to close the larger, in the sleeping state of this animal.

Vespertilio Barbastellus. V. caudatus, buccis elatis pilosis, auriculis magnis inferius angulatis. *Gm. Lin.* 48.

La Barbastelle, *De Buffon* 43. BARBASTELLE.
Tom.viii. 130. *Tab.* xix. *fig.*
1. *Schreber.* 203. *Tab.* lv.
Hist. quad. ii. No. 517. p. 319.

THE *Barbastelle* has a sunk fore-head; long and broad ears, the lower part of the inner sides of which touch each other, and conceal the face and head when looked at in front. The nose is short; the end flatted; the cheeks full. The upper part of the body is of a dusky brown; the lower ash-colored and brown. Its length to the rump is about two inches; that of the tail nearly the same; its extent ten and a half.

Mr. *Sowerby* in his *British Miscellany*, p. 9. *Tab.* v. first announced the discovery of this species in *England*: it was found in the powder mills at *Dartford*. Mr. *Montagu* observed it about the same time in *Devonshire*, and has given a full description of it in the ninth volume, p. 171 of the *Linnæan Transactions*. ED.

44. COMMON. Vespertilio. Bat, Flitter, or lis. *Brisson quad.* 158.
Flutter Mouse. *Raii syn.* La chauve souris. *De Buffon,*
quad. 243. Tom. viii. 113. *Tab.* 16.
Short-eared *English* Bat. *Edw.* Vespertilio murinus. *Gm. Lin.*
av. 201. f. 2. 48.
Seb. Mus. i. V. caudatus naso oreque sim-
The Rear Mouse. *Charlton ex.* plici. *Faun. Suec.* 2.
80. V. major. *Klein quad.* 61.
Meyer's an. i. *Tab.* 3. Vespertilio. *Plinii Lib.* x. 6.
Gesner av. 766. 61.
Vespertilio murini coloris, pe- *Br. Zool.* 55. *Hist. quad.* ii.
dibus omnibus pentadacty- No. 519. p. 320. *Arct.*
Zool. i. p. 215.

Brit. Ystlum

Fren. La Chauve souris

Ital. Nattola, Notula, Spor-
teglione, Vispristrello,
Vilpistrello

Span. Murcielago, Morcie-
galo

Port. Morcego

Germ. Speckmaus, Fleder-
maus

Dut. Vledermuys

Swed. Laderlap, Fladermus

Dan. Flagermuus, Aften-
bakke.

THIS singular animal was placed by *Pliny*, *Gesner*, *Aldrovandus*, and some other naturalists, among the birds; they did not consider, that it wanted every character of that order of animals, except the power of flying; if the irregular, uncertain, and jerking motion* of the

* The *English* synonym of this animal, *Flitter*, or *Flutter mouse*, is very expressive of its action in the air.

bat in the air, can merit the name of flight. No birds whatsoever are furnished with teeth, or bring forth their young alive, and suckle them: were other notes wanting, these would be sufficient to determine that the bat is a quadruped.

The species now described, is the most common: the usual length of it is about two inches and a half; the extent of the fore-legs nine inches. The members that are usually called the wings, are nothing more than the four interior toes of the fore-feet, produced to a great length, and connected by a thin membrane, which extends also to the hind legs, and from them to the tail; the first toe is quite loose, and serves as a heel, when the bat walks; or as a hook, when it would adhere to any thing. The hind-feet are disengaged from the membrane, and divided into five toes, furnished with pretty strong claws; the membranes are of a dusky color. The body is covered with short fur, of a mouse-color, tinged with red. The eyes are very small: the ears like those of the mouse.

DESCRIP-
TION.

This species of bat is very common in *England*: it makes its first appearance early in the summer, and begins its flight in the dusk of the evening; it principally frequents the sides of

woods, glades, and shady walks, and is also frequently observed to skim along the surface of pieces of water, in quest of gnats and insects; these are not its only food, for it will eat meat of any kind that it happens to find hanging up in a larder.

The bat brings only two young at a time, which it suckles from two* teats placed on the breast, like those of the human race. These animals are capable of being brought to some degree of familiarity. The Rev. Mr. *White* of *Selborne* has seen a bat so far tamed as to eat insects out of a person's hand, and while it was feeding would bring its wings round before its mouth, hovering in the manner of birds of prey.

Towards the latter end of summer, the bat retires into caves, ruined buildings, the roofs of houses, or hollow trees, where it remains the whole winter, in a state of inaction, suspended by the hind-feet, and closely wrapped up in the membranes of the fore-feet.

The voice of the bat is somewhat like that of the mouse, but very low, and weak. *Ovid* takes notice both of that, and the derivation of its *Latin* name,

* With exception apparently of the Minute Bat, which has a greater number. See above p. 182. ED.

Lucemque perosæ

Nocte volant, seroque tenent a vespere nomen.

———Minimam pro corpore vocem

Emittunt, peraguntque levi stridore querelas.

Met. lib. iv. 10.

Their little bodies found

No words, but murmur'd in a fainting sound.

In towns, not woods, the sooty bats delight,

And never till the dusk begin their flight ;

Till *Vesper* rises with his evening flame ;

From whom the *Romans* have derived their name.

Eusden.

ORITHOLOGY.

CLASS II.

B I R D S.

AVES INTERNUNCIÆ JOVIS.

BRITISH MUSEUM

CLASS II

BIRD S.

LES INTERMEDIATE JOVIS

BRITISH ZOOLOGY.

CLASS II. BIRDS.

DIV. I. LAND BIRDS.





CLASS II.

B I R D S.

DIV. I. LAND BIRDS.

SECT. I. RAPACIOUS.

Genus.

I. FALCON.

II. OWL.

SECT. II. PIES.

III. SHRIKE.

IV. CROW.

V. ROLLER.

VI. ORIOLE.

VII. CUCKOO.

VIII. WRYNECK.

IX. WOODPECKER.

X. KINGFISHER.

XI. NUTHATCH.

XII. BEE-EATER.

XIII. HOOPOE.

XIV. CREEPER.

SECT. III. GALLINACEOUS.

COCK.

TURKEY.

Genus.

PINTADO.

PEACOCK.

PHEASANT.

XV. GROUS.

XVI. BUSTARD.

SECT. IV. COLUMBINE.

XVII. PIGEON.

SECT. V. PASSERINE.

XVIII. STARE.

XIX. THRUSH.

XX. CHATTERER.

XXI. GROSBKAK.

XXII. BUNTING.

XXIII. FINCH.

XXIV. FLY-CATCHER.

XXV. LARK.

XXVI. WAGTAIL.

XXVII. WARBLERS.

XXVIII. TITMOUSE.

XXIX. SWALLOW.

XXX. GOATSUCKER.

DIV. II. WATER BIRDS.

SECT. I. CLOVEN FOOTED.

I. SPOONBILL.

II. HERON.

III. IBIS.

IV. CURLEW.

V. SNIPE.

Genus.

VI. SANDPIPER.

VII. PLOVER.

VIII. COURSER.

IX. PRATINCOLE.

X. OYSTER-CATCHER.

XI. RAIL.

XII. GALLINULE.

SECT. II. FIN FOOTED.

XIII. PHALAROPE.

XIV. COOT.

XV. GREBE.

SECT. III. WEB FOOTED.

XVI. AVOSET.

XVII. AUK.

XVIII. GUILLEMOT.

XIX. DIVER.

XX. TERN.

XXI. GULL.

XXII. PETREL.

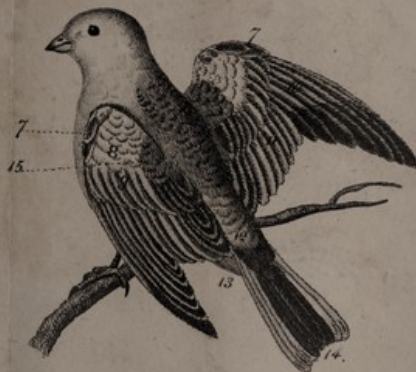
XXIII. MERGANSER.

XXIV. DUCK.

XXV. CORVORANT.

EXPLANATION OF SOME TECHNICAL TERMS
IN ORNITHOLOGY USED IN THIS WORK, AND
BY LINNÆUS.

<i>Rostrum uncinatum</i>	H OOKED bill, such as is seen in <i>fig. 16. b.</i>
- - - <i>cultratum</i>	Cultrated. When the edges of the bill are very sharp, such as in that of the Crow.
- - - <i>subulatum</i>	Awl shaped; a term which <i>Linnæus</i> uses for a straight and slender bill, <i>fig. 17.</i>
- - - <i>unguiculatum</i>	A bill with a nail at the end, as in those of the Goosanders and Ducks.
- - - <i>emarginatum</i>	Emarginated, when there is a small notch near the end of the bill; this is conspicuous in that of Thrushes, <i>fig. 5.</i>
<i>Nares lineares</i>	When the nostrils are very narrow, as in Sea-gulls.
- - - <i>marginatæ</i>	With a rim round the nostrils, as in the Stare.
<i>Cere</i>	The naked skin that covers the base of the bill in the Hawk kind, <i>fig. 16. c.</i>
<i>Vibrissæ</i>	Stiff hairs at the base of the bill; in some birds simple, as in the Fly-catcher <i>fig. 6.</i> ; in others pectinated, or comb-like, as in the Goat-sucker.
<i>Lingua integra</i>	The tongue entire, or not cloven.
- - - <i>ciliata</i>	When the tongue is edged in fine bristles, as in Ducks.



Lingua lumbriciformis

When the tongue is long, round and slender like a worm, as that of the Woodpecker.

Lorum

The space between the bill and the eye generally covered with feathers; but in some birds naked, as in the black and white Grebe, *fig. 17. a.*

Orbita

Orbits. The skin that surrounds the eye, which is generally bare, particularly in the Heron, *fig. 16. e.*

Capistrum

A word used by *Linnæus* to express the short feathers on the forehead, just above the bill. In Crows these fall forwards over the nostrils, *fig. 16. d.*

Nucha

The hind part of the head, *fig. 16. a.*

Pennæ scapulares

Scapular feathers, that rise from the shoulders, and cover the sides of the back, *fig. 15.*

Alula spuria

Bastard wing, a small joint rising at the end of the middle part of the wing, or the *cubitus*; on which are three or five feathers, *fig. 7.*

Tectrices primæ

Lesser coverts of the wings, the small feathers that lie in several rows on the bones of the wings. The Undercoverts are those that lie inside of the wing, *fig. 8.*

- - - - *secundæ*

Greater coverts, the feathers that lie immediately over the quill-feathers and secondary feathers, *fig. 9.*

Remiges primores

Greater quill-feathers. The largest feathers of the wings, or those that rise from the first bone, *fig. 10.*

- - - - *secundariæ*

Lesser quill-feathers, those that rise from the second bone, *fig. 11.*

of which seldom more than two are prolific; Providence denying a large increase to rapacious birds,* because they are noxious to mankind, but graciously bestowing an almost boundless one on such as are of use to us. This kind of eagle sometimes migrates into *Caernarvonshire*, and there are instances, though rare, of its having bred in the *Snowdon* hills, from whence some writers give that tract the name of *Creigiau'r eryri*, or the eagle rocks; others that of *Creigiau'r eira*, or the snowy rocks; the latter seems the more natural epithet, it being more reasonable to imagine that those mountains, like *Niphates* in *Armenia*, and *Imaus*† in *Tartary*, derived their name from the circumstance of being covered with snow, which is sure to befall them near the half of every year, than from the accidental appearance of a bird on them, once only in several years.

DESCRIP-
TION.

The golden eagle weighs about twelve pounds; its length is three feet; the extent of its wings seven feet four inches; the bill is three inches long, and of a deep blue color; the cere is yellow; the irides of a hazel color: the sight and sense of smelling are very acute: *her eyes be-*

* Τῶν γαμψωνύχων ὀλιγοτόκα πάντα. *Arist. hist. an.*

† *Imaus*—incolorum lingua nivolum significante. *Plin. lib. 6. c. 21.*

hold afar off :* the head and neck are clothed with narrow sharp-pointed feathers, of a deep brown color, bordered with tawny ; the hind part of the head in particular is of a bright rust-color. The whole body, above as well as beneath, is of a dark brown, and the feathers on the back are finely clouded with a deeper shade of the same : the wings, when closed, reach to the end of the tail ; the quill feathers are of a chocolate color, the shafts white : the tail is of a deep brown, irregularly barred and blotched with an obscure ash color, and usually white at the roots of the feathers : the legs are yellow, short, and very strong, being three inches in circumference, and are feathered to the very feet : the toes are covered with large scales, and armed with most formidable claws, the middle of which are two inches long.

Eagles in general are very destructive to fawns, lambs, kids, and all kind of game ; particularly in the breeding season, when they bring a vast quantity of prey to their young. *Smith*, in his history of *Kerry*, relates that a poor man in that county got a comfortable subsistence for his family, during a summer of famine, out of

* *Job xxxix. 9.* Where the natural history of the eagle is finely drawn up.

an eagle's nest, by robbing the eaglets of the food the old ones brought, whose attendance he protracted beyond the natural time, by clipping the wings and retarding the flight of the former. It is very unsafe to leave infants in places where eagles frequent; there being instances in *Scotland** of two being carried off by them, but fortunately,

Illæsum unguibus hæsit onus,

the theft was discovered in time, and the children restored unhurt out of the eagles' nests, to the affrighted parents.† In order to extirpate these pernicious birds, there is a law in the *Orkney* isles, which entitles any person that kills an eagle to an hen out of every house in the parish, in which it was killed.

Eagles seem to give the preference to the carcasses of dogs or cats. Persons, who make it their business to kill these birds, lay that of one or other by way of bait, and then conceal themselves within gun-shot. They fire the instant the eagle alights, for she that moment looks about before she begins to prey. Yet quick as her sight may be, her sense of hearing seems

* *Martin's hist. West. Isles*, 299. *Sib. hist. Scot.* 14.

† *Camden's Brit.* i. 1474. The impression of an eagle and child on the coin of the *Isle of Man*, was probably owing to some accident of this kind.

still more exquisite. If hooded crows or ravens happen to be nearer the carrion and resort to it first, and give a single croak, the eagle, if there is one in any part of the neighborhood, is certain of instantly repairing to the spot.

Eagles are remarkable for their longevity, and LONGEVITY. for their power of sustaining a long abstinence from food. Mr. *Keysler* relates that an eagle died at *Vienna* after a confinement of 104 years. This pre-eminent length of days probably gave occasion to the saying of the PSALMIST, *thy youth is renewed like the eagle's*. One of this species, which was nine years in the possession of *Owen Holland esq. of Conwy*, lived thirty-two years with the gentleman who made him a present of it; but what its age was when the latter received it from *Ireland* is unknown. The same bird also furnishes a proof of the truth of the other remark, having once, through the neglect of servants, endured hunger for twenty-one days, without any sustenance whatsoever.

“The golden eagle is not uncommon in *Russia*,* where it is said to be used in falconry, for the purpose of taking wolves, foxes, and antelopes. It is seldom killed in *England*. One was shot at *Yarmouth* in 1783, the extent of which was reported to be twelve feet. Mr.

* *Decouvertes Russes*. iii. 127.

Marckwick, in the fourth volume of the *Linnæan* Transactions, records an instance of one having been killed at *Bexhill*, in *Sussex*. J. L.*

A male of this species was shot in *Suffolk* in the winter of 1810, by a servant of Sir *Thomas Gooch*, baronet; a larger bird, probably the female, was observed at the same time near *Blythburgh*, for several evenings, but escaped its pursuers. ED.

2. BLACK
EAGLE.

<p><i>Falco fulvus</i>. F. cera flava, pedibus lanatis fusco-ferrugineis, dorso fusco, cauda fascia alba. <i>Lath. ind. orn.</i> 10. <i>id. Syn.</i> i. 32. <i>id. Sup.</i> i. 10.</p> <p>Golden eagle, with a white ring about its tail. <i>Wil. orn.</i> 59.</p>	<p><i>Raii syn. av.</i> 6.</p> <p>White tailed eagle. <i>Edw.</i> 1.</p> <p><i>Falco fulvus</i>. <i>Gm. Lin.</i> 255.</p> <p><i>Brisson av.</i> i. 420. L'Aigle commun. <i>Hist. d'oïs.</i> i. 86.</p> <p><i>Pl. Enl.</i> 409.</p> <p>Ring-tail Eagle. <i>Br. Zool.</i> 62.</p> <p><i>Arct. Zool.</i> i. 226.</p>
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THIS bird is common to the northern parts of *Europe* and *America*; that figured by Mr. *Edwards*, differing only, in some white spots on the breast, from our species. It is frequent in *Scotland*, where it is called the Black Eagle, from the dark color of the plumage. It is very destructive to deer, which it will seize between the horns, and by incessantly beating it about the

* The editor has to express his acknowledgements to his respected and valuable friend, *John Latham*, esq. for the paragraphs and notes distinguished by the initials, J. L.

eyes with its wings, soon makes a prey of the harassed animal. The eagles in the isle of *Rum* have nearly extirpated the stags which used to abound there. This species generally builds in clefts of rocks near the deer forests, and makes great havoc not only among them, but also the white hares and Ptarmigans.

It is equal in size to the preceding: the bill is of a blackish horn color; the cere yellow; the whole body is of a deep brown, slightly tinged with rust color; but what makes a long description of this kind unnecessary, is the remarkable band of white on the upper part of the tail; the end only being of a deep brown; which character it maintains through every stage of life, and in all countries where it is found. The legs are feathered to the feet; the toes yellow, the claws black. Mr. *Willughby* gives the following very curious account of the nest of this species, p. 21.

DESCRIP-
TION.

‘ In the year of our Lord 1668, in the wood-lands near the river *Derwent*, in the *Peak* of *Derbyshire*, was found an eagle’s nest made of great sticks, resting one end on the edge of a rock, the other on two birch trees; upon which was a layer of rushes, and over them a layer of heath, and upon the heath rushes again; upon which lay one young one, and an addle

NEST.

‘egg; and by them a lamb, a hare, and three
 ‘heath poults. The nest was about two yards
 ‘square, and had no hollow in it. The young
 ‘eagle was black as a hobby, of the shape of a
 ‘goshawk, of almost the weight of a goose, rough
 ‘footed, or feathered down to the foot: having
 ‘a white ring about the tail.’

Mr. *Willughby* imagines, his first *pygargus*,
 or white tailed eagle, p. 61. to be but a variety
 of this, having the same characteristic mark, and
 differing only in the pale color of the head.

The antients believed, that the pebble com-
 monly called the *ætites*,* or eagle stone, was
 formed in the eagle’s nest; and that the eggs
 could not be hatched without its assistance.
 Many absurd stories have been raised about this
 fossil, which (as it bears but an imaginary rela-
 tion to the eagle) must be omitted in a zoologic
 work.

“The black eagle is very common and de-
 structive in *Germany*. *Beckstein*† says, that in
 an aery of one were found the skeletons of three
 hundred ducks, and of forty hares, and that the

* If the reader’s curiosity should be excited, we refer him for
 information to *Pliny*, lib. x. c. 3. lib. xxx. c. 21. to *Boetius de*
gemmis, p. 375. to Dr. *Woodward’s* catalogue of fossils, vol. i.
 p. 53. c. 268, 269. and *Grew’s Rarities*, p. 297.

† *Deutsch.* ii. 218.



SEA EAGLE.



M. G. G. del

rapine they commit in cultivated parts cannot be computed. He adds, that the egg is not colored, as is usually asserted, with irregular marks of a deeper tint. J. L.

- | | | |
|---|--|---------------|
| Falco Ossifragus. F. ceralutea pedibusque semilatis, corpore ferrugineo, rectricibus latere interiore albis. <i>Lath. ind. orn.</i> | <i>Raii syn. av.</i> 7. | 3. SEA EAGLE. |
| 12. <i>id. Syn.</i> i. 30. <i>id. Sup.</i> i. 9. | Sea eagle. <i>Dale's Harwich</i> , 396. | |
| Bein-brecher, Ossifraga, Meeradler, Fisch-arn, Haliaetos. <i>Gesner av.</i> 201. 203. | <i>Martin's hist. West. isles</i> 70. | |
| Haliaetos. <i>Turneri.</i> | Le grand aigle de mer. <i>Brisson av.</i> i. 437. | |
| Augusta barbata, Ossifraga. <i>Aldr. av.</i> i. 118. | Falco Ossifragus. <i>Gm. Lin.</i> 255. | |
| Haliaetos. <i>Plinii lib.</i> 10. c. 3. | Gaase orn. <i>Brunnich</i> , 13. | |
| <i>Sib. hist. Scot.</i> 14. | L'Orfraie. <i>Hist. d'oï.</i> i. 112. | |
| Sea eagle, or osprey. <i>Wil. orn.</i> 59. | <i>Pl. Enl.</i> 112. 415. | |
| | Sea eagle. <i>Br. Zool.</i> 63. <i>Arct. Zool.</i> i. 224. | |

THIS species is found in *Ireland*, and several parts of *Great Britain*; the specimen we took our description from, was shot in the county of *Galway*: Mr. *Willughby* tells us there was an aery of them in *Whinfield-park, Westmoreland*; and the eagle soaring in the air, with a cat in its talons, which *Barlow* drew from the very fact which he saw in *Scotland*,* is of this kind. The

* Mr. *Walpole's* catalogue of engravers, p. 49.

cat's resistance brought both animals to the ground, when *Barlow* took them up; and afterwards caused the event to be engraved in the thirty-sixth plate of his collection of prints. *Turner* says, that in his days, it was too well known in *England*, for it made horrible destruction among the fish; he adds, the fishermen were fond of anointing their baits with the fat of this bird, imagining that it had a peculiar alluring quality: they were superstitious enough to believe that whenever the sea eagle hovered over a piece of water, the fish, (as if charmed) would rise to the surface with their bellies upwards, and in that manner present themselves to him. No writer since *Clusius* has described the sea eagle: though no uncommon species, it seems at present to be but little known, being generally confounded with the golden eagle, to which it bears some resemblance.

DESCRIP-
TION.

The color of the head, neck and body, are the same with the latter, but much lighter, the tawny part in this predominating; in size it is far superior, the extent of wings in some being nine or ten feet. The bill is larger, more hooked, and more arched; underneath grow several short, but strong hairs or bristles, forming a sort of beard. This gave occasion to some writers to suppose it to be the *aquila barbata* or beard-

ed eagle of *Pliny*. The interior sides, and the tips of the feathers of the tail, are of a deep brown; the exterior sides of some are ferruginous, in others blotched with white. The legs are yellow, strong and thick; and feathered but little below the knees, which is an invariable specific difference between this and our first species. This nakedness of the legs is besides no small convenience to a bird who preys among the waters. The claws are of a deep and shining black, exceedingly large and strong, and hooked into a perfect semicircle; those of the hind and first toe are an inch and a half long.

All writers agree, that this eagle feeds principally on fish, which it takes as they are swimming near the surface,* by darting itself down on them; not by diving or swimming, as several authors have invented, who furnish it for that purpose with one webbed foot to swim with, and another divided foot to take its prey with. *Pliny*, with his usual elegance, describes the manner of its fishing. *Superest haliaetos, clarissima*

FOOD.

* *Martin*, speaking of what he calls the great eagles in the western isles, says, that they fasten their talons in the back of the fish, commonly of salmon, which are often above water, or on the surface. Those of *Greenland* will even take a young seal out of the water.

oculorum acie, librans ex alto sese, visoque in mari pisce, præceps in eum ruens, et discussis pectore aquis rapiens.

It also preys on water fowl. The same writer prettily describes the chace, an amusement the inhabitants near the large lakes formed by the *Shannon* frequently enjoy.

It is strange that authors should give the name of *Nisus* to the sparrow hawk, when *Ovid* expressly mentions this as the bird to which the father of *Scylla* was transformed.

Quam pater ut vidit (nam jam pendebat in auras
Et modo factus erat fulvis HALIÆTOS alis)
Ibat, ut hærentem rostro laniaret adunco.

A hawk from upper air came pouring down,
(’Twas *Nisus* cleft the air with wings new grown.)
At *Scylla*’s head his horny bill he aims.

Croxal.





- | | | |
|--|--|---------------|
| Falco Albicella. F. cera pedibusque flavis, rectricibus albis, intermediis apice nigris. <i>Lath. Ind. orn.</i> 9. <i>id. Syn.</i> i. 33. <i>id. Sup.</i> i. 11. | Pygargus hinnularius, an Erne. <i>Sib. Scot.</i> Braunfahle Adler. <i>Frisch</i> i. 70. Gamsen geyer. <i>Kram.</i> 326. Postoina. <i>Scopoli.</i> No. 2. Falco Albicilla. <i>Gm. Lin.</i> 253. Cinereous eagle. <i>Arct. Zool.</i> i. 249. | 4. CINEREOUS. |
| Pygargus, or white tailed eagle. <i>Wil. orn.</i> 61. <i>Raii Syn. av.</i> 7. | | |
| Le grand Pygargue. <i>Brisson.</i> i. 427. <i>Hist. d'ois.</i> i. 99. <i>Pl. Enl.</i> 411. | | |

IS inferior in size to the golden eagle: the beak, cere and irides are of a very pale yellow; the space between that and the eyes bare, and of a bluish color. The head and neck are of a pale ash-color; the body and wings cinereous clouded with brown, the quill feathers very dark; the tail white; the legs feathered but little below the knees, and of a very light yellow. The male is of a darker color than the female.

DESCRIPTION.

The bill of this is rather straiter than is usual in the eagle, which seems to have induced *Linnaeus* to place it among the vultures; but it can have no clame to be ranked with that genus, for the *pygargus* is wholly feathered; whereas, the characteristical mark of the vulture is, that the head and neck are either quite bare, or only covered with down.

Inhabits *Scotland*, and the *Orknies*, and feeds on fish, as well as on land animals.

“The cinereous eagle is frequent in the southern parts of *Russia*, as far as trees grow, particularly about the *Volga*, where it winters and breeds, and though scarce in *Siberia*, has been observed as far as lake *Baikal*.”* J. L.

FALCONRY.

Falconry was the principal amusement of our ancestors : a person of rank scarcely stirred out without his hawk on his hand; which, in old paintings, is the criterion of nobility. *Harold*, afterwards king of *England*, when he went on a most important embassy into *Normandy*, is painted embarking with a bird on his fist, and a dog under his arm;† and in an antient picture of the nuptials of *Henry VI.* a nobleman is represented in much the same manner;‡ for in those days, *It was thought sufficient for noble-men's sons to winde their horn and to carry their hawk fair, and leave study and learning to the children of mean people.*§ The former were the accomplishments of the times; *Spenser* makes his gallant Sir *Tristram* boast,

* *Pallas. MSS.*

† *Montfaucon, monumens de la monarchie françoise, i. 372.*

‡ *Mr. Walpole's anecdotes of painting, i. 33.*

§ *Biog. Brit. article Cayton.*

Ne is there hauke which mantleth her on pearch,
Whether high towring, or accoasting low,
But I the measure of her flight doe search,
And all her pray, and all her diet know.*

In short, this diversion was, among the old *English*, the pride of the rich, and the privilege of the poor, no rank of men seems to have been excluded the amusement: we learn from the *book of St. Alban's*,† that every degree had its peculiar hawk, from the *emperor* down to the *holy water clerk*. Vast was the expence that sometimes attended this sport; in the reign of *James I.* Sir *Thomas Monson*‡ is said to have given a thousand pounds for a cast of hawks: we are not then to wonder at the rigor of the laws that tended to preserve a pleasure that was carried to such an extravagant pitch. In the 34th of *Edward III.* it was made felony to steal a hawk; to take its eggs, even in a person's own ground, was punishable with imprisonment for a year and a day, besides a fine at the king's pleasure: in queen *Elizabeth's* reign the imprisonment was reduced to three months; but the offender was to find security for his good behaviour for seven years, or lie in prison till he

* *Book VI. Canto 2.*

† A treatise on hunting, hawking and heraldry, printed at *St. Alban's* by *Caxton*, and attributed to *Dame Julian Barnes*.

‡ Sir *Ant. Weldon's* court of K. *James*. 105.

did. Such was the enviable state of the times of *old England*: during the whole day our gentry were given to the fowls of the air, and the beasts of the field; in the evening they celebrated their exploits with the most abandoned and brutish sottishness; at the same time the inferior rank of people, by the most unjust and arbitrary laws, was liable to capital punishment, to fines, and loss of liberty, for destroying the most noxious of the feathered tribe.

According to *Olcarius*, the diversion of falconry is more followed by the *Tartars* and *Persians*, than ever it was in any part of *Europe*. *Il n'y avoit point de hutte qui n'eust son aigle ou son faucon.**

Our ancestors made use of several kinds of native hawks; though that penetrating and faithful naturalist Mr. *Ray*, has left us only the bare name of a falcon in his list of the *English* birds, without mentioning the species. The falcons or hawks that were in use in these kingdoms, are now found to breed in *Wales*, and in *North Britain*, and its isles. The peregrine falcon inhabits the rocks of *Caernarvonshire*, *Holyhead* mountain, and *Priestholme* island in *Anglesey*. The same species, with the gyrfalcon,

* Tom. i. 217. 328.

the gentil, and the goshawk, are found in *Scotland*, and the lanner in *Ireland*.

We may here take notice that the *Norwegian* breed were, in old times, in high esteem with our countrymen: they were thought bribes worthy a king. *Geoffrey Fitzpierre* gave two good *Norway* hawks to king *John* to obtain for his friend the liberty of exporting 100 weight of cheese: and *Nicholas the Dane* was to give the king a hawk every time he came into *England*, that he might have free liberty to traffick throughout the king's dominions.* They were also made the tenures by which some of our nobility held their estates from the crown. Thus *Sir John Stanley* had a grant of the *Isle of Man* from *Henry IV.* to be held of the king, his heirs and successors, by homage and the service of two falcons, payable on the day of his or their coronation:† and *Philippe de Hastang* held his manor of *Combertoun*, in *Cambridgeshire*, by the service of keeping the king's falcons.‡

* *Madox* antiq. exchequer. i. 469, 470.

† *Blunt's* antient tenures. 20.

‡ *Madox*. i. 652

5. OSPREY. *Falco Haliaëtus*. F. cera pedibusque cæruleis, corpore supra fusco, subtus albo, capite al-bido. *Lath. Ind. orn.* 17. *id. Syn.* i. 45. *id. Sup.* i. 13.
- Une Orfraye. *Belon. av.* 96.
- Fisch-adler, Masswy, Aquila anataria, Clanga, Planga, Percnos, Morphnos. *Gesner. av.* 196.
- Haliaëtus*, seu aquila marina. *Gesner. av.* 804.
- Balbushardus. *Turneri.*
- Auguista piumbina, Aquilastro, *Haliaëtus*, seu Morphnos. *Aldr. av.* i. 105. 114.
- Haliaëtus*. *Caii opusc.* 85.
- Bald Buzzard. *Wil. orn.* 69.
- Bald Buzzard, or sea eagle. *Raii syn. av.* 16.
- Fishing hawk. *Catesby's Carol. i. Tab.* 2.
- Falco cyanopus*. *Klein Stem. Tab.* 8.
- Falco Haliaëtus*. *Gm. Lin.* 263.
- Blafot, Fisk-orn. *Faun. Succ. sp.* 63.
- Aigle de mer. *Brisson av. i.* 440. *Tab.* 34. *Hist. d'oïs.* i. 103. *Pl. Enl.* 414.
- Fisk-oern. *Brunnich, p.* 5.
- The Osprey. *Br. Zool.* 63. *Tab. A. 1. Arct. Zool. i.* 231.

MR. *Ray* places this bird among the hawks, instead of the eagles, on a supposition that Mr. *Willughby* had exceeded in his account of its weight; but as we had an opportunity of confirming the words of the latter, from one of this species just taken, we here restore it to the aquiline rank, under the name of the Osprey; which was the name it was known by in *England* above one hundred and sixty years ago, as appears by Dr. *Kay*, or *Caius's* description of it, who also calls it an eagle.

This bird haunts rivers, lakes, and the sea-

shores. Mr. *Oedman* flings new light on its history; he says, that it breeds on the tops of the highest trees,* and makes its nest with wonderful art of the twigs of the fir-tree, and lines the bottom with *polypodies*. It lays three eggs of the size of those of a hen, marbled with rust color. It brings fish and serpents to feed its young, and even eels of a large size, which renders its nest very fetid. It feeds chiefly on fish,† taking them in the same manner as the sea eagle does, not by swimming but by precipitating itself on them; its feet being formed like those of other birds of prey, for the left is not at all palmated, as some, copying the errors of antient writers, assert it to be. The *Italians* compare the violent descent of this bird on its prey, to the fall of lead into the water, and call it, *Auguista piumbina*, or the *leaden eagle*.

NEST.

FOOD.

The bird here described was a female; its weight was sixty-two ounces: the length twenty-three inches; the breadth five feet four inches; the wing when closed reached beyond the end of the tail; that, as in all the hawk kind, consisted of twelve feathers; the two middle feathers

DESCRIP-
TION.

* Mr. *Montagu* in his *Ornithological dictionary* says, that he observed the nest of an Osprey, on the top of the chimney of a ruined building in the island of *Loch Lomond*. ED.

† *Turner* says it preys also on coots, and other water fowl.

were dusky, the others barred alternately on their inner webs with brown and white; on the joint of the wing next the body was a spot of white: the quill feathers of the wings were black; the secondary feathers and the coverts dusky, the former having their interior webs varied with brown and white; the inner coverts were white spotted with brown. The head small and flat, the crown white marked with oblong dusky spots. The cheeks, chin, belly and breast white, the last spotted with a dull yellow: from the corner of each eye a bar of brown extended along the sides of the neck pointing towards the wing. The legs very short, thick and strong, their length being only two inches and a quarter; their circumference two inches; their color a pale blue: the outward toe turns easily backwards, and what merits attention, the claw belonging to it is larger than that of the inner toe, in which it differs from all other birds of prey, but seems peculiarly necessary to this kind, for better securing its slippery prey: the roughness of the soles of the feet contributes to the same end. The difference in weight, and other trifling particulars, makes us imagine that the bird Mr. *Willughby* saw was a male, as the females of all the hawk kind are larger, stronger, and fiercer than the



*Pallan p.m.*

males; the defence of their young, and the providing them with food, resting chiefly on them.

- | | | |
|---|---|---------------|
| Falco islandicus. F. albus macul- | White Falcon. <i>Wil. orn.</i> 80. | 6. GYRFALCON. |
| lis fuscis varius, rectricibus | F. Islandus albus. <i>Brunnich</i> | |
| albis, lateralibus extus fusco | 7, 8. | |
| maculatis. <i>Lath. Ind. orn.</i> 32. | Le Gerfault. <i>Brisson av.</i> i. | |
| <i>id. Syn.</i> i. 83, 84. <i>id. Sup.</i> i. 21. | 370. <i>Hist. d'ois.</i> i. 239. <i>Pl.</i> | |
| Le Gerfault. <i>Belon av.</i> 94. | <i>Enl.</i> 446. | |
| Gyrfalco. <i>Aldr. av.</i> i. 243. | <i>Sib. Scot.</i> 14. | |
| Jer-falcon. <i>Wil. orn.</i> 78. | <i>Charlton Ex.</i> 317. | |
| Gyrfalco. <i>Raii syn. av.</i> 13. | White Gyr-falcon. <i>Arct.</i> | |
| | <i>Zool.</i> i. 232. | |

THIS elegant species is not much inferior in size to the Osprey. The irides are dusky: the bill is very much hooked and yellow. The throat is of a pure white: the whole plumage of the same color, but marked with dusky lines, spots or bars; the head, breast and belly with narrow lines, thinly scattered and pointing downwards; the wings with large heart-shaped spots; the middle feathers of the tail with a few bars: the feathers on the thighs are very long, and of a pure white; the legs of a pale blue, and feathered a little below the knees. This kind is sometimes found quite white: it was in high esteem when falconry was in vogue, and used for the noblest game, such as cranes and herons.

DESCRIPTION.

This is the *Gyrfalco* of all the ornithologists except *Linnæus*, whose bird we are totally unacquainted with: though he gives several of their synonyms, his description differs entirely from each of them. It inhabits the north of *Scotland*; our specimen was shot near *Aberdeen*.

“*Iceland* is supposed to furnish the most generous breed of this species, and the king of *Denmark* sends there annually for all that can be procured; they are also in great request at *Vienna*. Those of a white color are most esteemed.” J. L.

7. PEREGRINE.

Falco peregrinus. *F. cerapedibus* que luteis, corpore nigricante transversim striato, supra cærulescente, subtus albido, rectricibus fasciatis apicibus albidis. *Lath. Ind. orn.* 33. *id. Syn.* i. 73. *id. Sup.* i. 18. *Gm. Lin.* 272.

Belon av. 116.

Falco peregrinus niger. Aldr. av. i. 239.

Blue backed falcon. *Charl. Ex.* 73.

Sparviere pellegrino femmina. Lorenzi av. Tab. 24.

Le Faucon pelerin. Brisson av. i. 341. *Hist. d'ois. i.* 249.

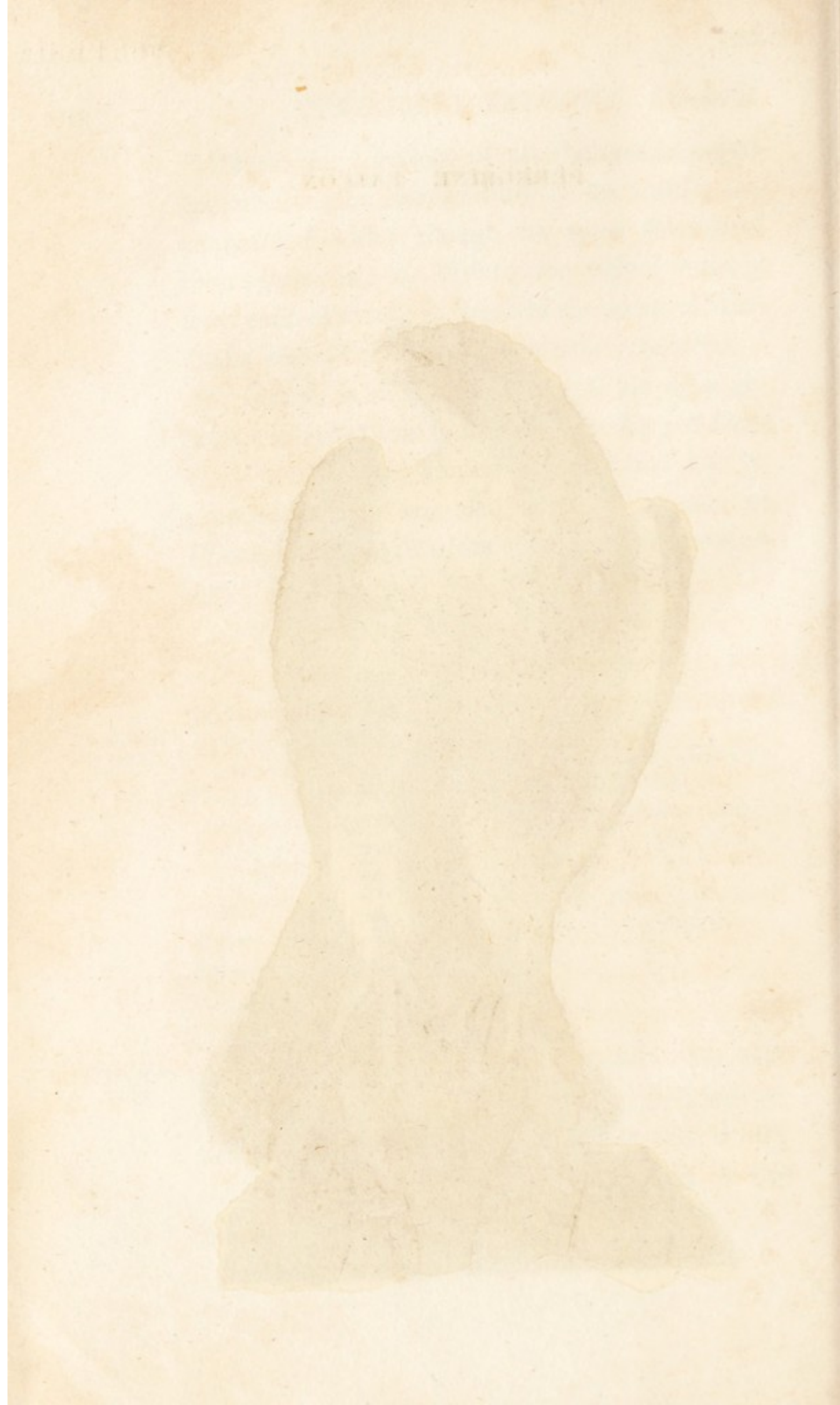
Peregrine Falcon. *Br. Zool. Tab. A*. 5. Arct. Zool. i.* 236.

DESCRIPTION.

IN size equal to the moor-buzzard. The bill is strong, short, and very much hooked, armed near the end of the upper mandible with a very sharp process; blue at the base, black at the point: the irides dusky.

PEREGRINE FALCON.





The feathers on the forehead are whitish : the crown of the head black mixed with blue ; the hind part of the neck black ; the back, scapulars, and coverts of the wings, elegantly barred with deep blue and black. The quill feathers dusky, marked with elliptical white spots placed transversely ; the inner coverts crossed with black and white bars ; the throat white ; the fore part of the neck, and upper part of the breast white slightly tinged with yellow, the last marked with a few small dusky lines pointing downwards. The rest of the breast, the belly, thighs and vent feathers, white inclining to grey, and crossed with dusky strokes pointed in the middle. The tail consists of feathers of equal length, finely and frequently barred with blue and black. The legs are short and yellow : the toes very long.

This species seems to vary : we have seen one that was shot in *Hampshire*, just as it had struck down a Rook and was tearing it to pieces. The whole under side of the body was of a deep dirty yellow, but the black bars were the same as in that above described. The weight of this was two pounds eight ounces ; the extent thirty eight inches. Another which was shot by the Dean of *St. Asaph*, in *October* 1794, was of the first kind. Its extent was three feet one inch,

its length eighteen inches and a half: the weight only twenty four ounces and a half. It was most excessively fat. As it was inferior in weight to the other, it probably was a male bird.

This species breeds on the rocks of *Llandudno* in *Caernarvonshire*. That promontory has been long famed for producing a generous kind, as appears by a letter extant in *Gloddaeth* library, from the lord treasurer *Burleigh* to an ancestor of Sir *Roger Mostyn*, in which his lordship thanks him for a present of a fine cast of hawks taken on those rocks, which belong to the family. They are also very common in the north of *Scotland*, and are sometimes trained for falconry by some few gentlemen who still take delight in this amusement in that part of *Great Britain*. Their flight is amazingly rapid: one that was reclaimed by a gentleman in the shire of *Angus*, a county on the east side of *Scotland*, eloped from his master with two heavy bells to each foot, on the twenty-fourth of *September* 1772, and was killed in the morning of the twenty-sixth, near *Mostyn, Flintshire*.

Falco griseus. F. cera palpebris bus albo maculatis. *Lath.* 8. GREY.
 pedibusque luteis, corpore su- *Ind. orn.* 37. *id. Syn.* i. 82.
 pra griseo, abdomine albo Falco griseus. *Gm. Lin.* 275.
 maculis oblongis nigris, cau- Grey Falcon. *Br. Zool.* 65.
 da cunei-formi longa, remi- *ib. octavo.* 137.
 gibus rectricibusque laterali-

THIS kind was shot near *Halifax* in 1762, and the following account transmitted to us by Mr. *Bolton*, of *Worly-clough*. This bird was about the size of a raven: the bill was strong, short, much hooked, and of a bluish color; the cere, and edges of the eye-lids yellow; the irides red; the head was small, flatted at the top; the fore part of a deep brown; the hind part white. The sides of the head and throat were creme colored; the belly white, marked with oblong black spots; the hind part of the neck, and the back were of a deep grey. The wings were very long, and when closed reached beyond the tail; the first of the quill feathers were black, with a white tip; the others were of a bluish grey, and their inner webs irregularly spotted with white: the tail was long, and wedge shaped; the two middle feathers being the longest, were plain, (the color not mentioned) the rest spotted. The legs were long, naked, and yellow.

DESCRIP-
TION.

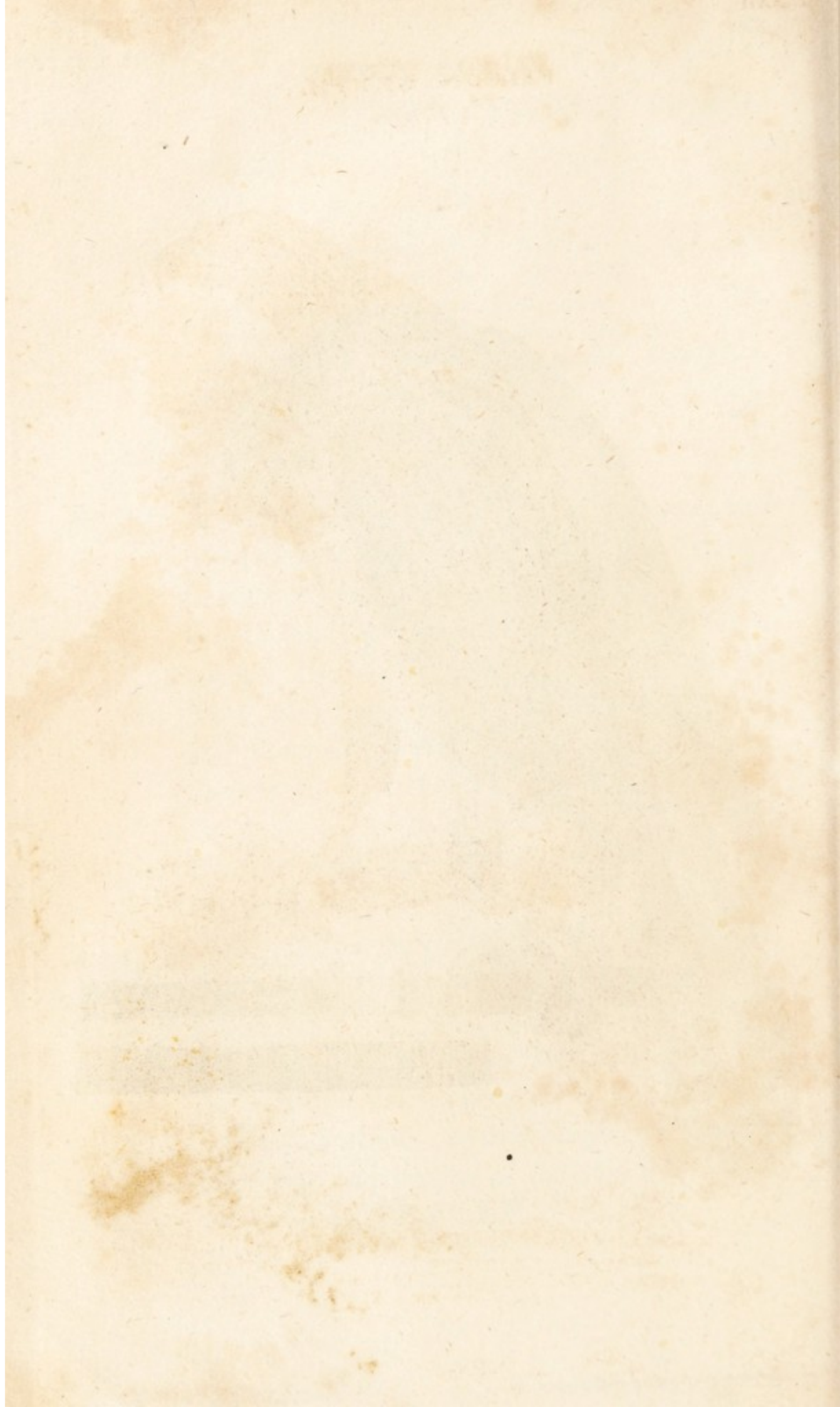
9. GENTIL. *Falcogentilis*. *F. cera* pedibusque
 flavis, corpore cinereo maculis
 fuscis, cauda fasciis quatuor
 nigricantibus. *Lath. Ind. orn.*
 29. *id. Syn.* i. 64. *id. Sup.* 17.
Gm. Lin. 270.
 Gentil Falcon. *Wil. orn.* 80.
- Raii syn. av. Arct. Zool.*
 i. 237.
Falk. Faun. Suec. sp. 58.
Kram. Austr. 328.
Falco gentilis. Brun. No. 6.
Scopoli, No. 3.
L'Autour. Hist. d'ois. i. 230.

DESCRIP-
TION.

THIS species is larger than the goshawk, and of an elegant make. Cere, and legs yellow; irides light yellow; pupil large and of a full black: head light rust color, with oblong black spots. The whole under side from chin to tail white, tinged with yellow; each feather marked with heart-shaped dusky spots pointing down; back brown; quill feathers dusky, barred on the out-most web with black, on the lower part of the inner with white. Coverts of the wings, and the scapulars, brown edged with rust color; wings reach only one half the length of the tail. The tail with four or five bars of black, and the same of cinereous; the first edged above and below with a line of dull white; the very tips of all the tail feathers white.

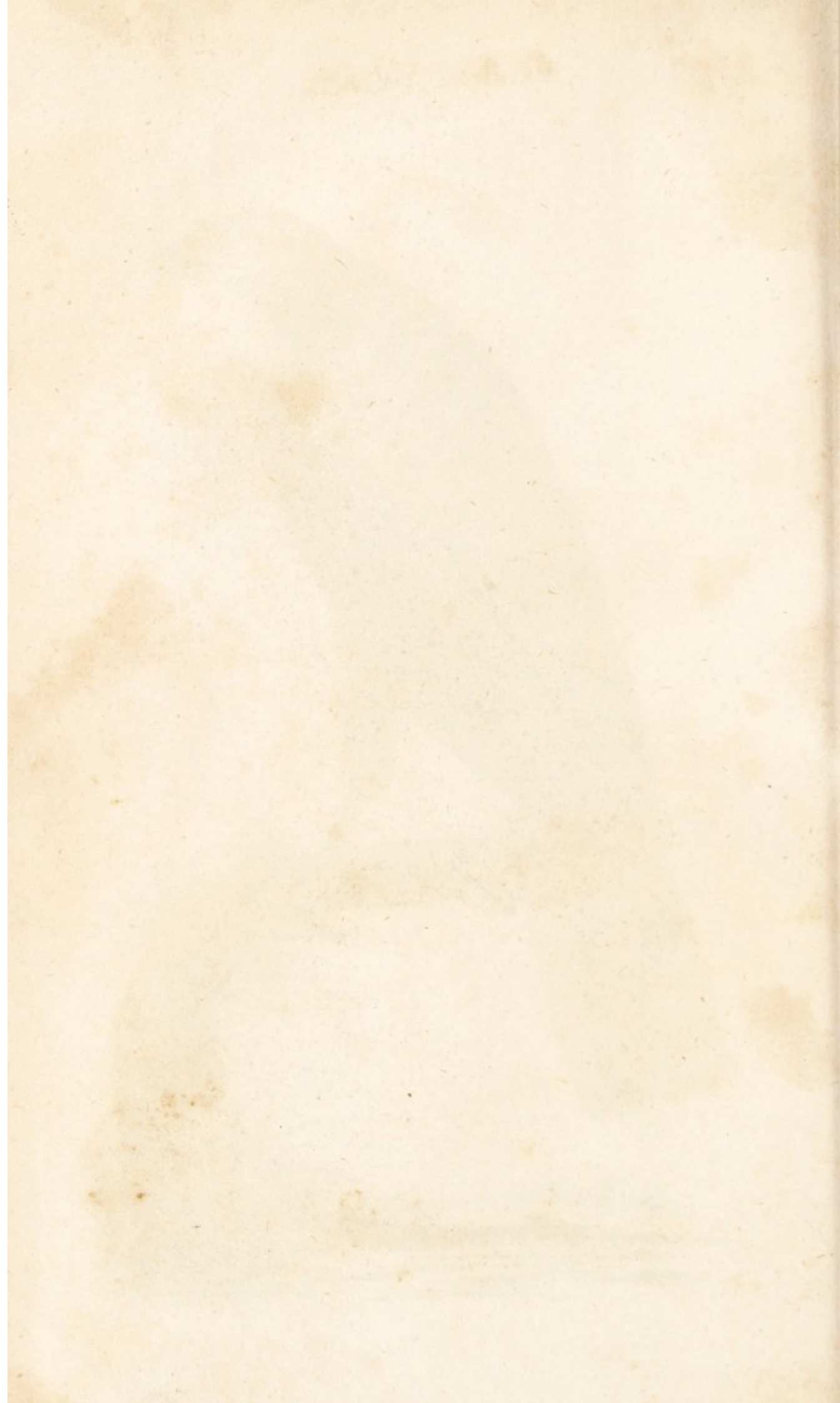
The young birds vary in having on their breasts transverse bars instead of cordated spots, as in the specimen, *Plate XXII.*

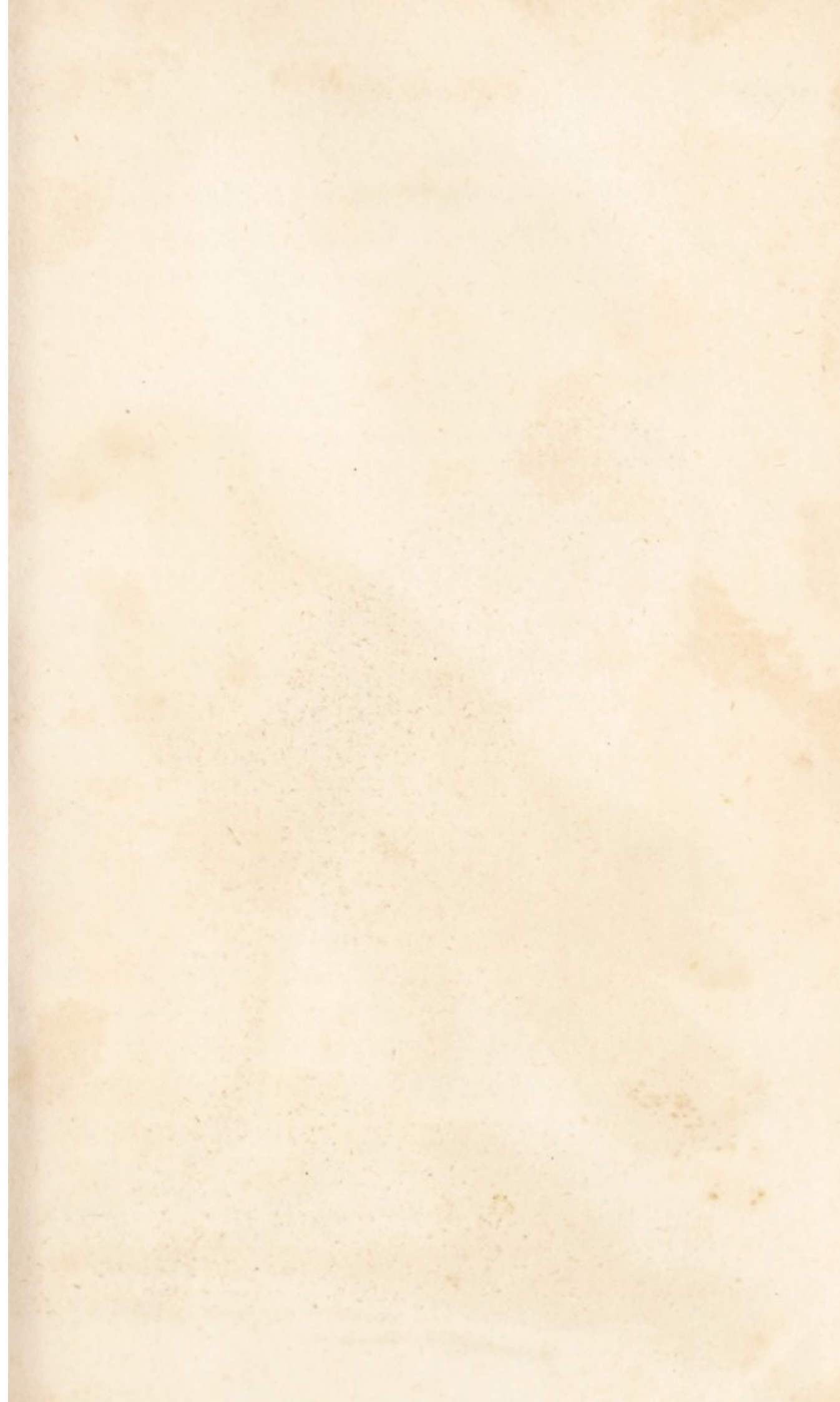




FALCON GENTIL.
(*Variety*)







LANNER.



This species inhabits the north of *Scotland*, and was in high esteem as a bold and spirited bird in the days of falconry. It makes its nest in rocks.

Falco Lanarius. F. cera lutea,	The Lanner. <i>Wil. orn.</i> 82.	10. LANNER.
pedibus rostroque cæruleis,	<i>Arct. Zool.</i> i. 260.	
corpore subtus maculis nigris	Lanarius. <i>Raii syn. av.</i> 15.	
longitudinalibus. <i>Lath. Ind.</i>	Falco Lanarius. <i>Gm. Lin.</i> 276.	
<i>orn.</i> 38. <i>id. Syn.</i> i. 86. <i>id. Sup.</i>	<i>Faun. Suec. sp.</i> 62.	
i. 21.	Le Lanier, <i>Hist. d'oïis.</i> i. 243.	

THIS species breeds in *Ireland*: the bird our description is taken from, was caught in a decoy in *Lincolnshire*, pursuing some wild ducks under the nets, and communicated to us by *Taylor White Esq.* under the name of the *Lanner*.*

It was less than the buzzard. The cere was of a pale greenish blue; the crown of the head of a brown and yellow clay color: above each eye, to the hind part of the head, passed a broad white line, and beneath each, a black mark pointing downwards: the throat white; the breast tinged with dull yellow, and marked with brown spots pointing downwards; the thighs and vent spotted in the same manner; the back and coverts of the

DESCRIP-
TION.

* The Lanner, though common in the northern parts of *Europe*, is rarely met with in *England*. J. L.

wings deep brown, edged with a paler brown : the quill feathers dusky ; the inner webs marked with oval rust colored spots : the tail was spotted like the wings. The legs short and strong, and of a bluish cast, which Mr. *Willughby* says, is the character of that bird. We are here to observe, that much caution is to be used in describing the hawk kind, no birds being so liable to change their colors the two or three first years of their lives : inattention to this has caused the number of hawks to be multiplied far beyond the reality. The marks to be attended to as forming the characters of the species, are those on the quill feathers and the tail, which do not change. Another reason for the needless increase of the species of this tribe of birds, is owing to the names given to the same kinds in different periods of their lives, by the writers on falconry, which ornithologists have adopted and described as distinct kinds : even Mr. *Ray* has been obliged to copy them. The falcon, the falcon gentil, and the haggard, are made distinct species, whereas they form only one : this is explained by a *French* author, who wrote in the beginning of the seventeenth century, and effectually clears up this point ; speaking of the falcon, he tells us, “ S’il est prins en *Juin*, “ *Juillet* et *Aoust*, vous le nommerez *Gentil* :





Fuller 1848

“ si en *Septembre, Octobre, Novembre* ou *Decembre*, vous le nommerez *Pellerin* ou *Passager* : s'il est prins en *Janvier, Feburier* et *Mars*, il sera nommé *Antenere* : et apres estre muë une fois et avoir changé son cerceau, non auparavant, vous le direz *Hagar*, mot *Hebrieu*, qui signifie *estranger* *.”

Falco palumbarius F. cera nigra, margine pedibusque flavis, corpore fusco, rectricibus fasciis pallidis, superciliis albis. <i>Lath. Ind. orn.</i> 29. <i>id. Syn.</i> i. 58. <i>id. Sup.</i> 16. <i>Gm. Lin.</i> 269.	Goshawk, accipiter palumbarius. <i>Wil. av.</i> 85. <i>Arct. Zool.</i> i. 238. <i>Raii Syn. av.</i> 18.	11. GOSHAWK.
Autour. <i>Belon av.</i> 112.	L'Atour, Astur. <i>Brisson av.</i> i. 317. <i>Hist. d'ois.</i> I. 230. <i>Pl. Enl.</i> 418. 461.	
<i>Gesner av.</i> 5.	Grosser gepfeilter Falck.	
<i>Aldr. av.</i> i. 181.	<i>Frisch.</i> I. 82.	
<i>Sib. Scot.</i> 15.	<i>Astore. Zinan.</i> 87.	

THE goshawk is larger than the common buzzard, but of a longer and more elegant form. The bill is blue towards the base, black at the tip: the cere a yellowish green; over each eye is a white line; and on the side of the neck is a bed of broken white: the head, hind part of the neck, back and wings are of a deep

DESCRIP-
TION.

* *La fauconnerie de Charles d'Arcussia seigneur d'Esparron*, p. 14. 5me edit. Paris 1607.

brown color : the breast and belly white, beautifully marked with numerous transverse bars of black and white : the tail is long, of a brownish ash-color, marked with four or five dusky bars placed remote from each other. The legs are yellow : the claw of the back, and that of the inner toe very large and strong.

This species and the sparrow hawk, are distinguished by Mr. *Willughby* by the name of short winged hawks, because their wings, when closed, fall short of the end of the tail.

The goshawk was in high esteem among falconers, and flown at cranes, geese, pheasants and partridges. It breeds in *Scotland*, and builds its nest in trees ; is very destructive to game, and dashes through the woods after its quarry with vast impetuosity ; but if it cannot catch the object of its pursuit, almost immediately, desists, and perches on a bough till some new game presents itself.

“ The female goshawk, as is usual among the hawk tribe, is much larger than the male. Young birds incline to grey, and have the markings less clearly defined than in the adult. This species is by no means uncommon in *America*, but is in general larger. I observe it also in drawings from *India* and *China*, under the name of *Bange* or *Bair*.” J. L.



SPOTTED FALCON.



Falco versicolor. F. cera flava, corpore supra albo et rufescente-fusco vario, uropygio subtus albicante, pectore ferrugineo maculato, remigibus rectricibusque fuscissaturatione fasciatis. *Lath. Ind. orn.* 33.

id. Syn. i. 74. *Gm. Lin.* 12. SPOTTED. 272.

Spotted Falcon, *Br. Zool.* p. 4. *tab.* 11.

Common Falcon. *var.* 10. *Shaw. Gen. Zool.* vii. 127.

TWO of these birds have been shot near *Longnor, Shropshire*.

Size of a buzzard : bill black ; cere and legs yellow : irides pale yellow : crown, and hind part of the neck white, spotted with light reddish brown : back and scapulars of the same color edged with white. Quil feathers dusky barred with ash color. Under side of the neck, breast, belly, and thighs, white ; the first, also the beginning of the breast marked with a few rusty spots ; rump white : middle feathers of the tail barred with white, and a deep brown ; the others with a lighter and darker brown. The legs very strong.

DESCRIP-
TION.

13. ROUGH
LEGGED.

Falco lagopus. F. cera pedibusque pennatis luteis, corpore fusco ex albido vario, rectricibus fuscis basi dimidia apiceque albis. *Lath. Ind. orn.* 19. *id. Syn.* i. 75. *id. Sup.* i. 18.

Rough legged Falcon. *Br. Zool.* ii. *App.* 529. *Arct. Zool.* i. 233. Dusky Falcon? *ib.* i. 248.
Falco lagopus. *Gm. Lin.* 260. *Brunnich*, No. 15. *Leems. Lapon.* 236.

THIS species is a native of *Denmark*, but was shot near *London*, and was preserved in the *Leverian* museum.

DESCRIP-
TION.

Its length is two feet two inches ; that of the wing, when closed, eighteen inches ; the bill dusky : the cere and irides yellow : the head, neck and breast of a yellowish white, marked in some parts with oblong brown strokes : the belly of a deep brown ; thighs and legs of a pale yellow, marked with brown ; the scapulars blotched with brown and yellowish white ; coverts of the wings brown, edged with rust color ; ends of the primaries deep brown ; the lower parts white : the extreme half of the tail brown, tipped with dirty white ; the part next to the body white. Legs covered with feathers as low as the feet : feet yellow ; claws black*.

* The editor received a specimen which had been shot in *Suffolk*, exactly corresponding with the above description. An-

ROUGH LEGGED FALCON.



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ASTOR
LENOX
TILDEN

- Falco Milvus. F. cera flava, Raii Syn. av. 17.*
cauda forficata, corpore ferrugineo, capite albidior. Lath. Ind. orn. 20. id. Syn. i. 61. id. Sup. i. 17.
Le Milan royal. Belon av. 129.
Milvus. Gesn. av. 609.
Glede, Puttok, Kite Turneri. Nibbio. Zinan. 82.
Milvio, Nichio. Ald. av. i. 201.
Kite, or Glead. Wil. orn. 74.
Milvus. Plinii lib. x. c. 10.
- Rother Milon. Kram. 326.*
Falco Milvus. Gm. Lin. 261.
Glada. Faun. Suec. sp. 57.
Le Milan royal. Brisson av. i. 414. Tab. 33. Hist. d'Ois. 1. 197. Pl. Enl. 422.
The Kite. Br. Zool. 66. Tab. A. 2. Arct. Zool. i. 258.
Glente. Brunnich 3.
14. KITE.

THE kite generally breeds in large forests, or wooded mountainous countries: its nest is made externally with sticks, lined with several odd materials, such as rags, bits of flannel, rope, and paper. It lays two, or at most three eggs, which, like those of other birds of prey, are much rounded, and blunt at the smaller end; they are white, spotted with a dirty yellow. Its motion in the air distinguishes it from all other birds, being so smooth and even, as to be scarcely perceptible; sometimes it will remain quite motionless for a considerable time; at others glides through the sky, without the least apparent action of its wings: from thence is derived the old name of Glead, or Glede, from the

other was killed in *Flintshire*, which differed in some few respects, chiefly in being of a much darker color. Its length was two feet four inches, its extent near six feet. ED.

Saxon Glida. Lord *Bacon* observes, that when kites fly high, it portends fair and dry weather. Some have supposed them to be birds of passage; but in *England* they certainly continue the whole year. *Clusius* relates * that when he was in *London*, he observed a most amazing number of kites that flocked there for the sake of the offals, &c. which were flung in the streets. They were so tame as to take their prey in the midst of the greatest crowds, and it was forbidden to kill them.

The tail of this kind is sufficient to distinguish it from all other *British* birds of prey, being forked. *Pliny* thinks that the invention of the rudder arose from the observation men made of the various motions of that part, when the kite was steering through the air †. Certain it is that the most useful arts were originally copied from animals; however we may now have improved upon them. Still in those nations which are in a state of nature, (such as the *Samoieds* and *Esquimaux*) their dwellings are inferior to those of the beavers, which those scarcely human beings but poorly copy.

DESCRIP-
TION.

The weight of this species is forty-four

* *Belon obs. ad finem Clus. exot.* 108.

† *Idem* videntur artem gubernandi docuisse caudæ flexibus
Lib. x. c. 10.

ounces: the length twenty-seven inches: the breadth five feet one inch. The bill is two inches long, and very much hooked at the end: the cere yellow: the irides of a straw-color. The head and chin are of a light grey, in some, white, marked with oblong streaks of black: the neck and breast are of a tawny red, but the middle of the feathers black. On the belly and thighs, the spots are fewer, and under the tail they almost vanish. The upper part of the back is brown, the middle covered with very soft white down. The five first quill feathers are black; the inner webs of the others dusky barred with black, and the lower edges white. The coverts of the wings are varied with tawny black and white: the tail is forked, and of a tawny red: the outmost feather on each side of a darker hue than the rest; and marked with a few obscure dusky spots: the thighs are covered with very long feathers: the legs are yellow and strong.

These birds differ in their colors. We have seen a beautiful variety shot in *Lincolnshire* that was entirely of a tawny color.

“Kites destroy great numbers of moles, which frequently come to the surface of pasture lands in search of caterpillars and insects. An instance is on record of twenty two moles being

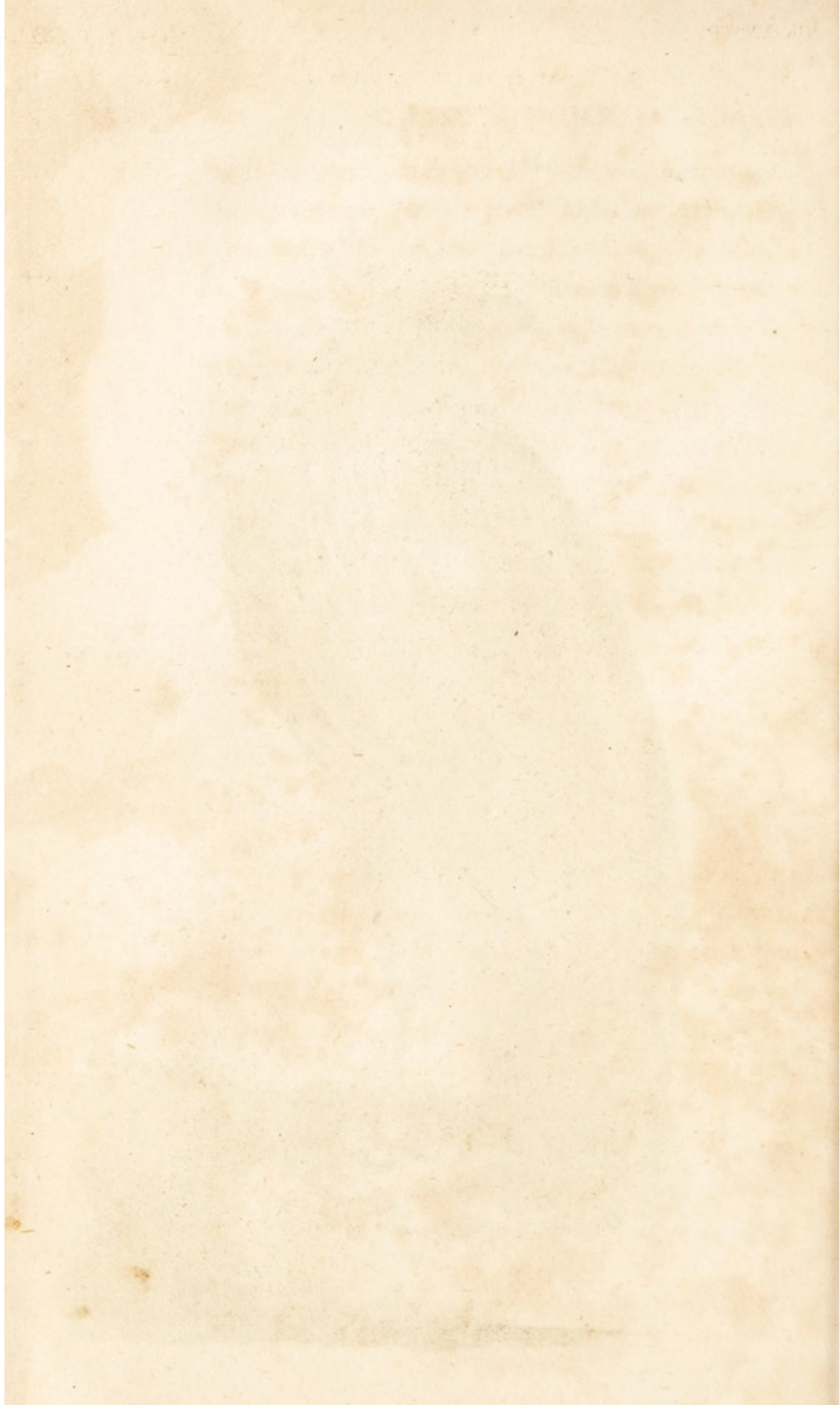
found in one kite's nest, as well as many frogs, and unfledged birds. The species extends to *Africa*, and is not uncommon in various parts of *India*. We are of opinion that this and the *Barbary* kite is one and the same, as it is well known that the common species passes alternately, spring and autumn, from *Andalusia* in *Spain* to the coast of *Barbary*, being there migratory, but it certainly is to be seen in *England* in all seasons." J. L.

15. BUZZARD. *Falco Buteo*. F. cera pedibusque luteis, corpore fusco, abdomine pallido maculis fuscis, cauda fusco fasciata. *Lath. Ind. orn.* 23. *id. Syn.* i. 48. *id. Sup.* i. 14. Common Buzzard, or Puttock. *Wil. orn.* 70. Wald Geyer. *Kram.* 329. *Falco Buteo. Gm. Lin.* 265. Quidfogel. *Faun. Suec. sp.* 60. Le Buse, ou Busard. *Belon av.* 100. La Buse. *Brisson av.* I. 406. *Hist. d'Ois.* I. 206. *Pl. Enl.* 419. Buteo. *Gesner. av.* 46. Pojana. *Zinan.* 85. *Scopoli* No. 4. Busharda *Turneri*. *Br. Zool.* 66. *Tab. A.* 3. *Arct. Zool.* i. 241. Buteo, seu Triorches. *Ald. av.* I. 190. Oerne Falk. *Brunnich* p. 5. Triorches, Buteo. *Plinii lib.* x. c. 7. *Raii Syn. av.* 16.

THIS bird is the commonest of the hawk kind we have in *England*. It breeds in large woods, and usually builds on an old crow's nest, which it enlarges and lines with wool, and other

BUZZARD.





soft materials ; it lays two or three eggs, which are sometimes wholly white ; sometimes spotted with yellow. The cock buzzard will hatch and bring up the young, if the hen is killed *. The young consort with the old ones for some little time after they quit the nest ; which is not usual with other birds of prey, who always drive away their brood as soon as they can fly. This species is very sluggish and inactive ; and is much less in motion than other hawks, remaining perched on the same bough for the greatest part of the day, and is found at most times near the same place. It feeds on birds, rabbits, moles and mice ; it will also eat frogs, earth-worms and insects.

This bird is subject to some variety in its colors ; we have seen some whose breast and belly were brown, and only marked across the craw with a large white crescent : usually the breast is of a yellowish white, spotted with oblong rust-colored spots, pointing downwards. The chin is ferruginous ; the back of the head and neck, and the coverts of the wings are of a deep brown, edged with a pale rust color : the scapular feathers brown, with white towards their roots : the middle of the back is covered only

DESCRIP-
TION.

* *Ray's Letters.* 352.

with a thick white down: the ends of the quill feathers are dusky; their lower exterior sides ash-colored; their interior sides blotched with darker and lighter shades of the same. The tail is barred with black and ash-color, and sometimes with ferruginous; the bar next the very tip is black, and the broadest of all; the tip itself of a dusky white. The irides are white, tinged with red. The weight of this species is thirty-two ounces: the length twenty-two inches; the breadth fifty-two.

SIZE.

“On the continent this bird like the kite is migratory, but we believe does not leave this kingdom. It is very common here and in most parts of *Europe*, and with some variety inhabits also several districts of *North America*.”

J. L.

- Falco apivorus*. *F. cera nigra*, Frosch-geyerl. *Kram.* 331. 16. HONEY
pedibus seminudis flavis, ca- *Falco apivorus*. *Gm. Lin.* 267. BUZZARD.
pitem cinereo, caudæ fascia ci- Slag-hok. *Faun. Suec. sp.* 65.
nerea, apice albo. *Lath. Ind.* La Bondrée. *Brisson av. i.*
orn. 25. *id. Syn. i.* 52. *id. Sup.* 410. *Hist. d'Ois. I.* 208.
i. 14. *Pl. Enl.* 420.
Le Goiran, ou Bondrée. *Belon Zinan.* 84.
av. 101. *Br. Zool.* 67. *Tab. A.* 4. A*
Ald. av. i. 191. 4. *Arct. Zool. i.* 260.
Honey-Buzzard. *Wil. orn.* 72. *Muse-Hoeg, Muse-Baage,*
Raii Syn. av. 16. *Brunnich p.* 5.

THE weight of this species is thirty ounces : the length twenty-three inches ; the breadth fifty-two. The bill and cere are black ; the latter much wrinkled : the irides of a fine yellow : the crown of the head ash-colored : the neck, back, scapulars, and covert feathers of the wings, are of a deep brown : the chin is white ; the breast and belly of the same color, marked with dusky spots pointing downwards. The tail is long, of a dull brown color, marked with three broad dusky bars ; between each of which are two or three of the same color, but narrower. The legs are short, strong, and thick, and of a dull yellow : the claws large and black.

DESCRIPTION.

After the publication of the folio *Zoology*, Mr. *Plymley* favored us with a variety of this species, engraved in the additional plates, sup-

EGGS.

posed to be a female, being shot on the nest: it was entirely of a deep brown color, but had much the same marks on the wings and tail as the male; and the head was tinged with ash color. There were two eggs in the nest, blotched over with two shades of red something darker than those of the kestrel; though Mr. *Willughby* says they are of a different color: that naturalist informs us, that this bird builds its nest with small twigs, which it covers with wool; that its eggs are cinereous, marked with darker spots: as he found the combs of wasps in the nest, he gave this species the name of the honey-buzzard: he adds, that it feeds on the *erucæ* of those insects, on frogs, lizards, &c. and that it runs very swiftly like a hen.

“ This, in respect of *England*, must be considered as a rare species, and like the common buzzard varies much in its plumage, as well as in the color of its eggs. It is, we believe, more frequent on the continent, and is found in *Russia* as well as in *Siberia*, in wooded districts, where lizards are plentiful, but is by no means common any where.” J. L.



MOOR BUZZARD.



Falco æruginosus. F. cera virescente, corpore griseo, vertice gula axillis pedibusque luteis. <i>Lath. Ind. orn.</i> 25. <i>id. Syn.</i> i. 53. <i>id. Sup.</i> i. 15.	Falco æruginosus. <i>Gm. Lin.</i> 267. <i>Hoens-tjuf. Faun. Suec. sp.</i> 66. <i>Pojana rossa. Zinan.</i> 83.	17. MOOR BUZZARD.
Le fau-Perdrieux. <i>Belon av.</i> 114.	Le Busard de marais. <i>Brisson av.</i> i. 401. <i>Hist. d'Ois.</i> i. 218. <i>Pl. Enl.</i> 423 ? 424.	
Circus Accipiter. <i>Gesner av.</i> 49.	Schwartz-brauner Fisch-Geyer mit dem gelben Kopf. <i>Frisch. I.</i> 77.	
Milvus æruginosus. <i>Ald. av.</i> i. 203.	Hoense Hoeg. <i>Brunnich p.</i> 5. <i>Br. Zool.</i> 67. <i>Tab. A.</i> 5. <i>Arct. Zool.</i> i. 261.	
Moor Buzzard. <i>Wil. orn.</i> 75. <i>Raii Syn. av.</i> 17.		
Brauner rohr Geyer. <i>Kram.</i> 328.		

THIS species frequents moors, marshy places, and heaths; it never soars like other hawks, but commonly sits on the ground, or on small bushes: it makes its nest in the midst of a tuft of grass or rushes: we have found three young ones in it, but never happened to meet with the eggs*: it is a very fierce and voracious bird, and is a great destroyer of rabbits, young wild ducks†, and other water fowl. It also preys, like the Osprey, upon fish.

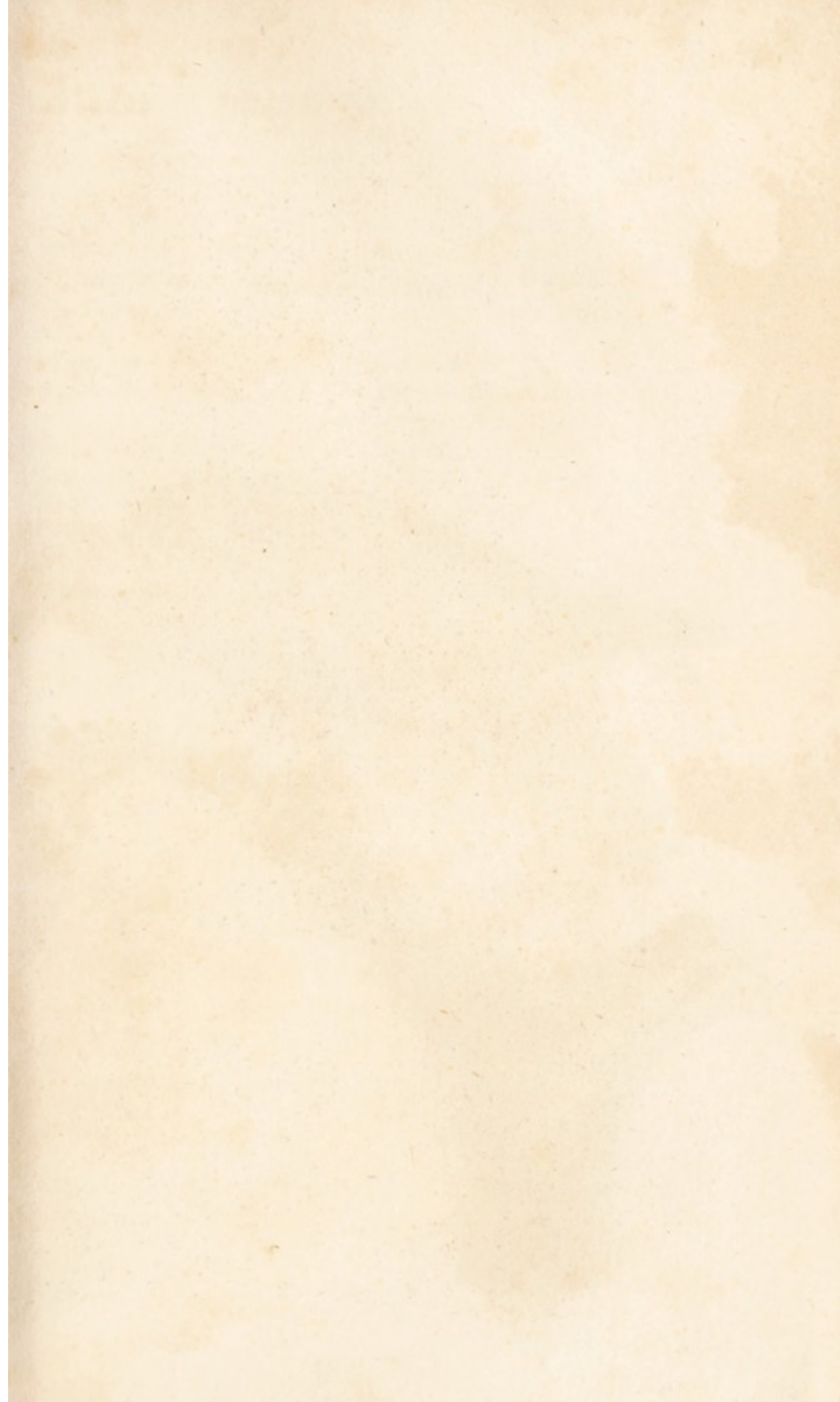
* The eggs, in general four or five in number, are of a plain white color. The Moor Buzzard will sometimes build its nest in the fork of a large tree; but the instance is rare. J. L.

† In some places it is called the *duck hawk*.

DESCRIP-
TION.

Its usual weight* is twenty ounces: the length twenty-one inches; the breadth four feet three inches. The bill is black; cere yellow; irides of the same color: the whole bird, head excepted, is of a chocolate brown, tinged with rust color: on the head is a large yellowish spot. We have seen some birds of this kind with their head and chin entirely white; others again have a whitish spot on the coverts of the wings; but these are only to be deemed varieties. The uniform color of its plumage, and the great length and slenderness of its legs, distinguish it from all other hawks.

* A pair of this species were brought at the same time to the reverend *Hugh Davies*: the male weighed only sixteen ounces and a half, the female thirty-six ounces. ED.



HENHARRIER .



- Falco cyaneus. F. cera alba, Blue Hawk. *Edw.* 225. the
pedibus fulvis, corpore coeruleo-canesciente, arcu superciliari albo gulam cingente. *male.*
(*Mas.*) *Lath. ind. orn.* 39. Falco cyaneus. *Gm. Lin.* 276.
id. syn. i. 88. *id. sup.* i. 22. Le Lanier cendré. *Brisson*
av. i. 365. the male. *Hist. d'oïs.* i. 212. *Pl. Enl.* 459.
Lanarius albus. *Aldr.* *av.* i. *Br. Zool.* 68. *Tab. A.* 6.
197. Grau-weisse Geyer. *Frisch.*
Rubetarius *Turneri.* i. 79, 80.
Wil. orn. 70. *Brunnich* 14.
Raii syn. *av.* 17.

18. HEN-HARRIER.
MALE.

THE HEN-HARRIER weighs about twelve ounces: the length is seventeen inches; the breadth three feet three inches. The bill is black: the cere, irides, and edges of the eye-lids yellow: the head, neck, back, and coverts of the wings, are of a bluish grey: the back of the head white, spotted with a pale brown; the breast, belly, and thighs, are white; the former marked with a few small dusky streaks: the scapular feathers are of a deep grey, inclining to dusky: the two middle feathers of the tail are entirely grey; the others only on their exterior webs; the interior being white, marked with dusky bars: the legs yellow, long and slender.

DESCRIPTION.

18. RING-
TAIL.
FEMALE.

Falco cyaneus. F. *cera pedibus-* Le faucon a collier. *Brisson*
que *flavis*, corpore cinereo, av. i. 345.
abdomine pallido, maculis ob- Une autre oyseau St. *Martin*.
longis rufis, oculorum orbita *Belon* av. 104.
alba. (*Femina*.) *Lath. ind.* Rubetarius *Turneri*.
orn. 39. *id. sup.* i. 22. La soubuse. *Hist. d'ois.* i.
Subbuteo. *Gesner.* av. 48. 215. *Pl. Enl.* 443. 480.
Ringtail. *Pygargus accipiter.* *Brunnich* No. 14.
Raii syn. av. 17. *Wil. orn.* *Br. Zool.* 68. *Tab.* 4. 7.
70. *Arct. Zool.* i. 243.

DESCRIP-
TION.

THE RINGTAIL weighs sixteen ounces: is twenty inches long; and three feet nine inches broad. The cere and irides are yellow: on the hind part of the head, round the ears to the chin, is a wreath of short stiff feathers of a dusky hue, tipped with a reddish white; on the top of the head, and the cheeks, the feathers are dusky, bordered with rust color; under each eye is a white spot: the back is dusky; the rump white, with oblong yellowish spots on each shaft. The tail is long; the two middle feathers marked with four dusky, and four broad cinereous bars; the others with three black, and three tawny bars; but the tips of all, white. The breast and belly are of a yellowish brown, with a cast of red, and marked with oblong dusky spots, but they are subject to vary, for we have met with one specimen that had these parts entirely plain.

The legs in color and shape resemble those of the preceding.

These birds are extremely destructive to young poultry, and to the feathered game: they fly near the ground, skimming the surface in search of prey. They breed on the ground, and never are observed to settle on trees. *Willughby* says, that the eggs are white, much besmeared with red.

In the earlier editions of the *British Zoology*, the hen harrier and the ringtail were considered as the same species, and it is certain that the opinion was well founded. In the last edition Mr. *Pennant* says, "The ringtail has generally been supposed to be the female of the former; but from some late observations by the infallible rule of dissection, males have been found of this species." Doctor *Latham* in the first volume of the supplement to his *Synopsis* of birds, has treated the subject much at length, and with his usual accuracy. He accounts for the circumstance, which deceived Mr. *Pennant*, of a male being observed with the plumage of the ringtail, from its being ascertained that it does not assume the grey color till the second year. M. *Beckstein*, in the *Gemeinnussige Naturf: Deutsch:* says, that the hen

harrier does not complete its paler plumage till the fourth year. Could any doubts have however remained, they must now be removed by the observations of Mr. *Montagu*, communicated in the ninth volume of the *Linnaean Transactions*. He obtained in 1805 a brood of young birds, two of which proved to be females, and one male; during the first autumn and the following winter, their plumage resembling that of the ringtail, was similar. In the ensuing *July*, the male threw out several grey feathers, particularly on the coverts of the wings. On the 20th of *August*, the greater part of the quill and tail feathers were grown to their full length, and a gradual increase of grey feathers appeared on most other parts; the eyes also, which had been previously lighter than those of the female, became more orange. In the month of *October*, when it was killed, the plumage of the ringtail still remained about the neck, the smaller coverts of the wings the thighs and part of the belly, intermixed with the male plumage; the top of the head and wreath had also a mixture of the feathers of both sexes; the quills, scapulars, and tail were completely masculine; in the last of these, there were a few small broken bars of cinereous brown on a white ground, in the three outer feathers, the exterior margin cinereous

grey; the six middle feathers were almost wholly grey, and the markings very obscure beneath. ED.

Ash-colored Falcon. *Mont. orn.* *Falco hyemalis.* *Gm. Lin.*
dict. id. Lin. Tr. ix. 188. 274.

19. ASH-COLORED FALCON.

MR. *Montagu* adds to the list of *British* falcons, a species shot in *Wiltshire*, which resembles the hen harrier in many respects, but differs in the want of the wreath of short feathers round the head, and in the greater relative length of wing and tail. Another specimen, a male, was killed in *Devonshire* in 1803. The weight of this was nine ounces and three quarters; its length eighteen inches; its extent three feet eight inches and a half. Bill black, base and cere greenish; irides bright yellow; crown of the head, cheeks, throat, under part of the neck and upper breast, dark ash-color: upper part of the neck, back and scapulars cinereous brown; greater covers the same; the eight prime quills dusky black; secondary quills cinereous brown above, pale beneath, with three remarkable dusky bars across them, nearly in parallel lines, each half an inch in breadth, one only of which is to be seen on the upper side of the wing, on the under part two of these

DESCRIP-
TION.

bars are very conspicuous. The under parts of the body and thighs white, with a broad streak of bright bay down the shaft of each feather: the tail rather cuneiform, the two middle feathers dark brown or dusky, the rest dark ash-color marked on the inner webs with four equidistant bars; the legs orange yellow, rather long and slender; the claws small and black. ED.

20. KESTREL. *Falco Tinnunculus*. F. *cera pedibusque flavis, dorso rufo punctis nigris, pectore striis fascis, cauda rotundata*. *Lath. Ind. orn.* 41. *id. Syn.* i. 94. *id. Sup.* i. 25.
- La Cresserelle. *Belon av.* 125. *Gesner av.* 54.
- Kistrel, Kastrel, or Steingal, *Turneri*. *Aldr. av.* 188.
- The Kestrel, Stannel, Stonegall, Windhover. *Wil. orn.* 84.
- Raii syn. av.* 16.
- La Cresserelle. *Brisson av.* i. 393. *Hist. d'oïs.* i. 280. *Pl. Enl.* 401. 471.
- Windwacht, Rittlweyer, Wannenweher. *Kram,* 331.
- Roethel-Geyer. *Frisch.* i. 84. *fæm.* Mause-Falck. *Frisch.* i. 88.
- Falco tinnunculus.* *Gm. Lin.* 278.
- Kyrko-Falk. *Faun. Suec. sp.* 61.
- Kirke-Falk. *Brunnich* 4, 5.
- Gheppio, Acertello, Gavi-nello. *Zinan.* 88.
- Br. Zool.* 68. plate A. *Arct. Zool.* i. 261.
- Postoka, Splintza, Skoltsch-*Scopoli.* No. 5.

DESCRIP-
TION.

THE male of this beautiful species weighs only six ounces and a half: its length is fourteen

inches : the breadth two feet three inches. The cere and legs yellow : irides dark. Its colors at once distinguish it from all other hawks : the crown of the head, and the greater part of the tail, are of a fine light grey, the lower end of the latter is marked with a broad black bar : the inner webs of the three feathers next the two middle barred with black ; the tips white : the back and coverts of the wings are of a brick red, elegantly spotted with black : the interior sides of the quill feathers are dusky, deeply indented with white. The whole under side of the bird, of a pale rust color, spotted with black ; the thighs and vent only, plain.

The female weighs eleven ounces : the color of the back and wings are far less bright than those of the male : it differs too in the colors of the head and tail ; the former being of a pale reddish brown, streaked with black ; the latter of the same color, marked with numerous transverse black bars : the breast is of a dirty yellowish white ; and the middle of each feather has an oblong dusky streak, pointing downwards.

FEMALE.

The kestrel breeds in the hollows of trees, in the holes of high rocks, towers and ruined buildings : it lays four eggs, of the same color with those of the Ringtail. Its food is field mice, small birds and insects, which it will discover at a great distance. This is the hawk

we so frequently see in the air fixed in one place, and as it were fanning it with its wings ; at which time it is watching for its prey. It flings up the indigested fur and feathers in form of a round ball. While falconry was in use in *Great Britain*, this kind was trained for catching small birds and young partridges.

A few winter in *Italy* ; the greater part migrate in *September*.

Dr. *Latham* in the second volume p. 44. of the supplement to his *Synopsis* of birds, describes a Kestrel, shot in *Surrey*, which varied in color from the common sort. Its length was fourteen inches ; the bill pale with a black tip : cere and legs yellow ; the forehead over the nostrils white ; the head grey, streaked with black, under the eye a black mark like a whisker ; the back of a rufous brick color, with a spot of black at the tip of each feather ; the rump pale ash ; all the under parts of the body of a pale rufous white, streaked with black down the shafts ; the thighs the same, with an occasional spot of black ; the chin and vent nearly white ; the wing coverts crossed with black bars ; the quail dusky, barred within with reddish white ; the tail of a pale rufous ash-color, barred on each side the shafts with black, those on the inner webs most complete, and all the feathers marked

at the end for an inch with a bar of black, but the very tips quite pale. This he conjectures to be a male kestrel in the first years plumage, and to be *Epervier des Alouettes* of *Brisson*.* ED.

“The kestrel is common on the continent, as well as in *England*. We have seen it represented both in *Chinese* drawings, and among those from *India*. It is observed in the south of *Spain* throughout the year.” J. L.

Falco Subbuteo. F. cera pedibusque flavis, dorso fusco, nucha alba, abdomine pallido maculis oblongis fuscis, crisso femoribusque rufis. *Lath. Ind. orn.* 47. *id. Syn.* i. 103. *id. Sup.* i. 28.

Le Hobreau. *Belon av.* 118. *Gesner av.* 75. *fæm.*

Hobbia *Turneri*.

Æsalon. Aldr. av. i. 187.

The Hobby. *Wil. orn.* 83.

Le Hobreau, Dendro-falco, 22. HOBBY.

Brisson av. i. 375. *Hist. d'ois.*

i. 277. *Pl. Enl.* 431. 432.

Raii syn. av. 15.

Falco Subbuteo. *Gm. Lin.* 283.

Faun. Suec. sp. 59.

Barletta. *Lorenzi av.* 45.

Stein-Falck. *Frisch.* i. 86.

Laerke-Falk. *Brunnich* 10, 11.

Br. Zool. 69. plate A. 9.

Arct. Zool. i. 262.

THIS bird was also used in the humbler kind of falconry; particularly in what was called daring of larks: the hawk was cast off; the larks aware of their most inveterate enemy, are fixed to the ground through fear, which makes them

* *Brisson orn.* i. p. 379. 22.

a ready prey to the fowler, by drawing a net over them. The hobby is a bird of passage, but breeds * in *England*; it migrates in *October*.

DESCRIP-
TION.

The male weighs seven ounces : the length is one foot ; the breadth two feet three inches. The cere and orbits are yellow : irides hazel : upper mandible furnished with a process : above each eye a white line : the crown of the head and back are of a deep bluish black : the hind part of the head is marked with two pale yellow spots ; each cheek with a large black one pointing downwards : the coverts of the wings are of the same color with the back, but slightly edged with rust color : the interior webs of the secondary and quill feathers, are varied with oval transverse reddish spots. The breast white, marked with oblong spots of black : thighs and vent feathers, pale orange : the two middle feathers of the tail are entirely of a deep dove color ; the others are barred on their interior sides with rust color, and tipped with a dirty white : legs yellow. The spots on the breast of the female are of a higher

FEMALE.

* It makes its nest on a low tree, and even on a moderate sized hawthorn ; sometimes lays in an old crow's nest ; the eggs are three or four in number, and said to be of a white color. As far as we can learn, it is migratory in every place where it is found. J. L.

color than those of the male: it is greatly superior in size; its legs have a tinge of green, in other respects it resembles the former.

- | | | |
|--|---------------------------------------|---------------|
| Falco Nisus. F. cera viridi, pedibus flavis, abdomine griseo undulato, cauda fasciis nigricantibus. <i>Lath. Ind. orn.</i> 44. | 225. <i>Pl. Enl.</i> 467. 22. | SPARROW HAWK. |
| <i>id. Syn.</i> i. 99. <i>id. Sup.</i> i. 26. | 412. | |
| L'Espervier. <i>Belon av.</i> 121. | <i>Raii syn. av.</i> 18. | |
| <i>Gesner av.</i> 51. | Sperber. <i>Frisch.</i> i. 90, 91. | |
| Sparhauc <i>Turneri.</i> | <i>Kram.</i> 332. | |
| Accipiter fringillarius, spaviero. <i>Aldr. av.</i> i. 183. | Falco Nisus. <i>Gm. Lin.</i> 280. | |
| <i>Will. orn.</i> 86. | Sparfhoek. <i>Faun. Suec. sp.</i> 69. | |
| L'Espervier, accipiter. <i>Brisson av.</i> i. 310. <i>Hist. d'oïis.</i> i. | Spurre-hoeg. <i>Brunnich</i> p. 5. | |
| | <i>Scopoli.</i> No. 6. | |
| | <i>Br. Zool.</i> 69. plate A. 10. A. | |
| | 11. <i>Arct. Zool.</i> i. 262. | |

THE difference between the size of the male and female sparrow hawks, is more disproportionate than in most other birds of prey; the former sometimes scarcely weighing five ounces, the latter nine ounces. The length of the male is about twelve inches, the breadth twenty-three: the female is fifteen inches long; in breadth twenty-six. These birds, as well as the hawk kind in general, vary greatly in their colors; in some, the back, head, coverts of the wings and tail, are of a deep bluish grey; in others of a deep brown, edged

DESCRIP-
TION.

with a rusty red : the quill feathers are dusky, barred with black on their exterior webs, and spotted with white on the lower part of their inner webs : the tail is of a deep ash color marked with five broad black bars, the tip white : the breast and belly are of a whitish yellow, adorned with transverse waved bars ; in some of a deep brown color, in others orange. The cere, irides, and legs yellow. The colors

FEMALE. of the female differ from those of the male : the head is of a deep brown ; the back, and coverts of the wings, are dusky mixed with dove color ; the coverts of the tail of a brighter dove color ; the waved lines which cross the breast, are more numerous than those on that of the male ; and the breast itself of a purer white.

MANNERS. This is the most pernicious hawk we have ; and makes great havoc among pigeons, as well as partridges. It builds in hollow trees, in old nests of crows, large ruins, and high rocks : lays four white eggs, encircled near the blunter end with red specks. Mr. *Willughby* places this among the short-winged hawks ; or such whose wings, when closed, fall short of the end of the tail.

“ The sparrow hawk, as well as the hobby, was formerly used in Falconry. A beautiful variety, wholly white, is in the collection of General *Davies*.” J. L.

- Falco Æsalon. F. cera pedibus- Merlina *Turneri*. 23. MER-
 que flavis, capite ferrugineo, Smerlus, Smerillus. *Aldr.* av. LIN.*
 corpore supra cœrulescente- i. 187.
 cinereo maculis striisque fer- *Wil. orn.* 85.
 rugineis, subtus flavicante- *Raii syn.* av. 15.
 albo, maculis oblongis. *Lath.* L'Emerillon. *Brisson av.* i.
Ind. orn. 49. *id. Syn.* i. 106. 382. *Hist. d'ois.* i. 288.
id. Sup. i. 29. *Pl. Enl.* 468.
 Falco Æsalon. *Gm. Lin.* 284. Smerlio, o Smeriglio. *Lorenzi*
 L'Esmerillon. *Belon av.* 118. *av. tab.* 18, 19.
 Æsalon. *Gesner av.* 44. *Br. Zool.* 70. plate A. 12.

THE merlin weighs nearly five ounces and a half: its length is twelve inches, its breadth twenty five. The bill is of a bluish lead color: the cere of a lemon color: the irides very dark, almost black: the head is ferruginous, and each feather is marked with a bluish black streak along the shaft. The back and wings are of a deep bluish ash color, adorned with ferruginous streaks and spots, and edged with the same: the quill feathers are almost black, marked with reddish oval spots: the under coverts of the wings brown, beautifully marked with round white spots. The tail is five inches long, crossed with alternate bars of dusky and reddish clay color; on some of the feathers of the same bird are

DESCRIP-
TION.

* Merularius; quia merulas insectatur. *Skinner.*

thirteen, on some fifteen, but in one bird I examined, were no more than eight bars. The breast and belly are of a yellowish white, marked with oblong brown spots pointing downwards: the legs yellow: the wings when closed reach within an inch and a half of the end of the tail.

MANNERS.

This and the preceding kind were often trained for hawking: and this species, small as it is, was inferior to none in point of spirit: it was used for taking partridges, which it would kill by a single stroke on the neck. The merlin flies low, and is often seen along the sides of roads, skimming from one side of the hedges to the other, in search of prey.

It does not breed* in *England*, but migrates here in *October*, about the time that the Hobby disappears; for the lark-catchers observe that in *September* they take no merlins but abundance of hobbies: but in the following month, merlins only.

* Dr. *Latham* says it breeds occasionally in *Cumberland*, and forms its nest on the ground like the ringtail. Mr. *Montagu* found three half grown merlins, in the middle of a high clump of heath upon the moors in *Northumberland*. ED.

“ *Beckstein* states, that it builds in high trees, and lays five or six whitish eggs, marked with brown spots. In *Thuringia* it is rarely seen in the summer, but during the autumn and winter, is plentiful in the forests and mountainous districts.”
J. L.

It was known to our *British* ancestors by the name of *llamysden*; was used in hawking; and its* nest was valued at twenty-four pence. They made use of four other species, but have left us only their names; the *hebog* or hawk, whose nest was estimated at a pound; the *gwalch*'s or falcon's at one hundred and twenty pence; the *hwyedig*'s or long winged, at twenty-four pence; and a species called *cammin* or crooked bill, at four pence. The *penhebogydd* or chief falconer, held the fourth place at the court of the *Welsh* prince: but notwithstanding the hospitality of the times, this officer was allowed only three draughts out of his horn, least he should be fuddled and neglect his birds.†

* *Leges Wallicæ*, 253.

† *Ib.* 24.

GENUS II. OWL.

HEAD large round.

BILL strong hooked, no cere.

FEATHERS round the face disposed in a circular form.

TOE outmost, capable of being turned back, and doing the office of a hind toe.

TONGUE divided.

EARED.

- | | | |
|----------|--|--|
| 1. EAGLE | Strix Bubo. S. capite auriculato, corpore rufo. <i>Lath. Ind. orn.</i> | Berg Uggel, Katugl hane. <i>Strom. Sondm.</i> 222. |
| | 51. <i>id.</i> <i>Syn.</i> i. 116. <i>id.</i> <i>Sup.</i> i. 40. | Buhu. <i>Kram. Austr.</i> 323. |
| | | Sova. <i>Scopoli.</i> No. 7. |
| | Bubo maximus nigri et fusci coloris. <i>Sib. Scot.</i> 14. | Le grand duc. <i>Brisson.</i> i. 477. |
| | | <i>Hist. d'oï.</i> i. 332. <i>Tab.</i> |
| | Great Owl, or Eagle Owl. <i>Wil.</i> | 22. <i>Pl. Enl.</i> 385. 435. |
| | <i>orn.</i> 99. <i>Raii Syn.</i> av. 24. | Eagle Owl. <i>Br. Zool.</i> Fol. |
| | Strix Bubo. <i>Gm. Lin.</i> 286. | 4. <i>Tab.</i> vi. <i>Arct. Zool.</i> i. |
| | Uff. <i>Faun. Suec.</i> No. 69. | 263. |

THE eagle owl has been shot in *Scotland* and in *Yorkshire*.* It inhabits inaccessible rocks and desert places; and preys on hares and fea-

* Also in *Kent* and *Sussex*. J. L.

thered game. Its appearance in cities was deemed an unlucky omen; *Rome* itself once underwent a lustration, because one of them strayed into the *Capitol*. The antients had them in the utmost abhorrence, and thought them, like the screech owls, the messengers of death. *Pliny* styles it *Bubo funebris et noctis monstrum*.

*Solaque culminibus ferali carmine Bubo
Sæpe queri et longas in fletum ducere voces.*

VIRGIL.

Perch'd on the roof the bird of night complains,
In lengthen'd shrieks, and dire funereal strains.

In size it is almost equal to an eagle. Irides bright yellow: head and whole body finely varied with lines, spots and specks of black, brown, cinereous, and ferruginous. Wings long: tail short, marked with dusky bars. Legs thick, covered to the very end of the toes with a close and full down of a testaceous color. Claws great, much hooked and dusky.

DESCRIP-
TION.

“The female lays two eggs the size of those of a hen, and white.” J. L.

GENUS XII. BEE EATER.

BILL quadrangular, a little incurvated, sharp pointed.

NOSTRILS small, placed near the base.

TONGUE slender.

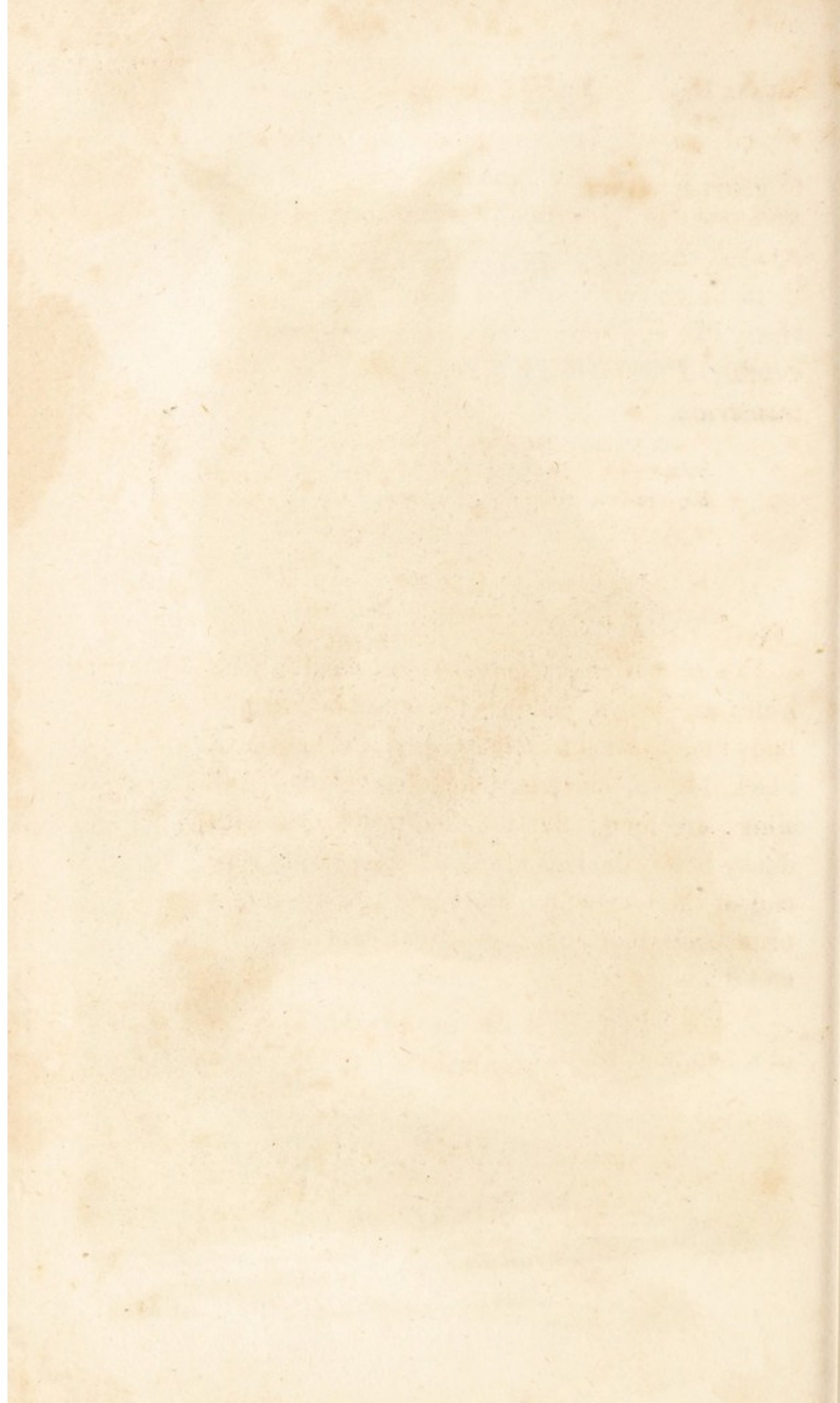
1. EURO-
PEAN.

Merops apiaster. M. dorso ferrugineo, abdomine caudaque viridi-cærulescente, rectricibus duabus longioribus, gula lutea. *Lath. Ind. orn.* 269. *id. Syn.* ii. 667. *id. Sup.* i. 119. *id. Sup.* ii. 148. Bee eater. *Wil. orn.* 147. *Raii Syn. av.* 49. Le Guepier. *Brisson. av.* iv. 532. *Hist. d'ois.* vi. 480. *Tab. 23. Pl. Enl.* 938. *Klein av.* 110. *Scopoli No.* 63. *Merops apiaster. Gm. Lin.* 460. *Lin. Tr.* iii. 333.

A FLIGHT of Bee eaters was observed in Norfolk, in June 1794, one of which was shot near Mattishall, by the reverend Mr. George Smith: the same flight (probably) with diminished numbers was seen passing over the same spot in October following. This is the first instance on record of their having visited Great Britain. Never having seen the species, the editor takes the liberty of transcribing Doctor Latham's description:

EAGLE OWL





thered game. Its appearance in cities was deemed an unlucky omen; *Rome* itself once underwent a lustration, because one of them strayed into the *Capitol*. The antients had them in the utmost abhorrence, and thought them, like the screech owls, the messengers of death. *Pliny* styles it *Bubo funebris et noctis monstrum*.

*Solaque culminibus ferali carmine Bubo
Sæpe queri et longas in fletum ducere voces.*

VIRGIL.

Perch'd on the roof the bird of night complains,
In lengthen'd shrieks, and dire funereal strains.

In size it is almost equal to an eagle. The irides are bright yellow; the head and whole body finely varied with lines, spots and specks of black, brown, cinereous, and ferruginous; the wings are long; the tail short, marked with dusky bars; the legs thick, covered to the very end of the toes with a close and full down of a testaceous color; the claws great, much hooked and dusky.

DESCRIP-
TION.

“ The female lays two eggs the size of those of a hen, and white. J. L.

2. LONG
EARED.

*Strix Otus. S. capite aurito pen-
nis senis. Lath. Ind. orn. 53.*

*id. Syn. i. 121. id. Sup. i.
42.*

*L'Hibou cornu. Belon av. 136.
Gesner av. 635.*

*Asio, seu Otus. Aldr. av. i.
265.*

*The Horn Owl. Wil. orn. 100.
Raii Syn. av. 25.*

Noctua aurita. Sib. Scot. 14.

Strix otus. Gm. Lin. 286.

Le moyen Duc ou le Hibou.

*Brisson av. i. 486: Hist.
d'ois. i. 342. Tab. 23.*

*Horn-uggla. Faun. Suec. sp.
71.*

Hasselquist itin. 233.

Horn Ugle. Brunnich 16.

Horn-eule. Kram. 323.

Mala Sova. Scopoli, No. 9.

*Rothe Kautzlein. Frisch, i.
99.*

Br. Zool. Plate 4. f. 1. Arct.

Zool. i. 264.

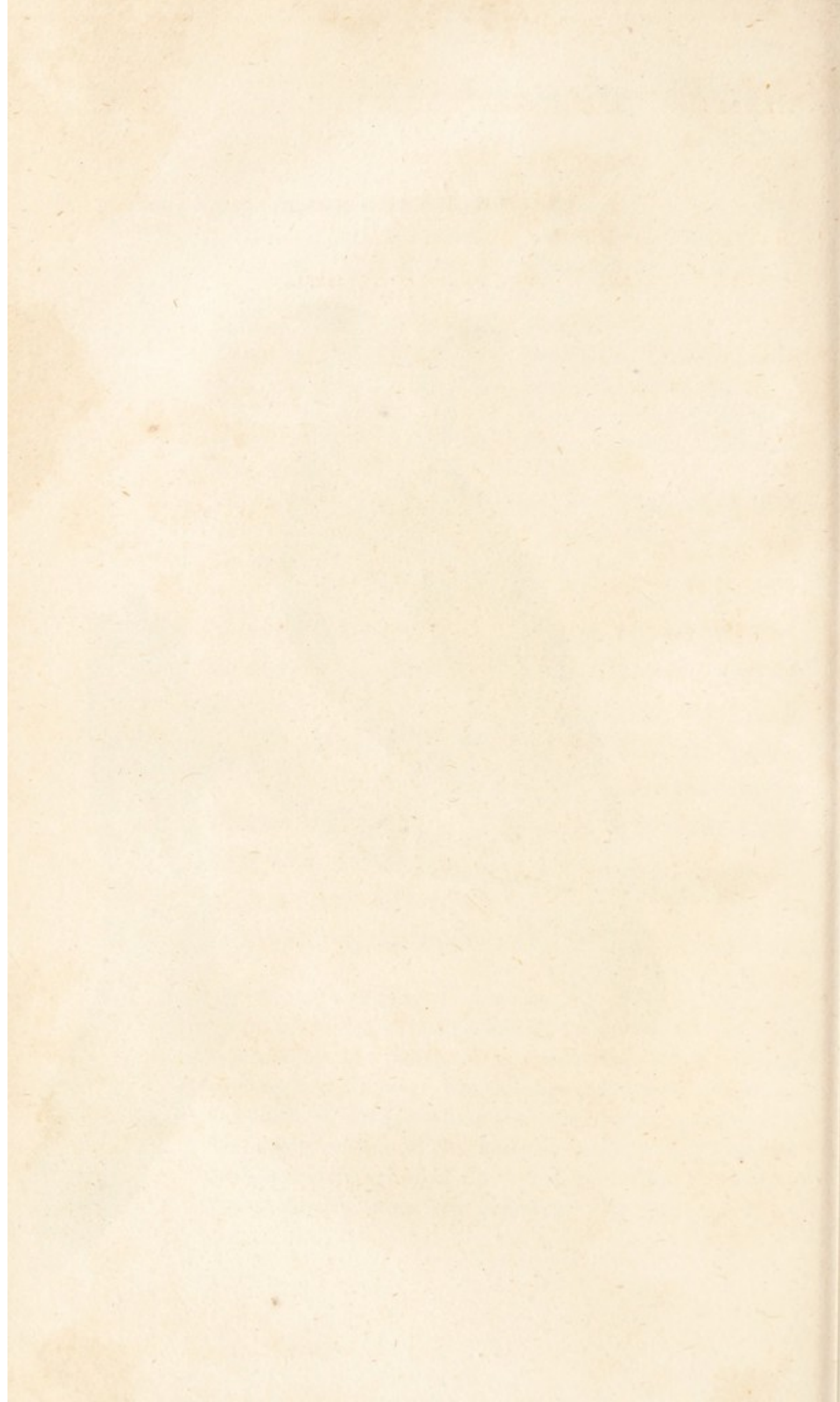
DESCRIP-
TION.

THIS species is found, though not frequently, in the north of *England*, in *Cheshire* and in *Wales*. The weight* of the female, according to Mr. *Willughby* (for we never had an opportunity of weighing it) is ten ounces: the length fourteen inches and a half: the breadth three feet four inches. The irides are of a bright yellow; the bill black; the circle of feathers surrounding the eyes is white tipped with reddish

* In one I weighed of eight ounces and an half only, the length was twelve inches and an half, the breadth two feet; this was a male. It is not an uncommon species, and remains with us throughout the year. The eared tuft is composed of nine feathers each, of which the front one is the shortest, and the fifth the longest. A nest of this species was found in a tree covered with ivy, which contained three white eggs. Mr. *Hutchins* informed me they are common at *Hudson's Bay*. J. L.

LONG-EARED OWL.





and dusky spots, and the part next the bill black; the breast and belly are of a dull yellow, marked with slender brown strokes pointing downwards; the thighs and vent feathers are of the same color, but unspotted. The back and coverts of the wings are varied with deep brown and yellow; the quill feathers of the same color, but near the ends of the outermost is a broad bar of red; the tail is marked with dusky and reddish bars, but beneath appears ash colored; the horns or ears are about an inch long, and consist of nine feathers variegated with yellow and black; the feet are feathered down to the claws.

3. SHORT EARED. *Strix brachyotos*. S. capite aurito penna solitaria, corpore fusco subtus flavescente longitudinaliter striato, rectricibus fuscis, intermediis, 4 macula lutea pupilla fusca. *Lath. Ind. orn.* 55. *id. Syn.* i. 124. *id. Sup.* i. 43. *Sup.* ii. 56. *Strix brachyotos*. *Gm. Lin.* 289.
- La Chouette ou la grande chevêche. *Hist. d'ois.* i. 372. *Tab.* xxvii. *Pl. Enl.* 438. Moyen duc ou hibou. *Pl. Enl.* 29. ? *Phil. Trans.* lxii. 384. *Br. Zool.* 71. *Tab.* B. 3. and B. 4. *Fig.* 2. *Arct. Zool.* i. 265.

THE horns of this species are very small, and consist of only a few feathers; these it can raise or depress at pleasure; in a dead bird they are with difficulty discovered. This kind is scarcer than the former. Both are solitary birds, avoiding inhabited places. They may be called long winged owls; the wings when closed reaching beyond the end of the tail, whereas in the common kinds, they fall short of it.

This is a bird of passage,* and has been observed to visit *Lincolnshire* the beginning of *October*, and to retire early in the spring; so probably, as it performs its migrations with the woodcock, its summer retreat is *Norway*. During the day it lies hid in long old grass: when

* In some parts of *England* it is, on account of its periods of migration, called the *Woodcock owl*. *Ed.*

SHORT EARED OWL.





disturbed, it seldom flies far, but will light and sit looking at its observer, at which time the horns may be seen very distinctly. It has not been known to perch on trees, like other owls: it will also fly in search of prey in cloudy hazy weather. Farmers are fond of seeing these birds in their fields, as they clear them from mice. It is found frequently on the hill of *Hoy* in the *Orknies*, where it flies about and preys by day like a hawk. I have also received this species from *Lancashire*, which is a hilly and wooded country: and my friends have also sent it from *New England* and *Newfoundland*.*

The length of the short eared owl is fourteen inches; its extent three feet; its weight fourteen ounces. The head is small and hawk-like; the bill is dusky; the circle of feathers that immediately surrounds the eyes is black; the larger circle white, terminated with tawny and black; the irides yellow; the feathers on the head, back, and coverts of the wings, are brown edged with pale dull yellow; the breast and belly are of the same color, marked with a few long narrow streaks of brown pointing downwards; the thighs, legs and toes, are covered with plain

DESCRIP-
TION.

* It is common at *Hudson's Bay*, and is there said to make a nest of dry grass on the ground; the eggs are white. It visits that country in *May* and departs in *September*. J. L.

yellow feathers; the quill feathers are dusky, barred with red; the tail is of a very deep brown, adorned on each side the shaft of the four middle feathers with a yellow circle which contains a brown spot; the tip of the tail is white.

The short eared owl appears to me to be *La Chouette* of the *comte de Buffon*, and his *moyen duc ou hibou*, Tab. 29 of the *Pl. Enl.* In p. 102 of my index to his *Ornithologie* and the *Planches enluminees* I have endeavoured to clear up the confusion which the illustrious writer has introduced on the subject.*

The other *European* horned owl, the little horn owl, *Scops* or *Petit Duc* of *M. de Buffon*, I. 353. is unknown in *Great Britain*.†

* *Arct. Zool.* i. 266.

† An intelligent friend lately informed the editor, that, in his younger days, he shot in *Dorsetshire*, a small horned owl, and that another was seen in the same county, about that period: the bulk of the body was superior to that of the blackbird, and nearly equal to the magpye's. Might it have been the *Scops* or a variety of the Long eared owl? ED.

** SMOOTH HEADED.

- | | | |
|---|--|-----------|
| Strix flammea. S. capite lævi,
corpore luteo punctis albis,
subtus albido punctis nigri-
cantibus. <i>Lath. Ind. orn.</i> 60.
<i>id. Syn.</i> 138. <i>id. Sup.</i> i. 46.
<i>Belon av.</i> 143.* | <i>Raii Syn. av.</i> 25.
Le petit Chat-huant. <i>Brisson</i>
<i>av.</i> i. 503.
<i>Allocco. Zinan.</i> 99.
Strix flammea. <i>Gm. Lin.</i> 293.
<i>Faun. Suec.</i> 73.
L'Effraie. <i>Hist. d'oïs.</i> i. 366.
<i>Pl. Enl.</i> 440.
Perl-Eule. <i>Frisch,</i> i. 97.
<i>Br. Zool.</i> 71. plate B. <i>Arct.</i>
<i>Zool.</i> i. 272. | 4. WHITE. |
| Aluco minor. <i>Aldr. av.</i> i. 272.
Common barn, white, or church
Owl, Howlet, madge How-
let, Gillihowter. <i>Wil. orn.</i>
104. | | |

THIS species is almost domestic; inhabiting for the greater part of the year, barns, haylofts, and other outhouses; and is as useful in clearing those places from mice, as the congenial cat: towards twilight it quits its perch, and takes a regular circuit round the fields, skimming along the ground in quest of field mice, and then returns to its usual residence: in the breeding season it takes to the eaves of churches, holes in lofty buildings, or hollows of trees. During the time the young are in the nest, the male and female alternately sally out in quest

* This refers only to the figure, for his description means the Goatsucker.

of food, make their circuit, beat the fields with the regularity of a spaniel, and drop instantly on their prey in the grass. They very seldom stay out above five minutes; return with their prey in their claws; but as it is necessary to shift it into their bill, they always alight for that purpose on the roof, before they attempt to enter their nest.

This species I believe does not hoot, but snores and hisses in a violent manner; and while it flies along, will often scream most tremendously. Its only food is mice; as the young of these birds keep their nest for a great length of time, and are fed even long after they can fly, many hundreds of mice will scarcely suffice to supply them with food.

Owls cast up the bones, fur or feathers of their prey in form of small pellets, after they have devoured it, in the same manner as hawks do. A gentleman, on grubbing up an old pollard ash which had been the habitation of owls for many generations, found at the bottom many bushels of this rejected stuff. Some owls will, when they are satisfied, hide, like dogs, the remainder of their meat.

DESCRIP-
TION.

The elegant plumage of this bird makes amends for the uncouthness of its form. A circle of soft white feathers surrounds the eyes; the

upper part of the body, the coverts and secondary feathers of the wings are of a fine pale yellow; on each side the shafts are two grey and two white spots placed alternately; the exterior sides of the quill feathers are yellow; the interior white, marked on each side with four black spots; the lower side of the body is wholly white; the interior sides of the feathers of the tail are white; the exterior marked with some obscure dusky bars. The legs are feathered to the feet; the feet are covered with short hairs, and the edge of the middle claw is serrated. The usual weight of this species is eleven ounces; its length fourteen inches; its breadth three feet.

5. TAWNY
OWL.

Strix stridula. S. capite lævi,
corpore ferrugineo, remige
tertio longiore. *Lath. Ind.*
orn. 58. *id. Syn.* i. 139.

Ulula. *Gesner av.* 773.

Strix. *Aldr. av.* i. 285.

Common brown or ivy Owl.
Wil. orn. 102.

Raii Syn. av. 25.

Le Chat huant. *Brisson av.* i.
500. *Hist. d'oï.* i. 362. *Pl.*
Enl. 437.

Strige. *Zinan*, 100. *Scopoli*,
No. 12.

Strix stridula. *Gm. Lin.* 294.

Skrik uggla. *Faun. Suec.* 77.

Strix Orientalis. *Hasselquist*
itin. 233.

Nacht Eule, Gemeine. *Kram.*
324.

Braune-Eule, or Stock-Eule?
Frisch, i. 96.

Nat Ugle. *Brunnich* 18.

Br. Zool. 72. plate B. 3.
Arct. Zool i. 275.

THIS is the *Strix* of *Aldrovandus*, and what we call the *Screech Owl*, to which the folly of superstition had given the power of presaging death by its cries. The antients believed that it sucked the blood of young children; a fact not incredible, for *Hasselquist** describes a species found in *Syria*, which frequently in the evening flies in at the windows, and destroys the helpless infant.

Nocte volant puerosque petunt nutricis egentes,
Et vitiant cuneis corpora rapta suis.
Carpere dicuntur lactentia viscera rostris,
Et plenum poto sanguine guttur habent.

* *Itin.* 255.

Est illis strigibus nomen, sed nominis hujus
Causa quod horrenda stridere nocte solent.

Ovid. Fast. VI. 135.

This is the bird *Shakespeare* describes so poetically in the *Midsummer Night's Dream*, as the omen of death in the mouth of *Puck*.

Now the wasted brands do glow,
Whilst the scritch-owl scritch'ing loud
Puts the wretch that lies in woe
In remembrance of a shroud.

The female of this species weighs nineteen ounces; the length is fourteen inches; the breadth two feet eight inches. The irides are dusky; the ears in this, as in all owls, very large, and their sense of hearing very exquisite. The color of this kind is sufficient to distinguish it from every other; that of the back, head, coverts of the wings, and the scapular feathers, being of a fine tawny red, elegantly spotted and powdered with black or dusky spots of various sizes; on the coverts of the wings, and on the scapulars, are several large white spots; the coverts of the tail are tawny, and quite free from any marks; the tail is variously blotched, barred and spotted with pale red and black; in the two middle feathers the red predominates; the breast and belly are yellowish, mixed with white, and marked with narrow black strokes,

DESCRIP-
TION.

pointing downwards; the legs are covered with feathers down to the toes.

This is a hardier species than the former; and the young will feed on any dead thing, whereas those of the white owl must have a constant supply of fresh meat.

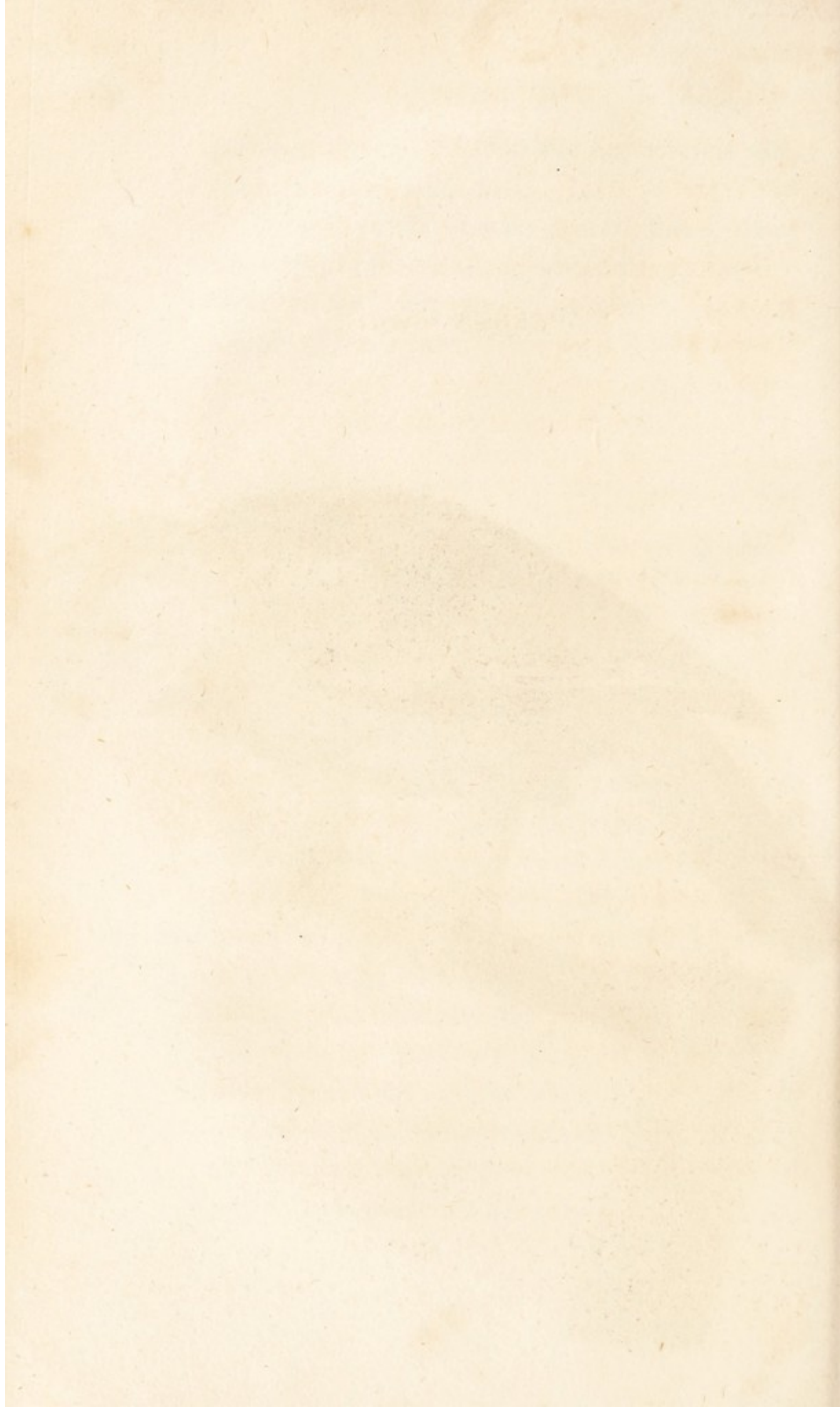
- *5. BROWN. *Strix Aluco. S. capite lævi corpore ferrugineo, iridibus atris. Lath. Ind. orn. 59. id. Syn. i. 134.* *Hist. d'ois. i. 358. Pl. Enl. 441.*
Strix Aluco Gm. Lin. 292. Faun. Suec. 78.
 The grey Owl. *Wil. orn. 103. Ugle. Brunnich 19.*
Raii Syn. av. 26. Graue Eule? Frisch, i. 94.
 La Hulote. *Brisson av. i. 507. Br. Zool. 72. Plate B. 1.*

DESCRIP-
TION.

AS the names this and the preceding species bear by no means suit their colors, we have taken the liberty of changing them to others more congruous. Both these kinds agree entirely in their marks, and differ only in the colors: in this the head, wings, and back, are of a deep brown, spotted with black in the same manner as the former; the coverts of the wings and the scapulars are adorned with similar white spots; the exterior edges of the four first quill feathers in both are serrated; the breast in this is of a very pale ash color mixed with tawny, and marked with oblong jagged spots;

BROWN OWL.





the feet too are feathered down to the very claws; the circle round the face is ash-colored, spotted with brown.

Both these species inhabit woods, where they reside the whole day; in the night they are very clamorous; and when they hoot, their throats are inflated to the size of a hen's egg. In the dusk they approach our dwellings; and will frequently enter pigeon houses, and make great havoc in them. They destroy numbers of little leverets, as appears by the legs frequently found in their nests. They also kill abundance of moles, and skin them with as much dexterity as a cook does a rabbit. These breed in hollow trees or ruined edifices; lay four eggs of an elliptic form, and of a whitish color.

[The opinion entertained by Doctor *Latham* in the second supplement to his *Synopsis* of birds, that the brown and tawny owls ought to be included in one species, is apparently well founded; the sole distinction between them consisting in a trifling variety of color.

In the exquisite drawings by the late *Joseph Plymley*, Esq. from which many of the plates in the folio edition of the *British Zoology* were taken, these two supposed species are represented with dark irides, but those of the

Brown owl have rather a bluish tint, those of the Grey of *Willughby* (whose nomenclature he followed) are nearly black. ED.

6. LITTLE. *Strix passerina*. S. capite lævi,
remigibus maculis quinque
ordinum. *Lath. Ind. orn.*
65. *id. Syn* i. 150.
La Cheveche. *Belon av.* 140.
Noctua. Gesner av. 620.
Little Owl. *Wil. orn.* 105.
Raii Syn. av. 26.
Edw. 228.
Tschiavitl. Kram. 324.
Faun. Suec. 79.
La petite Chouette, ou la
Cheveche. *Brisson av. i.*
514. *Hist. d'ois. i.* 377.
Pl. Enl. 439.
Strix passerina. Gm. Lin. 296.
La Civetta. *Olini, 65. Scopo-*
li, No. 17.
Krak-Ugle. *Brunnich* 20.
Kleinste Kautzlein. *Frisch, i.*
100.
Br. Zool. 73. plate B. 5. *Arct.*
Zool. i. 274.

DESCRIP-
TION.

THIS elegant species is very rare in *Eng-*
land; it is sometimes found in *Yorkshire, Flint-*
shire, and also near *London*. In size it scarcely
exceeds a thrush, though the fulness of its
plumage makes it appear larger. The irides are
of a light yellow; the bill of a paper color; the
feathers that encircle the face are white tipped with
black; the head brown, spotted with white; the
back and coverts of the wings of a deep olive

brown; the latter spotted with white; on the breast is a mixture of white and brown; the belly is white, marked with a few brown spots; the tail of the same color with the back; in each feather barred with white, and adorned with circular white spots, placed opposite one another on both sides the shaft; the legs and feet are covered with feathers down to the claws.

The *Italians* made use of this owl to decoy small birds to the limed twig; the method of which is exhibited in *Olina's uccelliera*, p. 65.

Mr. *Stuart*, the admirable author of the *Antiquities of Athens*, informed me that this species of owl was very common in *Attica*; that they were birds of passage, and appeared there the beginning of *April* in great numbers; that they bred there; and that they retired at the same time as the *Storks*, whose arrival they a little preceded.*

* *John Hawkins*, esq. to whom the editor is indebted for several observations on the species of birds which are common to *Greece* and the *British* isles, suggests that the owl alluded to by Mr. *Stuart*, as being migratory, is the *eatable* owl of *Aristotle*, probably the *Scops* of modern naturalists. ED.

SECT. II. PIES.

GENUS III. SHRIKE.

BILL strong, strait at the base, and hooked at the end with a sharp process or tooth on each side near the point of the upper mandible.

TONGUE jagged.

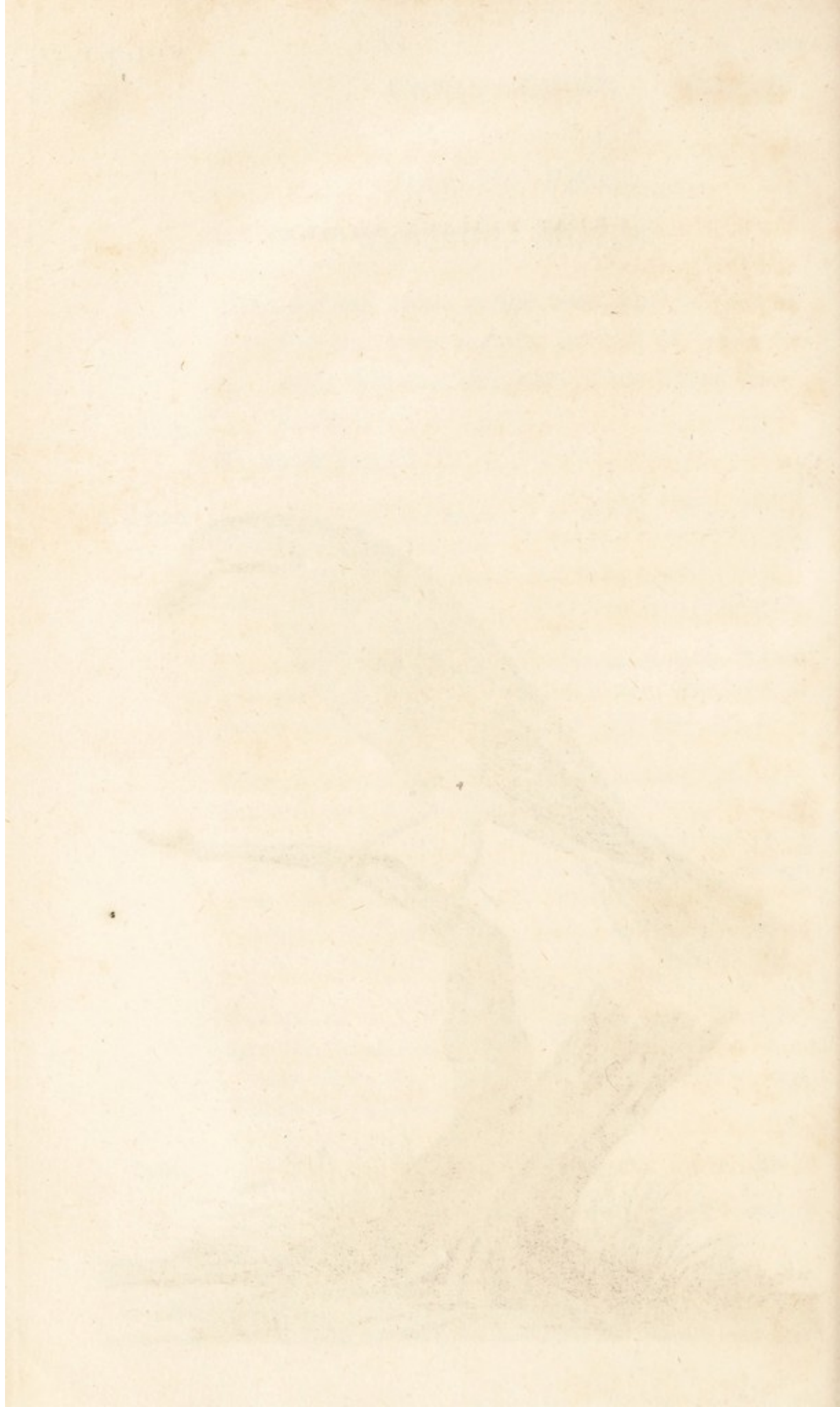
- | | | |
|----------|---|---|
| 1. GREAT | <p><i>Lanius Excubitor.</i> L. cauda cuneiformi, lateribus alba, dorso cano, alis nigris, macula alba. <i>Lath. Ind. orn.</i> 67. <i>id. Syn.</i> i. 160.</p> <p>La grande Pie-griesche: <i>Belon av.</i> 126.</p> <p><i>Lanius cinereus.</i> <i>Gesner av.</i> 579.</p> <p>Skrike, nyn murder <i>Turneri.</i></p> <p><i>Lanius cinereus,</i> Collurio major. <i>Aldr. av.</i> i. 199.</p> <p>Castrica, Ragastola. <i>Olin.</i> 41.</p> <p>Greater Butcher Bird, or Mat-tagess; in the North of England, Wierangle. <i>Wil. orn.</i> 87.</p> <p><i>Raii Syn. av.</i> 18.</p> <p>Speralster, Grigelalster, Neuntodter. <i>Kram.</i> 364.</p> <p>Butcher Bird, Murdering Bird</p> | <p>or Skreek. <i>Mer. Pinax,</i> 170.</p> <p><i>Cat. Carol.</i> app. 36.</p> <p>Night Jar. <i>Mort. Northampt.</i> 424.</p> <p>La Pie-griesche grise. <i>Brisson av.</i> ii. 141. <i>Hist. d'ois.</i> i. 296. <i>Pl. Enl.</i> 32. f. 1. 445.</p> <p><i>Lanius excubitor.</i> <i>Gm. Lin.</i> 300.</p> <p>Warfogel. <i>Faun. Suéc.</i> 80.</p> <p>Danish Torn-Skade. <i>Norvegis Klavert. Br.</i> 21, 22.</p> <p>Velch Skrakoper. <i>Scopoli,</i> No. 18.</p> <p>Berg Aelster (Mountain Magpie) or grosser Neuntodter. <i>Frisch,</i> i. 59.</p> <p><i>Br. Zool.</i> 73. plate C. <i>Arct. Zool.</i> i. 278.</p> |
|----------|---|---|

SIZE.

THIS bird weighs three ounces: its length is ten inches; its breadth fourteen. The bill is

GREAT FEMALE SHRIKE.





black, one inch long, and hooked at the end; the upper mandible furnished with a sharp process: the nostrils are oval, covered with black bristles pointing downwards: the muscles that move the bill are very thick and strong, which makes the head very large. This apparatus is quite requisite in a species whose method of MANNERS. killing its prey is so singular, and whose manner of devouring it is not less extraordinary: small birds it will seize by the throat, and strangle;* which probably is the reason the *Germans* call this bird *Wurchangel*,† or the suffocating angel. It feeds on small birds, young nestlings, beetles and caterpillars. When it has killed the prey, it fixes them on some thorn, and when thus spitted pulls them to pieces with its bill: on this account the *Germans* also call it *Thornträer* and *Thornfreker*. We have seen them, when confined in a cage, treat their food in much the same manner, sticking it against the wires before they would devour it. Mr. *Edwards* very justly imagines that as nature has not given these birds strength sufficient to tear their prey to pieces with their feet, as the hawks do, they are obliged to have recourse to this artifice.

It makes its nest with heath and moss, lining NEST. it with wool and gossamer, and lays six eggs,

* *Edw. Gl. iii. 233.*

† *Wil. orn. 87.*

of a dull olive green, spotted at the thickest end with black.

DESCRIP-
TION.

The crown of the head, the back, and the coverts which lie immediately on the joints of the wings are ash-colored; the rest of the coverts black: the quill feathers are black, marked in their middle with a broad white bar; and except the four first feathers, and the same number of those next the body, are tipped with white. The tail consists of twelve feathers of unequal lengths, the middle being the longest; the two middlemost are black, the next on each side tipped with white, and in the rest the white gradually increases to the outmost, where that color has either entire possession, or there remains only a spot of black. The cheeks are white, but crossed from the bill to the hind part of the head with a broad black stroke: the throat, breast and belly are of a dirty white: the legs are black. The female is of the same color with the male, the breast and belly excepted, which are marked transversely with numerous semicircular brown lines.

“ It is found in *North America*, from *Hudson's Bay* to *Georgia*, where it is known by the name of Big-headed Mocking bird. From various drawings it appears to inhabit *India*.” J. L.

- Lanius Collurio*. L. cauda sub-
cuneiformi, dorso griseo, rec-
trix 4 intermediis unicoloribus, rostro plumbeo. *Lath.*
Ind. orn. 69. *id. Syn.* i. 167. *id. Sup.* i. 52.
Lanius Collurio. *Gm. Lin.* 300.
Mort. Northampt. 424.
L'Ecorcheur. Brisson av. ii. 151. *Hist. d'ois.* i. 304.
Pl. Enl. 31. f. 2.
La petite Pie griesche grise. Belon av. 128.
Faun. Suec. 81. *Tab.* ii. f. 81.
Dorngreul, Dornheher. Kram. 363.
Lanius tertius. Aldr. av. i. 199.
Lesser Butcher Bird, called in Yorkshire Flusher. Wil. orn. 88. *sp.* 2. the male. 89. *sp.* 3. the female.
Br. Zool. 74. plate C. 1. *Arct. Zool.* i. 280.
Raii syn. av. 18.
Mali Skrakoper. Scopoli, Danish Tornskade. Norv. Hantvark. Br. 23.
No. 19.

2. RED-BACKED.

THE male weighs two ounces; the female two ounces two drams. The length of the former is seven inches and a half; the breadth eleven inches. The irides are hazel; the bill resembles that of the preceding species: the head and lower part of the back are of a fine light grey: across the eyes from the bill runs a broad black stroke: the upper part of the back, and coverts of the wings, are of a bright ferruginous color; the breast, belly and sides are of an elegant blossom color; the two middle feathers of the tail are longest, and entirely black; the lower part of the others white, and the ex-

DESCRIPTION.

FEMALE.

terior webs of the outmost feather on each side wholly so. In the female the stroke across the eyes is of a reddish brown; the head of a dull rust color mixed with grey; the breast, belly and sides of a dirty white, marked with semi-circular dusky lines. The tail is of a deep brown; the outward feather on each side excepted, whose exterior webs are white.

These birds build their nests in low bushes, and lay six eggs of a white color, but encircled at the bigger end with a ring of brownish red.

They arrive in *Italy* in *April*, go away in *September*; visit *England* in *May* and depart in *September*.

“ The Red-backed Shrike inhabits various parts of the old continent, also the *Cape of Good Hope* and *India*.” J. L.

- Lanius rutilus*. *L. supratricolor*, subtus rufescente-albus, scapularibus totis, rectricibus a basi ad medium, lateralibus apice albis, fascia oculari nigra. *Lath. Ind. orn.* 70. *id. Syn.* i. 169. *Sup.* ii. 70.
- Lanius minor primus*. *Alar. av.* i. 200.
- Another sort of Butcher Bird. *Wil. orn.* 89. *sp.* 4.
- The Wood-chat. *Raii syn. av.* 19. *sp.* 6.
- Lanius Collurio*. *Gm. Lin.* 301. γ .
- Dorngreul mit rother platten. *Kram.* 363.
- La Pie griesche rousse. *Brisson av.* ii. 147. *Hist. d'oï.* i. 301. *Pl. Enl.* 9. f. 2. and 31.
- Buferola, Felotta biancar. *Zinan.* 89.
- Kleiner Neuntoedter. *Frisch,* i. 61.
- Br. Zool.* 74 plate C. 2.
3. WOOD-CHAT.

IN size it seems equal to the preceding. The bill is horn colored; the feathers that surround the base are whitish; above is a black line drawn across the eyes, and then downwards on each side the neck; the head and hind part of the neck are of a bright bay; the upper part of the back dusky; the coverts of the tail grey; the scapulars white; the coverts of the wings dusky; the quill feathers black, marked towards the bottom with a white spot; the throat, breast and belly of a yellowish white. The two middle feathers of the tail appear by the drawing to be entirely black; the exterior edges and tips of the rest white; the legs black.

DESCRIPTION.

The female differs; the upper part of the head, neck and body are reddish, striated trans-

FEMALE.

versely with brown ; the lower parts of the body are of a dirty white, rayed with brown ; the tail is of a reddish brown, marked near the end with dusky, and tipped with red.

“ The Wood-chat, in respect to *England* at least, is a very rare bird ; but is probably not uncommon in *France*, as *Monsieur de Buffon* says, the manners are similar to those of the Red-backed Shrike, differing in this particular, that the latter remains throughout the year, whereas the Wood-chat comes in spring and departs in autumn with its young brood. The nest is said scarcely to differ from that of the Red-backed ; the eggs five or six in number are whitish, sprinkled with brown or fulvous spots. It is supposed to retire to *Barbary* on the approach of winter. *Levaillant* found it in *Senegal* and at the *Cape of Good Hope*.” J. L.

GENUS IV. CROW.

BILL strait, strong, somewhat convex.

NOSTRILS covered with bristles reflected down.

TONGUE cartilaginous, cloven.

- | | | |
|--|---|-----------|
| Corvus corax. C. ater, dorso | <i>Hist. d'oies.</i> iii. 13. <i>Pl. Enl.</i> | 1. RAVEN. |
| cærulescente, cauda subro- | 495. | |
| tunda. <i>Lath. Ind. orn.</i> 150. | Velch orn. <i>Scopoli</i> , No. 35. | |
| <i>id. Syn.</i> i. 367. <i>id. Sup.</i> i. 74. | Corvus corax. <i>Gm. Lin.</i> 364. | |
| <i>id. Sup.</i> ii. 106. | Korp. <i>Faun. Suec.</i> 85. | |
| Le Corbeau. <i>Belon av.</i> 279. | <i>Danish Raun. Norv. Korp.</i> | |
| Corvus. <i>Gesner av.</i> 334. | <i>Br.</i> 27. | |
| Corvo, Corbo. <i>Aldr. av.</i> i. 343. | Rab. <i>Kram.</i> 333. <i>Frisch.</i> i. | |
| <i>Wil. orn.</i> 121. | 63. | |
| <i>Raii. syn. av.</i> 39. | <i>Br. Zool.</i> 75. <i>Arct. Zool.</i> i. 286. | |
| Le Corbeau. <i>Brisson av.</i> ii. 8. | | |

THIS species weighs three pounds; its length is two feet two inches; its breadth four feet. The bill is strong and thick; and the upper mandible convex. The color of the whole bird is black, finely glossed with rich blue; the belly excepted, which is dusky.

DESCRIP-
TION.

Ravens build in trees, and lay five or six eggs of a pale green color marked with small brownish spots. They frequent in numbers the neighborhood of great towns, and are held in the same sort of veneration as the vultures are in

Egypt,* and for the same reason; devouring the carcasses and filth, that would otherwise prove a nuisance. A vulgar respect is also paid to the raven, as being the bird appointed by Heaven to feed the prophet *Elijah*, when he fled from the rage of *Ahab*.† They are docile, may be taught to speak, and fetch and carry. In clear weather they fly in pairs to a great height, making a deep loud noise, different from the common croaking. Their scent is remarkably good; and their life prolonged to a long period.

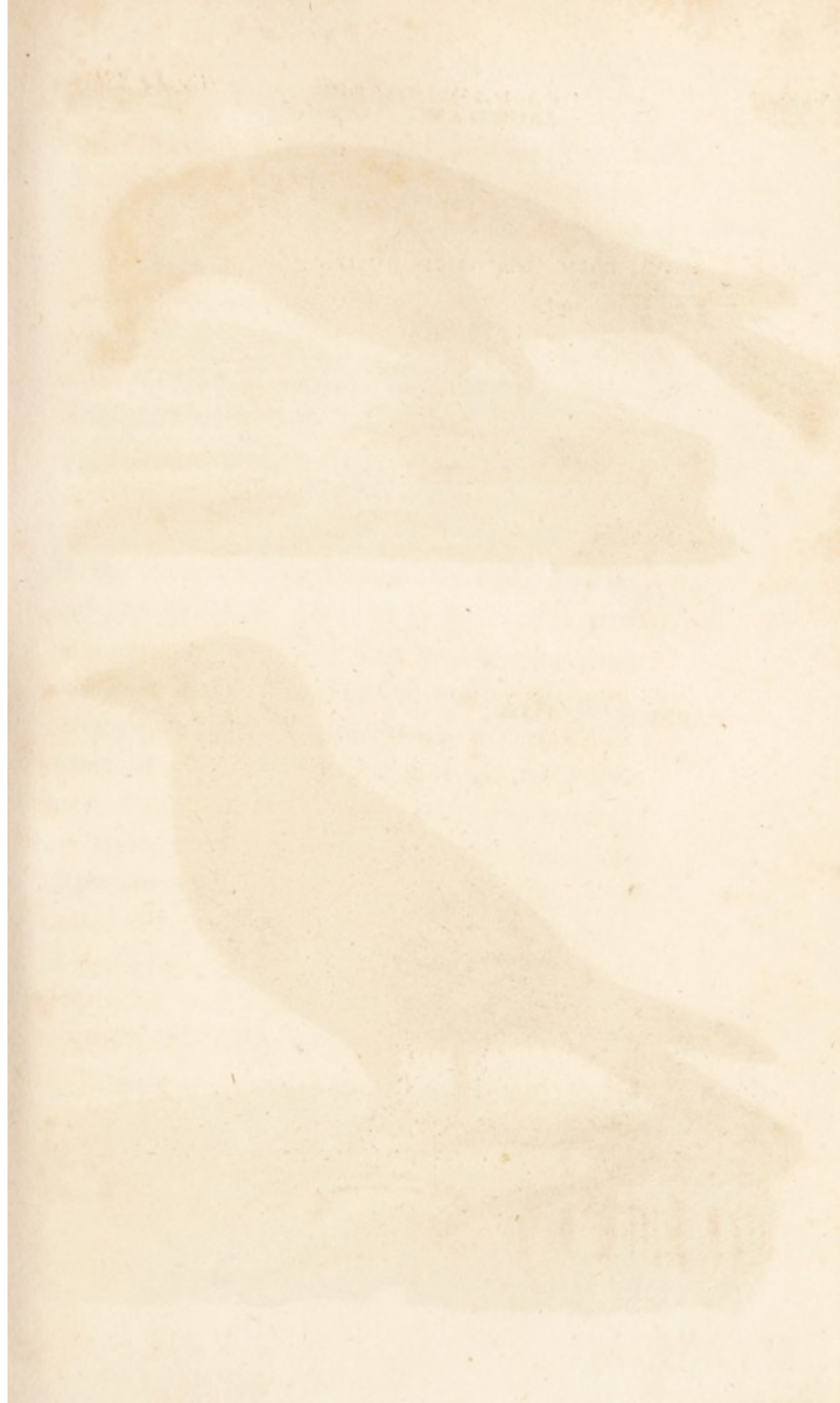
The quills of ravens sell for twelve shillings the hundred, being of great use in tuning the lower notes of a harpsichord, when the wires are set at a considerable distance from the sticks.

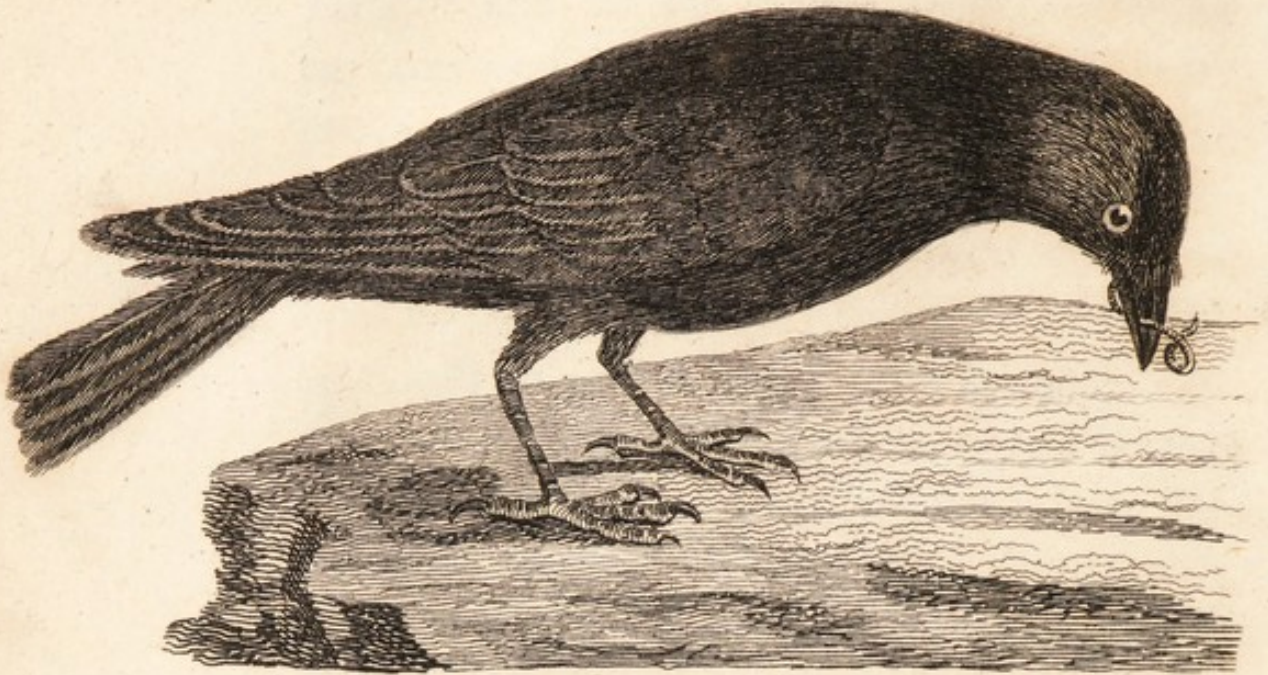
In *Italy* the raven quits the subalpine woods in *October*, and spreads over the lower countries; it returns to the woods in *April*.

“This is an universal species, found both in the old and new continents; from *Greenland* to the *Cape of Good Hope* in the one, and from *Hudson's Bay* to *Mexico* in the other. It was also met with by our circumnavigators in the *Sandwich* isles, and at *Owhyhee* was held in great estimation.” J. L.

* *Hasselquist itin.* 2.

† 1 *Kings* 17.





CARRION CROW.



M Griffiths del

- Corvus corone. *C. atro-cærules-* *Raii Syn. av. 39.*
cens totus, cauda rotundata, *La Corbine. Hist. d'oïs. iii.*
rectricibus acutis. Lath. Ind. 45. Pl. Enl. 483.
orn. 151. id. Syn. i. 370. id. La Corneille. Brisson av. 12.
Sup. i. 75. id. Sup. ii. 108. Corvus corone. Gm. Lin. 365.
La Corneille. Belon av. 281. Faun. Suec. 86.
Cornix (Krae). Gesner av. 320. Krage. Br. 30.
Cornice, Cornacchio. Aldr. av. Br. Zool. 75. Arct. Zool. i.
i. 369. 287.
Wil. orn. 122. Oru. Scopoli, No. 36.

2. CARRION.

THE crow in the form of its body agrees with the raven; also in its food, which is carrion and other filth. It will also eat grain and insects, and like the raven will pick out the eyes of young lambs when just dropped; for which reason it was formerly distinguished from the rook, which feeds entirely on grain and insects, by the name of the *gor* or *gorecrow*; thus *Ben Jonson* in his *For*, act I. scene 2.

Vulture, kite,
Raven and *gor-crow*, all my birds of prey.

Virgil says that its croaking foreboded rain:

Tum Cornix plena pluviam vocat improba voce.

It was also thought a bird of bad omen:

Sæpe sinistra cava prædixit ab ilice Cornix.

England breeds more birds of this tribe than any other country in *Europe*. In the twenty-fourth of *Henry VIII.* they were grown so numerous, and thought so prejudicial to the farmer, as to be considered an evil worthy of parliamentary redress: an act was passed for their destruction, in which rooks and choughs were included. Every hamlet was to provide crow nets for ten years, and all the inhabitants were obliged at certain times to assemble during that period to consult the properest method of extirpating them.

Though the crow abounds in our country, yet in *Sweden* it is so rare, that *Linnaeus* mentions it only as a bird that he once knew killed there.

Crows lay the same number of eggs as the raven, and of the same color: immediately after deserting their young, they go in pairs. Both these birds are often found white, or pied; an accident that befalls black birds more frequently than those of any other color. I have also seen one entirely of a pale brown color, not only in its plumage, but even in its bill and feet. The crow weighs about twenty ounces. Its length is eighteen inches; its breadth two feet two inches.

They come from *Hungary* into *Italy* in *March*, and re-migrate in flocks in *October*; many remain during the winter.

“ Though not generally inhabiting the same places as the raven, yet the carrion crow is found in various parts of both continents, and most certainly in *India* and *China*. It is also met with in *New Holland*, *New Guinea*, and *New Caledonia*.” J. L.

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|---|---|----------|
| Corvus frugilegus. C. ater, fronte cinerascens, cauda subrotundata. <i>Lath. Ind. orn.</i> 152. <i>id. Syn.</i> i. 372. <i>id. Sup.</i> i. 76. <i>id. Sup.</i> ii. 109. | Le Freux, ou la Frayonne. <i>Hist. d'ois.</i> iii. 55. <i>Pl. Enl.</i> 484. | 3. Rook. |
| La Graye, Grolle ou Freux. <i>Belon av.</i> 288. | La Corneille Moissoneuse. <i>Brisson av.</i> ii. 16. | |
| Cornix frugivora (Roeck). <i>Gesner av.</i> 332. | Roka. <i>Faun. Suec.</i> 87. | |
| <i>Aldr. av.</i> i. 378. | Spermologus, seu frugilega. <i>Caii opusc.</i> 100. | |
| <i>Wil. orn.</i> 123. | Schwartze krau, Schwartze krahe. <i>Kram.</i> 333. <i>Frisch,</i> i. 64. | |
| <i>Raii syn. av.</i> 39. | <i>Br. Zool.</i> 76. <i>Arct. Zool.</i> i. 292. | |
| Corvus frugilegus. <i>Gm. Lin.</i> 366. | | |

THE Rook is the *Corvus* of *Virgil*, no other species of this kind being gregarious.

E pastu decedens agmine magno
Corvorum increpuit densis exercitus alis.

A very natural description of the evening return of these birds to their nests.

This bird differs not greatly in its form from the carrion crow; the colors in each are the

DESCRIP-
TION.

same, the plumage of both being glossed with a rich purple. But what chiefly distinguishes* the rook from the crow is the bill; the nostrils, chin, and sides of that and the mouth being in old birds white and bared of feathers, by often thrusting the bill into the ground in search of the *erucæ* of the Dor-beetle;† the rook then, instead of being proscribed, should be treated as the farmer's friend; as it clears his ground from caterpillars, which do incredible damage by eating the roots of the corn. In *Suffolk* and part of *Norfolk*, the farmers find it their interest to encourage these birds. Mr. *Matthews*, a most excellent and observant farmer in *Berkshire*, assured Mr. *Stillingfleet*, that the rooks one year, while his men were hoeing a field of turnips, settled on a spot where they were not at work, and that the crop proved very fine in that part, whereas in the remainder it failed.‡ Rooks are sociable birds, living in vast flocks: crows go only in pairs. They begin to build their nests in *March*; one bringing materials, while the other watches the nest, lest it should

* Another distinction arises from the form of the tail feathers, the extremities of which are much more rounded in the Rook than in the Crow. ED.

† *Scarabæus melolontha*. *Lin. syst.* 351. *Ræsel*, ii. *Tab. i. List. Goed.* 265.

‡ *Stillingfleet's Tracts*, 2d edit. 175.

be plundered by its brethren: they lay the same number of eggs as the crow, and of the same color, but smaller. After the breeding season rooks forsake their nest-trees, and for some time go and roost elsewhere, but return to them in *August*: in *October* they repair their nests,* quit their nest-trees again in the depth of winter and roost in other woods, till *February*, when they select their mates.

In *France* and *Silesia*, these birds are migratory; in the former they appear at the approach of winter; in the latter they announce by their arrival, the return of summer.† According to *Ekmark*, who made his remarks in *Ostrogothland*, they arrive in that province of *Sweden* about the beginning of *April*, and leave it in autumn.‡

* *Calendar of Flora.*

† *De Buffon*, iii. 59.

‡ *Amæn Acad.* iv. 583. *Vergente mense regelationis*, in the language of philosophy the *thawing* month, beginning in *Sweden* the 19th of *March* and ending the 12th of *April*.

4. HOODED. *Corvus Cornix*. *C. cinerascens*, *av. ii. 19. Hist. d'oïis. iii. 61. Pl. Enl. 76.*
capite jugulo alis caudaque nigris. Lath. Ind. orn. 153. Mulacchia cinerizia, Monacchia. Zinan. 70.
id. Syn. i. 374. id. Sup. i. 77. id. Sup. ii. 109. Corvus cornix. Gm. Lin. 366.
La Corneille emantelée. Belon Kraka. Faun. Suec. sp. 88.
av. 285. Grave Kran, Kranveitl. Kram. 333.
Cornix varia, Marina, Hyberna, (Nabelfrae.) Gesner Graue-Krøche (grey-Crow),
av. 332. Nebel-Krøche (mist Crow).
Cornix cinerea. Aldr. av. i. 379. Frisch. i. 65.
Raii syn. av. 39. Urana. Scopoli, No. 37.
Martin's West. Isles, 376. Br. Zool. 76. plate D. i. Arct.
Hooded Crow. Sib. Scot. 15. Zool. i. 293.
La Corneille mantelée. Brisson

DESCRIP-
TION.

THE weight of this species is twenty-two ounces: the length twenty-two inches; the breadth twenty-three. The head, under side of the neck, and wings are black, glossed over with a fine blue; the breast, belly, back, and upper part of the neck, are of a pale ash color; the irides hazel; the legs black, and weaker than those of the Rook. The bottom of the toes are very broad and flat, to enable them to walk without sinking on marshy and muddy grounds, where they are conversant.

In *England* hooded crows are birds of passage, coming and going with the woodcock, and are found both in inland and maritime places. *Belon*, *Gesner*, and *Aldrovandus* agree,

that they are migratory in their respective countries, resorting in the breeding time to high mountains. They breed also in the southern parts of *Germany* on the banks of the *Danube*,* and extend as far north as *Norway* and *Finmark*.† They are found in all parts of *Russia* and *Siberia*, but never are seen beyond the *Lena*; to the east of the *Oby* they are very large, and often vary to black.

They are very common in *Scotland*; in many parts of the *Highlands*, and in all the *Hebrides*, *Orknies*, and *Shetlands*, are the only species of genuine crow; the *Carrion* and the *Rook* being unknown there. They breed and continue in those parts, the whole year round. Perhaps those that inhabit the northern parts of *Europe*, are the same which migrate here. In *Sweden* they build in the alder trees; in the *Highlands* indifferently in all kinds. In the *Orkney* and *Shetland* islands, which are destitute of trees, they make their nests in the holes of the rocks; they lay six eggs. They have a shriller note than the common crow, are much more mischievous, pick out the eyes of lambs, and even of horses when engaged in bogs; are therefore in many places proscribed, and rewards given for killing them.

* *Kram.* 333.† *Scems.* 239

For want of other food, they will eat cranberries and other mountain berries.

These birds are not gregarious unless when attracted by carrion, or meet accidentally on the shores in search of shell-fish. In spring before pairing time, they convene in great flocks; each associates with its mate and then they disperse. They are observed in *Kent* to quit the shores of the *Thames* towards evening, and roost in great numbers promiscuously in the woods.

It is a bird of uncommon affection to its mate; one which had been shot and hung by its legs on a tree adjacent to the nest, was discovered by its companion on returning from forage. It perched over the dead body, surveyed it attentively, as if in expectation of its revival; at length, on a windy day, the corpse being put in motion, the survivor, deceived by it, descended, fluttering round for a considerable time, endeavouring to release its mate, and uttering a melancholy scream; at last finding its efforts to be in vain, it retired without ever returning to its usual haunts.

“ Is very common in some parts of *India*, and was found by Monsieur *Sonnerat*, in the *Philippine* isles.” J. L.

- Corvus Pica. C. albo nigroque
 varius, cauda cuneiformi.
Lath. Ind. orn. 162. *id. Syn.* i.
 392. *id. Sup.* i. 80. *id. Sup.* ii.
 113.
 La Pie. *Belon av.* 291.
 Pica varia et caudata. *Gesner av.*
 695.
Aldr. av. i. 392.
 The Magpie, or Pianet. *Wil.*
orn. 127.
Ruii Syn. av. 41.
 La Pie. *Brisson, ii.* 35. *Hist.*
d'ois. iii. 85. *Pl. Enl.* 488.
 Gazza, Putta. *Zinan.* 66.
 Corvus Pica. *Gm. Lin.* 373.
 Skata, Skiura, Skara. *Faun.*
Suec. sp. 92.
 Danish Skade, Huus Skade.
Norv. Skior, Tunfugl.
Brunnich 32.
 Aelster. *Frisch,* i. 58.
 Alster. *Kram.* 335.
 Praka. *Scopoli, No.* 38.
Br. Zool. 77. plate D. 2. *Arct.*
Zool. i. 289.

5. MAGPIE.

THE great beauty of this very common bird was so little attended to, that the editors of the *British Zoology* thought fit to publish a print of it after a painting by the celebrated *Barlow*. The marks of this species are so well known, that it would be impertinent to detain the reader with the particulars.

We shall only observe the colors of this bird; its black, its white, its green, and purple, and the rich and gilded combination of glosses on the tail, are at least equal to those that adorn the plumage of any other of the feathered race. It bears a great resemblance to the butcher-bird in its bill, which has a sharp process near the end of the upper mandible; in the shortness of its

wings, and the form of the tail,* each feather shortening from the two middlemost: it agrees also in its food, which are worms, insects, and small birds. It will destroy young chickens; is a crafty, restless, noisy bird: *Ovid* therefore with great justice styles it,

—————*Nemorum convicia Pica.*

Is easily tamed, and may be taught to imitate the human voice. It builds its nest with great art, covering it entirely with thorns, except one small hole for admittance, and lining it with wool and soft materials. It lays six or seven eggs, of a pale green color spotted with brown. The magpie weighs near nine ounces: the length is eighteen inches; the breadth only twenty four.

“The Magpie is found throughout *Europe*. I have also seen a specimen from *China*. In *America* it is a rare bird. It is subject to much variety, *viz.* wholly white, black and white in streaks, and white and soot color.” J. L.

*The tail very cuneiform, the two middle feathers being eleven inches in length and sometimes more, the exterior feather only five inches and a half. J. L.

- Corvus glandarius*. *C. tectricibus* alarum cæruleis, lineis transversis albis nigrisque, corpore ferrugineo variegato. *Lath. Ind. orn.* 157. *id. Syn.* 384. *id. Sup.* i. 79.
 Le Jay. *Belon av.* 289.
Pica glandaria. *Gesner av.* 700. *Aldr. av.* i. 393. *Olin.* 35. *Wil. orn.* 130. *Raii Syn. av.* 41. *Ghiandaia*. *Zinan.* 67.
Corvus glandarius. *Gm. Lin.* 368.
- Le Geay, *Garrulus*. *Brisson av.* ii. 47. *Hist. d'ois.* iii. 107. *Pl. Enl.* 481.
 Allonskrika, Kornskrika. *Faun. Suec. sp.* 90.
 Skov-skade. *Br.* 33.
 Nuss-heher. *Kram.* 335.
 Eichen-Heher (Oak-Jay), or Holtz-Schreyer (Wood-Cryer). *Frisch*, i. 55.
 Skoia, Schoga. *Scopoli, No.* 39. *Br. Zool.* 77. plate D. *Arct. Zool.* i. 295.
6. JAY.

THIS is one of the most beautiful of the *British* birds. The weight is between six and seven ounces: the length thirteen inches; the breadth twenty and a half. The bill is strong, thick and black, about an inch and a quarter long; the tongue black, thin, and cloven at the tip; the irides white; the chin is white; at the angle of the mouth are two large black spots; the forehead is white, streaked with black; the head is covered with very long feathers, which it can erect at pleasure into the form of a crest: the whole neck, back,

DESCRIP-
TION.

breast and belly are of a faint purple dashed with grey; the covert feathers of the wings are of the same color. The first quill feather is black; the exterior webs of the nine next are ash-colored, the interior webs dusky: the six next black, but the lower sides of their exterior webs are white tinged with blue; the two next wholly black; the last of a fine bay color tipped with black. The lesser coverts are of a light bay; the greater covert feathers most beautifully barred with a lovely blue, black and white; the rest black: the rump is white. The tail consists of twelve black feathers. The feet are of a pale brown; the claws large and hooked.

The nest is made entirely of the fine fibres of roots of trees, but has for a foundation some coarse sticks; it is generally placed on the top of the underwood, such as hazels, thorns, or low birch. [It lays five or six eggs, of a dull whitish olive, mottled very obscurely with pale brown, and usually marked towards the large end with two or three short irregular black lines.] The young follow their parents till the spring: in the summer they are very injurious to gardens, being great devourers of pease and cherries; in the autumn and winter they feed on acorns, from

whence the Latin name. Dr. *Kramer** observes, that they will kill small birds. Jays are very docile, and may be taught to imitate the human voice: their native note is very loud and disagreeable. When they are enticing their fledged young to follow them, they emit a noise like the mewling of a cat.

[The Jay is very common in *Greece*, and still retains its antient name, *Μαλακοκρανευς*. ED.]

“ This species, though not near so far spread as the last, exists in various parts of the continent of *Europe*. I have also observed it among drawings done in *China*. I have seen only two varieties, the one pure white, the other as in the common Jay, but having the whole of the quills white.” J. L.

* *Kram. elench.* 335.

7. RED
LEGGED.

- Corvus Graculus. C. violaceo nigricans, rostro pedibusque luteis. *Lath. Ind. orn.* 165. *id. Syn.* i. 401. *id. Sup.* i. 82. *id. Sup.* ii. 115.
- Scurapola. *Belon. obs.* 12.
- La Chouette ou Chouca rouge. *Belon av.* 286.
- Pyrrhocorax gracculus saxatilis (Stein-tahen, Stein-frae). *Gesner av.* 522, 527.
- Spelvier, Taccola. *Aldr. av.* i. 386.
- Wil. orn.* 126.
- Raii Syn. av.* 40.
- Le Crave. ou Coracias *Brisson av.* ii. 4. *Tab.* 1. *Hist. d'oïs.* iii. 1. *Pl. Enl.* 255.
- The Killegrew. *Charlton ex.* 75.
- Cornwall Kae. *Sib. Scot.* 15.
- Borlase Cornw.* 249. *Tab.* 24.
- Camden,* vol. i. 14.
- Corvus Gracculus. *Gm. Lin.* 377.
- Monedula pyrrhocorax. *Hasselquist itin.* 238.
- Gracula pyrrhocorax. *Scopoli,* No. 46.
- Br. Zool.* 83. plate L*.

THIS species is but thinly scattered over the northern world; no mention is made of it by any of the *Faunists*; nor do we find it in other parts of *Europe*, except *England*, and the *Alps*.* In *Asia*, the island of *Candia* produces it.† In *Africa*, *Ægypt*; which last place it visits towards the end of the inundations of the *Nile*‡. Except *Ægypt* it affects mountainous and rocky situations; it builds its nest in high cliffs, or ruined towers, and lays four or five eggs, white spotted with a dirty yellow. It feeds on in-

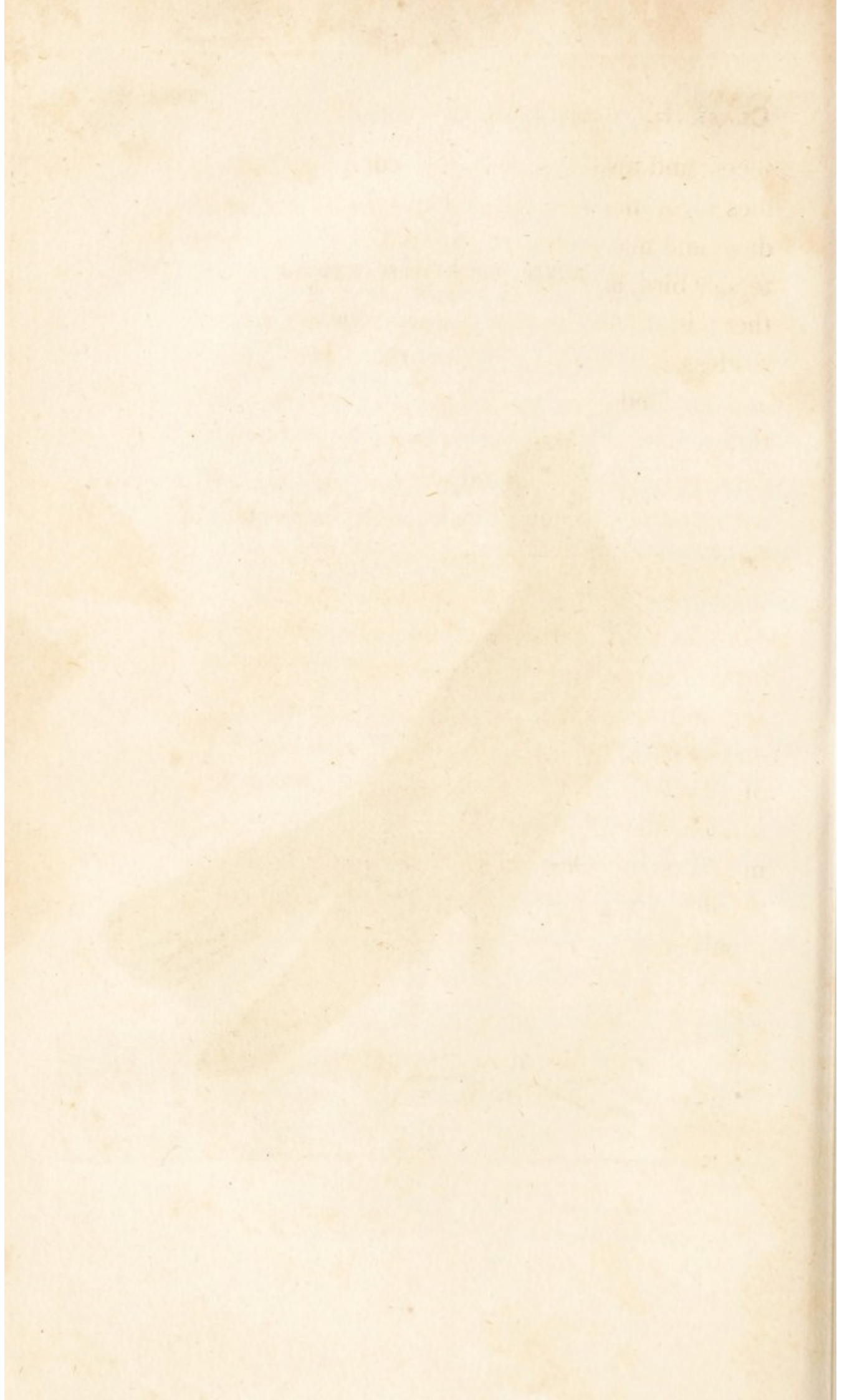
* *Plin. nat. hist. lib.* X. c. 48. *Brisson,* ii. 5.

† *Belon obs.* 17.

‡ *Hasselquist itin.* 240.

RED LEGGED CROW.





sects, and also on new sown corn: commonly flies high, makes a shriller noise than the jackdaw, and may be taught to speak. It is a very tender bird, and unable to bear very severe weather; is of an elegant, slender make; active, restless, and thieving; much taken with glitter, and so meddling as not to be trusted where things of consequence lie. It is very apt to catch up bits of lighted sticks, so that there are instances of houses being set on fire by its means; which is the reason that *Camden* calls it *incendiaria avis*. Several of the *Welsh* and *Cornish* families bear this bird in their coat of arms. It is found in *Cornwall*, *Flintshire*, *Caernarvonshire*, and *Anglesey*, in the cliffs and castles along the shores; in different parts of *Scotland* as far as *Straithnavern*; and in some of the *Hebrides*. It is also found in small numbers on *Dover* cliff, where they came by accident; a gentleman in that neighborhood had a pair sent as a present from *Cornwall*, which escaped, and stocked those rocks. They sometimes desert the place for a week or ten days at a time, and repeat it several times in the year.*

Its weight is thirteen ounces: the breadth

DESCRIP-
TION.

* It is also said to frequent the *South Downs* about *Beachy Head* and *Eastbourne*, where it is called the Red-billed Jackdaw. J. L.

thirty-three inches; the length sixteen. Its color is wholly black, beautifully glossed over with blue and purple: the legs and bill are of a bright orange, inclining to red: the tongue almost as long as the bill, and a little cloven: the claws large, hooked, and black. *Scopoli* says that in *Carniola* the feet of some, during autumn, turn black.

[The chough inhabits the lofty cliffs about the mid-region of the highest mountains of *Greece*, but never the maritime parts, as with us. ED.]

8. JACK-DAW. *Corvus Monedula*. *C. fusco-nigricans*, *occipite incano*, *fronte alis caudaque nigris*. *Lath. Ind. orn.* 154. *id. Syn.* i. 378. *id. Sup.* i. 78.
Chouca, *Chouchette*, ou *Chouette*. *Belon av.* 286.
Gracculus, seu *monedula*. *Gesner av.* 521.
Aldr. av. i. 387.
Wil. orn. 125.
Raii Syn. av. 40.
Le Choucas. *Brisson av.* 24.
Hist. d'oïs. iii. 69. *Pl. Enl.* 523.
Scopoli, No. 38.
Mulacchia nera. *Zinn.* 70.
Corvus Monedula. *Gm. Lin.* 367.
Kaja. *Faun. Suec. sp.* 89.
Danish Alike. *Norr.* Kaac, Kaye, Raun Kaate, Raage.
Br. 31.
Tagerl, *Dohle*, *Tschockerl*. *Kram.* 334.
Graue-Dohle. *Frisch*, i. 67.
Br. Zool. 78. *Arct. Zool.* i. 294.

DESCRIP-
TION.

THE jack-daw weighs nine ounces: the length is thirteen inches; the breadth twenty-eight. The head is large in proportion to its body,

which Mr. *Willughby* says argues him to be ingenious and crafty; the irides are white; the forehead is black; the hind part of the head a fine light grey; the breast and belly of dusky hue, inclining to ash-color; the rest of the plumage is black, slightly glossed with blue; the feet and bill black; the claws very strong, and hooked. It is a docile loquacious bird.

Jack-daws breed in steeples, old castles, and in high rocks; laying five or six eggs. I have known them sometimes to breed in hollow trees near a rookery, and join those birds in their foraging parties. In some parts of *Hampshire* they make their nests in rabbit holes: they also build in the interstices between the upright and transome stones of *Stone-Henge*; a proof of the prodigious height of that stupendous antiquity, for their nests are placed beyond the reach of the shepherd-boys, who are always idling about the spot. [Their nests are awkwardly composed of a quantity of dry sticks, thickly lined with wool, hair, &c.: they lay five or six eggs somewhat like those of the Magpie, but rather thicker, and the spots larger and more distinct. When they can, they build as contiguous to each other as Rooks do, and agree in society much better.] They are gregarious birds; and feed on insects, grain, and seeds.

They migrate from *Italy* in *September*, but are not frequently seen there.

[The Jack-daw is a very common bird at *Athens*, where it inhabits the rocks of the *Acropolis*. ED.]

9. NUT-
CRACKER.

- Corvus caryocatactes*. *C. fuscus* *Hist. d'oïis*. iii. 122. *Pl. Enl.*
albo punctatus, *alis caudaque* 50.
nigris, *rectricibus apice albis*, *Notwecka*, *Notkraka*. *Faun.*
intermediis apice detritis. *Suec. sp.* 19.
Lath. Ind. orn. 164. *id. Syn.* *Tannen-Heher* (Pine-Jay)
i. 400. *id. Sup.* i. 82. *Frisch*, i. 56.
Caryocatactes. *Wil. orn.* 132. *Edw.* 240.
Raii Syn. av. 42. *Danis Noddekrige.* *Norvegis*
Nucifraga, *le Casse-noix.* *Bris-* *Not-kraake.* *Brunnich*, 34.
son av. ii. 59. *Tab.* 5. *Br. Zool.* 4to. *App.* 531.
Corvus Caryocatactes. *Gm. Lin.* *Arct. Zool.* i. 294.
 370.

THE specimen we took our description from, is the only one we ever heard was shot in these kingdoms; it was killed near *Mostyn, Flintshire, October 5, 1753.*

DESCRIP-
TION.

It was somewhat less than the jackdaw: the bill strait, strong, and black: the color of the whole head and neck, breast and body, was a rusty brown; the crown of the head and the rump were plain; the other parts marked with triangular white spots; the wings black; the coverts spotted in the same manner as the body;



G. Edwards pinxit.

the tail rounded at the end, black tip with white; the vent-feathers white; the legs dusky.

This bird is also found in most parts of *Europe*. We received a specimen from *Denmark*, by means of Mr. *Brunnich*, author of the *Ornithologia Borealis*, a gentleman to whose friendship we owe a numerous collection of the curiosities of his country.

It feeds on nuts, from whence the name.

GENUS V. ROLLER.

BILL strait, bending a little towards the end, edges cultrated, bare of feathers at the base.

NOSTRILS narrow, naked.

TONGUE cartilaginous, cloven.

1. GARRULOUS. *Coracias garrula*. *C. cærulea*, Spransk Kraka, Blakraka, Al-lekraka. *Faun. Suec. sp.* 94. *Lath. Ind. orn.* 168. *id. Syn.* i. *Edw.* 109. 406. *id. Sup.* i. 85. The Shagarag. *Shaw's Travels*, 252. Roller. *Wil. orn.* 131. *Garrulus argentoratensis*. *Raii Syn. av.* 41. Ellekrage. *Brunnich*, 35. Birk-Heker; Blaue-Racke, *Galgulus*, le Rollier. *Brisson Frisch*, i. 57. *av.* ii. 64. *Tab.* 5. *Hist. d'ois.* *Br. Zool.* 4to. *App.* 530. iii. 135. *Pl. Enl.* 486. *Arct. Zool.* i. 279. *Coracias Garrula*. *Gm. Lin.* 378.

OF these birds we have heard of only two being seen at large in our island; one of which was shot near *Helston-bridge, Cornwall*, and an account of it transmitted to us by the Reverend Doctor *William Borlase*.* They are frequent

* In the month of *May* 1811, *Sir Thomas Gooch's* keeper shot a female Roller near *Benacre*, in *Suffolk*, on the same spot where he had killed the male four years since; the ground they frequented was a coarse sort of heath and fen intermixed. ED.



Painted by

The Roller



in most parts of *Europe*, and we have received them from *Denmark*.

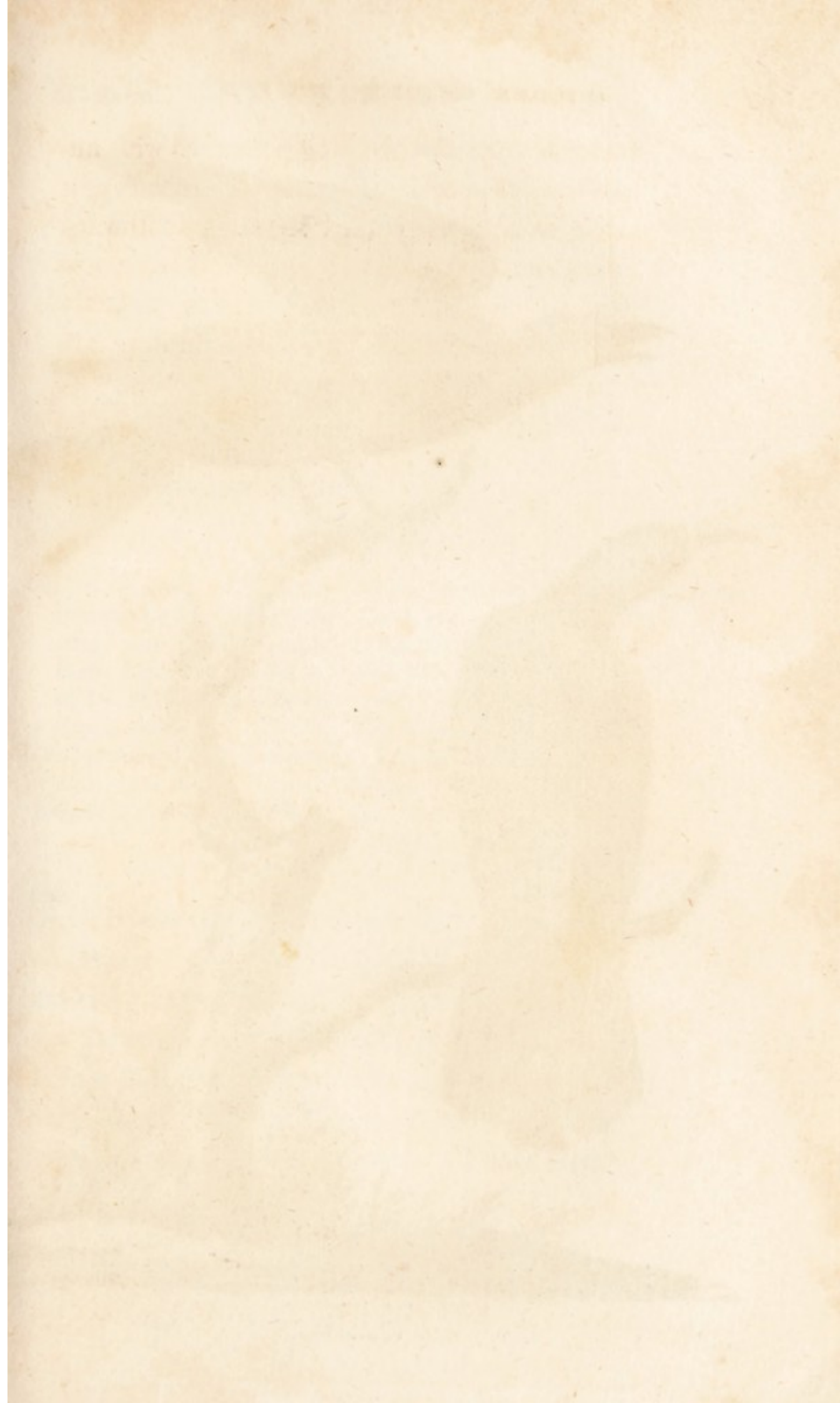
In size it is equal to a jay. The bill is black, strait, and hooked at the point; the base beset with bristles : the space about the eyes is bare, and naked ; behind each ear is also another bare spot, or protuberance; the head, neck, breast, and belly, are of a light bluish green; the back, and feathers of the wings next to it, are of a reddish brown; the coverts on the ridge of the wings are of a rich blue; beneath them of a pale green; the upper part and tips of the quill feathers are dusky; the lower parts of a fine deep blue; the rump is of the same color. The tail consists of twelve feathers, of which the outmost on each side are considerably longer than the rest, are of a light blue, and tipt with black; beneath that a spot of deep blue; as is the case with such part of the quill-feathers that are black above: the other feathers of the tail are of a dull green. The legs short, and of a dirty yellow.

It is remarkable for making a chattering noise, from which it is by some called *Garrulus*.

“ The Garrulous Roller is so common in *Sicily* and *Malta*, that it is sold in the poulterers’ shops for the table, and is said to have the taste of a turtle dove. It builds chiefly in birch

DESCRIP-
TION.

trees, and lays five green eggs marked with numerous dark specks ; sometimes it forms its nest in the holes of old oaks. Migrates southward in autumn, and is found during the winter in *Barbary*, and as far as *Senegal*. Is probably an inhabitant of *India*, as we see it in drawings from thence." J. L.



GOLDEN ORIOLE M. & F.



GENUS VI. ORIOLE.

BILL strait conic, sharp pointed, cultrated, upper mandible rather longer and slightly notched at the end.

TONGUE sharp and divided.

- | | |
|---|---|
| Oriolus Galbula. O. luteus, | Oriolus. <i>Gesner</i> av. 713. <i>Aldr.</i> 1. GOLDEN. |
| loris artubusque nigris, rectri- | av. i. 418. |
| cibus exterioribus postice | Le Lorient. <i>Brisson</i> av. ii. 320. |
| flavis. <i>Lath. Ind. orn.</i> 186. <i>id.</i> | <i>Hist. d'ois.</i> iii. 284. <i>Pl. Enl.</i> |
| <i>Syn.</i> ii. 249. <i>id.</i> <i>Sup.</i> i. 89. <i>id.</i> | 26. |
| <i>Sup.</i> ii. 126. | The Witwal. <i>Wil. orn.</i> 198. |
| Oriolus Galbula. <i>Gm. Lin.</i> 382. | <i>Raii Syn.</i> av. 68. |
| <i>Faun. Suec. No.</i> 95. | Golden Thrush. <i>Edw.</i> 185. |
| <i>Scopoli, No.</i> 45 <i>Kramer,</i> 360. | <i>Br. Zool.</i> 4to. <i>App.</i> 532. |
| | <i>Arct. Zool.</i> ii. 26. |

THIS beautiful bird is common in several parts of *Europe*; where it inhabits the woods, and hangs its nest very artificially between the slender branches on the summits of antient oaks. It lays four or five dirty white eggs, spotted with dark brown chiefly at the larger end. Its note is loud, and resembles its name. I have heard

of only one being shot in *Great Britain*, and that in *South Wales*.*

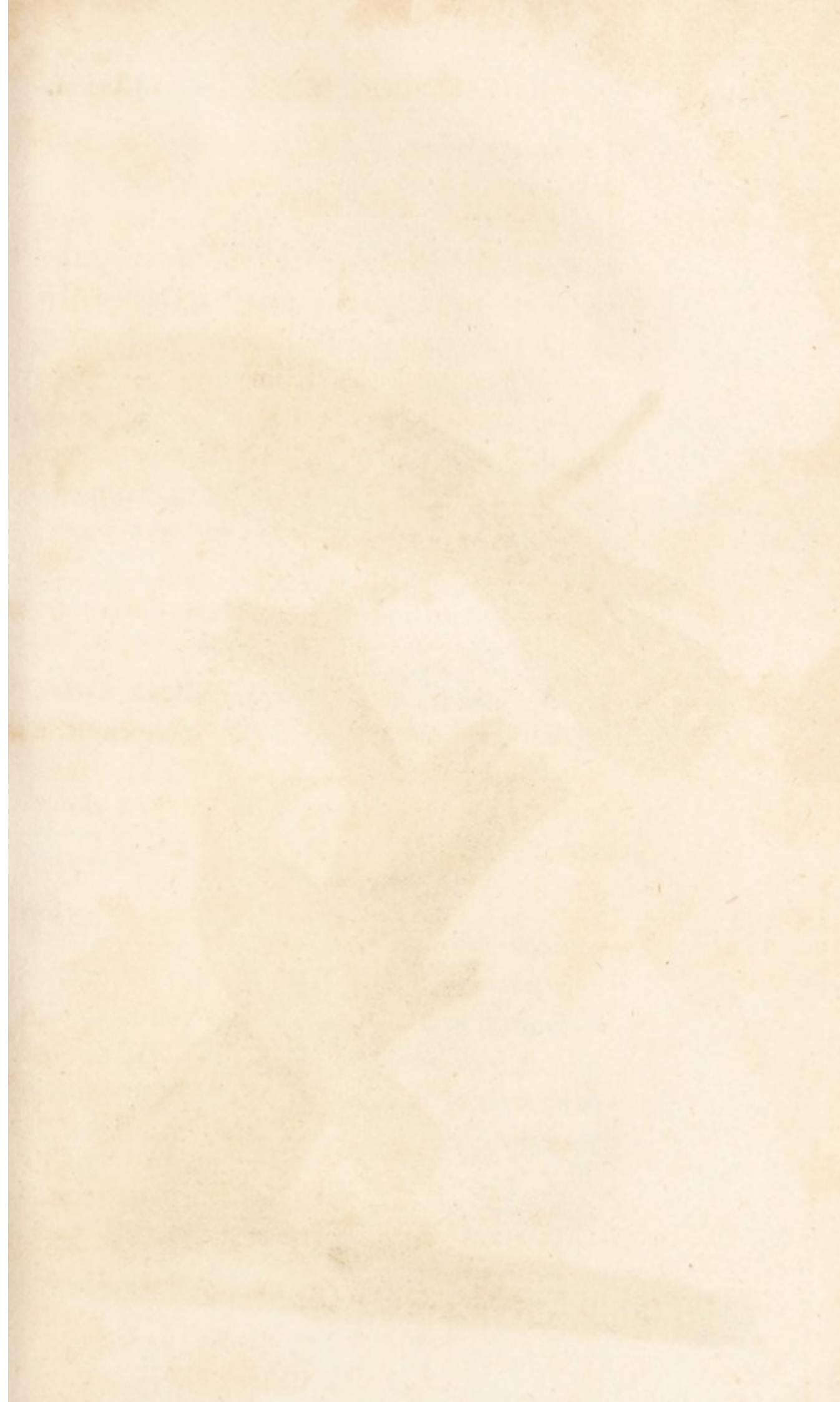
DESCRIP-
TION.

It is of the size of a thrush. The head and whole body of the male is of a rich yellow; the bill red; from that to the eye a black line; the wings black, marked with a bar of yellow; the ends of the feathers of the same color; the two middle feathers of the tail black; the rest black, with the ends of a fine yellow: the legs dusky. The body of the female is of a dull green: the wings dusky; the tail of a dirty green; the ends of the exterior feathers whitish.

[This species visits *Greece* about the seventeenth of *April*. ED.]

“ At *Naples* it is exposed for sale in the market as food. Is common in *India*, and known there under the name of *Pilluck*, or *Peeluck*. Drawings of both sexes were sent from *Oude* to Lord *Valentia*. J. L.”

* The editor is informed by *David Davy*, esq. that one has been killed near *Saxmundham* in *Suffolk*.



FEMALE CUCKOO



WRYNECK. P. 312

GENUS VII. CUCKOO.

BILL a little arched, roundish.

TONGUE short, horny at the end, entire.

FEET climbing.

- | | | |
|---|--|------------|
| Cuculus canorus. C. cinereus, | Le Coucou. <i>Brisson av.</i> 105. | 1. COMMON. |
| subtus albidus fusco transver- | <i>Hist. d'ois.</i> vi. 305. <i>Pl. Enl.</i> | |
| sim striatus, cauda rotundata | 811. | |
| nigricante albo punctata. <i>Lath.</i> | Cuculus canorus. <i>Gm. Lin.</i> | |
| <i>Ind. orn.</i> 207. <i>id. Syn.</i> ii. | 409. | |
| 509. <i>id. Sup.</i> i. 98. <i>id. Sup.</i> | Gjok. <i>Faun. Suec. sp.</i> 96. | |
| ii. 133. | Danish Gjoeg v. Kuk. <i>Norv.</i> | |
| Le Coqu. <i>Belon av.</i> 132. | Gouk. <i>Br.</i> 36. | |
| Cuculus. <i>Gesner av.</i> 362. | Kuckuck. <i>Frisch,</i> i. 40, 41, | |
| <i>Aldr. av.</i> i. 20. | 42. | |
| Cuculo. <i>Olin</i> 38. | Kuctuct. <i>Kram.</i> 337. | |
| <i>Wil. orn.</i> 97. | Kukautza. <i>Scopoli.</i> No. 48. | |
| <i>Raii syn. av.</i> 23. | <i>Br. Zool.</i> 80. plate G. G. 1. | |
| <i>Jenner in Phil. Tr.</i> 1788. 219. | <i>Arct. Zool.</i> i. 312. | |

THIS singular bird appears in our country early in the spring, and makes the shortest stay with us of any bird of passage; it is compelled here, as Mr. *Stillingfleet* observes, by that constitution of the air which causes the fig-tree to put forth its fruit.* From the coincidence of

* *Calendar of Flora.* A new edition of *Stillingfleet's*
VOL. I.

the first appearance of the summer birds of passage, and the leafing and fruiting of certain plants, this ingenious writer would establish a natural calendar in our rural œconomy; to instruct us in the time of sowing our most useful seeds, or of doing such work as depends on a certain temperament of the air. As the fallibility of human calendars need not be insisted upon, we must recommend to our countrymen some attention to these feathered guides, who come heaven-taught, and point out the true commencement of the season;* their food being the insects of those seasons they continue with us.

It is very probable, that these birds, or at least a part of them, do not entirely quit this island during winter, but that they seek shelter in hollow trees, and lie torpid, unless animated by unusually warm weather. I have two evidences of their being heard to sing as early as *February*; one was in the latter end of that month in 1771, the other on the fourth in 1769: the weather in the last was uncommonly warm, but after that they were heard no more, chilled again as I suppose into torpidity. There is an instance of

works, preceded by an interesting literary life of the amiable writer, has recently been published by the reverend Archdeacon Cox. ED.

* In *Sweden*, which is a much colder climate than our own, the cuckoo does not appear so early by a month.

their being heard in the summer time to sing at midnight. There is a remarkable coincidence between their song, and the season of the mackerel's continuance in full roe; that is from about the middle of *April*, to the latter end of *June*.

The cuckoo is silent for some little time after his arrival; his note is a call to love, and used only by the male,* who sits perched generally on some dead tree, or bare bough, and repeats his song, which he loses as soon as the amorous season is over. In a trap, which we placed on a tree frequented by cuckoos, we caught not fewer than five male birds in one season. His note is so uniform, that his name in all languages seems to have been derived from it; and in all other countries it is used in the same reproachful sense.

The plain song *cuckoo* grey,
Whose note full many a man doth mark,
And dares not answer nay.

Shakespeare.

* The female never emits the well known sound which gives name to the species, but often, particularly when she hears the male, makes a noise not unlike the Dabchick, which attracts the other sex, who pursue her and cry more vehemently in their flight, at which time the males frequently fight near the tree in which she may happen to alight. ED.

The reproach seems to arise from this bird making use of the bed or nest of another to deposit its eggs in ;* leaving the care of its young to a wrong parent ; but *Juvenal* with more justice gives the infamy to the bird in whose nest the supposititious eggs were layed,

Tu tibi tunc curruca places.†

A water-wagtail, a yellow hammer, or hedge-sparrow,‡ is generally the nurse of the young cuckoos ; who, if they happen to be hatched at the same time with the genuine offspring, quickly destroy them, by ejecting them from the nest. This want in the cuckoo of the common attention other birds have to their young, seems to arise from some defect in its make, which disables it from incubation ; but what that is, we confess ourselves ignorant, referring the inquiry to some skilful anatomist. A friend tells me that the stomach is uncommonly large, even so as to reach almost to the vent: may not the

* The eggs are rather bigger than those of the hedge-sparrow, elongated in shape, of a pale greenish grey, mottled thickly with purplish ash-color. J. L.

† *Sat. VI. 275.*

‡ I have been eye-witness to two instances : when a boy I saw a young cuckoo taken out of the nest of a hedge-sparrow : and in 1773 took another out of that of a yellow hammer : the old yellow hammer seemed as anxious about the loss as if it had been its proper offspring.

pressure of that in a sitting posture, prevent incubation?*

This bird has been ridiculously believed to change into a hawk, and to devour its nurse on quitting the nest, whence the *French* proverb *ingrat comme un coucou*. But it is not carnivorous, feeding only on worms and insects: it grows very fat, and is said to be as good eating as a land rail. The *French* and *Italians* eat them to this day. The *Romans* admired them greatly as a food; *Pliny*† says, that there is no bird to compare with them for delicacy.

* Doctor *Jenner* in his valuable observations on the Cuckoo, published in the *Philosophical Transactions* for 1788, controverts this opinion, and attributes its not performing the office of incubation, to the short residence it is allowed to make in the country, where it is destined to propagate its species. He explains most satisfactorily, the wonderful manner in which the young cuckoo dislodges its rightful owners from the nest. This is effected within a day or two after it is hatched, when the young bird will crawl backwards with the assistance of its wings, up the side of the nest with a young hedge-sparrow, or an egg, if one remains unhatched, on its back, and getting quite to the edge throw it over, then tumble again into the nest, and after a little time renew its efforts till every young bird and egg has met with the same fate. The whole of Doctor *Jenner's* remarks on this subject are extremely worthy of perusal; and we have to regret, that he who has benefited his fellow creatures in the most eminent degree by the introduction of vaccination, has not had the leisure to extend his inquiries farther into the natural history of his country. ED.

† *Lib. X. c. 9.*

DESCRIP-
TION.

The weight of the cuckoo is a little more than five ounces; the length is fourteen inches; the breadth twenty-five. The bill black, very strong, a little incurvated, and about two-thirds of an inch long; the irides are yellow. The head, hind part of the neck, the coverts of the wings, and the rump, are of a dove color; darker on the head and paler on the rump. The throat and upper part of the neck are of a pale grey; the breast and belly white, crossed elegantly with undulated lines of black; the vent feathers are of a buff color, marked with a few dusky spots. The wings are very long, reaching within an inch and a half of the end of the tail; the first quill feather is three inches shorter than the others; all are dusky, and their inner webs are barred with large oval white spots. The tail consists of ten feathers of unequal lengths like those of the butcher bird: the two middle are black tipped with white; the others are marked with white spots on each side their shafts. The legs are short, and the toes disposed two backwards and two forwards like the woodpecker, though it is never observed to run up the sides of trees. The female differs in some respects; the neck before and behind is of a brownish red; the tail barred with the same color and black, and spotted on each side the shaft with

FEMALE.

white. [The cuckoo when very young is a black looking ugly animal resembling at first sight a young toad or bat; in this state when you approach the nest, it will raise its crest and feathers, and peck or strike with the wings at the hand which offers to lay hold upon it, elevating itself on the nest, and when fledged, will make a shrieking noise; but this disposition soon leaves it, when it will take food and be easily tamed. ED.]

At a more advanced period the young birds are brown mixed with ferruginous and black, and in that state have been described by some authors as old ones.

The cuckoo is scarce in *Italy*; it arrives there in *April*, and disappears with the goat-suckers after the dog-days.

GENUS VIII. WRYNECK.

BILL weak, slightly incurvated.

NOSTRILS bare, sunk.

TONGUE long, slender, armed at the point.

TAIL of ten flexible feathers.

FEET climbing.

1. WRY-
NECK.

Yunx Torquilla. Y. grisea fusco nigricanteque varia, abdomine rufescente—albo maculis nigricantibus, rectricibus maculis striis fasciisque nigris undulatis. *Lath. Ind. orn.* 223. *id. Syn.* ii. 548. *t.* 24. *id. Sup.* i. 103.

Le Tercou, Torcou, ou Turcot. *Belon av.* 306.

Jynx. *Gesner av.* 573.

Aldr. av. i. 421.

The Wryneck. *Wil. orn.* 138. *Raii Syn. av.* 44.

Le Torcol, Torquilla. *Brisson av.* iv. 4. *Tab.* 1. *fig.* 1.

Hist. d'oï. vii. 84. *t.* 3. *Pl. Enl.* 698.

Collotorto, Verticella. *Zinn.* 72.

The Emmet Hunter. *Charlton ex.* 93.

Jynx Torquilla. *Gm. Lin.* 423. *Gjoktyta. Faun. Suec. sp.* 97.

Bende-Hals. *Br.* 37.

Natterwindl, Wendhalss. *Kram.* 336.

Dreh-Hals. *Frisch,* i. 38.

Ishudesch. *Scopoli, No.* 50.

Br. Zool. 80. plate F. *Arct. Zool.* i. 313.

DESCRIP-
TION.

NATURE, by the elegance of its penciling the colors of this bird, hath made ample amends for their want of splendor. Its plumage is marked with the plainest kinds. A list of black and ferruginous strokes divides the top of the head

and back. The sides of the head and neck are ash colored, beautifully traversed with fine lines of black and reddish brown; the quill feathers are dusky, but each web is marked with rust colored spots. The chin and breast are of a light yellowish brown, adorned with sharp pointed bars of black. The tail consists of ten feathers, broad at their ends and weak; of a pale ash color, powdered with black and red, and marked with four equidistant bars of black. The tongue is long and cylindric, for the same use as that of the woodpecker. The toes are also disposed the same way. The bill is short, weak, and a little arcuate. The irides are of a yellowish hazel.

The Wryneck we believe to be a bird of passage, appearing here in the spring before the cuckoo. The *Welsh* consider it as the fore-runner or servant of that bird, and call it *Gwŷs y gŷg*, or the cuckoo's attendant: the *Swedes* regard it in the same light.*

The food of this species is insects, but chiefly ants, for on examination we found the stomach of one filled with their remains. As the tongue of this bird, like that of the Ant-bear or *Tamandria*, is of an enormous length; it possibly

* *Jynx* hieme non apparet, verè autem remigrans, cuculi, post quatuordecem dies, adventum ruricolis annuntiat. *Amæn. acad.* iv. 584.

not only makes use of it to pick those insects out of their retreat, but like that quadruped may lay it across their path, and when covered with ants draw it into its mouth.

Its weight is one ounce and a quarter: the length seven inches; the breadth eleven. It takes its name from a manner it has of turning its head back to the shoulders, especially when terrified; it has also the faculty of erecting the feathers of the head like those of the jay. Its note is like that of the Kestrel, a quick repeated squeak. Its eggs are white, and have so thin a shell that the yolk may be seen through it. It builds in the hollows of trees, making its nest of dry grass, in which we have counted nine young.

[In *Gloucestershire* it is called the *Cuckoo Maid*, and *Cuckoo Fool*, from its attendance on that bird, and from its being considered as the most foolish of the feathered tribe; also the *Snake bird*, from its resemblance to that reptile in the form, color, and singular contortion of the neck in various ways, and particularly when the body is held in the hand, and the head at liberty. ED.]

GENUS IX. WOODPECKER.

BILL straight, strong, angular.

NOSTRILS covered with bristles.

TONGUE very long, slender, and armed at the end with a sharp bony point.

TAIL of ten stiff feathers.

FEET climbing.

- Picus viridis*. *P. viridis*, vertice
 coccineo. *Lath. Ind. orn.* 234. *Hist. d'oïis*. vii. 7. t. i. *Pl.* 1. GREEN.
Enl. 371. 879.
id. Syn. ii. 577. *id. Sup.* i. 110. Wedknar, Gronspik, Grong-
 joling. *Faun. Suec. sp.* 99.
 Le Pic mart, Pic verd, Pic Hasselquist itin. *Ter. Sanct.*
 jaulne. *Belon av.* 299. 291.
Gesner av. 710. *Girald. Cambrens.* 191.
 Pico verde. *Aldr. av.* i. 416. *Danish & Norv.* Groenspet.
 Green Woodpecker, or Wood- *Br.* 39.
 spite; called also the Rain Grunspecht. *Kram.* 334.
 Fowl, High Hoe, and Hew- *Frisch*, i. 35.
 hole. *Wil. orn.* 135. Deteu, Detela. *Scopoli.* No.
Raii Syn. av. 42. 52.
Picus viridis. *Gm. Lin.* 433. *Br. Zool.* 78. plate E. *Arct.*
 Le Pic verd. *Brisson av.* iv. 9. *Zool.* i. 325.

THE wisdom of Providence in the admirable contrivance of the fitness of the parts of animals to their respective nature, cannot be better illustrated than from this genus; which we shall

give from the observations of our illustrious countryman Mr. *Ray*.*

These birds feed entirely on insects, and their principal action is that of climbing up and down the bodies or boughs of trees ; for the first purpose they are provided with a long slender tongue, armed with a sharp bony end barbed on each side, which by the means of a curious apparatus of muscles† they can exert at pleasure, darting it to a great length into the clefts of the bark, transfixing and drawing out the insects that lurk there. They are reckoned great enemies to bees according to *Frisch*.

NEST.

They make their nests in the hollows of trees : the entrance to which is as exact a circle, as if it had been formed by the assistance of a compass. They will work their way for the space of nearly two feet, and lay their eggs, in the chamber at the extremity on the bare wood. The number of their eggs, which are of a beautiful transparent white, amounts to seven at lest, for I have seen so many of their young taken out of a single nest ; this was on *June 12, 1794*. They will, before they can fly, appear out of their hollows, and climb up and down the

* *Ray* on the Creation, p. 143.

† *Phil. Trans. Martin's abridg.* V. p. 55. plate 2.

body of the tree. In order, therefore, to force their way to those cavities, their bills are formed strong, very hard, and wedge-like at the end; Dr. *Derham* observes, that a neat ridge runs along the top, as if an artist had designed it for strength and beauty; it has not the power to penetrate a sound tree: their perforation of any tree is a warning to the owner to throw it down.

Their legs are short, but strong; their thighs very muscular; their toes disposed, two backwards, two forward; the feathers of the tail are very stiff, sharp pointed and bending downwards: the three first circumstances admirably concur to enable them to run up and down the sides of trees with great security; and the strength of the tail supports them firmly when they continue long in one place, either where they find plenty of food, or while they are forming an access to the interior part of the timber. This form of the tail makes their flight very awkward, as it inclines their body down, and forces them to fly with short and frequent jerks when they would ascend, or even keep in a line. This species feeds oftener on the ground than any other of the genus.

This kind weighs six ounces and a half: its length is thirteen inches; the breadth twenty

DESCRIP-
TION.

and a half. The bill is dusky, triangular, and nearly two inches long; the crown of the head is crimson, spotted with black. The eyes are surrounded with black, beneath which (in the males only) is a rich crimson mark. The back, neck, and lesser coverts of the wings, are green; the rump of a pale yellow; the greater quill feathers are dusky, spotted on each side with white. The tail consists of ten stiff feathers, whose ends are generally broken as the bird rests on them in climbing; their tips are black; the rest of each is alternately barred with dusky and deep green. The whole under part of the body is of a very pale green; and the thighs and vent marked with dusky lines. The legs and feet are of a cinereous green.

[This and the following species are confined to the wooded districts of *Greece*, and consequently are never seen on the eastern side of the country which is bare of trees. ED.]

- Picus major. P. albo nigroque
varius, crisso occipiteque ni-
gris. *Lath. Ind. orn.* 228. *id.*
Syn. ii. 564. *id. Sup.* i. 107.
L'epeiche, Cul rouge, Pic
rouge. *Belon av.* 300.
Picus varius, seu albus. *Gesner*
av. 709.
Greater spotted Woodpecker, or
Witwal. *Wil. orn.* 137.
Raii syn. av. 43.
Picchio. *Zinan.* 73.
Le grand Pic varié. *Brisson av.*
iv. 34. *Hist. d'ois.* vii. 57.
Pl. Enl. 196. *m.* 595. *fem.*
Picus major. *Gm. Lin.* 436.
Gyllenrenna. *Faun. Suec. sp.*
100.
Hakke-speet. *Brunnich,* 40.
Grosses Baumhackl. *Kram.*
336.
Bunt Specht. *Frisch,* i. 36.
Kobilar. *Scopoli,* No. 53.
Br. Zool. 79. plate E. *Arct.*
Zool. i. 319?
2. GREAT
SPOTTED.

THIS species weighs two ounces three quar-
ters: the length is nine inches; the breadth
sixteen. The bill is one inch and a quarter
long, of a black horn color. The irides are red;
the forehead is of a pale buff color; the
crown of the head a glossy black, the hind part
marked with a rich deep crimson spot; the cheeks
white, bounded beneath by a black line which
passes from the corner of the mouth, and sur-
rounds the hind part of the head. The neck is
encircled with a black collar; the throat and
breast are of a yellowish white; the vent fea-
thers of a fine light crimson. The back, rump,
and coverts of the tail, and lesser coverts of the

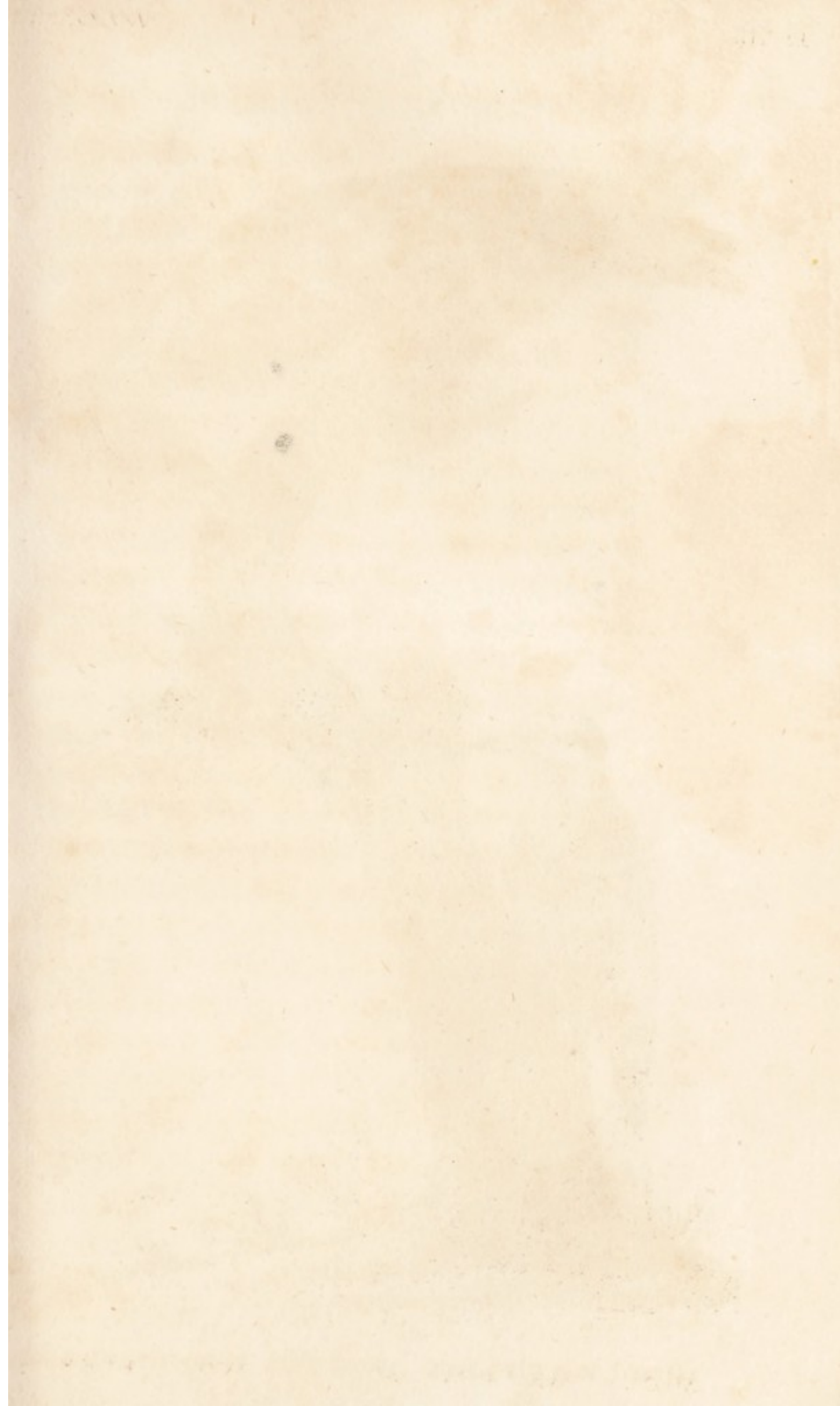
DESCRIP-
TION.

wings are black; the scapular feathers and coverts adjoining to them are white; the quill feathers black, elegantly marked on each web with round white spots. The four middle feathers of the tail are black, the next tip with dirty yellow; the bottoms of the two outmost black, the upper parts a dirty white; the exterior feather marked on each web with two black spots; the next with two on the inner web, and only one on the other. The legs are of a lead color. The female wants that beautiful crimson spot on the head; in other respects the colors of both agree. This species is much more uncommon than the preceding; and keeps altogether in the woods.

FEMALE.

All the species continue the whole year in *Italy*.

“Is found in *France, Germany* and other parts of *Europe*, and if the same as is mentioned by *Hasselquist*, frequents the higher parts of *Asia*. Among the drawings of *Indian* birds communicated by Doctor *Buchanan*, is one of the middle spotted woodpecker, with the whole crown crimson; therefore if this be allowed to be an immature bird, it will ascertain this species to be a native of *Calcutta* and other parts of *India*. It makes its nest in the holes





MIDDLE AND LEST SPOTTED WOODPECKERS.

of decayed trees, and lays five pure white and glossy eggs." J. L.

[This bird in *Gloucestershire* is known by the name of the *French Pie*. It has a method of obtaining its food, which, with the exception of the following species, is different to others in this country; by putting the point of its bill into a crack or the limb of a large tree, and making a quick tremulous motion with its head, it occasions a sound as if the tree was splitting, which alarms the insects and induces them to quit their recesses; this, during the spring it repeats in the same spot every minute or two for half an hour, and will then fly to another tree, generally fixing itself near the top, for the same purpose. The noise may be distinctly heard for half a mile. This bird will also keep its head in very quick motion, while moving about the tree for food, jarring the bark, and shaking it at the time it is seeking for insects. ED.]

Picus medius. *P. albo nigroque* *Gm. Lin.* 436.

A. MIDDLE.

varius, *crisso pileoque ru-* *Faun. Suec. sp.* 82.

bris. Lath. Ind. orn. 229. *id. Scopoli*, No. 54.

Syn. ii. 565. *id. Sup.* i. 107. *Le Pic varié. Brisson av.* iv.

id. Sup. ii. 140. 38. *Pl. Enl.* 611.

THIS agrees with the preceding in colors and size, excepting that the crown of the head

in this is of a rich crimson ; the crown of the head in the male of the former is black ; and the crimson is in the form of a bar on the hind part.

Birds thus marked have been shot in *Lancashire*, and other parts of *England* ; but I am doubtful whether they are varieties, or distinct species.*

3. LEST
SPOTTED.

- Picus minor*. *P. albo nigroque varius*, vertice rubro, crisso testaceo. *Lath. Ind. orn.* 229. *id. Syn.* ii. 566. *id. Sup.* i. 107. *Gesner av.* 709. *Aldr. av.* i. 416. Lesser spotted Woodpecker, or Hickwall. *Wil. orn.* 138. *Raii Syn. av.* 43. *Picus minor. Gm. Lin.* 437. *Faun. Suec.* 192. *Le petit Pic varié. Brisson av.* iv. 41. *Hist. d'ois.* vii. 62. *Pl. Enl.* 598. *Scopoli. No.* 55. *Hasselquist itin.* 242. *Kleiner Bunt-Specht. Frisch,* i. 37. *Kleiner Baumhackl. Kram.* 336. *Br. Zool.* 79. plate E. *Arct. Zool.* i. 326.

DESCRIP-
TION.

THIS species is the lest of the genus, scarcely weighing an ounce ; the length is six inches ; the breadth eleven. The forehead is of a dirty white ; the crown of the head (in the male) of a beautiful crimson ; the cheeks and sides of the

* It seems now ascertained, that they are merely the young of the greater spotted woodpecker, the head of which, in its first plumage, is entirely of a crimson color. When they moult the crown of the head in both sexes becomes black, but the cock afterwards obtains the beautiful bar of crimson at the poll, which is wanting in the hen. ED.

neck are white, bounded by a bed of black beneath the former. The hind part of the head and neck, and the coverts of the wings are black; the back is barred with black and white; the scapulars and quill feathers spotted with black and white; the four middle feathers of the tail are black; the others varied with black and white; the breast and belly are of a dirty white; the crown of the head (in the female) is white. The feet are of a lead color.

It has all the characters and actions of the greater kind, but is not so often met with.

[This is called in *Gloucestershire* the *Crank bird*. Its habits are nearly the same as the preceding species, but is more active, lively, and very industrious about the bark of trees in its search for insects. The tremulous motion of its head is more frequent, but the jarring noise is not so loud, though it may be heard at a considerable distance, and the species easily distinguished by the difference of the sound. It builds in holes of trees, and like others of the genus makes no nest, and lays white eggs. ED.]

“Is not plentiful in this kingdom. It frequents deep woods. Is a native of *Ceylon*.”

J. L.

4. HAIRY. *Picus villosus*. *P. albo nigroque* *P. villosus*. *Gm. Lin.* 435.
varius, subtus albus, dorso *Pic chevelu de Virginie. Bris-*
longitudinaliter subvillosa, *son* iv. 48. *Hist. d'oïs.* vii.
rectricibus externis toto albis. 74. *Pl. Enl.* 754.
Lath. Ind. orn. 232. *id. Syn.* *Arct. Zool.* i. 320.
 ii. 572. *Sup.* i. 108.

DESCRIP-
TION.

[THE crown of the head is black; the hind part marked with a crimson spot; the cheeks with two lines of white and two of black; the whole under side of the body is of a white color, divided in the middle lengthways, with a line of white unconnected feathers, resembling hairs; the wings are black spotted in rows with white: the two middle feathers of the tail are black, the two outmost entirely white; the rest black marked crossways with white. The female wants the red spot on the head. Its weight is about two ounces; its length nine inches.

We are informed by Dr. *Latham*, that a pair of these birds were shot near *Halifax*, in *Yorkshire*, and they are said not to be uncommon in the north of *England*. ED.]

- Picus martius. P. niger pileo d'ois. vii. 41. Tab. 2. Pl. 5. GREAT
 coccineo. Lath. Ind. orn. 224. Enl. 596. BLACK.
 id. Syn. ii. 552. Sup. i. 104. Raii syn. av. 42. Willughby
 Gm. Lin. 424. 92. t. 21.
 Le pic noir. Brisson iv. 21. Hist. Arct. Zool. i. 324.

[THIS species is also added to the *British Zoology* on the authority of Dr. *Latham*, who says he has been informed it has occasionally been seen in *Devonshire*, and the southern parts of the kingdom.

The length of this woodpecker, is eighteen inches, and its extent twenty-nine. Its whole plumage is of a full black, excepting the head, which is of a rich crimson. In the female, the crimson color is confined to the hind part of the head.

It inhabits the forests of *Germany*, *Switzerland*, and the north from *Petersburg* to *Ochotsk*; does great damage to trees by making deep holes in them to nestle in. Lays two or three white semi-transparent eggs. Feeds on caterpillars and insects, especially ants. ED.]

DESCRIP-
TION.

GENUS X. KINGFISHER.

BILL straight, strong, triangular, sharp pointed.
TONGUE short and pointed.

TOES, three lowest joints of the outmost connected to the middle toe.

1. COMMON. *Alcedo Ispida*. A. brachyura, sub-cristata cœrulea, subtus rufa, loris fulvis, vertice nigro undulato, macula aurium gulaque albis. *Lath. Ind. orn.* 252. *id. Syn.* ii. 626. *id. Sup.* i. 115.
Le Martinet pescheur. Belon av. 218.
Ispida (Isfogel). *Gesner av.* 571. *Aldr. av.* iii. 200.
Olin 39, 40.
Wil. orn. 146.
Raii Syn. av. 48.
- Alcedo Ispida. Gm. Lin.* 448.
Le Martin-pêcheur. Brisson av. iv. 471. *Hist. d'oïs.* vii. 164. *Pl. Enl.* 77.
Piombino, Martino pescatore, Pescatore del re. Zinan 116.
Isfogel. Mus. Fr. ad. 16. *Sco-poli. No.* 64.
Jis-fugl. Brunnich in Ap-pend.
Eisvogel. Frisch, ii. 223.
Meerschwalbe. Kram. 337.
Br. Zool. 82, plate I. *Arct. Zool.* i. 328.

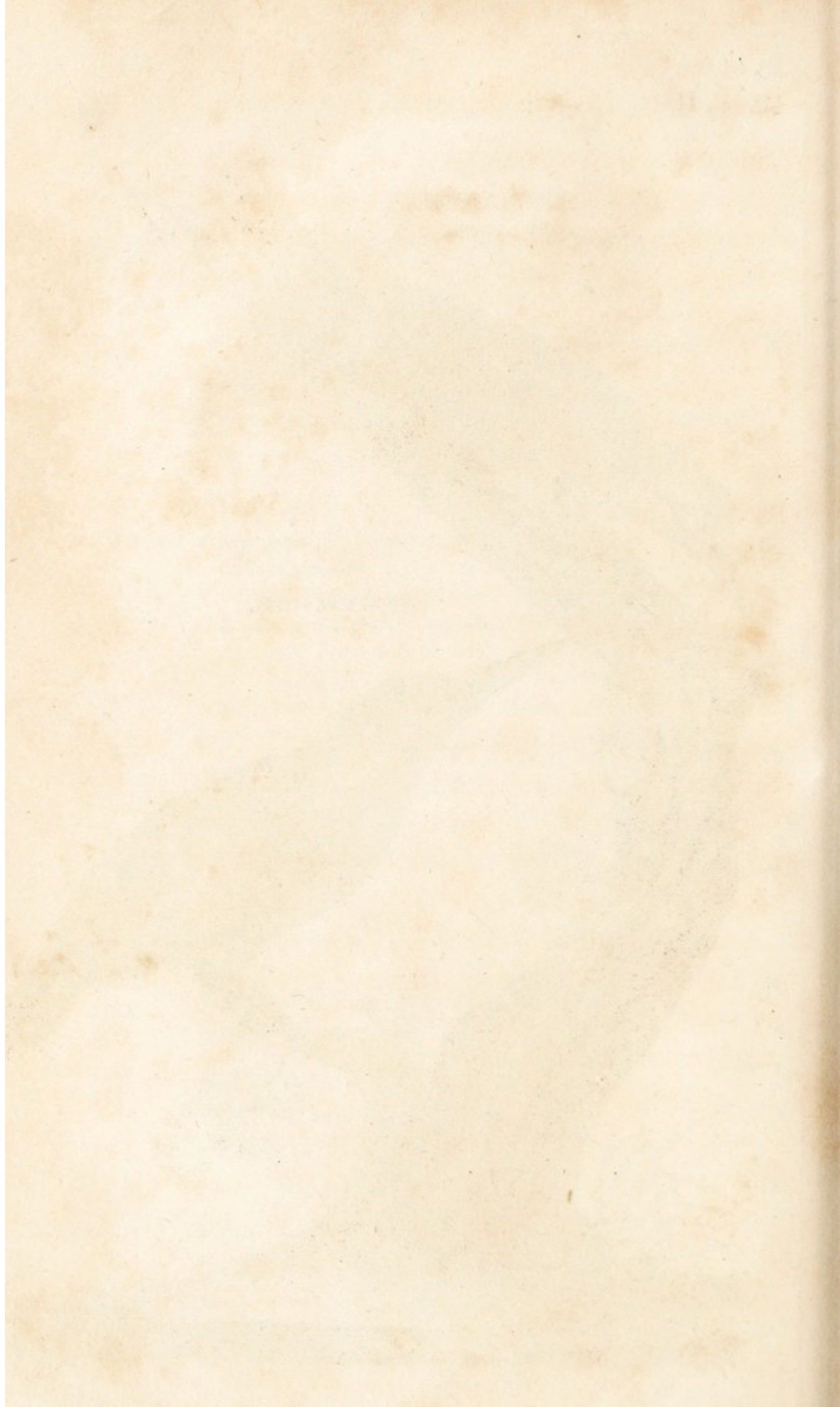
DESCRIP-
TION.

THIS bird weighs an ounce and a quarter : its length is seven inches ; its breadth eleven. Its shape is very clumsy, the head and bill being very large, and the legs disproportionably small ; the bill is two inches long ; the upper mandible black, the lower yellow : the irides are red. The colors of this bird atone for its inelegant form.

NUTHATCH.
(P. 336.)

KINGFISHER.





The crown of the head, and the coverts of the wings are of a deep blackish green, spotted with bright azure; the scapular feathers, and coverts of the tail are also of a most splendid azure; the whole underside of the body is orange colored; a broad mark of the same passes from the bill beyond the eyes; beyond that is a large white spot. The tail is short, and consists of twelve feathers of a rich deep blue: the feet are of a reddish yellow; the inner toe adheres to the middle toe by one joint.

The kingfisher frequents the banks of rivers, and feeds on fish. To compare small things to great, it takes its prey after the manner of the osprey, balancing itself at a certain distance over the water for a considerable time, then darting below the surface, brings the prey up in its bill. While it remains suspended in the air, in a bright day, the plumage exhibits a beautiful variety of the most dazzling and brilliant colors. This striking attitude did not escape the notice of the antients, for *Ibycus*, as quoted by *Athenæus*, styles these birds ἀλκυονες τανυσσιπτεροι*, the *halcyons with expanded wings*. It makes its nest in holes in the sides of the cliffs, which it scoops to the depth of three feet, and in holes

MANNERS.

* P. 388.

in the banks of rivers, chiefly those which before belonged to the water rat; in these the female lays from five to nine eggs,* of a most beautiful semi-transparent white. The nest is very fetid, by reason of the remains of the fish brought to feed the young.

NEST. This species is the *αλκυωναφωνος*, or *mute halcyon* of *Aristotle*,† which he describes with more precision than is usual with that great philosopher. After his description of the bird, follows that of its nest, than which the most inventive of the antients have delivered nothing that appears at first sight more fabulous and extravagant. He relates, that it resembled those concretions that are formed by the seawater; that it resembled the long necked gourd, that it was hollow within, that the entrance was very narrow, so that should it overset the water could not enter; that it resisted any violence from iron, but could be broke with a blow of the hand; and that it was composed of the bones of the *Βελονη* or sea-needle.‡ The nest had medical virtues ascribed to it; and from the bird was called *Halcyoneum*. In

* *Gesner* says he found nine young in one nest.

† *Hist. an.* 892. 1050.

‡ 1050. See also *Ælian*. lib. ix. c. 17. *Plin.* lib. x. c. 32.

a fabulous age every odd substance that was flung ashore received that name; a species of tubular coral, a sponge, a zoophyte, and a miscellaneous concrete having by the antients been dignified with that title from their imaginary origin.* Yet much of this seems to be founded on truth. The form of the nest agrees most exactly with the curious account of it that Count *Zinanni* has favored us with.† The materials which *Aristotle* says it was composed of, are not entirely of his own invention. Whoever has seen the nest of the kingfisher, will observe it strewed with the bones and scales of fish; the fragments of the food of the owner and its young; and those who deny that it is a bird which frequents the sea, must not confine their ideas to our northern shores, but reflect, that birds inhabiting a sheltered place in the more rigorous latitudes, may endure exposed ones in a milder clime. *Aristotle* made his observa-

* *Plin.* lib. xxxii. c. 8. *Diosc.* lib. v. c. 94.

† Nidifica egli nelle ripe degli acquidotti, o de piccoli torrenti vicino al mare, formando però il nido nei siti più alti di dette ripe, acciocchè l'escrescenza delle acque non possa insinuarsi nel di lui foro; e fa egli detto nido incavando internamente il terreno in tondo per la lunghezza di tre piedi, e riducendo il fine di detto foro a foggia di batello, tutto coperto di scaglie di pesci, che restano vagamente intrecciate; ma forse non sono così disposte ad arte, bensì per accidente.

tions in the east, and allows, that the *halcyon* sometimes ascended rivers;* possibly to breed, for we learn from *Zinanni*, that in his soft climate, *Italy*, it breeds in *May*, in banks of streams that are near the sea; and having brought up the first hatch, returns to the same place to lay a second time.

On the foundation laid by the philosopher, succeeding writers formed other tales extremely absurd, and the poets, indulging the powers of imagination, dressed the story in all the robes of romance. This nest was a floating one;

Incubat *halcyone* pendentibus æquore nidis.†

it was therefore necessary to place it in a tranquil sea, and to supply the bird with charms to allay the fury of a turbulent element during the time of its incubation; for it had, at that season, power over the seas and the winds.

Χ' ἀλκυόνες στορεσεῦντι τὰ κύματα, τὴν τε θάλασσαν,
 Τὸν τε νοῖον, τὸν τ' εὖρον, ὃς ἔσχατα φυκία κινεῖ·
 Ἀλκυόνες, γλαυκαῖς Νηρηΐσι ταί τε μάλιστα
 Ορνίθων ἐφίλαθεν. *Theocrit. Idyl. vii. l. 57.*

May *Halcyons* smooth the waves, and calm the seas,
 And the rough south-east sink into a breeze;
Halcyons of all the birds that haunt the main,
 Most lov'd and honor'd by the *Nereid* train.

Fawkes.

* Αναβαίνει δε τε ἐπὶ τῆς ποταμῆς. *Hist. an. 1050.*

† *Ovid. Met. lib. xi.*

These birds were equally favourites with *Thetis* as with the *Nereids*;

Dilectæ Thetidi Halcyones.

Virg. Georg. i. 399.

As if to their influence these deities owed a repose in the midst of the storms of winter, and by their means were secured from those winds which disturbed their submarine retreats, and which agitated even the plants at the bottom of the ocean.

Such are the accounts given by the *Roman* and *Sicilian* poets. *Aristotle* and *Pliny* tell us, that this bird is most common in the seas of *Sicily*; that it sat only a few days, and those in the depth of winter; and during that period the mariner might sail in full security, for which reason they were stiled, *Halcyon days*.*

Perque dies placidos hiberno tempore septem

Incubat *Halcyone* pendentibus æquore nidis :

Tum via tuta maris : ventos custodit, et arcet

Æolus egressu.

Ovid. Met. lib. XI.

Alcyone compress'd,

Seven days sits brooding on her watery nest

A wintry queen; her sire at length is kind,

Calms every storm and hushes every wind. *Dryden.*

* *Arist. hist. an. 541. Plin. lib. x. c. 32. lib. xviii. c. 24.*

Ἀλκυονεῖαι ἡμέραι of the former; and *dies halcyonides* of the latter.

In after times, these words expressed any season of prosperity: these were the *Halcyon days* of the poets, the brief tranquillity, the *septem placidi dies* of human life.

The poets also made it a bird of song: *Virgil* seems to place it in the same rank with the Linnet:

Littoraque *Halcyonem* resonant, et *Acanthida* dumi.

Georg. III. 338.

And *Silius Italicus* celebrates its music, and its floating nest:

Cum sonat *Halcyone* cantu, nidosque natantes

Immotâ gestat sopitis fluctibus undâ.

Lib. XIV. 275.

But we suspect that these writers have transferred to our species the harmony that belongs to the vocal alcedo of the philosopher, καὶ ἡ μὲν φθέγγεται, καθιζάνουσα ἐπὶ τῶν δονάκων,* which was vocal, and perched upon reeds. *Aristotle* says, it is the lest of the two, but that both of them have a cyanean back.† *Belon* labors to prove the vocal alcedo to be the rousserole, or the greater reed sparrow,‡ a bird found in *France*

* *Hist. an.* 892.

† Νῶτον κυανέον, the color of the cyanus, or lapis lazuli.

‡ Le Rousserolle, *Belon av.* 221. Le Roucherolle, *Brisson*

and some other parts of *Europe*, and of a very fine note ; it is true that it is conversant among reeds, like the bird described by *Aristotle*, but as its colors are very plain, and that striking character of the fine blue back is wanting, we cannot assent to the opinion of *Belon*, and rather imagine it to be one of the lost birds of the antients.

Those who think we have said too much on this subject, should consider how incumbent it is on every lover of science, to attempt placing the labors of the antients in a just light ; to clear their works from those errors, which owe their origin to the darkness of the times ; and to evince, that many of their accounts are strictly true ; many founded on truth ; and that others contain a mixture of fable and reality, which certainly merit the trouble of separation. It is much to be lamented that travellers, either on classic or any other ground, have not been more assiduous in noting the zoology of those countries, which the antients have celebrated for their productions : for, from those who have attended to that branch of natural knowledge, we have been able to develop the meaning of the old naturalists, and

av. ii. 218. Greater reed sparrow, *Wil. orn.* 143. *Turdus arundinaceus*, *Lin. syst. sp.* 296. Reed Thrush. *Lath. Syn.* iii. 32.

settle with precision some few of the animals of the antients.

Italy, a country crowded with travellers of all nations, hath not furnished a single writer on classical zoology. The *East* has been more fortunate: *Belon*, the first voyager who made remarks in natural history during his travels, mentions many of the animals of the places he visited, and may be very useful to ascertain those of *Aristotle*, especially as he has given their modern *Greek* names. Our countryman, Dr. *Russel*, enumerates those of *Syria*. Dr. *Hasselquist* has made some additions to the ornithology of *Egypt*: but all these fall short of the merits of that most learned and inquisitive traveller, Dr. *Shaw*; who with unparalleled learning and ingenuity, has left behind him the most satisfactory, and the most beautiful comments on the animals of the antients, particularly those mentioned in HOLY WRIT, or which relate to the *Ægyptian* mythology: such as do honor to our country, and we flatter ourselves will prove incentives to other travellers, to complete what must prove superior to any one genius, be it ever so great: from such we may be supplied with the means of illustrating the works of the antient naturalists; whilst commentators, after loading whole pages with

unenlightening learning, leave us as much in the dark, as the age their authors wrote in.

The Kingfisher never quits *Italy*.

[The Kingfisher seldom flies much or far from its haunt, and only passes just above the surface of the water in an easy gliding swift flight either up or down the stream, except when it traverses a meadow by a shorter way to a branch of the winding river it frequents. It generally alights on the branch of a low tree hanging over the side of the water, or upon reeds, where it remains in a quiet attitude, not stirring from the spot, unless when it may be observed to dart down, dive under the water, and bring up a small fish, which it immediately swallows. It has been seen at times balancing itself over the water, in which a great many of the small round shining beetles were swimming swiftly in a circular, and which it makes its prey. Ed.]

GENUS XI. NUTHATCH.

BILL straight, the upper mandible a little longer than the lower, and angular at the point.

TONGUE short, horny at the end, and jagged.

TOES divided to the base.

1. EURO-
PEAN.

Sitta Europæa. *S. cinerea* sub-
tus rufescens, rectricibus ni-
gris lateralibus quatuor infra
apicem albis. *Lath. Ind.*
orn. 261. *id. Syn.* ii. 648.
id. Sup. i. 117.

Le Grand Grimpereau, le Tor-
chepot. *Belon av.* 304.

Picus cinereus, seu *Sitta*. *Ges-*
ner av. 711.

Ziolo. *Aldr. av.* i. 417.

The Nuthatch, or Nut-jobber.
Wil. orn. 142.

Raii syn. av. 47.

The Woodcracker. *Plott's*
hist. Ox. 175.

Sitta Europæa. *Gm. Lin.* 440.

Le Torchepot, *Sitta*. *Brisson*
av. iii. 588. *Tab.* 29. *fig.* 3.
Hist. d'oïs. v. 460. *Pl. Enl.*
623. 1.

Picchio grigio, Raparino, Zi-
nan. 74.

Notwacka, Notpacka. *Faun.*
Suec. sp. 104.

Danish Spøett-meise. *Norv.*
Nat-Bake. *Br.* 42.

Klener, Nusszhacker. *Kram.*
362.

Blau-specht *Frisch*, i. 39.

Barless. *Scopoli*, No. 57.

Br. Zool. 81. plate H. *Arct.*
Zool. i. 330.

DESCRIP-
TION.

THE nuthatch weighs nearly an ounce; its length is about five inches three-quarters; its breadth nine inches. The bill is strong and

straight, about three quarters of an inch long; the upper mandible black, the lower white; the irides hazel; the crown of the head, back, and coverts of the wings are of a fine bluish grey; a black stroke passes over the eye from the mouth: the cheeks and chin are white; the breast and belly of a dull orange color; the quill feathers dusky; the wings underneath are marked with two spots, one white at the root of the exterior quills, the other black at the joint of the bastard wing. The tail consists of twelve feathers; the two middle are grey; the two exterior feathers tipped with grey, then succeeds a transverse white spot; beneath that the rest is black. The legs are of a pale yellow; the back toe very strong, and the claws large.

This bird runs up and down the bodies of MANNERS. trees, like the woodpecker tribe, and feeds not only on insects, but nuts, of which it lays up a considerable provision in the hollows of trees. It is a pretty sight, says Mr. *Willughby*, to see her fetch a nut out of her hoard, place it fast in a chink, and then standing above it with its head downwards, striking it with all its force, break the shell, and catch up the kernel. It breeds in the hollows of trees;* if the

* The eggs, generally six or seven in number, are of a dirty white color, blotched with rufous or sanguineous. J. L.

entrance to its nest be too large, it stops up part of it with clay, leaving only room enough for admission: in autumn it begins to make a chattering noise, being silent for the greatest part of the year. *Doctor Plot* tells us, that this bird, by putting its bill into a crack in the bough of a tree, can make* such a violent sound as if it was rending it asunder, so that the noise may be heard at least twelve score yards.

The Nuthatch migrates in *Italy*; a few only remain there during the winter.

* There is every reason to believe that this assertion is ill-founded. ED.

GENUS XII. BEE EATER.

BILL quadrangular, a little incurvated, sharp-pointed.

NOSTRILS small, placed near the base.

TONGUE slender.

TOES, three forward, one backward: the three lower joints of the middle toe closely joined to those of the outmost.

Merops apiaster. M. dorso ferrugineo abdomine caudaque viridi-cærulescente, rectricibus duobus longioribus, gula lutea. <i>Lath. Ind. orn.</i>	The Bee eater. <i>Wil. orn.</i> 147.	COMMON.
269. <i>id. Syn.</i> ii. 667. <i>id. Sup.</i> 119. <i>Gm. Lin.</i> 460.	<i>Raii Syn. av.</i> 49.	
	<i>Lin. Tr.</i> iii. 333.	
	Le Guepier. <i>Brisson av.</i> iv. 532. <i>Hist. d'oïs.</i> vi. 480.	
	<i>Pl. Enl.</i> 938.	

[THIS beautiful bird was first observed to visit *England* in 1794, when a flock of about twenty passed most part of the summer in *Norfolk*: other specimens have since that time been killed in *Suffolk*.

It measures from bill to tail ten inches. The bill is black, an inch and three quarters in length; the irides red; the forehead of a bluish-green color, with green; above the top of

DESCRIPTION.

the head chesnut tinged with green: the head and upper part of the neck chesnut, growing paler towards the back: from the bill to the back of the head is a black stripe, which passes through the eyes: the back and scapulars are of a very pale yellow, tinged with both chesnut and green; the rump and upper tail coverts blue-green with a yellowish tinge; the throat yellow; the under parts of the body blue-green, growing paler towards the belly; the lesser wing-coverts dull green, the middle rufous, and the greater rufous green; the quills for the most part sea-green without, many of the inner rufous; the first short, the second the longest: the tail consists of twelve feathers, the shafts of which are brown above and whitish beneath; the two middle feathers are sea-green with a shade of rufous, the rest the same, but margined with cinereous within; the two middle feathers exceed the outer by three quarters of an inch; the tail is of a wedge-shaped form: the legs are reddish brown; the claws reddish black.*

These birds chiefly inhabit the southern parts of *Europe*, but visit occasionally *Germany*,

* *Latham Syn.* ii. 667, from whom the above accurate description is borrowed.

Lorraine, and other northern districts. They are most abundant in the southern parts of *Russia*, particularly about the rivers *Don* and *Volga*, in the banks of which they build their nests, perforating holes to the depth of half a foot for that purpose, and in such numbers, that the clayey banks appear like a honeycomb. The nest is composed of moss, in which they deposit six or seven eggs, perfectly white, and about the size of those of a stare. At the approach of winter they migrate to more southern latitudes.* Ed.]

* *Montagu Ornithological Dictionary.*

GENUS XIII. HOOPOE.

BILL slender incurvated.

TONGUE very short, triangular, entire.

TOES divided to their origin.

TAIL of ten feathers.

COMMON.

Upupa Epops. *U. nigricante*
et rufo-albo variegata, subtus
rufescens, crista rufescente
apice nigra, cauda nigra
fascia alba. *Lath. Ind. orn.*
277. *id. Syn.* ii. 687. *id.*
Sup. i. 122.

La Huppe. *Belon av.* 293.

Upupa. *Gesner av.* 776.

Aldr. av. ii. 314.

Bubbola. *Olini*, 36.

The Hoop, or Hoopoe. *Wil.*
orn. 145.

Raii Syn. av. 48.

The Dung Bird. *Charlton ex.*
98. *Tab.* 99.

Plott's Oxf. 177.

Edw. 345.

La Hupe ou Puput. *Brisson*
av. iii. 455. *Tab.* 43. *Hist.*
d'ois. vi. 439. *Pl. Enl.* 52.

Upupa Epops. *Gm. Lin.* 466.
Harfogel, Pop. *Faun. Suec.*
sp. 105.

Ter Chaous *Pococke Trav.* i.
209.

Her-fugl. *Brunnich*, 43.

Widhopf. *Kram.* 337.

Upupa; arquata stercoraria;
gallus lutosus. *Klein. Stem.*
av. 24. *Tab.* 25.

Smerda kaura. *Scopoli*, No.
62.

Br. Zool. 83. plate L. *Arct.*
Zool. i. 332.

DESCRIP-
TION.

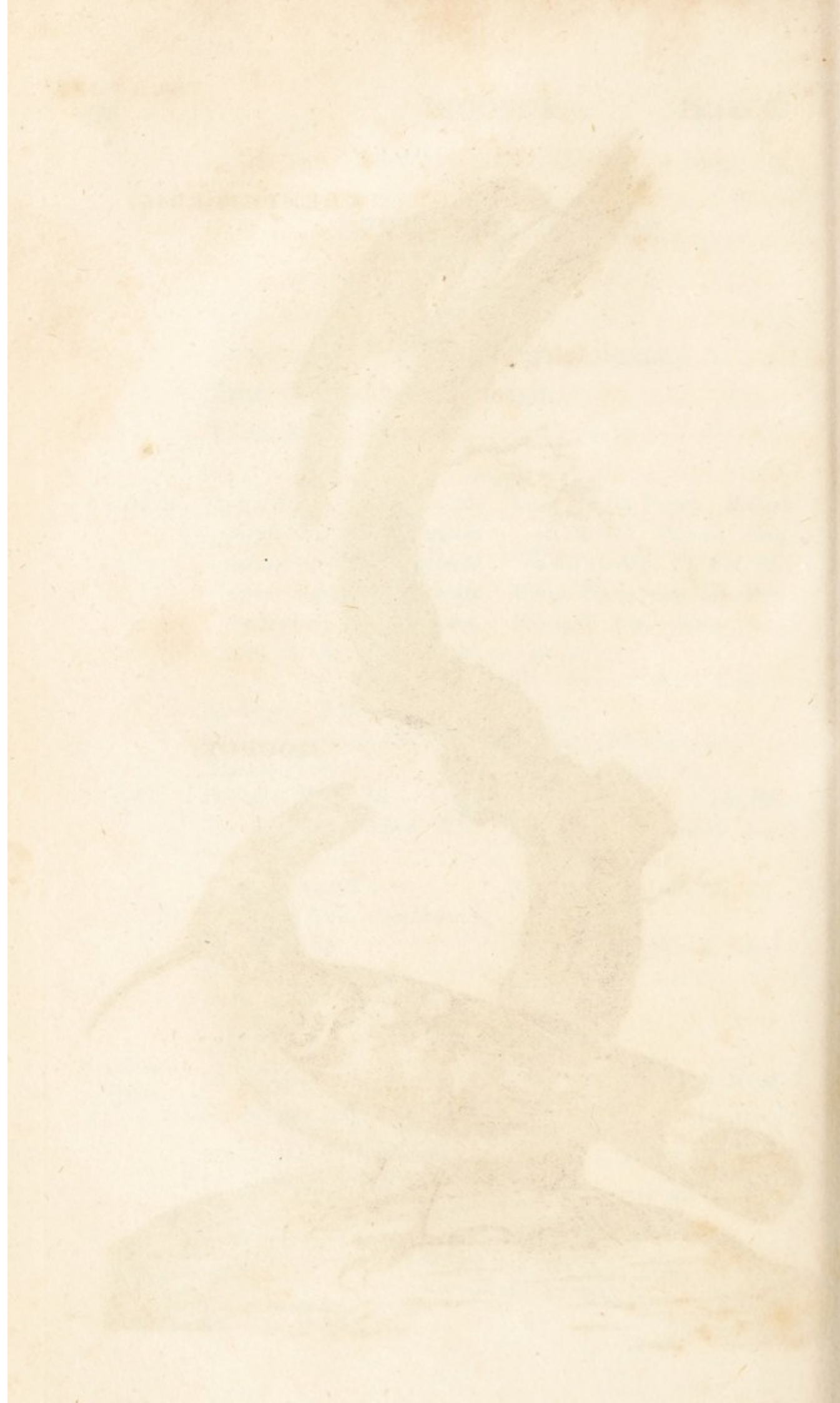
THIS bird may be readily distinguished from all others that visit these islands by its beautiful crest, which it can erect or depress at pleasure. It weighs three ounces: its length is twelve

CREEPER. (P. 345.)



HOOPOE.





inches ; its breadth nineteen. The bill is black, two inches and a half long, slender, and incurvated ; the tongue triangular, small, and placed low in the mouth ; the irides are hazel ; the crest consists of a double row of feathers, the highest about two inches long ; the tips are black, their lower part of a pale orange color. The neck is of a pale reddish brown ; the breast and belly white ; but in young birds marked with narrow dusky lines pointing downwards ; the lesser coverts of the wings are of a light brown ; the back, scapulars and wings crossed with broad bars of white and black ; the rump is white. The tail consists of only ten feathers, white marked with black, in form of a crescent, the horns pointing towards the end of the feathers. The legs are short and black.

According to *Linnæus* it takes its name from its note,* which has a sound similar to the word ; or it may be derived from the *French huppè*, crested. It breeds in hollow trees, and lays two ash-colored eggs ; feeds on insects which it picks out of ordure of all kinds. The antients believed that it made its nest of human excrement ; so far is certain, that its hole is excessively foetid from the tainted food it

* *Faun. Suec.* 2d edit. 37.

brings to its young. The country people in *Sweden* look on the appearance of this bird as a presage of war ;

————— *Facies armata videtur :*

and formerly the vulgar in our country esteemed it a forerunner of some calamity. It visits these islands frequently ; but not at stated seasons, neither does it breed* with us. It is found in many parts of *Europe*, in *Egypt*, and even as remote as *Ceylon*. The *Turks* call it *Tir Chaous* or the messenger bird, from the resemblance its crest has to the plumes worn by the *Chaous* or *Turkish* couriers.

Ovid says that *Tereus* was changed into this bird :

Vertitur in volucrem, cui stant in vertice cristæ,
Prominet immodicum pro longa cuspidē rostrum :
Nomen *Epops* volucris. *Metam.* lib. vi. l. 672.

Tereus, through grief, and haste to be reveng'd,
Shares the like fate and to a bird is chang'd.
Fix'd on his head the crested plumes appear ;
Long is his beak, and sharpen'd as a spear. *Croxall.*

The Hoopoe visits *Italy* in *May* and retires in *September*.

* Dr. *Latham* suggests that the Hoopoe breeds in *England* oftener than is generally supposed, and mentions that a pair some years ago had begun to make a nest in *Hampshire*, but were disturbed and quitted it. A young bird was also sent to him on the 10th of *May*, 1786. *Ed.*

GENUS XIV. CREEPER.

BILL very slender, very much incurvated.

TAIL of twelve feathers.

TOES divided to the origin.

- | | |
|--|---|
| Certhia familiaris. C. grisea, | Le Grimpereau. <i>Brisson</i> iii. 1. FAMILIAR. |
| subtus alba, remigibus fus- | 603. <i>Hist. d'Ois.</i> v. 481. <i>Pl.</i> |
| cis decem macula alba. | <i>Enl.</i> 681. 1. |
| <i>Lath. Ind. orn.</i> 280. <i>id.</i> | <i>Cat. Carol.</i> app. 37. |
| <i>Syn.</i> ii. 701. <i>id. Sup.</i> i. 126. | Certhia familiaris. <i>Gm. Lin.</i> |
| Le petit Grimpereau. <i>Belon</i> | 469. |
| <i>av.</i> 375. | <i>Krypare. Faun. Suec. sp.</i> 106. |
| Certhia. <i>Gesner av.</i> 251. | Træ-Pikke v. Lie-Hesten. |
| <i>Aldr. av.</i> i. 424. | <i>Br.</i> p. 12. <i>Scopoli, No.</i> |
| <i>Wil. orn.</i> 144. | 59. |
| <i>Raii Syn. av.</i> 47. | Grau-Specht. <i>Frisch,</i> i. 39. |
| The Oxeye Creeper. <i>Charlton</i> | Baumlaufferl. <i>Kram.</i> 337. |
| <i>ex.</i> 93. | <i>Br. Zool.</i> 82. plate K. <i>Arct.</i> |
| Picchio piccolo. <i>Zinan.</i> 75. | <i>Zool.</i> i. 334. |

THE creeper weighs only five drams; and next to the Crested wren is the lest of the *British* birds; the manner it has of ruffling its feathers, and their length, give it a much larger appearance than is real. The length of this bird is five inches and a half; the breadth seven and a half. The bill is hooked like a sickle; the irides are hazel; the legs slender; the toes and

DESCRIP-
TION.

claws very long, to enable it to creep up and down the bodies of trees in search of insects, which are its food. It breeds in hollow trees, and is said to lay sometimes twenty eggs, but they are rarely more than eight in number, of a white color minutely dotted with bright ferruginous, and the shell rather hard. The nest loosely made of dry grass, lined with small feathers, is placed in the hollow of decayed trees. The head and upper part of the neck are brown, streaked with black; the rump is tawny; the coverts of the wings are variegated with brown and black; the quill-feathers dusky, tipped with white, and edged and barred with tawny marks; the breast and belly are of a silvery white. The tail is very long, and consists of twelve stiff feathers, notwithstanding Mr. *Willughby* and other ornithologists give it but ten; they are of a tawny hue, and the interior ends of each slope off to a point.

Migrates in *Italy* in *September* and *October*.

“Is found in various parts of *Germany* and elsewhere on the continent, and is also said to inhabit *North America*.” J. L.

SECT. III. GALLINACEOUS.

GENUS XV. GROUS.

BILL short arched.

TOES outmost and inner connected to the first joint of the middle toe by a small membrane.

* With legs feathered to the feet: broad scarlet eye-brows.

- | | | |
|--|---|----------|
| Tetrao Urogallus. T. fusco-rufus, capite colloque cinereis, gula abdomineque nigris, axillis albis. <i>Lath. Ind. orn.</i> 634. <i>id. Syn.</i> iv. 729. | <i>Raii Syn. av.</i> 53.
Cock of the Mountain, or Wood. <i>Wil. orn.</i> 172.
Capricalca. <i>Sib. Scot.</i> 16. <i>Tab.</i> 14, 18. | 1. WOOD. |
| Le Coc de bois ou Faisan bruyant. <i>Belon av.</i> 249. | Le grand coq de Bruyeres. <i>Brisson av.</i> i. 182. <i>Hist. d'Ois.</i> ii. 191. <i>Pl. Enl.</i> 73, 74. | |
| Urogallus major (the Male). <i>Gesner av.</i> 490. | Tetrao Urogallus. <i>Gm. Lin.</i> 746. | |
| Grygallus major (the Female). 495. | Kjader. <i>Faun. Suec. sp.</i> 200. <i>Pontop.</i> ii. 101. | |
| Gallo cedrone, Urogallus sive Tetrao. <i>Aldr. av.</i> ii. 29. | Tjader-hona. <i>Hasselquist itin.</i> † 571. | |
| Gallo alpestre, Tetrax <i>Nemesiani</i> (fem.) <i>Aldr. av.</i> ii. 33. | <i>Klein. Stem. Tab.</i> 27. | |
| Pavo sylvestris. <i>Girald. Topogr. Hibern.</i> 706. | | |

† *Swedish* edition. This bird was shot in the isle of *Milo*, on a palm tree. *Belon* tells us, it is often found in *Crete*; *Obs.* p. 11. The *English* translator of *Hasselquist* gives a false name to the bird, calling it the *Black Game*.

- Mas *Norvegis* Tiur, Teer, Auerhahn. *Frisch*, i. 107,
 Toedder. Foemina *Norv.* 108.
 Roey. *Brunnich*, 194. Devi peteln. *Scopoli*, No. 169.
 Aurhan. *Kram*. 356. *Br. Zool.* 84. plates M. M*.
Arct. Zool. i. 364.

THIS species is found in no other part of *Great Britain* than the Highlands of *Scotland*, north of *Inverness*, and is very rare even in those parts. It is there known by the name of *Capercalze*, *Auer-calze*, and in the old law books *Caperkally*; the last signifying the horse of the woods; this species being, in comparison of others of the genus, pre-eminently large.†

Giraldus Cambrensis‡ describes it under the title of *Peacock of the wood*, from the rich green that shines on the breast of the male. *Boethius*§ also mentions it under the name of *Capercalze*, and truly describes its food, the extreme shoots of the pine. He afterwards delivers an exact description of the Black cock, but gives it the name of the Cock of the wood, an appellation now confined to this species. Bishop *Lessly*|| is a third of our historians who makes

† For the same reason the *Germans* call it *Aur-han*, or the *Urus*, or wild ox cock.

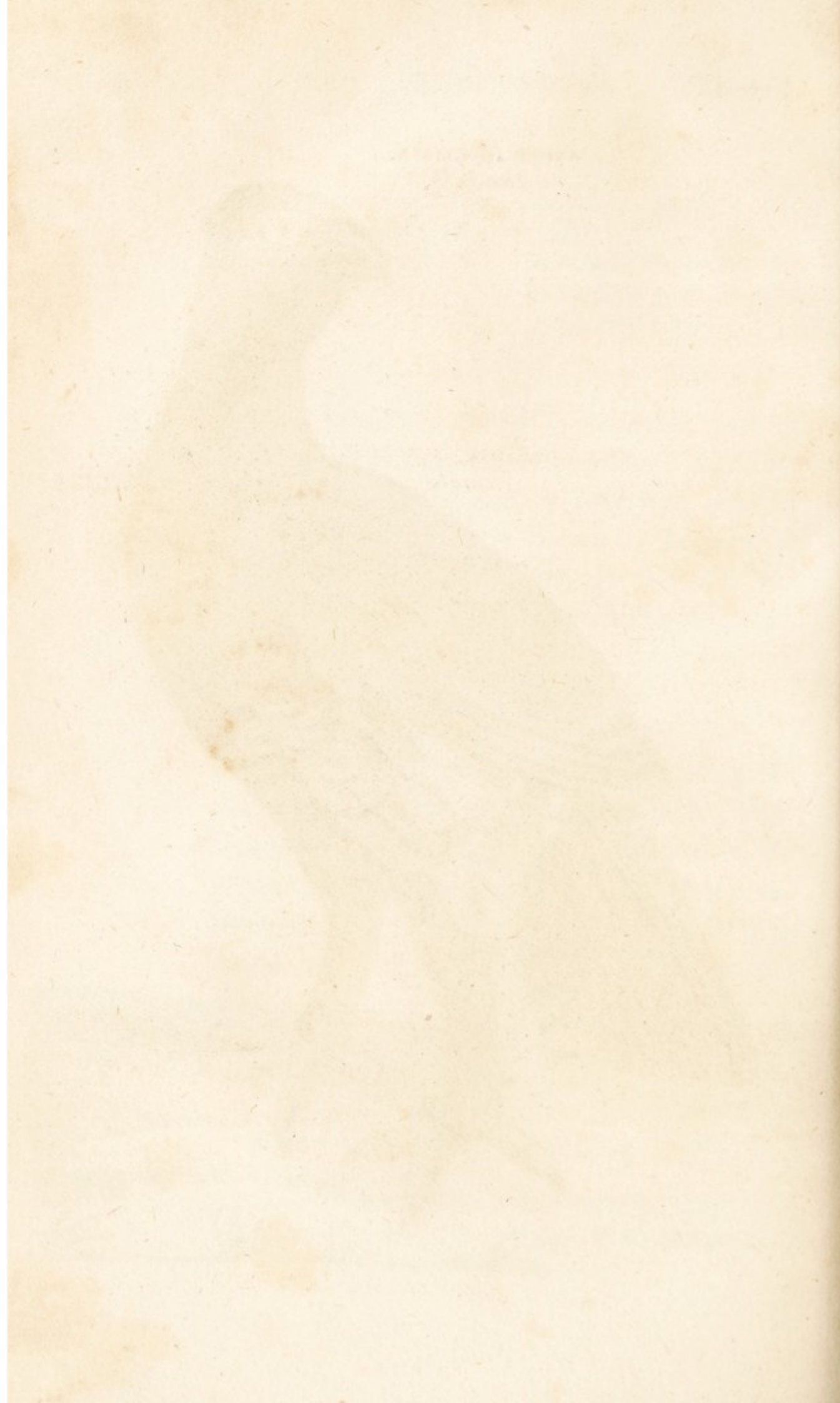
‡ *Topogr. Hibern.* 706.

§ *Descr. Regni Scotiæ.* 7.

|| *Scotiæ Descr.* 24.

WOOD GROUS.

(Male.)



mention of this bird along with two others of the genus, the black cock and common grouse; but the Ptarmigan is overlooked by them. None of these writers were conversant in the study of natural history, therefore are very excusable for their inaccuracy.

It inhabits wooded and mountainous countries; in particular, forests of pines, birch trees and junipers, feeding on the tops of the former, and berries of the latter; the first often infects the flesh with such a taste, as to render it scarcely eatable. In the spring it calls the females to its haunts with a loud and shrill voice; and is at that time so very inattentive to its safety, as to be very easily shot. It stands perched on a tree, and descends to the females on their first appearance. The female lays from eight to sixteen eggs; eight at the first, and more as they advance in age.*

These birds are common to *Scandinavia*, *Germany*, *France*, and several parts of the *Alps*. In our country I have seen one specimen, a male, killed in the woods of Mr. *Chisolme*, to the north of *Inverness*. About the year 1760, a few were to be found about *Thomas-town*, in the county of *Tipperary*, but I

* *Schwenckfelt Aviarium Silesiæ*. 372.

suspect that the breed is now extinct in every part of *Ireland*. All the *British* grouse and partridge are found in *Italy*, except the Red Grouse.

DESCRIP-
TION.

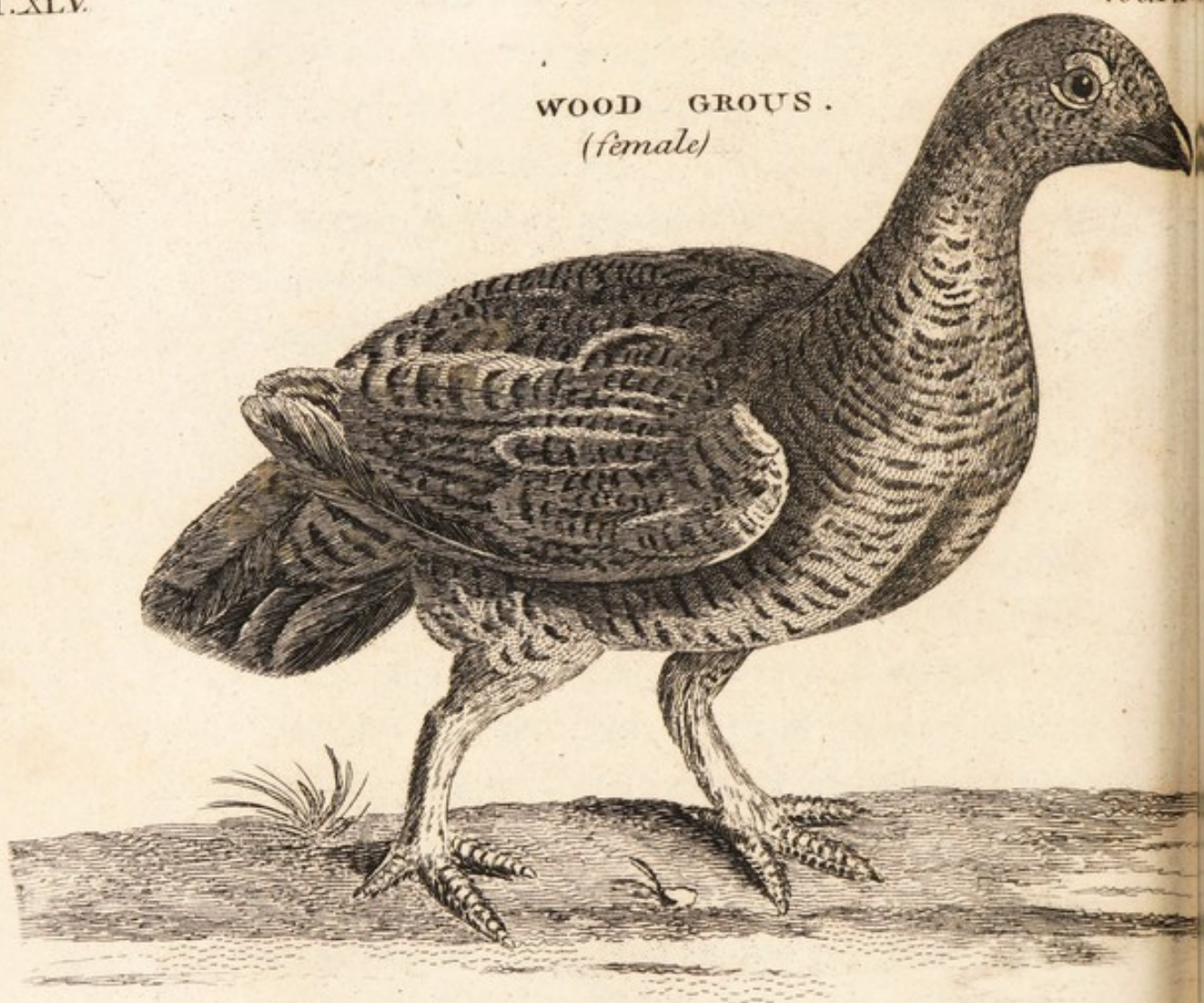
The length of the male is two feet eight inches; the breadth three feet ten inches: its weight sometimes fourteen pounds. The female is much less, the length being only twenty-six inches; the breadth forty. The sexes differ also greatly in colour. The bill of the male is of a pale yellow; the nostrils are covered with dusky feathers; the head, neck and back, are elegantly marked, with slender lines of grey and black running transversely; the feathers on the hind part of the head are long, and beneath the throat is a large tuft of long feathers. The upper part of the breast is of a rich glossy green; the rest of the breast and the belly black, mixed with some white feathers; the sides are marked like the neck; the coverts of the wings crossed with undulated lines of black and reddish brown; the exterior webs of the greater quill feathers are black; at the setting on of the wings in both sexes is a white spot; the inner coverts are of the same color. The tail consists of eighteen feathers, the middle of which is the longest; these are black, marked on each side with a few white spots; the vent



Pl. XLV.

Vol. I. Pl.

WOOD GROUSE.
(female)



feathers black mixed with white. The legs very strong, covered with brown feathers: the edges of the toes pectinated.

The female differs greatly from the male. FEMALE.
The bill is dusky; the throat red; the head, neck and back, are marked with transverse bars of red and black; the breast has some white spots on it, and the lower part is of a plain orange color; the belly barred with pale orange and black; the tips of the feathers white. The feathers of the back and scapulars black, the edges mottled with black and pale reddish brown; the scapulars tipped with white; the inner webs of the quill feathers dusky; the exterior mottled with dusky and pale brown. The tail is of a deep rust color barred with black, tipped with white, and consists of sixteen feathers.

Gesner, as *Mr. Willughby** has long since observed, deceived by the very different plumage of the male and female of this kind, has formed of them two species.

* *Wil. orn.* 173. *Gesner av.* 490. 495.

2. BLACK. Tetrao Tetrix. T. nigro-vio-
 cea, cauda bifurca, remigi-
 bus secundariis versus basin
 albis. *Lath. Ind. orn.* 635.
id. Syn. iv. 733. *id. Sup.* i.
 213.
 Urogallus minor (the Male).
Gesner av. 493. Grygallus
 minor (the Female). 496.
 Fasan negro, Fasiano alpestre,
 Urogallus sive Tetrao minor
 Gallus Scoticus sylvestris.
Aldr. av. ii. 32. 160.
Raii Syn. av. 53.
 Heath-cock, black Game, or
 Grous. *Wil. orn.* 173.
- Tetrao tetrix. *Gm. Lin.* 784.
Orre. Faun. Suec. sp. 102.
 Le Coq-de-bruyeres a queue
 fourchue. *Brisson av.* i. 186.
Hist. d'oïs. ii. 210. *Pl.*
Enl. 172, 173.
Cimbris mas Urhane, *fæmina*
 Urhoene. *Norvegis* Orrfugl.
Brunnich, 196.
 Berkhan, Schildhan. *Kram.*
 356.
 Birckhahn. *Frisch.* i. 109.
 Gallo sforcello *Ital. Scopoli,*
 No. 169.
Br. Zool. 85. *Tab. M.* 1. 2.
Arct. Zool. i. 367.

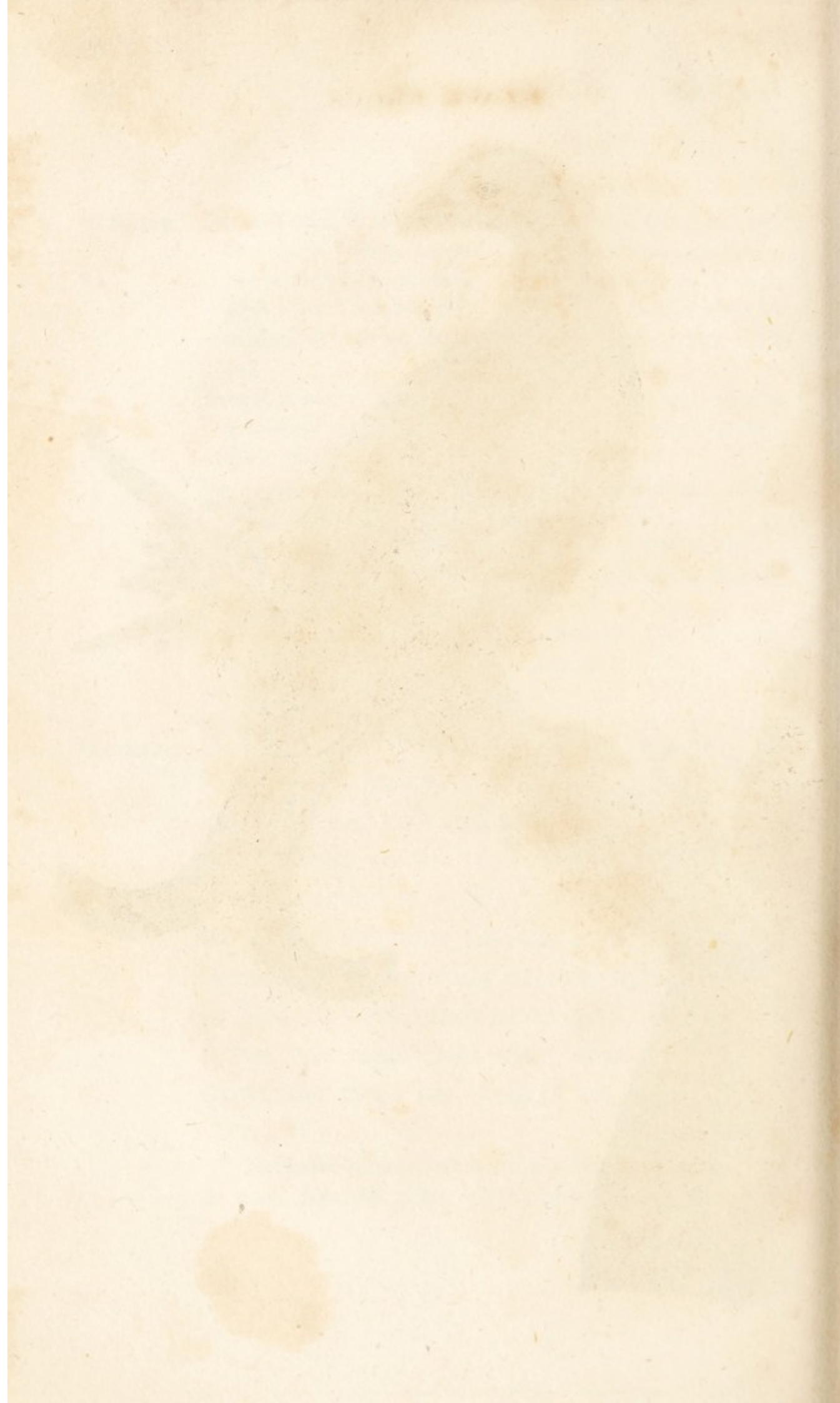
MANNERS.

THESE birds, like the former, are fond of wooded and mountanous situations; they feed on bilberries, and other mountain fruits, and in the winter on the tops of the heath. They are often found in woods; this and the preceding species perching like the pheasant: in the summer they frequently descend from the hills to feed on corn; they never pair, but in the spring the male gets upon some eminence, crows and claps his wings;* on which signal

* The ruffed heathcock of *America*, a bird of this genus, does the same. *Edw. Gl.* p. 80. The cock of the wood agrees too

BLACK GROUS.





all the females within hearing resort to him. The young males quit their mother in the beginning of winter, and keep in flocks of seven or eight till spring; during that time they inhabit the woods. They are very quarrelsome, and will fight together like game cocks; and at that time are so inattentive to their own safety, that it has often happened that two or three have been killed at one shot.

Black grouse are found in various parts of *Great Britain*, in *Scotland*, the *Hebrides*, and also in *Wales*.* Some have been shot in *Ireland*, in the county of *Sligo*, where the breed was formerly introduced out of *Scotland*, but I believe that at present the species is extirpated. They are met with even far south, and *Hutchins*, in the introduction to his history of *Dorsetshire*, says that a few are found in that county. I think they extend to the moors of *Devonshire*, the *New Forest* in *Hampshire*, *Ashdown Forest* in *Sussex*, on the north-west to *Cank heath* in *Staffordshire*, and to some of the *Shropshire*

in this exultation during the amorous season; at which time the peasants in the *Alps*, directed by the sound, have an opportunity of killing them.

* A few are still found on a moss, the property of Sir *Thomas Hanmer*, on the confines of the hundred of *Maelor* in *Flintshire*: the breed has been extirpated in other parts of *Wales*. ED.

moors, but in most places they are considerably reduced in numbers by the unrestrained havock made among them.

DESCRIP-
TION.

An old black cock weighs from four pounds to four pounds and an half; its length is one foot ten inches; its breadth two feet nine. The bill is dusky; the plumage of the whole body black, glossed over the neck and rump with a shining blue; the coverts of the wings are of a dusky brown; the four first quill feathers are black, the next white at the bottom; the lower half of the secondary feathers white, and the tips are of the same color; the inner coverts of the wings white; the thighs and legs are covered with dark brown feathers; on the former are some white spots; the toes resemble those of the former species. The tail consists of sixteen black feathers, and is much forked; the exterior feathers bend greatly outwards, and their ends seem as if cut off; the feathers under the tail and inner coverts of the wings are of a pure white.

FEMALE.

The female weighs only two pounds: its length is one foot six inches; its breadth two feet six. The head and neck are marked with alternate bars of dull red and black; the breast with dusky, black and white, but the last predominates. The back, coverts of the wings

and tail, are of the same colors as the neck, but the red is deeper; the inner webs of the quill feathers are mottled with black and white; the inner coverts of the wings are white, and in both sexes form a white spot on the shoulder. The tail is slightly forked; it consists of eighteen feathers variegated with red and black; the feathers under the tail are white, marked with a few bars of black and orange. This bird hatches its young late in summer; it lays from six to eight eggs, of a dull yellowish white color, marked with numbers of very small ferruginous specks, and towards the smaller end with some blotches of the same hue.

Besides the common species of black cock, M. *Brisson* mentions a variety found in *Scotland*, under the name of *le coq de bruyere piqueté*, or spotted black cock. It differs from the common sort in being spotted on the neck, breast, wings and thighs with red. This I suppose to have been a spurious breed between this and the former species, as the *Tetrao Hybridus** of *Linnaeus* is. I could not learn that this mixed race was found at present in *North Britain*, perhaps because the cock of the wood is now become so very rare. It is also found in

MIXED
BREED.

* *Arct. Zool.* i. 366. *Sparman Mus. Carlo. Tab.* xv. *Lath. Sup.* i. 214. *id. Sup.* ii. 275?

Sweden, and described by *Linnæus* in his *Faun. Suec. sp.* 201. by the title of *Tetrao caudâ bifurcâ subtus albo punctata*, in *Swedish*, *Racklehane* or *Roflare*. The legs of this and the preceding kind are feathered only to the feet; they both inhabit woods in the winter; therefore nature hath not given them the same kind protection against the cold, as she has the grouse and ptarmigan, who must undergo all the rigor of the season beneath the snow, or on the bare ground.

3. RED. Tetrao Scoticus. T. rufo et nigricante transversim striatus, rectricibus sex utrinque, exterioribus nigricantibus. *Lath. Ind. orn.* 641. *id. Syn.* iv. 746. *id. Sup.* i. 216. Tetrao Lagopus. γ et δ. *Gm. Lin.* 750. Gallina campestris. *Girald. topogr. Hibern.* 706. Red Game, Gorcock, or Moor-cock, *Wil. orn.* 177. Lagopus altera *Plinii. Raii Syn. av.* 54. Moor-cock, or Moor-fowl. *Sib. Scot.* 16. Attagen. *Brisson av.* i. 209. *Hist. d'oï.* ii. 252. La Gelinote d'Ecosse, Bonasa Scotica. *Brisson av.* 199. *tab.* 22. f. i. *Hist. d'oï.* ii. 242. *Br. Zool.* 85. plate M. 3.

DESCRIP-
TION.

THE male weighs about nineteen ounces;* the length is fifteen inches and a half; the breadth twenty-six. The bill is black; the nostrils covered with red and black feathers;

* I have since heard of one shot in *Yorkshire* which weighed twenty-nine ounces.

the irides hazel colored ; at the base of the lower mandible, on each side, is a white spot ; the throat is red. The plumage on the head and neck is of a light tawny red ; each feather is marked with several transverse bars of black. The back and scapular feathers are of a deeper red, and on the middle of each feather is a large black spot ; the breast and belly are of a dull purplish brown, crossed with numerous narrow dusky lines ; the quill feathers are dusky. The tail consists of sixteen feathers of an equal length, all of them (except the four middlemost) are black, and the middle feathers are barred with red ; the thighs are of a pale red, barred obscurely with black ; the legs and feet cloathed to the very claws with thick soft white feathers ;* the claws are whitish, very broad and strong.

The female weighs only fifteen ounces. The colors in general are duller than those of the male ; the breast and belly are spotted with white, and the tips of some of the coverts of the wings are of the same color. The red naked

FEMALE.

* The feet in the figure given by *M. Brisson* are engraven naked, or bare of feathers. The specimen probably came to that gentleman in that condition : his description in other respects is very accurate.

part that lies above the eyes is less prominent than in the male, and the edges not so deeply fringed.

We believe this species to be peculiar to *England, Scotland, and Ireland*; not having met with any account of it, except in the writings of our countrymen Mr. *Ray* and *Willughby*, and M. *Brisson* under the name of *Bonasa Scotica*; the same writer describes it again by the title of *Attagen*, but his references are either to authors who have copied our naturalists, or to such who mean quite another kind. Mr. *Ray* seems to think his bird, the other *Lagopus* of *Pliny*,* or the *Francolino* of the modern *Italians*: but the account left us by *Pliny* seems too brief and uncertain to determine at this time what species he intended; and that the *Francolino* is not the same with our grouse, is evident from the figure of it exhibited by our accurate friend Mr. *Edwards*.†

These birds pair in the spring, and lay from six to ten eggs: the young brood or packs follow the hen the whole summer; in the winter they join in flocks of forty or fifty, and become

* Est et alia nomine eodem, a coturnicibus magnitudine tantum differens, croceo tinctu, cibis gratissima. Lib. x. c. 48.

† Plate 246. This is the *Perdix Francolinus*. *Lath. Ind. orn.* 644. *id. Syn.* iv. 759. *Pl. Enl.* 147, 148. Ed.

PTARMIGAN.



F. RED GROUS. (P. 357.)

remarkably shy and wild: they always keep on the tops of the hills, are scarcely ever found on the sides, and never descend into the vallies; their food is the mountain berries, and the tops of heath.

- Tetrao Lagopus. T. cinereo alboque varius, pedibus lanatis, remigibus albis, rectricibus nigris apice albis, intermediis albis. *Lath. Ind. orn.* 639. *id. Syn.* iv. 741. *id. Sup.* i. 216.
- La perdrix blanche. *Belon av.* 259.
- Lagopus. *Gesner av.* 576.
- Perdrix alba seu Lagopus, Perdrice alpestre. *Aldr. av.* ii. 66.
- Lagopus. *Plinii lib.* x. c. 48.
- Tetrao Lagopus. *Gm. Lin.* 749.
- Snoripa. *Faun. Suec. sp.* 203.
- La Gelinote blanche. *Brisson*
- av.* i. 216. *Hist. d'Ois.* ii. 4. PTARMIGAN, 264. *Pl. Enl.* 129.
- Raii syn. av.* 55.
- White Game, erroneously called the white Partridge. *Wil. orn.* 176.
- The Ptarmigan. *Sib. Scot.* 16.
- Norv. Rype. Mas Islandis, Riupkarre, Fæm. Riupa. Brunnich* 199.
- Schneehuhn. *Frisch,* i. 110.
- Schneehun. *Kram.* 356.
- Scopoli.* No. 118.
- Br. Zool.* 86 plates M. 4. 5.
- Arct. Zool.* i. 368.

THIS bird is well described by Mr. *Willughby*, under the name of the white game. M. *Brisson** joins it with the white partridge of Mr. *Edwards*, plate 72. I have received both

* *Tom.* i. p. 216.

species at the same time from *Norway*, and am convinced that they are not the same.

DESCRIP-
TION.

These two birds differ greatly; the former* being above twice the size of the *Ptarmigan*; and the color of its summer plumage quite different; that of Mr. *Edwards'* bird being marked with large spots of white, and dull orange; that of the *Ptarmigan* is of a pale brown or ash-color, elegantly crossed or motled with small dusky spots, and minute bars; the head and neck with broad bars of black, rust-color, and white: the wings are white, but the shafts of the greater quill-feathers black; the belly white. In the male, the grey color predominates, except on the head and neck where there is a great mixture of red, with bars of white; but the whole plumage in this sex is extremely elegant. The females and young birds have a great deal of rust-color in them: both agree in their winter dress, being entirely white, except as follows: in the male a black line occurs between the bill and the eyes; the shafts of the seven first quill-feathers are black; the tail of the *Ptarmigan* consists of sixteen feathers, the two middle of which are ash-colored, motled with

* White grouse. *Arct. Zool.* i. 360. *Tetrao albus.* *Lath. Ind. orn.* 639. *Syn.* iv. 743.

black, and tipt with white; the two next black slightly marked with white at their ends, the rest wholly black; the feathers incumbent on the tail white, and almost entirely cover it. The length of these birds is near fifteen inches; the extent twenty-three; the weight nineteen ounces.

Ptarmigans are found in these kingdoms only on the summits of the highest hills of the Highlands of *Scotland* and of the *Hebrides*; and a few still inhabit the lofty hills near *Keswick* in *Cumberland*. They live amidst the rocks perching on the grey stones, the general color of the strata in those exalted situations: they are very silly birds, so tame as to bear driving like poultry; and if provoked to rise take very short flights, in a small circuit like pigeons: they taste so like a grouse as to be scarcely distinguished; and like them keep in small packs; they never take shelter in the heath, but beneath loose stones.

These birds are called by *Pliny*, *Lagopi*, their feet being clothed with feathers to the claws, as the hare's are with fur: the nails are long, broad and hollow: the first circumstance guards them from the rigor of the winter; the latter enables them to form a lodge under the snow, where they lie in heaps to protect them-

selves from the cold: the feet of the red grouse are cloathed in the same manner, but those of the two first species here described, which perch upon trees, are naked, not being in want of such a protection; the legs only are feathered.

In *Scotland* they inhabit from the hill of *Benlomond* to the naked mountains of *Scaroben* in *Cathness*, the isle of *Arran*, many of the *Hebrides*, the *Orknies*, and *Shetland* isles. Notwithstanding some of the *Hebrides* are at no great distance from *Ireland*, none are found in that kingdom.

** With naked legs.

- | | | |
|---|---|-------------------------|
| Perdix, Cinerea. <i>P. calcarata</i> ,
cinereo rufo et nigro varia,
macula nuda coccinea sub
oculis, cauda ferruginea pec-
tore brunneo. <i>Lath. Ind.</i>
<i>orn.</i> 645. <i>id. Syn.</i> iv. 762. | Tetrao Perdrix. <i>Gm. Lin.</i> 757.
Rapphona. <i>Faun. Suec. sp.</i>
205. | 5. COMMON
PARTRIDGE. |
| La Perdrix grise ou Gouache.
<i>Belon av.</i> 257. | La Perdrix grise. <i>Brisson av.</i>
i. 219. <i>Hist. d'ois.</i> ii. 401.
<i>Pl. Enl.</i> 27. | |
| Perdix (Waldhun). <i>Gesner. av.</i>
669. | Starna. <i>Zinan.</i> 30.
Agerhoene. <i>Br.</i> 201. | |
| Perdix minor sive cinerea.
<i>Aldr. av.</i> ii. 66. | Rebhun. <i>Kram.</i> 357.
Rebhuhn. <i>Frisch</i> , i. 114. | |
| <i>Wil. orn.</i> 166. | Serebitza, <i>Scopoli.</i> No. 175.
<i>Br. Zool.</i> 86. plate M. <i>Arct.</i>
<i>Zool.</i> i. 373. | |
| <i>Raii Syn. av.</i> 57. | | |

THE male partridge weighs near fifteen ounces; the female about two ounces less: the length to the end of the tail is thirteen inches; the breadth twenty. The bill is whitish: the crown of the head is brown spotted with reddish white: behind each eye is a naked red skin. The chin, cheeks and forehead are of a deep orange color, but in the females it is much paler than in the other sex. The neck and breast are prettily marked with narrow undulated lines of ash color and black; and in the hind part of

DESCRIP-
TION.

the neck is a strong mixture of rust color : on the breast of the male is a broad mark in form of a horse-shoe, of a deep orange hue ; in the female it is less distinct. Each feather on the back is finely marked with several semicircular lines of reddish brown and black : the scapulars with a narrow white line along their shafts, and with black and cinereous undulated lines on the webs ; whose sides are marked with a large spot of rust color. The greater quill feathers are dusky, spotted on each web with pale red : it has eighteen feathers in the tail ; the six outmost on each side are of a bright rust color tipped with white ; the others marked transversely with irregular lines of pale reddish brown and black : the legs are of a whitish cast.

MANNERS.

The nature of this bird is so well known, that it will be unnecessary to detain the readers with any account of it : all writers agree, that its passion for venery exceeds that of any bird of the genus ; should the readers' curiosity be excited to see a more particular account, we beg leave to refer them to those authors who have recorded this part of its natural history.*

* *Pliny* lib. x. c. 23. *Wil. orn.* 168. *Edw. preface to Gleanings*, part 2.

The affection of the female for the young even exceeds the passion above alluded to. I well recollect in my neighbourhood a strong instance. A partridge followed by a large covey of very young birds, was surprised by a violent shower of rain. She collected them under her, and to secure them farther, spread her wings to prevent every injury. In vain!. The storm encreased, yet she would not quit her charge, she preferred death, and we found her lifeless (with all the little brood) with distended wings, retaining her attempt to preserve them even to the very article of death.

The *British* name of this bird is *Coriár*, a word now obsolete; that now in use is *Pertrisen*, borrowed from the *Normans*.

[The common partridge occurs no where in *Turkey* in a lower latitude than *Salonica*, or south of *Thrace* and *Macedonia*. The red-legged species is found throughout *Greece* in all the rocky districts whether high or low, but in no other situation. The latter feeds on seeds and berries, the former is confined to corn-land; in no instance are they observed together.

Red legged partridges were introduced from RED LEGGED
PARTRIDGE. *France* into *Suffolk* about the year 1770, and

have multiplied considerably, particularly near *Orford* and in the vicinity of the sea. ED.]

6. QUAIL. *Perdix. Coturnix. P. mutica*, La Caille. *Brisson av.* i. 247.
corpore griseo maculato, superciliis albis, rectricibus *Hist. d'ois.* ii. 449. *Pl. Enl.*
marginibus lunulaque ferruginea. *Lath. Ind. orn.* 651. 170.
id. Syn. iv. 779. *id. Sup.* i. Quaglia. *Zinan.* 36.
 222. Tetrao *Coturnix. Gm. Lin.*
La Caille. Belon. av. 263. 765.
Gesner av. 334. Wachtel. *Faun. Suec. sp.* 206.
Coturnix Latinorum. Aldr. av. Vagtel. *Brunnich,* 202.
 ii. 69. Wachtel. *Kram.* 357. *Frisch,*
Wil. orn. 169. i. 117.
Raii Syn. av. 58. Perpetitza. *Scopoli,* No. 176.
Br. Zool. 87. late M. 6.
Arct. Zool. i. 374.

DESCRIP-
TION.

THE length of the quail is seven inches and a half; the breadth fourteen: the bill is of a dusky color; the feathers of the head are black, edged with rusty brown; the crown of the head divided by a whitish yellow line, beginning at the bill and running along the hind part of the neck to the back: above each eye is another line of the same color; the chin and throat are of a dirty white; the cheeks spotted with brown and white; the breast is of a pale yellowish red spotted with black; the scapular feathers and those on the back are marked in their middles

with a long pale yellow line, and on their sides with ferruginous and black bars; the coverts of the wings are reddish brown, elegantly barred with paler lines bounded on each side with black. The exterior side of the first quail feathers is white, of the others dusky spotted with red; the tail consists of twelve short feathers barred with black and very pale brownish red: the legs are of a pale hue.

Quails are found in most parts of *Great Britain*, but not in any quantity: they are birds of passage; some entirely quitting our island, others shifting their quarters. A gentleman, to whom this work lies under great obligations for his frequent assistance, has assured us, that these birds migrate out of the neighbouring inland counties, into the hundreds of *Essex*, in *October*, and continue there all the winter: if frost or snow drive them out of the stubble fields and marshes, they retreat to the sea-side, shelter themselves among the weeds, and live upon what they can pick up from the *algæ*, &c. between high and low water mark. Our friend remarks, that the time of their appearance in *Essex*, coincides with that of their leaving the inland counties; the same observation has been made in *Hampshire*.

These birds are much less prolific than the

partridge, seldom laying more than six or seven whitish eggs, marked with ragged rust colored spots: yet the late *Owen Holland*, Esq. of *Conwy*, once found a nest with twelve eggs, eleven of which were hatched: they are very easily taken, and may be enticed any where by a call.

They are birds of great spirit; insomuch that quail fighting among the *Athenians* was as great an entertainment as cock fighting is in this country: it is at this time a fashionable diversion in *China*, and large sums are betted there on the event.* The bodies of these birds are extremely hot; the *Chinese* on that account hold them in their hands in cold weather in order to warm themselves.† *Chaud comme une Caille*, is a common proverb. The antients never eat this bird, supposing them to have been unwholesome, as they were said to feed on *hellebore*.

Quails arrive in *Italy* the latter end of *April*, and remigrate in *August* and *September*; some remain during the winter.

The editor has been favored by a friend with the following observations on the migration of the quail and other birds in the eastern regions.

* *Bell's Travels*, i. 371.

† *Osbeck's Voyage*, i. 269.

“The quail together with the stork, and many other species of birds, arrive from *Africa* into *Greece*, during the prevalence of the warm southerly wind the *Ornithex*, in the month of *April*. I have twice had an opportunity of observing the birds on their passage; once between *Cyprus* and *Rhodes*, and another time between the *Morea* and *Crete*, when several species alighted on the vessels and were caught. *Belon* notices the same occurrence. All these birds have their fixed periods of return in the autumn, from the tenth of *August* to the end of *September*, when some of them, particularly the Turtle Dove and Quail, are remarkably fat, whereas at their first arrival they are lean. At each of these periods, as they congregate on points of land and small islands, they are caught or shot in great numbers.”]

To the birds of this genus we should add the whole tribe of domestic land fowl, such as Peacocks, Pheasants, &c.; but these cannot claim even an *European* origin.

India gave us Peacocks; and we are assured* PEACOCKS. they are still found in the wild state, in vast flocks, in the islands of *Ceylon* and *Java*. So

* *Knox's hist. of Ceylon.* 28.

beautiful a bird could not long be permitted to be a stranger in the more distant parts; for so early as the days of *Solomon*,* we find among the articles imported in his *Tarshish* navies, Apes and Peacocks. A monarch so conversant in all branches of natural history, *who spoke of trees, from the cedar of Lebanon, even unto the hyssop that springeth out of the wall: who spoke also of beasts and of fowl*, would certainly not neglect furnishing his officers with instructions for collecting every curiosity in the countries they voyaged to, which gave him a knowledge that distinguished him from all the princes of his time. *Ælian*† relates, that they were brought into *Greece* from some barbarous country; and that they were held in such high esteem, that a male and female were valued at *Athens* at 1000 *drachmæ*, or 32*l.* 5*s.* 10*d.* Their next step might be to *Samos*; where they were preserved about the temple of *Juno*, being the birds sacred to the goddess:‡ and *Gellius* in his *noctes Atticæ*, c. 16. commends the excellency of the *Samian* peacocks. It is therefore probable that they were brought here ori-

* 1 *Kings*, x. 22.

† *Ælian de nat. an.* lib. v. 21.

‡ *Athenæus.* lib. xiv. p. 655.

ginally for the purposes of superstition, and afterwards cultivated for the uses of luxury. We are also told, when *Alexander* was in *India*,* he found vast numbers of wild ones on the banks of the *Hyarotis*, and was so struck with their beauty, as to appoint a severe punishment on any person that killed them.

Peacocks' crests, in ancient times, were among the ornaments of the Kings of *England*. *Ernald de Aclent* paid a fine to King *John* in a hundred and forty palfries, with sackbuts, *lorrains*, gilt spurs and peacocks' crests, such as would be for his credit.†

Our common poultry came originally from POULTRY.
Persia and *India*. *Aristophanes*‡ calls the cock *περσικός ὄρνις*, the *Persian* bird; and tells us, it enjoyed that kingdom before *Darius* and *Megabyzus*: at this time we know that these birds are found in a state of nature in the isles of *Tinian*,§ and others of the *Indian* ocean; and that in their wild condition their plumage is black and yellow, and their combs and wattles purple and yellow.|| They were early introduced into the western parts of the world;

* *Q. Curtius*. lib. ix.

† *Maddox. ant. Exch.* i. 273.

‡ *Aves*, lin. 483.

§ *Dampier's voy.* i. 392. *Lord Anson's voy.* 309.

|| For this information we are indebted to governor *Loten*.

and have been very long naturalized in this country ; long before the arrival of the *Romans* in this island, *Cæsar* informing us, they were one of the forbidden foods of the old *Britons*. These were in all probability imported here by the *Phœnicians*, who traded to *Britain*, about five hundred years before *Christ*. For all other domestic fowls, turkies, geese, and ducks excepted, we seem to be indebted to our conquerors, the *Romans*. The wild fowl were all our own from the period they could be supposed to have reached us after the great event of the flood.

PHEASANTS. Pheasants were first brought into *Europe* from the banks of the *Phasis*, a river of *Colchis*.

Argiva primùm sum transportata carina,
Ante mihi notum nil, nisi *Phasis* erat.

Martial. lib. xiii. ep. 72.

**GUINEA
HENS.** Guinea hens, the *Meleagrides* or *Gallinæ numidicæ* of the antients, came originally from *Africa*.* We are much surprized how *Belon* and other learned ornithologists could possibly imagine them to have been the same with our *Turkies* ; since the descriptions of the *meleagri*

* *Bosman's history of Guinea. 248. Voyages de Marchais iii. 323. Barbot's descr. Guinea. Churchill's coll. voy. v. 29.*

left us by *Athenæus* and other antient writers, agree so exactly with the Guinea hen, as to take away (as we should imagine) all power of mistake. *Athenæus* (after *Clytus Milesius*, a disciple of *Aristotle*) describes their nature, form and colors: he tells us, “ They want natural affection towards their young; that their head is naked, and that on the top of it is a hard round body like a peg or nail; that from the cheeks hangs a red piece of flesh like a beard; that it has no wattles like the common poultry; that the feathers are black spotted with white; that they have no spurs; and that both sexes are so like, as not to be distinguished by the sight.”* *Varro* and *Pliny*† take notice of their spotted plumage, and the gibbous substance on their head: so that from

* *Εστι δὲ ἄστοργον πρὸς τὰ ἔκγονα τὸ ὄρνειον, καὶ ὀλιγωρεῖ τῶν νεωτερων, —ἐπ’ αὐτῆς δὲ λόφον σάρκινον, σκληρὸν, στρογγύλον ἐξέκοντα τῆς κεφαλῆς ὥσπερ πᾶτταλον—πρὸς δὲ ταῖς γνάθοις ἀπὸ τῆ σώματος ἀρξαμένην ἀντὶ πώγωνος μακρὰν σάρκα, καὶ ἐρυθροτέραν τῶν ὀρνιθῶν τὴν δὲ τοῖς ὄρνισιν ἐπὶ τῷ ρύγχει γινομένην, ἣν ἔνιοι πώγωνα καλοῦσιν, οὐκ ἔχει, διὸ καὶ ταύτη κολοβὸν ἐστὶ. —σῶμα ἅπαν ποικίλον, μέλανος ὄντος τοῦ χρώματος ὀλουπτίλοις λευκοῖς—σκέλη καὶ ἄκεντρα—παραπλήσια δὲ εἰσὶν αἱ θήλειαι τοῖς ἀρρεσιν· διὸ καὶ δυσδιάκριτόν ἐστι τὸ τῶν μελεαγρίδων γένος. *Athenæus*, 655.

† *Varro*. lib. 3. c. 9. *Pliny*. lib. 10. c. 26.

these citations we find every character of the Guinea hen, but none that agrees with the Turkey.

*Barbot** informs us that very few turkies are to be met with in *Guinea*; and those only in the hands of the chiefs of the *European* forts; the negroes declining to breed any on account of their tenderness, which sufficiently proves them not to be natives of that climate. On the contrary the same writer says, that the Guinea hens, or as he calls them *Pintadas*, are found there in flocks of two or three hundred, that they perch in trees, and feed on worms and grasshoppers; that they are run down and taken by dogs, and that their flesh is tender and sweet, generally white, though sometimes black. He also remarks that neither the common poultry or ducks are natural to *Guinea*, any more than the *Turkey*. Neither is that bird a native of *Asia*: the first that were seen in *Persia* were brought from *Venice* by some *Armenian* merchants†. They are also cultivated in *Ceylon*, but not found wild. In fact the *Turkey* was unknown‡ to the antient naturalists, and even to the old world before the discovery of

* *Barbot* 217.

† *Tavernier*. 146.

‡ This subject has been most satisfactorily discussed by Mr. *Pennant* in the *Arctic Zoology*, vol. i. p. 345, &c. ED.

America. It was a bird peculiar to the new continent, and is now the commonest wild fowl of the northern parts of that country. It was first seen in *France*, in the reign of *Francis I.* and in *England*, in that of *Henry VIII.* By the date of the reign of these monarchs, the first birds of this kind must have been brought from *Mexico*, whose conquest was completed, A. D. 1521, the short lived colony of the *French* in *Florida* not being attempted before 1562; nor our more successful one in *Virginia*, effected till 1585; when both those monarchs were in their graves.

Ælian, indeed, mentions a bird found in *India** which some writers have suspected to be the Turkey, but we conclude with *Gesner*, that it was either the Peacock, or some bird of that genus. On consulting some gentlemen who have long resided in the *East Indies*, we find, that though the Turkey is bred there, it is only considered as a domestic bird, and not a native of the country.

* *Æliani hist. an. lib. xvi. c. 2.*

GENUS XV. BUSTARD.

BILL strong, a little incurvated.

TOES none behind.

THIGHS partly bare of feathers.

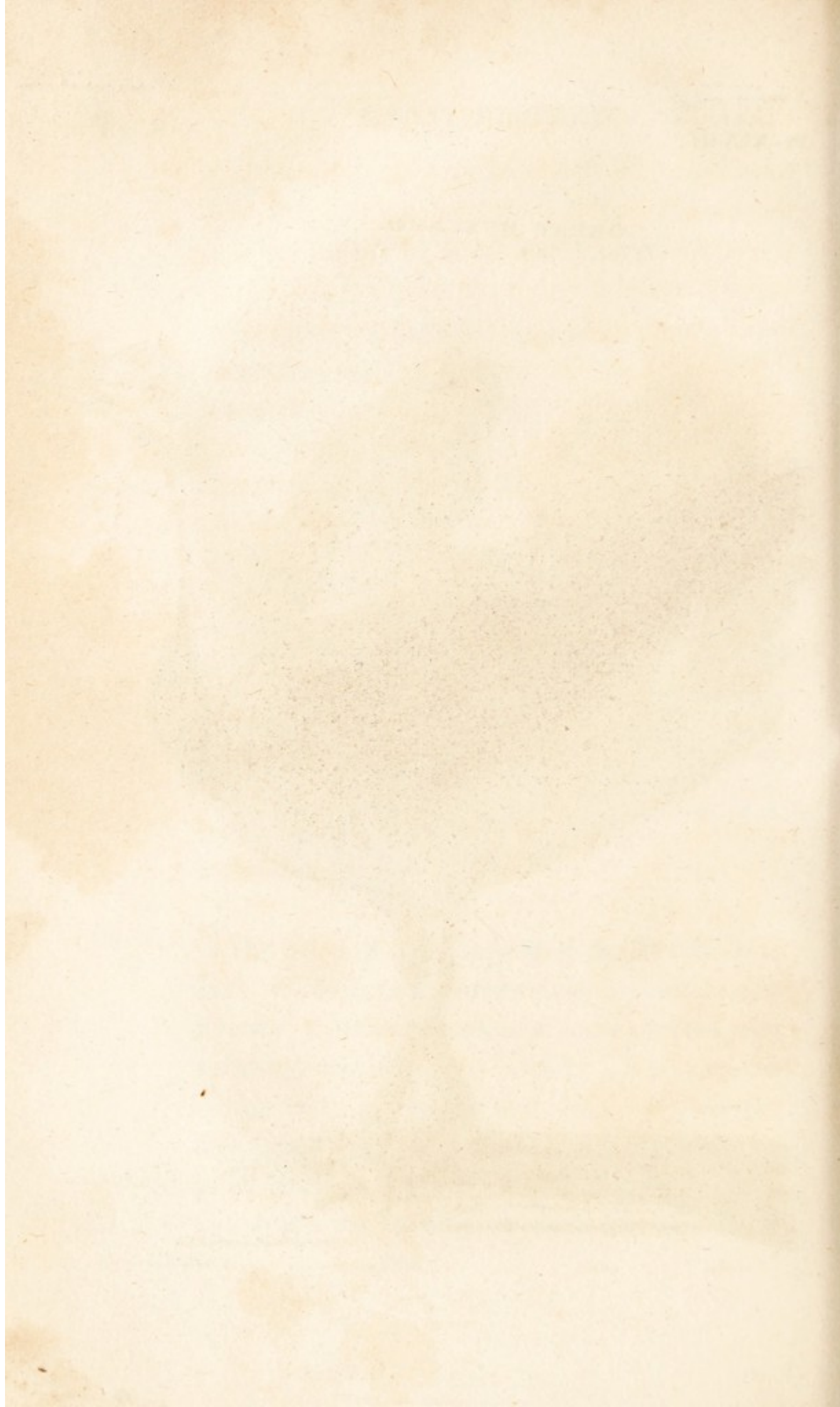
- | | |
|--|---|
| <p>1. GREAT. Otis. Tarda. O. nigro rufoque
undulato - maculata subtus
albida, capite (maris) jugu-
loque utrinque cristato.
<i>Lath. Ind. orn.</i> 658. <i>id. Syn.</i>
iv. 796.
<i>Tetrax. Athenæi</i>, lib. ix. 398.
<i>L'Ostarde. Belon av.</i> 235.
<i>Otis, vel Bistarda. Gesner av.</i>
484, 486.
<i>Otis sive Tarda. Aldr. av.</i> ii.
39.
<i>Wil. orn.</i> 178.
<i>Raii Syn. av.</i> 58.</p> | <p><i>Gustard. Boethii</i>, 7. and <i>Sib.</i>
<i>Scot.</i> 16.
<i>Edw. Tab.</i> 73, 74.
<i>L'Outarde. Brisson av.</i> v. 18.
<i>Hist. d'ois.</i> ii. 1. t. 1. <i>Pl.</i>
<i>Enl.</i> 245.
<i>Otis Tarda. Gm. Lin.</i> 726.
<i>Faun. Suec. sp.</i> 196.
<i>Trap. Kram.</i> 355.
<i>Acker-Trappe. Frisch.</i> i. 106.
<i>Scopoli</i>, No. 160.
<i>Br. Zool.</i> 87. plate N. <i>Arct.</i>
<i>Zool.</i> i. 375.</p> |
|--|---|

DESCRIP-
TION.

THE bustard is the largest of the *British* land fowl; the male at a medium weighing twenty-five pounds; there are instances of some very old ones weighing twenty-seven pounds. The breadth is nine feet; the length near four. Besides the size and difference of color, the male is distinguished from the female by a tuft of feathers about five inches long on each side the lower

GREAT BUSTARD.





mandible. Its head and neck are ash colored; the back is barred transversely with black and bright rust color; the greater quill feathers are black; the belly white; the tail is marked with broad red and black bars, and consists of twenty feathers; the legs are dusky.

The female is about half the size of the male: FEMALE.
the crown of the head is of a deep orange, traversed with black lines; the rest of the head is brown; the lower part of the fore-side of the neck is ash-colored: in other respects it resembles the male, only the colors of the back and wings are far more dull.

These birds inhabit most of the open coun- PLACE.
tries of the south and east parts of this island, from *Dorsetshire*, as far as the *Wolds* in *Yorkshire*.* They are exceedingly shy, and difficult to be shot; run very fast, and when on the wing can fly, though slowly, many miles without resting. It is said that they take flight with difficulty, and are sometimes run down with gre-hounds. They keep near their old haunts, seldom wandering above twenty or thirty miles. Their food is corn and other vegetables, and

* In Sir *Robert Sibbald's* time they were found in the *Mers*, but I believe that they are now extinct in *Scotland*.

The breed is now nearly extirpated, except on the downs of *Wiltshire*, where it is also very scarce. ED.

those large earth worms that appear in great quantities on the Downs, before sun-rising in the summer. These are replete with moisture, answer the purpose of liquids, and enable them to live long without drinking on those extensive and dry tracts. Besides this, nature hath given the males an admirable magazine for their security against drought, being a pouch,* whose entrance lies immediately under the tongue, and which is capable of holding near seven pints; and this they probably fill with water, to supply the hen when sitting, or the young before they can fly. Bustards lay only two eggs, of the size of those of a goose, of a pale olive brown, marked with spots of a darker color; they make no nest, only scrape a hole in the ground. In autumn they are (in *Wiltshire*) generally found in large turnep fields near the Downs, and in flocks of fifty or more.

[The Bustard still retaining its antient name *Oryz*, is found in all the great plains of *Greece*. Ed.]

* The world is obliged to the late Dr. *Douglas* for this discovery; and to Mr. *Edwards* for communicating it.

- Otis Tetrax. O. nigro rufo alboque variegata, subtus alba, capite juguloque lævi. *Lath. Ind. orn.* 659. *id. syn.* iv. 759. *id. Sup.* i. 226. The French Canne-petiere. *Wil. orn.* 179.
- La petite outard. *Brisson av.* 2. LESSER. v. 24. *Hist. d'oïs.* ii. 40. *Pl. Enl.* 10, 25.
- Otis Tetrax. *Gm. Lin.* 725. *Arct. Zool.* i. 375.

THERE are three or four instances of this species having been shot in *England*, but the specimens I have seen have all been female. Whether they were accidental stragglers from the continent, or whether they breed here, and the male has escaped the sportsman's notice, is not yet ascertained.*

This bird is about the size of a pheasant. The male, which I have seen in *France*, varies much in the colors of the neck from the female, being black, marked transversely above and below with a band of white. The crown of the head black and ferruginous; the back, scapulars, and coverts of the wings, varied with black and ferruginous lines; the quill feathers black

* Dr. *Latham* in the supplement to his *Synopsis* p. 226, observes that the late Mr. *Tunstall* had in his possession a specimen, shot in *Sussex*, which had the plumage of a female, but on dissection proved to be a male bird.† *ED.*

† One was shot within three miles of *Romsey, Hants*, Jan. 15, 1809, believed to be a female from its plumage. *J. L.*

at their ends, white at their bottoms; the white predominating to the secondaries, which are quite white; the breast, belly, and thighs, white; the middle feathers of the tail, tawny barred with black; the rest white; legs cinereous.

FEMALE.

The neck of the female agrees in colors with the back: in other respects the marks pretty nearly agree.

It inhabits open countries; feeds on grain, seeds, and insects.

3. THICK-KNEED.

Otis. *Ædicnemus*, *O. grisea*,
remigibus primoribus duabus
nigris medio albis, rostro
acuto, pedibus cinereis.
Lath. Ind. orn. 661. *id.*
Syn. iv. 806.

Un Ostardeau, *Ædicnemus*.
Belon. av. 239.

Charadrius (Triel vel Griel).
Gesner av. 256.

The Stone Curlew. *Wil. orn.*
306.

Raii Syn. av. 108.

Le grand Pluvier, Courly de
terre. *Brisson av.* v. 76.
Tab. 7. fig. 1. Hist. d'oïs.
viii. 105. *Pl. Enl.* 919.

Charadrius Ædicnemus. Gm.
Lin. 689.

Kervari. *Hasselquist Itin.* 210?
Engl. Ed. 200.

Norfolk Plover. *Br. Zool.* ii.
378. *Br. Zool. fol.* 127.

DESCRIPTION.

THE weight of this species is eighteen ounces. The length to the tail eighteen inches: the breadth thirty-six. The head is remarkably round; the space beneath the eyes is bare of feathers, and of a yellowish green; the irides yellow; the feathers of the head, neck, back,

and scapulars, and coverts of the wings are black, edged deeply with a pale reddish brown; the belly and thighs are of a pure white; the two first quill feathers are black, marked on the middle of each web with a large white spot. The tail consists of twelve feathers; the tips of the two outmost are black, beneath is a broad white bar, the remaining part barred with white and dusky brown; in the next feathers the white lessens; in the middle it almost disappears, changing to a pale reddish brown, mottled with a darker; its mouth very wide; the legs are of a fine yellow; the toes very short, bordered with a strong membrane; the knees thick, as if swelled, like those of a gouty man: from whence *Belon* gives it the name of *Ædicnemus*.*

This bird seems unknown in the western parts of this kingdom; but is found in *Hampshire*, *Norfolk*, and on *Lincoln heath*, where, from a similarity of colors to the curlew, it is called the *Stone Curlew*. It breeds in some places in rabbit burrows; also among stones on the bare ground, laying two eggs of a copper color, spotted with a darker red. The young run soon after they are hatched. These birds feed in the night on worms and caterpillars: they will also

* From οἰδεω, and κνήμη.

eat toads; and *Gesner* says they will catch mice, which is confirmed by *Hasselquist*.

They make a most piercing shrill noise, which they begin in the evening; and are so loud, as to be heard nearly a mile in a still night. They inhabit fallow lands and downs; affect dry places, never being seen near any waters. When they fly, they extend their legs straight out behind; are very shy birds; run far before they take to wing; and often squat: are generally seen single, and are esteemed very delicate food. In habit, make, and manners, these birds approach near to the Bustard. We have therefore removed them into this genus, from that of Plovers.

They are migratory: appear in *England* about the middle of *April*, and retire in autumn.

TURTLE (P. 394)



ROCK PIGEON.

SECT. IV. COLUMBINE.

GENUS XVI. PIGEON.

BILL soft straight.

NOSTRILS lodged in a tuberos naked skin.

TOES divided to their origin.

- Columba. domestica. C. minor versicolor, dorso inferiore albo. *Lath. Ind. orn.* 589. *Id. Syn.* iv. 605. *Pl. Enl.* 466. Le* Biset. 1. COMMON. *Brisson av.* i. 82. *Hist. d'oïs.* i. 82, *Pl. Enl.* 510. Le Rocheraye. *Brisson av.* i. 84.
- La Pigeon privé. *Belon av.* 313. Columba CEnas, domestica β . *Lin. Syst.* 279. C. domestica. *Gm. Lin.* 769.
- Columba domestica. *Aldr. av.* ii. 225. Skogs dufwa, Dufwa, Hemdufwa. *Faun. Suec. sp.* 207.
- Common wild Dove, or Pigeon. *Wil. orn.* 180. Rock Pigeon. *ib.* 186. Kirke-Due, Skov-Due. *Brunnich,* 203.
- Raii Syn. av.* 59. C. rupicola. *id.* 63. Feldtaube, Haustaube, Hohltaube. *Kram.* 358.
- Golob. Scopoli,* No. 177. Blau-Taube, or Holtz-Taube. *Frisch,* i. 139.
- Le Pigeon domestique. *Brisson av.* i. 68. *Hist. d'oïs.* ii. 501. *Br. Zool.* 88. plate 88.

THE tame pigeon, and all its beautiful varieties, derive their origin from one species, the Rock Pigeon. These birds, as *Varro*† ob-

* Columba livia. *Aldr. av.* ii. 234. et Oenas, seu vinago. 233.

† De Ling. Lat. lib. iv.

serves, take their Latin name, *Columba*, from their voice or cooing; and had he known it, he might have added the *British*, &c. for *Colommen*, *Kylobman*, *Kulm* and *Kolm*, signify the same bird. They were, and still are, found in this kingdom in a state of nature, especially on the vast rocks which impend over the sea. The *French* call them *Rocherayes*, and some old sportsmen in the south of *England*, *Rockiers*. They swarm in the *Orknies* and *Hebrides*. In the first they collect by thousands towards winter, and do great injury to the rick-yards. I have seen in *Ilay* the bottoms of the great chasms, covered with their dung for many feet in thickness, which is drawn up in buckets, and used successfully as a manure. Notwithstanding this species is so easily domesticated, yet it is difficult to tempt them to continue regularly in a dove-cot near to their natural haunts. I am acquainted with one, not far from those vast rocks, the *Orms-head*, where they will reside on account of the supply of food provided for them, till the breeding season, at which time, the greater part of the flock quit the artificial holes, and return to the rude habitations on the neighbouring promontories. *Virgil*, as a familiar occurrence, describes the Pigeon as haunting the caverns of a rock in such beautiful numbers,

that I cannot forbear repeating his simile :

Qualis speluncâ subito commota COLUMBA
Cui domus et dulces latebroso in pumice nidi,
Fertur in arva volans, plausumque exterrita pennis
Dat tecto ingentem—mox aëre lapsa quieto
Radit iter liquidum, celeres neque commovet alas.*

As when a Dove her rocky hold forsakes,
Rous'd in a fright, her sounding wings she shakes ;
The cavern rings with clattering—out she flies,
And leaves her callow care, and cleaves the skies :
At first she flutters ; but at length she springs
To smoother flight, and glides upon her wings.

DRYDEN.

This bird in its native state weighs about thirteen ounces : its length is thirteen inches and a half ; extent twenty-four inches and three quarters ; but I believe it is not usually so large. The head is grey ; the sides of the neck, variable with rich green, purple, and copper color ; the breast and belly cinereous ; the upper part of the back and coverts of the wings bluish ash-color ; the greater crossed with a black bar ; the primaries cinereous, tipped with black ; the lower part of the back white, a constant and specific mark ; the tail cinereous : the outmost web of the exterior feather white almost to the end, which, with those

DESCRIP-
TION.

* Æneid. v. l. 213.

of all the rest, is crossed with a black bar; the legs purplish red.

VARIETIES. The varieties produced from the domestic pigeon are very numerous, and extremely elegant; these are distinguished by names expressive of their several properties, such as *Tumblers*, *Carriers*, *Jacobines*, *Croppers*, *Powt-ers*, *Runts*, *Turbits*, *Owls*, *Nuns*,* &c. The

CARRIER. most celebrated of these is the *Carrier*, which from the superior attachment that pigeon shews to its native place, is employed in many countries as the most expeditious courier: the letters are tied under its wing, it is let loose, and in a very short space of time returns to the home it was brought from, with its advices.†

* Vide *Wil. orn. Moore's Columbarium*, and a treatise on domestic pigeons, published in 1765. The last illustrates the names of the birds, with several neat figures.

† This custom was observed by that legendary traveller, Sir *John Maundevile*, knight, warrior and pilgrim; who, with the true spirit of religious chivalry, voyaged into the East, and penetrated as far as the borders of *China*, during the reigns of *Edward II.* and *III.*

“ In that contree,” says he, “ and other contrees bezonde, thei han a custom, whan thei schulle usen werre, and whan men holden sege abouten cytee or castelle, and thei withinnen dur not senden out messagers with lettere, fro lord to lord, for to aske sokour, thei maken here letters and bynden hem to the nekke of a *Colver*, and leten the *Colver* flee; and the *Colveren*

This practice was much in vogue in the East; and at *Scanderoon*, till of late years,* used on the arrival of a ship, to give the merchants at *Aleppo* a more expeditious notice than could be done by any other means. In our own country, these aërial messengers have been employed for a very singular purpose, being let loose at *Tyburn* at the moment the fatal cart was drawn away, to notify to distant friends, the departure of the unhappy criminal.

In the East, the use of these birds seems to have been improved greatly, by having, if we may use the expression, relays of them ready to spread intelligence to all parts of the country. Thus the governor of *Damiata* circulated the news of the death of *Orrilo*:

Tosto che'l Castellan di *Damiata*
 Certificossi, ch'era morto *Orrilo*,
 La *Colomba* lasciò, ch'avea legata
 Sotto l'ala la lettera col filo.

ben so taughte, that thei fleen with tho letters to the verry place, that men wolde send hem to. For the *Colveres* ben norysscht in tho places, where thei ben sent to; and thei senden hem thus, for to beren here letters. And the *Colveres* retournen azen, where as thei ben norisscht and so they don comounly." The voiage and travaile of Sir *J. Maundevile*, knight, ed. 1727.

* Dr. *Russel* informs us, that the practice is left off. *Hist. Aleppo*, 66.

Quelle andò al *Cairo*, ed indi fu lasciata
 Un' altra altrove, come quivi e stilo :
 Sì, che in pochissime ore andò l'avviso
 Per tutto *Egitto*, ch'era *Orrilo* ucciso.*

But the simple use of them was known in very early times: *Anacreon* tells us, he conveyed his billet-doux, to his beautiful *Bathyllus*, by a dove.

Εγω δ' Ἀνακρέοντι
 Διάκονῳ τοσαῦτα
 Καὶ νῦν οἷας ἐκείνου
 Ἐπιστολας κομίζω.†

I am now *Anacreon's* slave,
 And to me entrusted have
 All the o'erflowings of his heart
 To *Bathyllus* to impart;
 Each soft line, with nimble wing,
 To the lovely boy I bring.

Taurosthenes also, by means of a pigeon he had decked with purple, sent advice to his father, who lived in the isle of *Ægina*, of his victory in the *Olympic* games, on the very day he

* 'As soon as the commandant of *Damiata* heard that *Orrilo* was dead, he let loose a pigeon, under whose wing he had tied a letter; this fled to *Cairo*, from whence a second was dispatched to another place, as is usual; so that in a very few hours, all *Egypt* was acquainted with the death of *Orrilo*.' *Ariosto*, canto 15.

† *Anacreon*, ode 9. εἰς περιστέραν.

had obtained it.* And, at the siege of *Modena*, *Hirtius* without, and *Brutus* within the walls, kept, by the help of pigeons, a constant correspondence; baffling every stratagem of the besieger *Antony*,† to intercept their couriers. In the times of the *Crusades*, there are many more instances of these birds of peace being employed in the service of war: *Joinville* relates one during the crusade of *Saint Louis*;‡ and *Tasso* another, during the siege of *Jerusalem*.§

The nature of pigeons is to be gregarious; to lay only two eggs; to breed many times in the year;|| to bill in their courtship; for the male and female to sit by turns, and also to feed their young; to cast their provision out of their craw into the young ones' mouths; to drink, not like other birds by sipping, but by continual draughts like quadrupeds; and to have notes mournful, or plaintive.

* *Ælian var. hist.* lib. ix. 2. *Pliny*, lib. x. c. 24. says, that swallows have been made use of for the same purpose.

† *Pliny*, lib. x. c. 37. Exclames, *Quid vallum et vigil obsidio atque etiam retia amne pretenta profuere Antonio, per cælum cunte nuncio?*

‡ *Joinville*, 638. app. 35.

§ *Tasso*, book xviii.

|| So quick is their produce, that the author of the *Oeconomy of nature* observes, that in the space of four years, 14,760 may come from a single pair. *Stillingfleet's tracts*, 75.

2. STOCK
DOVE.

Columba Œnas. C. cœrulescens, cervice viridi-nitente, dorso postico cinerascente, fascia alarum duplici apice-que caudæ nigricante. *Lath. Ind. orn.* 589. *id. Syn.* iv. 604. *id. Sup.* i. 197.
Œnas seu vinago. Raii Syn. av. 62. *A.* 10.

Gesner av. 307.

Stock dove or Wood Pigeon.

Willughby orn. 185.

Le Pigeon sauvage. *Brisson av.* i. 86.

Le Pigeon fuyard. *Belon av.* 78. *Gm. Lin.* 769.

Arct. Zool. ii. 9.

DESCRIP-
TION.

THE head, neck, and beginning of the back, are of a fine bluish grey; the sides of the neck marked with a variable green spot; the coverts of the wings grey, the most remote marked with black spots; the primaries dusky; the secondaries grey, the farthest spotted like the coverts; the lower part of the back and the rump of a very pale grey; the breast vinaceous; the belly of a light grey; the tail of the same color, except the exterior side of the outmost feather, which is white; the ends of all are black. The length is fourteen inches and a half; the extent, two feet two; the weight fourteen ounces.

MANNERS.

This species is migratory, and arrives in *Hampshire* the latest of any bird of passage. Flocks of them appear towards the latter end of *No-*

ember, and retire early in the spring. They probably come from *Sweden*, for the time of their migration and remigration in that country coincides with their appearance and disappearance in *Britain*. When the south of *England* was covered with large woods of beech, they came in myriads to feed on the mast. They also alight on the barley stubble to collect the scattered grain, and in hard weather, are very destructive to turnips by picking holes in the roots, from which they acquire a rancid taste. A few continue and breed in *England*, particularly in *Sussex*: they make their nests in the hollows of stocks of trees, from which they take their name. I have also been informed by the reverend Mr. *Ashby*, of *Barrow*, near *Newmarket*, that multitudes breed in the rabbit burrows on the sandy plain of *Suffolk* about *Brandon*, and that the shepherds annually take the young for sale.

These perch and roost in trees, which the Rock and domestic kinds never do: yet a few Rock-Pigeons have been often seen mixed with the flights of Stock Doves. I have also frequently observed some of these (which are easily known by their grey backs) mingling among the flocks of tame pigeons, and breeding with them. This, therefore, causes me to

suspect the Stock Dove may likewise contribute to add to the domestic kinds, as their place of nidification in a state of nature is in holes of trees, as that of the others is in holes of rocks.

3. RING. Columba. Palumbus. *C. cinerea*, rectricibus postice atris, remigibus primoribus margine exteriori albidis, collo utrinque albo. *Lath. Ind. orn.* 601. *id. Syn.* iv. 635. *id. Sup.* i. 198.
 Le Ramier. *Belon av.* 307.
 Phassa. *Belon obs.* 13.
 Palumbus. *Gesner av.* 310.
 Palumbus major sive torquatus. *Aldr. av.* ii. 227.
 Colombaccio. *Olini*, 54.
 Ring-dove, Queest, or Cushat. *Wil. orn.* 185.
Raii Syn. av. 62.
 Le Pigeon Ramier. *Brisson av.* i. 89. *Hist. d'oies.* ii. 531. *Pl. Enl.* 316.
 Griunik. *Scopoli*, No. 178.
 Columba Palumbus. *Gm. Lin.* 776.
 Ringdufwa, Siutut. *Faun. Suec. sp.* 208.
 Wildtaube, Ringлтаube. *Kram.* 359.
 Ringel-Taube. *Frisch.* i. 138.
 Dan. Ringel-due *Bornholmis*, Skude. *Brunnich*, 204.
Br. Zool. 89. plate O. *Arct. Zool.* ii. 10.

THIS species forms its nest of a few dry sticks in the boughs of trees: attempts have been made to domesticate them, by hatching their eggs under the common pigeon in dove houses; but as soon as they could fly, they always took to their proper haunts. In the beginning of the winter they assemble in great flocks, and leave off cooing; which they begin in *March*, when they pair.

The ring dove is the largest pigeon we have ; and may be at once distinguished from all others by the size. Its weight is about twenty ounces ; its length eighteen inches ; its breadth thirty. The head, back, and coverts of the wings are of a bluish ash color ; the lower side of the neck and the breast are of a purplish red, dashed with ash color ; on the hind part of the neck is a semicircular line of white ; above and beneath that the feathers are glossy, and of changeable colors as opposed to the light ; the belly is of a dirty white ; the greater quill feathers are dusky ; the rest ash colored ; underneath the bastard wing is a white stroke pointing downwards.

DESCRIP-
TION.

[The Ring dove, like the preceding species, quits *Sweden* in the autumn, and returns early in the spring ; it is not found in *Norway* or within the arctic zone, by reason not only of the cold but of defect of food.* ED.]

* *Arct. Zool.* ii. 10.

4. TURTLE. Columba. Turtur. C. rectricibus apice albis, dorso griseo, pectore incarnato, macula laterali colli nigra lineolis albis. *Lath. Ind. orn.* 605. *id. Syn.* iv. 644. *id. Sup.* i. 199.
- La Turtrelle. *Belon av.* 309.
- Turtur. *Gesner av.* 316.
- Turtur. *Aldr. av.* ii. 235.
- Tortora. *Olin.* 34.
- The Turtle-dove. *Wil. orn.* 183.
- Raii Syn. av.* 61.
- Wilde Turtel taube. *Kram.* 359.
- Turtel-Taube. *Frisch,* i. 140.
- Le Tourterelle. *Brisson av.* i. 92. *Hist. d'oï.* ii. 545. *Pl. Enl.* 394.
- Scopoli,* No. 181.
- Columba Turtur. *Gm. Lin.* 276.
- Br. Zool.* 89. plate O. 1.

THIS species is found in *Buckinghamshire*, *Gloucestershire*, *Shropshire*, and in the West of *England*. They are very shy and retired birds, breeding in thick woods, generally of oak: we believe that they reside in *Buckinghamshire* during the breeding season, migrating into the other counties in autumn.*

About the year 1785, a pair came into my garden at *Downing* in the winter season and continued there two or three weeks. I have seen

* The stomach of a Turtle Dove examined by the reverend *Hugh Davies* in the month of *October*, contained only some seed of the *Polygonum aviculare*, of rape and of mustard; it must therefore at that season have declined from choice every species of bread-corn. *Ed.*

one shot in *Anglesey*, and another near *Holywell*.

The length is twelve inches and a half; the breadth twenty-one: the weight four ounces. The irides are of a fine yellow; a beautiful crimson circle encompasses the eye lids; the chin and forehead are whitish, the top of the head ash colored mixed with olive; on each side of the neck is a spot of black feathers prettily tipped with white; the back ash colored, bordered with olive brown; the scapulars and coverts of a reddish brown spotted with black; the quill feathers of a dusky brown, the tips and outward edges of a yellowish brown; the breast of a light purplish red, having the verge of each feather yellow; the belly white; the sides and inner coverts of the wings bluish; the tail is three inches and a half long; the two middlemost feathers are of a dusky brown; the others black, with white tips; the end and exterior side of the outmost feathers wholly white.

DESCRIP-
TION.

Turtle doves arrive in *Italy* in *May* and migrate in *September*. [They visit *Greece* rather earlier, and generally come during the month of *April* in four or five vast flocks. ED.]

SECT. V. PASSERINE.

GENUS XVIII. STARE.

BILL, strait depressed.

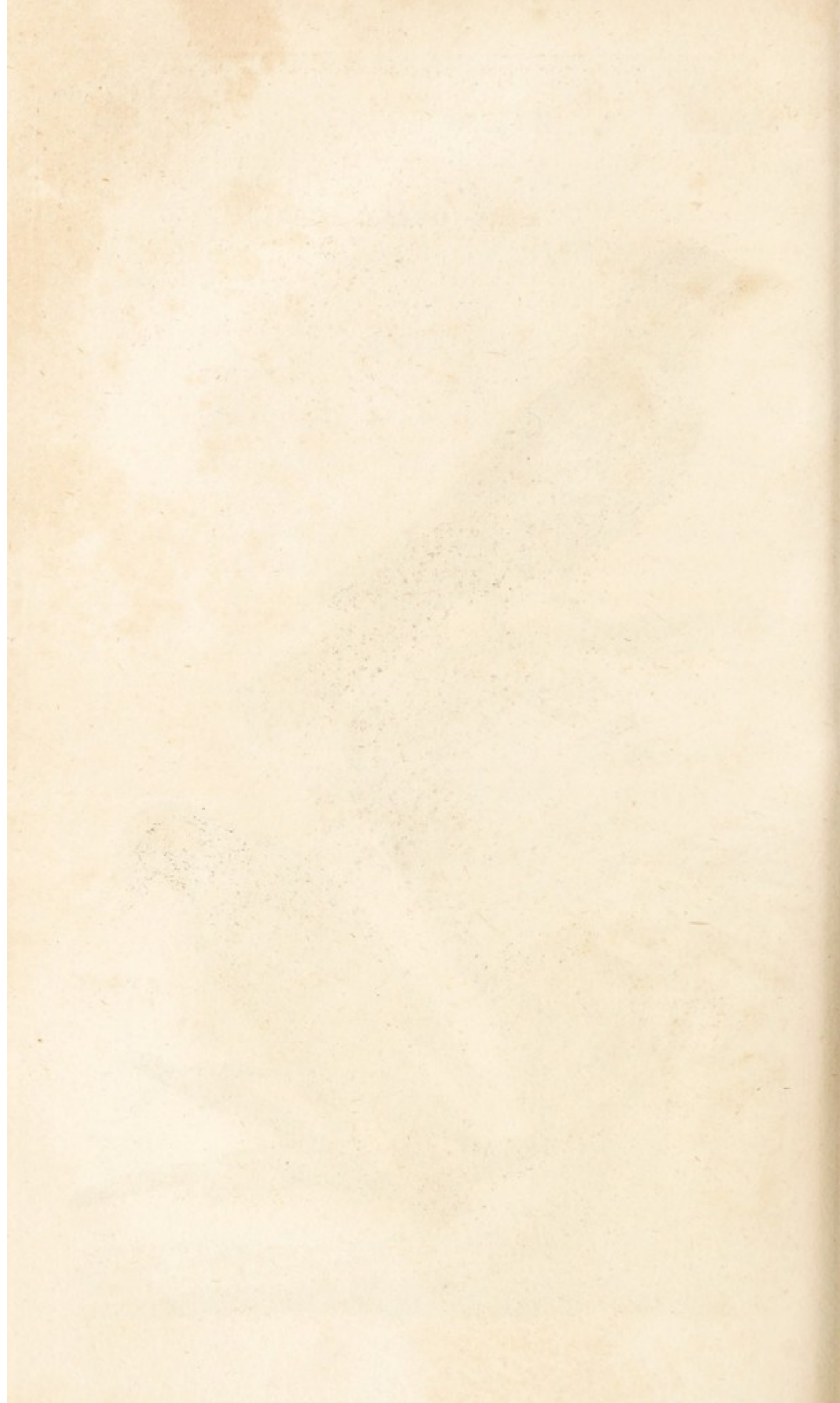
NOSTRILS surrounded with a prominent rim.

1. COMMON. *Sturnus vulgaris*. St. rostro Starl. *Scopoli*, No. 189.
 flavescente, corpore nigro- Storno. *Zinan*, 69.
 nitente punctis albis. *Lath.* *Olin*, 18.
Ind. orn. 321. *id. Syn.* iii. *Sturnus vulgaris.* *Gm. Lin.*
 2. *id. Sup.* i. 137. 801.
L'Estourneau. *Belon av.* 321. *Stare. Faun. Suec. sp.* 213.
Sturnus. *Gesner av.* 746. *Hasselquist, itin.* 284.
Aldr. av. ii. 284. *Danis & Norvegis, Stær. Br.*
Stare, or Starling. Wil. orn. 229.
 196. *Staar. Frisch.* ii. 217.
Raii Syn. av. 67. *Starl. Kram.* 362.
L'Etourneau. Brisson av. ii. *Br. Zool.* 93. plate P. 2. f. 1.
 439. *Hist. d'ois.* iii. 176. *Arct. Zool.* ii. 12.
Pl. Enl. 75.

THE Stare breeds in hollow trees, eaves of houses, towers, ruins, cliffs, and often in high rocks over the sea, such as those of the *Isle of Wight*. It lays twice, sometimes thrice, in the season; the first time it is said to deposit five eggs, the second four, the last three: the eggs are of a pale greenish ash-color: its nest is made

RING OUZEL. (P. 415.)





of straw, small fibres of roots, and the like. In winter, stares assemble in vast flocks: they collect in myriads in the fens of *Lincolnshire*, and do great damage to the fen-men, by roosting on the reeds, and breaking them down by their weight; for reeds are the thatch of the country, and are harvested with great care.

These birds feed on worms, and insects; and it is said that they will get into pigeon houses, for the sake of sucking the eggs. Their flesh is so bitter, as to be scarcely eatable. They are very docile, and may be taught to speak.

The weight of the male of this species is about three ounces; that of the female rather less. The length is eight inches three quarters: the breadth fourteen inches. The bill, in old birds, is yellow; the whole plumage is black, very resplendent with changeable blue, purple, and copper; each feather marked with a pale yellow spot; the lesser coverts are edged with yellow, and slightly glossed with green; the quill feathers and tail dusky; the former edged with yellow on the exterior side; the last with dirty white; the legs are of a reddish brown.

DESCRIP-
TION.

The Starling visits *Italy* in *February*, migrates in *October*.

2. WATER-OUZEL. *Turdus Cinclus*. *T. fusco-nigricans*, genis gutture collo inferiore et pectore niveis, ventre supremo fusco-rufescente, imo rectricibusque nigricantibus. *Lath. Ind. orn.* 343. *id. Syn.* iii. 48. *id. Sup.* i. 142.
- Merula aquatica*. *Gesner av.* 608.
- Lerlichirolo*. *Aldr. av.* iii. 186.
- Water-craw. *Turner*.
- The Water-Ouzel, or Water-Crake. *Wil. orn.* 149. *Raii Syn. av.* 66.
- Sturnus Cinclus*. *Gm. Lin.* 803.
- Watnstare. *Faun. Suec. sp.* 214.
- Povodni Koss. *Scopoli*, No. 223.
- Le Merle d'eau. *Brisson av.* v. 252. *Hist. d'oïs.* viii. 134. *Pl. Enl.* 940.
- Merlo aquatico. *Zinan.* 109.
- Norvegis*, Fosse Fald, Fosse Kald, Quærn Kald, Stroem-Stær, Bække Eugl. *Brunnich.* 230.
- Wasser-amsel, Bach-amsel. *Kra.* 374.
- Br. Zool.* 92. plate. P. 1. f. 2. *Arct. Zool.* ii. 13.

NEST.

THIS bird frequents small brooks, particularly those with steep banks, or that run through a rocky country. It is of a very retired nature, and never seen but single, or with its mate. It breeds in holes in the banks, and lays five white transparent eggs adorned with a fine blush of red. The nest is constructed in a curious manner, of hay and fibres of roots, and lined with dead oak leaves, having a portico, or grand entrance made with green moss. It feeds on insects and small fish; and as Mr.

PENRITH OUZEL.



Willughby observes, though not web-footed, will dart itself after them quite under water.

Its weight is two ounces and a half; the length seven inches one quarter; the breadth eleven; the bill is narrow, and compressed sideways; the eyelids are white; the head, cheeks, and hind part of the neck are dusky, mixed with rust color; the back, coverts of the wings, and of the tail also dusky, edged with bluish ash color; the throat and breast white; the belly ferruginous, vent feathers a deep ash color; the legs are of a pale blue before, black behind; the tail short and black, which it often flirts up, as it is sitting.

DESCRIP-
TION.

Penrith Ouzel. *Pennant's Tour to Alston Moor.*

VAR. A.?
PENRITH
OUZEL.

[EITHER a singular variety or a new species of Water Ouzel, shot near *Penrith*, is thus described by Mr. *Pennant* in his tour to *Alston Moor*, p. 159.

It is rather superior in size to the common water-ouzel; the head, wings, upper part of the body, and tail are dusky; the chin and throat white; at the bottom of the last is a dusky bar; the breast, belly, and thighs are white, marked

with short black strokes, pointing downwards, most numerous towards the lower part of the belly and the thighs; the vent is of a rusty yellow crossed with bars of black; the legs are of a rusty yellow. ED.]

[EITHER a singular variety or a new species of Water Ouzel, shot near Penrith, is thus described by Mr. Bennett in his tour to Alston Moor, p. 159.

It is rather superior in size to the common water-ouzel; the head, wings, upper part of the body, and tail are dusky; the chin and throat white; at the bottom of the feet is a dusky bar; the breast, belly, and thighs are white; marked

GENUS XIX. THRUSH.

BILL strait, a little bending at the point, with a small notch near the end of the upper mandible.

TOE outmost adhering as far as the first joint to the middle toe.

TONGUE divided and jagged.

GULLET bristly.

- | | | |
|--------------------------------|-------------------------------|------------|
| Turdus viscivorus. T. supra | Turdus viscivorus. Gm. Lin. | 1. MISSEL. |
| griseo-fuscus, subtus albo- | 806. | |
| flavicans, maculis nigrican- | Tordo viscada, Zicchio. Zi- | |
| tibus varius, rectricibus tri- | nan. 39. | |
| bis extimis albo terminatis. | La Draine. Hist. d'oïis. iii. | |
| Lath. Ind. orn. 326. id. | 295. Pl. Enl. 489. | |
| Syn. iii. 16. | La grosse grive, Turdus ma- | |
| La Grive ou Siserre. Belon. | ajor. Brisson av. ii. 200. | |
| av. 324. | Biork-Trast. Faun. Suec. sp. | |
| Turdus viscivorus. Gesner av. | 216. | |
| 759. | Dobbelt-Kramsfugl. Brun- | |
| Aldr. av. ii. 273. | nich, 231. | |
| Tordo. Olin, 25. | Zariker, Mistler, Zerrer. | |
| Missel-bird, or Shrite. Wil. | Kram. 361. | |
| orn. 187. | Mistel-Drossel, or Schnarre. | |
| Raii Syn. av. 64. | Scopoli, No. 193. Frisch, i. | |
| Misseltoe-thrush, or Shreitch. | 25. | |
| Charlton ex. 89. | Br. Zool. 90. plate P. f. 1. | |
| | Arct. Zool. ii. 24. | |

THIS is the largest of the genus, and weighs nearly five ounces. Its length is eleven inches :

its breadth sixteen and a half. The bill is shorter and thicker than that of other thrushes; dusky, except the base of the lower mandible, which is yellow. The irides are hazel. The head, back, and lesser coverts of the wings are of a deep olive brown; the lower part of the back tinged with yellow; the lowest order of lesser coverts, and the great coverts brown; the first tipt with white, the last both tipt and edged with the same color; the quill feathers, and secondaries dusky, but the lower part of the inner webs white; the inner coverts of the wings white. The tail brown; the three outmost feathers tipt with white. The cheeks and throat are mottled with brown and white; the breast and belly whitish yellow, marked with large spots of black: the legs yellow.

These birds build their nests in bushes, or on the side of some tree, generally an ash, and lay four or five eggs. Their note of anger or fear is very harsh, between a chatter and shriek; from whence some of their *English* names; their song nevertheless is very fine, which they begin, sitting on the summit of a high tree, very early in the spring, often with the new year, in blowing showery weather, which makes the inhabitants of *Hampshire* call them the *Storm-cock*. They feed on insects, holly and missel-

toe berries, which are the food of all the thrush kind: in severe snowy weather, when there is a failure of their usual diet, they are observed to scratch out of the banks of hedges, the root of *Arum*, or the cuckoo pint: this is remarkably warm and pungent, and a provision suitable to the season.

This bird migrates into *Burgundy* in the months of *October* and *November*: in *Great Britain*, it continues the whole year. The *Welsh* call it *Pen y llwyn*, or the master of the coppice, as it will drive all the lesser species of thrushes from it. The antients believed that the misseltoe (the basis of bird-lime) could not be propagated but by the berries that had past through the body of this bird; and on that is founded the proverb of *Turdus malum sibi cacat*.

It may be observed, that this is the largest bird, *British* or foreign (within our knowledge) that sings or has any melody in its note: the notes of all of a superior size, being either screaming, croaking, or chattering, the pigeon kind excepted, whose slow plaintive continued monotone has something sweetly soothing in it. *Thomson* (the naturalist's poet) in the concert he has formed among the feathered tribe, allows the imperfection of voice in the larger birds, yet

introduces them as useful as the base in chorus,
notwithstanding it is displeasing by itself.

The jay, the rook, the daw,
And each harsh pipe (discordant heard alone)
Aid the full concert: while the stock-dove breathes
A melancholy murmur thro' the whole.*

2. FIELD-
FARE.

- Turdus Pilaris*. *T. fusco-rufescens*, subtus nigricante varius, rectricibus nigris, extimis margine interiore apice albicantibus, capite uropygioque cano. *Lath. Ind. orn.* 330. *id. Syn.* iii. 24.
- La Litorne*. *Belon av.* 328.
- Turdus pilaris*. *Gm. Lin.* 807. *Gesner av.* 753. *Aldr. av.* ii. 274. *Wil. orn.* 188. *Raii Syn. av.* 64.
- La Litorne*, ou *Tourdelle*. *Brisson av.* ii. 214. *Hist. d'ois.* iii. 301. *Pl. Enl.* 490.
- Kramsfogel*, *snoskata*. *Faun. Suec.* No. 215.
- Brinauka*. *Scopoli*, No. 194.
- Dan.* Dobbelt *Kramsfugl*. *Cimbris.* Snarrer. *Norvegis*, Graae *Trost*, *Field-Trost*, *Nordenvinds Pibe*, *Bornholmis*, *Simmeren*. *Br.* 232.
- Kranabets vogel*, *Kranabeter*. *Kram.* 361.
- Wacholder-Drossel*, (*Juniper Thrush*), or *Ziemer*. *Frisch*, i. 26.
- Br. Zool.* 90. plate P. 2. f. 1. *Arct. Zool.* ii. 23.

THIS bird passes the summer in the northern parts of *Europe*; also in lower *Austria*.† It breeds in the largest trees;‡ feeds on berries

* *Seasons.* *Spring.* l. 606.

† *Kramer elench.* 361.

‡ *Faun. Suec. sp.* 78.

of all kinds, and is very fond of those of the juniper. Fieldfares visit our islands in great flocks about *Michaelmas*, and leave us the latter end of *February*, or the beginning of *March*. We suspect that the birds that migrate here, come from *Norway*, &c. forced by the excessive rigor of the season in those cold regions; as we find that they winter as well as breed in *Prussia*, *Austria*,* and the moderate climates.†

These birds and the Redwings were the *Turdi* of the *Romans*, which they fattened with crums of figs and bread mixed together. *Varro* informs us that they were birds of passage, coming in autumn, and departing in the spring. They must have been taken in great numbers, for they were kept by thousands together in their fattening aviaries.‡ They do not arrive in *France* till the beginning of *December*.

These birds weigh generally about four ounces; their length is ten inches, their breadth seventeen. The head is ash-colored inclining

DESCRIP-
TION.

* *Klein hist. av.* 178.

† “ Instances of their breeding in *England* are rare. Mr. *Lewin* assured me that *February* 12, 1792, a pair were observed to make a nest near his residence in an ivy bush, and, in a former year, he has seen them in summer. We are told also that a nest of this bird has been found at *Paddington*.”§ J. L.

‡ *Varro*, lib. iii. c. 5.

§ *Hart. Misc.* ii. 561. *Barringt. Misc.* 219.

to olive, and spotted with black; the back and greater coverts of the wings are of a fine deep chesnut; the rump ash-colored. The tail is black; the lower parts of the two middlemost feathers, and the interior upper sides of the outmost feathers excepted; the first being ash-colored, the latter white. The legs are black; the claws very strong.

- Turdus musicus*. *T. supra griseo-fuscus*, *subtus albo-rufescens maculis nigricantibus varius*, *remigibus basi interiore ferrugineis*. *Lath. Ind. orn.* 327. *id. Syn.* iii. 18. *id. Sup.* i. 139.
- La petite Grive. *Belon av.* 226.
- Turdus minor alter*. *Gesner av.* 762. *Aldr. av.* ii. 275.
- Storno. *Olin.* 18.
- Mavis, Thrustle, or Song Thrush. *Wil. orn.* 188.
- Raii Syn. av.* 64.
- La petite Grive, *Turdus minor*. *Brisson av.* ii. 205.
- Hist. d'ois.* iii. 280. *Pl.* 3. THROSTLE. *Enl.* 406.
- Turdus musicus*. *Gm. Lin.* 809.
- Faun. Suec. sp.* 217.
- Turdus in altissimis*. *Klein stem. av. Tab.* 13.
- Weindroschl, Weissdroschl, Sommer-droschl. *Kram.* 361.
- Sing-Drossel, or Weiss-drossel. *Frisch, i.* 27.
- Cimbris & Bornholmis*, Vündrossel. *Norvegis, Tale Trast. Br.* 236.
- Drasich. Scopoli, No.* 195.
- Br. Zool.* 91. plate P. f. 2.
- Arct. Zool.* ii. 25.

THE weight of this species is three ounces: the length nine inches: the breadth thirteen inches and a half. In colors it so nearly resembles the missel thrush, that no other remark need be added, but that it is less, and that the inner coverts of the wings are yellow.

The throstle is the finest of our singing birds, not only for the sweetness and variety of its notes, but for the long continuance of its harmony; for it obliges us with its song for nearly three parts of the year. Like the missel bird, it delivers its music from the top of some high tree;

DESCRIP-
TION.

but to form its nest descends to some low bush or thicket. The nest is made of earth, moss, and straws, and the inside is curiously plaistered with clay. It lays five or six eggs, of a pale bluish green, marked with dusky spots.

In *France* these birds are migratory: in *Burgundy*, they appear just before vintage, in order to feed on the ripe grapes, are therefore called there *la Grive de vigne*: retire at the first frosts, return in *March* and *April*, as if it were to disappear again in *May*. A few stragglers stay to breed. In *Italy* they arrive in *April* and *May*, and return before *October*.

“ With us it seems to shift its quarters according to the season, but we believe does not depart from the kingdom. The chief food is berries, but in defect of these sometimes eats snails in quantities, and it is not unusual to see numbers of the broken shells together near some particular stone, used by them for the purpose of the more easily breaking them against.* It builds very early; a nest was found in a garden near *Chester* the third week in *January* containing four eggs, on which the bird was sitting.” J. L.

VAR. A.
BUFF-CO-
LORED.

“ Two specimens, exactly alike, of a uniform buff-colored Thrustle, with the exception of the breast and vent which are a shade lighter, have

* *Natur. Calend.* 61.

been sent to the ingenious Miss *Meyrick*, of *Beaumaris*; one was found near *St. Asaph*, in *Flintshire*, the other near *Bangor*, in *Caernarvonshire*. *Brisson*, who is so very particular with regard to varieties, who has his *Turdus candidus*, *T. minor leucocephalus*, *T. minor cristatus*, and all the pied varieties of *T. Merula*, has nothing like this. Should it form a distinct species it may be defined *Turdus unicolor*. *T. totus luteus, pedibus concoloribus, rostro sub-fusco.*" H. D.

- | | |
|---|---|
| <i>Turdus Iliacus</i> . <i>T. griseo-fuscus</i> , subtus albidus maculis fuscis, alis subtus ferrugineis, superciliis albicantibus. <i>Lath. Ind. orn.</i> 329. | <i>Le Mauvis</i> . <i>Brisson av.</i> ii. 4. REDWING. |
| <i>id. Syn.</i> iii. 22. | 208. <i>Tab.</i> 20. <i>fig.</i> 1. <i>Hist. d'ois.</i> iii. 309. <i>Pl. Enl.</i> 51. |
| <i>Le Mauvis</i> . <i>Belon av.</i> 327. | <i>Scopoli</i> , No. 196. |
| <i>Turdus minor</i> . <i>Gesner av.</i> 761. | <i>Turdus iliacus</i> . <i>Gm. Lin.</i> 808. |
| <i>T. Illas seu Tylas</i> . <i>Aldr. av.</i> ii. 275. | <i>Klera</i> , <i>Kladra</i> , <i>Tall-Trast</i> . |
| <i>Redwing</i> , <i>Swinepipe</i> , or <i>Wind Thrush</i> . <i>Wil. orn.</i> 189. | <i>Faun. Suec. sp.</i> 218. |
| <i>Raii syn. av.</i> 54. | <i>Rothdroschl</i> , <i>Walddroschl</i> , <i>Winterdroschl</i> . <i>Kram.</i> 361. |
| | <i>Wein-Drossel</i> . <i>Roth-Drossel</i> . <i>Frisch</i> , i. 28. |
| | <i>Br. Zool.</i> 91. plate P. f. 2. |
| | <i>Arct. Zool.</i> ii. 25. |

THESE birds appear in *Great-Britain* a few days before the fieldfare; they come in vast flocks, and from the same countries. With us

they have only a disagreeable piping note, but in *Sweden*, during the spring they sing very finely, perching on the top of some tree among the forests of maples. They build their nests in hedges, and lay six bluish green eggs spotted with black.*

DESCRIP-
TION.

They have a very near resemblance to the throstle, but are less, only weighing two ounces and a quarter: their colors are much the same, but the sides under the wings and the inner coverts in this are of a reddish orange; in the throstle yellow: above each eye is a line of yellowish white, beginning at the bill and passing towards the hind part of the head. The vent feathers are white.

Besides these three sorts of throstles, the author of the *Epitome of the art of husbandry*,† mentions a fourth kind under the name of the *heath throstle*, which he commends as far superior to the others in its song: he says it is the best of any, and may be known by its dark breast; that it builds its nest by some heath-side, is very scarce, and will sing nine months in the year.

* *Faun. Suec. sp.* 218.

† *By J. B. gent. third edit.* 1685.

M. & F. BLACKBIRD.



McGriffiths del

- Turdus Merula. T. ater, rostro palpebrisque fulvis. *Lath.* 831. 5. BLACK-BIRD.
Ind. orn. 340. *id. Syn.* iii. Kohl-Trast. *Faun. Suec.* sp. 220.
 43. *id. Sup.* i. 141. *Dan. & Norvegis* Solsort. *Br.* 234.
 Le Merle noir. *Belon av.* 320. Amsel, Amarl. *Kram.* 360.
 Merula. *Gesner av.* 602. Schwartz Amsel. *Frisch,* i. 29.
Aldr. av. ii. 276. *Wil. orn.* 190. Koss. *Scopoli,* No. 197.
 Merlo. *Zinan.* 39. *Olinæ,* 29. *Br. Zool.* 92. *Arct. Zool.* ii. 29.
Raii Syn. av. 65. *Hist. d'oïis.* iii. 330. *Pl.* 29.
 La Merle. *Brisson av.* ii. 227. *Enl.* 2.

THIS bird is of a very retired and solitary nature; frequents hedges and thickets, in which it builds earlier than any other bird. The nest is formed of moss, dead grass, fibres, &c. lined or plaistered with clay, and that again covered with hay or small straw. It lays four or five eggs of a bluish green color, marked with irregular dusky spots. The note of the male is extremely fine, but too loud for any place except the woods; it begins to sing early in the spring, continues its music part of the summer, desists in the moulting season; but resumes it for some time in *September*, and the first winter months.

DESCRIP-
TION.

The color of the male, when it has attained its full age, is of a fine deep black, and the bill of a bright yellow: the edges of the eyelids yellow. When young the bill is dusky, and the plumage of a rusty black, so that it cannot be distinguished from the female; but at the age of one year it attains its proper color.

The blackbird continues in *Italy* the whole year.

“ We can trace the blackbird as far as the southern part of *Spain*, from whence it is said alternately to visit *Barbary*, and in both places to be numerous, though in general it is a solitary species. It is a constant inhabitant here; is subject to much variety, and is found sometimes white and occasionally pied in different degrees. When kept tame may be taught to whistle tunes and imitate the human voice.”
J. L.





G. Edwards pinxit.

- | | | |
|---|--|------------------------|
| Turdus roseus. T. subincarnatus, capite alis caudaque nigris, occipite cristato. <i>Lath.</i> | <i>Brisson</i> av. ii. 250. <i>Hist. d'oïs.</i> iii. 348. <i>Pl. Enl.</i> 251. | 6. ROSE COLORED OUZEL. |
| <i>Ind. orn.</i> 344. <i>id. Syn.</i> iii. 50. <i>id. Sup.</i> i. 142. | Turdus roseus. <i>Gm. Lin.</i> 819. <i>Faun. Suec.</i> sp. 219. | |
| Merula rosea. <i>Raii Syn.</i> av. 67. <i>Aldr.</i> av. ii. 283. | <i>Edw.</i> 20. <i>Br. Zool.</i> 4to. ii. App. 533. | |
| <i>Wil. orn.</i> 194. | <i>tab. v. Arct. Zool.</i> ii. 27. | |
| Le Merle Couleur de Rose. | | |

MR. *Edwards* discovered this beautiful bird twice in our island, once near *London*, at *Norwood*, and another time in *Norfolk*.* The figure of this and of the Oriole, were copied, by permission, from his excellent and accurate designs, which we gratefully acknowlege, as well as every other assistance from our worthy friend, whose pencil has done as much honor to our country, as the integrity of his heart, and communicative disposition, have procured him esteem from a numerous and respectable acquaintance.

The size of this bird appears by the print to be equal to that of a stare. The bill at the point is black, at the base of a dirty flesh color :

DESCRIPTION.

* Dr. *Shaw*, in the seventh volume of the *Naturalist's Miscellany*, *tab.* 231, gives the figure of a specimen shot in *Oxfordshire*. ED.

the head is adorned with a crest hanging backwards. The head, crest, neck, wings, and tail are black, glossed with a changeable blue, purple and green: the breast, belly, back, and lesser coverts of the wings, are of a rose color, mixed with a few spots of black: the legs are of a dirty orange color.

This bird is found in *Lapland*, *Italy*, and *Syria*. About *Aleppo* it is called the *locust bird*, possibly from its food; and appears there only in summer.* In *Italy* it is styled the *sea-stare*; and, as *Aldrovandus* says, frequents heaps of dung.† Mr. *Ekmarck*‡ informs us, that it resides in *Lapland*, never passing beyond the limits of that frozen region. We have mentioned very opposite climes, but believe it to be a scarce bird in all, at lest in *Europe*.

We have seen one that was shot at *Grantham* in *Lincolnshire*, and it has been told me that one has been shot and sometimes more about *Ormskirk* in *Lancashire*. J. L.

* *Russel's hist. Alep.* 70. *Tavernier*, 146.

† *Aldr. av.* ii. 283.

‡ *Migr. av. Amæn. acad.* iv. 594.

- Turdus torquatus*. *T. nigricans*, torque albo, rostro flavescente. *Lath. Ind. orn.* 243. *id. Syn.* iii. 46. *id. Sup.* i. 141. Le Merle a plastron blanc. *Hist. d'ois.* iii. 340. *Pl. Enl.* 516. 7. RING-OUZEL.
- Le Merle a Collier. *Brisson av.* ii. 235. Le Merle ou Collier. *Belon Marton Northampt.* 425. *av.* 318. *Turdus torquatus*. *Gm. Lin.* 832. *Merula torquata*. *Gesner av.* 607. *Ringel-Amsel. Frisch,* i. 30. *Merlo alpestre. Aldr. av.* ii. 282. *Faun. Suec. sp.* 221. *Scopoli, No.* 198. *Wil. orn.* 194. Rock or Mountain-Ouzel, 195. *Dan. Ringdrossel. Norvegis* Ring Trost. *Br.* 237. *Raii Syn. av.* 65. *Ringlamsel. Kram.* 360. *Mwyalchen y graig. Camden Br. Zool.* 92. plate P. 1. f. 1. *Brit.* 795. *Arct. Zool.* ii. 28.

THESE birds are superior in size to the black-bird: their length is eleven inches; their breadth seventeen. The bill in some is wholly black, in others the upper half is yellow: on each side of the mouth are a few bristles: the head and whole upper part of the body are dusky, edged with pale brown: the quill feathers, and the tail are black. The coverts of the wings, the upper part of the breast, and the belly are dusky, slightly edged with ash-color. The middle of the breast is adorned with a crescent, the horns of which point to the hind part of the neck;

DESCRIP-
TION.

in some birds this is of a pure white, in others of a dirty hue. In the females and in young birds this mark is wanting, which gave occasion to some naturalists to form two species of them.

Ring-Ouzels inhabit the *Highland* hills, the north of *England*, and the mountains of *Wales*. They are also found to breed in *Dart-moor*, in *Devonshire*, in banks on the sides of streams. I have seen them in the same situation in *Wales*, very clamorous when disturbed.

They are observed by the Rev. Mr. *White*, of *Selborne*, near *Alton*, *Hants*, to visit his neighbourhood regularly twice a year, in flocks of twenty or thirty, about the middle of *April*, and again about *Michaelmas*. They make it only a resting place in their way to some other country; in their spring migration they only stay a week, in their autumnal a fortnight. They feed there on haws, and for want of them on yew berries. On dissection in *April*, the females were found full of the small rudiments of eggs, which prove them to be later breeders than any others of this genus, which generally have fledged young about that time. The place of their retreat is not known: those that breed in *Wales* and *Scotland* never quitting those

countries. In the last they breed in the hills, but descend to the lower parts to feed on the berries of the mountain ash.

They migrate into *France* late in the season : and appear in small flocks about *Montbard*, in *Burgundy*, in the beginning of *October*, but seldom stay above two or three weeks. Notwithstanding this, they are said to breed in *Sologne* and the forest of *Orleans*.

“ The nest and eggs are said not to be unlike those of a blackbird : the former is made on the ground or the side of a bush ; the eggs usually five in number. This species is met with in the warmer and the colder regions, as well in *Africa* as *Asia* ; but does not inhabit either *Russia* or *Siberia*, though it is seen in *Persia* about the *Caspian* sea.” J. L.

GENUS XX. CHATTERER.

BILL strait, a little convex above, and bending towards the point: near the end of the lower mandible a small notch on each side.

NOSTRILS hid in bristles.

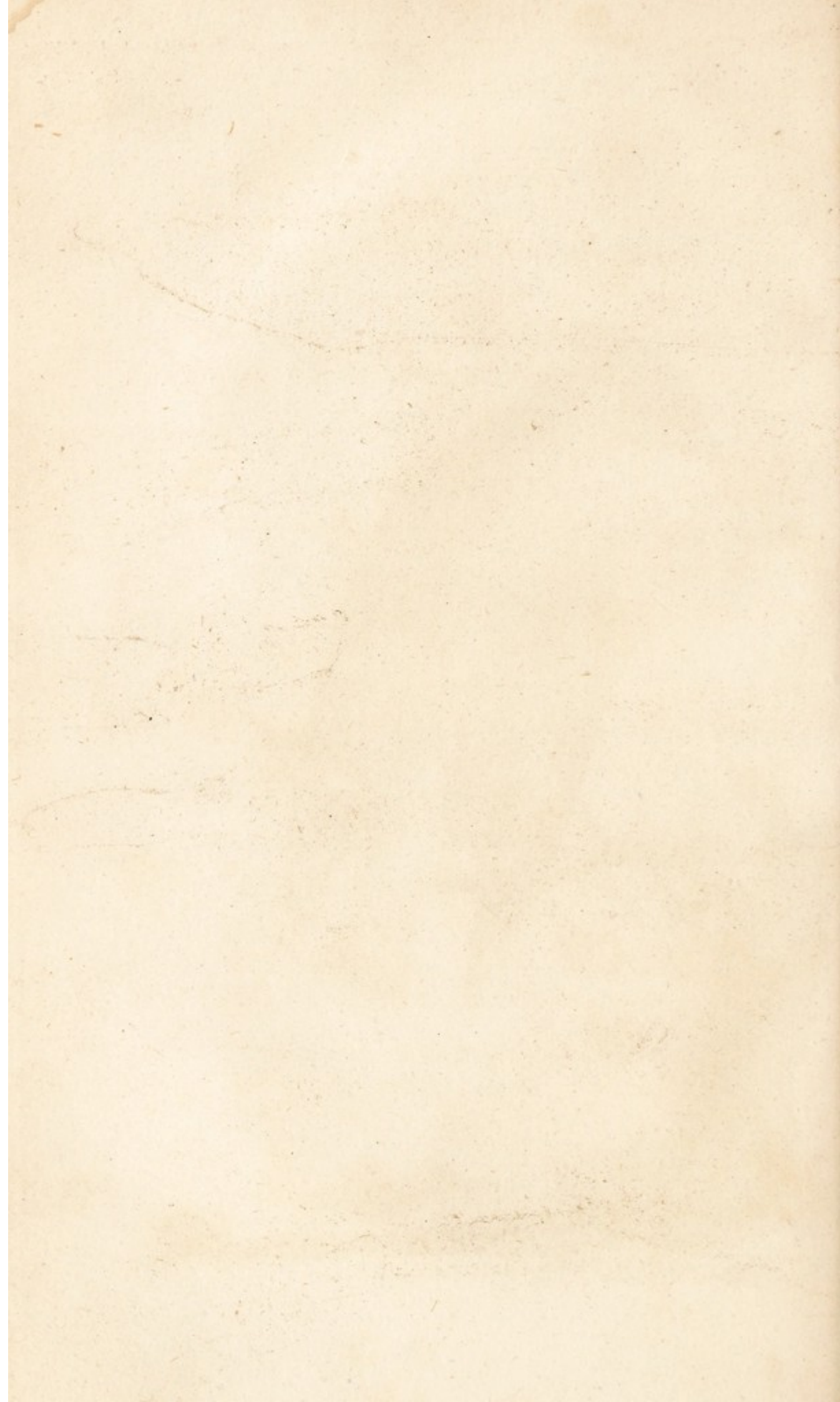
TOE middle connected at the base to the outmost.

1. WAXEN. *Ampelis Garrulus*. *A. occipite cristato, remigibus secundariis apice membranaceo colorato. Lath. Ind. orn. 363. id. Syn. iii. 91.*
Garrulus Bohemicus. Gesner av. 703.
Aldr. av. i. 395.
Bohemian Chatterer. Wil. orn. 133.
Silk Tail. Raii Syn. av. 85.
Ray's Letters, 198. 200.
Bell's Travels, i. 198.
Le Jaseur de Boheme, Bombycilla Bohemica. Brisson av. ii. 333. Hist. d'ois. iii. 429. Pl. Enl. 261. Phil. Trans. No. 175. Ampelis Garrulus. Gm. Lin. 838. Siden-Suantz, Snotuppa. Faun. Suec. sp. 82. Sieden vel Sieben Suands. Brunnich 25. Zuserl, Geidenschweiff. Kram. 363. Seiden-schwantz. Frisch, i. 32. Scopoli No. 20. Br. Zool. 77. plate C. 1. Arct. Zool. ii. 31.

THESE birds appear but by accident in *South Britain*: about *Edinburgh* they come annually

CHATTERER.





in *February*, and feed on the berries of the mountain ash: they also appear as far south as *Northumberland*, and like the fieldfare make the berries of the white thorn their food. That *Bohemia* is their native country is a mistake of past writers. They breed and pass their summer within the *Arctic* circle, from whence they disperse themselves (often in vast flocks) over many parts of *Europe*, but I believe not farther south than *Italy*. All retire north before the spring. One was killed at *Garthmeilio* in *Denbighshire*, in a fir-tree, during the severe frost of *December 1788*.* They were once superstitiously considered as presages of a pestilence. They are gregarious; feed on grapes where vineyards are cultivated, and are esteemed delicious food; they are easily tamed.

The length of the bird I saw was eight inches. The bill was short, thick, and black; the base covered with black bristles; from thence a bar of black passes to the hind part of the head over each eye: on the head is a sharp pointed crest reclining backwards; the irides

DESCRIP-
TION.

* The late Mr. *Tunstall* informed me, that in the winter of 1787, many flocks were seen all over the county of *York*, and that towards the spring a flock of between twenty and thirty were observed within two miles from *Wycliffe*, his place of residence. *Frisch* mentions it as a bird of *Tartary*, and says it there breeds in the rocks. J. L.

are of a bright ruby color; the cheeks tawny; the throat black, with a small bristly tuft in the middle. The head, crest, and back are ash-colored mixed with red: the rump of a fine cinereous color; breast and belly, pale chesnut dashed with a vinaceous cast; the vent feathers bright bay; the lower part of the tail black, the end of a rich yellow; the lesser coverts of the wings brown, the greater black tipped with white; the quill feathers black, the three first tipped with white; the six next have half an inch of their exterior margin edged with fine yellow, the interior with white; but what distinguishes this from all other birds are the horny appendages from the tips of seven of the secondary feathers of the color and gloss of the best red wax; some have one more or one less. The legs are black.

I think that the females want the yellow marks in the wings.

GENUS XXI. GROSBEAK.

BILL strong, thick, convex above and below.

NOSTRILS small and round.

TONGUE as if cut off at the end.

- | | | |
|---|---|---------|
| Loxia Coccothraustes. L. cinereo-castanea, linea alarum alba, remigibus mediis apice rhombeis, rectricibus latere tenuiore baseos nigris. <i>Lath. Ind. orn.</i> 371. <i>id. Syn.</i> iii. 103. <i>id. Sup.</i> i. 148. | Dleschk. <i>Scopoli</i> , No. 201. <i>Edw. av.</i> 188. The male. | 1. HAW. |
| Le Grosbec ou Pinson royal. <i>Belon av.</i> 373. | Le Grosbec. <i>Brisson av.</i> iii. 219. <i>Hist. d'ois.</i> iii. 444. <i>Pl. Enl.</i> 99, 100. | |
| Coccothraustes (steinbeisser) <i>Gesner av.</i> 276. <i>Aldr. av.</i> ii. 289. | Loxia Coccothraustes. <i>Gm. Lin.</i> 844. | |
| Frosone. <i>Olin</i> 37. | Stenkneck. <i>Faun. Suec. sp.</i> 222. | |
| Grosbeak, or Hawfinch. <i>Wil. orn.</i> 244. | Kernbeis, Nusbeisser. <i>Kram.</i> 365. | |
| <i>Raii Syn. av.</i> 85. | Kirschfinch (Cherry-finch). <i>Frisch</i> , i. 4. | |
| <i>Charlton ex.</i> 91. | <i>Brunnich, in append.</i> | |
| | <i>Br. Zool.</i> 105. plate U. <i>Fig.</i> 1. | |
| | <i>Arct. Zool.</i> ii. 40. | |

THE birds we describe were shot in *Shropshire*: they visit us only at uncertain times, and are not regularly migrant.* They feed on ber-

* "The Hawfinch visits us chiefly in winter, but one was shot in the summer months near *Dartford*, in *Kent*. Mr.

ries, and even on the hardest kernels, such as those of cherries and almonds, which they crack with the greatest facility: their bills are well adapted to that work, being remarkably thick and strong. Mr. *Willughby* tells us, they are common in *Germany* and *Italy*; that in the summer they live in woods, and breed in hollow trees, or in holes in the walls of churches, laying five or six eggs; but in the winter they come down into the plains.

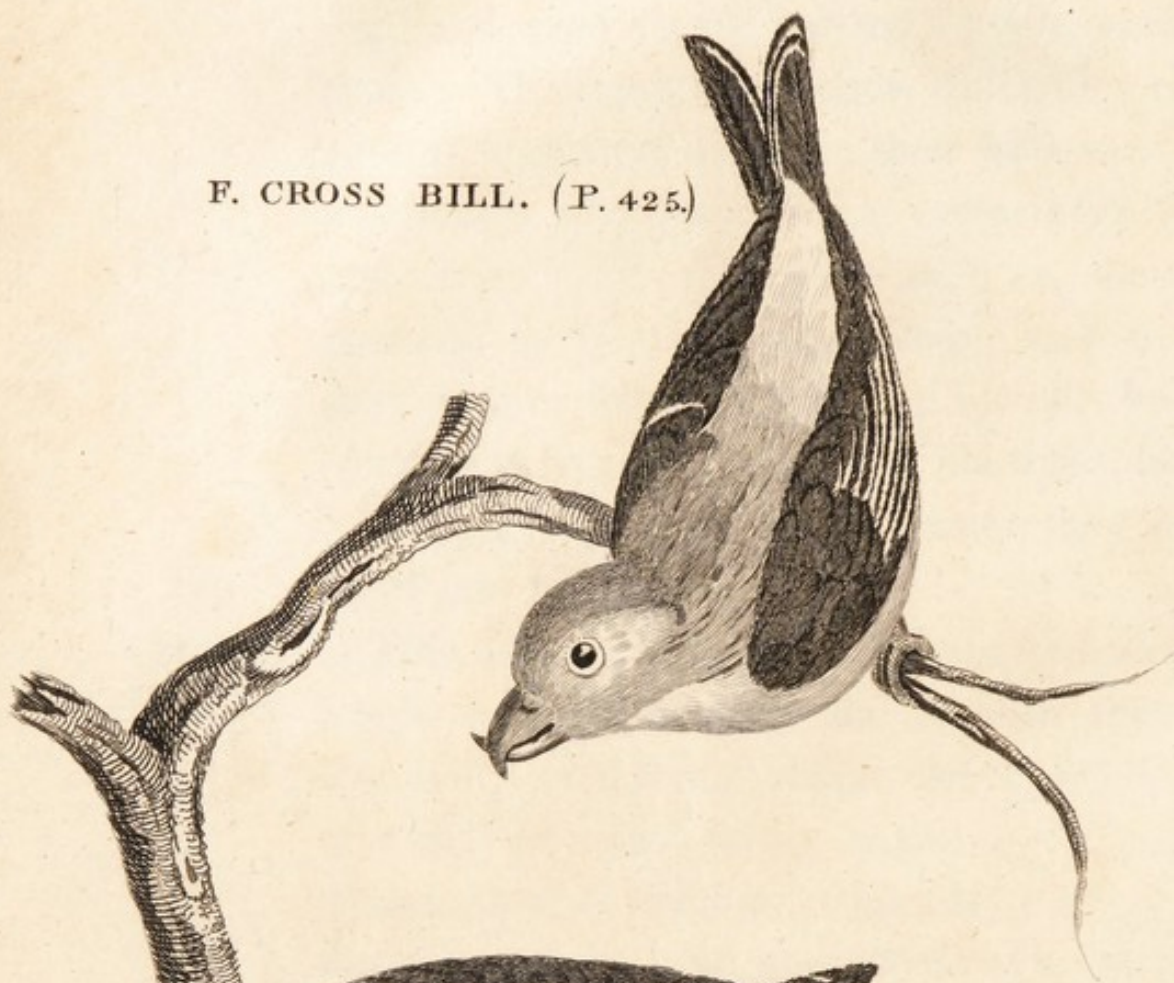
DESCRIP-
TION.

This species weighs nearly two ounces: its length is seven inches; the breadth thirteen. The bill is of a funnel shape, strong, thick, and of a dull pale pink color; at the base are some orange colored feathers: the irides are grey; the crown of the head and cheeks of a fine deep bay; the chin black; from the bill to the eyes is a black line; the breast and whole under side is of a dirty flesh color; the neck ash-colored; the back and coverts of the wings of a deep brown, those of the tail of a yellowish bay: the greater quill feathers are black, marked with white on their inner webs. The tail is

White records another instance at the same season, and says that it had the kernels of damsons in its stomach.* These might possibly have bred here, though we have no authority for it ever being the case." J. L.

* *Natur. Calend.* 41.

F. CROSS BILL. (P. 425.)



PINE GROSBEAK. (P. 423.)



short, spotted with white on the inner sides; the legs are of a flesh color.

The great particularity of this bird, and what distinguishes it from all others, is the form of the ends of the middle quill feathers; which Mr. *Edwards* justly compares to the figure of some of the antient battle-axes: these feathers are glossed over with a rich blue; but are less conspicuous in the female: the head in that sex is of dull olive, tinged with brown; it also wants the black spot under the chin.

It arrives in *Italy* at the end of *April*, and migrates in *October*.

Loxia Eucleator. L. sordide roseo fusco griseoque varia, linea alarum duplici alba, rectricibus totis nigricanti- bus. <i>Lath. Ind. orn.</i> 372. <i>id. Syn.</i> iii. 111. <i>id. Sup.</i> i. 148.	Tallbit, Natt-waka. <i>Faun.</i> <i>Succ.</i> No. 223. Greatest Bulfinch. <i>Edw.</i> 123, 124. <i>mas et femina.</i> Le Dur-bec. <i>Coccothraustes</i> <i>Canadensis.</i> <i>Brisson</i> , iii. 250. <i>Hist. d'ois.</i> iii. 457. <i>Pl. Enl.</i> 135. f. 1. <i>Arct. Zool.</i> ii. 33.	2. PINE.
Loxia Eucleator. <i>Gm. Lin.</i> 845.		

THESE are common to *Hudson's Bay*, *Sweden*, and *Scotland*. I have seen them flying above the great pine forests of *Invercauld*, in *Aberdeenshire*; and I imagine they breed there, for I saw them on the 5th of *August*. They

feed on the seeds of the pine. *Linnaeus* says, they sing in the night.

DESCRIP-
TION.

They are nearly twice the size of the bulfinch, being nine inches and an half in length. The bill is strong, dusky, hooked at the end, less thick than that of the common bulfinch; the head, back, neck, and breast are of a rich crimson; the bottoms of the feathers ash-color; the middle of those on the back and head black; the lower belly and vent ash-color; the lesser coverts of the wings dusky, edged with orange, the next with a broad stripe of white; the lowest order of greater coverts with another; the exterior edges of the same color; the quill feathers and tail dusky; their exterior edges of a dirty white; the legs black. There seems an agreement in colors, as well as food, between this species and the crossbill; one that I saw in *Scotland*, and believe to be the female, was (like the female crossbill) of a dirty green; the tail and quill feathers dusky.

“ They breed in *Hudson's Bay*, where Mr. *Hutchins* told me that they make their nest, formed with sticks, and lined with feathers, in the trees at a small height from the ground, in *May*, deposit five white eggs, and that the young are hatched the middle of *June*.” J. L.

- Loxia curvirostra*. L. rostro
 forficato, corpore versicolore,
 remigibus rectricibusque fus-
 cis, oris exterioribus viridi-
 olivaceis, cauda furcata.
Lath. Ind. orn. 370. *id.*
Syn. iii. 106.
- Loxia*. *Gesner av.* 591.
Aldr. av. i. 426.
- Shell-apple, or Cross-bill. *Wil.*
orn. 248.
- Raii Syn. av.* 86.
Charlton ex. 77.
Edw. av. 303.
Cat. Carol. app. 37.
- Le Bec-croisé. *Brisson av.* iii.
329. *tab.* 17. *fig.* 3. *Hist.*
d'ois. iii. 449. *t.* 27. *f.* 2.
Pl. Enl. 218.
- Loxia Curvirostra*. *Gm. Lin.*
 843.
- Korssnaff, Kingelrifvare.
Faun. Suec. sp. 224.
- Scopoli*, No. 200.
- Krumschnabl, Kreutzelvogel.
Kram. 365.
- Kreutz-Schnabel. *Frisch*, i. 11.
Norveg. Kors-Næb. Kors-
 fugl. *Br.* 238.
- Br. Zool.* 106. plate U. *f.* 2.
Arct. Zool. ii. 32.
3. CROSS-
 BILLED.

THERE are two varieties of this bird: Mr. *Edwards* has very accurately figured the lesser, which we have seen frequently: the other is very rare. We received a male and female of the large variety out of *Shropshire*; the bill was remarkably thick and short, more incurvated than that of the common kind, and the ends more blunt.

These birds, like the Pine Grosbeak, are inconstant visitants of this island: in *Germany* and *Switzerland** they inhabit the pine forests, and breed in those trees as early as the months of *Ja-*

* *Gesner* 59. *Kramer Elench.* 365.

January and *February*. They feed on the seeds of the cones of pines and firs, and are very dexterous in scaling them, for which purpose the cross structure of the lower mandible of their bill is admirably adapted; they feed also on hemp seed, and the pips or kernels of apples, and are said to divide an apple with one stroke of the bill to get at the contents. *Linnaeus** says, that the upper mandible of this bird is moveable; but on examination we could not discover its structure to differ from that of others of the genus.

It is an undoubted fact, that these birds change their colors; or rather the shades of their colors: that is, the males which are red, vary at certain seasons to deep red, to orange, or to a sort of a yellow: the females which are green, alter to different varieties of the same color.

Cross-bills are rare in *Italy*. My friend, *John Strange*, Esq. informed me that they have appeared in flocks in *Tuscany* among the cypresses and pines, for the sake of the cones, a favorite food with them. The form of the bill astonished the peasants, to whom they were before quite unknown.

* *Faun. Suec. sp* 224.

“ I know but one certain instance of their breeding in *England*, and that on a pine-tree within two miles of *Dartford* in *Kent*. The nest, about the size of a blackbird's, was made on the lowest fork of the tree, composed of dried twigs of a loose texture; however, no eggs were laid, for from the too great curiosity of frequent observers the birds forsook it. A female shot at *Erith*, in *August* 1791, was bare on the breast, a circumstance common to sitting birds. In *July* 1791, Mr. *Lewin* shewed me two of these old birds, a male and female, shot in his garden, as also one young bird; three or four other young birds were still about his garden. Some authors inform us that the eggs are four or five in number, yellowish white, tinged with brown, with small red dots, most numerous at the larger end. I saw at Colonel *Woodford's* one of these birds in a cage: he had had it for some time. It sung very prettily, the note somewhat like that of the bulfinch.” J. L.

4. WHITE
WINGED.

Loxia falcirostra. L. rostro for-
ficato, corpore croceo-cocci-
neo, alis nigris fasciis duabus
albis, remigibus secunda-
riis apice albis, cauda nigra.
Lath. Ind. orn. 371. *id. Syn.*
iii. 108. *id. Sup.* i. 148.

Loxia leucoptera. Gm. *Lin.*
844.

Dandin. ii. 358.

Lin. Tr. vii. 309.

Crossbill var. *Arct. Zool.* ii.
32.

Dixon's Voy. Pl. ii. p. 356.
female.

“THIS bird is a common species in *North America*. Mr. *Hutchins* found it frequently at *Hudson's Bay*, coming there in *March*. In *May* it makes a nest of grass, mud, and feathers, half way up a pine-tree, and lays five white eggs with yellowish spots. The young fly towards the end of *June*, and all depart about *November*. I find from Mr. *Abbot* that it is found about *Burke* county, in *Georgia*, though very rarely. The reason of my giving the bird a place here is, its having been shot within two miles of *Belfast*, in *January* 1802. The specimen was a female, and perfectly resembling that figured in *Dixon's* voyage above mentioned. I had indeed been informed before of the species having been met with in *Scotland*, but the report came through so uncertain a channel as to forbid my noticing it.

DESCRIP-
TION.

The size of this small species is about that of the goldfinch, and measures only five inches

and three quarters in length. The bill is of a dusky horn-color; the nostrils covered with reflected bristles of a pale buff-color; at the base of the bill from eye to eye, a streak of brown: the feathers on the head, neck, back, and under parts are whitish, deeply margined with crimson; and as some part of the white appears not fully covered with the crimson, gives the bird a mottled appearance: the rump is pale crimson, the vent dirty white; the wing is black, marked with a bar of white from the shoulder, passing obliquely backwards, and a second bar, or rather spot of the same below that, but only in the inner half: the second quills are each of them tipped with white; the tail black; the legs brown.

The female differs from the other sex much in the same manner as in the common crossbill." J. L.

5. BULFINCH. *Loxia Pyrrhula*. *L. cinerea*,
artubus nigris, tectricibus
caudæ remigumque postica-
rum albis. Lath. Ind. orn.
387. id. Syn. iii. 145. id.
Sup. i. 152.
Le Pivoine. Belon av. 359.
Asprocolos, obs. 13.
Rubicilla, sive Pyrrhula. Ges-
ner av. 733.
Aldr. av. ii. 326.
Ciufolotto. Olini, 40.
Bulfinch, Alp, or Nope. Wil.
orn. 247.
Raii Syn. av. 86.
Blutfinck, Frisch, i. 2.
- Le Bouvreuil. Brisson av. iii.*
308. Hist. d'ois. iv. 372. Pl.
Enl. 145.
Monachino, Sufolotto. Zinan.
58.
Loxia Pyrrhula. Gm. Lin.
846.
Domherre. Faun. Suec. sp.
225.
Gumpl. Kram. 365. Gimpl.
Scopoli, No. 202.
Danis & Norvegis Dom-pape,
quibusdam Dom-Herre. Br.
240.
Br. Zool. 106. plate U. f. 3. 4.
Arct. Zool. ii. 39.

THE wild note of this bird is not in the least musical; but when tamed it becomes remarkably docile, and may be taught any tune after a pipe, or to whistle any notes in the justest manner: it seldom forgets what it has learned; and will become so tame as to come at call, perch on its master's shoulders, and (at command) go through a difficult musical lesson. It may be taught to speak, and some thus instructed are annually brought to *London* from *Germany*.

DESCRIP-
TION.

The male is distinguished from the female

by the superior blackness of its crown, and by the rich crimson which adorns the cheeks, breast, belly, and throat of the male; those of the female being of a dirty color. The bill is black, short, and very thick; the head large; the hind part of the neck and the back grey; the coverts of the wings black; the lower crossed with a white line; the quill feathers dusky, but part of their inner webs white; the coverts of the tail and vent feathers white, the tail black.

In the spring these birds frequent our gardens, and are very destructive to fruit-trees, by eating the tender buds. They breed about the latter end of *May*, or beginning of *June*, and are seldom seen at that time near houses, as they chuse some very retired place to breed in. These birds are sometimes wholly black; I have heard of a male bulfinch which had changed its colors after it had been taken in full feather, and with all its fine tints. The first year it began to assume a dull hue, blackening every year, till in the fourth it attained the deepest degree of that color. This was communicated to me by the Reverend Mr. *White* of *Selborne*. Mr. *Morton*, in his *History of Northamptonshire*,* gives another instance of

* Page 437.

such a change, with this addition, that the year following, after moulting, the bird recovered its native colors. Bulfinches fed entirely on hempseed are aptest to undergo this change.

They for the most part winter in *Italy*.

“ They seem to be common to most parts of the continent of *Europe*, and extend to *Russia* and *Siberia*, in which last place they are caught for the use of the table. *Thunberg* says they are found in *Japan*.” J. L.

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| <p>6. GREEN. <i>Loxia Chloris</i>. L. flavicantivirens, remigibus primoribus antice luteis, rectricibus lateralibus quatuor basi luteis. <i>Lath. Ind. orn.</i> 382. <i>id. Syn.</i> iii. 134. <i>id. Sup.</i> i. 152. <i>Belon av.</i> 365. <i>Assarandos. obs.</i> 13. <i>Chloris. Gesner av.</i> 258. <i>Aldr. av.</i> ii. 371. <i>Olin.</i> 26. <i>Wil. orn.</i> 246. <i>Raii Syn. av.</i> 85.</p> | <p>Le Verdier. <i>Brisson av.</i> iii. 190. <i>Hist. d'oies.</i> iv. 172. <i>Pl. Enl.</i> 267. f. 1. Grindling. <i>Scopoli</i>, No. 206. Verdone, Verdero, Antone. <i>Zinan.</i> 63. <i>Loxia Chloris. Gm. Lin.</i> 854. <i>Swenska. Faun. Suec. sp.</i> 226. <i>Svenske. Br.</i> 242. Grunling. <i>Kram.</i> 368. Grünfinck (Greenfinch) <i>Frisch</i> i. 2. <i>Br. Zool.</i> 107. <i>Arct. Zool.</i> ii. 39.</p> |
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DESCRIP-
TION.

THE head and back of this bird are of a yellowish green; the edges of the feathers are grey; the rump more yellow; the breast of the same color; the lower belly white; the

edges of the outmost quill feathers are yellow, the next green, the farthest grey. The tail is a little forked; the two middle feathers are wholly dusky; the exterior webs of the four outmost feathers on both sides the tail are yellow. The colors in the female are much less vivid than in the male.

These birds are very common in this island: they make their nest in hedges; the outside is composed of hay or stubble, the middle part of moss, the inside of feathers, wool, and hair. They lay five or six eggs of a pale green color, marked with blood colored spots. During breeding-time, that bird which is not engaged in incubation, or nutrition, has a pretty way of sporting on wing over the bush.

NEST.

Their native note has nothing musical in it; but a late writer on singing-birds says, they may be taught to pipe or whistle in imitation of other birds. The Green Grosbeak is so easily tamed, that it frequently eats out of the hand five minutes after it is taken, if there is an opportunity of carrying it into the dark; the bird should first be put upon the finger, which it does not attempt to move from (as being in darkness it does not know where to fly); the finger of the other hand should then be introduced under its breast, which making it incon-

The throat, breast, sides, and belly are of a yellowish white; the head and upper part of the body of a pale brown, tinged with olive; each of which (except the belly) are marked with oblong black spots; towards the rump the spots grow fainter. The quill feathers are dusky, their exterior edges of a pale yellow. The tail is a little forked, of a dusky hue, edged with white; the legs are of a pale yellow.

This bird resides with us the whole year, and during winter collects in flocks.

I received in *November*, 1787, a Bunting with a white head and tail; the head elegantly tinged with yellow; the back white and brown; the coverts of the wings the same, but on both the white predominated; the breast had all the usual marks of the Bunting.

YELLOW BUNTING.



SNOW-BUNTING (P. 444.)



- Emberiza Citrinella. E. rec-
trix nigricantibus, exte-
rioribus duabus latere interiore
macula alba acuta. *Lath.*
Ind. orn. 400. *id. Syn.* iii.
170. *id. Sup.* i. 157.
Belon av. 366.
Emberiza flava. *Gesner av.*
653.
Cia pagglia riccia, Luteæ alte-
rum genus. *Aldr. av.* ii.
372.
Wil. orn. 268.
- Yellow Hammer, *Raii Syn.* 2. YELLOW.
av. 93.
Le Bruant. *Brisson av.* iii.
258. *Hist. d'oï.* iv. 342. *Pl.*
Enl. 30. f. 1.
Sternardt. Scopoli, No. 209.
Emberiza Citrinella. *Gm. Lin.*
870.
Groning, Golspink. *Faun.*
Suec. sp. 230.
Ammering, Goldammering.
Kram. 370. *Frisch,* i. 5.
Arct. Zool. ii. 55.

THIS species makes a large flat nest on the ground, near or under a bush or hedge; the materials are moss, dried roots, and horse hair interwoven. It lays six eggs of a white color, veined with a dark purple: is extremely common, and in winter frequents our farm yards with other small birds.

NEST.

The bill is of a dusky hue; the crown of the head is of a pleasant pale yellow, in some almost plain, in others spotted with brown; the hind part of the neck is tinged with green; the chin and throat are yellow; the breast is marked with an orange red; the belly yellow; the lesser coverts of the wings are green; the others dusky, edged with rust color; the back

DESCRIP-
TION.

of the same colors; the rump of a rusty red; the quill feathers dusky, their exterior sides edged with yellowish green; the tail is a little forked; the middle feathers are brown; the two middlemost edged on both sides with green; the others on their exterior sides only: the interior sides of the two outmost feathers are marked obliquely near their ends with white.

It visits *Italy* the end of *April*, and quits it in *October*, but many winter there.

- | | | |
|----------|---|--|
| 3. CIRL. | <p><i>Emberiza Cirlus. E. supra varia, subtus lutea, pectore maculato, superciliis luteis, rectricibus duabus extimis macula alba cuneata. Lath. Ind. orn. 401. id. Syn. iii. 190.</i></p> <p><i>E. Cirlus. Gm. Lin. ii. 879.</i></p> | <p><i>Luteæ primum genus. Raii Syn. av. 93.</i></p> <p><i>Le Bruant de Haye. Emberiza sepioria. Brisson, av. iii. 263. Hist. d'ois. iv. 347. Pl. Enl. 653. f. 1. 2.</i></p> <p><i>Bunting Cirl. Montagu, orn. dict. id. Lin. Tr. vii. 276.</i></p> |
|----------|---|--|

[THE discovery of the Cirl Bunting, as a *British* bird, is due to that accurate ornithologist, *George Montagu*, esq. who first observed it in *Devonshire*, in the year 1800, amongst flocks of yellow buntings and chaffinches.*

DESCRIP-
TION.

It is thus described by Dr. *Latham*. "Size of a yellow-hammer; length six inches and a

* Mr. *Montagu* afterwards found its nest with four eggs in the stump of an old tree. ED.

F. CIRCUS . BUNTING.





quarter; bill cinereous brown; the head olive-green, with a dusky line down the shaft of each feather; side of the head yellow, with a dash of black between the bill and eye, and some markings of black on the ears; the chin is also black, passing a little backwards; the hind part of the neck, back, and rump, brown; the feathers dusky in the middle; the under parts from the chin are yellow; the breast inclining to brown, and a few dusky streaks on the sides of the body; across the throat a yellow band; the tail is brown, edged with grey, the outer feather with white; and has also a spot of white on the inner web for half the length; the outermost but one has also a spot of white on the same place, but of a much smaller size; the shape a little forked; the legs yellowish.

The female is not unlike the male on the upper parts; the under are yellow streaked with dusky and inclining to white at the chin and vent: in some the breast inclines to green."

ED.]

4. REED. *Emberiza Schœniclus*. *E. capite nigro, corpore griseo nigroque, reatricibus extimis macula alba cuneiformi.* *Lath. Ind. orn.* 402. *id. Syn.* iii. 173. *id. Sup.* i. 157. *Schœniclus. Gesner av.* 573, 652. *Wil. orn.* 269. Reed Sparrow. *Raii Syn. av.* 95. The Nettle-monger. *Morton Northampt.* 428. Ror-Spurv. *Brunnich* 251. L'Ortolan de Roseaux, *Hortulanus arundinaceus. Brisson av.* iii. 274. *Hist. d'oïs.* iv. 315. *Pl. Enl.* 247. *f.* 2. 477. *f.* 2. *Emberiza Schœniclus. Gm. Lin.* 881. Saf-sparf. *Faun. Suec. sp.* 231. Rohrammering, *Meerspatz. Kram.* 371. Rohrammer (Reed-hammer) *Frisch, i.* 7. *Br. Zool.* 112. plate W.

THE reed bunting inhabits marshy places, most commonly among reeds; from which it takes its name.

NEST. [Its nest is composed of stalks of grass intermixed sometimes with moss, and lined with fine grass, and generally placed on the ground near water, sometimes in high grass reeds or sedge. The eggs are of a dirty bluish white, spotted and veined like those of the Chaffinch. Its song is inharmonious, consisting only of two notes, the first repeated three or four times, the last single and more sharp.* ED.

DESCRIP- In the male, the head, chin, and throat, are
TION. black; the tongue livid: at each corner of the

* *Mont. orn. Dict. art.* BUNTING-REED.

mouth commences a white ring, which encircles the head. At the approach of winter the head changes to hoary, but on the return of spring resumes its pristine jettyness. The whole under side of the body is white. The back, coverts of the wings, and the scapular feathers are black, deeply bordered with red; the two middle feathers of the tail are of the same colors; the three next black; the exterior web, and part of the interior of the outmost feather is white. The head of the female is rust-colored, spotted with black; it wants the white ring round the neck: but in most other respects resembles the male.

5. TAWNY. *Emberiza glacialis*. *E. nigra*,
pennis flavo-fusco marginatis, gula uropygioque flavescens, subtus alba flavo obscure maculata. *Lath. Ind. orn.* 398. *id. Syn.* iii. 164.
Great pied Mountain Finch, or Brambling. *Wil. orn.* 255.
Emberiza mustelina. *Gm. Lin.* 867.
Raii Syn. av. 88.
L'Ortolan de Neige, *Hortulanus nivalis*. *Brisson av.* iii. 285. *Hist. d'ois.* iv. 329. *Pl. Enl.* 497.
Schnee-ammer (Snow-hammer). *Frisch*, i. 6.
Tawny Bunting. *Br. Zool.* ed. 4to. i. 278. *Br. Zool.* 113. plate v. f. 6. *Arct. Zool.* ii. 41.
Emberiza nivalis. *E. remigibus albis*, primoribus extorsum nigris, rectricibus nigris, lateralibus tribus albis. *Lath. Ind. orn.* 397. *id. Syn.* iii. 161. *id. Sup.* i. 157.
Emberiza nivalis. *Gm. Lin.* 866.
Snosparf. Faun. Suec. No. 227.
Le Pinçon de neige ou la nive-rolle. *Brisson*, iii. 162.
Cimbris, sneekok, vinter fugl. *Norvegis*. Sneefugl, Fialster, *Brunnich*, 245.
Avis ignota a Piperino missa. *Gesner av.* 798.
Scopoli, No. 214.
Snow-bird, *Edw.* 126. *Egede Greenl.* 64. *Marten's Spitzbergen*, 73.
Forster in Ph. Tr. vol. lxii. p. 403.
Snow Bunting. *Br. Zool.* 4to. i. 279.

DESCRIP-
TION.

THE weight of this bird is rather more than an ounce; the length is six inches three quarters; the breadth twelve inches three quarters. The bill is very short; yellow, except at the point, which is black; the crown of the head is tawny, darkest near the forehead; the whole neck is of the same color, but paler; the throat almost white; the upper part of the breast is of

a dull yellow; the belly and whole under part of the body white, dashed with a yellowish tinge. The back and scapular feathers are black, edged with a pale reddish brown; the rump and covert feathers of the tail are white on their lower half, on their upper, yellow. The tail consists of twelve feathers, and is a little forked: the three exterior feathers are white; the two outmost marked with a dusky spot on the exterior side; the third is marked with the same color on both sides the tip; the rest of the tail feathers are entirely dusky. The wings, when closed, reach to about the middle of the tail; the color, of as much of the six first quill feathers as appears in view, is dusky, slightly tipped with a reddish white, their lower part on both sides white; in the seven succeeding feathers the dusky color gradually gives place to the white, which in the seventh of these possesses the whole feather, except a small spot on the exterior upper side of each; the two next are wholly white; the rest of the quill feathers and the scapular feathers are black, edged with a pale red: the bastard wing, and the outmost secondary feathers are of the same color with the quill feathers; the rest of them, together with the coverts, are entirely white, forming one large bed of white. The

legs, feet and claws are black; the hind toe is very long, like that of a lark, but not so strait.

SNOW
BUNTING.

This is their summer dress. Against the rigorous season, they become white on their head, neck, and whole under side: great part of their wings and the rump assume the same color; but the back and middle feathers of the tail remain black: *Linnaeus*, who was well acquainted with the species, says that they vary according to age and season. In this state they are called in *Scotland*, Snow-flakes, from their appearance in hard weather and in deep snows. They arrive in that season among the *Cheviot* hills, and in the *Highlands*, in amazing flocks. A few breed in the last on the summit of the highest hills in the same places with the Ptarmigans; but the greatest numbers migrate from the extreme north. They first appear in the *Shetland* islands, then in the *Orknies*, and multitudes of them often fall, wearied with their flight, on vessels in the *Pentland Firth*. Their appearance is a certain fore-runner of hard weather, and storms of snow, being driven by the cold from their common retreats. Their progress southward is probably thus; *Spitzbergen* and *Greenland*, *Hudson's Bay*, the *Lapland Alps*, *Scandinavia*,

Iceland, the *Ferroe* isles, *Shetland*, *Orknies*, *Scotland*, and the *Cheviot* hills. They visit at that season all parts of the northern hemisphere, *Prussia*, *Austria*, and *Siberia*.* They arrive lean and return fat. In *Austria* they are caught and fed with millet, and, like the *Ortolan*, grow excessively fat. In their flights, they keep very close to each other, mingle most confusedly together; and fling themselves collectively into the form of a ball, at which instant the fowler makes great havoc among them.

[The *Emberiza nivalis* is found in all the highest mountains of *Greece*. ED.]

Emberiza montana. E. cinerea subtus flavescence-undulata, capite castaneo, fronte saturatiore, gula alba, rectricibus tribus extimis albis. <i>Lath. Ind. orn.</i> 398. <i>id. Syn.</i> iii. 165.	Emberiza Montana. <i>Gm. Lin.</i> 867. Lesser Mountain-finch, or Brambling. <i>Wil. orn.</i> 255. <i>Morton Northampt.</i> 423. <i>tab.</i> 13. <i>fig.</i> 3. <i>Br. Zool.</i> 113.	6. MOUNTAIN.
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WE are obliged to borrow the following description from the account of Mr. *Johnson* transmitted to Mr. *Ray*; having never seen the bird. Mr. *Ray* suspected that it was only a variety of the Tawny Bunting, but Mr. *Mor-*

DESCRIP-
TION.

* *Kram. Austria*, 372. *Bell's Travels*, i, 198.

ton, having frequent opportunity of examining this species, proves it to be a distinct kind.

According to Mr. *Johnson*, its bill is short, thick, and strong; black at the point, the rest yellow. The forehead is of a dark chesnut; the hind part of the head and cheeks of a lighter; the hind part of the neck, and the back are ash-colored; the latter more spotted with black; the throat is white; the breast and belly waved with flame color; at the setting on of the wing, grey; the first five feathers of the wing are of a blackish brown, the rest white with the point of each dashed with brown; the three outmost feathers of the tail are white, the rest dark brown; the feet black; the hind claw as long again as any of the rest. The breast of the female is of a darker color than that of the male. The species, by the above-mentioned writer's account, is found in *Yorkshire* and *Northamptonshire*.

GENUS XXIII. FINCH.

BILL perfectly conic, slender towards the end,
and sharp-pointed.

- | | | |
|--|--|-----------------|
| <p>Fringilla Carduelis. Fr. remi-
gibus antrorsum luteis, ex-
tima immaculata, rectrici-
bus duabus, extimis medio
reliquisque apice albis. <i>Lath.</i>
<i>Ind. orn.</i> 449. <i>id. Syn.</i> iii.
281.
<i>Belon av.</i> 353.
Carduelis. <i>Gesner av.</i> 242.
<i>Aldr. av.</i> ii. 349.
Cardelli. <i>Olin.</i> 10.
Goldfinch, or Thistlefinch.
<i>Wil. orn.</i> 256.
<i>Raii Syn. av.</i> 89.</p> | <p>Le Chardonneret. <i>Brisson av.</i>
iii. 53. <i>Hist. d'ois.</i> iv. 187.
<i>Pl. Enl.</i> 4. f. 1.
Cardellino. <i>Zinan.</i> 59.
Fringilla Carduelis. <i>Gm. Lin.</i>
903.
Stigitza. <i>Faun. Suec. sp.</i> 236.
Stigitz. <i>Br.</i> 257. <i>Scopoli,</i>
No. 211.
Stigitz. <i>Kram.</i> 365. Distel-
finck. <i>Frisch,</i> i. 1.
<i>Br. Zool.</i> 108. plate v. f. 1.
<i>Arct. Zool.</i> ii. 73.</p> | <p>1. GOLD.</p> |
|--|--|-----------------|

THIS is the most beautiful of our hard billed small birds; whether we consider its colors, the elegance of its form, or the music of its note. The bill is white, tipped with black, the base surrounded with a ring of rich scarlet feathers: from the corners of the mouth to the eyes is a black line; the cheeks are white; the top of the head black, and the white on the cheeks is bounded almost to the forepart of the

DESCRIP-
TION.

neck with black; the hind part of the head is white; the back, rump, and breast, are of a fine pale tawny brown, lightest on the two last: the belly is white; the covert feathers of the wings, in the male, are black; the quill feathers black, marked in their middle with a beautiful yellow; the tips white: the tail is black, but most of the feathers marked near their ends with a white spot: the legs are white.

FEMALE. The female is thus distinguished from the male: the feathers at the end of the bill are brown; those in the male black: the lesser coverts of the wings are brown; and the black and yellow in the wings are less brilliant. The young bird, before it moults, is grey on the head; and hence it is termed by the bird-catchers a *grey pate*.

Their note is very sweet, and they are much esteemed on that account, as well as for their great docility. Towards winter they assemble in flocks, and feed on seeds of different kinds, particularly those of the thistle. They are fond of orchards; and frequently build in an apple or pear tree: their nest is very elegantly formed of fine moss, liver-worts, and bents on the outside; lined first with wool and hair, and then with the goslin or cotton of the willow. They lay five white eggs, marked with deep purple spots on the upper end.

This bird seems to have been the χρυσομίτρίς* of *Aristotle*; being the only one that we know of, that could be distinguished by a *golden fillet* round its head, feeding on the seeds of *prickly* plants. The very ingenious translator† of *Virgil's* eclogues and georgics, gives the name of this bird to the *acalanthis* or *acanthis*:

Littoraque alcyonen resonant, acanthida dumi.

In our account of the *Halcyon* of the ancients, p. 191 of the former edition, we followed his opinion; but having since met with a passage in *Aristotle* that clearly proves that *acanthis* could not be used in that sense, we beg, that, till we can discover what it really is, the word may be rendered linnet; since it is impossible the philosopher could distinguish a bird of such striking and brilliant colors as the goldfinch, by the epithet κακοχρῶος, or bad colored; and as he celebrates his *acanthis* for a fine note, φωνὴν μὲν τοι λιγυράν ἔχουσι,‡ both characters will suit the linnet, being a bird as remarkable for the sweetness of its note, as for the plainness of its plumage.

* Which he places among the ἀκανθοφάγα. *Scaliger* reads the word χρυσομίτρίς, which has no meaning; neither does the critic support his alteration with any reasons. *Hist. an.* 887.

† Dr. *Martyn*.

‡ *Hist. an.* 1055.

The Goldfinch comes into *Italy* in *April*, builds in rocks, and migrates in *October* and *November*.

“ This bird is as well known on the continent as in this kingdom, and is found at least as high as *Sondmor*. It breeds in *France* and *Italy*, also in *Spain*; comes in prodigious flocks early in winter to *Gibraltar*, and disperses in the spring; few are seen there in summer. It is said to be found both in *Africa* and *Asia*, but much less common. *Russell* mentions it as being at *Aleppo*.” J. L.

VAR. A.
CHEVEREL.

There is a variety of goldfinch, which is, perhaps, not taken above once in two or three years, which is called by the *London* bird-catchers a *cheverel*, from the manner in which it concludes its *jerk*: when this sort is taken, it sells at a very high price: it is distinguished from the common sort by a white streak, or by two, and sometimes three white spots under the throat.

VAR. B.
NICHOL.

[The editor has been favored by an intelligent friend with the following account of a bird, which is an occasional visitant in the neighbourhood of *Wrexham*, in the county of *Denbigh*, and probably in other parts of *North Wales*;

whether it is a distinct species or a variety of the Goldfinch, he cannot pretend to determine, as it never fell under his observation, and was not seen in the present year. (1811.)

The Nichol is considerably less than the Goldfinch. The fore part of the head of the male has a spot of dark red, almost approaching to black; the hinder part of the head dusky brown, as is the whole back and wings, except a feather or two in the latter, which are of a dingy yellow; the tail is rather forked; the belly of an ash-color, dashed with brown irregular spots; the note jerking, and rather hoarse, which is heard when the bird is in motion; the neck very short; the nest much like that of the Goldfinch, but less, as are the eggs: it seems to prefer the white-thorn, especially if mixed with honeysuckles. ED.]

DESCRIP-
TION.

2. CHAFFINCH.

Fringilla Cœlebs. Fr. artubus nigris, remigibus utrinque albis, tribus primis immaculatis, rectricibus duabus oblique albis. *Lath. Ind. orn.* 437. *id. Syn.* iii. 257. *id. Sup.* i. 165.

Le Pinçon. *Belon av.* 371.

Fringilla. *Gesner av.* 337.

Aldr. av. ii. 356.

Olin. 31.

Wil. orn. 253.

Raii Syn. av. 88.

Fringuello. Zinan. 61.

Le Pinçon. *Brisson av.* iii. 148.

Hist. d'ois. iv. 109. *Pl. Enl.* 54. f. 1.

Schinkovitz. *Scopoli*, No. 217.

Fringilla cœlebs. *Gm. Lin.* 901.

Fincke, Bofincke. *Faun. Suec.* sp. 232.

Buchfinck (Beachfinch)

Frisch, i. 1.

Finke. *Kram.* 367.

Bofincke. *Br.* 253.

Br. Zool. 108. plate V. f. 2.

3. *Arct. Zool.* ii. 71.

THIS species entertains us agreeably with its song very early in the year, but towards the latter end of summer assumes a chirping note: both sexes continue with us the whole year. What is very singular in *Sweden*, the females quit that country in *September*, migrating in flocks into *Holland*, leaving their mates behind; in the spring they return.* In *Hampshire* Mr. *White* has observed something of this kind; namely, vast flocks of females with scarcely any males among them. Their nest is almost as elegantly constructed as that of the goldfinch, and of much the same materials, only the inside

* *Amœn. acad.* ii. 42. iv. 595.

has the addition of some large feathers. They lay four or five eggs, of a dull white color, tinged and spotted with deep purple.

The bill is of a pale blue, the tip black; the feathers on the forehead black; the crown of the head, the hind part and the sides of the neck, are of a bluish grey; the space above the eyes, the cheeks, throat, and forepart of the neck, are red; the sides and belly white, tinged with red; the upper part of the back is of a deep tawny color; the lower part and rump green; the coverts on the very ridge of the wing black and grey; beneath them is a large white spot; the bastard wing and first greater coverts black, the rest tipped with white; the quill feathers black; their exterior sides edged with pale yellow; their inner and outward webs white on their lower part, so as to form a third white line across the wing; the tail is black, except the outmost feather, which is marked obliquely with a white line from top to bottom, and the next which has a white spot on the end of the inner web; the legs are dusky. The colors of the female are very dull; it entirely wants the red on the breast and other parts: the head and upper part of the body are of a dirty green; the belly and breast of a dirty white; the wings and tail marked much like those of the male.

DESCRIP-
TION.

It arrives in *Italy* in *April*, and departs in *October*; but many winter there.

3. BRAM-
BLING.

Fringilla montifringilla. Fr.
nigra pennis rufo margina-
tis, subtus uropygioque alba,
jugulo pectoreque rufescen-
tibus, rectricibus lateralibus
nigricantibus, extus albo
marginatis. *Lath. Ind. orn.*
439. *id. Syn.* iii. 261.

Le Montain. *Belon av.* 372.

Montifringilla montana. *Ges-
ner av.* 388.

Aldr. av. ii. 358.

Fringuella montanina. *Olin,*
32.

Bramble, or Brambling. *Wil.*
orn. 254.

Mountain-finch. *Raii Syn.*
av. 88.

Le Pinçon d'ardennes. *Bris-
son av.* iii. 155. *Hist. d'ois.*
iv. 124. *Pl. Enl.* 54. f. 2.

Fringilla Montifringilla. *Gm.*
Lin. 902.

Pinosch. Scopoli. No. 218.

Norquint. Faun. Suec. sp.
233.

Quæker, Bosinkens Hore-
Unge, Akerlan. *Brunnich,*
255.

Nicowitz, Mecker, Piencken.
Kram. 367.

Bergfinck (Mountainfinch).
Frisch, i. 3.

Br. Zool. 108. plate V. f. 4.
Arct. Zool. ii. 71.

DESCRIP-
TION.

THIS bird is not very common in these islands. It is superior in size to the chaffinch: the top of the head is of a glossy black, slightly edged with a yellowish brown; the feathers of the back are of the same colors, but the edges more deeply bordered with brown; the chin, throat, and breast, are of an orange color; the lesser coverts of the wings of the same color, but those incumbent on the quill feathers barred

with black, tip with orange; the inner coverts at the base of the wings are of a fine yellow; the quill feathers are dusky; but their exterior sides edged with yellow; the tail a little forked; the exterior web of the outmost feather is white, the others black, except the two middle, which are edged and tip with ash color.

It migrates in *Italy*, and takes its departure later than the chaffinch.

“The Brambling visits *England* occasionally, but rarely, if ever, breeds here. Mr. *Bewick*, however, mentions having seen these birds on the *Cumberland* hills in *August*, which gives an air of probability to the circumstance. It sometimes assembles in vast flocks; I once had eighteen brought to me in *Kent* which were killed with one discharge of the fowling-piece.”

J. L.

4. SPARROW. *Fringilla domestica*. Fr. remigibus reatricibusque fuscis, corpore griseo nigroque, fascia alarum alba solitaria. *Lath. Ind. orn.* 432. *id. Syn.* iii. 248. *id. Sup.* 163. Le Moineau, Paisse, ou Moisson. *Belon av.* 361. Passer. *Gesner av.* 643. *Aldr. av.* ii. 246. Passera nostrale. *Olin.* 42. The House-sparrow. *Wil. orn.* 249. *Raii Syn. av.* 86. Le Moineau franc. *Brisson av.* iii. 72. *Hist. d'ois.* iii. 474. *Pl. Enl.* 6. f. 1. 55. f. 1. *Fringilla domestica. Gm. Lin.* 925. Tatting, Grasparf. *Faun. Suec. sp.* 242. *Danis Graae-Spurre. Norveg.* Huus-Kald. *Br.* 264. Hausspatz. *Kram.* 369. Grabetz. *Scopoli.* No. 220. *Br. Zool.* ii. 300. *Arct. Zool.* ii. 73.

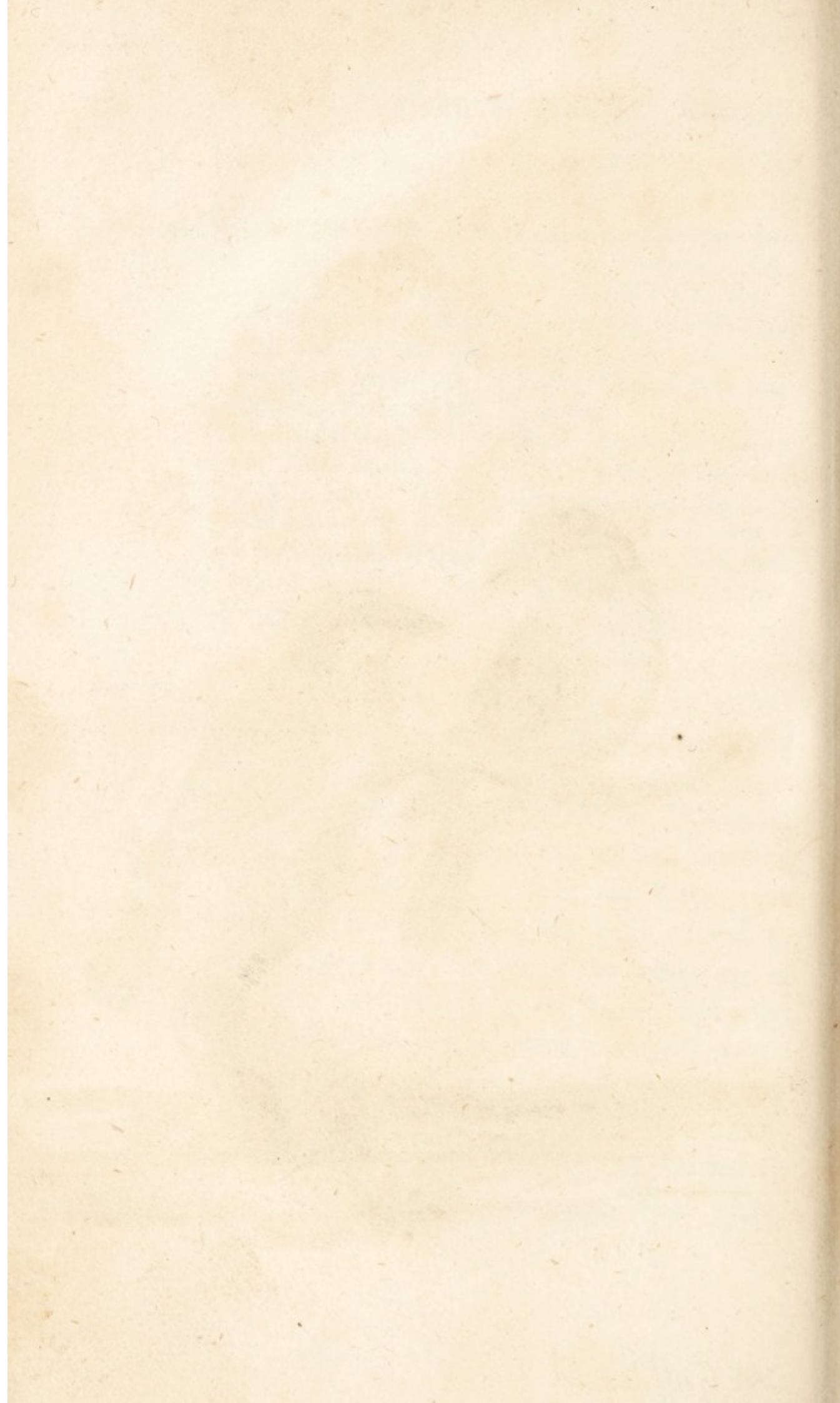
DESCRIP-
TION.

THE bill of the male is black; the crown of the head grey; under each eye is a black spot, and above the corner a broad bright bay mark, which surrounds the hind part of the head; the cheeks are white; the chin and under side of the neck are black; the latter edged with white; the belly of a dirty white; the lesser coverts of the wings are of a bright bay; the last row black, tipped with white; the great coverts black, outwardly edged with red; the quill feathers the same; the back spotted with red and black; the tail dusky. The lower mandible of the bill of the female is white; beyond each eye is a line of white;

M. & F. SPARROWS.



M Griffiths del



the head and whole upper part are brown, only on the back are a few black spots; the black and white marks on the wings are obscure; the lower side of the body is a dirty white.

Sparrows are proverbially salacious; they breed early in the spring, make their nests under the eaves of houses, in holes of walls, and very often in the nests of the martin, after expelling the owner. *Linnaeus* tells us (a tale from *Albertus Magnus*) that this insult does not pass unrevenged; the injured martin assembles its companions, who assist in plaistering up the entrance with dirt; then fly away, twittering in triumph, and leave the invader to perish miserably. They will often breed in plumb-trees and apple-trees, in old rooks' nests, and in the forks of boughs beneath them.

They remain in *Italy* the whole year, and breed thrice.

5. TREE
SPARROW.

Fringilla montana. Fr. remi-
gibus reatricibusque fuscis,
corpore griseo nigroque, ala-
rum fascia alba gemina.
Lath. Ind. orn. 433. *id.*
Syn. iii. 252. *id. Sup.* i.
163.

Passerinus. *Gesner av.* 656.

Aldr. av. ii. 261.

Olin. 48.

Wil. orn. 252.

Raii Syn. av. 87.

Edw. av. 269.

Le Moineau de Montagne,

Passer montanus. *Brisson*
av. iii. 79.

Le Friquet. *Hist. d'ois.* 489.

Pl. Enl. 267. f. 1.

Passere Montano. *Zinan.* 81.

Fringilla montana. *Gm. Lin.*
925.

Faun. Suec. sp. 243.

Scopoli, No. 221.

Skov-Spurre. *Brunnich*, 267.

Feldspatz, Rohrspatz, *Kram.*
370. *Frisch*, i. 1.

Br. Zool. 109. *Arct. Zool.* ii.
62.

DESCRIP-
TION.

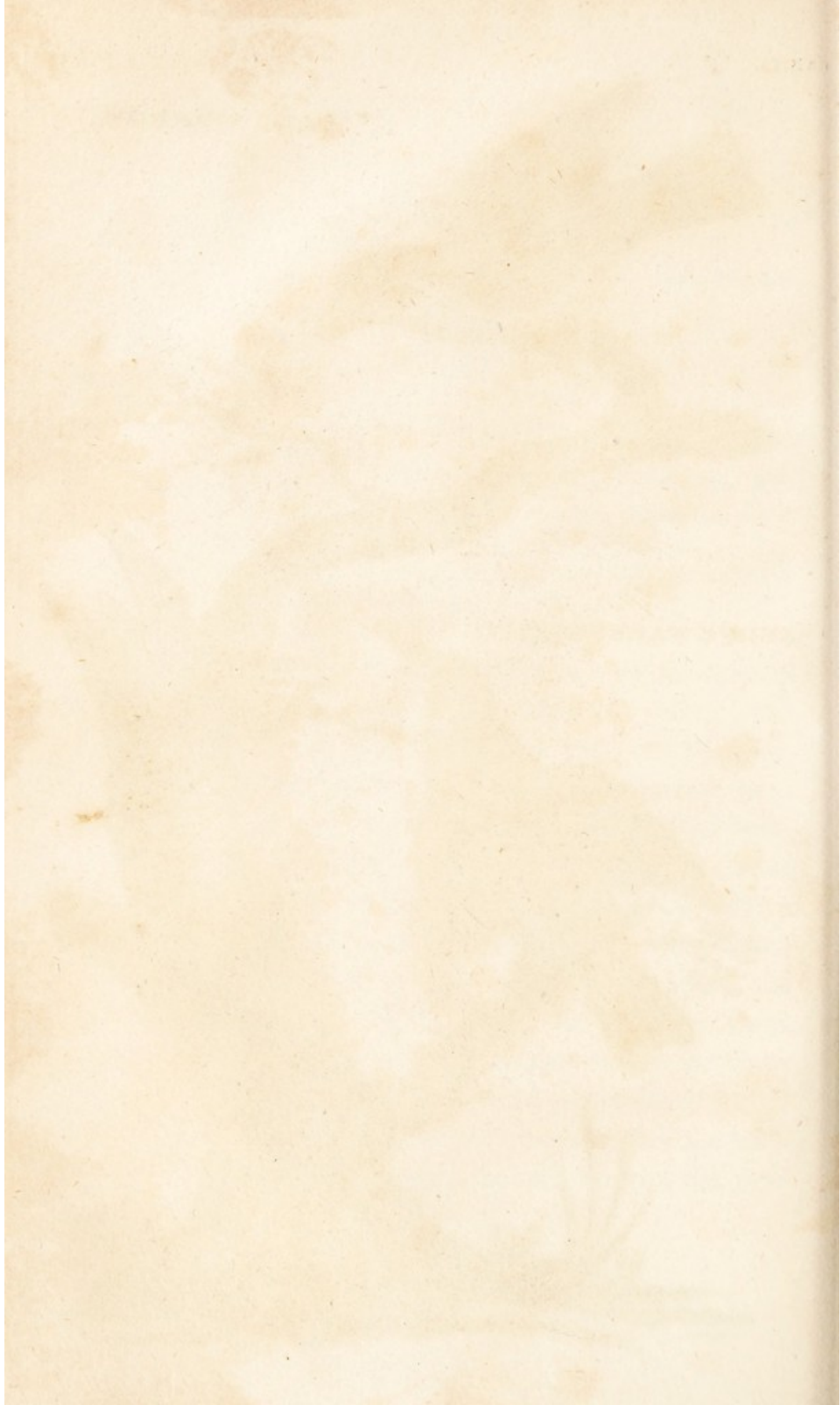
THIS species is inferior in size to the common sparrow. The bill is thick and black; the crown of the head, hind part of the neck, and the lesser coverts of the wings are of a bright bay; the two first plain, the last spotted with black; the chin black; the cheeks and sides of the head white, marked with a great black spot beneath each ear; the breast and belly of a dirty white; just above the greater coverts is a row of feathers black edged with white; the greater coverts are black edged with rust color; the quill feathers dusky, edged with pale red; the lower part of the back of an olive brown; the tail brown; the legs straw color.

TREE SPARROW.



SEDGE WARBLER (P.517)





SISKIN. M. & F.



TWITE. M. & F. (P 467)

These birds are very common in *Lincolnshire*; are conversant among trees, and collect like the common kind in great flocks.

They winter in *Italy*.

“ The nest of this species is made in trees. The eggs, five in number, are pale brown with chocolate spots running together, and forming a cloud at the larger end. It is found in *North America* in great plenty.” J. L.

Fringilla Spinus. Fr. remigibus medio luteis, primis quatuor immaculatis, rectricibus basi flavis apice nigris. *Lath. Ind. orn.* 452. *id. Syn.* iii. 289. *id. Sup.* i. 166. *Belon av.* 354.

Acanthis, Spinus, Ligurinus *Gesner av.* 1.

Aldr. av. ii. 352.

Lucarino. Olina, 17.

Wil. orn. 261.

Rui Syn. av. 91.

Le Serin. Brisson av. iii. 65.

Le Tarin. Hist. d'ois. iv. 221.

Pl. Enl. 485. f. 3.

Fringilla Spinus. Gm. Lin. 914.

Siska, Gronsiska. Faun. Suec. sp. 237.

Sisgen. Brunnich, 261.

Zeisel, Zeiserl. Kram. 366.

Frisch, i. 2. Scopoli, No. 212.

Br. Zool. 109. plate V. *Arct.*

Zool. ii. 74.

6. SISKIN.

THE head of the male is black; the neck and back green; but the shafts on the latter are black; the rump is of a greenish yellow; the throat and breast the same; the belly white; the vent-feathers yellowish, marked with oblong dusky spots in the middle; the pinion quill feather

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TION.

is dusky edged with green ; the outward webs of the nine next quill feathers are green ; the green part is widened by degrees in every feather, till in the last it takes up half the length ; from the tenth almost the lower half of each feather is yellow, the upper black ; the exterior coverts of the wings are black ; the two middle feathers of the tail are black ; the rest above half way are of a most lovely yellow, with black tips. The colors of the female are paler ; her throat and sides are white spotted with brown ; the head and back are of a greenish ash-color, marked also with brown.

Mr. *Willughby* tells us, that this is a song bird : that in *Sussex* it is called the *barley-bird*, because it comes to them in barley-seed time. We are informed that it visits these islands at very uncertain periods, like the grosbeak, &c. It is to be met with in the bird shops in *London*, and being rather a scarce bird, sells at a higher price than the merit of its song deserves : it is known there by the name of the *Aberdavine*. The bird catchers have a notion that it comes out of *Russia*. Dr. *Kramer** informs us, that it conceals its nest with great art, and that no one could discover it, though there are

* *Kramer elench.* 366.

infinite numbers of young birds in the woods on the banks of the *Danube*, that seem just to have taken flight.

In *Italy* it builds its nest in the highest woods of the *Alps*, and migrates in flocks in *October*.

“The Siskin is generally seen in this kingdom in winter: in some years much more scarce than in others. It often mixes with the smaller linnet, picking the seeds of the alder with the back downwards. Is said to breed sometimes in *Westmoreland*. Mr. *Lewin* once put into my possession two birds, male and female, shot in his garden in *Kent*, in the summer months. The nest, as figured by *Sepp*, is composed of dried bents and leaves, lined with feathers. The eggs dull white, marked with reddish spots: a pretty representation is given of them in *Bolton's Song birds*, pl. 25; they are five in number, and were sent him from *Berlin*.” J. L.

7. LINNET. *Fringilla Linota*. Fr. fusco-
castanea, subtus albida, fa-
scia alarum longitudinali al-
ba, rectricibus nigris, mar-
ginibus undique albis. *Lath.*
Ind. orn. 457. *id. Syn.* iii.
302.
Fringilla Linota. *Gm. Lin.*
916.
Belon av. 356
- Linaria*, Henfling, Schofzling,
Flacklin. *Gesner av.* 590.
Haenfling. *Frisch*, i. 9.
Aldr. av. ii. 359.
Wil. orn. 258.
Raii Syn. av. 90.
Fanello. *Zinan.* 61.
La Linotte. *Brisson av.* iii.
131. *Hist. d'oies.* iv. 58. *Pl.*
Enl. 151. f. 1.
Br. Zool. 110.

DESCRIP-
TION.

THE bill of this species is dusky, but in the spring assumes a bluish cast; the feathers on the head are black edged with ash-color; the sides of the neck deep ash-color; the throat marked in the middle with a brown line, bounded on each side with a white one; the back black bordered with reddish brown; the bottom of the breast is of a fine blood red, which heightens in color as the spring advances; the belly white; the vent feathers yellowish; the sides under the wings spotted with brown; the quill feathers are dusky; the lower part of the nine first are white; the coverts incumbent on them black; the others of a reddish brown; the lowest order tipt with a paler color; the tail is a little forked, of a brown color, edged

with white; the two middle feathers excepted, which are bordered with dull red. The females and young birds want the red spot on the breast; in lieu of that, their breasts are marked with short streaks of brown pointing downwards; the females have also less white in their wings.

These birds are much esteemed for their song; they feed on seeds of different kinds, which they peel before they eat; the seed of the *linum* or flax is their favorite food, from whence the name of the linnet tribe.

They breed among furze and white thorn; the outside of their nest is made with moss and bents, and lined with wool and hair. They lay five whitish eggs, spotted like those of the goldfinch.

8. RED
HEADED.

- Fringilla cannabina*. Fr. fusco-castanea, subtus albo-rufescens, fascia alarum longitudinali alba, macula verticis pectoreque rubris. *Lath. Ind. orn.* 458. *id. Syn.* iii. 304. *id. Sup.* i. 167. *id. Sup.* ii. 209.
- Linaria rubra*. *Gesner av.* 591.
- Fanello marino. *Aldr. av.* ii. 360.
- Wil. orn.* 260.
- Raii Syn. av.* 91.
- La grande Linotte des vignes.
- Brisson av.* iii. 135. *Hist. d'ois.* iv. 58. *Pl. Enl.* 485. f 1.
- Fringilla cannabina*. *Gm. Lin.* 916.
- Scopoli*, No. 219.
- Hampling. Faun. Suec. sp.* 240.
- Torn-Isrk. Brunnich*, 263.
- Hauefferl, Hampfling. Kram.* 368.
- Blut Hänfling (Bloody Linnet). *Frisch*, i. 9.
- Br. Zool.* 110. *Arct. Zool.* ii. 68.

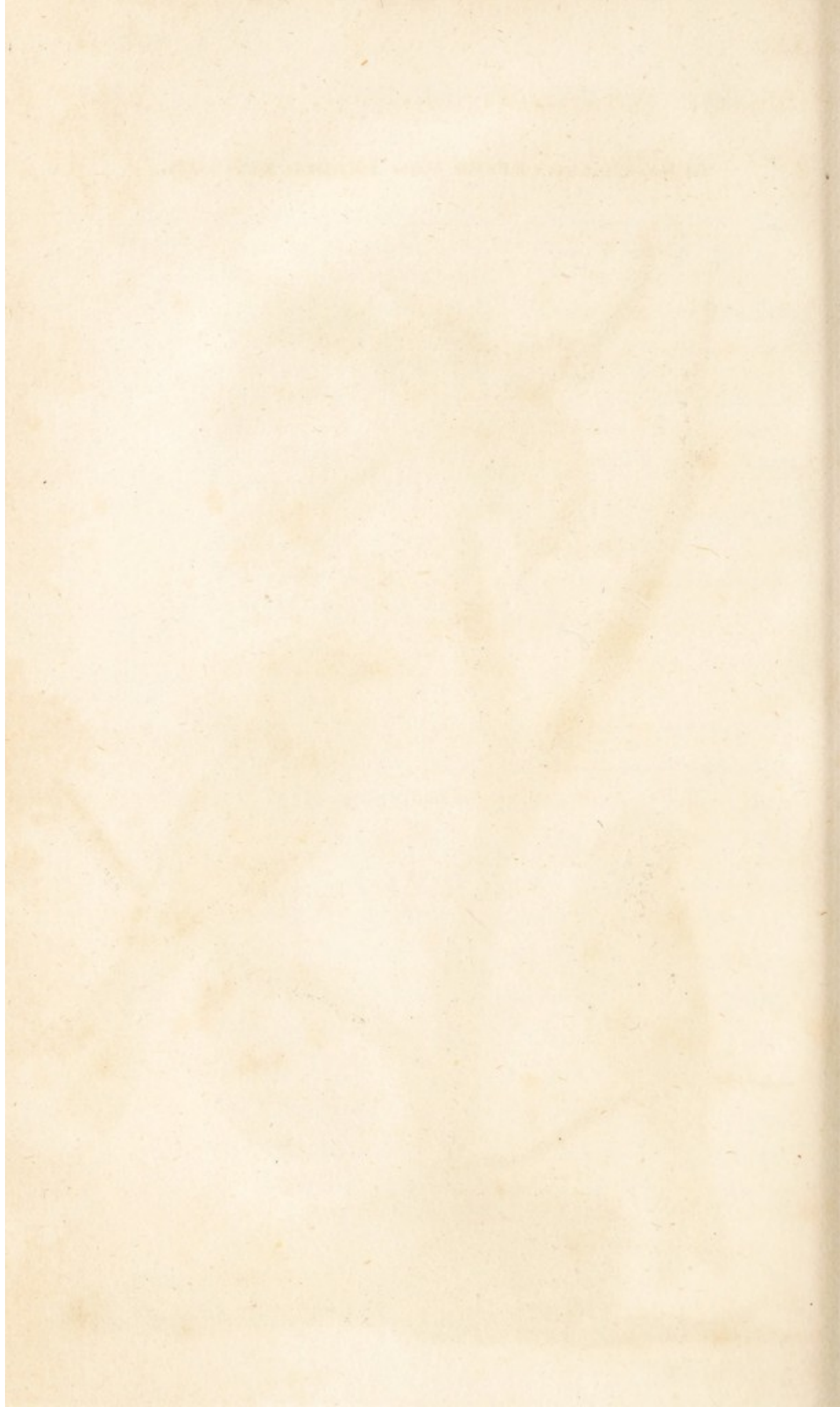
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TION.

THIS bird is less than the former; on the forehead is a blood colored spot; the rest of the head and the neck are of an ash-color; the breast is tinged with a fine rose color; the back, scapular feathers, and coverts of the wings, are of a bright reddish brown; the first quill feather is entirely black; the exterior and interior edges of the eight following are white, which forms a bar of that color on the wing, even when closed; the sides are yellow; the middle of the belly white; the tail, like that of the former, is forked, of a dusky color, edged on both sides with white, which is broadest on the inner webs. The head of the female is

GREATER AND LESSER RED HEADED FINCHES.



M Griffiths del



ash color, spotted with black; the back and scapulars are of a dull brownish red; and the breast and sides of a dirty yellow, streaked with dusky lines. It is a common fraud in the bird shops in *London*, when a male bird is distinguished from the female by a red breast, as in the case of this bird, to stain or paint the feathers, so that the deceit is not easily discovered, without at least close inspection.*

These birds are frequent on our sea-coasts; and are often taken in *flight* time near *London*. It is a familiar bird, and is chearful in five minutes after it is caught.

It leaves *Italy* in flocks in *September* and *October*.

* Doctor *Latham*, in the second supplement to his *Synopsis*, suggests the possibility that this and the common linnet constitute only one species, the latter not completing the red on the forehead till the end of the second year at soonest, though it is capable of breeding in the first spring after it is hatched. ED.

9. LESS RED HEADED.

Fringilla Linaria. Fr. fusco griseoque varia, subtus albo-rufescens, fascia alarum duplici albida, vertice pectoreque rubris. *Lath. Ind. orn.* 458. *id. Syn.* iii. 305. *id. Sup.* i. 167. *Wil. orn.* 260. *Raii Syn. av.* 91. *La petite Linotte des vignes. Brisson av.* iii. 138.

Le Sizerin. *Hist. d'ois.* iv. 216. *Pl. Enl.* 151. f. 2.

Fringilla Linaria. Gm. Lin. 917.

Grasiska. *Faun. Suec. sp.* 241.

Grasel, Meerzeisel, Tschotscherl. *Kram.* 369.

Rothplattige Staenfling. *Fris.* i. 10.

Br. Zool. 111. *Arct. Zool.* ii. 68.

DESCRIPTION.

THIS is the lest of the *genus*, being scarcely half the size of the preceding. Its bill is dusky, but the base of the lower mandible yellow; the forehead ornamented with a rich shining spot of a purplish red; the breast is of the same color, but not so bright; yet, in the breasts of some, we have found the red wanting; the belly is white; the back dusky, edged with reddish brown; the sides in some yellowish, in others ash color, but both marked with narrow dusky lines; the quill feathers, and those of the tail, are dusky, bordered with dirty white; the coverts dusky, edged with white, so as to form two transverse lines of that color. The spot on the forehead of the female is of a saffron color: the legs are dusky.

We have seen the nest of this species on an alder stump near a brook, between two or three

feet from the ground : it was made on the outside with dried stalks of grass and other plants, and here and there a little wool, the lining consisted of hair and a few feathers : the bird was sitting on four eggs of a pale bluish green, thickly sprinkled near the blunt end with small reddish spots, and was so tenacious of her nest, as to suffer us to take her off with our hand, and we found that after we had released her she would not forsake it.

This seems to be the species known about *London* under the name of *stone redpoll* : it is gregarious.

Fringilla Linaria. β . Fr. supra varia, subtus rufescens, abdomine albedo, superciliis fasciaque alarum rufescentibus, vertice uropygioque rubris. *Lath. Ind. orn.* 459. *id. Syn.* iii. 307.

Le Picaveret? *Belon av.* 358.

Wil. orn. 261.

Raii Syn. av. 91.

Fanello dell'Aquila. *Olin.* 8. 10. TWITE.

Linaria montana. Linaria minima. La petite Linotte, ou le Cabaret. *Brisson av.* iii. 142. *Hist. d'oï.* iv. 76. *Pl. Enl.* 485. f. 2.

Linaria fera saxatilis. *Klein. hist. av.* 93.

Br. Zool. 111. *Arct. Zool.* ii. 70.

THIS is an inhabitant of the hilly parts of our country, as Mr. *Willughby* informs us. He says it is twice the size of the last species ; that the color of the head and back is the same with

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that of the common linnet: that the feathers on the throat and breast are black edged with white; and that the rump is of a rich scarlet or orange tawny color; that the edges of the middle quill feathers are white, as are the tips of those of the second row; the two middle feathers of the tail of a uniform dusky color; the others edged with white. This species is taken in the flight season near *London* with the linnets; it is there called a Twite. The birds we examined differed in some particulars from Mr. *Willughby's* description. In size they were rather inferior to the common linnet, and of a more taper make; their bills short and entirely yellow; the head cinereous and black; above each eye was a spot of pale brown; the back rusty, spotted with black; the coverts of the tail of a rich scarlet; the tips of the greater coverts of the wings, white; the primaries dusky; the inner sides white; the tail dusky, and all but the two middle feathers were edged with white. The female wants the red mark on the rump.

These birds take their name from their note, which has no music in it: it is a familiar bird, and more easily tamed than the common linnet.

We believe it breeds only in the Northern parts of our island.

Here it may not be improper to mention the

Canary bird,* which is of the finch tribe. It was originally peculiar to those isles, to which it owes its name; the same that were known to the antients by the addition of the *fortunate*. The happy temperament of the air; the spontaneous productions of the ground in the varieties of fruits; the sprightly and chearful disposition of the inhabitants;† and the harmony arising from the number of the birds found there,‡ procured them that romantic distinction. Though the antients celebrate the isle of *Canaria* for the multitude of birds, they have not mentioned any in particular. It is probable then, that our species was not introduced into *Europe* till after the second discovery of these isles, which was in the fourteenth century. We are uncertain when it first made its appearance in this quarter of the globe. *Belon*,

* *Wil. orn.* 262. *Raii Syn. av.* 91. Serin des Canaries. *Brisson av.* iii. 184. *Fringilla Canaria. Gm. Lin.* 913.

† *Fortunatae insulae abundant sua sponte genitis, et subinde aliis super aliis innascentibus nihil sollicitos alunt; beatius quam aliae urbes excultae. Mela de sit. orb.* iii. 17. He then relates the vast flow of mirth among this happy people, by a figurative sort of expression, that alludes to their tempering discretion with their jollity, and never suffering it to exceed the bounds of prudence. This he delivers under the notion of two fountains found among them, *alterum qui gustavere risu solvuntur in mortem; ita affectis remedium est ex altero bibere.*

‡ *Omnes copia pomorum, et avium omnes generis abundant, &c. Plin. lib. vi. c. 32.*

who wrote in 1555, is silent in respect to these birds: *Gesner** is the first who mentions them; and *Aldrovand*† speaks of them as rarities; he says that they were very dear on account of the difficulty attending the bringing them from so distant a country, and that they were purchased by people of rank alone. *Olin*‡ says, that in his time there was a degenerate sort found on the isle of *Elba*, off the coast of *Italy*, which came there originally by means of a ship bound from the *Canaries* to *Leghorn*, which was wrecked on that island. We once saw some small birds brought directly from the *Canary* Islands, that we suspect to be the genuine sort; they were of a dull green color, but as they did not sing, we supposed them to be hens. These birds will produce with the goldfinch and linnet, and the offspring is called a mule-bird, because, like that animal, it proves barren.

They are still found§ on the same spot to which we were first indebted for the production of such charming songsters; but they are now become so numerous in our country, that we are under no necessity of crossing the ocean for them.

* *Gesner* av. 240.

† *Aldr.* av. ii. 355.

‡ *Olin* uccel. 7.

§ *Glas's hist. Canary Isles*, 199.

GENUS XXIV. FLY-CATCHER.

BILL flattened at the base, almost triangular, notched near the end of the upper mandible, and beset with bristles.

TOES divided to their origin.

Muscicapa. Grisola. M. sub-	Zinan. 45.	1. SPOTTED.
fusca subtus albicans, collo	The Cobweb. Morton Nor-	
longitudinaliter maculato,	thampt. 426.	
crisso rufescente. Lath.	Le Gobe-mouche, Muscicapa.	
Ind. orn. 467. id. Syn. iii.	Brisson av. ii. 357. tab. 35.	
323.	f. 3. Hist. d'oïs. iii. 517.	
Stoparola. Aldr. av. ii. 324.	Pl. Enl. 565. f. 1.	
A small bird without a name,	Muscicapa Grisola. Gm. Lin.	
like the <i>Stopparola</i> of Al-	949.	
drovand. Wil. orn. 217.	Br. Zool. 99. plate P. 2. f. 4.	
Raii Syn. av. 77.	Arct. Zool. ii. 83.	

THE fly-catcher is a bird of passage, appears in the spring, breeds with us, and retires in *August*. It builds its nest on the sides of trees, towards the middle part, and sometimes, as *Morton* says, in the corners of walls where spiders weave their webs. We have seen them followed by four or five young, but never saw their eggs;*

* Mr. *Montagu* says, that the eggs are not much unlike those of the Redbreast, but rather less, the rust-colored spots more distinct, and not so much confined to the larger end. Ed.

when the young can fly the old ones withdraw with them into thick woods, where they frolick among the top branches; frequently dropping from the boughs quite perpendicularly on the flies that sport beneath, and rising again in the same direction. They will also take their stand on the top of some stake or post, from whence they spring forth on their prey, returning still to the same stand for many times together. They feed also on cherries, of which they seem very fond.

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The head is large, of a brownish hue spotted obscurely with black; the back of a mouse color; the wings and tail dusky; the interior edges of the quill feathers edged with pale yellow; the breast and belly white; the shafts of the feathers on the former dusky; the throat and sides under the wings are dashed with red; the bill is very broad at the base, ridged in the middle, and round the base are several short bristles; the inside of the mouth is yellow; the legs and feet short and black.

Muscicapa atricapilla. *M. nigra*, subtus frontisque macula alarumque speculo albis, rectricibus lateralibus extus albis. *Lath. Ind. orn.* 467. *id. Syn.* iii. p. 323.

Atricapilla sive ficedula. *Aldr.* av. ii. 331.

Cold finch. *Wil. orn.* 236.

Raii Syn. av. 77.

Edw. 30.

Frisch, i. 22.

Le Traquet d'Angleterre. *Rubetra anglicana*. *Brisson*, av. iii. 436. *Hist. d'ois.* v. 222. *Meerschwartz pluffe*. *Kramer Aust.* 377.

Muscicapa Atricapilla. *Gm. Lin.* 935.

Faun. Suec. No. 256. Tab. 1. 103. 5. f. 1.

Cold-finch. *Br. Zool.* 103. B. fig. 1. *Arct. Zool.* ii. 85.

2. PIED.

DESCRIPTION,

THIS is less than a hedge sparrow. The bill and legs are black; the forehead white; the head, cheeks, and back black; the coverts of the tail spotted with white; the coverts of the wings dusky, traversed with a white bar; the quill feathers dusky; the exterior sides of the secondaries white, the interior dusky; the middle feathers of the tail black; the exterior marked with white; the whole under side of the body white.

The female wants the white spot on the forehead; the whole head, and upper part of the body are of dusky brown; the white in the wings is less conspicuous; the under side of the body is of a dirty white.

It is found occasionally in different parts of *England*.

“ In respect to *England* this is a rare species,

but is most common in *Yorkshire, Lancashire, and Derbyshire*. Mr. Bolton says it visits the *West Riding* in *April*, and departs with the young in *September*. A nest built on the branch of an almond-tree was well concealed; it was loose in structure, composed of moss, hay, small sticks, roots, and lined with finer fibres, hair and a few feathers. The eggs, six in number, were pale bright blue. A few years since a young male was shot at *Uxbridge*. It is not observed in the west of *England*.”
J. L.

WHITE WAGTAIL. (P. 489)



YELLOW WAGTAIL. (P. 491)



SKY LARK. (P. 475)



GENUS XXV. LARK.

BILL weak, strait, bending towards the point.

NOSTRILS covered with feathers or bristles.

TOES divided to their origin; back toe armed with a long and strait claw.

Alauda Arvensis. *A. nigricante*
griseo-rufescente et albidovaria,
subtus rufo-alba, rectricibus
extimis duabus extrorsum
longitudinaliter albis,
intermediis interiori latere
ferrugineis. *Lath. Ind. orn.*
491. *id. Syn.* iv. 368.

L'Alouette. *Belon av.* 269.

Chamoichilada. *Obs.* 12.

Alauda sine crista. *Gesner av.*
78.

Aldr. av. ii. 369.

Lodola. Olin. 12.

Common Field Lark, or Sky
Lark. *Wil. orn.* 203.

Raii syn. av. 69.

L'Alouette. *Brisson av.* iii.
335. *Hist. d'ois.* v. 1. *Pl.*
Enl. 363. *f.* 1.

Allodola, *Pantherana. Zinan.*
55.

Alauda arvensis. Gm. Lin. 791.

Larka. Faun. Suec. sp. 209.

Alauda coelipeta. Klein stem.
Tab. 15. *f.* 1.

Sang-Loerke. Br. 221.

Feldlerche. Kram. 362. *Frisch,*
i. 15.

Lauditza. Scopoli, No. 184.

Br. Zool. 93. plate S. 2. *f.* 7.

Arct. Zool. ii. 86.

1. SKY.

THE length of this species is seven inches
one-fourth; the breadth twelve and a half; the
weight one ounce and a half. The tongue broad
and cloven; the bill slender; the upper man-
dible dusky, the lower yellow; above the eyes

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is a yellow spot; the crown of the head is of a reddish brown spotted with deep black; the hind part of the head ash-color; the chin white. It has the faculty of erecting the feathers of the head. The feathers on the back, and coverts of the wings are dusky edged with reddish brown, which is paler on the latter; the quill feathers dusky; the exterior web edged with white, that of the others with reddish brown; the upper part of the breast yellow spotted with black; the lower part of the body of a pale yellow; the exterior web, and half of the interior web next to the shaft of the first feather of the tail are white; of the second only the exterior web; the rest of those feathers dusky; the others are dusky edged with red; those in the middle deeply so, the rest very slightly; the legs dusky; the soles of the feet yellow: the hind claw very long and strait. It builds its nest on the ground, beneath some clod; forming it of hay, dry fibres, &c. and lays four or five eggs, of a dirty white color, blotched and spotted with brown.

This and the wood lark are the only birds that sing as they fly; this raising its note as it soars, and lowering it till it quite dies away as it descends. It will often soar to such a height, that we are charmed with the music when we lose sight of the songster; it also begins its song

before the earliest dawn. *Milton*, in his *Allegro*, most admirably expresses these circumstances; and bishop *Newton* observes, that the beautiful scene which *Milton* exhibits of rural cheerfulness, at the same time gives us a fine picture of the regularity of his life, and the innocency of his own mind; thus he describes himself as in a situation

To hear the lark begin his flight,
And singing startle the dull night,
From his watch tower in the skies,
'Till the dappled dawn doth rise.

It continues its harmony several months, beginning early in the spring, on pairing.

In the winter larks assemble in vast flocks, grow very fat, and are taken in great numbers for our tables. The place where these birds are caught in the greatest quantity is in the neighbourhood of *Dunstable*:* the season begins about

* "The number caught about *Dunstable*, bears no proportion to the immense multitudes met with in *Germany*, where they are subject to excise, which, according to *Keysler*, produces six thousand dollars, (above nine hundred pounds sterling) to the city of *Leipsic* yearly. The duty at *Leipsic* is a *grotsch*, (about $2\frac{1}{2}d.$) for every sixty birds, and has been known to produce frequently twelve thousand crowns. The country about *Nuremberg*, *Merseburg*, *Halle*, and other parts furnish proportional numbers. Larks are every where seen on the Continent and as far as the *Cape of Good Hope*; we have also observed drawings of them from *India*. J. L."

the fourteenth of *September*, and ends the twenty-fifth of *February*; and during that time, about 4000 dozen are taken, which supply the markets of the metropolis. Those caught in the day are taken in clap-nets of fifteen yards in length, and two and a half in breadth, and are enticed within their reach by means of bits of looking-glass, fixed in a piece of wood, and placed in the middle of the nets, which are put in a quick whirling motion, by a string the larker commands; he also makes use of a decoy lark. These nets are used only till the fourteenth of *November*, for the larks will not *dare*, or frolick in the air except in fine sunny weather, and of course cannot be inveigled into the snare. When the weather grows gloomy, the larker changes his engine, and makes use of a trammel net twenty-seven or twenty-eight feet long, and five broad, which is put on two poles eighteen feet long, and carried by men under each arm, who pass over the fields and quarter the ground as a setting dog; when they hear or feel a lark hit the net, they drop it down, and so the birds are taken.

Alauda arborea. *A. varia*, capite vitta annulari alba cincto. *Lath. Ind. orn.* 492.
id. Syn. iv. p. 370.

Tottavilla, *Olina*, 27.

Wil. orn. 204.

Raii Syn. av. 69.

L' Alouette de Bois ou le Cujelier. *Brisson av.* iii. 340.
Tab. 20. *fig.* 1. *Hist. d'Ois.* v. 25. *Pl. Enl.* 660.
f. 2.

Alauda arborea. *Gm. Lin.* 793. 2. Wood.
Faun. Suec. sp. 211.

Ludllerche, Waldlerche *Kram.* 362.

Danis Skov-Lerke, *Cimbris* Heede-Leker, *Lyng-Lreke.* *Br.* 224.

Zippa. Scopoli, No. 186.

Br. Zool. 94. plate Q *f.* 3.
Arct. Zool. ii. 87.

THIS bird is inferior in size to the sky lark, and is of a shorter thicker form; the colors are paler; its note less sonorous and varied, though not less sweet. These and the following characters, may serve at once to distinguish it from the common kind: it perches on trees; it whistles like the black-bird; the crown of the head, and the back, are marked with large black spots edged with pale reddish brown; the head is surrounded with a whitish coronet of feathers, reaching from eye to eye; the throat is of yellowish white, spotted with black: the breast is tinged with red; the belly white; the coverts of the wings are brown, edged with white and dull yellow; the quill feathers dusky; the exterior edges of the three first white; of the

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others yellow, and their tips blunt and white; the first feather of the wing is shorter than the second; in the common lark it is nearly equal; the tail is black, the outmost feather is tipped with white; the exterior web, and inner side of the interior are also white; in the second feather, the exterior web only; the legs are of a dull yellow; the hind claw very long. The wood lark will sing in the night, and, like the common lark, will sing as it flies. It builds on the ground, and makes its nest on the outside with moss, within of dried bents lined with a few hairs. It lays five eggs, dusky and blotched with deep brown, the marks darkest at the thicker end.

The males of this and the last species, are known from the females by their superior size; but this is not near so numerous as the preceding.

This species migrates from *Italy* in *October*; the sky lark seldom quits that country.

Alauda pratensis. *A. viridifusca*, rectricibus duabus extrorsum albis, linea superciliaria alba. *Lath. Ind. orn.* 493. *id. Syn.* iv. p. 374.

La Farlouse, Fallope ou L'Alouette de pre. *Belon av.* 272.

Aldr. av. ii. 370.

Lodolo di Prato. *Olini*, 27.

Wil. orn. 206.

Raii Syn. av. 69.

L'Alouette de prez ou la

Farlouse. *Brisson av.* iii. 3. **TIT.**

343. *Hist. d'ois.* v. 31. *Pl.*

Enl. 660. *f.* 1.

Mattolina, Petagnola, Corriera. *Zinan.* 55.

Alauda pratensis. *Gm. Lin.* 792.

Faun. Suec. sp. 210.

Wiesen Lerche (Meadows Lark) *Frisch*, i. 16.

Englerke. Br. 223.

Br. Zool. 94. plates Q. f. 6.

Arct. Zool. ii. 87.

THIS bird is found frequently in low marshy grounds. It builds its nest among the grass, lining it with horse hair, and lays five or six eggs, generally of a deep brown color, but sometimes whitish, and thickly speckled with rufous brown. Like the woodlark it sits on trees, and has a most remarkable fine note, singing in all situations, whether when perched or on the ground, or while it is sporting in the air, and particularly in its descent. This bird with many others, such as the thrush, blackbird, willow wren, &c. become silent about *Midsummer*, and resume their notes in *September*: hence this interval is the most mute of the year's three vocal seasons, spring, summer, and autumn: perhaps they are induced

DESCRIP-
TION.

to sing again as the autumnal temperature resembles the vernal. It is a bird of an elegant slender shape: the length is five inches and a half; the breadth nine inches. The bill is black; the back and head is of a greenish brown, spotted with black; the throat and lower part of the belly are white; the breast yellow, marked with oblong spots of black; the tail is dusky; the exterior feather is varied by a bar of white, which runs across the end, and takes in the whole outmost web. The claw on the hind toe is very long, the feet yellowish.

4. DUSKY. *Alauda obscura*. *A. olivaceo-fusca nigricante varia*, subtus flavicans, lateribus colli pectoreque maculis fusciscentibus, rectrice extima dimidiato, secunda apice albo cinerascens. *Lath. Ind. orn.* 494. *id. Sup.* ii. 227. *Montagu Orn. Dict.* *Alauda petrosa*. *Lin. Tr.* iv. 41. *Br. Zool.* 94. *Tab. P. i. f.* 3.

[THIS bird in the preceding edition of the *British Zoology*, was considered as a variety of the tit lark, to which it bears a great resemblance; but the editor feels himself authorised to follow the example of later ornithologists, and describe it as a distinct species.

DESCRIP-
TION.

In size it exceeds the tit lark: the upper part of the head, back of the neck, and tail coverts,

are of a dark brown; the back and scapulars of the same color, obscurely marked with dusky strokes; the throat whitish, the breast and belly of a yellowish white; the former blotched with large dusky spots; the sides marked with strokes of the same; the tail three inches long; the legs brown; the hind claw, which is crooked, is about four tenths of an inch in length.

We are informed by Mr. *Montagu* that it begins breeding early in the spring, and that the nest is made of dry grass, marine plants, and a very little moss externally, and lined with fine grass and a few long hairs. This is generally placed on the shelf of a rock near the sea, where there are a few scanty bushes or tufts of grass. It lays four or five eggs, of a dirty white, sprinkled with numerous specks of brown, so confluent at the larger end as to give that part the appearance of an uniform color.

This species is found from the coast of *Caernarvonshire*, where it was first observed by Mr. *Pennant*, to the southern parts of the kingdom, and seems confined to the neighbourhood of the sea. ED.]

5. PIPIT. *Alauda trivialis*. *A. nigricante* Grasshopper Warbler. *Lath.*
et olivaceo varia, subtus albo- *Syn.* iv. 429. (*quoad synonym.*)
flavicans maculis nigricanti- *A. sepiaria.* *Brisson av.* iii. 349.
bus, rectrice extima dimi- *Alouette pipi.* *Hist. d'oï.* v.
diato secunda apice alba. 39. t. 4.
Lath. Ind. orn. 493. *Piep Lerche,* *Frisch,* 26.
Gm. Lin. 796. *Pipit Lark.* *Alb.* i. 44.

[THE Pipit Lark has generally been confound-
 ed with the tit lark and the grasshopper warbler,
 and can only be distinguished from the former
 by the color of the upper parts being more oli-
 vaceous, and the yellow of the under more fer-
 ruginous; and also from its superior size, being
 six inches and a half in length. ED.]

6. FIELD. *Alauda minor.* *A. rubro-fusca* *Alauda minor.* *Gm. Lin.* 793.
subtus maculata, gula abdo- *The Lesser Field Lark.* *Wil.*
mineque albis, jugulo pecto- *orn.* 207.
reque obscure flavescens. *Arct. Zool.* ii. 88.
Lath. Ind. orn. 494. *id. Syn.*
iv. 375.

DESCRIP-
 TION.

THIS species we received from Mr. *Plymly*.
 It is larger than the tit lark; the bill dusky
 above, whitish beneath; the head and hind part
 of the neck are of a pale brown, spotted with
 dusky lines, which on the neck are very faint;
 the back and rump are of a dirty green, the
 former marked in the middle of each feather with

black, the latter plain; the coverts of the wings dusky, deeply edged with white; the quill feathers dusky; the exterior web of the first edged with white, of the others with a yellowish green. The throat is yellow; the breast of the same color, marked with large black spots; the belly and vent-feathers white; on the thighs are a few dusky oblong lines: the tail is dusky, but half the exterior and interior web of the outmost feather is white; the next is marked near the end, with a short white stripe pointing downwards; the legs are of a very pale yellowish brown; and the claw on the hind toe very short for one of the lark kind, which strongly distinguishes it from the tit lark.

[The excellent naturalist who has particularly elucidated this species in his *Ornithological Dictionary* says, that this bird visits *England* late in the spring, and is chiefly found in *Wiltshire* and the southern parts of the kingdom. It generally makes its nest amongst high grass or green wheat, and frequents the more cultivated districts, where there are trees; the nest is composed of dry grass, fibrous plants, and sometimes a little moss, and is lined with fine dry grass and horse hair. The eggs are four in number, of a dirty bluish white, thickly blotched and spotted with purplish brown. ED.]

7. RED. *Alauda rubra*. A. obscure fusca, subtus fulvo-rufescens, maculis fuscis varia, genis nigricantibus, superciliis pallide rufis. *Lath. Ind. orn.* 494. *id. Syn.* iv. 376. *Alouette a joues brunes de* *Pensylvanie. Brisson av. Sup.* 94. *Hist. d'ois.* v. 58. *Alauda rubra. Gm. Lin.* 794. *Lark from Pensylvania. Edw. tab.* 297. *Br. Zool.* ii. 239. *Arct. Zool.* ii. 85.

I MET with this species in the magnificent and elegant *Museum* of *Ashton Lever*, Esq; where the lover of *British* or exotic ornithology, may find delight and instruction equally intermixed.

DESCRIP-
TION.

This species is equal in size to the common lark. A white line crosses each eye, and another passes beneath; the bill is thick; the chin and throat whitish; the head, neck, back, and coverts of the wings are of a rusty brown, spotted with black; the breast whitish, with dusky spots; the belly of a dirty white; the middle feather of the tail black edged with brown; the two exterior white; the legs of a pale brown.

This bird is common to the neighborhood of *London*, to *North America*, and to the South of *Europe*; but in most parts of *England* is rare. Mr. *Edwards* first discovered it; he remarks, that when the wing is gathered up, the third primary feather reaches to the tip of the first.

- | | | |
|---|--|-------------------------------|
| <p><i>Alauda, cristatella. A. cristata,</i>
 <i>corpore supra fusco subtus</i>
 <i>albicante, remigibus rectrici-</i>
 <i>busque fuscis, pedibus subru-</i>
 <i>bris. Lath. Ind. orn. 499. id</i>
 <i>Syn. iv. 391.</i></p> <p><i>Alauda cristatella. Gm. Lin.</i>
 <i>797.</i></p> | <p><i>Alauda cristata minor. Aldr</i>
 <i>av. ii. 371.</i>
 <i>Wil. orn. 209.</i>
 <i>Raii Syn. av. 69.</i>
 <i>La petite alouette hupée. Bris-</i>
 <i>son av. iii. 361.</i></p> <p><i>Le Lulu. Hist. d'oïs. v. 74.</i>
 <i>Pl. Enl. 303. f. 2.</i>
 <i>Br. Zool. 95.</i></p> | <p>8. LESSER
CRESTED.</p> |
|---|--|-------------------------------|

THIS species we find in Mr. *Ray's* history of *English* birds; who says it is found in *Yorkshire*, and gives us only this brief description of it, from *Aldrovandus*. That it is like the greater crested lark, but much less, and not so brown; that it hath a considerable tuft on its head for the smallness of its body; and that its legs are red. We never saw this kind; but by Mr. *Bolton's* list of *Yorkshire* birds, which he favored us with, we are informed it is plentiful in that country.

“ Mr. *Lewin* once showed me a lark, which he supposed to be this. It resembled the skylark, but had the tail only two inches and a half long; the wings approaching to within three quarters of an inch of the end of it. The total length of the bird was six inches and three quarters. It certainly was not unlike the field* spe-

* Mr. *Montagu* says, there is great reason to believe it is merely the Field Lark of this work. ED.

cies, but the head feathers were more elongated. We have seen one exactly resembling it, and crested on the crown in drawings from *India*, under the name of *Chundool*." J. L.

GENUS XXVI. WAGTAIL.

BILL slender, with a small tooth near the end of the upper mandible.

TONGUE lacerated.

TAIL long.

Motacilla alba. *M. pectore nigro*, rectricibus duabus lateralibus dimidiato oblique albis.

Lath. Ind. orn. 501. *id. Syn.* iv. 395. *id. Sup.* i. 178.

Belon. av. 349.

Motacilla alba. *Gesner av.* 618.

Aldr. av. ii. 323.

Ballarina, *Cutrettola*. *Olin*, 43.

Wil. orn. 237.

Raii Syn. av. 75.

La Lavandiere. *Brisson av.* iii.

461. *Hist. d'ois.* vi. 251. *Pl.*

Enl. 652. *f.* 1. 2.

Monachina. *Zinan.* 51.

Pliska, *Pastaritra*. *Scopoli*, No. 224.

M. alba. *Gm. Lin.* 960.

Arla, *Sadesarla*. *Faun. Suec.* sp. 252.

Danis Vip-Stiert, *Havre-Sæer*.

Norvegis Erle, *Lin-Erle*.

Brunnich, 271.

Weiss und schwartze Bachsteltze. *Frisch*, i. 23.

Graue Bachstelze. *Kram.* 374.

Br. Zool. 104. *Arct. Zool.* ii. 88.

1. WHITE.

THIS bird frequents the sides of ponds, and small streams; and feeds on insects and worms, as do all the rest of this genus. Mr. *Willughby* justly observes, that this species shifts its quarters in the winter, moving from the north to the south of *England*, during that season. In spring

and autumn it is a constant attendant of the plough, for the sake of the worms thrown up by that instrument.

DESCRIP-
TION.

The head, back, and upper and lower side of the neck as far as the breast are black; in some the chin is white, and the throat marked with a black crescent; the breast, and belly are white; the quill feathers are dusky; the coverts black tipped and edged with white; the tail is very long, and always in motion; the exterior feather on each side is white, the lower part of the inner web excepted, which is dusky; the other feathers are black; the bill, inside of the mouth, and the legs, are black; the back claw very long.

It visits *Italy* in *April*, and departs in *September*.

- Motacilla flava. M. pectore
abdomineque flavis, rectrici-
bus duabus lateralibus dimi-
diato oblique albis. *Lath.*
Ind. orn. 504. *id. Syn.* iv.
400. *id. Sup.* i. 179.
- La Bergerette. *Belon av.* 351.
- Motacilla flava alia. *Aldr. av.*
ii. 383.
- Wil. orn.* 238. *t.* 68.
- Raii Syn. av.* 75.
- Edw. av.* 258.
- Bergeronette de Printems:
Brisson av. iii. 468. *Hist.*
d'ois. 265. *t.* 14. *f.* 1. *Pl.*
Enl. 674. 2.
- Motacilla flava. *Gm. Lin.* 963.
- Faun. Suec.* 253.
- Scop. Ann.* No. 226.
- Br. Zool.* 105. *Arct. Zool.* ii.
89.
2. YELLOW.

THE male is a bird of great beauty: the breast, belly, thighs, and vent-feathers, being of a most vivid and lovely yellow; above the eye is a bright yellow line; beneath that, from the bill across the eye, is another of a dusky hue; and beneath the eye is a third of the same color;* the head and whole upper part of the body is of an olive green, which brightens in the coverts of the tail; the quill feathers are dusky; the coverts of the wings olive colored, but the lower rows dusky, tipped with yellowish white; the two outmost feathers of the tail half white; the others black, as in the former.

DESCRIP-
TION.

The colors of the female are far more obscure than those of the male.

* The lower part of the cheeks and the throat of young birds are mottled with brown, not unlike what is observed on Thrushes. ED.

It makes its nest on the ground, in corn fields; the outside is composed of decayed stems of plants, and small fibrous roots; the inside is lined with hair: it lays five eggs, of a pale brown color, sprinkled all over with a darker shade, and not unlike those of the sedge warbler. This species migrates in *September*.

3. GREY. M. Boarula. M. cinerea sub-
tus flava, rectrice prima tota,
secunda latere interiore alba.
Lath. Ind. orn. 502. *id.*
Syn. 398. *id. Sup.* i. 178.
Susurada. *Belon obs.* ii.
Motacilla flava, (Gale Wasser-
steltz.) *Gesner av.* 618.
Aldr. av. 323.
Wil. orn. 328.
Raii Syn. av. 75.
- Coda tremola. *Zinan.* 51.
Bergeronette jaune. *Brisson*
av. iii. 471. *t.* 23. *f.* 3. *Hist.*
d'ois. v. 268. *Pl. Enl.* 28.
f. 1.
Grey Wagtail. *Edw. av.* 259.
Motacilla Boarula. *Gm. Lin.*
997.
Scopoli, 225.
Br. Zool. 105.

DESCRIP-
TION.

THE top of the head, upper part of the neck, and the back of this species, are ash-colored, slightly edged with yellowish green; the space round each eye is ash colored, beneath and above which is a line of white; in the male, the chin and throat are black;* the feathers incumbent on the tail are yellow; the tail is longer, in proportion to its size, than that of the other kinds; the two exterior feathers are white, the rest

* During the winter these marks are said to disappear. ED.

black ; the breast, and whole under side of the body are yellow ; the quill feathers are dusky ; those next the back edged with yellow. The colors of the female are usually more obscure ; and the black spot on the throat is wanting in that sex.

The birds of this genus are much in motion ; seldom perch ; are perpetually flirting their tails ; scream when they fly ; frequent waters ; feed on insects, and make their nests on the ground.

GENUS XXVII. WARBLER.

BILL slender and weak.

NOSTRILS small and sunk.

TOE exterior, joined at the under part of the last joint to the middle toe.

1. NIGHT-
INGALE.

Sylvia Luscinia. *S. rufo-cinerea* subtus cinereo-alba, rectricibus fusco-rufis, armillis cinereis. *Lath. Ind. orn.* 506. *id. Syn.* iv. 408. *id. Sup.* i. 180.

Le Rossignol. *Belon av.* 335.

Adoni, Aidoni. *Obs.* 12.

Luscinia. *Gesner av.* 592.

Aldr. av. ii. 336.

Wil. orn. 220.

Raii Syn. av. 78.

Le Rossignol. *Brisson av.* iii.

397. *Hist. d'ois.* v. 81. *Pl.*

Enl. 615. f. 2.

Slauz. Scopoli. No. 227.

Rusignulo. Zinan. 54.

Motacilla Luscinia Gm. Lin. 950.

Nachtergahl. Faun. Suec. sp. 244.

Hasselquist Itin. Ter. Sanct. 291.

Nattergale. Brunnich in append.

Au-vogel, Auen-nachtigall. Kram. 376.

Nachtigall. Frisch, i. 21.

Br. Zool. 100. plate S. 1. f. 2.

Arct. Zool. ii. 112.

DESCRIP-
TION.

THE nightingale takes its name from *night*, and the *Saxon* word *galan* to sing; expressive of the time of its melody. In size it is equal to the sky lark, but longer bodied, and more elegantly made. The colors are very plain. The head and back are of a pale tawny, dashed with

olive; the tail is of a deep tawny red; the throat, breast, and upper part of the belly, are of a light glossy ash-color; the lower belly almost white; the exterior webs of the quill feathers are of a dull reddish brown; the interior of brownish ash-color; the irides are hazel, and the eyes remarkably large and piercing; the legs and feet of a deep ash-color.

This bird, the most famed of the feathered tribe, for the variety*, length, and sweetness of its notes, visits *England* the beginning of *April*, and leaves us in *August*. It is a species that does not spread itself over the island. It is not found in *North Wales*, or in any of the *English* counties north of it, except *Yorkshire*, where it is met with in great plenty about *Doncaster*†. It has been also heard, but rarely, near *Shrewsbury*. It is also remarkable, that this bird does not migrate so far west as *Devonshire* and *Cornwall*; counties where the seasons are so very mild, that myrtles flourish in the open

* For this reason, *Oppian*, in his *halieutics*, l. I. 728. gives the nightingale the epithet of αἰολοφωνή, or *various voiced*; and *Hesiod*, (figuratively) of παικιλοδαιρα, or *various throated*. *Εργα και ημέραι*, l. 201.

† In the year 1808, a nightingale was several times heard in the gardens of the Earl of *Lonsdale*, in *Fisher Street, Carlisle*. J. L.

air during the whole year: neither is it found in *Ireland*. *Sibbald* places nightingales in his list of *Scotch* birds; but they certainly are unknown in that part of *Great Britain*, probably from the scarcity and the recent introduction of hedges there; yet they visit *Sweden*, a much more severe climate. With us they frequent thick hedges, and low coppices, and generally keep in the middle of the bush, so that they are very rarely seen. They form their nest of oak leaves, a few bents and reeds. The eggs are of a deep brown. When the young first come abroad, and are helpless, the old birds make a plaintive and jarring noise with a sort of snapping as if in menace, pursuing the passengers along the hedge.

They begin their song in the evening, and continue it the whole night. These, their vigils, did not pass unnoticed by the antients: the slumbers of these birds were proverbial; and not to rest as much as the nightingale, expressed a very bad sleeper*. This was the favorite bird of the *British* poet, who omits no opportunity of introducing it, and almost constantly noting its love of solitude and night. How finely does it

* *Ælian var. hist.* 577. both in the text and note. It must be remarked, that nightingales sing also in the day.

serve to compose part of the solemn scenery of his *Penseroso*; when he describes it

In her saddest sweetest plight,
Smoothing the rugged brow of night;
While *Cynthia* checks her dragon yoke,
Gently o'er th' accustom'd oak;
Sweet bird, that shunn'st the noise of folly,
Most musical, most melancholy!
Thee, chauntress, oft the woods among,
I woo to hear thy evening song.

In another place he styles it the *solemn bird*;
and again speaks of it,

As the wakeful bird
Sings darkling, and in shadiest covert hid,
Tunes her nocturnal note.

The reader must excuse a few more quotations from the same poet, on the same subject; the first describes the approach of evening, and the retiring of all animals to their repose:

Silence accompanied; for beast and bird,
They to their grassy couch, these to their nests
Were slunk; all but the wakeful *nightingale*,
She all night long her amorous descant sung.

When *Eve* passed the irksome night preceding her fall, she, in a dream, imagines herself thus reproached with losing the beauties of the night by indulging too long a repose:

Why sleep'st thou, *Eve*? now is the pleasant time,
The cool, the silent, save where silence yields

To the night-warbling bird, that now awake
Tunes sweetest his love-labor'd song.

The same birds sing their nuptial song, and lull them to rest. How rapturous are the following lines! how expressive of the delicate sensibility of our *Milton's* tender ideas!

The Earth
Gave sign of gratulation, and each hill;
Joyous the birds; fresh gales and gentle airs
Whisper'd it to the woods, and from their wings
Flung rose, flung odors from the spicy shrub,
Disporting, till the amorous bird of night
Sung spousal, and bid haste the evening star
On his hill-top to light the bridal lamp.

These, lull'd by *nightingales*, embracing slept;
And on their naked limbs the flowery roof
Shower'd roses, which the morn repair'd.

These quotations from the best judge of melody, we thought due to the sweetest of our feathered choiristers, and we believe no reader of taste will think them tedious.

Virgil seems to be the only poet among the antients, who hath attended to the circumstance of this bird's singing in the night time.

Qualis populeâ mœrens *Philomela* sub umbrâ
Amissos queritur fœtus, quos durus arator
Observans nido implumes detraxit: at illa
Flet noctem, ramoque sedens miserabile carmen
Integrat, et mœstis late loca questibus implet.

Georg. IV. l. 511.

As *Philomel* in poplar shades, alone,
 For her lost offspring pours a mother's moan,
 Which some rough ploughman marking for his prey,
 From the warm nest, unfledg'd hath dragg'd away;
 Percht on a bough, she all night long complains,
 And fills the grove with sad repeated strains.

Warton.

Pliny has described the warbling notes of this bird, with an elegance that bespeaks an exquisite sensibility of taste; notwithstanding that his words have been cited by most other writers on natural history, yet such is the beauty, and in general the truth of his expressions, that they cannot be too much studied by lovers of natural history, and therefore clame a place in a work of this kind. We must observe notwithstanding, that a few of his thoughts are more to be admired for their vivacity than for strict philosophical reasoning; but these few are easily distinguishable.

“ *Lusciniis* diebus ac noctibus continuis xv. garrulus sine intermisso cantus, densante se frondium germine, non in novissimum digna miratu ave. Primum tanta vox tam parvo in corpusculo, tam pertinax spiritus. Deinde in una perfecta musicæ scientia modulatus editur sonus: et nunc continuo spiritu trahitur in longum, nunc variatur inflexo, nunc distinguitur conciso, copulatur in torto: promittitur revocato, infuscat ex inopinato: interdum et secum ipse murmurat: plenus, gravis, acutus, creber, extentus, ubi visum est, vibrans, summus, medius, imus. Breviterque omnia tam parvulis in faucibus, quæ tot exquisitis tibiæ tormentis ars

“hominum excogitavit: ut non sit dubium hanc suavitatem præ-
 “monstratam efficaci auspicio, cum in ore *Stesichori* cecinit in-
 “fantis. Ac ne quis dubitet artis esse, plures singulis sunt can-
 “tus, nec iidem omnibus, sed sui cuique. Certant inter se,
 “palamque animosa contentio est. Victa morte finit sæpe
 “vitam, spiritu prius deficiente, quam cantu. Meditantur aliæ
 “juniores, versusque quos imitentur accipiunt. Audit discipula
 “intentione magna et reddit, vicibusque reticent. Intelligitur
 “emendatæ correctio et in docente quædam reprehensio.”*

The nightingale arrives in *Italy* at the end of *April*, and disappears in *September*.

2. REDSTART. *Sylvia*. *Phoenicurus*. *S. gula* *d'ois*. v. 170. *Pl. Enl.* 351.
nigra, abdomine caudaque f. 1. 2.
rufis, capite dorsoque canis, Culo ranzo, Culo rosso. *Zi-*
fronte alba. Lath. Ind. orn. nan. 53. *Scopoli*, No. 232.
511. *id. Syn.* iv. 421. *Motacilla Phoenicurus. Gm.*
Le Rossignol de Muraille. *Be-* *Lin.* 987.
lon av. 347. *Rodstjert. Faun. Suec. sp.* 257.
Ruticilla, sive *Phoenicurus* *Norvegis* Blod-fugl. *Danis*
(Sommerrotele) *Gesner av.* Roed-stiert. *Brunnich*, 280.
731. *Schwartzkehlein* (Blackthroat)
Aldr. av. ii. 327. *Frisch*, i. 19.
Codorosso. *Olin*, 47. *Waldrothschweiff.* *Kram.*
Wil. orn. 218. 376.
Raii Syn. av. 78. *Br. Zool.* 99. plate S. f. 6. 7.
Ruticilla. Brisson av. iii. 403. *Arct. Zool.* ii. 112.
Rossignol de murailles. *Hist.*

THIS also appears among us only in the spring and summer, and is observed to come over

* *Plin.* lib. x. c. 29.

nearly at the same time with the nightingale. It makes its nest in hollow trees, and holes in walls and other buildings, which it forms with moss on the outside, and lines with hair and feathers. It lays four or five eggs, very like those of the hedge-sparrow, but rather paler, and more taper at the lesser end. This bird is so remarkably shy, that it will forsake its nest, if the eggs are only touched. It has a very fine soft note, but being a sullen bird, is with difficulty kept alive in confinement. It is remarkable in shaking its tail, and moves it horizontally as a dog does when fawning.

The bill and legs of the male are black; the forehead white; the crown of the head, hind part of the neck, and the back are of a deep blue grey; the cheeks and throat black; the breast, rump and sides are red; the two middle feathers of the tail brown, the others red; the wings brown. In the female, the top of the head and back are of a deep ash-color; the rump and tail of a duller red than those of the male; the chin white; the lower side of the neck cinereous; the breast of a paler red.

DESCRIP-
TION.

It visits and departs from *Italy* sooner than the red-breast.

“ The redstart inhabits various parts of *Europe*, and may be traced to the *Cape of Good*

Hope. In *England* is seldom met with to the west of *Exeter*." J. L.

- | | | |
|----------------|--|---|
| 3. RED-BREAST. | <p><i>Sylvia. Rubecula. S. grisea, gula pectoreque ferrugineis. Lath. Ind. orn. 520. id. Syn. iv. 442.</i></p> <p><i>Rubeline. Belon av. 348.</i></p> <p><i>Rubecula. Gesner av. 730.</i></p> <p><i>Erithacus. Aldr. av. ii. 325. Olin, 16.</i></p> <p><i>Robin Red-breast, or Rud-dock. Wil. orn. 219.</i></p> <p><i>Raii Syn. av. 78.</i></p> <p><i>Le Rouge-gorge. Brisson av. iii. 418. Hist. d'oïs. v. 196. Pl. Enl. 361. f. 1.</i></p> | <p><i>Pettorosso. Zinan. 46.</i></p> <p><i>Motacilla Rubecula. Gm. Lin. 993.</i></p> <p><i>Rotgel. Faun. Suec. sp. 260.</i></p> <p><i>Roed-Finke, Roed-Kielke. Br. 283.</i></p> <p><i>Rothkehlein. Frisch, i. 19.</i></p> <p><i>Rothkropfl. Kram. 376.</i></p> <p><i>Smarnza, Taschtza. Scopoli, No. 231.</i></p> <p><i>Br. Zool. 100. plate S. 2. f. 2.</i></p> <p><i>Arct. Zool. ii. 113.</i></p> |
|----------------|--|---|

THIS bird, though so very petulant as to be at constant war with its own tribe, yet is remarkably sociable with mankind: in the winter it frequently makes one of the family; and takes refuge from the inclemency of the season even by our fire sides. *Thomson** has prettily described the annual visits of this guest.

The RED-BREAST, sacred to the houshold gods,
 Wisely regardful of th' embroiling sky,
 In joyless fields, and thorny thickets, leaves
 His shivering mates, and pays to trusted Man
 His annual visit. Half afraid, he first

* In his Seasons, *vide Winter*, line 246.

Against the window beats; then, brisk, alights
On the warm hearth; then, hopping o'er the floor,
Eyes all the smiling family askance,
And pecks, and starts, and wonders where he is:
'Till more familiar grown, the table-crums
Attract his slender feet.

The great beauty of that celebrated poet consists in his elegant and just descriptions of the economy of animals; and the happy use* he hath made of natural knowledge, in descriptive poetry, shines through almost every page of his *Seasons*. The affection this bird has for mankind, is also recorded in that antient ballad, † *The babes in the wood*; a composition of a most beautiful and pathetic simplicity. It is the first tryal of our humanity: the child that refrains from tears on hearing that read, gives but a bad presage of the tenderness of his future sensations.

In the spring this bird retires to breed in the thickest covers, or the most concealed holes of walls and other buildings. The eggs are of a dull white, sprinkled with reddish spots. Its song is remarkably fine and soft; and the more to be valued, as we enjoy it the greatest part of the winter, and early in the spring, and even

* *Vide* our Preface.

† Reliques of antient *English Poetry*, Vol. iii. p. 170.

through great part of the summer, but its notes are during a part of that time drowned in the general warble of the season. Many of the autumnal songsters seem to be the young cock red-breasts of that year.

DESCRIP-
TION.

The bill is dusky; the forehead, chin, throat and breast are of a deep orange color; the head, hind part of the neck, the back and tail are of a deep ash-color, tinged with green; the wings rather darker; the edges inclining to yellow; the legs and feet dusky.

It comes into *Italy* in *April* and leaves it in *September*.

“It is common in most parts of *Europe*, from *Sweden* to *Italy*, and is found in great abundance in *Spain*, *Gibraltar*, *Barbary*, and *Algiers*. I also observe it among *Indian* drawings.” J. L.

Sylvia atricapilla. *S. testacea*
subtus cinerea, pileo obscu-
ro. *Lath. Ind. orn.* 508. *id.*
Syn. iv. 415.

Atricapilla. *Gesner av.* 371,
384.

Aldr. av. ii. 329.

Wil. orn. 226.

La Fauvette a tete noire, Cur-
ruca atricapilla. *Brisson av.*
iii. 380. *Hist. d'oï.* v. 125.
Pl. Enl. 580.

Capinera. *Zinan.* 56.

Olin. 9. *Scopoli*, No. 229.

Raii Syn. av. 79.

Motacilla atricapilla. *Gm.*
Lin. 970.

Faun. Suec. sp. 256.

Hav-Skade. quibusdam Spikke.
Br. 228.

Moench mit der Schwartz
Platte (Monk with the black
crown) *Frisch*, i. 23.

Schwartz plattl. *Kram.* 377.

Br. Zool. 101. plate S. f. 5.

Arct. Zool. ii. 114.

4. BLACK-
CAP.

THIS bird is among the smallest of this tribe, scarcely weighing half an ounce. The crown of the head in the male is black; the hind part of the neck of a light ash-color; the back and coverts of the wings are of a greyish green; the quill feathers and tail dusky, edged with dull green; the breast and upper part of the belly are of a pale ash-color; the vent feathers whitish; the legs of a lead color. The female is distinguished from the male by the spot on the head, which in that is of a dull rust-color. The black-cap is a bird of passage, leaving us before winter. It sings very finely, and on that account is called in *Norfolk* the mock nightingale. It has usually a full, sweet, deep, loud wild

DESCRIP-
TION.

pipe; yet the strain is of short continuance, and its motions are desultory: but when it sits calmly, and in earnest engages in song, it pours forth very sweet but inward melody, and expresses a great variety of soft and gentle modulations, superior perhaps to those of any of our warblers, the nightingale excepted; while it warbles, its throat is wonderfully distended.

The black-cap frequents orchards and gardens. Last spring we discovered the nest of this bird in a spruce fir, about two feet from the ground; the outside was composed of the dried stalks of the goose grass, with a little wool and green moss round the verge; the inside was lined with fibres of roots, thinly covered with black horse hair. There were in it five eggs of a pale reddish brown, mottled with a deeper color, and sprinkled with a few dark spots.

5. GREATER
PETTY-
CHAPS.

Sylvia hortensis. *S. griseo-fusca* sub*tus* rufescente-alba, superciliis albidis, rectricibus fuscis extus griseo marginatis, extima oblique dimidiato alba. *Lath. Ind.*

orn. 507. *id. Syn.* iv. 413.

id. Sup. ii. 234.

Motacilla hortensis. Gm. Lin. 955.

Curruca. Brisson. iii. 372.

La Fauvette. Hist. d'ois. v. 117. *Pl. Enl.* 579. f. 1.

[THIS charming songster was first observed in *Lancashire*, by the late Sir *Ashton Lever*, and

communicated by him to Dr. *Latham*; it has since been found in several parts of the kingdom.

Its length is nearly six inches; the color of the upper parts of a light brown, inclining to olive green; the quils and tail edged with the same; below the ears is a dash of ash-color; the throat, neck, and upper part of the breast are of a dirty white, inclining to a dull buff; the lower parts of the breast, belly, and under tail coverts, white; beneath the wings buff; the legs dusky. When in full plumage, there is an obscure yellowish streak over the eye.

DESCRIP-
TION.

Its nest which it forms in thick hedges or bushes, is composed of dried fibres, some wool, and a little green moss outwardly, and is sometimes lined with horse hair. The eggs, generally four in number, are of a dirty white marked with rather numerous brownish specks, and running frequently together at the larger end. The young are observed to remain in the nest till they are grown very large, and almost as well feathered as their parents.

The males of this species generally arrive the last week in *April*, the females a few days later.]

6. LESSER PETTY-CHAPS. *Sylvia hippolais*. S. virescente-cinerea subtus flavescens, abdomine argenteo, artubus fuscis, superciliis albidis. *Lath. Ind. orn.* 507. *id. Syn.* iv. 413. *id. Sup.* ii. 236. *Ficedula. Gesner* 385. *Beccafigo, or Fig eater. Wil. orn.* 216. *Raii Syn. av.* 79. *La Fauvette, curruca. Brisson av.* iii. 372. *Beccafico cinerizio. Zinan* 44. *Motacilla Hippolais. Gm. Lin.* 954. *Faun. Suec. sp.* 248. *Braune grass-mucke, Kleiner spottvogel. Kram.* 377. *Br. Zool.* '99. *Arct. Zool.* ii. 115.

DESCRIP-
TION.

THIS species is inferior in size to the former. The inside of the mouth is red; the head, neck, back and wings are of an olivaceous ash-color; the quill feathers darker, edged with olive; the inner coverts of the wings yellow; the breast white, tinged with yellow; the belly of a silvery white; the tail dusky; the legs bluish.

[This is said to be one of the earliest of the tribe, which comes to pass the warmer season in *England*; it has been seen before the 20th of *March*, and remains till the end of *October*. Mr. *Montagu* informs us, that the nest is of an oval form, with a small hole near the top, that it is composed externally of dried leaves, then of coarse grass, and that it is lined with feathers and placed in a low bush or tuft of

grass on or near the ground. The eggs are six in number, white speckled with purplish red on the larger end only, with here and there a single speck on the sides. The Lesser petty-chaps resembles the Yellow Warbler in its plumage, but is inferior in size, and its legs are of a much darker hue; it has also been confounded with the Wood wren, but a striking distinction occurs in the tail coverts, which in the latter are of a pure white, while those of this species are tinged with yellow. ED.]

Sylvia modularis. *S. supra*
griseo-fusca, tectricibus ala-
rum apice albis, pectore cæ-
rulescente-cinereo. *Lath.*
Ind. orn. 511. *id. Syn.* iv.
419.

Le petit Mouchet. *Belon.* av.
375.

Potamida, obs. 12.

Passer sepium *Angl. Aldr.* av.
ii. 329.

Curruca Eliotæ (Zaunschlip-
fle). *Gesner* av. 371.

Wil. orn. 215.

Raii syn. av. 79.

La Fauvette de haye, ou la pas-
se buse. *Curruca sepiaria.*
Brisson av. iii. 394. *Hist.*
d'oïis. v. 151. *Pl. Enl.* 615.
f. 1.

Jarnsparf. *Faun. Suec. sp.* 245.
Motacilla modularis. *Gm.*

Lin. 952.

Braunfleckige Grasmücke
(Brown spotted Petty-
chaps.) *Frisch,* i. 21.

Br. Zool. plate S. 1. f. 3. 4.

Arct. Zool. ii. 115.

7. HEDGE.

THIS bird weighs twelve drams. Its head is of a deep brown, mixed with ash color, the cheeks marked with oblong spots of dirty white;

DESCRIP-
TION.

the back and coverts of the wings are dusky, edged with reddish brown; the quill feathers and tail dusky; the rump brown, tinged with green; the throat and breast are of a dull ash color; the belly of a dirty white; the sides, thighs, and vent-feathers are of a pale tawny brown; the legs of a dull flesh color.

This bird frequents low hedges, especially those of gardens. It makes its nest in some small bush, and lays four or five eggs of a fine pale blue color; during the breeding season it has a remarkable flirt with its wings. The male has a short but very sweet plaintive note, which it begins with the first frosty mornings, and continues till a little time in the spring. This is the *Motacilla modularis* of *Linnæus*; the bird which he supposes to be our hedge sparrow, and describes under the title of *Motacilla Curruca*,* differs in colors of plumage as well as eggs.

* *Faun. Suec. sp.* 247 *Kruka Warbler. Arct. Zool.* ii. 119. *ED.*

- Sylvia. Trochilus. S. cinereo- Schmittl. *Kram.* 378. 8. YELLOW.
virens, alis subtus tectrici-
busque flavescentibus, su-
perciliis luteis. *Lath. Ind.*
orn. 550. *id. Syn.* iv. 512. *Hist. d'oïs.* v. 344. *Pl. Enl.*
651. *f.* 1.
Chofti, ou Chanteur. *Belon* Motacilla trochilus. *Gm. Lin.*
av. 344. 995.
Trochilus. *Gesner av.* 726. *Faun. Suec. sp.* 264.
Asilus. *Aldr. av.* ii. 293. *Scopoli,* No. 238.
Little yellowish Bird. *Wil.* Spurre-Konge, Fager-Fiis. *Br.*
orn. 228. 286.
Raii Syn. av. 80. *Br. Zool.* 101. plate S. *f.* 2. S.
Edw. av. 278. 2. *f.* 1. *Arct. Zool.* ii. 108.
Schnee Rienig (Snow king).
Frisch, i. 24.

THE Yellow Warbler frequents large moist woods, and places where willow trees abound, from which it takes one of its names. Its weight is about two drams. The color of the whole upper part of the body is a dusky green; the wings and tail are brown, edged with yellowish green; above each eye is a yellowish stroke; the breast, belly, and thighs vary in their color in different birds; in some the yellow is bright, in others it fades almost into white.

DESCRIP-
TION.

It builds in hollows in the sides of ditches, making its nest in the form of an egg; with a large hole at the top, as an entrance; the outside is composed of moss and hay, the inside lined with soft feathers. It lays commonly se-

ven white eggs, marked with numerous small rust colored spots. It has a low plaintive note; and is perpetually creeping up and down the bodies and boughs of trees.

[The *Scotch* wren of the preceding edition, is discovered by Dr. *Tengmelin* to be no other than a young bird of this species.* ED.]

9. WOOD. *Sylvia sylvicola*. *S. virescens*, *Regulus non cristatus major*.
subtus flavescens, *superciliis luteis*, *abdomine crissoque niveis*. *Lath. Sup. ii. lili.* *Brisson av. iii. 482.*
Sylvia Asilus id. Syn. iv. 514. *Larger not crested Wren. Wil. orn. 228.*
E. id. Ind. orn. 550. 3. *Ray's Letters, 108.*
Wood Wren. Lin. Tr. ii. 245. *Large Yellow Wren. White's Selborne. 55.*
t. 24. ib. iv. 35.

[THIS species, which has been confounded with the yellow warbler, was first figured and described by Mr. *Lamb*, in the *Linnean Transactions*, and its manners more fully elucidated by Mr. *Montagu*, in a subsequent volume of the same work.

DESCRIP-
TION.

It exceeds the yellow warbler in size, measuring in length five inches and a quarter; its plumage is also more vivid, the stroke over the eye of a lighter yellow, and a more character-

* *Arct. Zool. ii. 109.*

istic distinction, the belly and under tail coverts are of a pure white. The bill is dusky; the upper part of the head, the back, scapulars, and upper coverts of the tail are of a lively yellow green; over the eye is a light brimstone-colored streak; the cheeks and throat are yellow; the upper part of the breast white tinged with yellow, the lower part, the belly and under tail coverts of a pure white; the quill-feathers dusky, edged on their outer webs with yellow green; the tail rather forked, colored like the quills, except the two outmost feathers which want the yellow margin; the legs yellowish brown.

It visits *England* towards the end of *April*, and departs in *September*, the males arriving ten days before the females. The nest is placed on the ground, and is constructed of dry grass, a few dead leaves, and a little moss; and invariably lined with finer grass, and a few long hairs. It lays six eggs, white and sprinkled all over with purplish spots. ED.]

10. GOLDEN CRESTED. *Sylvia. Regulus. S. virescens,*

remigibus secundariis exteriori margine flavis, medio albis, vertice luteo. *Lath. Ind. orn.* 548. *id. Syn.* iv. 508.

La Soulcie. Belon av. 345.

Tettigon. obs. 12.

Regulus. Gesner av. 727.

Fior rancio. Olin, 6.

Aldr. av. ii. 290.

Wil. orn. 227.

Raii Syn. av. 79.

Edw. av. 254.

Cat. Carol. app. 36, 37.

Kratlich. Scopoli, No. 240.

Le Poul, ou Souci, ou Roi-telet hupé, Calendula. Brisson av. iii. 579. *Hist. d'ois.* v. 363. *Pl. Enl.* 651. f. 3.

Motacilla Regulus. Gm. Lin. 995.

Kongsfogel. Faun. Suec. sp. 262.

Sommer Zaunkoenig (Summer Wren), Frisch, i. 24.

Goldhannel. Kram. 378.

Fugle-Konge. Br. 285.

Br. Zool. 101. plate S. f. 3.

Arct. Zool. ii. 109.

DESCRIPTION.

THIS is the lest of the *British* birds, weighing only seventy-six grains. Its length is three inches and a half; the breadth five inches; it may readily be distinguished from all other birds, not only by its size, but by the beautiful scarlet mark on the head, bounded on each side by a fine yellow line. The bill is dusky; the feathers of the forehead are green; from the bill to the eyes is a narrow white line; the back and the hind part of the neck are of a dull green; the coverts of the wings dusky, edged with green and tipped with white; the quill feathers and tail dusky, edged with pale green. The throat and lower part of the body white, tinged with green;

the legs dull yellow; the claws very long. It frequents woods, and is found principally in oak trees. Though so small a bird it endures our winters, for we have frequently observed it later than *Christmas*. It is seen in autumn as far north as the *Shetland Isles*, but quits the country before winter; a vast flight for so minute and delicate a bird.

We have observed this bird suspended in the air for a considerable time over a bush in flower, whilst it sung very melodiously. The note does not much differ from that of the common wren, but is very weak.

11. WREN. *Sylvia. Troglodytes. S. grisea*,
 superciliis albidis, alis nigro
 cinereoque undulatis. *Lath.*
Ind. orn. 547. *id. Syn.* iv.
 506.
Le Roitelet, Regulus. Brisson
av. iii. 425. *Hist. d'ois.* v.
 352. *Pl. Enl.* 651. f. 2.
Motacilla Troglodytes. Gm.
Lin. 993.
Roytelet, Bœuf de Dieu, et
Berichot. Belon av. 343.
Trilato, obs. 12.
Passer troglodytes. Gesner av.
 651.
Faun. Suec. sp. 261.
Nelle-Konge. Brunnich, 284.
Schneekoning, Konickerl,
Zaunslupfrel. Kram.
 378.
Aldr. av. ii. 292.
Reatino. Olin, 6.
Wil. orn. 229.
Raii Syn. av. 80.
Stresch; Storschek. Scopoli,
 No. 239.
Schneekoenig (Snow king).
Frisch, i. 24.
Br. Zool. 102. *Arct. Zool.*
 ii. 110.

THE wren may be placed among the finest of our singing birds. It continues its song throughout the winter, excepting during the frosts. It makes its nest in a very curious manner, of an oval shape, very deep, with a small hole in the middle for ingress and egress: the external material is moss, within it is lined with hair and feathers. It lays from ten to eighteen eggs, and often brings up as many young; and, as Mr. Ray observes, it may be ranked among those daily miracles we take no notice of, that it should feed such a number without passing over one, and that too in utter darkness.

The head and upper part of the body of the wren are of a deep reddish brown; above each eye is a stroke of white; the back, and coverts of the wings, and tail, are marked with slender transverse black lines; the quill feathers with bars of black and red. The throat is of a yellowish white. The belly and sides crossed with narrow dusky and pale reddish brown lines. The tail is crossed with dusky bars.

DESCRIP-
TION.

<i>Sylvia. salicaria. S. cinerea</i>	<i>Faun. Suec. No. 249.</i>	12. SEDGE.
<i>subtus alba, superciliis albis.</i>	<i>Brisson av. iii. 378.</i>	
<i>Lath. Ind. orn. 516. id. Syn.</i>	<i>La Fauvette de roseaux. Hist.</i>	
<i>iv. 430. id. Sup. i. 180.</i>	<i>d'ois. v. 142. Pl. Enl. 581.</i>	
<i>Avis consimilis Stoparolæ et</i>	<i>f. 2.</i>	
<i>Magnanimæ. Raii Syn. av.</i>	<i>Willow Lark, Br. Zool. Fol.</i>	
<i>81. 6.</i>	<i>95. plate 2. f. 4. ed. 1768</i>	
<i>Salicaria. Raii Syn. av. 81.</i>	<i>ii. 241.</i>	
<i>11.</i>	<i>Sedge Bird. Br. Zool. ed.</i>	
<i>Wil. orn. 217.</i>	<i>1768. iv. 16. t. 10. Arct.</i>	
<i>Motacilla salicaria. Gm. Lin.</i>	<i>Zool. ii. 116.</i>	
<i>955.</i>		

THIS species is of a slender elegant form; the bill black; the head brown, marked with dusky streaks; over each eye is a line of pure white, over that another of black; the cheeks brown; the throat, breast, and belly white; the two last tinged with yellow; the hind part of the neck and back of a reddish brown; the back spotted with black; the coverts of the tail tawny; those of the

DESCRIP-
TION.

wings dusky, edged with pale brown; the quill feathers dusky; the tail brown, cuneiform, forming a circle when spread; the legs dusky.

It is a most entertaining polyglot, or mocking bird; sitting concealed in willows or reeds, in a pleasing but rather hurrying manner, it imitates the swallow, the sky-lark, the house-sparrow, &c. sings all night, and seems to leave us before winter. Makes its nest with straw and dried fibres, lined with hair; lays five eggs, white marbled with brown.

13. GRASS-
HOPPER.

Sylvia Locustella. S. fusco-viridis maculis nigricantibus subtus flavescens, pectore saturatiore, cauda cuneata rectricibus apice mucronatis. Lath. Ind. orn. 515. id. Syn. iv. 429. id. Sup. ii. 240. Alauda minima locustæ voce. Locustella, D. Johnson.

* Fauvette tachetée. *Pl. Enl.* 581. f. 3.

Tit-lark, that sings like a Grasshopper. *Wil. orn.* 207.

Raii Syn. av. 70.

Ray's Letters, 108.

Br. Zool. 95. plate Q. f. 5.

Arct. Zool. ii. 116.

THIS bird we received out of *Shropshire*: it is the same with that Mr. *Ray* describes as hav-

* This has been considered by recent ornithologists as *La Locustelle* of *de Buffon*, but his description of that bird corresponds with the Sedge Warbler, and is in fact merely a translation from the *British Zoology* to which he refers. Mr. *Montagu*, in the *Ornithological Dictionary*, gives a reference in this instance as he does in that of the Pipit Lark to the *Alauda trivialis* of *Linnaeus*, but it seems evident that neither the illustrious *Swede* or his editor *Gmelin* were acquainted with the species. Ed.

ing the note of the grasshopper, but louder and shriller. It is a most artful bird, will skulk in the middle, and thickest part of the hedge, and will keep running along for a hundred yards together, nor can it be forced out but with the greatest difficulty: it is from this covert that it emits its note, which so much resembles the insect, from which it derives its name, as generally to be mistaken for it. In the height of summer it chirps the whole night: its sibilous note is observed to cease about the latter end of *July*.

The bill is very slender, of a dusky color; the head, and whole upper part of the body is of a greenish brown, spotted with black; the quill feathers dusky, edged with an olive brown; the tail very long, composed of twelve sharp pointed feathers; the two middlemost are the longest, the others on each side grow gradually shorter. The under side of the body is of a dull yellowish white, darkest about the breast; the legs are of a dirty white; the hind claw short and rather crooked.

DESCRIP-
TION.

14. REED. *Sylvia arundinacea*. S. supra olivaceo-fusca, subtus albidā, loris et orbitis fusco-albescentibus, angulo carpi subtus luteo-fulvo, cauda subcuneata fusca. *Lath. Ind. orn.* 510. *id. Syn. Sup.* 184. *Motacilla arundinacea*. *Gm. Lin.* 992. Lesser Reed Sparrow. *Wil. orn.* 144.? *Raii Syn. av.* 47.? *Lightfoot in Ph. Trans.* lxxv. 8. *Tab.* 1.

DESCRIP-
TION.

THE head, upper part of the body, and coverts of the wings of this species, are olive brown; the primaries and tail of the same color, but darker; from the bill to each eye is a stripe of tawny white feathers; the chin white; the breast and belly white, shaded with tawny; the tail slightly cuneated. The size nearly equal to that of the sedge warbler.

NEST.

It was discovered by Mr. *Lightfoot*, on the banks of the *Colne*, near *Uxbridge*, where it makes its nest externally with dry stalks, lined with the tufts of the common reed, mixed with a few hairs. It usually is suspended between three or four reeds; sometimes to the branches of the water dock. This bird lays commonly four eggs of a dirty white, stained with dull olive-colored spots. The note of this species is simple and plaintive.

[Mr. *Montagu* has found this species along the coasts of *Kent* and *Sussex*, from *Sandwich* to *Arundel*, amongst the reedy pools and ditches,

especially on *Romney Marsh*. He says, it makes its appearance in *April*, or the beginning of *May*, and departs in *September*; and, that it is distinguishable from the sedge warbler by the base of the bill being broader; in having no light stroke over the eye, and in the whole upper parts being of one plain color. ED.]

** With party colored Tails.

Sylvia. CEnanthe. S. dorso cano, fronte linea supra oculos uropygio basique caudæ albis, per oculos fascia nigra. *Lath. Ind. orn.* 529. *id. Syn.* iv. p. 465. 75. *id. Sup.* i. p. 182.

Belon av. 352.

CEnanthe. Gesner av. 629.

Aldr. av. ii. 332.

Wheat-ear, Fallow-smich,

White-tail. *Wil. orn.* 233.

Raii Syn. av. 75.

Motacilla CEnanthe. Gm. Lin. 966.

Stensquetta. Faun. Suec. sp. 15. WHEAT-EAR. 254.

Le Cul blanc, Vitrec, ou Moteux, Vitiflora. *Brisson av.* iii. 449. *Hist. d'oïs.* v. 327. *Pl. Enl.* 554. f. 1. 2.

Culo bianco, Fornarola, Petraghola. *Zinan.* 41.

Norvegis, Steendolp, Steen Squette, Steengylpe. *Brunnich,* 276.

Steinschwaker, Steinschnapperl. *Kram.* 374.

Bella. *Scopoli,* No. 230.

Br. Zool. 102. plate S. 1. f. 5. 6. *Arct. Zool.* ii. 117.

THE wheat-ear begins to visit us about the middle of *March*, and continues coming till the beginning of *May*: we have observed that the females arrive about a fortnight before the males. They frequent warrens, downs, and the

edges of hills, especially those that are fenced with stone walls. They breed in the latter, in old rabbit burrows, cliffs, and frequently under old timber: their nest is large, made of dried grass, rabbit's down, a few feathers, and horse hair; and they lay from six to eight eggs, of a light blue color.

They grow very fat in autumn, and are esteemed a delicacy. Their chief autumnal rendezvous in *Sussex* is about *Eastbourn*, where they are taken by the shepherds in great numbers, in snares made of horse hair, placed under a long turf; being very timid birds, the motion of a cloud, or the appearance of a hawk, will drive them for shelter into those traps. The numbers annually ensnared in that district alone, amount to about 1840 dozen, which sell usually at sixpence *per* dozen; and what appears very extraordinary, the numbers that return the following year do not appear to be lessened, as we are assured by a very intelligent person resident near that place. The season is in *July* and *August*, in which more or less are taken, according to the warmth of these months. The reason of their being so numerous in the neighborhood of *Eastbourn* arises from its abounding with a certain fly which frequents the adjacent hills, for the sake

of the wild thyme they are covered with, and which is not only a favorite food of that insect, but the plant on which it deposits its eggs.

Wheat-ears are much fatter in a rainy season than a dry one, for they not only feed on insects, but on earth worms, which come out of the ground in greater numbers in wet weather than in dry.

The head and back of the male are of a light grey, tinged with red; over each eye is a white line; beneath that is a broad black stroke, passing across each eye to the hind part of the head; the rump and lower half of the tail are white; the upper half black; the under side of the body is white, tinged with yellow; on the neck it inclines to red; the quill feathers are black, edged with reddish brown. The colors of the female are more dull; it wants that black stroke across the eyes, and the bar of white on the tail is narrower. These birds disappear in *September*, at least from the northern parts of this kingdom; but in *Hampshire* they continue the whole winter, as they do in *Sussex*.

DESCRIPTION.

Great quantities of these birds are sent potted to *London*, and numbers dressed fresh in the country. They are roasted, wrapped up in vine leaves, on account of the great tender-

ness of the flesh, insomuch that it is even difficult to pluck without bruising them.

VAR. A.
GREY.

Motacilla Œnanthe. β . S. corpore supra fulvo albidoque vario, collo infimo griseo maculato, rectricibus duabus intermediis toto nigris. *Lath.*

Ind. orn. 530. *Syn.* iv. 468.
Cul blanc gris. *Brisson av.* iii. 452. *tab.* 21. *fig.* 2. *Hist. d'ois.* v. 244.
Br. Zool. app.

DESCRIP-
TION.

THE following variety was shot near *Uxbridge*.

The crown and back were of a tawny brown; the under side of the neck of a dull brownish yellow; from the bill to eye passed an obscure dusky line; the quill feathers and secondaries were black, edged with tawny and white; the tail like that of the common wheat-ear, but the edges marked with pale tawny.

Sylvia rubetra. *S. nigricans*,
superciliis albis, macula ala-
rum alba, gula pectoreque
flavescente. *Lath. Ind. orn.*
525. *id. Syn.* iv. 454.

Le Tarier. *Belon av.* 361.

Rubetra. *Gesner av.* 729.

Le grand Traquet, ou le Ta-
rier. *Brisson av.* iii. 432.
tab. 24. *fig.* 1. *Hist. d'oï.*
v. 224. *Pl. Enl.* 678. *f.*
2.

Wil. orn. 234.

Raii Syn. av. 76.

Motacilla rubetra. *Gm. Lin.*
967.

Faun. Suec. sp. 255. *Scopoli*,
No. 237.

Gestettenschlager. Kram. 375.

Grosser Fliegenfuenger (great
Fly-catcher). *Frisch*, i. 22.

Br. Zool. 103. plate S. 2. *f.* 3.
4. *Arct. Zool.* ii. 118.

16. WHIN-
CHAT.

THIS is in the north of *England*, also a bird
of passage ; we are not certain whether it quits
this island, but are rather inclined to think it
only shifts its quarters.

The head and back are of a pale reddish
brown, regularly spotted with black ; over each
eye is a narrow white stroke, beneath that is a
broad bed of black, which extends from the
bill to the hind part of the head ; the breast is
of a reddish yellow ; the belly paler ; the quill
feathers are brown, edged with a yellowish
brown ; the upper part of the wing is marked
with two white spots ; the lower part of the
tail is white, the two middle feathers excepted,
which are wholly black ; the upper part of the
others are of the same color.

DESCRIP-
TION.

The colors of the female are far less agreeable; in lieu of the white and black marks on the cheeks, is one broad pale brown one; and the white on the wings is in far less quantity than on those of the male.

It often winters in *Italy*.

17. STONE-CHAT. *Sylvia rubicola*. *S. grisea sub-tus rufescens*, jugulo fascia alba, loris nigris, uropygio maculaque alarum alba. *Lath. Ind. orn.* 523. *id. Syn.* iv. 448. Le Traquet ou Groulard. *Belon av.* 360. Rubetra. *Aldr. av.* ii. 325. Stone-smich, Stone-chatter, or Moortitling. *Wil. orn.* 235. *Raii Syn. av.* 76. Le Traquet, Rubetra. *Brisson av.* iii. 428. *tab.* 23. *fig.* 1. *Hist. d'oïs.* v. 215. *Pl. Enl.* 678. *f.* 1. Pontza. *Scopoli*, No. 236. Occhio di bue. *Zinan.* 52. Motacilla Rubicola. *Gm. Lin.* 969. Cristoffl. *Kram.* 375. *Br. Zool.* 103. plate S. 2. f. 5, 6.

THIS species is common during summer, in gorsy grounds. In the winter they disperse into marshes, and other places, but do not quit the island. It is a restless and noisy bird, and perches frequently on some bush, chattering incessantly.

DESCRIP-
TION.

The head, neck, and throat, are black; but on both sides the latter is a white bar, so that it appears at first sight to be encircled with white; the feathers on the back are black edged with

tawny; the lower part of the back just above the rump is white; the end and exterior side of the two outmost feathers of the tail are of a pale rust-color, the rest are black; the breast is of a deep reddish yellow; the belly of a lighter hue; the quill feathers are dusky edged with dull red; those next the body are marked with a white spot near their bottoms; the coverts of the wings are adorned with another. The head of the female is ferruginous spotted with black; and the colors in general less vivid. In both sexes the legs are black; which also is the character of the two preceding species, as well as that next to be described.

18. WHITE-THROAT. *Sylvia cinerea*. β . *S. supra* Fauvette grise ou la Grisette.
rufo-cinerea, *subtus rufo-al-* *Hist. d'oï. 132. Pl. Enl.*
ba, *gula alba*, *rectrice extima* 579. f. 3.
extus toto intus dimidiato *Motacilla Sylvia? Gm. Lin.*
alba. Lath. Ind. orn. 515. 956.
id. Syn. iv. p. 428. 19. *Kogsnetter, Mesar. Faun.*
Wil. orn. 236. *Suec. sp. 250.*
Raii Syn. av. 77. *Br. Zool. 104. plate S. f. 4.*
La Mesange cendrée, Parus *Arct. Zool. ii. 118.*
cinereus. Brisson av. iii.
549.

THIS frequents our gardens in the summer time; in the winter it leaves us. It builds in low bushes near the ground, making its nest externally of the tender stalks of herbs and dry straw, the middle part of fine bents and soft grass, the inside of hair. It lays five eggs of a whitish green color, sprinkled with black spots.* Its note is continually repeated, often attended with odd gesticulations of the wings, and is harsh and displeasing; it is a shy and wild bird, avoiding the haunt of man; seems of a pugnacious disposition, singing with an erected crest, and in attitudes of defiance.

DESCRIP-
TION.

The head of this bird is of a brownish ash-color; the throat white; the breast and belly white tinged with red; (in the female wholly

* *Wil. orn.*

white;) the back inclines to red; the lesser coverts of the wings are of a pale brown; the greater dusky, edged with tawny brown; the quill feathers dusky, edged with reddish brown; the tail the same, except the upper part of the interior side and whole exterior side of the outmost feather, which are white; the legs are of a yellowish brown.

Sylvia Sylviella. S. cinereo-fusca, subtus sordide alba, rectricibus duabus intermediis brevioribus subulatis.

Lath. Ind. orn. 515. id. Sup. i. 185. t. 113. id. Sup. ii. 239.

19. LESSER
WHITE-
THROAT.

[THE crown and upper part of the body are of a pale cinereous brown; from the chin to the vent of a dull white; the tail long, very slightly forked, of the same color with the back; rather less than the preceding species. The female does not differ in plumage from the male.

DESCRIP-
TION.

It appears in *May* and *June* about *Bulstrode*, in *Buckinghamshire*; builds in brambles and small bushes: the nest is composed of dry bents mixed with wool, and lined with finer bents and a few hairs. The eggs are white, dotted with brown, and marked with irregular blotches of a paler brown. It was first noticed by the reverend *John Lightfoot*.

Mr. *Montagu* conjectures that this species is confined to the eastern part of the kingdom, to *Gloucestershire*, *Wiltshire*, and part of *Somersetshire*, and that it is not found in *Devonshire* or *Cornwall*. Its bill is shorter than that of the common white-throat, the legs are darker, the whole under parts of the plumage much whiter, and the whole upper parts do not possess the least appearance of rufous brown. ED.]

20. DART-
FORD.

Sylvia dartfordiensis. S. saturate rufo-fusca subtus ferruginea, abdomine medio albo, palpebris iridibusque coccineis, pedibus flavis. *Lath. Ind. orn.* 517. *id. Syn.* iv. 435. *id. Sup.* i. 181. *id. Sup.* ii. 241.

Motacilla provincialis. Gm. *Lin.* 958.

Le Pitchon de Provence. *Hist. d'oïs.* v. 158. *Pl. Enl.* 655. f. 1.

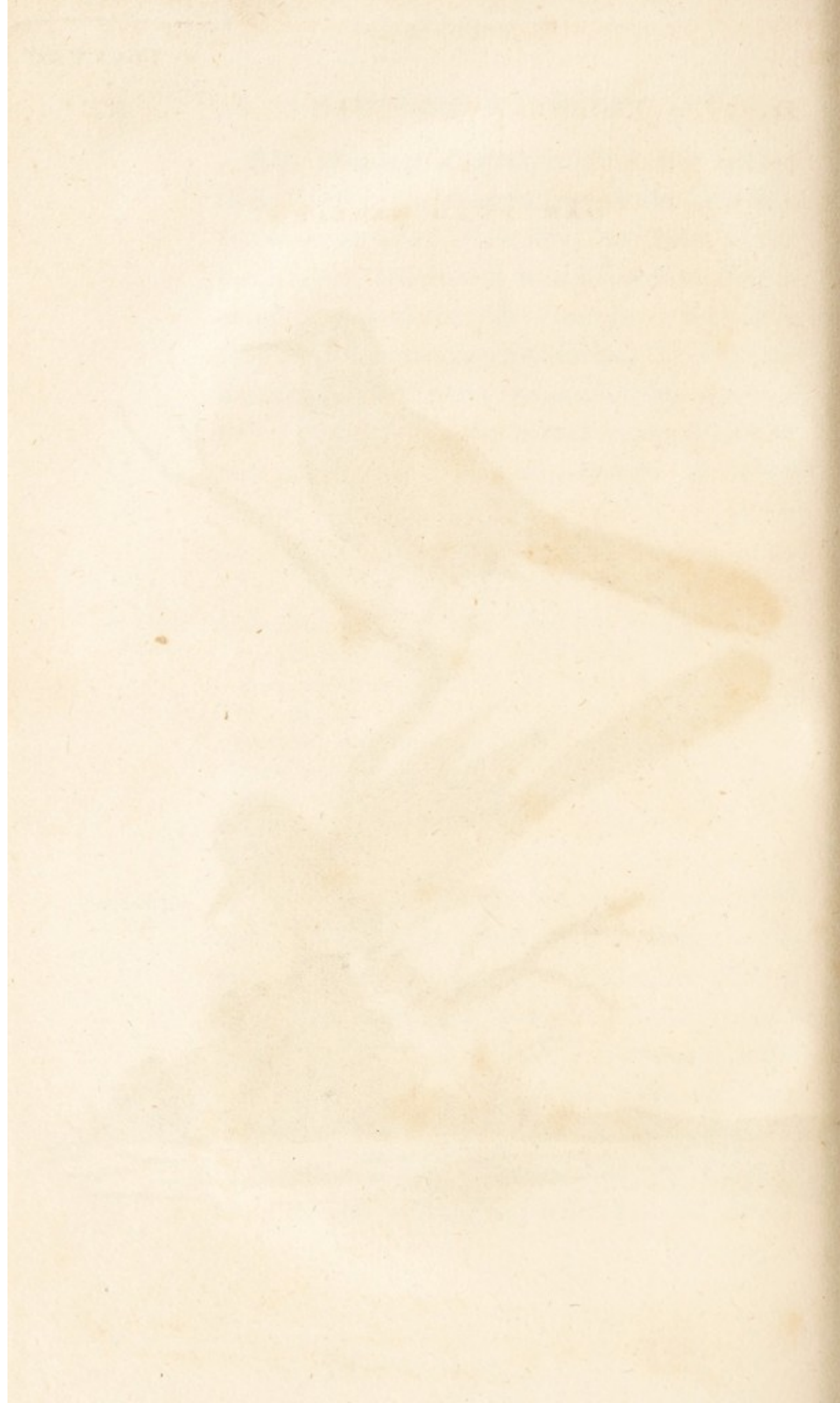
Lin. Tr. vii. 280.

DESCRIP-
TION.

ITS irides are reddish; the eyelids of a deep crimson; the bill black, slender, and a little curved at the point: the whole upper part of the head, neck, and back, of a dusky brown tinged with a dull yellow; the throat, under side of the neck, the breast and belly deep ferruginous; the middle of the belly white; the quill feathers dusky edged with white; the bastard wing white; the exterior side of the

DARTFORD WARBLER.





interior feather of the tail white, the rest dusky, and long in proportion to the size of the bird; the legs yellow.

A pair of these were shot on a common near *Dartford*, in *April* 1773, and communicated to me by Mr. *Latham*; they fed on flies, which they sprung on from the furze bush they sat on, and then returned to it again.

[They have since been seen near *Wandsworth*, in *Surrey*, and Mr. *Montagu* observed them about *Falmouth* in the month of *September*. ED.]

GENUS XXVIII. TITMOUSE.

BILL strait, short, hard, strong, sharp-pointed,
a little compressed.

NOSTRILS round covered with bristles.

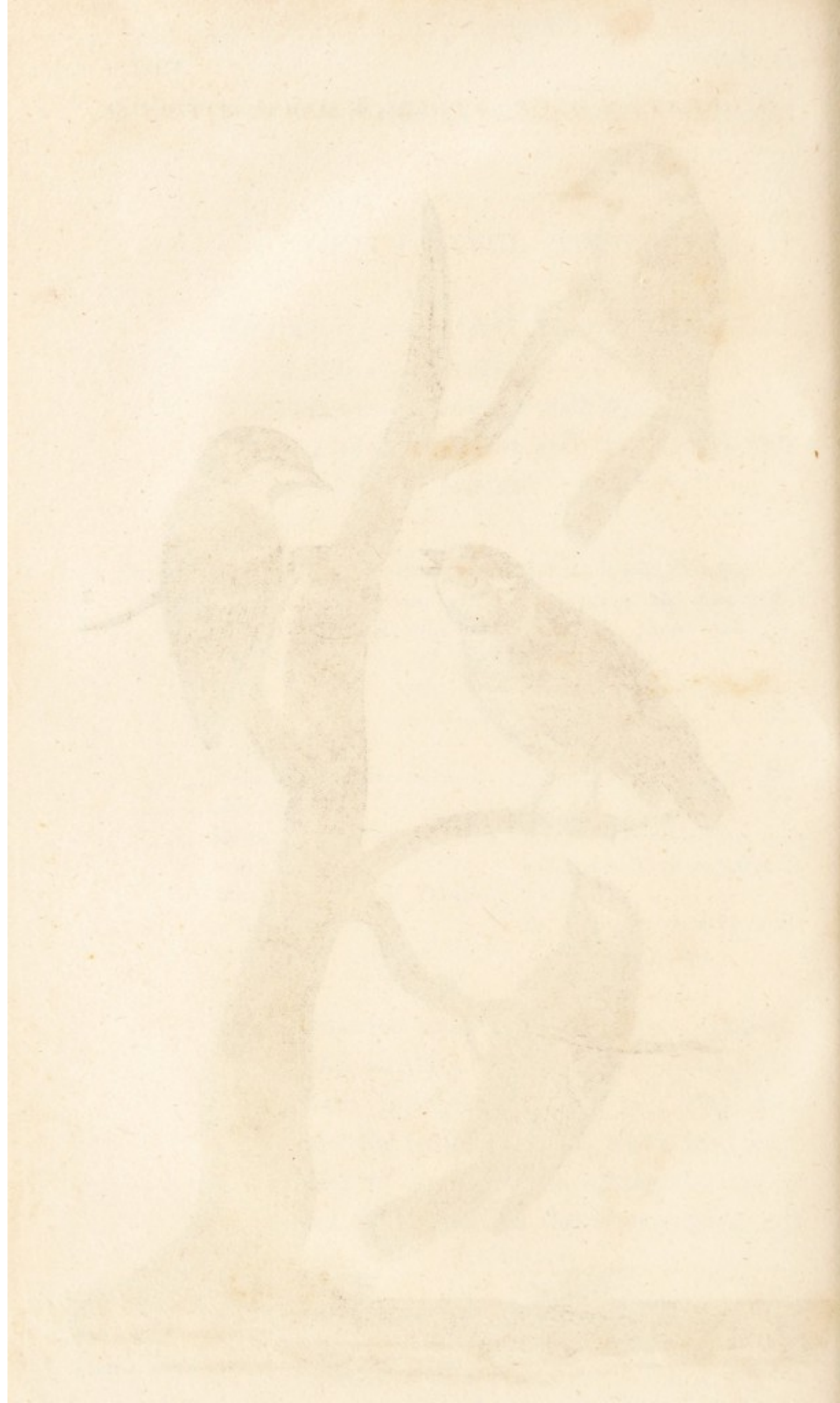
TONGUE as if cut at the end, terminating with
two or three bristles.

- | | | |
|-----------|--|--|
| 1. GREAT. | <p><i>Parus. major. P. viridi-olivaceus subtus flavescens, capite nigro temporibus albis, nucha lutea. Lath. Ind. orn. 562. id. Syn. iv. 536.</i></p> <p>Nonette ou Mesange. <i>Belon av. 376.</i></p> <p><i>Parus major. Gesner av. 640. Aldr. av. ii. 319.</i></p> <p>Spernuzzola, Parussola. <i>Oli-na, 28.</i></p> <p>Great Titmouse, or Ox-eye. <i>Wil. orn. 240. Raii Syn. av. 73.</i></p> | <p><i>Snitza. Scopoli, No. 242.</i></p> <p><i>Parus major. Gm. Lin. 1006.</i></p> <p>Talg-oxe. <i>Faun. Suec. sp. 265.</i></p> <p>Le grosse Mesange ou la Charbonniere. <i>Brisson av. iii. 539.</i></p> <p><i>Hist. d'oïs. v. 392. Pl. Enl. 3. f. 1.</i></p> <p>Musvit. <i>Brunnich, 287.</i></p> <p>Kohlmeise. <i>Kram. 378. Frisch, i. 13.</i></p> <p><i>Br. Zool. 113. plate W. f. 4.</i></p> <p><i>Arct. Zool. ii. 123.</i></p> |
|-----------|--|--|

THIS species sometimes visits our gardens, but chiefly inhabits woods, where it builds in hollow trees, laying about ten eggs. This, and the whole tribe feed on insects, which they find in the bark of trees; in the spring they do a great deal of mischief in the fruit garden, by

1 GREAT, 2 BLUE, 3 COLE, 4 MARSH TITMOUSE.





picking off the tender buds. Like wood-peckers they are perpetually running up and down the bodies of trees in quest of food. The bird has three chearful notes, which it begins to utter in the month of *February*.

The head and throat of this species are black; the cheeks white; the back green; the belly of a yellowish green, divided in the middle by a bed of black, which extends to the vent; the rump is of a bluish grey. The quill feathers are dusky, edged partly with blue, partly with white; the coverts blue, the greater tipt with white. The exterior sides of the outmost feathers of the tail are white; the exterior sides of the other bluish; their interior sides dusky; the legs lead color. The toes are divided to the origin; and the back toe of the whole genus is very large and strong.

DESCRIP-
TION.

It appears in *Italy* towards the end of *April*, and retires, as most of the titmice do in that country, in *October*.

“ Inhabits *Europe* throughout, and indeed every part of the old continent, at least from *Sweden* to the *Cape of Good Hope*, and also *India*, where it is called *Har Goura*. Mr. *Lewin* records the circumstance of one having been killed at *Faversham*, which had both mandibles singularly elongated or crossed in the manner of the Crossbill.” J. L.

2. BLUE. *Parus. cæruleus. P. olivaceo* *av. iii. 544. Hist. d'ois. v. 413. Pl. Enl. 3. f. 2.*
virescens subtus luteus, remigibus cærulescentibus, *Blava snitza, Blau mandlitz. Scopoli, No. 244.*
primoribus margine exteriore albis, fronte alba, vertice cæruleo. Lath. Ind. Parozolino, o Fratino. Zinan. 76.
orn. 566. id. Syn. iv. 543. Parus cæruleus. Gm. Lin. 1008.
Belon. av. 369. Blamees. Faun. Suec. sp. 641.
Parus cæruleus. Gesner av. Aldr. av. ii. 321. Blaameise. Br. 288.
Blue Titmouse, or Nun. Wil. Blaumeise. Kram. 379. Frisch, i. 14.
orn. 242. Raii Syn. av. 74. Br. Zool. 114. plate W. f. 5.
La Mesange Bleue. Brisson Arct. Zool. ii. 124.

THIS bird frequents gardens, and does great injury to fruit trees, by bruising the young buds in search of the insects that lurk under them ; it breeds in holes of walls, and lays about twelve or fourteen eggs.

DESCRIP-
TION.

It is a very beautiful species, the bill is short and dusky ; the crown of the head of a fine blue ; from the bill to the eyes is a black line ; the forehead and cheeks are white ; the back is of a yellowish green ; the lower side of the body yellow ; the wings and tail blue, the former marked transversely with a white bar ; the legs are of a lead color.

- Parus. ater. P. dorso cinereo, capite nigro, occipite pectoreque albo. *Lath. Ind. orn.* 564. *id. Syn.* iv. 540.
- Quatriesme espece de Mesange. *Belon av.* 370.
- Parus ater. *Gesner av.* 641. *Aldr. av.* ii. 321. *Wil. orn.* 241. *Raii Syn. av.* 73.
- Speermiese, Creuzmeise. *Kram.* 379.
- Tannen Meise (Pine Titmouse). *Frisch*, i. 13.
- La Mesange a tete noire, Parus atricapillus. *Brisson av.* iii. 551.
- La petite charbonniere. *Hist. d'ois.* v. 400.
- Cat. Carol. app.* 37.
- P. ater. *Gm. Lin.* 1009.
- Faun. Suec. sp.* 268. *Scopoli*, No. 245.
- Br. Zool.* 114. *Arct. Zool.* ii. 121.
3. COLE.

THE head of the cole titmouse is black, marked on the hind part with a white spot; the back is of a greenish grey; the rump more green; the tail and wings dusky; the exterior feathers edged with green; the coverts of the wings are of a dusky green; the lowest tipt with white. For a farther account we beg leave to refer to the next description.

DESCRIP-
TION.

4. MARSH. *Parus palustris*. *P. capite nigro, dorso cinereo, temporibus albis.* *Lath. Ind. orn.* 565. *id. Syn.* iv. 541. *id. Sup.* i. 189.
- Parus palustris.* *Gesner av.* 641.
- Paronzino. *Aldr. av.* ii. 32.
- Marsh Titmouse, or Black-cap. *Wil. orn.* 241.
- Raii Syn. av.* 73.
- Fratino palustre. *Zinan.* 77.
- La Mesange de Marais ou la Nonette cendrée. *Brisson av.* iii. 555. *Hist. d'ois.* v. 403. *Pl. Enl.* 3. f. 3.
- P. palustris.* *Gm. Lin.* 1009.
- Entita, Tomlinge. *Faun. Suec.* sp. 269. *Scopoli*, No. 246.
- Asch Meise (Ash Titmouse). *Frisch*, i. 13.
- Hundsmeise. *Kram.* 379.
- Norvegis Graae-Meise. *Brunnich.* 190.
- Br. Zool.* 114. plate W. f. 3.
- Arct. Zool.* ii. 125.

THIS species is called by *Gesner* the marsh titmouse; because it frequents wet places. With us it inhabits woods, and seldom infests our gardens: early in *February* it emits two notes, not unlike the whetting of a saw. It is said to be a great enemy to bees, and to lay up a magazine of seeds against times of want.

DESCRIPTION.

Mr. *Willughby* observes, that this bird differs from the former in these particulars, 1st, that it is bigger; 2d, that it wants the white spot on the head; 3d, it has a larger tail; 4th, its under side is white; 5th, it has less black under the chin; 6th, it wants the white spot on the coverts of the wings.* This last distinction does

* Mr. *Montagu* adds, that its head is of a dull sooty black; while that of the Cole Titmouse is extremely glossy. ED.

not hold in general, as the subject figured in the *British Zoology* had those spots; yet wanted that on the hind part of the head.

Le Comte de Buffon thought this only a variety of the preceding species: certain it is that the haunts of this and of the former differ, but each agree in being equally prolific with others of the genus.

Parus. caudatus. P. albo roseo nigroque longitudinaliter varius, vertice albo, cauda longiore. Lath. Ind. orn. 569. id. Syn. iv. 550. id. Sup. i. 190.

Belon av. 368.

Parus caudatus. Gesner av. 642.

Monticola. Aldr. av. ii. 319.

Wil. orn. 242.

Raii Syn. av. 74.

Pendolino, Paronzino. Zinan. 77.

Gaugartza. Scopoli, No. 247.

La Mesange a longue queue, Parus longicaudus. Brisson av. iii. 570. Hist. d'oïs. v. 437. Pl. Enl. 502. f. 3.

Parus caudatus. Gm. Lin. 1010.

Alhtita. Faun. Suec. sp. 83.

Belzmeise Pfannenstiel. Kram. 379.

Langschwaentzige Meise.

Frisch, i. 14.

Br. Zool. 110. W. f. 6. Arct. Zool. ii. 125.

5. LONG
TAILED.

THE length is five inches and a quarter; the breadth seven inches. The bill is black, very short, thick, and very convex, differing greatly from all others of the titmouse kind; the base is beset with small bristles; the irides are of a hazel color. The top of the head, from the bill

DESCRIP-
TION.

to the hind part, is white, mixed with a few dark grey feathers; this bed of white is entirely surrounded with a broad stroke of black, which, rising on each side the upper mandible, passes over each eye, unites at the hind part of the head, and continues along the middle of the back to the rump; the feathers on each side of this black stroke are of a purplish red, as are those immediately incumbent on the tail. The covert feathers of the wings are black; the secondary and quill feathers are dusky, the largest of the latter wholly so; the lesser and more remote have their exterior sides edged with white.

The tail is the longest in proportion to the bulk of any *British* bird, being in length three inches; the form of it is like that of a magpie, consisting of twelve feathers of unequal lengths, the middlemost the longest, those on each side growing gradually shorter; the exterior sides, and the top of the interior sides of the three outmost feathers are white; the rest of the tail black. The cheeks and throat are white: the breast and whole under side white, with a cast of red. The legs, feet, and claws, are black.

NEST.

It forms its nest with great elegance, of an oval shape, and about eight inches deep; near the upper end is a hole for admission; the ex-

ternal materials are mosses and lichens, curiously interwoven with wool; within it is lined very warmly with a thick bed of feathers; it lays from ten to seventeen eggs. The young follow the parents the whole winter; and from the slimness of their bodies, and great length of tail, appear, while flying, like so many darts cutting the air. They are often seen passing through our gardens, going progressively from tree to tree, as if on their road to some other place, never making any halt.

It is seen in *Italy* flying about during the whole winter.

6. BEARDED. *Parus. biarmicus. P. rufus,* La mesange barbue, ou le
 vertice cano, cauda corpore moustache, *Parus barbatus.*
longiore, capite barbato, Brisson av. iii. 567. Hist.
crisso nigro. Lath. Ind. orn. d'ois. v. 418. Pl. Enl. 618.
570. id. Syn. iv. 552 id. f. 1. 2.
Sup. 190. Parus biarmicus. Gm. Lin.
 Lest Butcher Bird. 1011.
Edw. av. 55. Lest Butcher Bird. Br. Zool.
 Bearded Titmouse. *Aldr. av. Ed. 2d. i. 165.*
i. tab. 48. Br. Zool. 74. plate C. 2. Arct.
Scopoli, No. 241. Zool. ii. 126.

THIS species is found in the marshes near *London*: we have seen it near *Gloucester*; it is also frequent among the great tracts of reeds near *Cowbit* in *Lincolnshire*, where I suspect it breeds.

NEST. The nest is not accurately known.* One supposed to belong to this bird was formed of soft materials, and suspended from three reeds. *Kramer*† says that it is built among willows, or the aspen tree, from the branches of which it

* The nest has been ascertained by Mr. *Montagu*, who informs us it is of an oval form, made of white moss and lichens curiously and firmly wove together with wool, covered at the top, with only a small hole on the side, and lined with a prodigious quantity of feathers. It is placed in the fork of some bush or tree. Its diminutive egg is white, sparingly marked with small rust-colored spots towards the larger end. ED.

† *Latham Syn. iv. 584.*

is pendulous. It inhabits *Schonen*, in *Sweden*, and is found in great numbers on the banks of the *Volga* and *Yaik*, where its pendulous nest is very common among the reeds,* and is said to be of the same shape as that of the long tailed titmouse, but rather larger.

The bill is short, strong, and very convex, of a box color; the irides pale yellow; the head is of a fine grey; on each side of the bill, beneath the eye, is a long triangular tuft of black feathers; the chin and throat are white; the middle of the breast flesh colored; the sides and thighs of a pale orange; the hind part of the neck and the back are of an orange bay; the secondary feathers of the wings are black edged with orange; the quill feathers dusky on their exterior, white on their interior sides; the lesser quill feathers tipped with orange. The tail is two inches and three quarters long; the two middle feathers are largest, the others gradually shorten on each side, the outmost of which are of a deep orange color. The vent-feathers of the male are of a pale black; of the female of a dull orange. The legs are of a deep shining black.

DESCRIP-
TION.

The female wants the black mark on each cheek, and the fine flesh color on the breast;

FEMALE.

* Dr. Pallas MS.

the crown of the head is of a brownish rust color, spotted with black; the outmost feathers of the tail are black tipped with white.

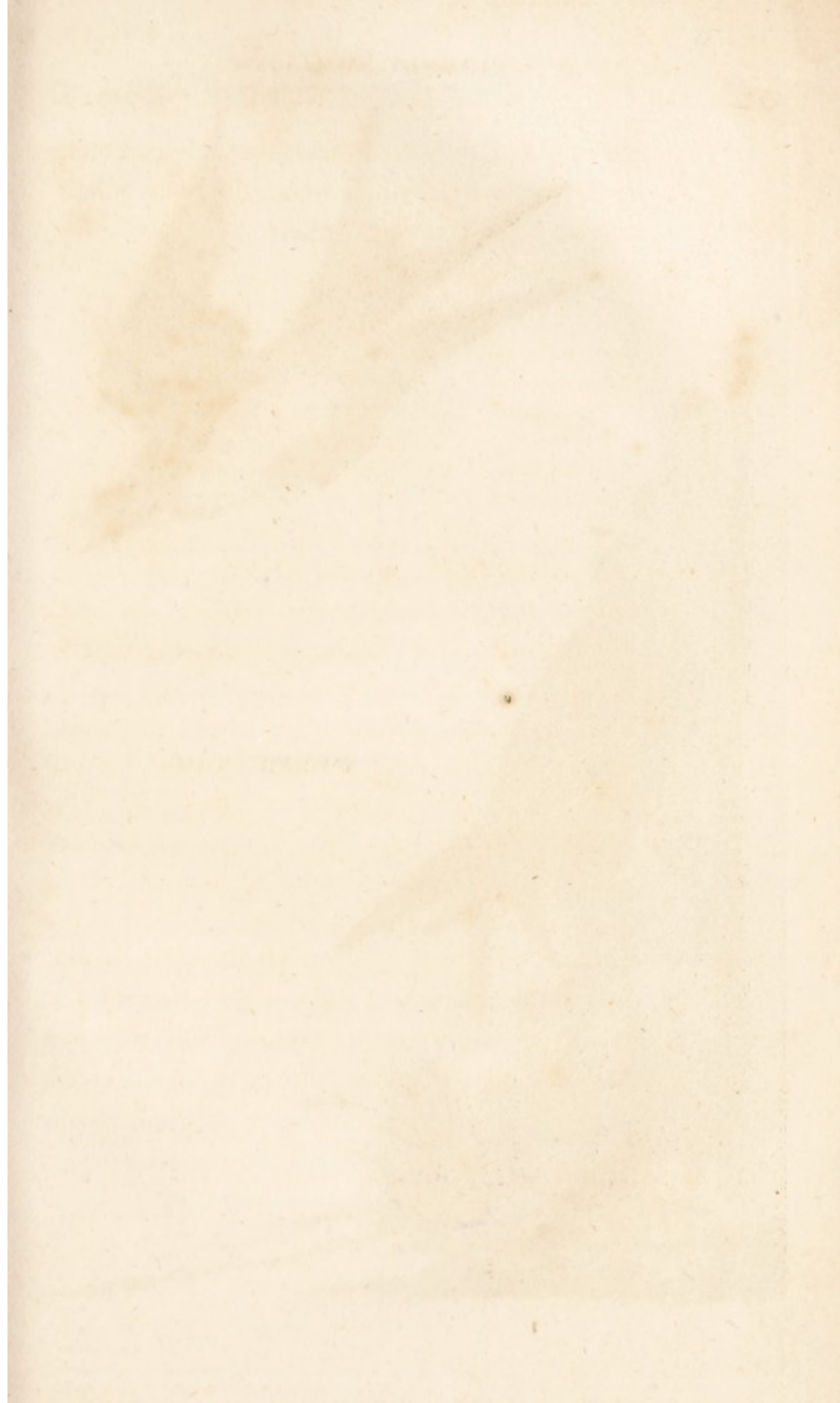
7. CRESTED. *Parus cristatus*. *P. griseo-rufescens cristatus*, *collari nigro*, *ventre albo*. *Lath. Ind. orn.* 567. *id. Syn.* iv. 550. *id. Sup.* i. 190. *Gm. Lin.* 1005. *Brisson orn.* iii. 558. *La Mesange huppé. Hist. d'ois.* v. 447. *Pl. Enl.* 502. *f.* 1. *Raii Syn.* av. 74. *Wil. orn.* 242.

DESCRIP-
TION.

THE front and cheeks of this species are white; the chin and throat black; the head highly crested with black feathers edged with white; the cheeks branded beneath with black; from the throat to the belly white; the back, wings, and tail, of a rufous dark grey. Its size that of the Blue Titmouse.

- * As yet it has only been discovered in *Scotland*, but is not unfrequent in many parts of *Europe*: it inhabits *Schonen* in *Sweden*, and the western and more temperate parts of *Russia*, but does not reach *Siberia*. Its haunts are chiefly among ever-green trees, especially the resinous kinds.

* I saw several in a tree by the roadside, when, many years ago—about 25 years—when I was on business near the village of *in the Whitby valley,* in the North Riding of Yorkshire.
W. H. Sadler.
May 29.



CHIMNEY SWALLOW.



SWIFT (P. 550)



GENUS XXIX. SWALLOW.

BILL short, weak.

MOUTH very wide.

LEGS short, weak.

- | | |
|--|--|
| Hirundo rustica. H. nigro-
cærulescens subtus albida,
fronte gulaque castaneis, rec-
tricibus lateralibus macula
alba notatis. <i>Lath. Ind.</i>
<i>orn.</i> 572. <i>id. Syn.</i> iv. 361.
<i>id. Sup.</i> i. 192. | <i>d'ois.</i> vi. 591. <i>Pl. Enl.</i> 543. 1. CHIMNEY.
<i>f.</i> 1.
<i>Hirundo rustica. Gm. Lin.</i>
1015.
<i>Ladu-Swala. Faun. Suec. sp.</i>
270.
<i>Forstue-Svale, Mark-Svale.</i>
<i>Brunnich,</i> 289. |
| La petite Hirondelle. <i>Belon</i>
<i>av.</i> 378. | <i>Haus-Schwalbe. Frisch,</i> i. 17. |
| Hirundo domestica. <i>Gesner av.</i>
548. | <i>Hauss Schwalbe. Kram.</i> 380. |
| <i>Aldr. av.</i> ii. 294. | <i>Laustaza. Scopoli,</i> No. 249. |
| Rondone. <i>Zinan.</i> 47. | <i>Raii Syn. av.</i> 71. |
| L'Hirondelle de Cheminée.
<i>Brisson av.</i> ii. 486. <i>Hist.</i> | <i>House or Chimney Swallow.</i>
<i>Wil. orn.</i> 212.
<i>Br. Zool.</i> 96. <i>Arct. Zool.</i> ii.
127. |

THIS species appears in *Great Britain* nearly twenty days before the martin, or any other of the swallow tribe. They leave us the latter end of *September*; and for a few days previous to their departure, assemble in vast flocks on house tops, churches, and even trees, from

whence they take their flight. It is now known that swallows fix their winter quarters in *Senegal*, and possibly they may be found along the whole *Morocco* shore. We are indebted to M. *Adanson** for this discovery, who first observed them in the month of *October*, after their migration from *Europe*, on the shores of that kingdom; but whether it was this species alone, or all the *European* kinds, he is silent.

The name of chimney swallow may almost be confined to *Great Britain*, for in several other countries they chuse different places for their nests. In *Sweden*, they prefer barns, so are styled there *Ladu-Swala*, or the barn swallow; and in the hotter climates, they make their nests in porches, gateways, galleries, and open halls.

DESCRIP-
TION.

The house swallow is distinguished from all others by the superior forkiness of its tail, and by the red spot on the forehead, and under the chin. The crown of the head, the whole upper part of the body, and the coverts of the wings are black, glossed with a rich purplish blue, most resplendent in the male; the breast and belly white, that of the male tinged with red; the tail black; the two middle feathers plain;

* Voyage to *Senegal*, p. 121, 163.

the others marked transversely near their ends with a white spot. The exterior feathers of the tail are much longer in the male than in the female.

Their food is the same with that of the others of the genus, viz. insects; for the taking of which in their swiftest flight, nature hath admirably contrived their several parts; their mouths are very wide; their wings are long, and adapted for distant and continual flight, and their tails are forked, to enable them to turn the readier in pursuit of their prey. This species, in our country, builds in chimneys, and makes its nest of clay mixed with straw, leaving the top quite open. It lines the bottom with feathers and grasses; and usually lays from four to six eggs, white speckled with red; but by taking away one of the eggs daily, it will successively lay as far as nineteen, as Doctor *Lister* has experienced. It breeds earlier than any other species. The first brood are observed to quit the nest the last week in *June*, or the first in *July*; the last brood towards the middle or end of *August*. The nest being fixed five or six feet deep within the chimney, it is with difficulty that the young can emerge. They even sometimes fall into the rooms below; but as

soon as they succeed, they perch for a few days on the chimney top, and are there fed by their parents. Their next essay is to reach some leafless bough, where they sit in rows, and receive their food. Soon after they take to the wing, but still want skill to seize their own prey. They hover near the place where their parents are in chase of flies, attend their motions, meet them, and receive from their mouths the offered sustenance.

It has a sweet note, which it emits in *August* and *September*, perching on house tops.

[Swallows appear in *Greece* from the 16th of *March* to the 2d of *April*, and are accompanied or soon followed by the Martins. ED.]

“ They are found every where on the old continent, and may be traced to *India* and *Japan*, and at *Newfoundland*, and other parts of *North America*. Two instances of the capriciousness of the swallow are on record. One in the museum of the late Sir *Ashton Lever*, in which was the nest made in the dead body of an owl nailed against a barn. After the young were flown, Sir *Ashton* substituted a large shell in the place of the owl, and in the following season had the satisfaction of seeing a nest made in the shell, supposed by the same pair of birds. At *Camerton Hall*, near *Bath*, a pair built a

nest in the upper part of the frame of an old picture over a chimney, in a room little frequented, coming through a broken pane of the window, and this for three successive years, and probably would have continued to do so, if the room being put into repair all access to the inside was prevented." J. L.

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| Hirundo urbica. H. nigro-cærulescens subtus alba, rectricibus immaculatis. <i>Lath. Ind. orn.</i> 573. <i>id Syn.</i> iv. 564. <i>id. Sup.</i> i. 192. | La petite Hirondelle, ou le 2. MARTIN. Martinet a cul blanc. <i>Brisson av.</i> ii. 490. <i>Hist. d'oïs.</i> vi. 614. <i>Pl. Enl.</i> 542, f. 2. |
| Le Martinet. <i>Belon av.</i> 380. | Hirundo urbica. <i>Gm. Lin.</i> 1017. |
| Hirundo sylvestris. <i>Gesner av.</i> 564. <i>Frisch,</i> i. 17. | Hus-Swala. <i>Faun. Suec. sp.</i> 271. |
| <i>Aldr. av.</i> ii. 311. | <i>Speyerl. Kram.</i> 380. |
| Martin, Martlet, or Martinet. <i>Wil. orn.</i> 213. | <i>Danis, Bye v. Tagskiæg-Svale, Langelandis, Rive. Br.</i> 290. |
| <i>Raii Syn. av.</i> 71. | <i>Ph. Tr.</i> 1774. p. 196. |
| Rondone minore, e Grassolo. <i>Zinan.</i> 48. | <i>Br. Zool.</i> 96. plate Q. f. 2. p. 196. <i>Arct. Zool.</i> ii. 128. |
| Huda urnik. <i>Scopoli, No.</i> 250. | |

THE Martin is inferior in size to the former species, and its tail is much less forked. The head and upper part of the body, except the rump, is black glossed with blue; the breast, belly, and rump, are white; the feet are covered with a short white down. This is the second

DESCRIP-
TION.

of the swallow kind that appears in our country. It builds under the eaves of houses, with the same materials, and in the same form as the house swallow, only its nest is covered above, having only a small hole for admittance. We have also seen this species build against the sides of high cliffs over the sea. For the time that the young keep the nest, the old one feeds them, adhering by the claws to the outside; but as soon as they quit it, feeds them flying, by a motion quick and almost imperceptible to those who are not used to observe it.

It is a later breeder than the preceding by some days; but both will lay twice in the season, and the latter brood of this species have been observed to come forth so late as the eighteenth of *September*; yet that year (1766) they entirely quitted our sight by the fifth of *October*; not but they sometimes continue here much later: the martins and red wing thrushes having been seen flying in view on the seventh of *November*. Nestlings have been remarked in *Hampshire* as late as the 21st of *October*, 1772.

In *Italy* they appear and retire sooner than the chimney-swallows.

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| Hirundo riparia. H. cinerea,
gula abdomineque albis.
<i>Lath. Ind. orn.</i> 575. <i>id. Syn.</i>
iv. 568. | <i>Cat. Carol. app.</i> 37. | 3. SAND. |
| L'Hirondelle de rivage. <i>Belon</i>
<i>av.</i> 379. | Rondone riparia. <i>Zinan.</i> 49. | |
| Hirundo riparia, seu Drepa-
nis. <i>Gesner av.</i> 565. | Hirundo riparia. <i>Gm. Lin.</i>
1019. | |
| Dardanelli. <i>Aldr. av.</i> ii. 312. | Strand-swala, Back swala,
<i>Faun. Suec. sp.</i> 273. | |
| Sand Martin, or Shore Bird.
<i>Wil. orn.</i> 213. | <i>Danis, Dig-v.</i> Jord-svale, Soil-
baake. <i>Norveg.</i> Sand Ræn-
ne. <i>Br.</i> 291. | |
| <i>Raii Syn. av.</i> 71. | Ufer-Schwalbe (Shore Swal-
low). <i>Frisch, i.</i> 18. | |
| L'Hirondelle de rivage. <i>Bris-</i>
<i>son av.</i> ii. 506. <i>Hist. d'ois.</i> | Gestetten-schwalbe. <i>Kram.</i>
381. | |
| vi. 632. <i>Pl. Enl.</i> 543. <i>f.</i> 2. | <i>Br. Zool.</i> 97. plate Q. f. 1. | |
| | <i>Arct. Zool.</i> ii. 129. | |

THIS is the lest of the genus that frequents *Great Britain*. The head and whole upper part of the body are mouse colored ; the throat white, encircled with a mouse colored ring ; the belly white ; the feet smooth and black.

DESCRIP-
TION.

It builds in holes in sand pits, and in the banks of rivers, penetrating some feet deep into the bank, boring through the soil in a wonderful manner with its feet, claws, and bill. It makes its nest of hay, straw, &c. and lines it with feathers : it lays five or six white eggs. It is the earliest of the swallow tribe in bringing out its young, and arrives in *England* about the same time as the Chimney Swallow.

4. SWIFT. *Hirundo Apus*. *H. nigricans*,
 gula alba, digitis omnibus
 quatuor anticis. *Lath. Ind.*
orn. 582. *id. Syn.* iv. 584.
 La grande Hirondelle, Mou-
 tardier ou grand Martinet.
Belon av. 377.
Apus. Gesner av. 166.
Aldr. av. ii. 312.
 Black Martin, or Swift. *Wil.*
orn. 214.
Raii Syn. av. 72.
Rondone. Zinan. 47.
 Le Martinet. *Brisson av.* ii.
 514. *Hist. d'oïis.* vi. 643.
Pl. Enl. 542. f. 1.
Hirundo Apus. Gm. Lin.
 1020.
 Ring-swala. *Faun. Suec. sp.*
 272.
 Steen, Kirke-v. *Sæc-Svale.*
Br. 292.
 Speyer, grosse thurn schwalbe.
Kram. 380. *Scopoli, No.*
 251.
Br. Zool. 97. *Arct. Zool.* ii.
 130.

THIS species is the largest of our swallows; but the weight is most disproportionately small to its extent of wing; the former being scarcely one ounce, the latter eighteen inches; the length near eight inches. The feet of this bird are so small, that the action of walking and of rising from the ground is extremely difficult; so that nature hath made it full amends, by furnishing it with ample means for an easy and continual flight. It is more on the wing than any other swallows; its flight is more rapid, and that attended with a shrill scream. It rests by clinging against some wall, or other apt body; from whence *Klein* styles this species *Hirundo muraria*. It breeds under the eaves

of houses, in steeples, and other lofty buildings; makes its nest of grasses and feathers, and lays only two eggs, of a white color.

It is entirely of a glossy dark sooty color, only the chin is marked with a white spot; but by being so constantly exposed to all weathers, the gloss of the plumage is lost before it retires. The feet are of a particular structure, all the toes standing forward; the lest consists of only one bone; the others of an equal number, viz. two each; in which they differ from those of all other birds.

DESCRIP-
TION.

This appears in our country about fourteen days later than the sand martin; but differs greatly in the time of its departure, retiring invariably about the tenth of *August*, being the first of the genus that leaves us. I cannot trace them to their winter quarters, unless in one instance of a pair found adhering by their claws and in a torpid state, in *February* 1766, under the roof of *Longnor Chapel, Shropshire*: on being brought to a fire, they revived and moved about the room.

Swifts appear about *Pavia* on the eighth of *April*, and depart towards the twenty-fifth of *July*; some remain as late as *September*.

The fabulous history of the *Manucodiata*, or bird of *Paradise*, is in the history of this species

in great measure verified. It was believed to have no feet, to live upon the celestial dew, to float perpetually on the *Indian* air, and to perform all its functions in that element.

The SWIFT actually performs what has been in these enlightened times disproved of the former; except the small time it takes in sleeping, and what it devotes to incubation, every other action is done on the wing. The materials of its nest it collects either as they are carried about by the winds, or picks them up from the surface in its sweeping flight. Its food is undeniably the insects that fill the air. Its drink is taken in transient sips from the water's surface. Even its amorous rites are performed on high. Few persons who have attended to them in a fine summer's morning, but must have seen them make their aërial courses at a great height, encircling a certain space with an easy steady motion. On a sudden they fall into each other's embraces, then drop precipitate with a loud shriek for numbers of yards. This is the critical conjuncture, and to be no more wondered at, than that insects (a familiar instance) should discharge the same duty in the same element.

These birds and swallows are inveterate enemies to hawks. The moment one appears, they

attack him immediately: the swifts soon desist; but the swallows pursue and persecute those rapacious birds, till they have entirely driven them away.

Swifts delight in sultry weather, and seem thence to receive fresh spirits. They fly in those times in small parties with particular violence; and as they pass near steeples, towers, or any edifices where their mates perform the office of incubation, emit a loud scream, a sort of serenade, as Mr. *White* supposes, to their respective females.

To the curious monographies on the swallow tribe, of that worthy correspondent, I must acknowledge myself indebted for numbers of the remarks above-mentioned.

OF THE

DISAPPEARANCE OF SWALLOWS.

THERE are three opinions among naturalists concerning the manner the swallow tribe dispose of themselves after their disappearance from the countries in which they make their summer residence. *Herodotus* mentions one species that resides in *Egypt* the whole year:

*Prosper Alpinus** asserts the same; and Mr. *Loten*, late governor of *Ceylon*, assured us that those of *Java* never remove. These excepted, every other known kind observe a periodical migration, or retreat. The swallows of the cold *Norway*,† and of *North America*,‡ of the distant *Kamtschatka*§, of the temperate parts of *Europe*, of *Aleppo*,|| and of the hot *Jamaica*,¶ all agree in this one point.

In cold countries, a defect of insect food on the approach of winter, is a sufficient reason for these birds to quit them; but since the same cause probably does not subsist in the warm climates, recourse should be had to some other reason for their vanishing.

Of the three opinions, the first has the utmost appearance of probability; which is, that they remove nearer the sun, where they can find a continuance of their natural diet, and a temperature of air suiting their constitutions. That this is the case with some species of *Eu-*

* *Hirundines duplicis generis ibi observantur; patriæ scilicet quæ nunquam ab Ægypto discedentes, ibi perpetuo morantur, atque peregrinæ, hæ sunt nostratibus omnino similes; patriæ vero toto etiam ventre nigricant. Hist. Ægypt. i. 198.*

† *Pontop. hist. Norw. ii. 98.*

‡ *Cat. Carol. i. 51. app. 8.*

§ *Hist. Kamts. 162.*

|| *Russel Alep. 70.*

¶ *Phil. Trans. No. 36.*

ropean swallows, has been proved beyond contradiction (as above cited) by M. *Adanson*. We often observe them collected in flocks innumerable on churches, on rocks, and on trees, previous to their departure hence; and Mr. *Collinson* proves their return here in perhaps equal numbers, by two curious relations of undoubted credit: the one communicated to him by Mr. *Wright*, master of a ship; the other by the late Sir *Charles Wager*, who both described (to the same purpose) what happened to each in their voyages. “Returning home, says “Sir *Charles*, in the spring of the year, as I “came into sounding in our channel, a great “flock of swallows came and settled on all my “rigging; every rope was covered; they hung “on one another like a swarm of bees; the “decks and carving were filled with them. “They seemed almost famished and spent, and “were only feathers and bones; but being “recruited with a night’s rest, took their flight “in the morning.”* This vast fatigue, proves that the journey must have been very great, considering the amazing swiftness of these birds: in all probability they had crossed the *Atlantic*

* *Phil. Trans.* vol. li. Part 2. p. 459.

ocean, and were returning from the shores of *Senegal*, or other parts of *Africa*; so that this account from that most able and honest seaman, confirms the later information of M. *Adanson*.

The following observations made during repeated passages of the *Atlantic* were communicated by *Charles Mills*, Esq. of *Macclesfield*.

Crossed the <i>Atlantic</i> ,	<i>April</i>	1770.	Saw no Swallows.
Ditto	-	- <i>May</i> 1772.	Ditto.
Ditto	-	- <i>July</i> 1773.	Ditto.
Ditto	-	- 16 <i>May</i> 1775.	Lat. 20° 20' N. Long. 29° 23' W. from <i>St.</i> <i>Helena</i> . Saw a swallow.
Ditto	-	- 30 <i>June</i> 1778.	Lat. 28° 5' N. Long. 20° 9' W. from <i>Ascension</i> . Saw four swallows.
Ditto	-	- 1 <i>July</i> 1778.	Lat. 25° 37' N. Long. 20° 23' W. Saw a swallow.
Ditto	-	- 2 <i>July</i> 1778.	Lat. 29° 41' N. Long. 20° 19' W. A swallow about the ship.

Mr. *White*, on *Michaelmas* day, 1768, had the good fortune to have ocular proof of what may reasonably be supposed an actual migration of swallows. Travelling that morning very

early between his house and the coast, at the beginning of his journey he was environed with a thick fog, but on a large wild heath the mist began to break, and discovered to him numberless swallows, clustered on the standing bushes, as if they had roosted there; as soon as the sun burst out, they were instantly on wing, and with an easy and placid flight proceeded towards the sea. After this he saw no more flocks, only now and then a straggler.*

This rendezvous of swallows about the same time of year is very common on the willows, in the little isles in the *Thames*. They seem to assemble for the same purpose as those in *Hampshire*, notwithstanding no one yet has been eye-witness of their departure. On the 26th of *September* last, two gentlemen who happened to lie at *Maidenhead bridge*, furnished at least a proof of the multitudes there assembled: they went by torch-light to an adjacent isle, and

* In *Kalm's Voyage to America*, is a remarkable instance of the distant flight of swallows; for one lighted on the ship he was in, *September* 2d. when he had passed only over two thirds of the *Atlantic* ocean. His passage was uncommonly quick, being performed from *Deal* to *Philadelphia* in less than six weeks; and when this accident happened, he was fourteen days' sail from *Cape Hinlopen*.

in less than half an hour brought ashore fifty dozen; for they had nothing more to do than to draw the willow twigs through their hands, the birds never stirring till they were taken.

The northern naturalists will perhaps say, that this assembly met for the purpose of plunging into their subaqueous winter quarters; but was that the case, they would never escape discovery in a river perpetually fished as the *Thames*; some of them must inevitably be brought up in the nets that harass that water.

The second notion has great antiquity on its side. *Aristotle** and *Pliny*† give, as their belief, that swallows do not remove very far from their summer habitation, but winter in the hollows of rocks, and during that time lose their feathers. The former part of their opinion has been adopted by several ingenious men; and of late, several proofs have been brought of some species, at least, having been discovered in a torpid state. Mr. *Collinson*‡ favored us with the evidence of three gentlemen, eye-witnesses to numbers of sand martins being drawn out of a cliff on the *Rhine*, in the month of *March*,

* *Hist. an.* 935.

† *Lib.* 10. c. 24.

‡ By letter, dated June 14, 1764.

1762.* And the Honorable *Daines Barrington* communicated to us the following fact, on the authority of the late Lord *Belhaven*, that numbers of swallows have been found in old dry walls, and in sandhills near his Lordship's seat in *East Lothian*; not once only, but from year to year; and that when they were exposed to the warmth of a fire, they revived. We have also heard of the same annual discoveries near *Morpeth* in *Northumberland*, but cannot speak of them with the same assurance as the two former: neither in the two last instances are we certain of the particular species.†

Other witnesses crowd on us to prove the residence of those birds in a torpid state during the severe season.

First, In the chalky cliffs of *Sussex*; as was seen on the fall of a great fragment some years ago.

Secondly, In a decayed hollow tree that was cut down, near *Dolgelleu*, in *Meirconethshire*.

Thirdly, In a cliff near *Whitby*, *Yorkshire*; where, on digging out a fox, whole bushels of swallows were found in a torpid condition. And,

* *Phil. Trans.* vol. liii. p. 101. art. 24.

† *Klein* gives an instance of swifts being found in a torpid state. *Hist. av.* 204.

Lastly, The Reverend Mr. *Conway*, of *Sychton, Flintshire*, was so obliging as to communicate the following fact. A few years ago, on looking down an old lead mine in that county, he observed numbers of swallows clinging to the timbers of the shaft, seemingly asleep; and on flinging some gravel on them, they just moved, but never attempted to fly or change their place; this was between *All Saints* and *Christmas*.

These are doubtless the lurking places of the latter hatches, or of those young birds, who are incapable of distant migrations. There they continue insensible and rigid; but like flies may sometimes be reanimated by an unseasonable hot day in the midst of winter; for very near *Christmas* a few appeared on the moulding of a window of *Merton College, Oxford*, in a remarkably warm nook, which prematurely set their blood in motion, having the same effect as laying them before the fire at the same time of year. Others have been known to make this premature appearance, but as soon as the cold natural to the season returned, they withdrew again to their former retreats.

I shall conclude with one argument drawn from the very late hatches of two species.

On the twenty-third of *October*, 1767, a mar-

tin was seen in *Southwark*, flying in and out of its nest; and on the twenty-ninth of the same month, four or five swallows were observed hovering round and settling on the county hospital at *Oxford*. As these birds must have been of a late hatch, it is highly improbable that at so late a season of the year, they would attempt from one of our midland counties, a voyage, almost as far as the equator, to *Senegal* or *Goree*: we are therefore confirmed in our notion, that there is only a partial migration of these birds, and that the feeble late hatches conceal themselves in this country.

The above, are circumstances we cannot but assent to, though seemingly contradictory to the common course of nature in regard to other birds. We must, therefore, divide our belief relating to these two so different opinions, and conclude, that one part of the swallow tribe migrates, and that others have their winter quarters near home. If it should be demanded, why swallows alone are found in a torpid state, and not the other many species of soft billed birds, which likewise disappear about the same time? The following reasons may be assigned.

No birds are so much on the wing as swallows; none fly with such swiftness and rapidity;

none are obliged to such sudden and various evolutions in their flight; none are at such pains to take their prey; and we may add, none exert their voice more incessantly: all these occasion a vast expence of strength, and of spirits, and may give such a texture to the blood, that other animals cannot experience, and so dispose, or we may say, necessitate, this tribe of birds, or a part of them, at lest, to a repose more lasting than that of any others.

The third notion is, even at first sight, too amazing and unnatural to merit mention, if it was not that some of the learned have been credulous enough to deliver, for fact, what has the strongest appearance of impossibility; we mean the relation of swallows passing the winter immersed under ice, at the bottom of lakes, or lodged beneath the water of the sea at the foot of the rocks. The first who broached this opinion, was *Olaus Magnus*, Archbishop of *Upsal*, who very gravely informs us, that these birds are often found in clustered masses at the bottom of the northern lakes, mouth to mouth, wing to wing, foot to foot; and that they creep down the reeds in autumn, to their subaqueous retreats. That when old fishermen discover such a mass, they throw it into

the water again; but when young inexperienced ones take it, they will, by thawing the birds at a fire, bring them indeed to the use of their wings, which will continue but a very short time, owing to a premature and forced revival.*

That the good Archbishop did not want credulity, in other instances, appears from this, that after having stocked the bottoms of the lakes with birds, he stores the clouds with mice, which sometimes fall in plentiful showers on *Norway* and the neighboring countries.†

Some of our own countrymen ‡ have given credit to the submersion of swallows; and *Klein* patronises the doctrine strongly, giving the following history of their manner of retiring, which he received from some countrymen and others. They asserted, that sometimes the swallows assembled in numbers on a reed, till it broke and sunk with them to the bottom; and that their immersion was preluded by a dirge of a quarter of an hour's length; that others would unite

* *Derham's Phys. Theol.* note d. p. 349. *Pontop. hist. Norw.* i. 99.

† *Gesner Icon. An.* 100.

‡ *Derham's Phys. Theol.* 340. 349. *Hildrop's Tracts*, ii. 32.

in laying hold of a straw with their bills, and so plunge down in society; that others again would form a large mass, by clinging together with their feet, and so commit themselves to the deep.*

Such are the relations given by those who are fond of this opinion, and which, though delivered without exaggeration, must provoke a smile. They assign not the smallest reason to account for these birds being able to endure so long a submersion without being suffocated, or without decaying, in an element so unnatural to their delicate frame; when we know that the otter,† the corvorant, and the grebes, soon perish, if caught under ice, or entangled in nets: and it

* *Klein hist. av.* 205, 206. *Ekmarck migr. av. Amæn. acad.* iv. 589.

† Though entirely satisfied in our own mind of the impossibility of these relations; yet, desirous of strengthening our opinion with some better authority, we applied to that able anatomist, Mr. *John Hunter*; who was so obliging to inform us, that he had dissected many swallows, but found nothing in them different from other birds as to the organs of respiration. That all those animals which he had dissected of the class that sleep during winter, such as lizards, frogs, &c. had a very different conformation as to those organs. That all these animals, he believes, do breathe in their torpid state; and, as far as his experience reaches, he knows they do: and that therefore he esteems it a very wild opinion, that terrestrial animals can remain any long time under water without drowning.

is well known, that those animals will continue much longer under water than any others to whom nature hath denied that particular structure of heart, necessary for a long residence beneath that element.

GENUS XXX. GOAT-SUCKER.

BILL very short, bent at the end, bristles round the base.

NOSTRILS tubular, very prominent.

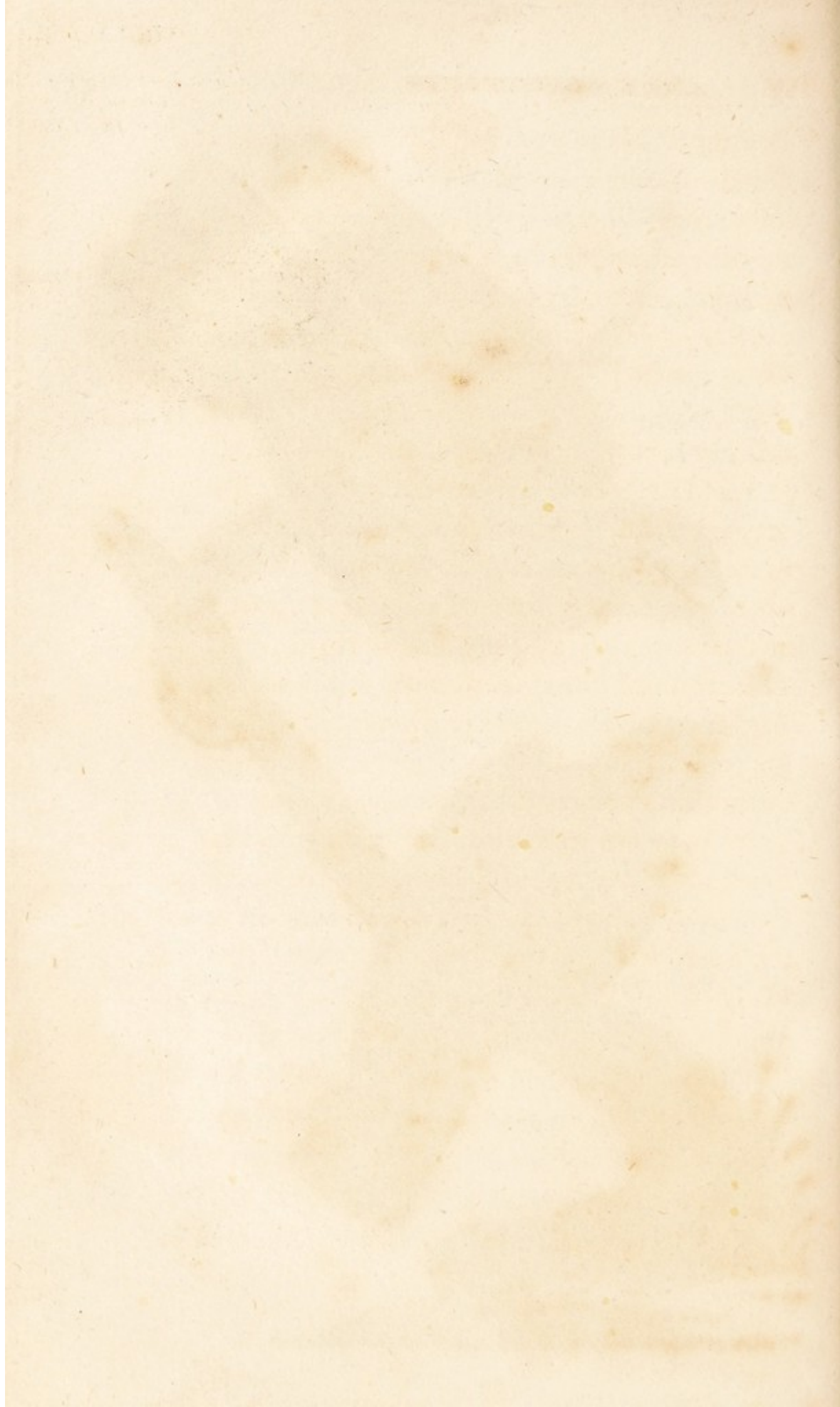
TAIL consisting of ten feathers, not forked.

1. NOCTURNAL. Caprimulgus Europeanus. C. niger cinereo fusco ferrugineo et albo varius, subtus alborufescens fasciis fuscis. *Lath. Ind. orn.* 584. *id. Syn.* iv. 593. *id. Sup.* i. 194. L'Effraye ou Fresaye. *Belon av.* 343. Caprimulgus, Geissmelcher. *Gesner av.* 241. Calcobotto. *Aldr. av.* i. 288. Fern Owl, Goatsucker, Goat Owl. *Wil. orn.* 107. Also, Churn Owl. *Raii Syn. av.* 26. *Cat. Carolin.* i. 8. Dorchawk, accipiter Cantharophagus. *Charlton ex.* 79. Le Tette Chevre ou Crapaud volant. *Brisson av.* ii. 470. *Tab. 44. Hist. d'oïs.* vi. 512. *Pl. Enl.* 193. Covaterra. *Zinanni,* 94. *Sco-poli,* No. 254. Caprimulgus Europeanus. *Gm. Lin.* 1027. Natskrafa, Natskarra, Quallknarren. *Faun. Suec. sp.* 274. Hirundo cauda æquabili. *H. caprimulga. Klein av.* 81. Nat-Ravn, Nat-Skade, Aften-bakke. *Brun.* 293. Mucken stecker, Nachtrabb. *Kram.* 381. *Br. Zool.* 97. *Tab. R. R.* 1. *Arct. Zool.* ii. 136.

KLEIN hath placed this bird in the swallow tribe, and styles it a swallow with an undivided tail. It has most of the characters of that genus; a very small bill, wide mouth, small legs.

M. & F. GOATSUCKERS.





It is also a bird of passage; agrees in food with this genus, and in the manner of taking it: differs in the time of preying, flying only by night, so with some justice may be called a *nocturnal swallow*. It feeds on moths, gnats, dorrs or chaffers; from which *Charlton* calls it a *Dorr-hazek*, its food being entirely that species of beetle during the month of *July*, the period of that insect's* flight in this country.

This bird makes but a short stay with us: appears the latter end of *May*; and disappears in the northern parts of our island the latter end of *August*,† but in the southern stays above a month later. It inhabits all parts of *Great Britain*, from *Cornwall* to the county of *Ross*. Mr. *Scopoli* seems to credit the report of their sucking the teats of goats, an error delivered down from the days of *Aristotle*.

Its notes are most singular: the loudest so much resembles that of a large spinning wheel, that the *Welsh* call this bird *aderyn y droell*, or the wheel bird. It begins its song most punctually on the close of day, sitting usually on a bare bough with the head lower than the tail, as expressed in the upper figure in the plate; the lower jaw quivering with the efforts. The noise is so very violent, as to give a sensible vibration

* *Scarabæus Melolontha*.

† It quits *Italy* about the same period.

to any little building it chances to alight on, and emit this species of note: the other is a sharp squeak, which it repeats often; this seems a note of love, as it is observed to reiterate it when in pursuit of the female among the trees. It lays its eggs on the bare ground; usually two: they are of a long form, of a whitish hue, prettily marbled with reddish brown.

DESCRIP-
TION.

The weight of this bird is two ounces and a half; its length ten inches and a half; the extent twenty-two. The bill is very short; the mouth vast; the irides hazel. The plumage a beautiful mixture of black, white, ash color, and ferruginous, disposed in lines, bars, and spots. The male is distinguished from the female by a great oval white spot near the end of the three first quill feathers, and another on the outmost feathers of the tail; the plumage is also more ferruginous. The legs are short, scaly, and feathered below the knee; the middle toe connected to those on each side by a small membrane, as far as the first joint; the claw of the middle toe thin, broad, serrated.

END OF THE FIRST VOLUME.

