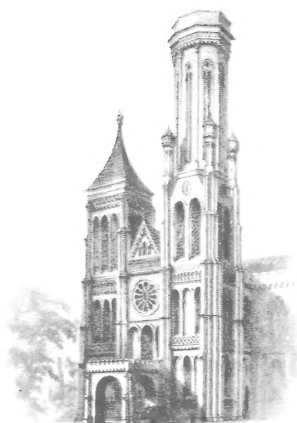


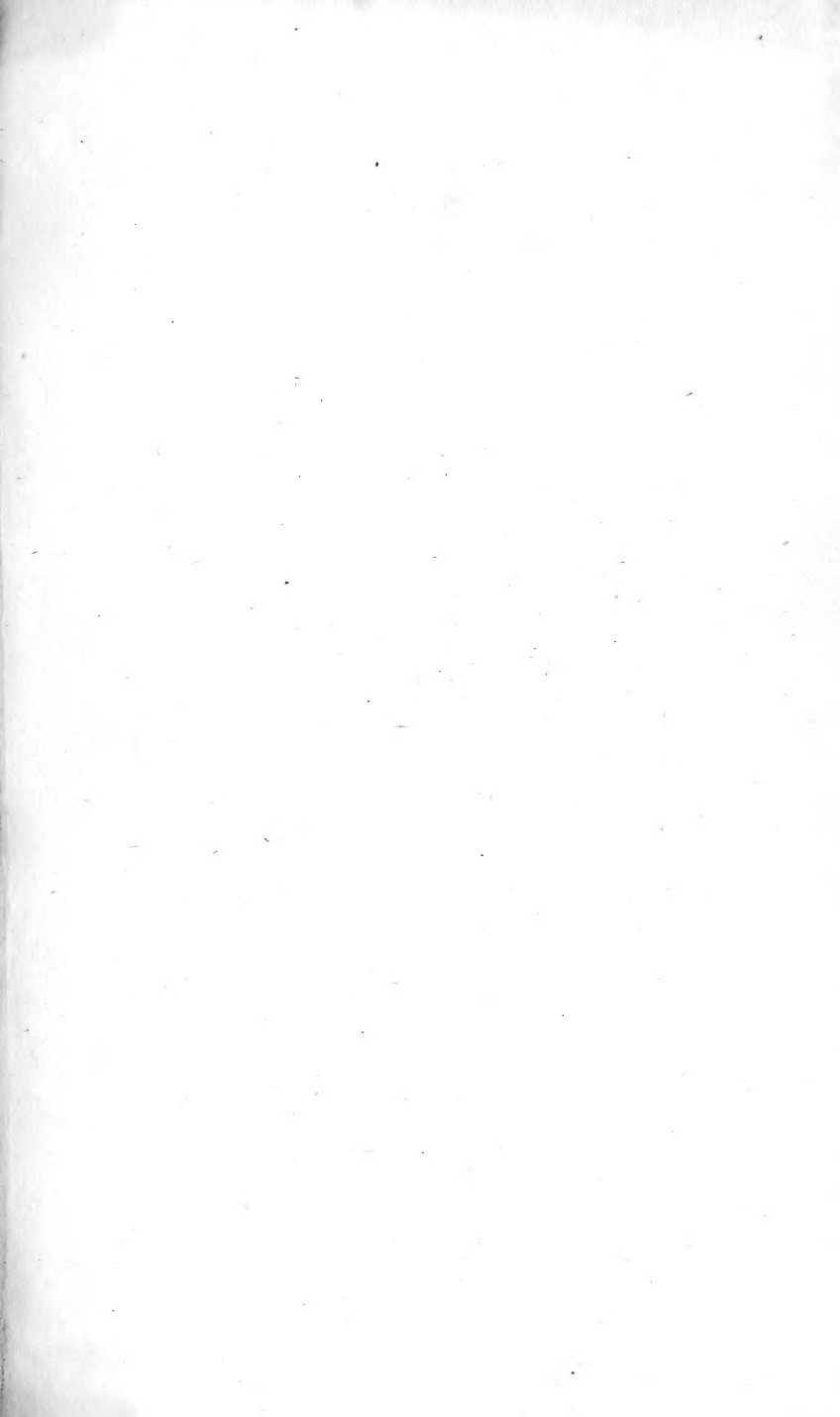
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Wedale, T. - Pr. Malac. Soc. Lond., 15(2): 80-82,

Dec. 1922

Salisbury, A. E. - J. Conch. 22(6): 136-137, May 1943

BRITISH ZOOLOGY.

CLASS I.

QUADRUPEDS.

HINC LAUDEM FORTES SPERATE COLONI



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

L O N D O N .
Printed for Benj. White,
M D C C L X X V I .



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P R E F A C E.

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 least 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,

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

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 magnificence 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

* Between *Aberdeen* and *Peterhead*.

† In *Cumberland*.

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 abundance 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

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

are the lead mines of *Derbyshire*, *Cardigan-shire* 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 *Tralea**, the fibrous lead ore of *Tipperary*; the laminated lead ore of *Lord Hoptoun's* mines; the crystalized tins, and the figured ores of *Zink*, are equally noted for their elegance, scarcity, and richness.

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*.

* In the county of *Kerry*.

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

Our botanical productions are not less abundant; but the works of *Ray*, which have lately been much enlarged and methodized, according to the *Linneæan* 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

* 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.

parade of uselefs 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 crea-
“ tures, to be looked on with a careless in-
“ curious eye, especially to have them slight-
“ ed or contemned; 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 demon-
“ strations of the infinite wisdom and power
“ of God, they may serve to us, as so ma-
“ ny arguments exciting us to a constant fear
“ of

“ of the Deity, and a steady and hearty obedience to all his laws.” *

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

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

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 knowledge; 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 knowledge 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

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.

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

* That great artist, Mr. *Ridinger*, of *Ausburg*, 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 giving pleasure to all admirers of nature represented as herself.

† *Fresnoy de arte graph. lin.* 537.

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 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.

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

Thus

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 natural knowledge, 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

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* animals in common life, yet even these would greatly exceed the bounds to which we have thought it right to limit ourselves. The knowlege of *Dietetics* 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,

ticle, 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 judgment, 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,

* *Alex. Mal. Berger.*

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 not think our time misapplied, in offering to the publick, 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

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

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 Mr. *George Ashby*, and the Reverend Mr. *Green* of *Cambridge*; *William Constable*, Esquire; *Joseph Banks*, Esquire; the late *Benjamin Stillingfleet*, Esquire; *Thomas Falconer*, Esquire, of *Chester*; Doctor *John Reinold Forster*; the Reverend Doctor *Buckworth*; the Reverend Mr. *Hugh Davies*, of *Beaumaris*; Mr. *Travis*, Surgeon, of *Scarborough*; Mr. *Latham*, Surgeon, of *Dartford*; *Thomas Tosfield*, 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*; the late Mr. *Peter Col-lin-son*; the Reverend Mr. *White*, of *Selborn, Hants*; and that Father of *British Ornithologists*, the late Mr. *George Edwards*, of the College of Physicians.

In the prosecution of our plan, we shall, to avoid the perplexity arising from forming

a new

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 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

* Printed at *Edinburgh*, 1773.

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 knowledge 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 an active turn, we might say, that so pleasing and useful an employment would relieve the *tædium* arising from

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

<i>Italian</i>	to	Aldrovand, Olina, or Zinanni.
<i>French</i>		Briffon, or de Buffon.
<i>German</i>		Gesner, or Kramer.
<i>Swedish</i>		the Fauna Suecica.
<i>Danish and Norwegian</i>		Brunnich.
<i>Carniolan</i>		Scopoli.

a fame-

a fameness 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 knowlege ; 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.

DOWNING,
March 1. 1776.

THOMAS PENNANT.

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- Ruffel's Alep.* The Natural History of *Aleppo* and the Parts adjacent, by *Alexander Ruffel*, M. D. 4to. *London*, 1756.
- SCOPOLI. Annus. I. Historico-Naturalis, *Johannis Antonii Scopoli*. *Lipsiæ*, 1769.
- Sib. Mus.* *Alberti Sebæ* Rerum Naturalium Theſaurus, 4 tom. fol. *Amsterdam*, 1734, &c.
- Sib. Scot.* Prodrômus Historiæ Naturalis Scotiæ, Auctore *Roberto Sibbald*, M. D. Eq. Aur. fol. *Edinburgi*, 1684.
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- Smitb's Kerry.* Natural and Civil History of the County of *Kerry*, 8vo. *Dublin*, 1756.
- Syn. Quad.* Synopsis of Quadrupeds, containing Descriptions of 292 Animals, with 31 Plates, 8vo. 1771. by *Thomas Pennant*, Esquire.
- Turner.* Avium præcipuarum quarum apud *Plinium* & *Aristotelem* Mentio est, brevis & succincta Hiltoria, per Dm. *Gulielmum Turnerum*, Artium & Medicinæ Doctorem, 12mo. *Coloniæ*, 1544. N. B. This Book is not paged.
- WIL. ORN. The Ornithology of Mr. *Francis Willughby*; published by Mr. *Ray*, fol. *London*, 1678.
- Worm. Mus.* Museum Wormianum, fol. *Amstelodami*, 1655.
- Zinanni.* Delle uova e dei Nidi degli Uccelli, Libro primo del Conte *Giuseppe Zinanni*, in *Venezia*, 1737.

C L A S S I.

Q U A D R U P E D S.



C L A S S I.

Q U A D R U P E D S.

DIV. I. HOOFED.

II. DIGITATED.

III. PINNATED.

IV. WINGED.

DIV. I. SECT. I. WHOLE HOOFED.

GENUS

I. HORSE.

SECT. II. CLOVEN HOOFED.

II. OX.

III. SHEEP.

IV. GOAT.

V. DEER.

VI. HOG.

Div.

DIV. II. DIGITATED.

SECT. I. With large canine teeth, separated from the cutting teeth.

Six cutting teeth in each jaw.

Rapacious, carnivorous.

GENUS

VII. DOG.

VIII. CAT.

IX. BADGER.

X. WEESEL.

XI. OTTER.

SECT. II. With only two cutting teeth in each jaw.

Usually herbivorous, frugivorous.

XII. HARE.

XIII. SQUIRREL.

XIV. DORMOUSE.

XV. RAT.

XVI. SHREW.

XVII. MOLE.

XVIII. URCHIN.

D I V. III. P I N N A T E D.

GENUS

XIX. S E A L.

D I V. IV. W I N G E D.

XX. B A T.

E R R A T A.

Page 12, line 3, for insect read infest. P. 15, note, for *maritima* read *lanuceolata*. P. 18, margin, for DOMESTIC read 3. DOMESTIC. P. 25, l. 9, for coracles read coracles. *Ibid.* note, for Stanley read Stavely. P. 46, l. 13, for were read are. *Ibid.* l. 15, for agreed read agree. P. 78, l. 22, for out ricks read oat ricks. P. 79, l. 4, for our read other. P. 89*, 90*, 91*, 92*, 93*, 94*, 95*, 96*. P. 101, l. 9, for second satire fourth book read fourth satire second book. P. 102, l. 8, for *Boadicia* read *Boadicea*. P. 115, running title, for NORWAY RAT read BROWN RAT. P. 128, l. 9, for *Europæus* read *Europæa*. P. 137, l. 12, for *tectis* read *rectis*. P. 170, running title, for ERNE read CINEREUS. P. 175, margin, for NEOT read NEST. P. 181, l. 5, for *fuscis* read *fasciis*. *Ibid.* l. 21, for tips, all read tips of all. P. 186, l. 25, after twenty-seven add inches. P. 193, l. 12, dele (*the male*). P. 199, l. 10, for five read five. P. 202, after the character of the genus add EARED OWLS. P. 203, dele EARED OWLS. P. 210, l. 18, for *diffre* read *differ*. P. 220, l. 14, for *illice* read *ilice*. P. 222, note, for *Melolantha* read *Melolontba*. *Ibid.* for *Rosel* read *Ræsel*. P. 241, l. 5, for *clifts* read *clefts*. P. 250, l. 17, for *disturb* read *disturbed*. P. 262, l. 9, for *Cocque* read *Coq*. P. 263, 264, 265, running title, WOOD GROUS. P. 269, 270, running title, RED GROUS. P. 275, l. 25, for *Sâr* read *Jâr*. P. 286, l. 1, for *quarts* read *pints*. *Ibid.* l. 10, for *canne patiere* read *canne petiere*. P. 294, l. 1, for *is* read *was*. P. 326, l. 18, for *Sparrow* read *Bunting*. P. 328, l. 2, for *breast* read *belly*. P. 351, l. 13, for *atri capilla* read *atricapilla*. *Ibid.* l. 24, for with white bar read with a white bar. P. 384, l. penult. dele? P. 401, last l. for *breed* read *breeder*. P. 404, l. 27, after *Indian* read *air*. P. 406, l. 1, for *monographsics* read *monographies*. *Ibid.* l. 8, for *tribes* read *tribe*. P. 446, l. 22, for *pair* read *pairs*. P. 461, last l. for *such as employed* read *such as are, &c.* P. 485, last l. for *table* read *tables*. *Ibid.* dele preceding this class. P. 515, l. 8, for *house* read *holes*. P. 528, l. 6, for *above knee* read *above the knee*. P. 546, l. 18, for *Larus Minuta* read *Sterna Minuta*. P. 550, l. 26, for *unctious* read *unctuous*. P. 563, note, for *Knat* read *Gnat*. P. 619, l. 23, dele) and place it in the preceding line after *suspects*. P. 630, l. 13, for *one* read *the*. P. 644, l. 14, for *fleetnese* read *fleetness*. *Ibid.* l. 21, for *at time* read *at the time*. P. 645, l. 8, for *cartamea* read *carta mea*. P. 652, note †, for *let flutter* read *let it flutter*. For *Hist. d' Oyf.* read *Hist. d' Oif.* *passim*.

THE Book-binder is requested to place the Plates according to the numbers affixed to the figures which refer to the descriptions,

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BRITISH ZOOLOGY.

VOL. I. OCTAVO.

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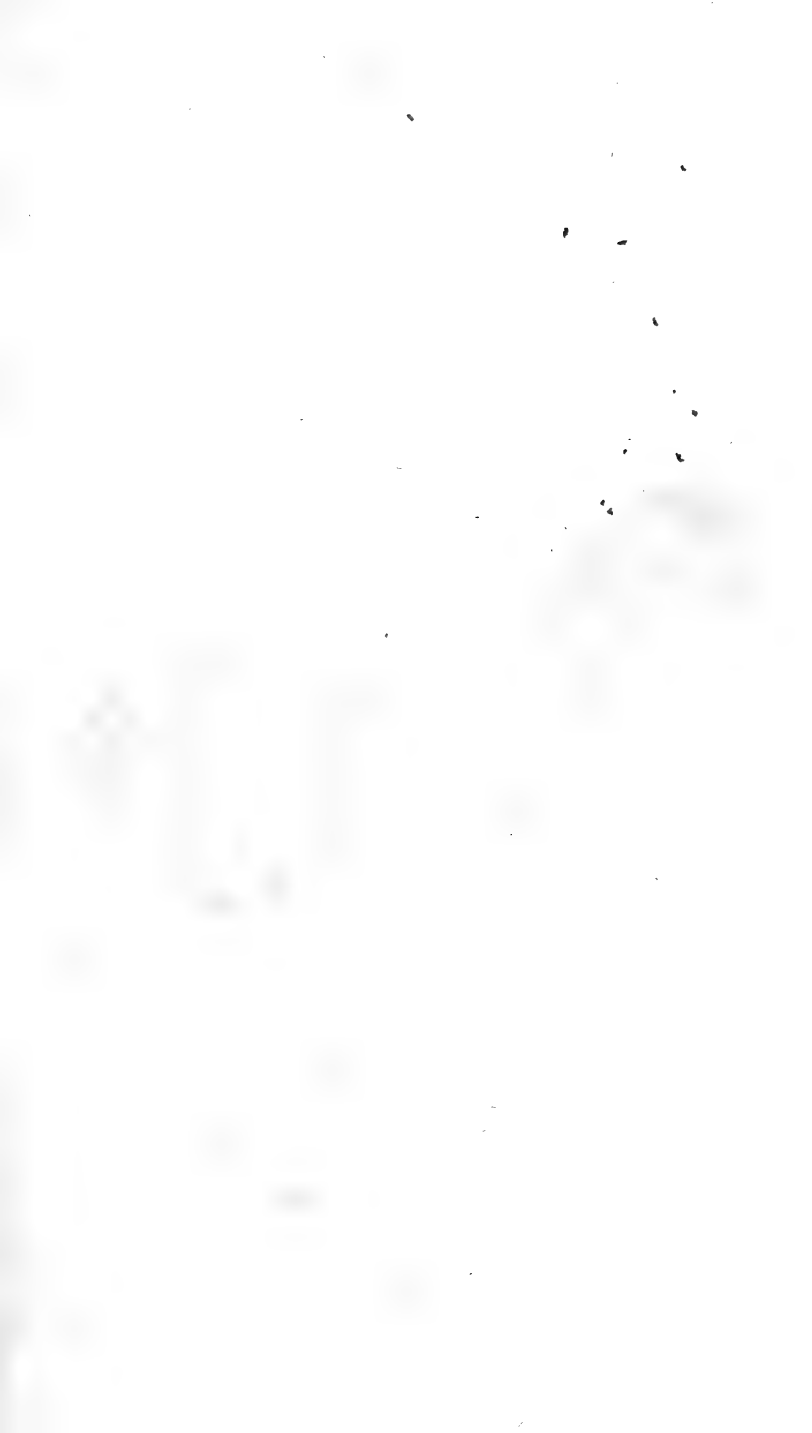
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C L A S S I.

Q U A D R U P E D S.

D I V. I. H O O F E D.

S E C T. I. W H O L E H O O F E D.

I I. C L O V E N H O O F E D.

S E C T. I.

Hoof consisting of one piece.

I. HORSE.

Six cutting teeth in each jaw.

Raii syn. quad. 62.
Merret pinax. 166.
Gesn. quad. 404.
Klein quad. 4.
De Buffon iv. 174.

Equus auriculis brevibus erectis,
juba longa. Brisson quad. 69.
Eq. Caballus. Lin. syst. 100.
Eq. cauda undique setosa. Faun.
Succ. 47.
Br. Zool. I. Syn. quad. No. 1.

I. GENEROUS.

H O R S E.

M A R E.

G E L D I N G.

Brit. March, Ceffyl

Casq

Dispaiddfarch

Fren. Le Cheval

La Cavale, Jument

Cheval ongre

Ital. Cavallo

Cavalla

Span. Cavallo

Yegua

Port. Cavallo

Egoa

Germ. Pferd

Stut, Motfch

Dut. Paerd, Hengft

Merrie

Swed. Hæft

Stood, Horfs

Dan. Hæft, Oeg, Hingft

Stod-Hæft, 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 foils, 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 lately shewn in his remarks* on those of *Great Britain*. *Cbilders*† 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-three feet royal, the latter only that of eighteen feet and a half royal.

Horses of this kind, derive their origin from

* 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 *Cbilders*, as indisputable and universally known.

Arabia;

Arabia; the feat 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.

In our capital there are instances of single horses that are able to draw on a plain, for a small space, the weight of three tuns; 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 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

STRENGTH.

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

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

one load thirteen meafures, which at a moderate computation of 70 pounds each, will amount to 910; a weight fuperior to that which the leffer fort of camels will bear: this will appear lefs furprifing, as thefe horfes are by degrees accuftomed to the weight; and the diftance they travel no greater than to and from the adjacent hamlets.

BRITISH
CAVALRY.

Our cavalry in the late campaigns, (when they had opportunity) fhewed over thofe of our allies, as well as of the *French*, a great fuperiority both of ftrength and activity: the enemy was broken through by the impetuous charge of our fquadrons; while the *German* horfes, from their great weight, and inactive make, were unable to fecond our efforts; though thofe troops were actuated by the nobleft ardor.

ANTIEN T.

The prefent cavalry of this ifland only fupports its antient glory; it was eminent in the earlieft times: our fcythed* chariots, and the activity † and good difcipline of our horfes, even ftruck terror into *Cæfar's* legions: and the *Britains*, as foon as they became civilized enough to coin, took care to represent on their money the animal for which they were fo celebrated. It is now impoffible to trace out this fpecies; for thofe which exift among the *indigenæ* of *Great Britain*, fuch as the little

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

† *Cæfar. Com.* lib. iv. *Strabo.* lib. iv.

horses of *Wales* and *Cornwal*, 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 *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*, Earl of *Shrewsbury**, is the first that is on record: he introduced the *Spanish* stallions into his estate in *Powisland*, from which that

* Created by *William the Conqueror*.

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 *Michael Drayton*, cotemporary with *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.

RACES.

Notwithstanding my former supposition, 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

* In hæc tertia *Walliæ* portione quæ *Powissa* dicitur sunt equitia peroptima, et equi emissaria laudatissima, de *Hispanicum* equorum generositate, quos olim Comes *Slopesburie Robertus de Belesme* in fines istos adduci curaverat, originaliter propagati. *Itin. Camb.* 222,

to such excess as to injure the fortunes of the nobility. The famous *George Earl of Cumberland* is recorded to have wasted more of his estate than any of his ancestors; and chiefly by his extreme love to 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 *Kennelworth* by her favorite *Leicester*. In the following reign, were places allotted for the sport: *Croydon* in the South, and *Garterby* in *Yorkshire*, were celebrated courses. *Cambden* 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 be 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 increase of our inhabitants, and the extent

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

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

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* invasion, all the cavalry which the nation could then furnish 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

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

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.

The learned *M. de Buffon* has almost exhausted the subject of the natural history of the horse, and the other domestic animals; and left very little for after writers to add. We may observe, that this most noble and useful quadruped is endowed with every quality that can 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

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

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 forming 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 provisions; 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 them, or to deposit their eggs in the *rectum*; the same length of hair contributes to guard them from the cold in winter.

winter. But we, by the absurd 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 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, bring on a numerous train, which are often fatal.

* 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,

Among

Among the distempers he is naturally subject to, are the worms, the bots, and the stone: the species of worms that infect him are the *lumbrici*, and *ascarides*; both these resemble those found in human bodies, only larger: the bots are the *erucæ*, or caterpillars of the *oestrus*, 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 *Highwycombe*, that 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*; weighing 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.

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 best to our benefit. The chief use that the *exuvie* of 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

* *Museum Meadianum*, p. 261.

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.

Afinus, <i>Raii syn. quad.</i> 63.	Equus afinus. <i>Lin. syst.</i> 100.	2. Ass.
<i>Gesn. quad.</i> 5.	Eq. caudæ extremitate fetosa	
<i>Klein. quad.</i> 6.	cruce nigra super humeros.	
<i>De Buffon</i> iv. 377.	<i>Faun. Suec.</i> 35*.	
Equus auriculis longis flaccidis,	<i>Br. Zool.</i> 5. <i>Syn. quad.</i> No. 3.	
juba brevi. <i>Briffon quad.</i> 70.		

<i>Brit.</i> Afyn, <i>fæm.</i> Asen	<i>Germ.</i> Efel
<i>Fren.</i> L'Ane, <i>f.</i> L'Anesse	<i>Dut.</i> Eezel
<i>Ital.</i> Afino, Miccio. <i>f.</i> Miccia	<i>Swed.</i> Afna
<i>Span.</i> Afno, Borrigo. <i>f.</i> Borrigo	<i>Dan.</i> Asen, Efel.
<i>Port.</i> Afno, Burro. <i>f.</i> Afna, Burra	

THIS animal, tho' 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 suppose 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

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

† 109.

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

years

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 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

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

† *Voy. Senegal.* 212.

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

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 surefooted 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 the place of the former, and enable us to enlarge our exports, certainly merits our attention.

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 *Plantane*; for which we have often seen it neglect every other herb in the pasture. The narrow-leaved *Plantane** is greedily eat by horses and cows: of late years it has been greatly cultivated and sowed with clover in North *Wales*, particularly in *Anglesea*, where

* *Plantago maritima*. *Fl. Angl.* 52.

the feed is harvested, and thence dispersed thro' other parts of the principality.

MULE.	Mulus, <i>Raii syn. quad.</i> 64.	juba brevi. <i>Briffon quad.</i>
	<i>Gesn. quad.</i> 702.	71.
	Afinus biformis, <i>Klein. quad.</i> 6.	Equus mulus, <i>Lin. syst.</i> 101.
	<i>Charlton ex.</i> 4.	<i>Faun. Suec.</i> 35. edit. 1.
	Equus auriculis longis erectis,	<i>Br. Zool.</i> 6.
<i>Brit.</i>	Mul, <i>fœm.</i> Mules	<i>Germ.</i> Maulthier, Maulefel
<i>Fren.</i>	Le Mulet	<i>Dut.</i> Muyl-Eefel
<i>Ital.</i>	Mula	<i>Swed.</i> Mulafna
<i>Span.</i>	Mulo	<i>Dan.</i> Muule, v. Muul-Efel.
<i>Port.</i>	Mula	

THIS useful and hardy animal is the off-spring of the horse and afs, or afs 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 afs, tho' 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

tion 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 surprising, 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 nor 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 instance of deviation, the powers of propagation.

* Letters on the *Spanish* nation.

DIV. I. SECT. II. CLOVEN HOOFED.

* With horns.

** Without horns.

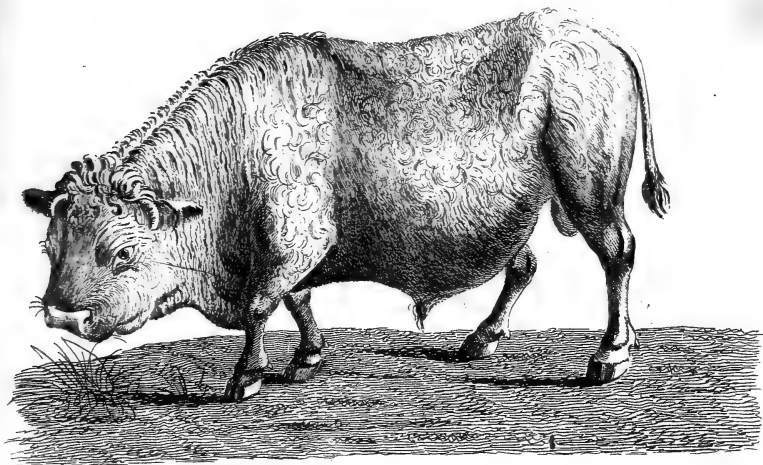
- II. ^{*} OX. Horns bending out laterally.
 Eight cutting teeth in the lower jaw, none in the
 upper.
 Skin along the lower side of the neck pendulous.

DOMESTIC.	<i>Raii syn. quad.</i> 70.	<i>Bos cornibus levibus teretibus, fursum reflexis.</i>
	<i>Merret pinax.</i> 166.	<i>Briffon quad.</i> 52.
	<i>Gesn. quad.</i> 25, 26, 92.	<i>Bos taurus. Lin. syst.</i> 98.
	<i>Taurus domesticus. Klein. quad.</i>	<i>Bos cornibus teretibus flexis.</i>
	10.	<i>Faun. Suec.</i> 46.
	<i>Charlton ex.</i> 8.	<i>Br. Zool. 7. Syn. quad.</i> No. 4.

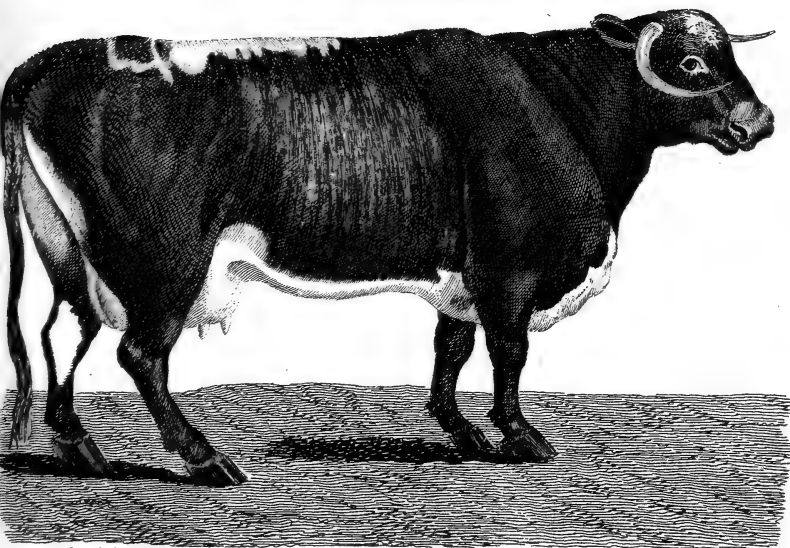
	BULL.	Cow.	OX.	CALF.
<i>Brit.</i>	Tarw	Buwch	Ych, Eidion	Llo
<i>Fren.</i>	Le Taureau	La Vache	Le Bœuf	Veau
<i>Ital.</i>	Toro	Vacca	Bue	Vitello
<i>Span.</i>	Toro	Vaca	Buey	Ternera
<i>Port.</i>	Touro	Vaca	Boy	Vitela
<i>Germ.</i>	Stier	Kuh	Ochs	Kalb
<i>Dut.</i>	Stier, Bul	Koe	Os	Kalff
<i>Swed.</i>	Tiur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

HIGHLAND BULL.



LANCASHIRE COW.



Moses Griffiths Del.



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 cheerfully 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 *Britains* 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 delivered down from our *British* ancestors to much later times; and continued equally prevalent during the whole period of our feudal government:

* *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 diffiliant. *Lib. iii. c. 6.*

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

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; that 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 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 carcases of not fewer than 80 beeves, 600 bacons, and 600 muttens*. The accounts of the several great feasts in after times, afford amazing instances of the quantity of cattle that were consumed in 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 quan-

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

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

tity of cattle that appear from the latest 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, 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 exceeding 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* are either entirely of foreign extraction, or our own improved by a cross with the foreign kind. The *Lincolnshire* kind derive their size from the *Holstein*

* That inquisitive and accurate historian *Maitland* furnishes us with this table of the quantity of cattle that were consumed in *London* above 30 years ago, 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	

breed; and the large hornless cattle that are bred in some parts of *England* come 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 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 *Cbillingham* castle in *Northumberland*, herds of cattle probably derived from the savage breed. They have lost their manes; but retain their color and fierceness: they were of a middle size; long leg'd; and had black muzzles, and ears: their horns fine, and with a bold and elegant bend. The keeper of those at *Cbillingham* 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 they would give six-pence per stone more for them. These cattle were wild as any deer: on being approached would instantly take to flight and galop away at full speed: never mix with the tame species; nor 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

Frequent mention is made of our savage 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. I believe these to have been the *Bifontes jubati* of *Pliny* found then in *Germany*, and 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 *Cæsar*, book VI. was of this kind, the same which is called by the modern *Germans*, *Aurochs*, i. e. *Bos sylvestris* ‡.

The ox is the only horned animal in these islands

* 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.

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

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 scarce any part of this animal without its use. The blood, fat, marrow, hide, hair, horns, hoofs, milk, cream, 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 *Britains*, 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.

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

* That these *vitula 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 polybistor: 56.*

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* *Co racles*, from the *British* *Cwrwgl*, a word signifying a boat of that structure.

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

Vellum is made of calves skin, and goldbeaters skin is made of a 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. These 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 †.

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

† *Stanley's hist. of churches*, 103.

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 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.

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

Horns twisted spirally, and pointing outwards. III. SHEEP.
 Eight cutting teeth in the lower jaw, none in the
 upper.

Ovis, Raii syn. quad. 73. *Aries, &c. Klein. quad.* 13. 4. FLEECY.
Gesn. quad. 71. *Aries laniger cauda rotunda*
Ovis aries, ovis anglica mutica *brevi Briffon quad.* 48.
 cauda scrotoque ad genua pen- *De Buffon. v. 1. tab. 1, 2.*
 dulis. Lin. syst. 97. *Br. Zool. 10. Syn. quad.*
Ovis cornibus compressis lunatis. *No. 8.*
Faun. Suec. 45.

	MALE.	FEMALE.	LAMB.
<i>Brit.</i>	Hwrd. 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 *Britains*; 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 left traces of manufactures

manufactures among the *Britains*, in the histories of those times.

On the coins or money of the *Britains* 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, and 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 what is more surprising, when after a long period we had 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 business 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* the second, by a patent

* *Cambden.* I. Preface. cxiii.

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* the third 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 wear of foreign cloth. Yet, 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 rectified, for it appears that, on the alliance that *Edward* the fourth made with the king of *Arragon*, he presented the latter with some ewes and rams of the *Cotswold* kind; which is 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* the third, and in the two succeeding reigns, our woollen manufactures

* *Stow* 419.

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

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 for 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 we 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 clothing business, than *Great-Britain*; and though the sheep of these islands afford fleeces of different degrees of goodness, yet there are not any but what may be used in some branch of it. *Herefordshire*, *Devonshire*, and *Cotswold 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;

* 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. Kerfies were also first made in *England* about that time.

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; 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 another kind, which is
clothed

* *Gmelin* describes an animal he found in *Siberia*, that in many particulars agrees with this; he calls it *Rupicapra cornubus*

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 *Atkol* house, the jaws of an ox, with teeth thickly incrustated with a gold colored *pyrites*; and the same might have happened to those of sheep had they fed in the same grounds, which were in the valley beneath the house.

Besides the fleece, there is scarce 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 mu-

bus arcticis; *Linnaeus* styles it *Capra ammon*. *Syst.* 97. and *Gesner*, p. 934. 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*: but having thrice within these few years had opportunity of examining the *Musimon*, we found that both in the form of the horns, and the shortness of the tail, it had the greatest agreement with the goat, in which *genus* we have placed it No. 11. of our *Synopsis*, with the trivial name of *Siberian*.

fical

fical instruments. The bones calcined (like other bones in general) form materials for tests for the refiner. The milk is thicker than that of cows; and consequently yields a greater quantity of butter and cheese; and in some places 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 this 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**.

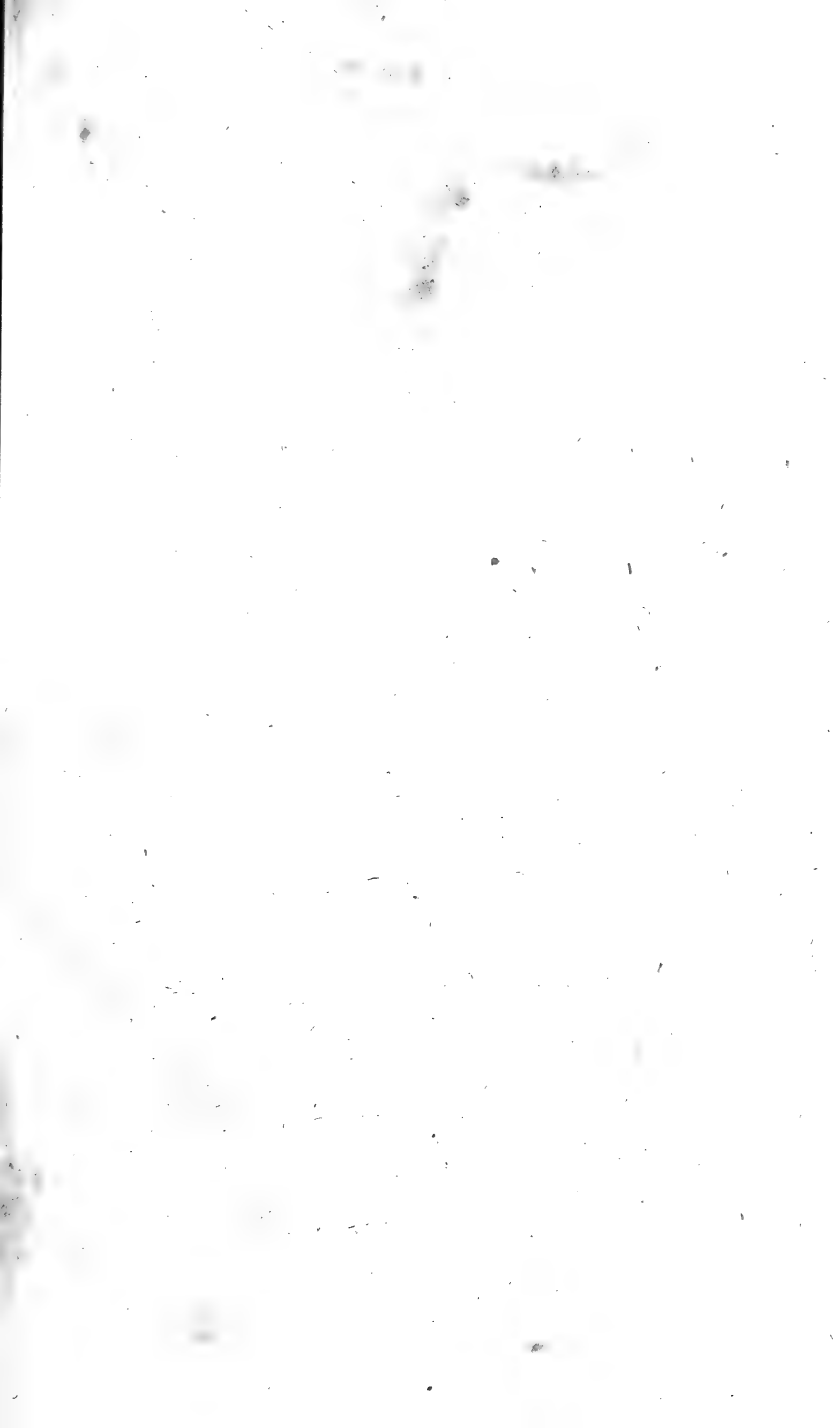
The sheep as to its nature, is a most innocent mild and simple animal; and conscious of its own defenceless state, remarkably timid: if attacked when attended by its lamb, it will make some shew of defence, by stamping with its feet, and pushing with its head: it is a gregarious animal, is fond of any jingling noise, for which reason the

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

leader of the flock has in many places a bell hung round its neck, which the others will constantly follow: it is subject to many diseases: some arise from insects which deposite 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 pthifick, 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; which plant 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 deposite its eggs above the nose in the frontal sinuses; when those turn into maggots they become excessive painful, and cause those violent agitations that we so often see the animal in. The *French* shepherds make a common practice of easing the sheep, by trepanning and taking out the maggot; this 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, which magpies and starlings contribute to ease it of, by lighting on its back, and picking the insects off.

* *Fasciola hepatica*, *Lin. Syst.* 648.



GOAT.



n. Magell.

Horns bending backwards and almost close at their base. IV. GOAT.

Eight cutting teeth in the upper jaw, none in the lower.

Male generally bearded.

Raii syn. quad. 77.

Meyer's an. i. Tab. 68.

Charlton ex. 9.

Klein quad. 15.

Gesn. quad. 266. 268.

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

Hircus cornibus interioribus
 curvatis, exterioribus rotundatis, infra
 carinatis, arcuatis. *Brisson*
quad. 38.

Capra Hircus, Lin syst. 94.

Capra cornibus carinatis arcu-
atis, Faun. Suec. 44.

Br. Zool. 13. *Syn. quad p.* 14.

5. DOMESTIC.

	MALE.	FEMALE.	KID.
<i>Brit.</i>	Bwch	Gafr	Mynn
<i>Fren.</i>	Le Bouc	La Chevre	Chevreaux
<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 is the tops of the boughs, or the tender 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 thought on to obviate this

evil. We have been informed, that there is a freeholder in the parish of *Trawsvynnyd*, in *Merionethshire*, who hath, for several years past, broke 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 that medicine arises from their promiscuous feeding.

This quadruped contributes in various instances to the necessities of human life; as food, as physic, 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 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 three feet from tip to tip.

The

The fuet 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 fuet 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. 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 furniture.

* Bolsters made of the hair of a goat were in use in the days of *Saul*; as appears from *I. Samuel*, c. 19. v. 13. The species 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 Syn. quad.* p. 15.

The flesh is of great use to the inhabitants of the country where it resides; and affords them 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 *Coch yr wden*, or hung venison.

The meat of a splayed 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 necessaries, but delicacies for the inhabitants.

The milk of the goat is sweet, nourishing and medicinal: it is an excellent succedaneum for ass's milk; and has (with a tea-spoon ful 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 pthifical people, before they were gone too far. 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 a great resort of patients of all ranks, as there is in *England* to the *Spaws* 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

tain 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 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 females continually from place to place, and fill the whole atmosphere around them with their strong and ungrateful odor; which though as disagreeable as *assa foetida* itself, yet 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 stables 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, and 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 ex-

* 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 *Ibex*.

cessive venery prevents longævity, for they seldom live in our climate above eleven or twelve years.

These animals with amazing swiftness and safety, climb 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 falling, or breaking their necks. 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 is the *Steinbock*, *Ibex* or wild goat, *Syn. quad.* No. 9. a species now found only in the *Alps*, and in *Crete*.

Horns upright, solid, branched, annually deciduous. V. DEER.
Eight cutting teeth in the lower jaw, none in the upper.

Red Deer, Stag or Hart.	Cervus cornibus teretibus ad	6. STAG.
Cervus <i>Raii</i> <i>syn. quad.</i> 84.	latera incurvis. <i>Briffon quad.</i>	
<i>Charlt. ex.</i> 11.	58.	
<i>Meyer's an.</i> Tab. 22.	Cervus Elaphus. <i>Lin. syst.</i>	
<i>Gesner quad.</i> 326.	93.	
<i>Grew's Museum,</i> 21.	C. cornibus ramosis teretibus	
<i>De Buffon,</i> Tom. vi. 63. Tab.	recurvatis. <i>Faun. Suec.</i> 40.	
9, 10.	C. nobilis. <i>Klein. quad.</i> 23.	
	<i>Br. Zool.</i> 15. <i>Syn. quad.</i>	
	No. 38.	

	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

Platycerata. <i>Plinii,</i> lib. xi.	Cervus cornuum unica et altiore	7. FALLOW.
c. 37.	summitate palmata. <i>Briffon</i>	
Eurycerata. <i>Oppian Cyneq.</i>	<i>quad.</i> 62.	
lib. 11. lin. 293.	Cervus dama. Cervus cornibus	
Fallow deer, or buck; cer-	ramosis recurvatis compressis:	
vus platyceros. <i>Raii syn.</i>	summitatibus palmatis. <i>Lin.</i>	
<i>quad.</i> 85.	<i>syst.</i> 93.	
Dama vulgaris. <i>Gesner quad.</i>	<i>Faun. Suec.</i> 42. <i>Br. Zool.</i> 15.	
307.	<i>Syn. quad.</i> No. 37.	
<i>Meyer's an.</i> Tom. i. Tab.	Cervus palmatus. <i>Klein. quad.</i>	
71.	25.	
<i>De Buffon.</i> Tom. vi. 161.		
Tab. 27, 28.		

Brit.

	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		Veado
<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 that of the ocean; nor 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 only employ 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.

But as the *Saxon* kings only appropriated those lands to the use of forests which were unoccupied; so no individuals received any 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

new forest in *Hampshire* is too trite an instance to be dwelt on : sanguinary laws were enacted to preserve the game ; and in the reigns of *William Rufus*, and *Henry the first*, it was less criminal to destroy one of the human species than a beast of chase*. Thus it continued while the *Norman* line filled the throne ; but when the *Saxon* line was restored under *Henry the second*, 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 that 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, 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* nor 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

* An antient historian speaks thus of the penalties incurred ; *Si ceruum aut aprum oculos eis evellebat ; amavit enim feras tanquam erat pater earum. M. Paris, 11,*

hunting-grounds became more limited; and as tillage and husbandry increased, the beasts of chase 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 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 pleasure; but confine them in 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 pos-

* 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.

feffed about that time of thirteen parks*. They feem to have forgot good king *Edgar's* advice, *Docemus etiam ut sacerdos non fit venator neque accipitrarius neque potator, sed incumbat suis libris sicut ordinem ipsius decet* †.

It was customary to falt the venifon for prefervation, like other meat. *Rymer* preserves a warrant of *Edward III.* ordering fixty deer to be killed for that purpofe.

The ftag and buck agree in their nature; only the latter being more tender is eafier tamed, and made familiar. The firft is become lefs common than it was formerly; its exceffive vitiousnefs during the rutting feafon, and the badnefs of its flefh, induce moft people to part with the fpecies. Stags are ftill found wild in the highlands of *Scotland*, in herds of four or five hundred together, ranging at full liberty over the vaft hills of the north. Some grow to a great fize: when I was at *Invercauld* Mr. *Farquharfon* affured me that he knew an inftance of one that weighed eighteen ftone *Scots*, or three hundred and fourteen pounds, exclusive of the entrails, head and fkin. Formerly the great highland chieftains ufed to hunt with the magnificence of an eastern monarch; affembling four or five thoufand of their clan, who drove the deer into the toils, or to the ftation their lairds had pla-

* *Peacham's Compleat Gentleman*, 261.

† *Leges Saxon.* 87.

ced themselves in : but as this pretence was frequently used 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 *Cornwal* 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 that 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* *.

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

* *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.

James the first out of *Norway**, where he passed some time when he visited his intended bride *Mary* of *Denmark* †. He observed 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 into 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 p. 51. of our *Synopsis* of quadrupeds.

The uses of these animals are almost similar; the skin of the buck and doe is sufficiently known to

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

† One of the *Welch* names of this animal (*Gievr-danas*, or *Danish* goat) implies that it was brought from some of the *Danish* dominions. *Ed. Llwyd. Ph. tr.* No. 334.

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

|| *Hasselquist. itin.* 290. § *Du Halde hist. China.* I. 315.

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 excessively compact, solid, hard and weighty; and make excellent handles for couteaus, knives, and several other utensils. They abound in that salt, 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.



St. Griffiths pinus.

P. Mayr.

- Δορκας, *Aristotelis de Part. lib.*
 iii. c. 2.
 Iorcas, Dorcas, *Oppian Cyneq.*
 lib. ii. lin. 296. 315.
 Caprea, *Plinii*, lib. xi. c. 37.
 Capreolus *Vulgo. Raii syn. quad.*
 89.
Camd. Brit. ii. 771.
Meyer's anim. ii. Tab. 73.
 Capreolus, *Sib. Scot. pars 3. 9.*
 Caprea, capreolus, Dorcas. *Ges-*
ner's quad. 296.
Merret pinax. 166.
- Cervus cornibus teretibus, 8. ROE.
 erectis. *Briffon quad.* 61.
De Buffon, Tom. vi. 289.
 Tab. 32, 33.
 Cervus minimus, *Klein quad.*
 24.
 Cervus capreolus, *Lin. syst.*
 94.
 C. Cornibus ramosis tereti-
 bus erectis, summitate bi-
 fida, *Faun. Suec.* 43. *Br.*
Zool. 18. *Syn. quad. No.*
 43. *Tour in Scotland.* 288
 Tab. xiv.
- Brit.* Iwrch, *fæm.* Iyrchell
Fren. Le Chevreuil
Ital. Capriolo
Span. Zorlito, Cabronzillo
 montes
- Port.* Cabra montes
Ger. Rehbock, *fæm.* Reh-
 geefs
Swed. Radiur, Rabock
Dan. Raedijr Raebuk

THE roebuck prefers a mountainous 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. In *France* they are more frequent; they are also found in *Italy*, *Sweden*, and *Norway*; and in *Asia* they are met with in *Siberia**. The first that are met with in *Great-Britain* are in the woods on the south side of *Loch Rannoch*, in *Pertshire*: the last in those of *Langwal*, on the

* *Bell's Travels.*

southern borders of *Catbness*: but they are most numerous in the beautifull forests of *Invercauld*, in the midst of the *Grampian* hills. They are unknown in *Ireland*.

This is the left of the deer kind, being only three feet nine inches long, and two feet three inches high before, and two feet seven behind. The weight 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 fulcated 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; but in the fourth its head is complete. The 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 ends 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

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. 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* were almost destroyed, and many years past 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 *roebuck* 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 roebuck 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, a he-goat*.

It will not be foreign to the present subject, to mention the vast horns frequently found in *Ireland*,

Fossil
Horns.

* *Leges Wallicæ*, 258.

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* 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 historic) 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

* *Pb. Tr.* No. 422.

† No. 227. *Boate's Nat. Hist. Ireland*, 137.

‡ 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 Plates VII. and IX. of my *Synopsis of Quadrupeds*.

accounts from the *Indians* who resort to the factories, that there is found a deer, about seven or eight hundred miles west of *York fort*, which they call *Waskeffeu*, and 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 between 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. Transf. abridg.* VII. 447.

** Without horns.

VI. HOG.

Divided hoofs.

Cutting teeth in both jaws.

9. COMMON. Sus, seu Porcus domesticus. *De Buffon, Tom. V. 99. Tab. 6. 7.*
Raii syn. quad. 92. Klein quad. 25.
Gesner quad. 872. Sus scrofa. Lin. syst. 102.
Charlton ex. 14. Sus dorso antice setoso, cauda
pilosa. Faun. Suec. 21.
longis acutis, cauda pi- Br. Zool. 19. Syn. quad. No. 54.
losa. Brisson quad. 74.

	BOAR.	Sow.	Hog.
<i>Brit.</i>	Baedd	Hwch	Mochyn
<i>Eren.</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: we should however reflect that filthiness is an idea merely relative to ourselves; but 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, nor any part of

of the creation uselefs. This obfervation may be exemplified in the animal before us; the hog alone devouring what is the refufe of all the reft, and contributing not only to remove what would be a nuifance to the human race, but alfo converting the moft naufeous offals into the richeft nutriment: for this reafon its ftomach is capacious, and its gluttony exceffive; not that its palate is infenfible to the difference of eatables; for where it finds variety, it will reject the worft with as diftinguifhing a tafte as other quadrupeds*.

This animal has (not unaptly) been compared to a mifer, who is ufelefs and rapacious in his life, but on his death becomes of public ufe, by the very effects of his fordid manners. The hog during life renders little fervice to mankind, except in removing that filth which other animals reject: his more than common brutality, urges him to devour even his own off-fpring. All other domeftic quadrupeds fhew fome degree of refpect to mankind; and even a fort of tendernes for us in our

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

The Ox eats 276. rejects 218.

Goat 449. 126.

Sheep 387. 141.

Horse 262. 212. *Aman. Acad. ii. 203.*

helpless years ; but this animal will devour infants, whenever it has opportunity.

The parts of this animal 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, 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 unweildy ; 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 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,

tumes, and scrophulous complaints are reckoned among them. *Linnaeus* observes that its flesh is wholesome food for athletic constitutions, or those that use much exercise; but bad for such as lead a sedentary life: it is though 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 pomatum; 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 *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 coun-

* *Hollingshed Descr, Brit.* 109.

try, as appears from the laws of *Hoel 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, any that were convicted of killing the wild-boar, the stag, or the roebuck †; and *Fitz-Stephen* tells us, that the vast forest that 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 QUADRUPEDS,

With large canine teeth, separated from the cutting teeth.

Six cutting teeth in each jaw.

Rapacious, carnivorous.

Six cutting teeth, and two canine.

Five toes before, four behind.

Blunt claws. Long visage.

VII. DOG.

Canis, *Raii syn. quad.* 175. *De Buffon*, *Tom. v. p.* 185.
Charlton ex. 26. *Klein quad.* 63.
Merret pinax, 168. *Canis familiaris. Lin. syst.* 56.
Gesner quad. 160, 249, 250. *Canis cauda recurva. Faun.*
Canis domesticus. Brisson quad. *Suec.* 5.
 170. *Brit. Zool.* 23. *Syn. quad.*
 No. 110.

IO. FAITH-
FULL.

Brit. Ci, *fæm.* Gast

Fren. Le Chien

Ital. Cane

Span. Perro

Port. Cam

Germ. Hund

Dut. Hond

Swed. Hund

Dan. Hund, *fæm.* 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 wrote for the use of his learned

ed 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 that 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	
			} Lap Dogs.		}	}	Spaniel gentle, or comforter
							Shepherd's dog
			II. Farm Dogs.		}	}	Mastiff, or ban dog
							} Mon- grels.
			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 fleetier variety, applied to a different chace*.

The *Sanguinarius*, or *Bloodhound*, or the *Sleut-bounde*† 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 stole out of the forest. It was remarkable for the acuteness of its smell, tracing the lost beast by the blood it had spilt; from whence the name is derived: This

* Prince *Griffith ap Conan* (who began his reign in the year 1079) divided hunting into three kinds: the first and noblest sort was the *Helpa ddolef*, which is hunting for the melody of the cry, or notes of the pack: The second sort was the *Helpa gyfartha*, or hunting when the animal stood at bay: The last kind was the *Helpa 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.

Species

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. They were 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 subtilty.

The *Agasæus*, or Gazehound, was the first: it chaced 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; and 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

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;

Γυρὸν, ἀσαρκότατον, λασιότριχον, ὄμμασι νωθές.

Curvum, macilentum, hispidum, oculis pigrum.

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

Ρίνεσι δ' αὐτε μάλινα 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 Gre-hound. *Dr. Caius* informs us, that it takes its name *quod præcipui gradus sit inter canes*; the 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 Bonbeddig*: Which signifies, that you may know a gentleman by his hawk, his horse and his gre-hound.

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

Nemesianus also celebrates our dogs.

Divisa Britannia mittit

Veloces, nostrique orbis venantibus aptos.

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 it in the note in the words of the historian.

* Le Roy *Richard* avoit ung levrier lequel on nommoit *Math*, tres beau levrier oultre mesure, & ne vouloit ce chien cognoistre nul homme hors le Roi, et quand le Roy vouloit chevaucher, ceiluy 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 chevaux tous seëlez, car ils vouloient monter a cheval, ce levrier nomme *Math* qui estoit coustumier 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 assit les deux pieds sur le col, et le commença 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 signifiante & a moy petite. Comment dist duc lentendez vous. Je lentends dist le Roy, le levrier vous festoye et receult au jourdhuy comme Roy d'Angleterre que vous ferez 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. Fueille 72. Edition de Paris, 1530.

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 powerfull chieftains in their magnificent hunting matches. It had as sagacious nostrils as the *Blood-hound*, 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 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 fight; and in the form of its body observed a medium between the hound, and the gre-hound. This probably is the kind now 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 them 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 last century. As soon as those animals were extirpated, the numbers of the dogs decreased; for 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, nor its swiftness: if it came into a warren, it neither barked, nor 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, and 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

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.

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 *Melitæus*, 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 it was in his time † a novelty.

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

The first species is the *Pastoralis*, or shepherd's dog; which is the same that is used at present, either in guarding our flocks, or in driving herds of cattle. This kind is so well trained for those

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

† In the reign of Queen *Elizabeth*.

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*; the *mastiff* or *band* 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* the first, 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,

Magnaque taurorum fracturi colla *Britanni* ||.
And *British* dogs subdue the stoutest bulls.

* *Manwood's Forest Law*.

† *Stow's Annals*, 1427.

‡ *Camd. Brit. in Hampshire*.

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

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

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 coast 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

* *Gratii Cynægeticon. Lin. 175.*

† *Strabo. Lib. iv.*

from its note: its only use was to alarm the family, by barking, if any person approached the house. Of this class was the *Verfator*, or turnspit; and lastly the *Saltator*, or dancing dog; or such as was taught 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 excrements 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. *Oderat anum alterius*: its scent is most exquisite, when its nose is moist: it treads lightly on its toes; scarce 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 dreams. *Procis rixantibus crudelis: catulit cum variis: mordet illa illos: cohæret copula junctus:*

“ it goes with young sixty-three days; and common-
 “ ly 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
 “ docible: hates strange dogs: will snap at a stone
 “ thrown at it: will howl at certain musical notes:
 “ all (except the *S. American* kind) will bark at
 “ strangers: dogs are rejected by the *Mabo-*
 “ *metans.*”

Vulpes. Raii syn. quad. 177

Morton's Northampt. 444.

Meyer's an. i. Tab. 36.

Canis fulvus, pilis cinereis
intermixtis. Brisson quad.
 173.

De Buffon. Tom. vii. 75.

Tab. 6.

Gesner quad. 966.

Vulpes auctorum. Hasselquist Itin. 11. F O X.
 191.

Canis vulpes. Lin. syst. 59.

Canis Alopex. C. cauda recta apice
nigro. vulpes campestris. ibid.

Canis cauda recta apice albo,
Faun. Suec. 7.

Vulpes vulgaris. Klein quad. 73.

Br. Zool. 28. *syn. quad. N.* 112.

Brit. Llwynog, *fæm* Llwynoges.

Fren. Le Renard

Ital. Volpe

Span. Raposa

Port. Rapoza

Germ. Fuchs

Dut. Vos

Swed. Raff

Dan. Rev

THE fox is a crafty, lively, and libidinous animal: it breeds only once in a year (except some accident befalls its first litter;) and brings four or five young, which, like puppies, are born blind. It is a common 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 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

* *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 chiens ; quoiqu'ils n'eussent jamais vu 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 couvrirent, 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.

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, and 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.

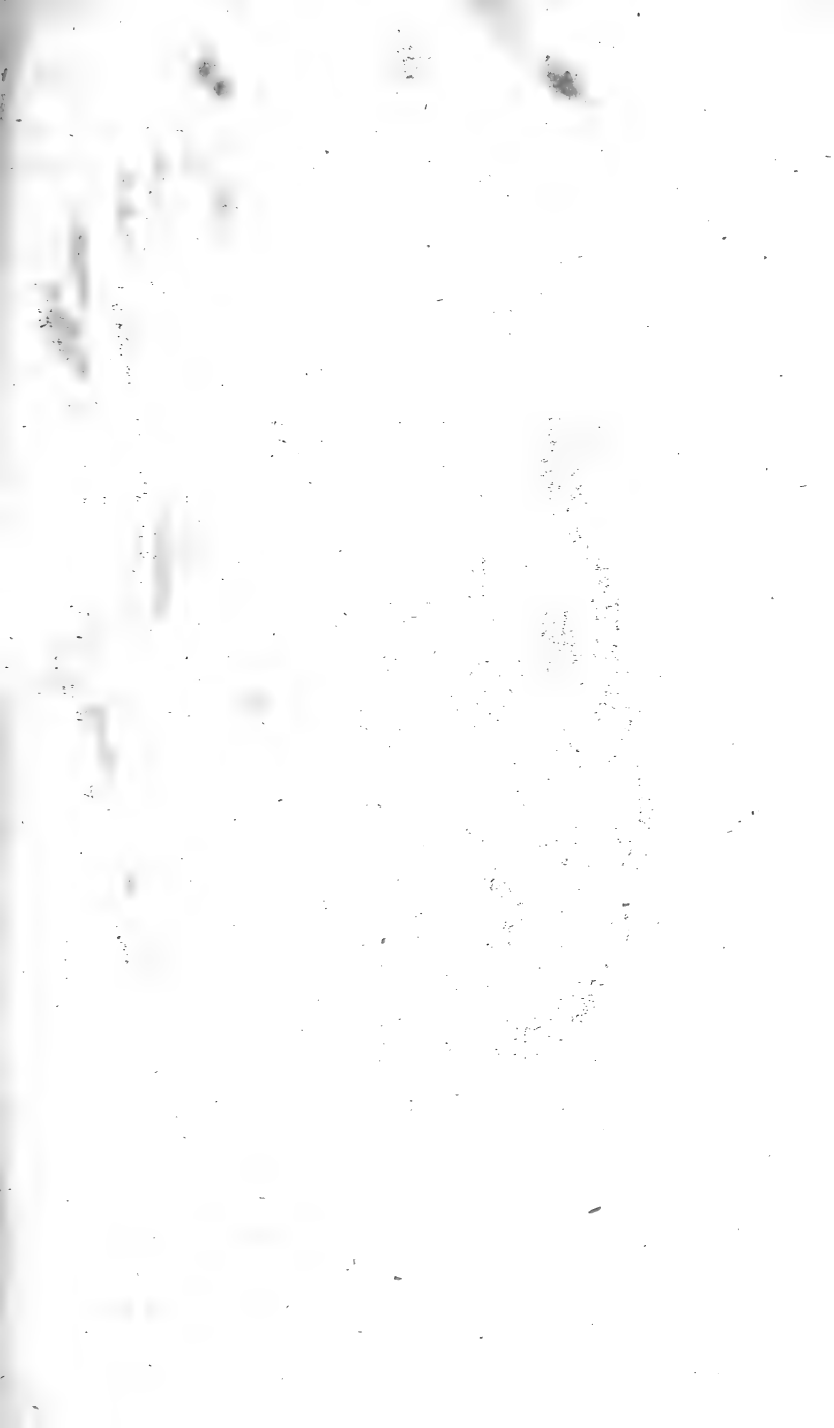
Of all animals the fox has the most significant eye, by which it expresses every passion of love, fear, hatred, &c. It is remarkably playful, but like all other savage creatures half reclaimed, will on the least offence bite those it is most familiar with.

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.

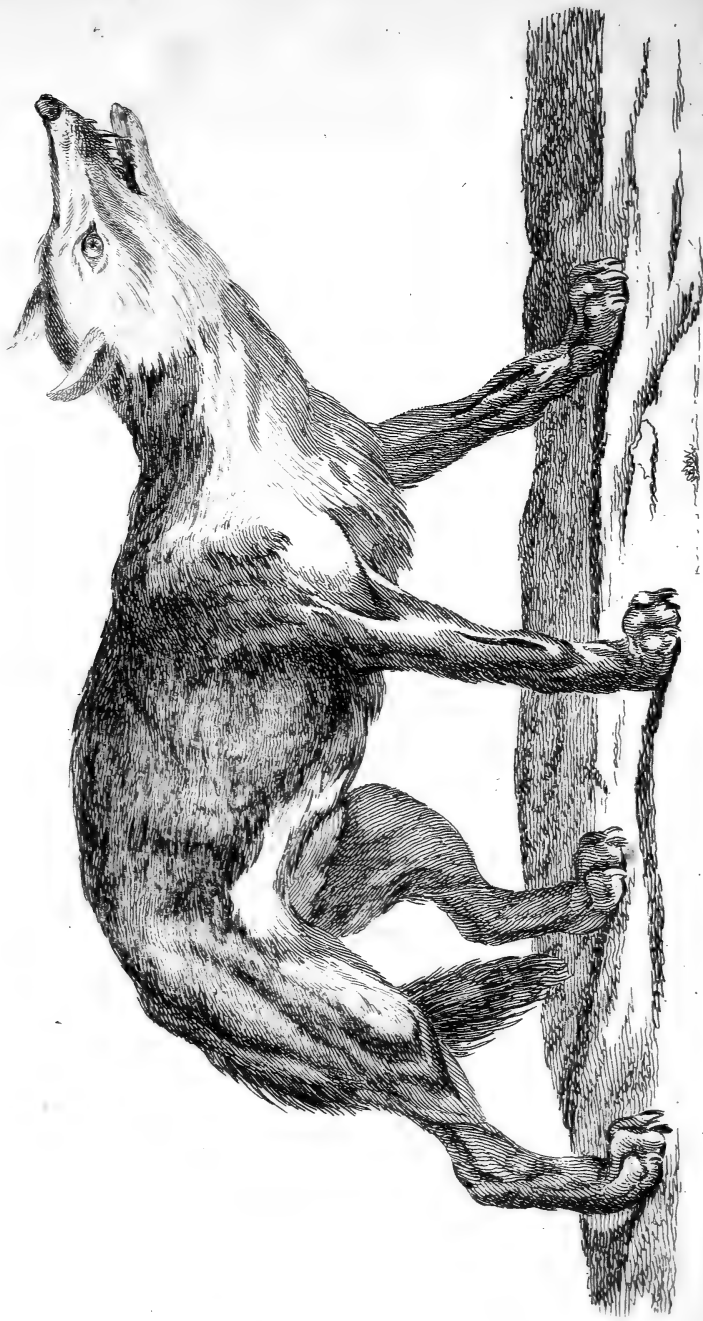
The smell of this animal in general is very strong, but that of the urine is most remarkably foetid. This seems so offensive even to itself, that it will take the trouble of digging a hole in the ground, stretching its body at full length over it, and there,
after

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; but 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 line cloaths. Vast numbers are taken in *Le Vallais*, and the *Alpine* parts of *Switzerland*. At *Lausanne* there are furriers who are
in



The WOLF.



Pl. V.

Mozell fecit

Demoulin's. pinx.

in possession of between two and three thousand skins, all taken in one winter.

There are three varieties of foxes found in the mountainous 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 *Milgi* or *gre-bound 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 least, 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, having a certain reward set on their heads.

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 Erwin 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 †.

WOLF,

* *Disc. Scot.* 10.† *Tom.* vii.

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 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* the first 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 adja-

* *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 ingeriis 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.*

cent county of *Derby*, as *Camden*, p. 902, informs us, certain persons at *Wormbill* held their lands by the duty of hunting and taking the wolves that infested the country, whence they were stiled *Wolve bunt*. To look back into the *Saxon* times we find that in *Athelstan's* reign wolves abounded so in *Yorkshire*, that a retreat was built at *Flixton* 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 *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. II. c. II. also *Knighton* 2356.

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

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 *Caledonian* bears were

B E A R.

* *Verstegan's Antiq.* 59.† *Smith's hist. Cork.* II. 226.

used to heighten the torments of the unhappy sufferers on the cross.

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

And *Plutarch* relates, that Bears were transported from *Britain* to *Rome*, where they were much admired †. Mr. *Lloyd* ‡ 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 *Pennarth*, 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* so late as the year 1057 ||, when a *Gordon*, in reward for his valor for killing a fierce bear, was directed by the King to carry three *Bears' heads* on his banner. They are still found in the mountainous parts of *France*, particularly about the *grande Chartreuse* in *Dauphinè*, where they make great havoc among the out-ricks of the poor farmers. Long after their extirpation out of this kingdom, these animals were imported for an end, that

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

† *Plutarch*, as cited by *Camden*, p. 1227. ‡ *Raii syn. quad.* 214.

|| *Hist. of the Gordons. I, 2.*

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 our 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 *criftnas* with his lord-
' shippes beests for makynge of his lordschip pas-
' tyme the said xii days*.

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 porpentines (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 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.

* *Northumberland Household Book.*

† *Stow's hist London* 1, 79.

‡ *Ibid.*

|| *Idem.* 118.

- VIII. CAT. Six cutting teeth and two canine in each jaw.
 Five toes before; four behind.
 Sharp hooked claws, lodged in a sheath, that may
 be exerted at pleasure.
 Round head: short visage: rough tongue.

12. WILD. *Felis pilis ex fusco flavicante, et albido variegatis vestita, cauda annulis alternatim nigris et ex fordide albo flavicantibus cincta.* *Briffon quad.* 192.
De Buffon, Tom. vi. 20. Tab 1.
- Morton Northampt.* 443.
Gesner quad. 325.
Catus sylvestris ferus vel ferus eques arborum, Klein quad. 75.
Br. Zool. 22. *Syn. quad.* No. 133.

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

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 havoc 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 often the females of the latter will 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 chase; as appears by the charter of *Richard* the second, to the abbot of *Peterborough*, giving him leave to hunt the hare, fox, and wild cat. The use of the fur was in lining

of robes ; but it was esteemed not of the most luxurious kind ; for it was ordained ‘ that no abbesses 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.

DOMESTIC.	<p><i>Felis domestica seu catus. Raii</i> <i>syn. quad. 170.</i> <i>Charlton ex. 20.</i> <i>Meyer’s an. i. Tab. 15.</i> <i>Gesner quad. 317.</i> <i>Briffon quad. 191.</i></p>	<p><i>De Buffon, Tom. vi. 3. Tab. 2.</i> <i>Felis catus, Lin. Syst. 62.</i> <i>Felis cauda elongata, auribus</i> <i>æqualibus. Faun. Suec. 9.</i> <i>Br. Zool. 21. Syn. quad. No.</i> <i>133.</i></p>
<p><i>Brit. Cath, maf. Gwr cath</i> <i>Fren. Le Chat</i> <i>Ital. Gatto</i> <i>Span. Gato</i> <i>Port. Gato</i></p>	<p><i>Germ. Katz</i> <i>Dut. Cyperse Kat. Huyskat.</i> <i>Swed. Katta</i> <i>Dan. Kat.</i></p>	

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

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

drinks little : is fond of fish : it 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*, *Cat-mint*, *valerian*, &c*.

Our ancestors seem to have had a high sense of the utility of this animal. That excellent Prince *Hoel 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

* Vide *Lin. syst.*

† *Leges Wallicæ*, p. 247, 248.

the tip of the former *. This last quotation is not only curious, as being an evidence of the simplicity of ancient 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.

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

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

Six cutting teeth, two canine, in each jaw,
 Five toes before; five behind: very long strait
 claws on the forefeet.

IX. B A D-
 G E R.

A transverse orifice between the tail, and the anus.

Badger, Brock, Gray, Pate,
 Taxus five Meles. *Raii syn.*
quad. 185.

Meyer's an. i. Tab. 31.

Sib. Scot. 11.

Meles pilis ex fordidè albo et
 nigro variegatis vestita, ca-
 pite tæniis alternatim albis
 et nigris variegato. *Briffon*
quad. 183.

De Buffon, Tom. viii. Tab. 7.
 p. 104.

Gesner quad. 686.

Ursus meles. Ursus cauda
 concolore, corpore supra ci-
 nereo, subtus nigro, fascia
 longitudinali per oculos au-
 resque nigra. *Lin. syst.* 70.

Coati cauda brevi. *Klein quad.*
 73.

Meles unguibus anticis lon-
 gissimis. *Faun. Suec.* 20.

Br. Zool. 30. *Syn quad. No.*
 142.

13. COMMON.

Brit. Pryf Llwyd, Pryf pen-
 frith

Fren. Le Taiffon, Le Blaireau

Ital. Taffo

Span. Texon

Port. Texugo

Germ. Tachs

Dut. Varkens Das

Swed. Graf Suin

Dan. Grevlin, Brok

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 an animal perfectly inoffensive: roots, fruits, grass, insects, 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 scarce any creature would hazard the attacking it; few animals defend themselves better, or bite harder: when pursued, they soon come to bay, and fight with great obstinacy. It is an indolent animal, 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.

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

The nose, chin, lower sides of the cheeks, and the

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 ancients, 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

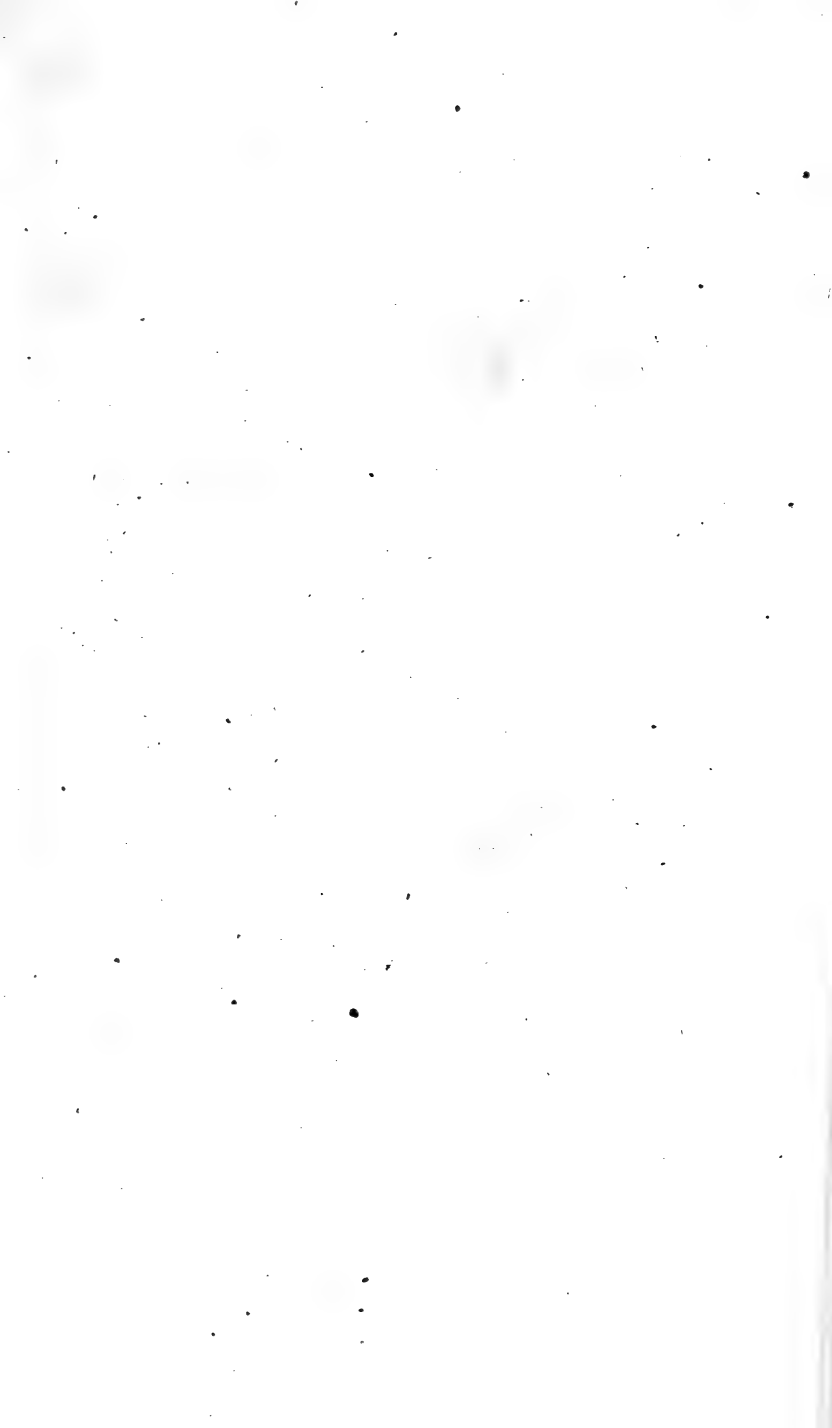
* *Alia solertia in metu Melibus, sufflatæ cutis distentu ictus hominum et morfus canum arcent. Lib. viii. c. 38.*

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.

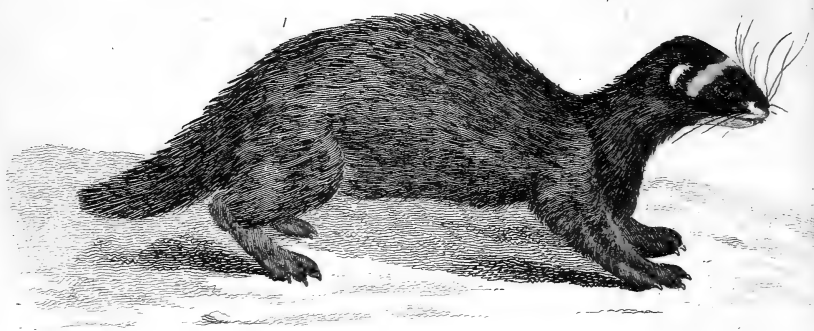
The skin of the badger, when dressed with the hair on, is used for pistol furniture. The Highlanders make their pendent pouches of it. The hair is frequently used for making brushes to soften the shades in painting, which are called sweetening tools. These animals are also hunted in the winter nights 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 *Cbina* it seems to be more common food than in *Europe* : for Mr. *Bell* * says, he has seen about a dozen at one time in the markets at *Pekin* ; and that the *Cbinese* 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.

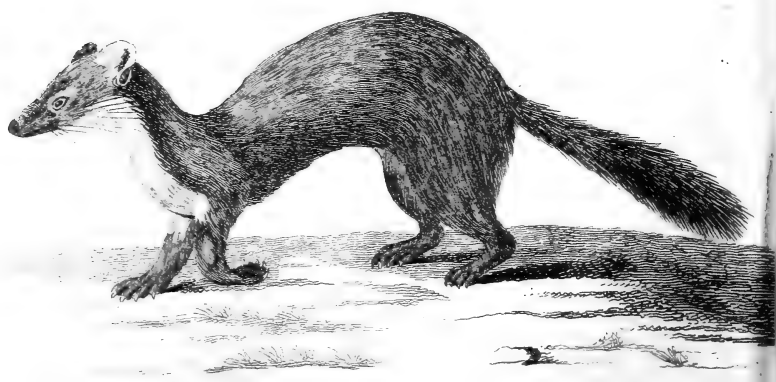
* *Bell's Travels*, I, 83.



FITCHET.



MARTIN .



Six cutting teeth, two canine, in each jaw.

X. WEESEL.

Sharp nose, slender bodies.

Five toes before, five behind.

- Putorius. Polecat or Fitchet. *De Buffon, Tom. vii. 199. Tab. 14. FITCHET.*
Raii syn. quad. 199.
Meyer's an. ii. Tab. 6.
Charlton ex. 20.
Gesner quad. 767.
 Mustela pilis in exortu ex cinereo albidis, colore nigricante terminatis, oris circumferentia alba. *Briffon quad. 180.*
De Buffon, Tom. vii. 199. Tab. 23.
 Mustela putorius, *Lin. syst. 67.*
 Mustela foetida, *Klein quad. 63.*
 Mustela flavescens nigricans, ore albo, collari flavescens. *Faun. Suec. 16.*
Br. Zool. 37. Syn. quad. No. 152.

<i>Brit.</i>	Ffwlbard	<i>Germ.</i>	Iltis, ulk, Buntfing
<i>Fren.</i>	Le Putois	<i>Dut.</i>	Bonfing
<i>Ital.</i>	Foetta, Puzolo	<i>Swed.</i>	Iller
<i>Span.</i>	Putoro	<i>Dan.</i>	Ilder

THE length of this animal is about seventeen inches, exclusive of the tail; that of the tail six. The shape of this animal 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 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.

DESCRIP.

The

The ears are short, rounded and tipped with white: the circumference of the mouth, that is to say, the ends of the lower and upper mandibles 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: they generally reside 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 havoc in warrens.

It will bring five or six young at a time. Warreners assert, that the fitchet will mix with the ferret; and 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*,

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 *Llansfowel* 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 male of this species for it to couple with; neither was there any within three miles, and those 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 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 dressed with the hair on, and used as other furs for tippetts, &c. and is also sent abroad to line cloaths.

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

† *Καὶ γὰρ ἀγρίας ἄς ἢ λυβύη φέρει.* *Strabo*, Lib. iii. p. 144. *Edit. Casaubon.*

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. *Mutela pilis in exortu albidis* castaneo colore terminatis vestita, gutture albo. *Briffon quad.* 178. *De Buffon, Tom. vii.* 161. Tab. 18. *Mutela martes.* *Lin. syst.* 67. *M. martes.* *Klein. quad.* 64. *M. fulvo-nigricans gula pallida.* *Faun. Suec.* 15. *Br. Zool.* 38. *Syn. quad.* No. 154.
- | | | | |
|--------------|------------------|--------------|----------------------------|
| <i>Brit.</i> | Bela graig | <i>Germ.</i> | Haufs 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.

THIS is the most beautifull 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 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 havoc among poultry, game, &c. and will eat mice, rats, and moles. With us it inhabits woods, and makes its lodge in the hollows of trees ; and brings from four to six young at a time.

DESCRIP.

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.

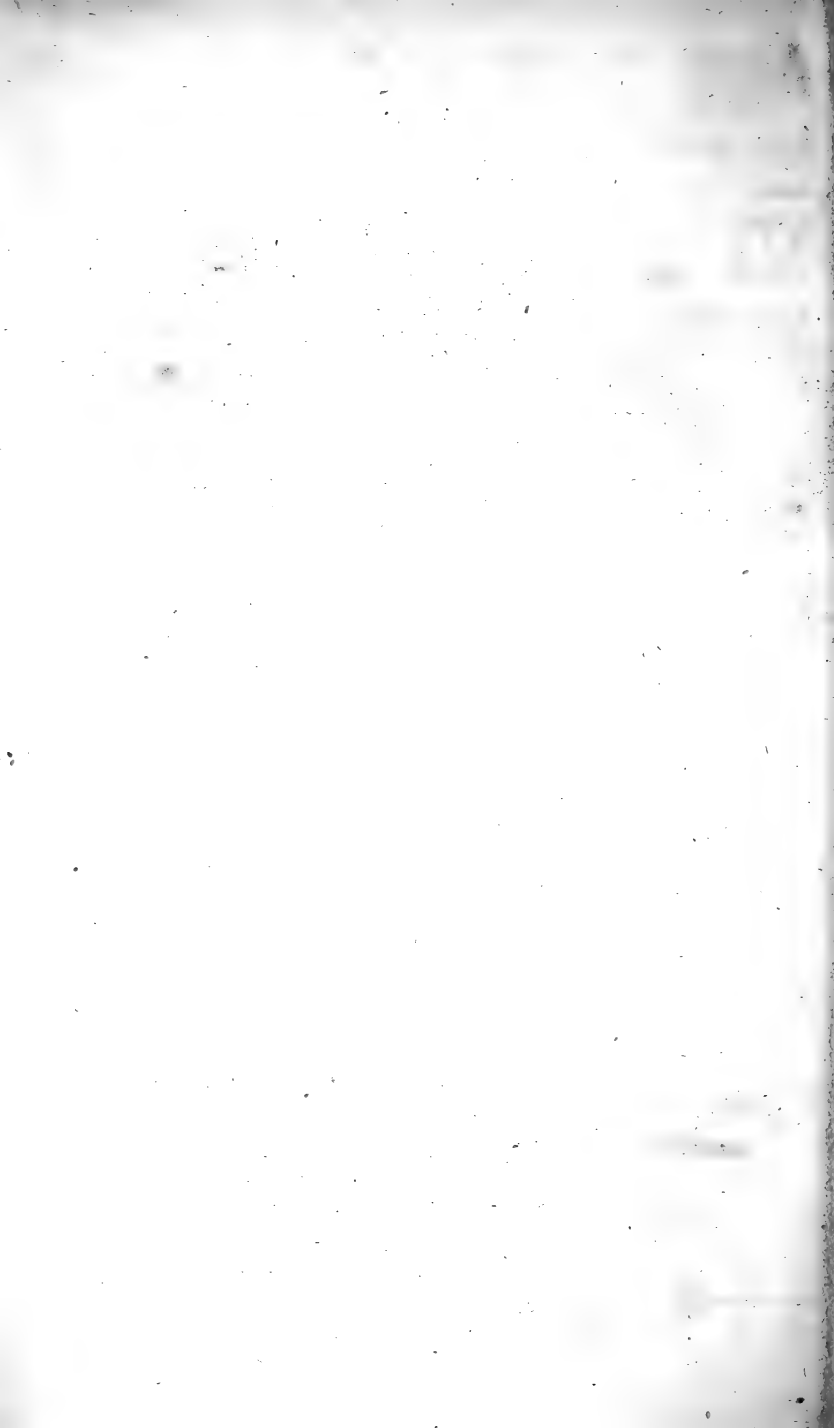
The

OTTER.



BADGER.





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 chestnut 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 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.

The skin and excrements of this animal have a FINE SMELL. 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.	Martes abietum. <i>Raii syn.</i>	terminatis vestita, gutture flavo. <i>Briffon quad.</i> 179.
	<i>quad.</i> 200. <i>Meyer's an.</i> ii. Tab. 5.	<i>De Buffon, Tom.</i> vii. 186. Tab. 22.
	Martes fylvestris. <i>Gesner quad.</i>	<i>Br. Zool.</i> 39. <i>Syn. quad.</i>
	765.	No. 155.
	Mustela pilis in exortu ex cine- reo albidis castaneo colore	
	<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, Mar- tora, Martorello	<i>Dut.</i> Marter
	<i>Span.</i> Marta	<i>Swed.</i>

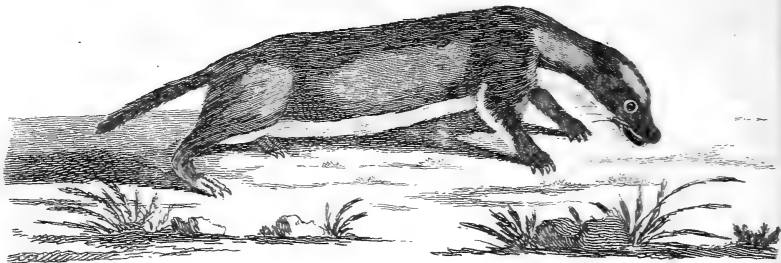
THIS species is found in *Great Britain*; but is much less common in *England* than the former: it is sometimes taken in the counties of *Merioneth* and *Caernarvon*, as I was informed by my late worthy friend *Mr. W. Morris*, where it is distinguished from the other kind, by the name of *bela goed*,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

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

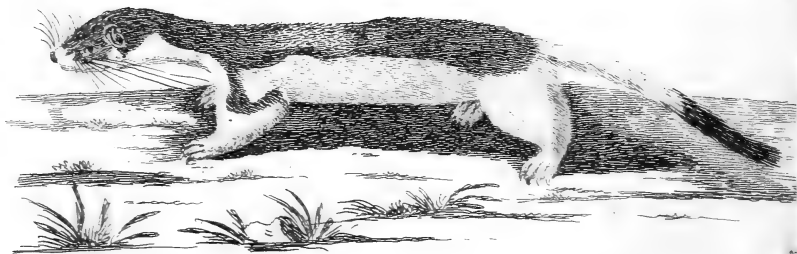
from



WEESSEL.



ERMINE.



M Griffiths del

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 differences between this and the former kind, consist in the size, this being less: the breast too is yellow; the color of the body much darker, and the fur in general greatly superior in fineness, beauty, and value.

The Weasel or Weefel. <i>Mustela vulgaris</i> : in <i>Yorkshire</i> , the Fitchet or Foumart. <i>Raii syn. quad.</i> 195.	<i>Mustela supra rutila</i> , infra alba. <i>Briffon quad.</i> 173.	17. COMMON.
<i>Girald. Cambrenf.</i> 149.	<i>De Buffon, Tom. vii.</i> 235. Tab. 29.	
The Whitred. <i>Sib. Scot.</i> 11.	<i>Gesner quad.</i> 753.	
	<i>Mustela vulgaris. Klein'quad.</i> 62.	
	<i>Br. Zool.</i> 39. <i>Syn. quad.</i> No. 150.	

<i>Brit.</i> Bronwen	<i>Germ.</i> Wisel
<i>Fren.</i> La Belette	<i>Dut.</i> Weezel
<i>Ital.</i> Donnola, Ballottula, Benula	<i>Swed.</i> Vefla
<i>Span.</i> Comadreia	<i>Dan.</i> Væfel
<i>Port.</i> Doninha	

THIS species is the least of the weasel kind; DESCRIP.
 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.

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

The

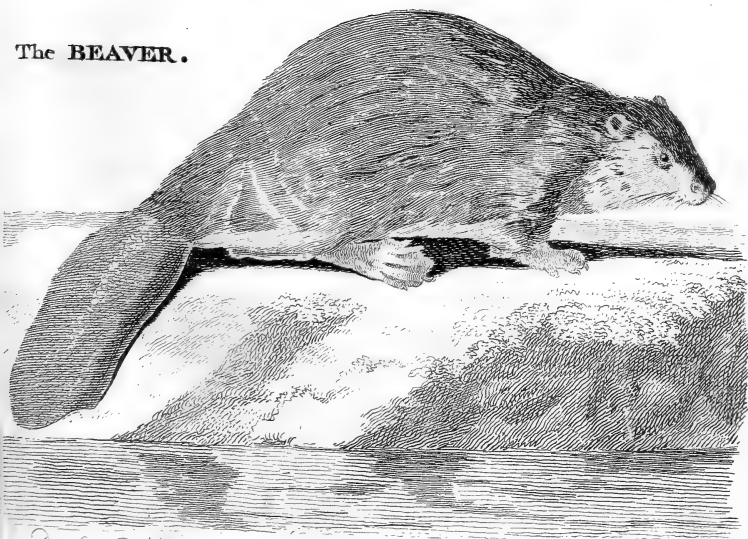
COLOR. The whole upper part of the body, the head, tail, legs, and feet are of a very pale tawny brown. The whole under side of the body from the chin to the tail is white; but beneath the corners of the mouth on each jaw is a spot of brown.

PREY. 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. 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 weasel also preys upon moles, as appears by their 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 scarce any place is secure from it; and its body is so small, that there is scarce 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 *Linnaeus* with the Stoat or Ermine. He seems unacquainted with our weasel in its brown color; but describes it in the white state under the title of *Snomus*, or *Mustela nivalis*.



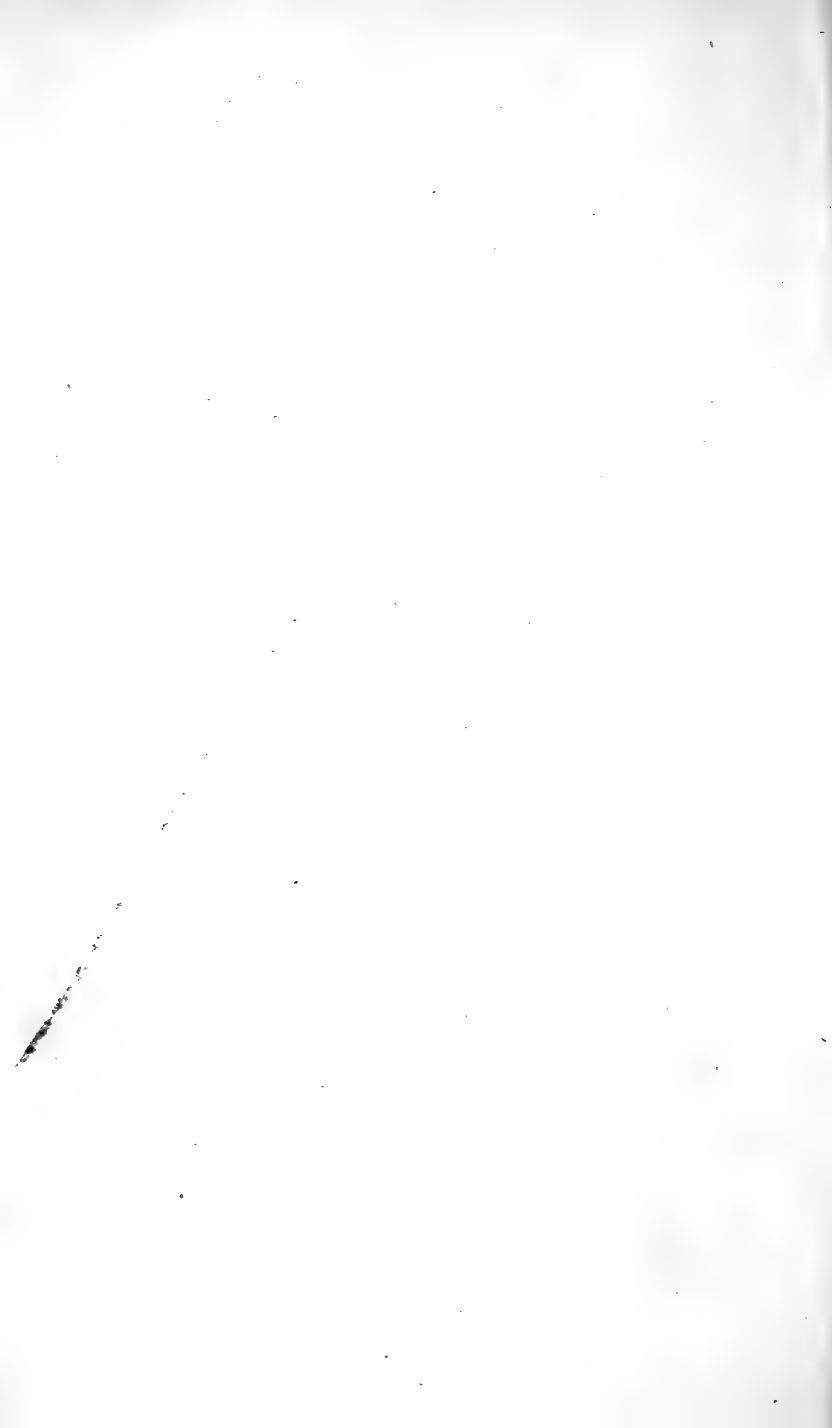
The MUSIMON.



The BEAVER.

De Sève Del.

Marell. fec.



nivalis *. I have met with it in that circumstance, in the isle of *Ilay*.

Mustela candida, animal ermineum, *Raii syn quad.* 198
Mort. Northampt. 442.
Meyer's an. ii. Tab. 23, 24.
Mustela hieme alba, ætate supra rutila infra alba, caudæ apice nigro. *Briffon quad.* 176.
De Buffon, vii. 240. *Tab.* 29.

Fig. 2. Tab. 31. Fig. 1.
Gesner quad. 753.
Mustela erminea. M. plantis fissis, caudæ apice atro. *Lin. syst.* 68. *Faun. Suec.* 17.
Pontop. Norway. Part ii. p. 25.
Br. Zool. 40. *Syn. quad.* No. 151.

18. STOAT, OR ERMINE.

Brit. Carlwm
Fren. L'Hermine, Le Roselet
Ital. Armellino
Span. Armino, Armelina

Germ. Hermelin, *Klein.* 63.
Swed. Hermelin, Lekatt
Dut. Hermilyn
Dan. Hermelin, Lekat

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 tipt with black, is longer in

DESCRIP.

* *Similima Ermineo sed dimidio minor, caudæ apice pilo vix uno alterove albo.* *Faun. Suec.* No. 18. *Syst. Nat.* 69.

proportion to the bulk of the animal, and more hairy; whereas the tail of the weefel 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 float haunts woods, hedges and meadows; especially where there are brooks, whose sides are covered with small bushes; and sometimes (but less frequently than the weefel) inhabits barns, and other buildings.

ERMINES.

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 *Kamtshatka* 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 up with a stick, to which is fastned 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 in-

HOW TAKEN.

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

stead 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 weasel. That animal is also found white; but may be easily distinguished from the other in the ermine state, by the tail, which in the weasel 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 weasel, its food being birds, rabbits, mice, &c. its agility the same, and its scent equally fetid: it is much more common in *England* than that animal.

* *Oeuvres de Maupertuis*, iii. 187.

XI. OTTER. Six cutting teeth, two canine, in each jaw.
Five toes on each foot; each toe palmated.

19. OTTER. Le Loutre, *Belon* 26. pl. 27 *De Buffon*, Tom. vii. 134. Tab.
Lutra. The otter. *Raii syn.* 11. xiii. 322.
quad. 187. *Mustela lutra.* *Lin. syst.* 66.
Grew's Mus. 16. *Pontop. Norw.* 2. 27.
Morton's Northampton. 444. *Lutra digitis omnibus aquali-*
Sib. Scot. 10. *bus. Faun. Suec.* 12.
Gesner quad. 687. *Br. Zool.* 32. *Syn. quad.* No.
Lutra castanei coloris. Bris- 138.
son quad. 201.

<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>			

DESCRIP. **T**HE usual length of this animal is three feet three inches, including the tail, which is sixteen inches long.

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

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 best: 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 had allotted to an animal, whose food is fish; and whose haunts must necessarily be about waters.

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 is only used 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 nume-

F U R.

rous. Westward of *Carolina**, there are some found of a white color inclining to yellow.

MANNERS.

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 have been 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* 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, the eating of 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 *bolts*, or lodges, that in case of high floods,

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

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.

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

SEA OTTER.

H 4

seek

* Τοιαῦτα δὲ εἰν ὁ τε καλεμενος κατωρ, και το σαθηριον και το σαλυριον, και ενυδρις, και ἡ καλεμενη λαλαξ. εἰ δὲ τῆλο πλατυτερον ενυδριδος, και οδοντας εχει ιχυρας εξισσα γαρ νυκτωρ πολλας, τας περι τον ποταμον κερκιδας επιεμνει τοις οδυσσιον. δακνει δὲ τες ανθρωπως και ἡ ενυδρις, και εκ αφησιυ, ως λεγασι, μεχρῖς αν οσε ψοφον ανεστη. το δε τριχωμα εχει ἡ λαλαξ σκληρον, και το ειδος μεταξυ τε της φωκης τριχωματος, και τε της ελαφς. *Aristot. Hist. Anim.* p. 905. A.

Sunt etiam in hoc genere (sc. animalium quadrupedum quæ vivunt ex lacubus et fluviiis petunt) fiber, satherium, satyrium, lutris, latax, quæ latior lutre est, dentesque habet robustos,
quippè

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 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 accounts 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

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. Latæ pilus durus, specie inter pilum vituli marini et cervi.

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

† *Girald. Camb. Itin.* 178, 179.

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 thro' *Nant Frankon*; the other in the river *Conway* 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 times; by the laws of *Hoel dda*, the price of a beaver's skin (*Croen Lloftlydan* †) was fixed at one hundred and twenty pence, a great sum in those days.

* *Raii fyn. quad.* 213.

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

D I V. II. S E C T. II.

With only two cutting teeth in each jaw.
Herbivorous, frugivorous.

XII. HARE. Two cutting teeth in each jaw.
Long ears: short tail.
Five toes before, four behind.

20. C O M-
M O N.
- | | |
|--|--|
| Lepus, <i>Plinii</i> , lib. viii. c. 55. | <i>De Buffon</i> , Tom. vi. 246. |
| The Hare. <i>Raii syn. quad.</i> 204. | Tab. 38. |
| White Hare. <i>Mort. Northampt.</i> | Lepus timidus. <i>Lin. syst.</i> 77. |
| 445. | Lepus cauda abrupta pupil- |
| <i>Sib. Scot.</i> 11. | lis atris. <i>Faun. Suec.</i> 35. |
| <i>Meyer's an.</i> ii. Tab. 32. | Lepus vulgaris cinereus. |
| <i>Gesner quad.</i> 605. | <i>Klein quad.</i> 51. |
| Lepus caudatus ex cinereo ru- | <i>Br. Zool.</i> 41. <i>Syn. quad.</i> No. |
| fus. <i>Briffon quad.</i> 94. | 184. |
-
- | | |
|----------------------------------|------------------------|
| <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> Lièbre | <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 pointing out the admirable contrivance of its several properties and parts, would be frustrating the chief design of this

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.

EYES,

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 give 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

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 off: it is particularly fond of pinks, parsley, and birch.

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

* P. 118.

cluded;

cluded; 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 ancients were acquainted with this circumstance. *Horace* alludes to it in the second satire of the fourth 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 increase of this animal gives the following elegant account of it. *Lepus omnium prædæ nascens, solus præter Dasypodem superfat, 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 *fil*; 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

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

† *Faun. Suec.* 25.

supply a sufficient number, vast quantities are annually imported from *Russia* and *Siberia*.

The hare was reckoned a great delicacy among the *Romans**; the *Britains*, 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 *Boadicia*, immediately before her last conflict with the *Romans*, let loose a hare she had concealed in her bosom, which taking what was deemed a fortunate course, animated her soldiers by the omen of an easy victory over a timid enemy ‡.

21. ALPINE. *Lepus hieme albus Forster hist. nat. Alpine Hare. Syn. quad.*
Volgæ. Pb. Tr. LVII. 343. No. 184.

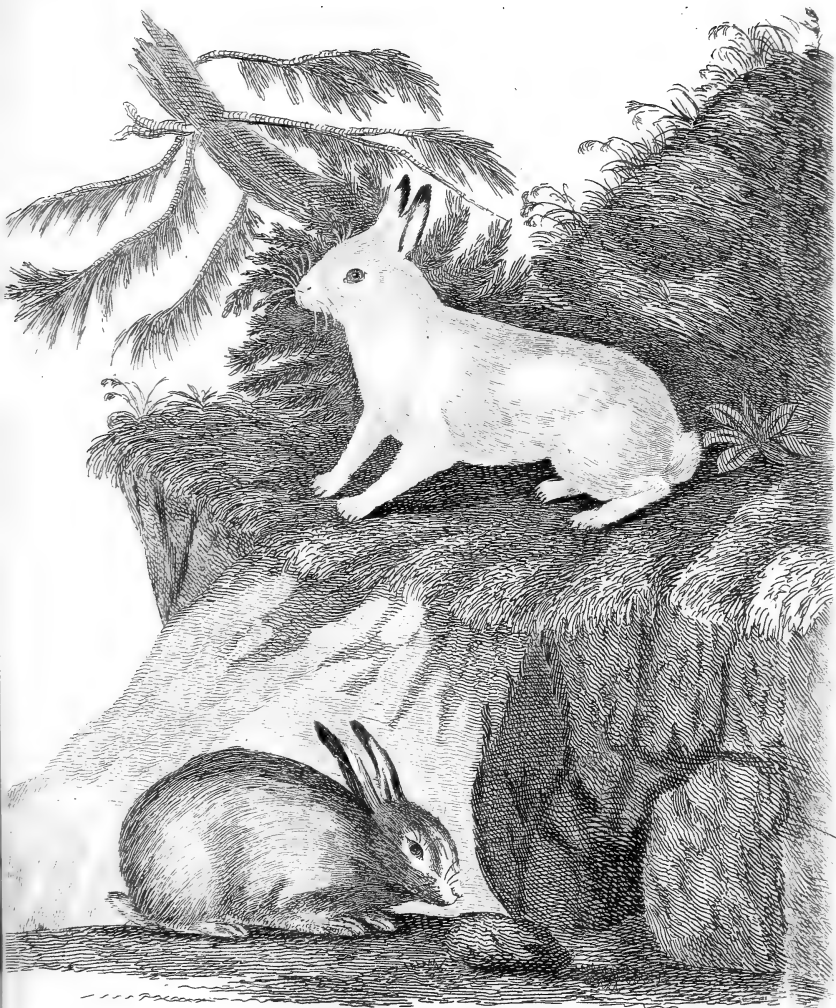
THE *Alpine* hare inhabits the summits of the *highland* mountains, never descends into the vales, or mixes with the common species which is frequent in the bottoms: it lives among the rocks

* Inter aves turdus, si quid me iudice verum:
 Inter quadrupedes gloria prima Lepus. *Martial. 13. 92.*

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

‡ Ταῦτα εἰπῶσα λαγωῦν μὲν ἐκ τῆς κοιλίας, &c. *Xiphilini Epitome Dionis. 173.*

with



ALPINE HARE. N^o 21.

RABBET. N^o 22.



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 6 lb. $\frac{1}{2}$. 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. 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.

* *Kramer Austr.* 315.

22. RABBIT. Cuniculus. The Rabbet, or Lepus cuniculus. *Lin syst.*
 Cony. *Raii syn. quad.* 205. 77.
Meyer's an. i. Tab. 83. Lepus cauda brevissima pa-
Gesner quad. 362. pillis rubris. *Faun. Suec.*
 Lepus caudatus, obscure cinere- 26.
 us. *Briffon quad.* 95. Cuniculus terram fodiens;
De Buffon Tom. vi. 303. Tab. Klein *quad.* 52.
 50, 51. *Br. Zool.* 43. *Syn. quad. No.*
 186.
- | | |
|-----------------------|----------------------------------|
| <i>Brit.</i> Cwningen | <i>Ger.</i> Koniglein, Kaninchin |
| <i>Fren.</i> Le Lapin | <i>Dut.</i> Konyn |
| <i>Ital.</i> Coniglio | <i>Swed.</i> Kanin |
| <i>Span.</i> Conejo | <i>Dan.</i> Kanine |
| <i>Port.</i> Coelho | |

IT is well observed by *Pliny*, that nature ‘ hath
 ‘ shewed great kindness, in causing those things
 ‘ to be most prolific, that are the most harmless
 ‘ and the properest for our food*.’

PROLIFIC. This excellent observation of his, cannot be
 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 quotation. 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

* *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.*

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 prevents the too great increase: not only men, but hawks, and beasts of prey, make dreadful havoc among the species. Notwithstanding these different enemies, 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 military force from the *Romans*, in the time of *Augustus*, in order to extirpate them*. Their native country is *Spain*, where they were taken by means of ferrets, as we do at present, 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 into *China*. The *English* counties that are most noted for these ani-

FUR,

* *Plin.* lib. viii. c. 55. *Strabo*, lib. iii.

† *Strabo*, iii. 144.

‡ *Faun. Suec.* 26.

mals are *Lincolnshire*, *Norfolk*, and *Cambridgeshire*. *Methold*, in the last county, is famous for the best fort for the table: the soil there is sandy, and full of mosses and the *Carex* grass. 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.

Formerly the silver-haired rabbits were in great esteem for lining of cloaths, and their skins sold at three shillings a piece*; but since the introduction of the more elegant furs, the price is fallen to sixpence 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.

Two cutting teeth in each jaw.

Four toes before; five behind.

Tufted ears.

Long tail cloathed with long hair.

XIII.
SQUIRREL.

- Sciurus vulgaris. Raii syn. quad.* palmis 4-dactylis plantis 23. COMMON.
214. 5-dactylis. *Lin. syst.* 86.
Meyer's an. i. Tab. 97. *Sciurus palmis folis foliens.*
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. 32. *Br. Zool. 44. Syn. quad.*
Sciurus auriculis apice barbatis, *No. 206.*

- | | | | |
|--------------|-------------------------------------|--------------|---------------------------|
| <i>Brit.</i> | Gwiwair | <i>Germ.</i> | Eichorn, Eichmerm-
lin |
| <i>Fren.</i> | L'Ecureuil | <i>Dut.</i> | Inkhoorn |
| <i>Ital.</i> | Sciattolo, Schiarro, Schi-
ratto | <i>Swed.</i> | Ikorn, graskin |
| <i>Span.</i> | Harda, Hardilla, Esquilo | <i>Dan.</i> | Ekorn |
| <i>Port.</i> | Ciuro | | |

THE squirrel derives its name from the form of its tail, *σιν* a shade, *ρα* 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 squirrel takes from tree to tree. On the authority of *Klein* and *Linnaeus*,

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.

MANNERS. 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, to observe the various proofs they give of their agility, which is then exerted in full force.

DESCRIP. 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 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

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 of trees, or in down leaps.

XIV. DOR-
MOUSE.

Two cutting teeth in each jaw.

Four toes before; five behind.

Naked ears.

Long tail covered with hair.

24. DOR-
MOUSE.Mus avellanarum minor. The
Dormoufe or Sleeper. *Raii**syn. quad.* 220.The Dormoufe. *Edw.* 266.*Gefner quad.* 162.Glis supra rufus infra albi-
cans. *Briffon quad.* 115.*De Buffon, Tom.* viii. 193. *Tab.*
26.Mus avellanarius. *Lin. syst.* 83.Mus cauda longa pilosa cor-
pore rufo gula albicante.*Faun. Suec.* 35.*Br. Zool.* 45. *Syn. quad. No.*
219.*Brit.* Pathew*Fren.* Le Mufcardin, Croque-
noix, Rat-d'or*Ital.* Mofcardino*Span.* Liron*Germ.* Rothe, Wald-maus*Swed.* Skogsmus*Dan.* Kaffel-muus

THIS animal agrees with the squirrel in its food, residence, and 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. Briffon* 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 that distinguish the squirrel kind. These distinctions prevail in the other species, such as the *Lerot* and *Loir*.

Dormice

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 greatest part of that gloomy season. In that space, they sometimes experience a short revival, in a warm sunny day; when they take a little food, and then relapse into their former state.

MANNERS.

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

DESCRIP.

These animals seldom appear far from their retreats, or in any open place; for which reason they

NEST.

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.

Two cutting teeth in each jaw.

XV. RAT.

Four toes before, five behind.

Very slender tail; naked, or very slightly haired.

Mus domesticus major, feu

Mus rattus. *Lin. syst.* 83.

Rattus. Raii syn. quad. 217.

Mus cauda longa subnuda corpore fusco cinerescente.

Meyer's an. ii. Tab. 83.

Faun. Succ. 33.

Gesner quad. 731.

Mus cauda longissima obscure cinereus. *Brisson quad* 118.

Mus Rattus, mus citrinarius.

Klein quad. 57.

De Buffon, Tom. vii. p. 278.

Br. Zool. 46. *Syn. quad.* No.

Tab. 36.

226.

25. BLACK.

Brit. Llygoden fferngig

Germ. Ratz

Fren. Le Rat

Dut. Rot

Ital. Ratto, Sorcio

Swed. Rotta

Span. Raton, Rata

Dan. Rotte

Port. Rato

THE rat is the most pernicious of any of MANNERS.
 Our smaller quadrupeds : our meat, corn, paper, cloaths, furniture, in short every convenience of life is a prey to this destructive creature : nor does it confine itself to these ; but will make equal havoc 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 for a nest for its young,

young, near a chimney; and improves the warmth of it, by forming there a magazine of wool, bits of cloth, hay or straw. It breeds frequently in the year, and brings about six or seven young at a time: this species increases so fast, as to over-stock their abode; which often forces them, through deficiency of food, to devour one another: this unnatural disposition 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 weasel; which makes infinitely more havoc among them than the cat; for the weasel is not only endowed with superior agility; but, from the form of its body, can pursue them through all their retreats that are impervious to the former. The *Norway* rat has also greatly lessened their numbers, and in many places almost extirpated them: this will apologize for a brief description of an animal once so well known.

DESCRIP.

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.

Among

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

KING'S RAT-
CATCHER.

Mus sylvestris, Rat de bois. Mus norvegicus. *Klein quad.* 26. BROWN.
Briffon quad. 20. 56.
 Le Surmulot. *De Buffon, Tom.* Mus ex norvegia. *Seb. Mus.*
 viii. 206. Tab. 27. *Tom.* ii. 64. Tab. 63.
Br, Zool. 47. *Syn. quad.* No. 227.

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 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 is of the same color as the back; the rest of the tail is covered with minute dusky scales, mixed with a few hairs.

DESCRIP.

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 that

HIST,

that form that tract: and *Linnaeus** takes no notice of it in his last system. It is fit here to remark an error that gentleman has 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* 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 scarce 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 fast, producing from fourteen to eighteen young at a time. 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

* *Lin.* syst. 83.

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

‡ This species reached the neighborhood of *Paris*, about seventeen years ago,

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. *Briffon* 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* styles it *le Surmulot*; as resembling the mulots, or field mice, in many respects; but exceeding them in bulk.

I suspect that this rat came in ships originally from the *East Indies*; a large brown species being found there, called *Bandicotes*, which burrow under ground. *Barbot** also mentions a species inhabiting the fields in *Guinea*, and probably the same with this.

* *Churchill's Coll. Voy.* 214.

27. WATER. Le Rat d'Eau, *Belon* 30. *pl.* *De Buffon*, Tom. vii. 348. *Tab.*
 31. *Mus major aquaticus*, seu *Mus cauda*
Rattus aquaticus. *Raii* *elongata pilosa plantis pal-*
syn. quad. 217. *matis.* *Lin syst.* 82.
Sorex aquaticus. *Charlton* *Castor caudalinearitereti.* *Faun.*
ex. 25. *Suec.* 25. *Ed.* 1. *Mus ampli-*
Meyer's an. ii. *Tab.* 84. *bibus* 52. *Ed.* 2.
Mus cauda longa pilis supra *Mus aquatilis.* *Klein quad.*
ex nigro et flavescente 57.
mixtiss, infra cinereis ves- *Br. Zool.* 48. *Syn. quad. No.*
titus. *Briffon quad.* 124. 228.
- Brit.* Llygoden y dwfr
Fren. Le Rat d'eau
Ital. Sorgo morgange
Span.
Port.
- Germ.* Wasser maufe. W. Ratz
Dut. Water-rot
Swed. Watn-ratta
Dan. Vand-rotte

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, and the thickness of the fur and the places it haunts, vindicate in some degree the opinion that naturalist was at that time of: 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

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.

The male weighs about nine ounces; the length 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 scarce 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.

28. FIELD. *Mus domesticus medius.* *Mus sylvaticus, M. cauda longa*
Raii syn. quad. 218. *palmis tetradactylis, plantis*
Mus cauda longa supra e *pentadactylis, corpore griseo*
fulco flavescens infra ex *pilis nigris, abdomine albo.*
albo cinerescens. Brisson *Lin. syst. 84.*
quad. 123. *Faun. Suec. 36.*
De Buffon, Tom. vii. 325, *Brit. Zool. 49. Syn. quad. No.*
Tab. 41. *230.*
- Brit. Llygoden ganolig. Fren. Le Mulot*
Llygoden y maes Dan. Voed

THIS measures from the nose-end to the setting on of the tail, four inches and 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 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

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, *Br. Zool. II. App. 498.*
Syn. quad. No. 231.

29. HAR-
VEST.

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

They form their nest above the ground, between the straws of the standing corn, and sometimes in thistles: it is of a round shape, and composed of the blades of corn. They bring about eight young at a time.

These never enter houses: but are often carried in the sheaves of corn into ricks; and often a hundred of them have been found in a single rick, on pulling it down to be housed.

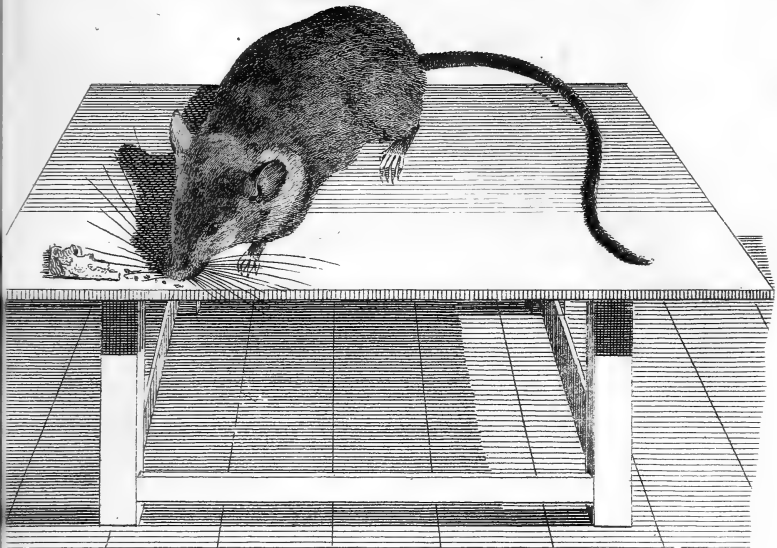
Those that are not thus carried away in the sheaves, shelter themselves during winter under ground, and burrow deep, forming a warm bed for themselves of dead grass.

DESCRIP. They are 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. 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. <i>Mus domesticus vulgaris</i> seu <i>minor</i>. <i>Raii syn. quad.</i> 218.
 <i>Seb. Museum</i>, i. <i>Tab.</i> 111. f. 6.
 its skeleton. <i>Tab.</i> 31.
 <i>Gesner quad.</i> 714.
 <i>Mus cauda longissima</i>, obscure cinereus, ventre subalbescente. <i>Briffon quad.</i> 119.
 <i>De Buffon</i>, <i>Tom.</i> vii. 309.
 <i>Tab.</i> 39.</p> | <p><i>Mus musculus</i>. <i>M. cauda elongata</i>, palmis tetradactylis, plantis pentadactylis. <i>Lin. syst.</i> 83.
 <i>Faun. Suec.</i> 34.
 <i>Mus minor</i>, <i>Musculus vulgaris</i>. <i>Klein quad.</i> 57.
 <i>Br. Zool.</i> 50. <i>Syn. quad.</i> No. 229.</p> |
| <p><i>Brit.</i> Llygoden
 <i>Fren.</i> La Souris
 <i>Ital.</i> Topo, forice
 <i>Span.</i> Raton
 <i>Port.</i> Ratinho</p> | <p><i>Germ.</i> Maus
 <i>Dut.</i> Muys
 <i>Swed.</i> Mus
 <i>Dan.</i> Muus</p> |

THIS timid, cautious, active, little animal, is too well known to require a description: it is

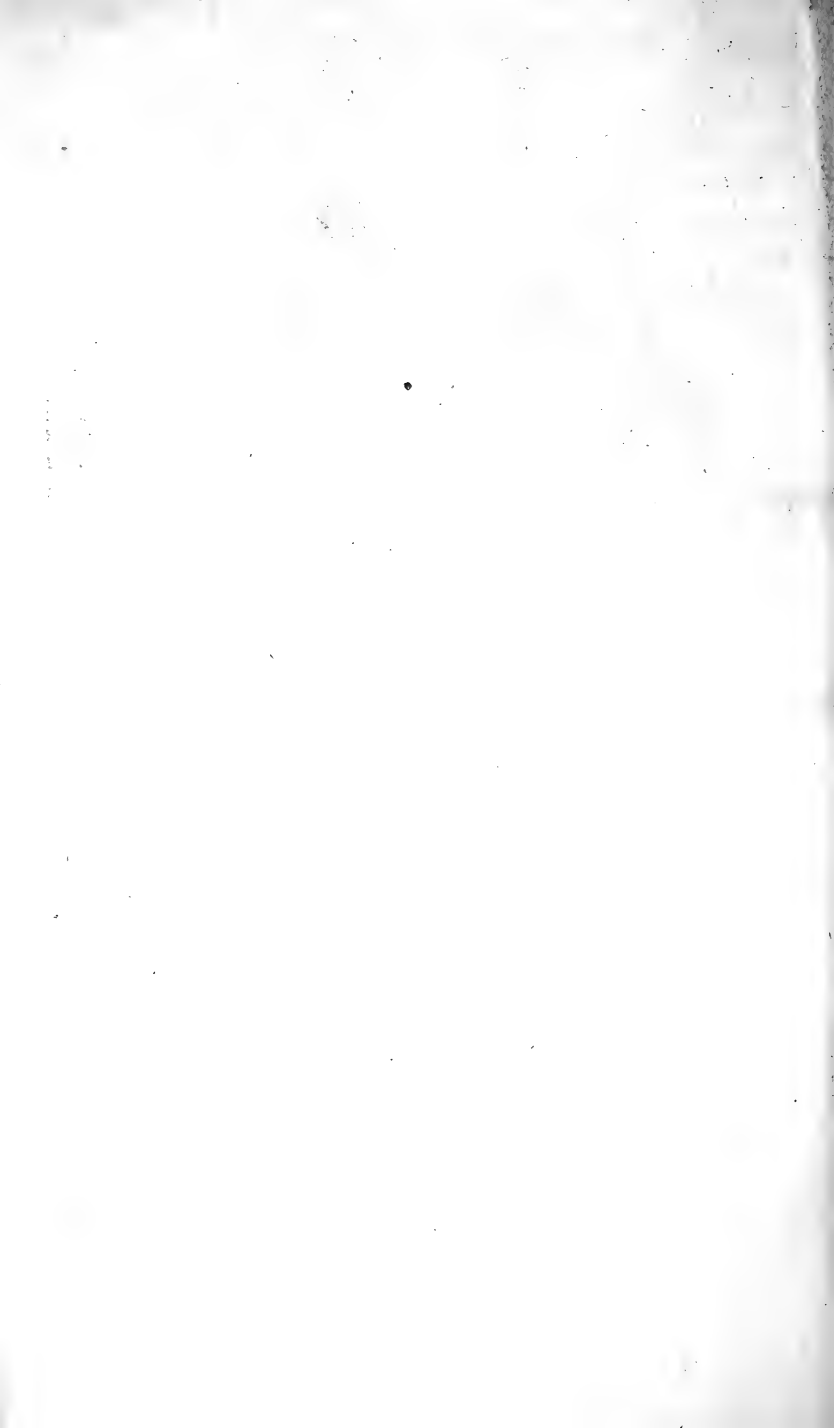
MOUSE.



WATER SHREW MOUSE.

N^o 33





is entirely domestic, being never found in fields; or, as M. *Buffon* observes, in any countries uninhabited by mankind: it breeds very frequently 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 agrestis capite grandi brachiurus. <i>Raii syn. quad.</i> 218.	Mus agrestis. <i>Faun. Suec.</i> 30.	31. SHORT TAILED.
Mus cauda brevi pilis e nigricante et fordide luteo mixtis in dorso et saturate cinereis in ventre vestitis. <i>Briffon quad.</i> 125.	<i>De Buffon, Tom. vii.</i> 369. <i>Tab.</i> 47. <i>Klein quad.</i> 57 <i>No.</i> 50. <i>Br. Zool.</i> 50. <i>Syn. quad. No.</i> 233.	

<i>Brit.</i> Llygoden gwtta'r maes	<i>Fren.</i> Le petit Rat de champs,
<i>Ital.</i> Campagnoli	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,

DESCRIP.

K 2 ending

ending with a little bush, about a quarter 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.

Two cutting teeth in each jaw pointing forward.
 Long slender nose; small ears.
 Five toes on each foot.

XVI.
 SHREW.

Mus araneus. Shrew, Shrew
 Mouse, or Hardy Shrew.
Raii syn. quad. 239.
Gesner quad. 747.
 Mus araneus supra ex fusco ru-
 fus infra albicans. *Briffon*
quad. 126.
De Buffon, Tom. viii. 57.
Tab. 10.

Sorex araneus. S. cauda cor-
 pore longiore. *Lin. syst.*
 74.
Faun. Suec. 24.
 Mus araneus rostro producti-
 ore. *Klein quad.* 58.
Br. Zool. 54. *Syn. quad. No.*
 235.

32. FETID.

Brit. Llygodengoch, Chwist-
 len, Llyg
Fren. La Musfaraigue
Ital. Toporango
Span. Murganho

Port.
Germ. Spitzmause, Ziffmufs,
 Muger
Swed. Nabbmus
Dan. 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 mandible is much longer than the
 lower, beset with long but fine whiskers: the ears
 are short, and rounded: the eyes are very small;
 and, like those of the mole, almost concealed in
 the hair. The color of the head, and upper part

DESCRIP.

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 hind legs placed very far back: 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.

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* is an annual mortality of them, numbers being in that season found dead in the paths. The ancients believed them to be injurious to cattle, an error now detected.

53. WATER. *Musaraneus dorso nigro ventreque albo.* Merret *Pinax.* 167. *Sorex fodiens,* Pallas *ined.* La Mufaraigne d'Eau, *de Buffon.* viii. 64. Water Shrew, *Syn. quad. No.* 256.

THIS species inhabits the banks of ditches, and other wet situations, and is in some places

places called the *Blind Mouse*, from the smallness of its eyes. The *Germans* call it *Græber* or digger. I imagine it to be the same that the inhabitants of *Sutherland* call the water mole, and those of *Cathness*, the *Lavellan*, which the last imagine poisons their cattle; and is held by them in great abhorrence. It burrows in banks near the water: and according to *M. de Buffon* brings nine young. It was known to *Dr. Merret* above a century ago; but lost again till within these few years, when it was found to inhabit *Lincolnshire*, and *Lancashire*. Its length from nose to tail is three inches and three quarters: the tail two inches: the nose long and slender: ears minute: eyes very small and hid in the fur: the color of the head and upper part of the body black: the throat, breast, and belly ash-color; beneath the tail is a triangular dusky spot.

XVII.
MOLE.

Long slender nose, upper jaw much longer than the lower.

No ears.

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

34. EURO-
PEAN.

Talpa. The Mole, Mold-Warp,
or Want. *Raii syn. quad.* 236.

Meyer's an. i. Tab. 2.

Talpa alba nostras. *Seb. Mus. i.*
p. 61. *Tab.* 32. f. 1.

Sib. Scot. 11.

Gesner quad. 931.

Talpa caudata nigricans pedi-
bus anticis et posticis penta-

dactylis. *Briffon quad.*
203.

De Buffon, viii. 81. *Tab.* 12.

Talpa europæus. T. cauda-
ta, pedibus pentadactylis.

Lin. syst. 73.

Faun Suec. 23.

Talpa. *Klein quad.* 60.

Br. Zool. 52. *syn. quad.*
No. 241.

Brit. Gwadd, Twrch daear

Fren. La Taupe

Ital. Talpa.

Span. Topo

Port. Toupeira

Germ. Maulwerf

Dut. Mol.

Swed. Mulvad, Surk

Dan. Muldvarp

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 the most 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

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

* *Edw.* 268,

creme colored breed is sometimes found in my lands near *Downing*.

The smallness of the eyes (which gave occasion to the ancients 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 power of withdrawing or exerting them, according to its exigencies.

To make amends for the dimness of its sight, 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.

* *Aut oculis capti fodere cubilia talpæ. Virg. Georg. 1.*
Or *fightless* moles have dug their chamber'd lodge,

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*.

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, gives 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

* 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 — penem etiam facile omnium, ni fallor, animalium longissimum: ex quibus colligere est maximam præ reliquis omnibus animalibus voluptatem in coitu hoc abjectum et vile animalculum percipere, ut habeant quod ipsi invideant, qui in hoc supremas vitæ suæ delicias collocant.* Raii syn. quad. 238, 239.

the

the surface of the ground. The mole 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 they run in search of snails and worms in the night time among the grass, which makes them the prey of owls. The mole shews great art in skinning a worm, which it always does before it eats it; 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 bellebore*, made into a 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.

Five toes on each foot.

Body covered with short strong spines.

XVIII.
URCHIN.

Echinus sc. erinaceus terrestris. <i>Raii syn. quad.</i> 231.	Echinus terrestris. <i>Gesner</i> <i>quad.</i> 368.	35. COMMON.
<i>Meyer's an. i.</i> Tab. 95, 96.	Erinaceus europæus. <i>Lin.</i> <i>syft.</i> 75.	
<i>Sib. Scot.</i> 11.	Erinaceus spinosus auriculatus. <i>Faun. Suec.</i> 22:	
Erinaceus parvus nostras. <i>Seb.</i> <i>Mus. i.</i> p. 78. <i>Tab.</i> 49. f. 1, 2.	Acanthion vulgaris nostras. <i>Klein quad.</i> 66.	
Erinaceus auriculis erectis. <i>Briffon quad.</i> 128.	<i>Br. Zool.</i> 51. <i>Syn. quad.</i> No. 247.	
<i>De Buffon, Tom.</i> viii. 28. <i>Tab.</i> 6.		
<i>Brit.</i> Draenog, Draen y coed	<i>Germ.</i> Igel	
<i>Fren.</i> L'Heriffon	<i>Dut.</i> Eegel-varken	
<i>Ital.</i> Riccio	<i>Swed.</i> Igelhot	
<i>Span.</i> Erizo	<i>Dan.</i> Pin-fuin, Pin-foe	
<i>Port.</i> Ourizo		

DESCR.

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 scarce to be visible. The form of the nose is like that of the hog; the upper mandible 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; 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.

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

TEETH.

with teeth: in each jaw are two sharp pointed cutting teeth: in the upper jaw are on each side four tusks, and five grinders: in the lower jaw on each side are three tusks, pointing obliquely forward; and beyond those, four grinders.

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

MANNERS.

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

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.

D I V. III.

PINNATED QUADRUPEDS,

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

- XIX. SEAL. Cutting teeth and two canine in each jaw.
Five palmated toes on each foot.
Body thick at the shoulders, tapering towards the
tail.

- | | | |
|------------|--------------------------------------|-----------------------------------|
| 36. GREAT. | Sea calf, <i>Ph. Transf.</i> ix. 74. | Utfuk? <i>Crantz Greenl.</i> i. |
| | <i>Tab.</i> 5. | 125. |
| | Le grand Phoque, <i>de Buffon,</i> | Great feal, <i>Syn. quad.</i> No. |
| | xiii. 345. | 266. |

A SPECIES not very uncommon on the coast
of *Scotland*, particularly about the rock *Hiskyr*,
one of the western isles, which grows to the length
of twelve feet.

A young one of this species was some years ago
shewen in *London*: notwithstanding it was so young
as to have scarce any teeth, yet it was seven feet
and a half long.

In my voyage among the *Hebrides* I frequently
heard



SEALS



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. | Kaffigiak. <i>Crantz's hist. Greenl.</i> i. 123. | 37 COMMON. |
| Seal, Seoile, or Sea-calf. <i>Phoca</i> , feu vitulus marinus. <i>Raii syn. quad.</i> 189. | Le Phoque, de <i>Buffon</i> , xiii. 333. | |
| Sea-calf. <i>Phil. Transf.</i> No. 469. <i>Tab.</i> 1. <i>Abridg.</i> xlvii. | <i>Horr. Icel.</i> 88. | |
| <i>Smith's Kerry</i> , 84, 364. | <i>Pontop. Norw.</i> ii. 125. | |
| <i>Borlase's Cornw.</i> 284. | <i>Briffon quad.</i> 162. | |
| <i>Worm. muse.</i> 289. | <i>Phoca vitulina.</i> <i>Lin. syst.</i> 56. | |
| | <i>Phoca.</i> <i>Klein quad.</i> 93. | |
| | <i>Phoca dentibus caninis tectis.</i> | |
| | <i>Faun. Suec.</i> 4. | |
| | <i>Br. Zool.</i> 34. <i>Syn. quad.</i> No. 265. | |

<i>Brit.</i> Moelrhon	<i>Germ.</i> Meer wolff, Meer hund
<i>Fren.</i> Le Veau marin	<i>Dut.</i> Zœ 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.

The subject that we took our description from, was a young one; so allowance must 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,

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.

TONGUE. 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

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. One that was taken near *Chester*, in *May* 1766, had on its first capture, the body naked like the skin of a porpoise; and only the head and a small spot beneath each fore leg, hairy: it was kept alive some time; but before it died, hair began to grow over the whole body †.

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 prey beneath the water; and in case they are devouring any very oily fish, the place is known by a certain smoothness

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

† *Vide* The figure published in the additional plates of the folio edition of this work.

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 *Caernar-*
 ‘ *vonshire*, and the northern parts of *Anglesey*: they
 ‘ are seen often towards *Carrig y moelrhon*, to the
 ‘ west of *Bardsey*, or *Ynys Enlli*; and the *Skerries*,
 ‘ commonly called in the *British* language *Yynys y*
 ‘ *moelrhoniad*, or seal island. The *Latin* name of
 ‘ this amphibious animal is *Phoca*†: the vulgar
 ‘ name is 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.

* *Phil. Transf.* 1774. p. 445.

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

‘ They

‘ 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 vigorous 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 porpeses, 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* the fourth, 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

* *Leland's Collectanea,*

shore; and bring forth in those vast caverns that are frequent on our coasts; they commonly bring two at a time, which in their infant state are covered with a whitish down, or woolly substance. The seal-hunters in *Catbness* 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 mouths of the caverns about midnight, 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-born; 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 sea during their continuance in the cave, their lives are lost. The young seals of six weeks age, yield more oil than their emaciated dams: above eight gallons have been got 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 downwards 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

• L 4

‘ found

' found it had no way to escape, but by running
 ' into shoal water: the seal pursued; and the for-
 ' mer, to get more surely out of danger, threw it-
 ' self 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 begin-
 ' ning of autumn; our fishermen have seen two
 ' sucking their dam at the same time, as she stood
 ' in the sea in a perpendicular position.

' 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 ne-
 ' ver sleep long without moving; 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
 ' precaution, 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

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 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 *Narbwal*, 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.

† *Polybist.* c. xxxv.

D I V. IV.

W I N G E D Q U A D R U P E D S.

XX. BAT. With long extended toes to the fore-feet, connected by thin membranes, extending to the hind-legs.

38. GREAT. *La noctule de Buffon VIII. Tab. xviii. p. 128.*
Syn. quad. No. 287.

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: of the tail one inch seven tenths.

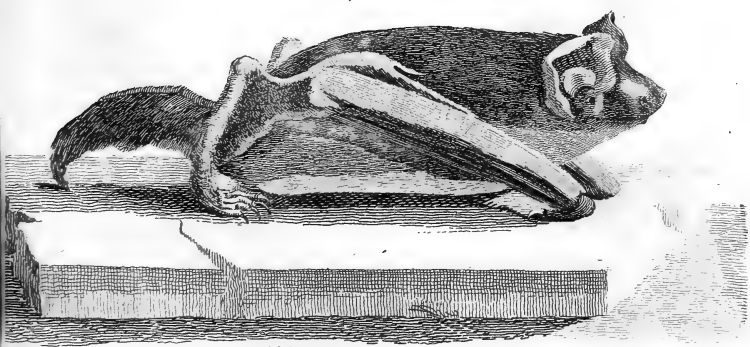
The nose is slightly bilobated: ears small and rounded: on the chin a minute *verruca*. Hair on the body a reddish ash-color.

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.

LONG EARED BAT..



GREAT BAT.

N^o 38*C. Griffiths del*







HORSE-SHOE BAT.

La Chauve-fouris a fer a cheval. Horse-shoe Bat. *Syn. quad.* 39. HORSE-SHOE.
De Buffon VIII. 131. Tab. No. 186.
 xvii. xx.

THIS species was discovered by Mr. *Latham* Surgeon at *Dartford, Kent*; who was so obliging as to communicate it to me. They are found in 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.

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.

Edw. av. 201. f. 3.

Alb. iii. Tab. 101.

La petite chauve fouris de notre pays. *Briffon quad.* 160.

L'oreillar. *De Buffon, Tom.*

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

Vespertilio auritus. Lin. syst.

47.

V. auritus, naso oreque simplicis, auriculis duplicatis, capite majoribus. Faun. Suec. 3.

Br. Zool. 56. Syn. quad. No. 292.

40. LONG EARED.

THIS species is the least of the *British* bats: the length being only an inch and three quarters; and the extent of the fore-legs seven inches.

The

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.

41. COMMON. Vespertilio. Bat, Flitter, or Flutter Mouse. *Raii syn. quad.* 243.
 Short-eared *English* Bat. *Edw. av.* 201. f. 2.
Seb. Mus. i.
 The Rear Mouse. *Charlton ex.* 80.
Meyer's an i. Tab. 3.
Gesner av. 766.
 Vespertilio murini coloris, pedibus omnibus pentadactylis. *Briffon quad.* 158.
 La chauve iouris. *De Buffon, Tom. viii,* 113. Tab. 16.
 Vespertilio murinus. *Lin. syst.* 47.
 V. caudatus naso oreque simplicis. *Faun. Suec.* 2.
 V. major. *Klein quad.* 61.
 Vespertilio. *Plinii Lib.* x. 6. 61.
Br. Zool. 55. *Syn. quad.* No. 291.
- | | |
|---|------------------------------------|
| <i>Brit.</i> Yftlum | <i>Port.</i> Morcego |
| <i>Fren.</i> La Chauve fouris | <i>Germ.</i> Speckmaus, Fledermaus |
| <i>Ital.</i> Nottola, Notula, Sporteghione, Vifpriftrello, Vilpiftrello | <i>Dut.</i> Vledermuys |
| <i>Span.</i> Murcielago, Morciégalo | <i>Swed.</i> Laderlap, Fladermus |
| | <i>Dan.</i> Flagermuus, Aftenbakke |

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,

gular, uncertain, and jerking motion* of the 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.

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

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

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,

Lucemque perosæ

Nocte volant, seroque tenent a vespere nomen.

Minimam pro corpore vocem

Emittunt, peraguntque levi stridore querelas.

Met. lib. iv. 10.

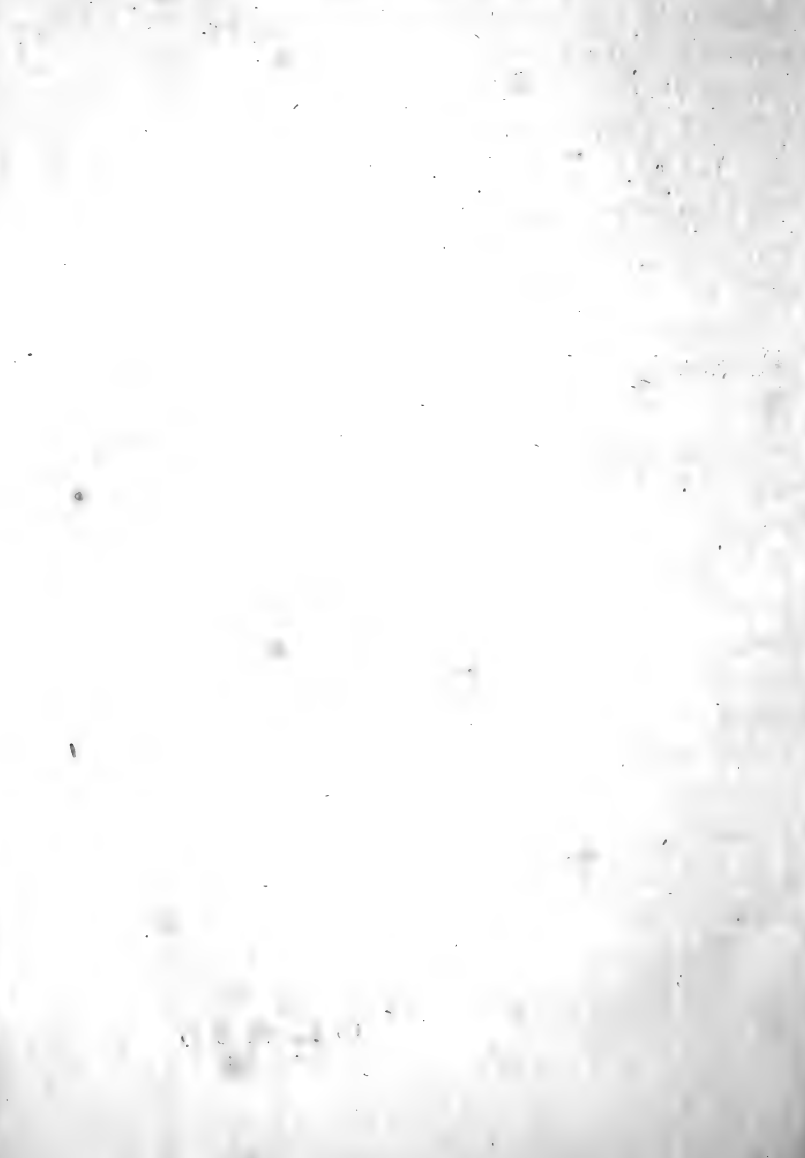
Their little bodies found

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

In towns, not woods, the footy 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.

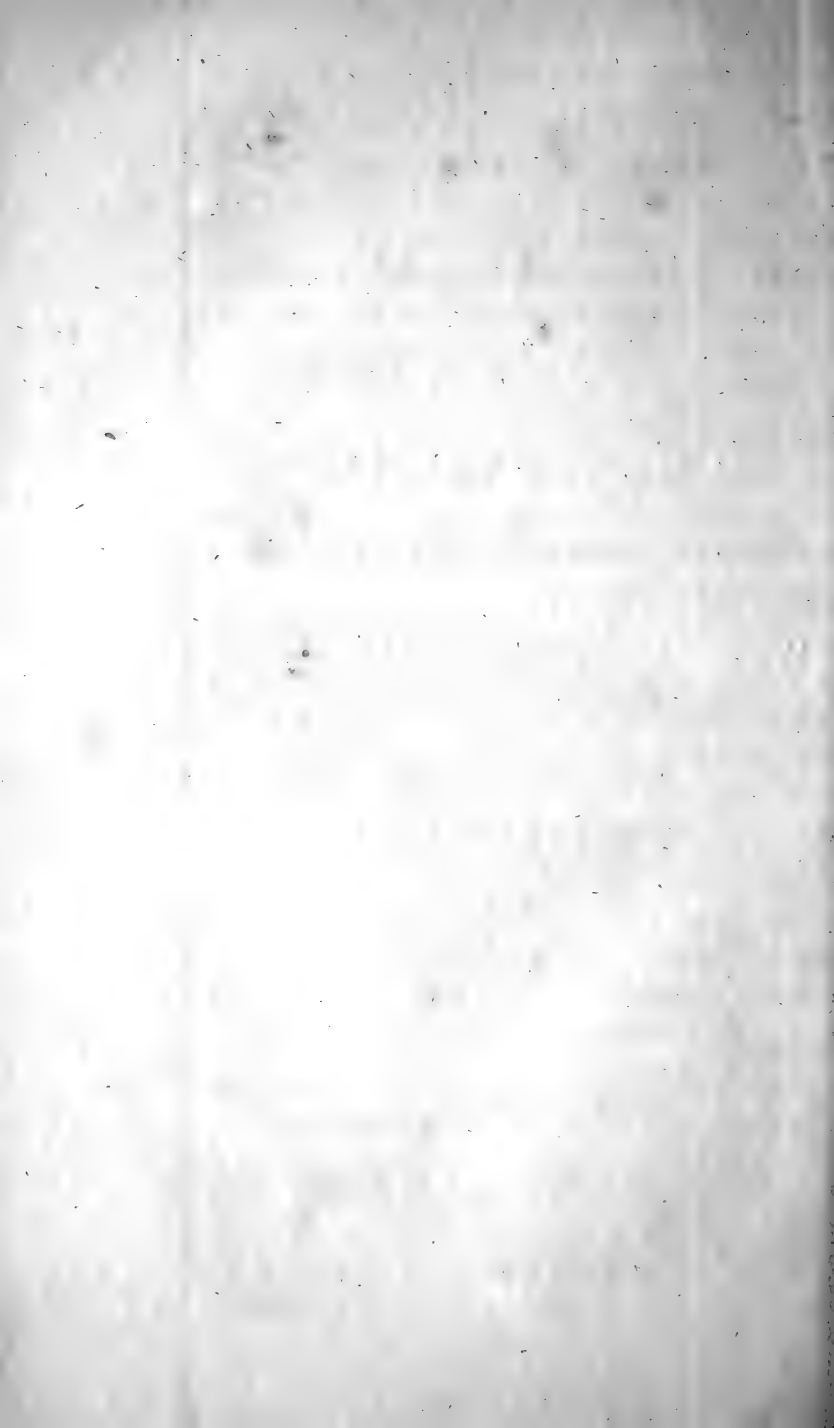
In the year 1850, the first
And a few years later, the
The first building was
The first building was



C L A S S II.

B I R D S.

AVES INTERNUNCIÆ JOVIS.



C L A S S II.

B I R D S.

DIV. I. LAND BIRDS.

II. WATER BIRDS.

DIV. I. ORDER I. RAPACIOUS.

Genus.

- I. FALCON.
II. FOWL.

II. P I E S.

- III. SHRIKE.
IV. CROW.
V. CUCKOO.
VI. WRYNECK.
VII. WOODPECKER.
VIII. KINGFISHER.
IX. NUTHATCH.
X. HOOPOE.
XI. CREEPER.

III. GALLINACEOUS.

COCK.
TURKEY.

M₂

PINTADO.

Genus.

PINTADO.
PEACOCK.
PHEASANT.

XII. GROUS.
XIII. BUSTARD.

IV. C O L U M B I N E .

XIV. PIGEON.

V. P A S S E R I N E .

XV. STARE.
XVI. THRUSH.
XVII. CHATTERER.
XVIII. GROSBKAK.
XIX. BUNTING.
XX. FINCH.
XXI. FLY-CATCHER.
XXII. LARK.
XXIII. WAGTAIL.
XXIV. WARBLERS.
XXV. TITMOUSE
XXVI. SWALLOW.
XXVII. GOATSUCKER.

D I V . II. W A T E R B I R D S .

VI. C L O V E N F O O T E D .

XXVIII. HERON.
XXIX. CURLEW.
XXX. SNIPE.

SAND.

Genus.

- XXXI. SANDPIPER.
XXXII. PLOVER.
XXXIII. OYSTER-CATCHER.
XXXIV. RAIL.
XXXV. GALLINULE.

VII. FIN FOOTED.

- XXXVI. PHALAROPE.
XXXVII. COOT.
XXXVIII. GREBE.

VIII. WEB FOOTED.

- XXXIX. AVOSET.
XL. AUK.
XLI. GUILLEMOT.
XLII. DIVER.
XLIII. TERN.
XLIV. GULL.
XLV. PETREL.
XLVI. MERGANSER.
XLVII. DUCK.
XLVIII. CORVORANT.

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

Fig.

1. *Cere. Cera* **T**HE naked skin that covers the base of the bill in the *Hawk* kind.
2. *Capistrum* A word used by *Linnaeus* to express the short feathers on the forehead just above the bill. In *Crows* these fall forwards over the nostrils.
3. *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*.
4. *Orbits. Orbita* The skin that surrounds the eye, which is generally bare, particularly in the *Heron* and *Parrot*.
5. *Emarginatum* A bill is called *rostrum emarginatum* when there is a small notch near the end: this is conspicuous in that of *Butcher-birds* and *Thrushes*.
6. *Vibrissæ* *Vibrissæ pectinatæ*, stiff hairs that grow on each side the mouth, formed like a double comb, to be seen in the *Goatsucker*, *Flycatcher*, &c.
7. *Bastard wing.*
Alula spuria A small joint rising at the end of the middle part of the wing, or the *cubitus*;

cubitus; on which are three or five feathers.

8. *Lesser coverts of the wings.* *Tectrices primæ* The small feathers that lie in several rows on the bones of the wings. The *under coverts* are those that line the inside of the wings.
9. *Greater coverts.* *Tectrices secundæ* The feathers that lie immediately over the quill-feathers and secondary feathers.
10. *Quill-feathers.* *Primores* The largest feathers of the wings, or those that rise from the first bone.
11. *Secondary feathers.* *Secundariæ* Those that rise from the second.
12. *Coverts of the tail.* *Uropygium* Those that cover the base of the tail.
13. *Vent-feathers.* Those that lie from the vent to the tail. *Crissum Linnæi.*
14. *The tail.* *Rectrices*
15. *Scapular feathers* That rise from the shoulders and cover the sides of the back.
16. *Nucha* The hind part of the head.
17. *Rostrum subulatum* A term *Linnæus* uses for a straight and slender bill.
18. To shew the structure of the feet of the *Kingfisher*.
19. *Pes scanforius* The foot of the *Woodpecker* formed for climbing. Climbing feet.
20. *Finned foot.* *Pes lobatus, pinnatus* Such as those of the *Grebes*, &c. Such as are indented, as *fig. 21.* are called

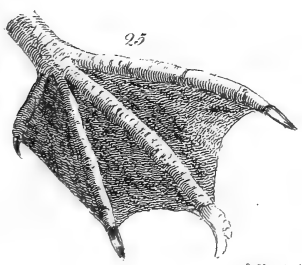
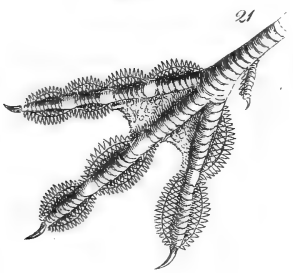
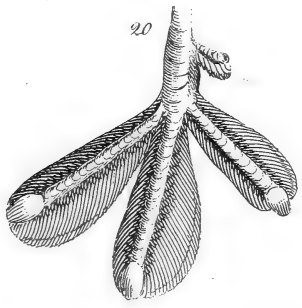
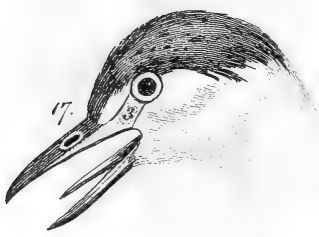
called scalloped, such are those of *Coots* and scallop-toed *Sandpipers*.

22. *Pes tridactylus* Such as want the back toe.
23. *Semi-palmated. Pes semi-palmatus* When the webs only reach half way of the toes.
24. *Ungue postico sessili* When the hind claw adheres to the leg without any toe, as in the *Petrels*.
25. *Digitis 4 omnibus palmatis* All the four toes connected by webs as in the *Corcorants*.

EXPLANATION OF OTHER LINNÆAN TERMS.

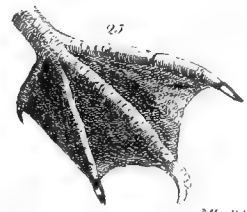
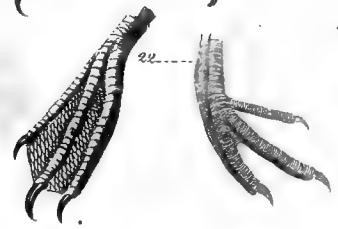
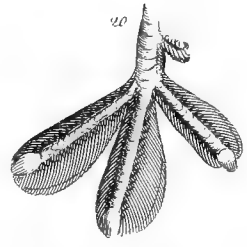
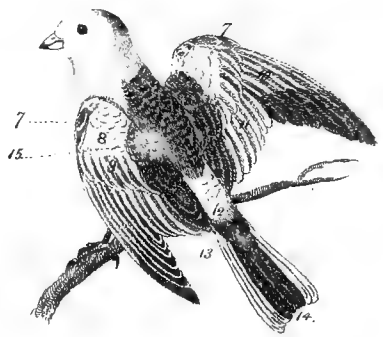
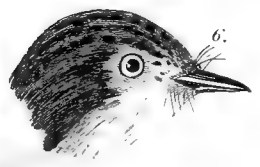
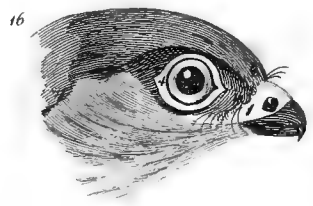
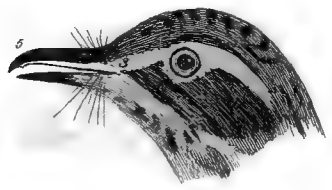
- Rostrum cultratum* WHEN the edges of the bill are very sharp, such as in that of the *Crow*.
- Unguiculatum* A bill with a nail at the end, as in those of the *Goosanders* and *Ducks*.
- Lingua ciliata* When the tongue is edged with fine bristles, as in *Ducks*.
- Integra* When quite plain or even.
- Lumbriciformis* When the tongue is long, round and slender like a worm, as that of the *Woodpecker*.
- Pedes compedes* When the legs are placed so far behind as to make the bird walk with difficulty, or as if *in fetters*; as is the case with the *Auks*, *Grebes* and *Divers*.
- Nares Lineares* When the nostrils are very narrow, as in *Sea Gulls*.
- Marginatæ* With a rim round the nostrils, as in the *Stare*.

CLASS



P. Magell. f. n.





Magell. fca.

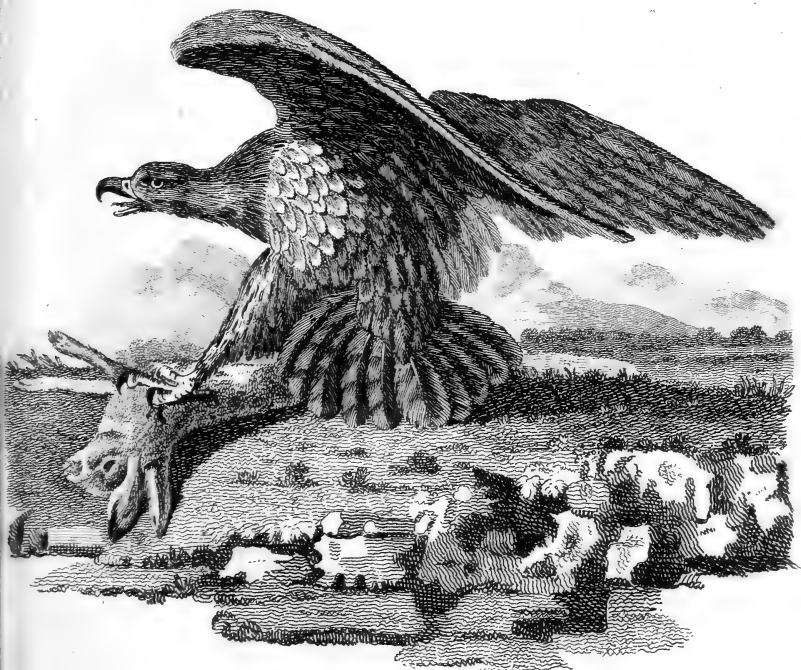
BRITISH GEOLOGY

1830

BRITISH ZOOLOGY.

CLASS II. BIRDS.

DIV. I. LAND-BIRDS.



LONDON,
Printed for Benj. White,
MDCCLXXVI.

1881

1881

1881

C L A S S II.

B I R D S.

D I V. I. L A N D B I R D S.

O R D E R I. R A P A C I O U S.

Strong hooked BILL, the base covered with a
CERE or naked skin. The first joint of the
middle toe connected to that of the outmost by a
membrane.

I. FAL
CONS.

- | | | |
|---|--|-------------|
| Grand aigle royal. <i>Belon av.</i> 89. | Orn. <i>Faun. Suec. sp.</i> 54. | 42. GOLDEN- |
| Aquila Germana. <i>Gesn. av.</i> 168. | L' Aigle doré. <i>Briffon av.</i> | EAGLE. |
| Aquila, aguglia, Chrysaetos. | I. 431. | |
| <i>Aldr.</i> I. 62. | Golden eagle. <i>Br. Zool.</i> 61. | |
| Gnesios. <i>Plinii lib.</i> 10. c. 3. | <i>Tab. A. Pl. Enl.</i> 410. | |
| The golden eagle. <i>Wil. orn.</i> 8. | Stein adler. <i>Kram.</i> 325. <i>Sco-</i> | |
| Aquila aurea, feu fulva. <i>Raii</i> | <i>poli.</i> No. 1. | |
| <i>syn. av.</i> 6. | Le grand Aigle. <i>Hist.</i> | |
| Falco Chrysaetos. <i>Lin. syst.</i> | <i>D'Oys.</i> 1. 76. | |

125.

THIS species is found in the mountainous
parts of *Ireland* where it breeds in the lofti-
est cliffs: it lays three, and sometimes four eggs,
of which seldom more than two are prolific; pro-
vidence

vidence 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 their having bred in *Snowdon* hills; from whence some writers give that tract the name of *Creigiau'r eryrau*, 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.

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 behold afar off* ‡: the head and neck are cloathed with narrow sharp pointed feathers, and of a deep brown color, bor-

* Τῶν γαμψωνύχων ὀλιγοτόμα πᾶσι. Arist. hist. an.

† *Imaus*—incolarum lingua nivofum significante. *Plin. lib. 6. c. 21.*

‡ *Job 39, 27.* Where the natural history of the eagle is finely drawn up.

dered 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 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,

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

Illæfum unguibus hæfit 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 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 is certain of instantly repairing to the spot, if there is one in any part of the neighborhood.

LONGEVITY. Eagles are remarkable for their longevity; and for their power of sustaining a long abstinence from food. Mr. *Keyser* relates that an eagle died at *Vienna* after a confinement of 104 years. This preeminent length of days probably gave occasion

* *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.

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 *Conway*, 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.

Golden eagle, with a white ring about its tail. <i>Wil. orn.</i> 59.	<i>Falco fulvus. Lin. syst.</i> 125.	43. BLACK EAGLE.
<i>Raii syn. av.</i> 6.	<i>Briffon av. I.</i> 420. <i>Hist. d'oys.</i> I. 86.	
White tailed eagle. <i>Edw.</i> 1.	Ring-tail Eagle. <i>Br. Zool.</i> 62. <i>Pl. Enl.</i> 409.	

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 eyes with its wings, soon makes a prey of the harassed animal. The eagles in the isle of *Rum* have nearly extirpated the stags that used to abound there. This species generally builds in clefts of rocks near the deer forests;

DESCRIP.

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.

NEST.

‘ In the year of our Lord 1668, in the woodlands
 ‘ 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 up-
 ‘ on the heath rushes again; upon which lay one
 ‘ young one, and an addle 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



SEA EAGLE.



J. G. G. del

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 ancients believed, that the pebble, commonly 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 relation to the eagle) must be omitted in a zoologic work.

Bein-brecher, Offifraga, Meer-
adler, Fisch-arn, Haliætos.

Gesner av. 201. 203.

Haliætos. *Turneri.*

Auguista barbata, Offifraga.

Aldr. av. i. 118.

Haliætos. *Plinii lib.* 10. c. 3.

Sib. hist. Scot. 14.

Sea eagle, or osprey. *Wil. orn.*

59.

Raii syn. av. 7.

Sea eagle. *Dale's Harwich.*
396.

Martin's hist. West. isles 70.

Le grand aigle de mer. *Brif-
son av.* i. 437.

Sea eagle. *Br. Zool.* 63. *Pl.*

Enl. 112. 415.

Falco offifragus. *Lin. syst.*

124.

Gaale orn. *Brunnich* 13.

L'Orfrair. *Hist. d'oys.* I. 112.

44. SEA EA-
GLE.

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

* 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.
of

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 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.

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

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

gave occasion to some writers to suppose it to be the *aquila barbata* or bearded 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 kaliætos, clariffima oculorum acie, librans ex alto ſeſe, viſoque in mari piſce, præceps in eum ruens, et diſcuſſis peſtore aquis rapiens.*

F o o d.

* *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.

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 *Nifus* 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 *Nifus* cleft the air with wings new grown.)
At *Scylla*’s head his horny bill he aims.

Croxał.

45. CINERE- Pygargus, or white tailed ea- Pygargus hinnularius, an
OUS. gle. *Wil. orn.* 61. *Erne. Sib. Scot.*
Raii syn. av. 7. *Briffon* 1. Vultur albiulla. *Lin. syst.* 123.
427. Braunfahle Adler. *Frisch* I. 70.
Ern. Br. Zool. Pl. Enl. 411. Gamfen geyer. *Kram.* 326.
Hist. d’Oys. 1. 99. Postoina. *Scopoli.* No. 2.

DESCRIP. **I**S 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,



Paillou delin^t

Mazell fec^t



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.

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 claim to be ranked with that genus, for the *pygargus* is wholly feathered; whereas, the characteristic 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.

FALCONRY.

Falconry was the principal amusement of our ancestors: a person of rank scarce 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 noblemen's sons to winde their*

* *Monfaucon monumens de la monarchie françoise*, I. 372.

† *Mr. Walpole's anecdotes of painting*, I. 33.

born 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 Triftram boast,

Ne is there hauke which mantleth her on perch,
Whether high trowing, or accoasting low,
But I the measure of her flight doe searck,
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. Albans* ‡, 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

* *Biog. Brit.* article *Caxton*.

† *Book VI. Canto 2.*

‡ A treatise on hunting, hawking and heraldry, printed at *St. Albans* by *Caxton*, and attributed to *Dame Julian Barnes*.

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

find security for his good behaviour for seven years, or lie in prison till he 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, were liable to capital punishments, to fines, and loss of liberty, for destroying the most noxious of the feathered tribe.

According to *Olearius*, 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 butte 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*. The same species, with the *gyrfalcon*, the *gentil*, and the *goshawk* are found in *Scotland*, and the *lanner* in *Ireland*.

We may here take notice that the *Norwegian* breed was, in old times, in high esteem with our coun-

* *Tom.* I. 217. 328.

trymen: they were thought bribes worthy a king. *Jeoffrey Fitzpierre* gave two good *Norway* hawks to king *John*, to obtain for his friend the liberty of exporting 100 weight of cheefe: 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 that some of our nobility held their estates by, 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 *Philipp de Hastang*, held his manour of *Combertoun*, in *Cambridgeshire*, by the service of keeping the king's falcons‡.

46. OSPREY. Une Orfraye. *Belon. av.* 96. Bald Buzzard, or sea eagle. *Raii syn. av.* 16.
 Fisch-adler, Maffwy, Aquila anataria, Clanga, Planga, Percnos, Morphnos. *Gesner. av.* 196. Fishing hawk. *Catesby's Carol. I. Tab.* 2.
 Haliætus, seu aquila marina. *Falco cyanopus. Klein Stem. Tab.* 8.
Gesner av. 804. Falco Haliætus. *Lin. syst.* 129.
 Balbushardus. *Turneri.* Blafot, Fisk-orn. *Faun. Suec. sp.* 63.
 Auguista piumbina, Aquilastro, Haliætus, seu Morphnos. *Aldr. av. I.* 105. Aigle de mer. *Briffon av. I.* 440. *Tab.* 34. *Hist. d'Oys. I.* 103.
 114. The Osprey. *Br. Zool.* 63. *Tab.*
 Haliætus. *Caii opusc.* 85. A. 1. *Pl. Enl.* 414.
 Bald Buzzard. *Wil. orn.* 69. Fisk-oern. *Brunnich, p.* 5.

MR. Ray places this bird among the hawks, instead of the eagles, on a supposition that

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

† *Blunt's antient tenures.* 20.

‡ *Madox I.* 652.

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 seashores. It builds its nest on the ground among reeds, and lays three or four white eggs of an elliptical form; rather less than those of a hen. It feeds chiefly on fish*, taking them in the same manner as the sea eagle does, by precipitating itself on them, not by swimming; 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 ancient writers, assert it to be. The *Italians* compare the violent descent of this bird on its prey, to the fall of lead into water, and call it, *Auguista piumbina*, or the *leaden eagle*.

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, consists of twelve feathers: the two middle feathers were dusky;

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

N E O T.

F O O D.

DESCRIP.

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

H E A D.

inner coverts 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 is a bar of brown that extends along the sides of the neck pointing towards

L E G S.

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





Paulsen sculp.

Mazell fec.

Le Gerfault. <i>Belon av.</i> 94	F. Islandus albus. <i>Brunnich</i> 47.	GYRFALCON.
Gyrfalco. <i>Aldr. av.</i> I. 243.	7. 8.	
Jer-falcon. <i>Wil. orn.</i> 78.	Le Gerfault. <i>Briffon av.</i> I.	
Gyrfalco. <i>Raii syn. av.</i> 13.	370.	
White Falcon. <i>Wil. orn.</i>	<i>Sib. Scot.</i> 14.	
80.	<i>Charlton Ex.</i> 317.	

THIS elegant species is not much inferior in size to the *Osprey*. The *irides* 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 down: 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 a bird in high esteem when falconry was in vogue, and used for the noblest game, such as cranes and herons. DESCRIP.

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

48. PERE-GRINE. *Belon av.* 116. *Falco peregrinus niger. Aldr. av.* 1. 239. *Blue backed falcon. Charl. Ex.* 73. *Ditto. Br. Zool. Tab. A*. 5. Sparviere pellegrino femmina. Lorenzi av. Tab.* 24. *Le Faucon pelerin. Brisson av.* I. 341. *Hist. D'Oys. I.* 249.

DESCRIP.

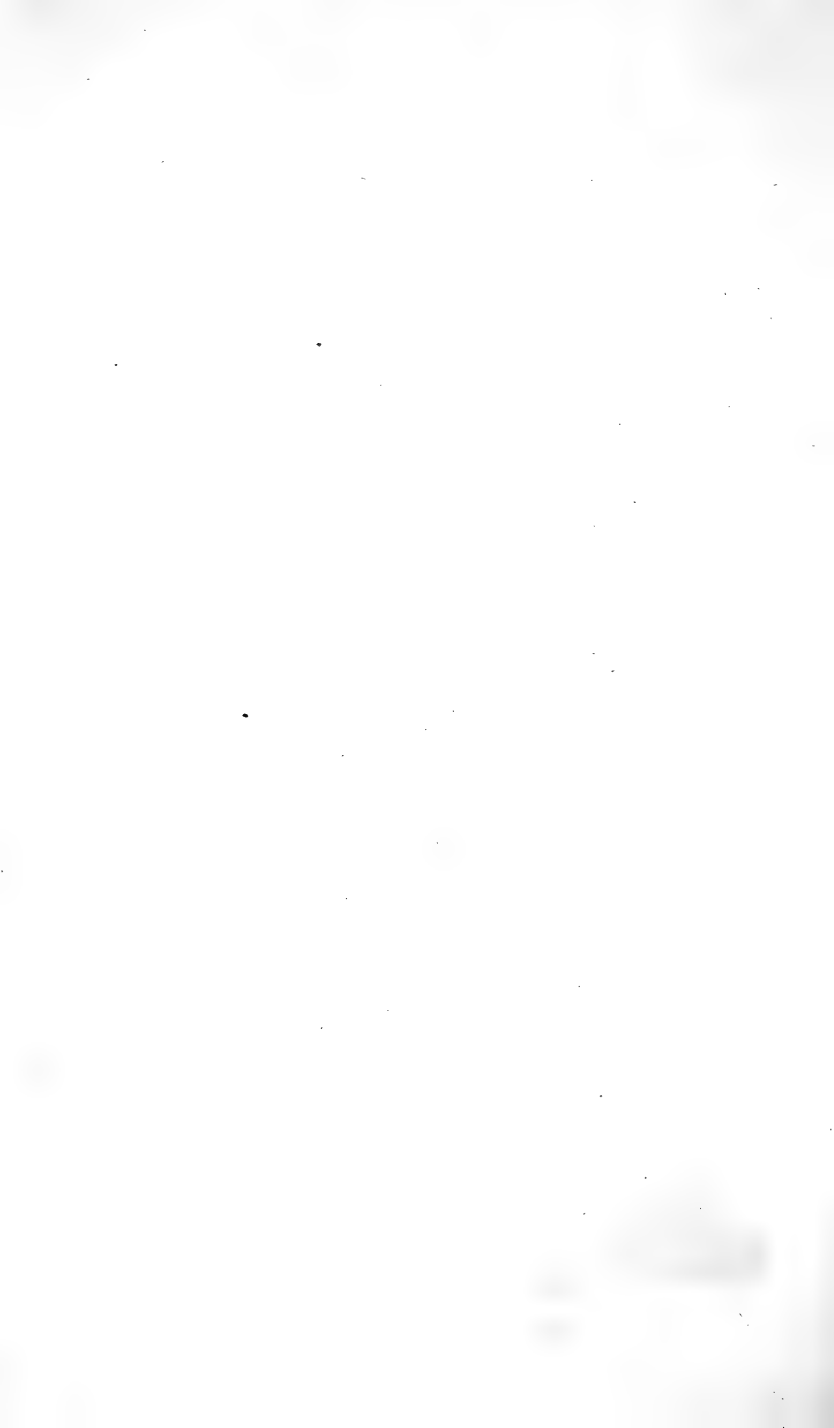
IN size equal to the moor-buzzard: the bill strong, short, and very much hooked, armed near the end of the upper mandible with a very sharp process: blue at the base, black at the point: the irides dusky.

The feathers on the forehead 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 transverse: 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 their middle. The tail consists of feathers of equal length, finely and frequently barred with blue and black. The legs short and yellow: the toes very long.

This species seems to vary: we have seen one that

PEREGRINE FALCON.





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 breadth thirty eight inches.

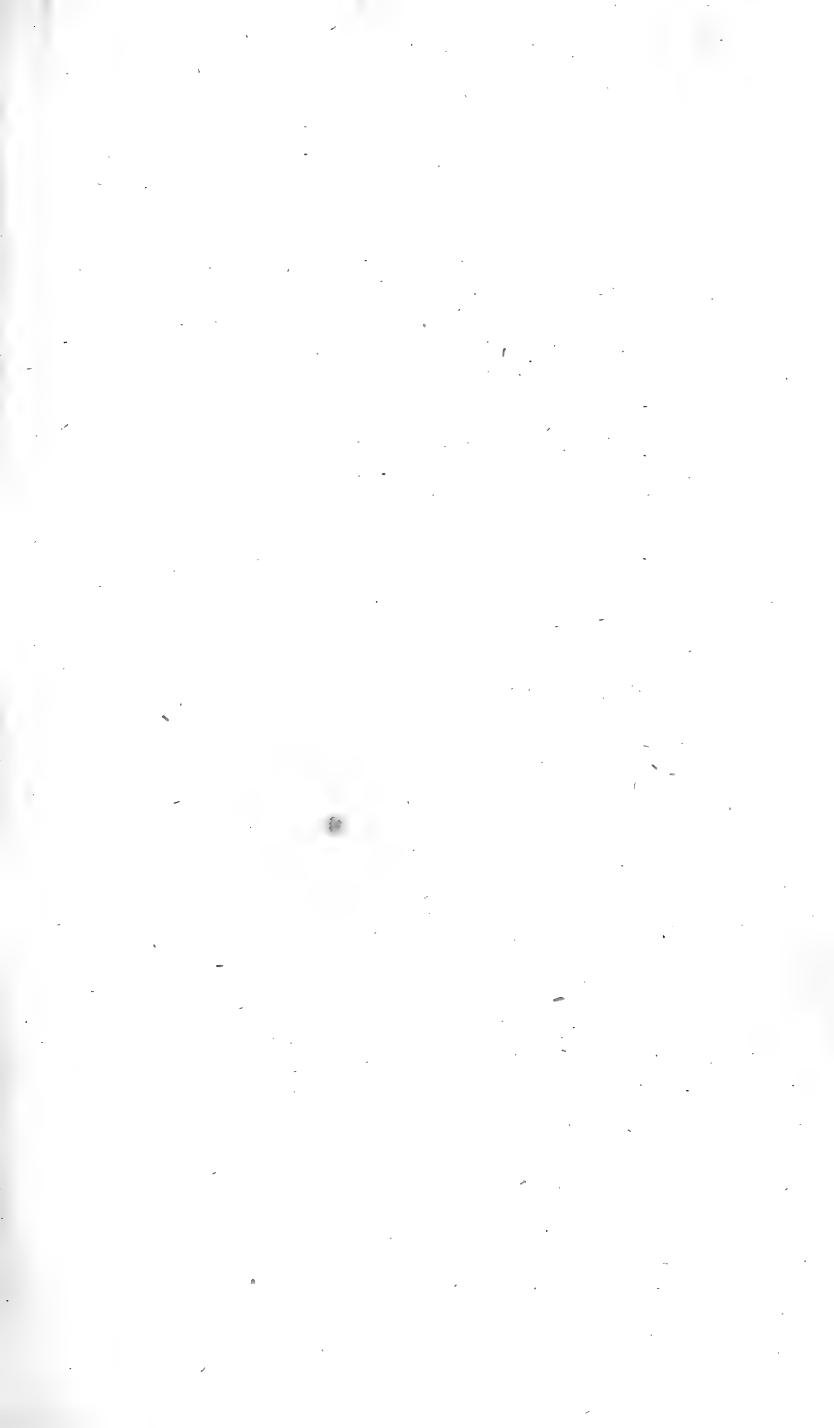
This species breeds on the rocks of *Llandidno* in *Caernarvonshire*. That promontory has been long famed for producing a generous kind, as appears by a letter extant in *Gloddaeth* library, from the lord treasurer *Burleigh* to an ancestor of Sir *Roger Mostyn*, in which his lordship thanks him for 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*.

49. GREY.

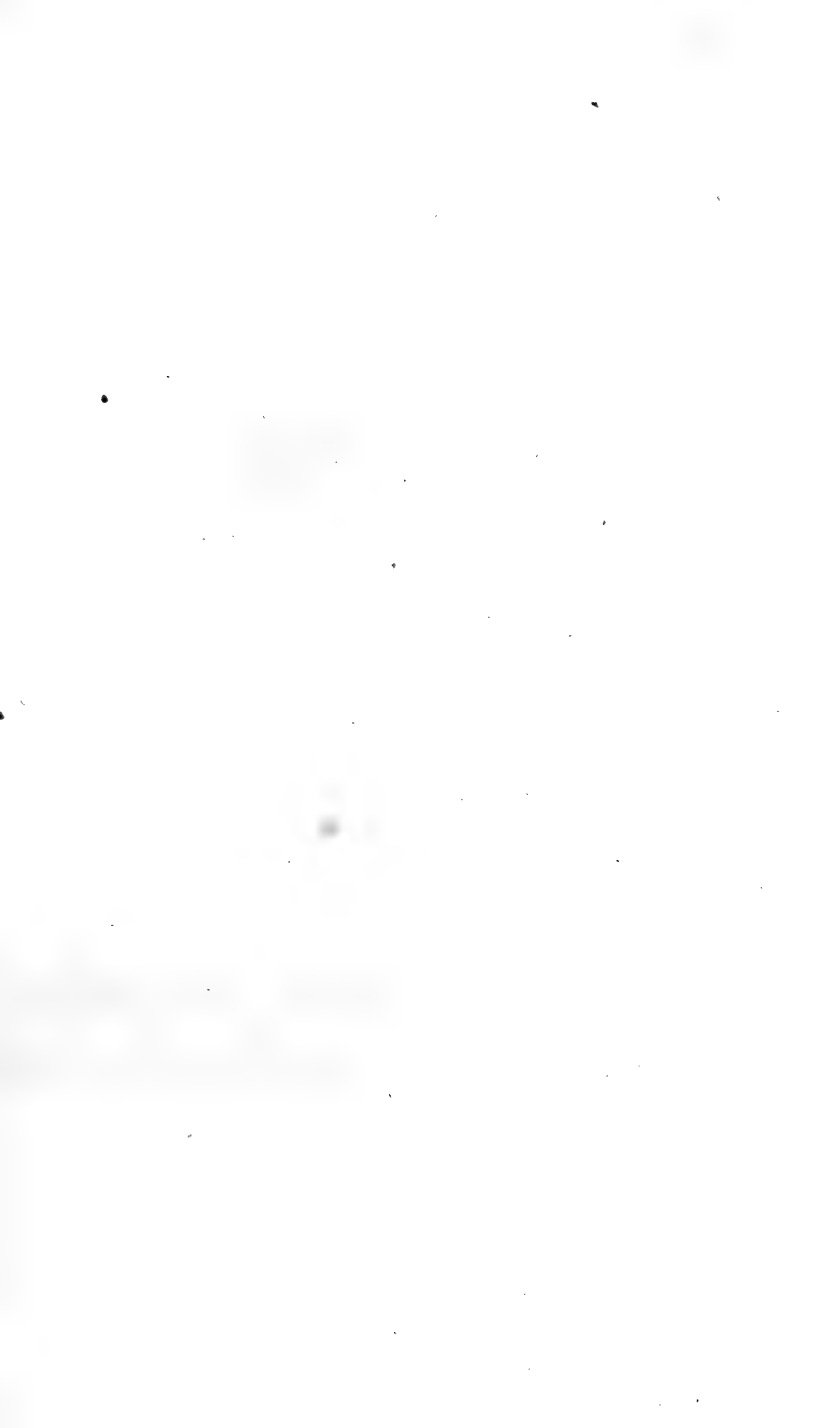
Grey Falcon. *Br. Zoology*, 65. *Octavo* I. 137.

THIS kind was shot near *Halifax* 1762, and the following account transmitted to us by

DESCRIP. 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 train: 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.







FALCON GENTIL.
a Variety



Gentil Falcon. *Wil. orn.* 80.*Lin. syst.* 126.

50. GENTIL.

*Raii syn. av.*Falk. *Faun. Suec.* sp. 58.

Falco gentilis. F. cere pedibusque flavis, corpore cinereo maculis fuscis, cauda fuscis quatuor nigricantibus.

Kram. Austr. 328.Falco gentilis. *Brun.* No. 6.*Scopoli,* No. 3.L'Autour. *Hist. d'Oys.* I. 230.

THIS species of an elegant make is larger than the gofhawk. Cere, and legs yellow; irides light yellow: pupil large and of a full black: head light rust color, with oblong black spots: whole under side from chin to tail white, tinged with yellow: each feather marked with heartshaped 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 barred 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, all the tail feathers white.

DESCRIP.

The young birds vary in having on their breasts transverse bars instead of cordated spots, as in the specimen, *Plate*

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.

The

51. LANNER. The Lanner. *Wil. orn.* 82. *Falco Lanarius. Lin. syst.* 129.
Lanarius. Raii syn. av. 15. *Faun. Suec. sp.* 62.

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*.

DESCRIP.

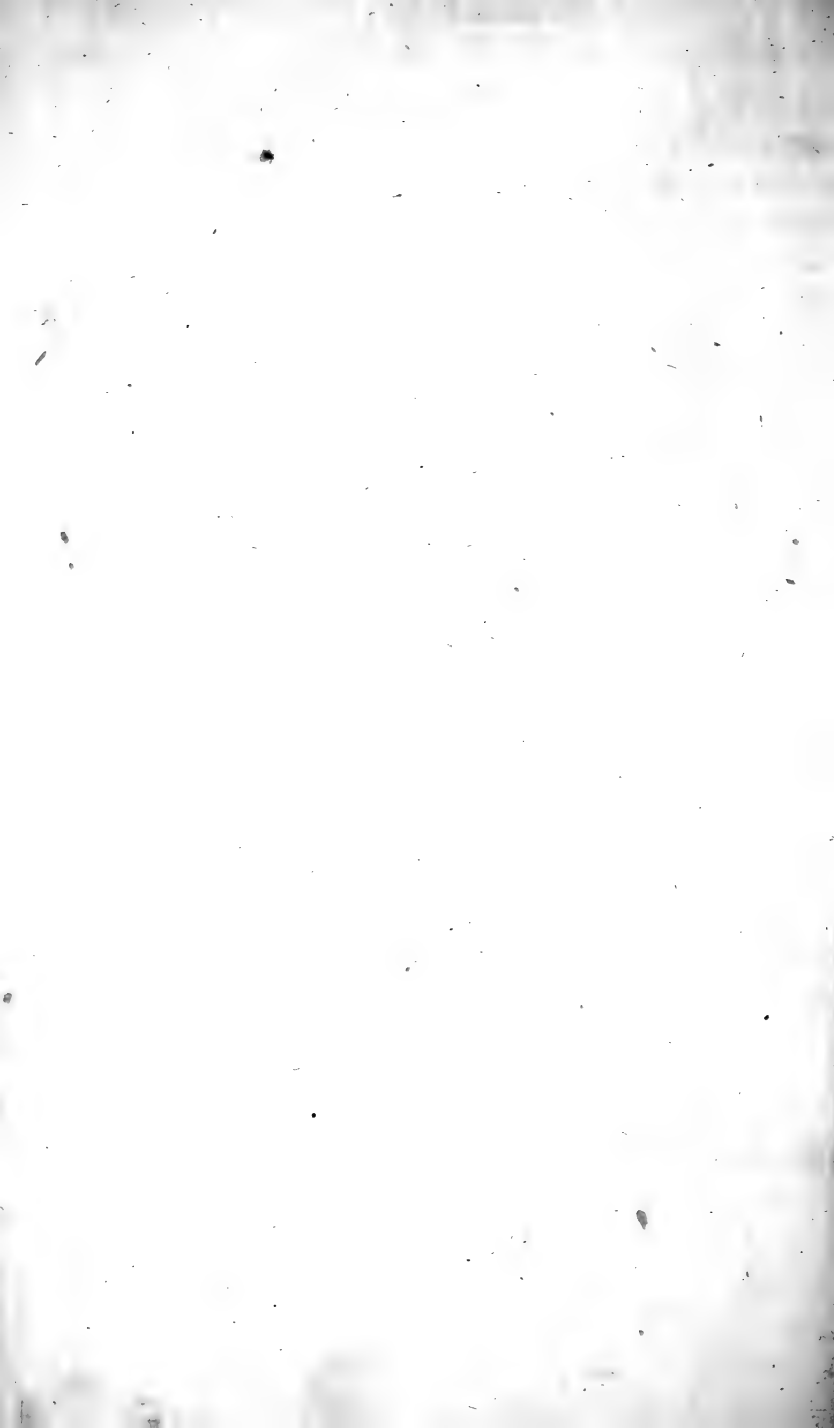
It was less than the buzzard. The cere was of a pale greenish blue; the crown of the head of a brown and yellow clay color: above each eye, to the hind part of the head, passed a broad white line; and beneath each, a black mark pointing down: the throat white: the breast tinged with dull yellow, and marked with brown spots pointing downwards: the thighs and vent spotted in the same manner: back and coverts of the wings deep brown, edged with a paler: 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, are the characters 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

LANNER.





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 this 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 last century, and effectually clears up this point; speaking of the falcon, he tells us, “ S’il est prins
 “ en *Juin, Juillet & Aoust*, vous le nommerez
 “ *Gentil*: si en *Septembre, Octobre, Novembre* ou
 “ *Decembre*, vous le nommerez *Pellerin* ou *Passa-*
 “ *ger*: 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 aupara-
 “ vant, vous le direz *Hagar*, mot *Hebrieu*, qui sig-
 “ nifie estrange*.”

* *La fauconnerie de Charles d’Arcussia seigneur d’Esparron*,
 p. 14. 5^{me} edit. Paris 1607.

52. GOS-
HAWK.
- Autour. Belon av. 112.*
Gesner av. 5.
Aldr. av. i. 181.
Sib. Scot. 15.
Goshawk, accipiter palumbarius. *Wil. av. 85.*
Raii syn. av. 18.
- L'Atour, Astur. *Briffon av. i. 317.*
Großer gepfeilter Falck. *Frisch I. 82.*
Astore. *Zinan 87.*
Falco palumbarius. *Lin. syst. 130.*

DESCRIP.

THE gohawk 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 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.

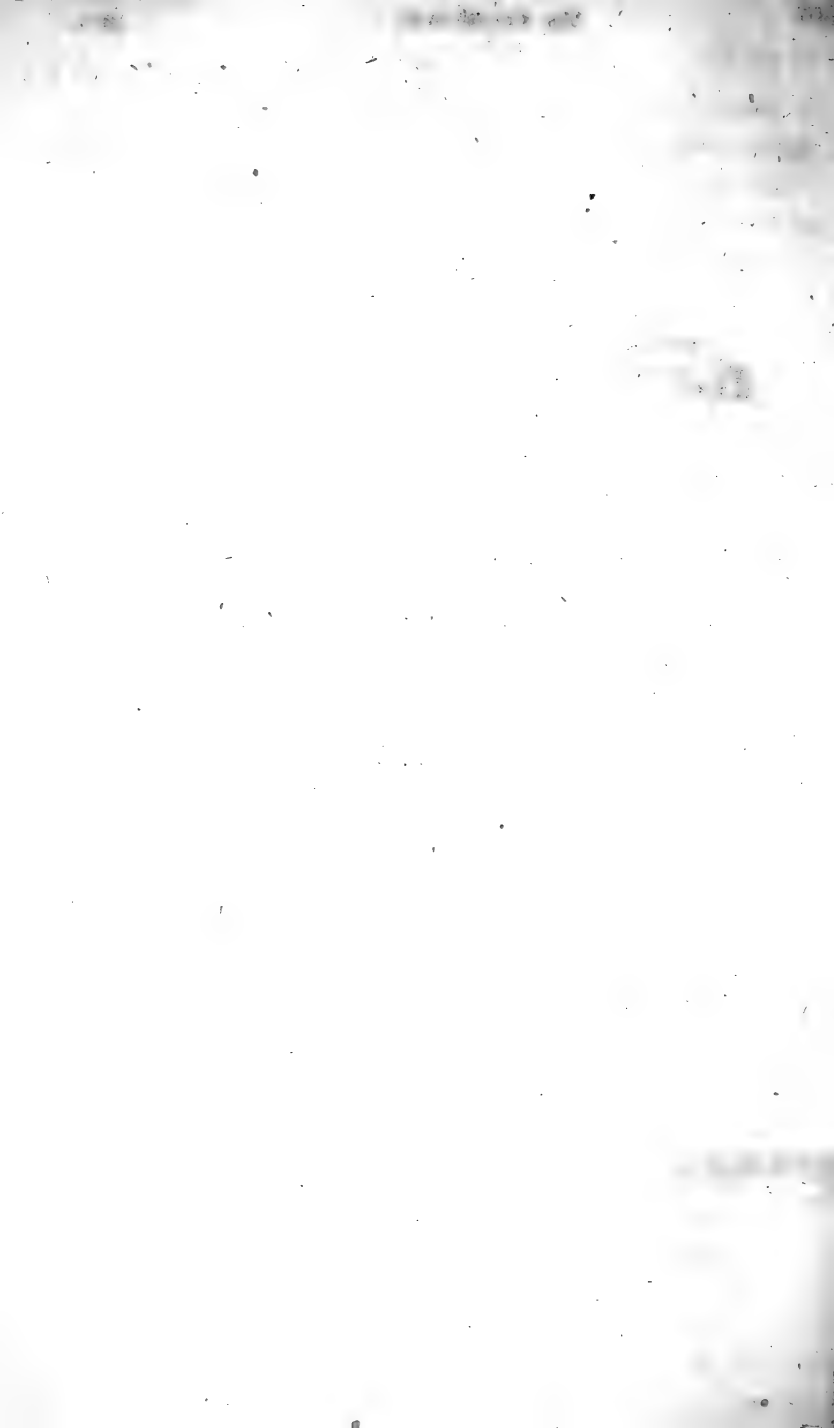
This species and the sparrow hawk, are distinguished by Mr. *Willughby* by the name of short winged hawks, because their wings, when closed, fall short of the end of the tail.

The gohawk was in high esteem among falconers, and flown at cranes, geese, pheasants and partridges. It breeds in *Scotland*, and builds its nest in



Aulton sculp

Magill fecit



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.

Le Milan royal. *Belon av.* 129.

Milvus. *Gesn. av.* 609.

Glede, Puttok, Kyte *Turneri.*

Milvio, Nichio. *Ald. av. i.* 201.

Kite, or Glead. *Wil. orn.* 74.

Milvus. *Plinii lib. x. c.* 10.

Raii syn. av. 17.

Rother Milon. *Kram.* 326.

Falco milvus. *Lin. syst.* 126.

Glada. *Faun. Suec. sp.* 57.

Le Milan royal. *Briffon av.*

i. 414. *Tab.* 33. *Hist.*

d'Oys. i. 197.

Nibbio. *Zinan.* 82.

The Kite. *Br. Zool.* 66.

Tab. A. 2. Pl. Enl. 422.

Glente. *Brunnich* 3.

53. K I T E.

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 scarce perceptible; sometimes it will remain quite motionless for a considerable space; 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 *Saxon* Glida. Lord *Bacon* observes, that when kites fly high, it portends fair and dry weather. Some have supposed these 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.

The weight of this species is forty-four ounces: the length twenty-seven: the breadth five feet one inch. The bill is two inches long, and very much

* *Belon obs. ad finem Clus. exot.* 108.

† *Iidem videntur artem gubernandi docuisse caudæ flexibus.*
Lib. x. c. 10.

hooked at the end : the cere yellow : *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.

54. B U Z -
Z A R D.
- Le Bufe, ou Bufard. *Belon*
av. 100.
- Buteo. *Gefner. av.* 46.
- Bufharda *Turneri.*
- Buteo, feu Triorches. *Ald. av.*
I. 190.
- Triorches, Buteo. *Plinii lib.*
x. c. 7.
- Raii fyn. av.* 16.
- Common Buzzard, or Puttock.
Wil. orn. 70.
- Wald Geyer. *Kram.* 329.
- Falco buteo. *Lin. fyft.* 127.
- Quidfogel. *Faun. Suec. fp.* 60.
- La Bufe. *Briffon av.* I. 406.
- Hift. d' Oys.* I. 206.
- Pojana. *Zinan.* 85. *Scopoli.*
No. 4.
- Br. Zool.* 66. *Tab. A.* 3. *Pl.*
Enl. 419.
- Oerne Falk. *Brunnich* p. 5.

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 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.

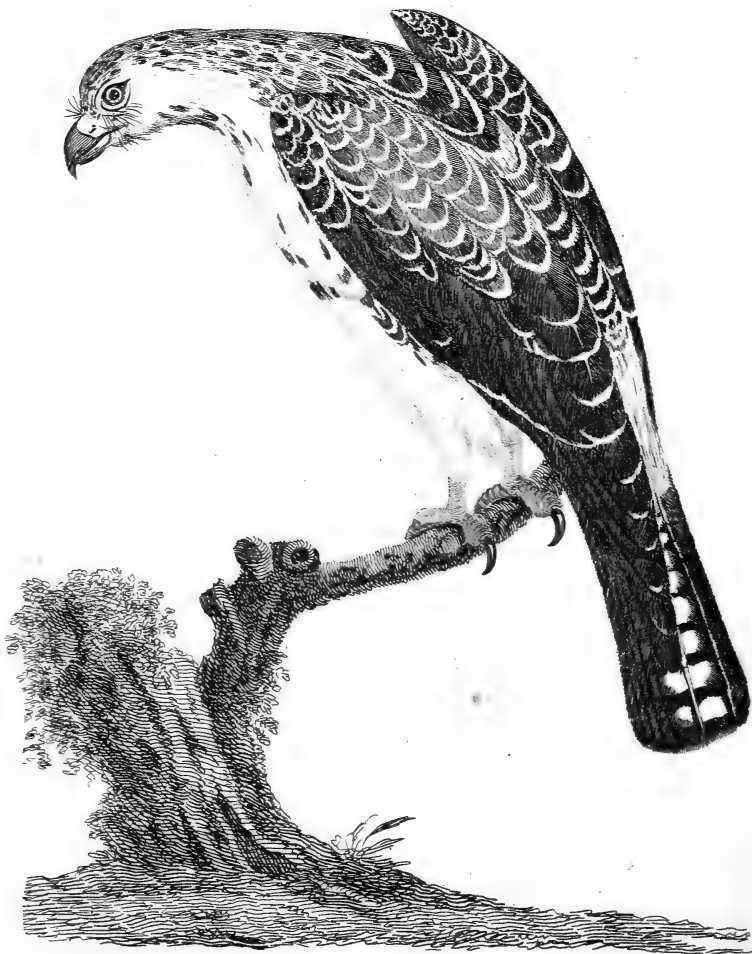
* *Ray's Letters.* 352.

BUZZARD.





SPOTTED FALCON.



This bird is subject to some variety in its colors: we have seen some whose breast and belly were brown, and only marked cross the crown with a large white crescent: usually the breast is of a yellowish white, spotted with oblong rust-colored spots, pointing downwards: the chin 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 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.

DESCRIP.

SIZE.

Spotted Falcon, *Br. Zool. iv. tab. 11.* 55. SPOTTED.

TWO of these birds have been shot near
Longnor, Shropshire.

O 3

Size

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.

- | | | |
|-----------------------|--|--|
| 56. HONEY
BUZZARD. | Le Goiran, ou Bondrèe. <i>Belon av.</i> 101. | La Bondrèe. <i>Briffon av.</i> i. 410. <i>Hist. d'Oys.</i> I. 208. |
| | <i>Ald. av.</i> 1. 191. | <i>Zinan.</i> 84. |
| | Honey-Buzzard. <i>Wil. orn.</i> 72. | <i>Br. Zool.</i> 67. <i>Tab. A.</i> 4. A*. |
| | <i>Raii syn. av.</i> 16. | 4. <i>Pl. Enl.</i> 420. |
| | Froich-geyerl. <i>Kram.</i> 331. | <i>Muse-Hoeg,</i> <i>Muse-Baage,</i> |
| | Falco Apivorus. <i>Lin. syst.</i> 130. | <i>Brunnich</i> p. 5. |
| | Slag-hok. <i>Faun. Suec. sp.</i> 65. | |

DESCRIP. **T**HE 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

T A I L.

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: the claws large and black.

After the publication of the *folio Zoology*, Mr. *Plymly* favored us with a variety of this species, engraved in the additional plates, supposed 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 reds 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.

E G G S.

57. MOOR BUZZARD.
- | | |
|---|---|
| Le fau-Perdrieux. <i>Belon av.</i> | Hoens-tjuf. <i>Faun. Suec. sp.</i> 66. |
| 114. | Pojana rossa. <i>Zinan.</i> 83. |
| Circus Accipiter. <i>Gesner av.</i> | Le Bufard de marais. <i>Briffon</i> |
| 49. | <i>av.</i> i. 401. <i>Hist. d'Oys.</i> 1. |
| Milvus æruginosus. <i>Ald. av.</i> | 218. |
| i. 203. | Schwartz-brauner Fisch-Geyer |
| Moor Buzzard. <i>Wil. orn.</i> 75. | er mit dem gelben Kopf. |
| <i>Raii syn. av.</i> 17. | <i>Frisch.</i> I. 77. |
| Brauner rohr Geyer. <i>Kram.</i> | Hoense Hoeg. <i>Brunnich</i> p. 5. |
| 328. | <i>Br. Zool.</i> 67. <i>Tab. A.</i> 5. |
| Falco æruginosus. <i>Lin. syst.</i> 91. | |

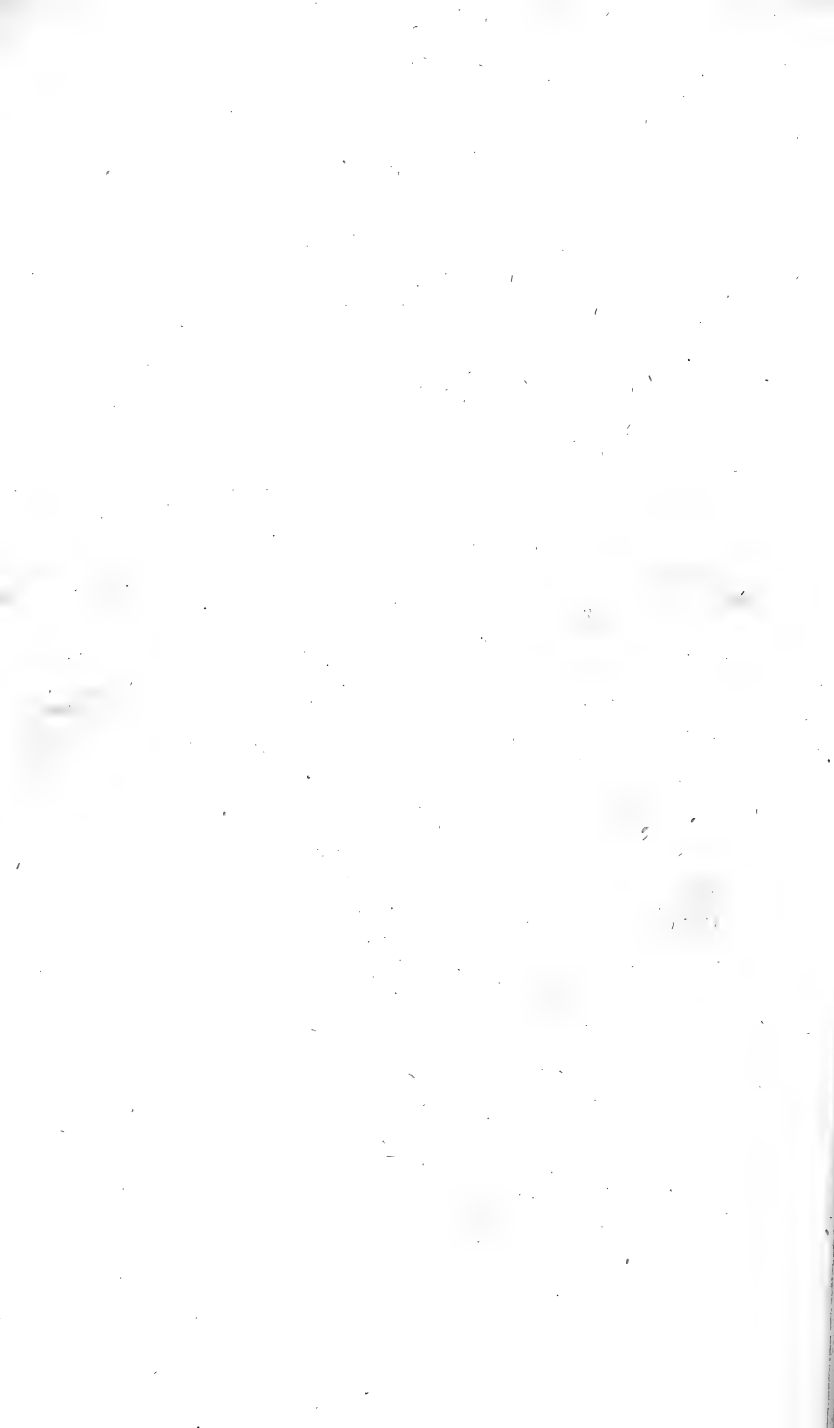
THIS species frequents moors, marshy places, and heaths; it never soars like other hawks; but commonly sits on the ground, or on small bushes: it makes its nest in the midst of a tuft of grass or rushes: we have found three young ones in it, but never happened to meet with the eggs: it is a very fierce 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.

DESCRIP. 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

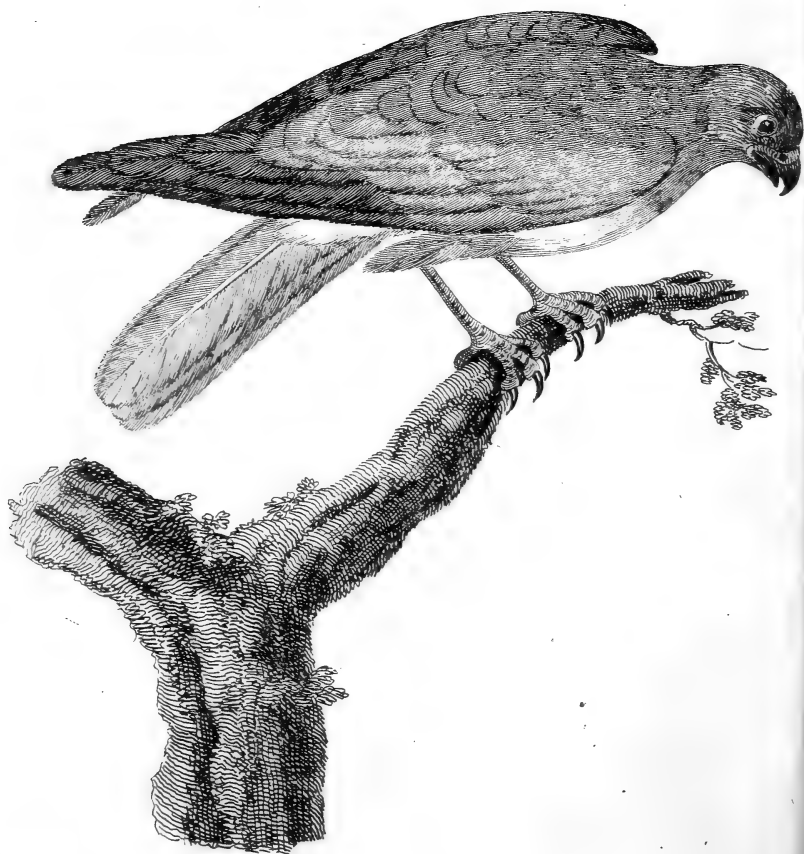
* In some places it is called the *duck hawk*.

MOOR BUZZARD.





HENHARRIER.



some birds of this kind with their head and chin entirely white; and others again have a whitish spot on the coverts of their wings; but these are only to be deemed varieties. The uniform color of its plumage, and the great length and slenderness of its legs, distinguishes it from all other hawks.

- Lanarius albus. *Aldr. av. i.* Le Lanier cendré. *Briffon av. i. 365. the male. Hist. d'Oys. I. 212.*
 197.
 Rubetarius *Turneri.*
Wil. orn. 70.
Raii syn. av. 17.
 Blue Hawk. *Edw. 225. the male.*
 Falco Cyaneus. *Lin. syst. 126.*

58. HEN-HARRIER.

- Br. Zool. 68. Tab. A. 6. Pl. Enl. 459.*
 Grau-weiße Geyer. *Frisch. I. 79, 80.*
Brunnich 14.

THE HEN-HARRIER weighs about twelve ounces: the length is seventeen inches; the breadth three feet three inches: the bill is black: 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.

DESCRIP.

These

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.

59. RING-
TAIL.

Subbuteo. *Gesner. av.* 48.
Ringtail. *Pygargus accipiter.*
Raii syn. av. 17. *Wil.*
orn. 70.
Le faucon a collier. *Briffon*
av. 1. 345. *Pl. Enl.* 443,
and 480.

Une autre oyseau *St. Martin.*
Belon av. 104.
Rubetarius Turneri. La fou-
buse. *Hist. d'Oys.* I. 215.
Brunnich No. 14. *Br. Zool.*
68. *Tab.* 4. 7.

DESCRIP.

THE RINGTAIL weighs sixteen ounces: is twenty inches long; and three feet nine inches broad: the *cere* and *irides* 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

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.

This 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. *Willughby* says, that the eggs are white, much besmeared with red. These birds fly higher than the *ben-barrier*; and I have seen them perch on trees.

La Crefferelle. *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 Crefferelle. *Briffon av.* I.

393.

Hist. d'Oys. I. 280.

Windwachtel, Rittlweyer,

Wannenweher. *Kram,* 331.

Roethel-Geyer. *Frisch.* I. 84.

fæm. Maufe-Falck. *Frisch.*
I. 88.

Falco tinnunculus. *Lin. syst.*
127.

Kyrko-Falk. *Faun. Suec. sp.*
61.

Kirke-Falk. *Brunnich* 4. 5.

Gheppio, Acertello, Gavi-
nello. *Zinan.* 88.

Br. Zool. 68. plate A. *Pl.*
Enl. 401. 471.

Postoka, Splintza, Skoltfch.
Scopoli. No. 5.

60. K E S -
T R E L

THE male of this beautiful species weighs only six ounces and a half: its length fourteen inches: the breadth two feet three inches: cere and legs yellow: *irides* dark. Its colors at once distinguish it from all other hawks: the crown

DESCRIP.

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.

FEMALE.

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.

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 preceding species: its food is field mice, small birds and insects; which it will discover at a great distance. This is the hawk that 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. When falconry

was

was in use in *Great Britain*, this kind was trained for catching small birds and young partridges.

Le Hobreau. <i>Belon av.</i> 118.	<i>Raii syn. av.</i> 15.	61. HOBBY.
<i>Gesner av.</i> 75. <i>fam.</i>	<i>Falco subbuteo. Lin. syst.</i> 127.	
Hobbia. <i>Turneri.</i>	<i>Faun. Suec. sp.</i> 59.	
<i>Æfalon. Aldr. av.</i> I. 187.	<i>Barletta. Lorenzi av.</i> 45.	
The Hobby. <i>Wil. orn.</i> 83.	<i>Stein-Falck. Frisch.</i> I. 86.	
Le Hobreau, <i>Dendro-falco.</i>	<i>Laerke-Falk. Brunnich</i> 10. 11.	
<i>Briffon av.</i> I. 375. <i>Hist.</i>	<i>Br. Zool.</i> 69. plate A. 9. <i>Pl.</i>	
<i>d'Oys. I.</i> 277.	<i>Enl.</i> 431.	

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 a ready prey to the fowler, by drawing a net over them. The hobby is a bird of passage; but breeds in *England*, and migrates in *October*.

The male weighs seven ounces: the length is one foot; the breadth two feet three inches: cere and orbits 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

DESCRIP.

rior

rior 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.

FEMALE.

The spots on the breast of the female are of a higher 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.

62. SPARROW HAWK. L'Espervier. *Belon av.* 121. *Sperber Frisch.* I. 90. 91.
Gesner av. 51. *Kram.* 332.
Sparhauc Turneri. *Falco nifus.* *Lin. syst.* 130.
Accipiter fringillarius, spar- *Sparfhoek.* *Faun. Suec. sp.*
viero. Aldr. av. i. 183. 69.
Wil. orn. 86. *Spurre-hoeg.* *Brunnich p.* 5.
L'Espervier, accipiter. Brisson *Scopoli.* No. 6.
av. I. 310. *Hist. d'oyes.* 1. *Br. Zool.* 69. plate A. 10. A.
 225. *11. Pl. Enl.* 466, 467. 412.
Raii syn. av. 18.

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 scarce weighing five ounces, the latter nine ounces. The length of the male is about twelve inches, the breadth twenty-three: the female

DESCRIP.

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 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 fine 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 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 that cross the breast, are more numerous than those on that of the male ; and the breast itself of a purer white.

This is the most pernicious hawk we have ; and MANNERS. 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.

63. MER-
LIN.*L'Esmerillon. *Belon av.* 118.*Æsalon. Gesner av.* 44.Merlina. *Turneri.*Smerlus, Smerillus. *Aldr. av.*

I. 187.

Wil. orn. 85.*Raii syn. av.* 15.L'Emerillon. *Briffon av.* I.
382.Smerlio, o Smeriglio. *Lorenzi*
av. tab. 18. 19.*Br. Zool.* 70. plate A. 12.*Pl. Enl.* 468.*Hist. D'Oys.* I. 288.

DESCRIP.

THE Merlin weighs near 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 thirteen, on some fifteen, but in one bird I examined, were no more than eight: 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. This and

MANNERS.

* Merularius; quia merulas insectatur. *Skinner.*

the

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 roads' sides, 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.

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 *Penbebogyd* or *chief falconer*, held the fourth place at the court of the *Welch* prince : but notwithstanding the hospitality of the times, this officer was allowed only three draughts out of his horn, lest he should be fuddled and neglect his birds*.

* *Leges Wallicæ*, 253. 25.

II. OWL. Large round HEAD, strong hooked BILL, no CERE. Feathers round the face disposed in a circular form. Outmost TOE capable of being turned back, and doing the office of a hind toe.

64. EAGLE. *Bubo maximus nigri et fusci coloris.* *Sib. Scot.* 14. *Buhu. Kram. Austr.* 323. *Sova. Scopoli.* No. 7.
 Great Owl, or Eagle Owl. *Wil. Le grand duc. Brisson.* I. 477.
orn. 99. *Raii syn. av.* *De Buffon,* I. 332.
Strix Bubo. Lin. Syst. 131. *Eagle Owl. Br. Zool.* IV.
Uff. Faun. Suec. No. 69. *Tab. VI. Pl. Enl.* 385.
Berg Uggel, Katugl hane. 435.
Strom. Sondm. 222.

THE eagle owl has been shot in *Scotland* and in *Yorkshire*. It inhabits inaccessible rocks and desert places; and preys on hares and feathered 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 ancients had them in the utmost abhorrence, and thought them, like the screech owls, the messengers of death. *Pliny* styles it *Bubo funebris & noctis monstrum*.

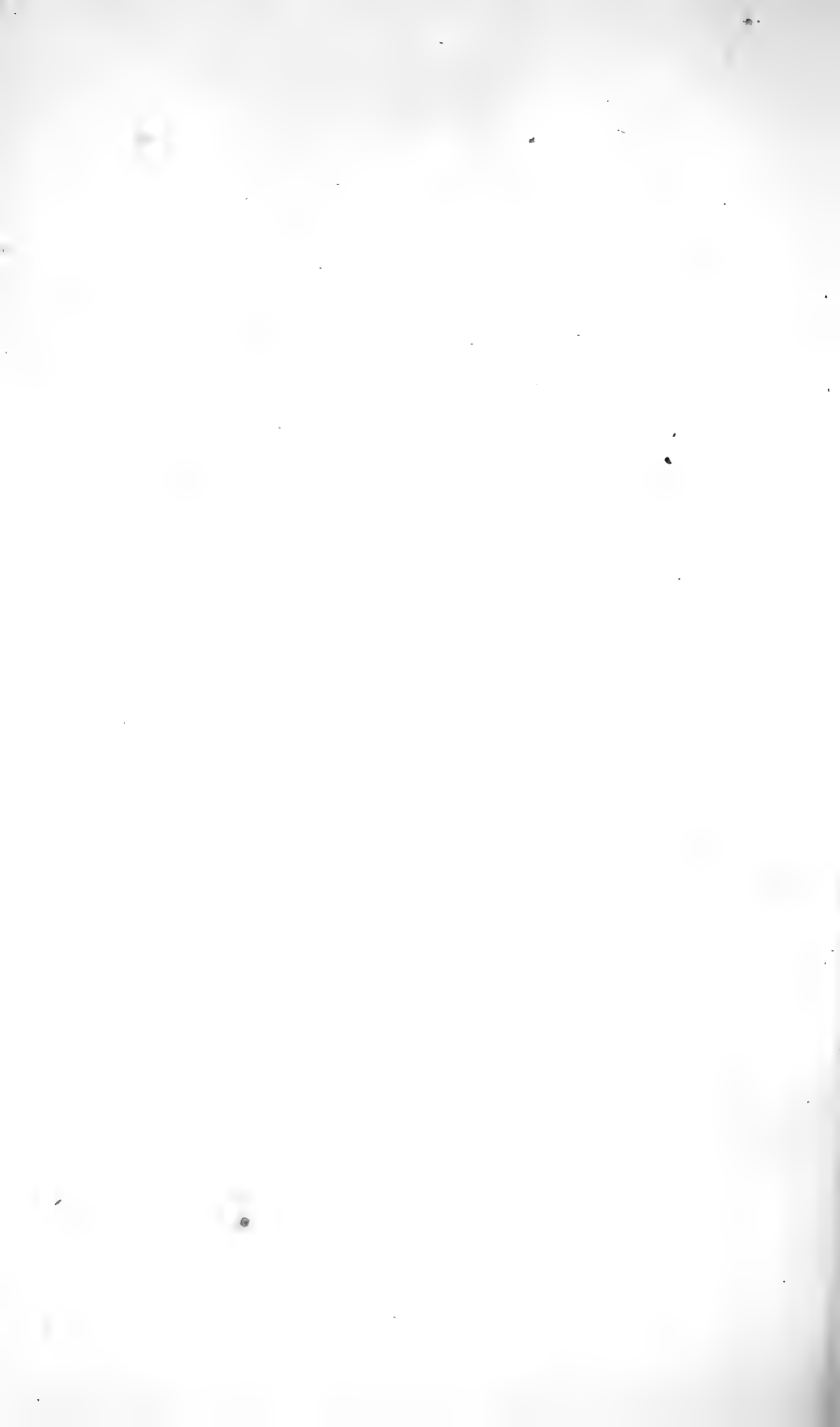
*Solaque culminibus ferali carmine Bubo
 Saepe queri et longas in fletum ducere voces.*

VIRGIL.

Perch'd

EAGLE OWL







LONG-EARED OWL.



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.

E A R E D O W L S.

L'Hibou cornu. <i>Belon av.</i> 136.	Horn-uggla. <i>Faun. Suec.</i>	65. LONG
<i>Gesner av.</i> 635.	<i>sp.</i> 71.	EARED.
Afio, seu Otus. <i>Aldr. av.</i> I. 265.	<i>Hasselquist itin.</i> 233.	
The Horn Owl. <i>Wil. orn.</i> 100.	Horn Ugle. <i>Brunnich</i> 16.	
<i>Raii syn. av.</i> 25.	Horn-eule. <i>Kram.</i> 323.	
Noctua aurita. <i>Sib. Scot.</i> 14.	<i>Br. Zool. Plate 4. f. 1. Pl.</i>	
<i>Strix otus. Lin. syst.</i> 132.	<i>Enl.</i> 29. 473.	
Le moyen Duc ou le Hibou.	Mala Sova. <i>Scopoli</i> No. 9.	
<i>Briffon av.</i> I. 486. <i>Hist.</i>	Rothe Kautzlein. <i>Frisch</i> I.	
<i>d' Oys.</i> I. 342.	99.	

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 opportunity of weighing it) is ten ounces: the length fourteen inches and a half: the breadth three feet four inches:

inches : the irides are of a bright yellow : the bill black : the circle of feathers surrounding the eyes is white tipped with reddish 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 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 outmost 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 six feathers variegated with yellow and black : the feet are feathered down to the claws.

66. SHORT
EARED.

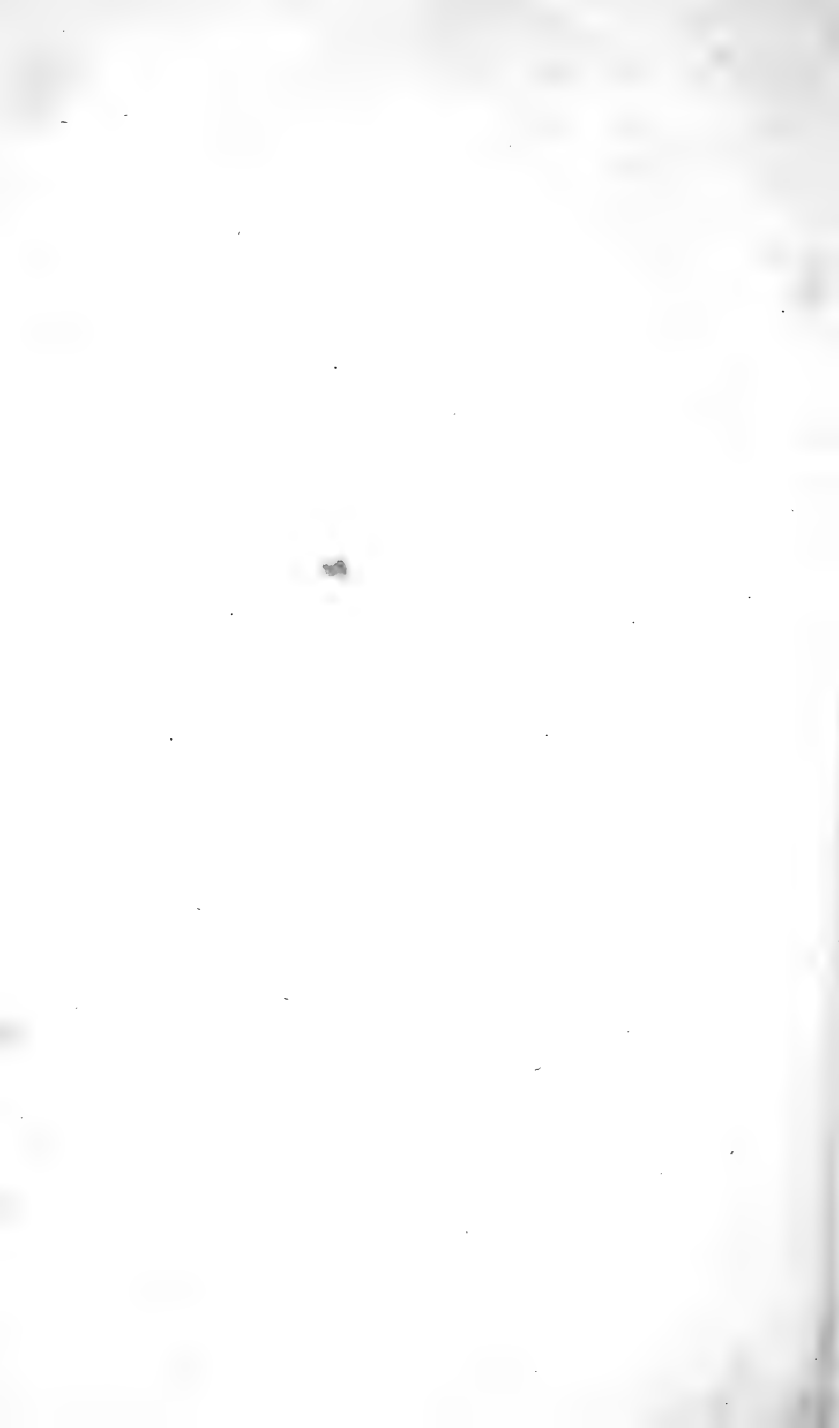
Br. Zool. 71. Tab. B. 3. and B. 4. Fig. 2.

THE horns of this species are very small, and each consists of only a single feather ; these it can raise or depress at pleasure ; and in a dead bird they are with difficulty discovered. This kind is scarcer than the former ; both are solitary birds, avoiding inhabited places. These species 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

SHORT EARED OWL.





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 day it lies hid in long old grass; when disturbed, it seldom flies far, but will light and sit looking at one, at which time the horns may be seen very distinctly. It has not been observed 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: extent three feet: the head is small and hawk-like: the bill is dusky: weight fourteen ounces: the circle of feathers that immediately surrounds the eyes is black: the larger circle white, terminated with tawny and black: 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;

wards: the thighs, legs and toes, are covered with plain 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 other *European* horn owl, the little horn owl, *Scops* or *Petit Duc* of *M. de Buffon*, I. 353, is unknown in *Great Britain*.

OWLS WITH SMOOTH HEADS.

67. WHITE. *Belon av.* 143*.
Aluco minor. *Aldr. av.* I. 272.
 Common barn, white, or church Owl, Howlet, madge Howlet, Gillihowter. *Wil. orn.* 104.
Raii syn. av. 25.
- Le petit Chat-huant. *Briffon av.* I. 503.
Allocco. *Zinan.* 99.
Strix flammea. *Lin. syst.* 133.
Faun. Suec. 73.
Br. Zool. 71. plate B. *Pl. Enl.* 474.
L'Effraie. *Hist. d'Ois.* I. 366.
Perl-Eule. *Frisch.* I. 97.

THIS species is almost domestic: inhabiting for the greatest part of the year, barns,

* This refers only to the figure, for his description means the *Goatsucker*.

haylofts,

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 fall out in quest 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 that had been the habitation of owls for many generations, found at the bottom many bushels of this re-

jected stuff. Some owls will, when they are satisfied, like dogs, hide the remainder of their meat.

The elegant plumage of this bird makes amends for the uncouthness of its form: a circle of soft white feathers surround 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 alternate: 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: 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.

S I Z E.

- | | | |
|--|--|--|
| 68. TAWNY OWL. | Ulula. <i>Gesner av.</i> 773. | Strix stridula. <i>Lin. syst.</i> 133. |
| | Strix. <i>Aldr. av.</i> I. 285. | Skrik uggla. <i>Faun. Suec.</i> 77. |
| | Common brown or ivy Owl. | Strix Orientalis. <i>Hasselquist itin.</i> |
| | <i>Wil. orn.</i> 102. | 233. |
| | <i>Raii syn. av.</i> 25. | Nacht Eule, Gemeine. <i>Kram.</i> |
| | Le Chat huant. <i>Briffon av.</i> | 324. |
| I. 500. <i>Hist. d'Oys.</i> | Braune-Eule, or Stock-Eule? | |
| I. 362. | <i>Priseb.</i> I. 96. | |
| Strige. <i>Zinan</i> , 100. <i>Scopoli</i> , | Nat Ugle. <i>Brunnich</i> , 18. | |
| li, No. 12. | <i>Br. Zool.</i> 72. plate B. 3. <i>Pl. Enl.</i> | |
| | 437. | |

THIS is the *Strix* of *Aldrovandus*, what we call the *Screech Owl*; to which the folly of superstition

perftition had given the power of prefaging death by its cries. The antients believed that it fucked the blood of young children; a fact not incredible, for *Haffelquift** describes a fpecies found in *Syria*, which frequently in the evening flies in at the windows, and deftroys the helpless infant.

Nocte volant puerofque petunt nutricis egentes,
 Et vitiant cuneis corpora rapta fuis.
 Carpere dicuntur lactentia viscera roftris,
 Et plenum poto fanguine guttur habent.
 Eft illis ftrigibus nomen, fed nominis hujus
 Caufa quod horrenda ftridere nocte folent.

Ovid. Faft. VI. 135.

The female of this fpecies 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 fenfe of hearing very exquisite. The color of this kind is fufficient to diftinguifh it from every other: that of the back, head, coverts of the wings, and on the fcapular feathers, being a fine tawny red, elegantly spotted and powdered with black or dusky fspots of various fizes: on the coverts of the wings, and on the fcapulars, are feveral large white fspots: the coverts of the tail are tawny, and quite free from any marks: the tail is varioufly blotched, barred and fspotted with pale red and black; in

DESCRIP.

* *Iin. 255.*

the two middle feathers the red predominates: the breast and belly are yellowish, mixed with white, and marked with narrow black strokes 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.

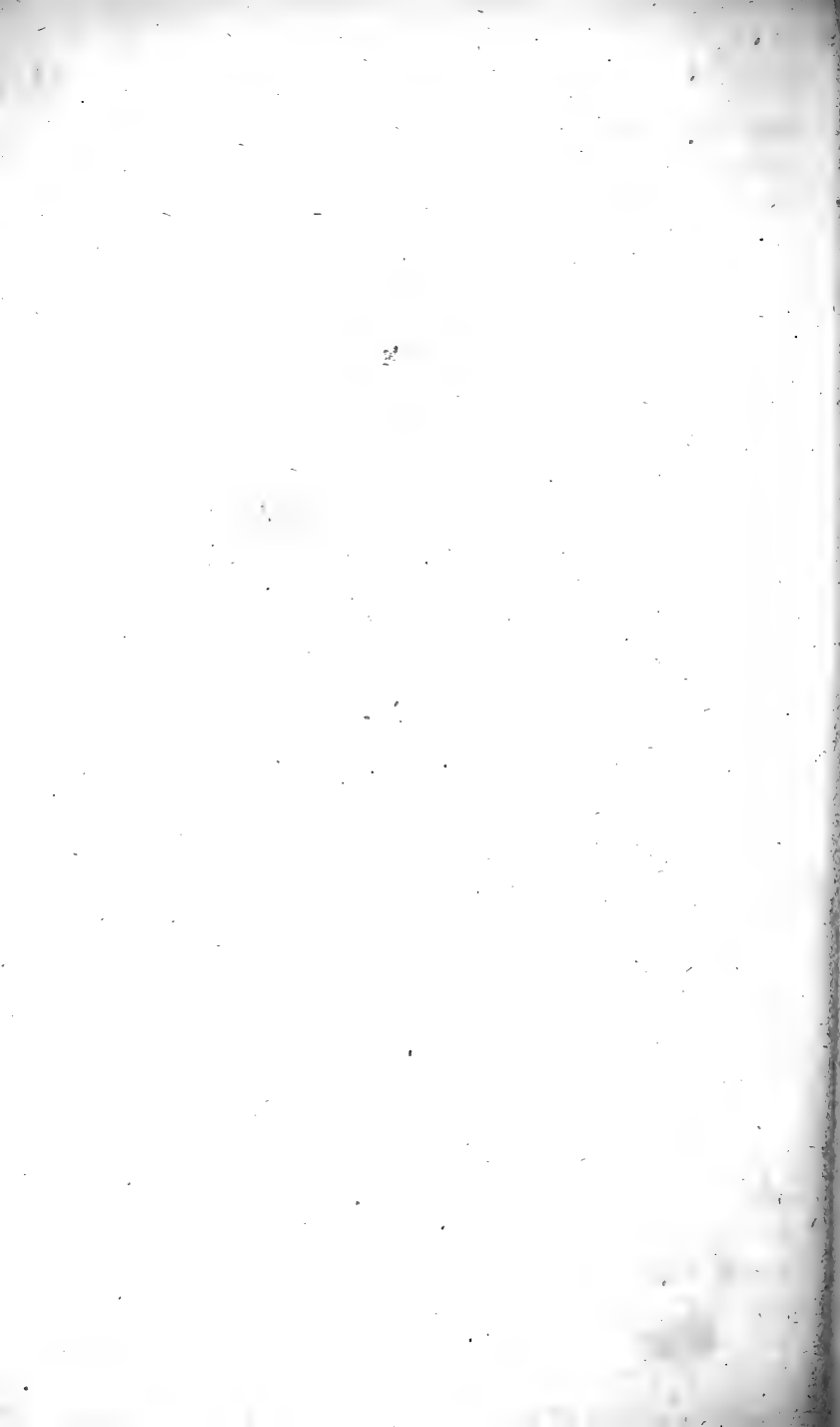
69. BROWN. The grey Owl. *Wil. orn.* 103. *Faun. Suec.* 78.
Raii syn. av. 26. Ugle. *Brunnich,* 19.
 La Hulote. *Briffon av.* I. 507. Graue Eule? *Frisch,* I. 94.
 Strix Ulula. *Lin. syst.* 133. *Br. Zool.* 72. Plate B. 1.

DESCRIP.

AS the names this and the precedent species bear do 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: the feet too are feathered down to the very

BROWN OWL.





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 an 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.

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. *Briffon av.* I. 70. LITTLE.

514.

Strix passerina. Lin. syst. 133.

La Civetta. *Olina, 65. Scopoli,*

No. 17.

Krak-Ugle. *Brunnich,* 20.

Kleinste Kautzlein. *Frisch,*

I. 100.

Br. Zool. 73. plate B. 5.

THIS elegant species is very rare in *England* ;

it is sometimes found in *Yorkshire, Flintshire,* DESCRIP.

and also near *London* : in size it scarcely exceeds a

thrush, though the fullness of its plumage makes

it

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 : in each 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. *Steuart*, 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.



GREAT FEMALE SHRIKE.



ORDER II. P I E S.

Strong bill, strait at the base, and hooked at the end. Each side of the upper mandible marked with one notch. Outmost toe closely joined to the middlemost as far as the first joint. III. SHRIKE.

- | | |
|---|---|
| Le grande Pie griefche. <i>Belon av.</i> 126. | Night Jar. <i>Mort. Northampt.</i> 71. GREAT. 424. |
| <i>Lanius cinereus.</i> <i>Gesner av.</i> 579. | La Pie-griefche grife. <i>Briffon av.</i> II. 141. <i>Hift. d' Oys.</i> I. 296. |
| Skrike, nyn murder <i>Turneri.</i> | <i>Pl. Enl.</i> 32. f. 1. |
| <i>Lanius cinereus,</i> Collurio major. <i>Aldr av.</i> I. 199. | <i>Lanius excubitor.</i> <i>Lin. syst.</i> 135. |
| Cafrica, Ragastola. <i>Olina,</i> 41. | Warfogel. <i>Faun. Suec.</i> 80. |
| Greater Butcher Bird, or Mat-tagefs; in the North of England, Wierangle. <i>Wil. orn.</i> 87. | <i>Danish Torn-Skade. Norvegis Klavert. Br.</i> 21. 22. |
| <i>Raii syn. av.</i> 18. | <i>Br. Zool.</i> 73. plate C. <i>Pl. Enl.</i> 445. |
| Speralfter, Grigelalfter, Neuntodter. <i>Kram.</i> 364. | Velch Skrakoper. <i>Scopoli,</i> No. 18. |
| Butcher Bird, Murdering Bird or Skreek. <i>Mer. Pinax,</i> 170. | Berg-Aelster (Mountain Magpie) or groffer Neuntodter. <i>Frisch,</i> I. 59. |
| <i>Cat. Carol.</i> app. 36. | |

THIS bird weighs three ounces: its length is ten inches: its breadth fourteen: its bill is 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

SIZE.

MANNERS.

very thick and strong; which makes the head very large. This apparatus is quite requisite in a species whose method of 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 *Wurcbangel* †, 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* 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 it with wool and gossamer; and lays six eggs, of a dull olive green, spotted at the thickest end with black.

DESCRIP.

The crown of the head, the back, and the coverts that 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

* *Edw. Gl.* III. 233.† *Wil. orn.* 87.

with

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.

TAIL,

CHEEKS.

- | | |
|---|--|
| La petite Pie grise. <i>Belon av.</i> 128. | L'Ecorcheur. <i>Briffon av.</i> II. 151. |
| Lanius tertius. <i>Aldr. av.</i> I. 199. | <i>Pl. Enl.</i> 31. f. 2. <i>Hist. d'Oys.</i> I. 304. |
| Lesser Butcher Bird, called in <i>Yorkshire</i> Flusher. <i>Wil. orn.</i> 88. <i>sp.</i> 2. the male. 89. <i>sp.</i> 3. the female. | Lanius collurio. <i>Lin. syst.</i> 136. <i>Faun. Suec.</i> 81. Tab. II. f. 81. |
| <i>Raii syn. av.</i> 18. | Dorngreul, Dornheher. <i>Kram.</i> 363. |
| <i>Danish</i> Tornskade. <i>Norw.</i> Hantvark. <i>Br.</i> 23. | Bufferola, Ferlotta rossa. <i>Zinnan,</i> 91. |
| <i>Mort. Northampton.</i> 424. | <i>Br. Zool.</i> 74. plate C. 1. |
| | Mali Skrakoper. <i>Scopoli,</i> No. 19. |

72. RED-BACKED.

THE male weighs two ounces; the female two ounces two drams. The length of the former

DESCRIP.

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 exterior 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 semicircular 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.

- Lanius minor primus.* Aldr. La Pie griefche rousse. *Briffon* 73. WOOD-
av. I. 200. *av.* II. 147. *Hist. d'Oys.* CHAT.
 Another sort of Butcher Bird. I. 301.
Wil. orn. 89. *fp.* 4. *Pl. Enl.* 9. f. 2.
 The Wood-chat. *Raii syn.* Buferola, Ferlotta bianca.
av. 19. *fp.* 6. *Zinan.* 89.
Br. Zool. 74. plate C. 2. Kleiner Neuntoedter. *Frisch,*
 Dorngreul mit rother platten. I. 61.
Kram. 363.

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 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 appear by the drawing to be entirely black: the exterior edges and tips of the rest white: the legs black.

DESCRIP.

The female differs: the upper part of head, neck and body are reddish, striated transversely 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.

FEMALE.

IV. CROW. Strait strong BILL: NOSTRILS covered with bristles reflected down. Outmost TOE closely connected to the middle toe as far as the first joint.

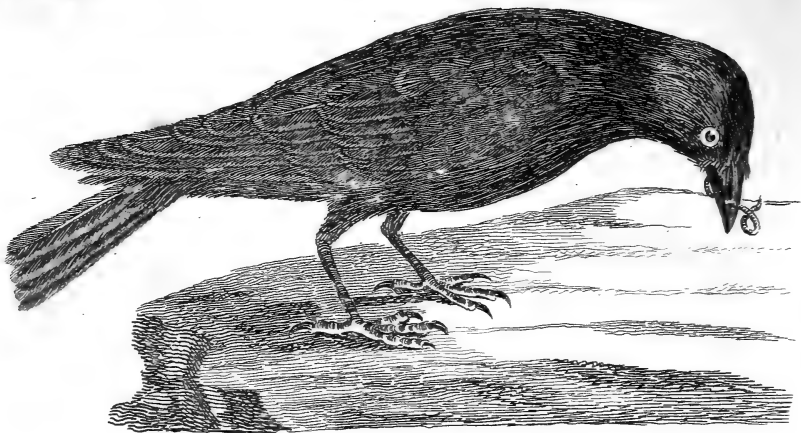
74. RAVEN. Le Corbeau. *Belon av.* 279. Velch oru. *Scopoli*, No. 35.
 Corvus. *Gesner av.* 334. Corvus corax. *Lin. syst.* 155.
 Corvo, Corbo. *Aldr. av.* I. Korp. *Faun. Suec.* 85.
 343. *Danish Raun. Norv. Korp.*
Wil. orn. 121. *Br.* 27.
Raii syn. av. 39. Rab. *Kram.* 333. *Frisch*, I.
 Le Corbeau. *Brisson av.* II. 8. 63.
Br. Zool. 75. *Hist. d' Oys.*
 III. 13.

DESCRIP. **T**HIS 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 a rich blue; the belly excepted, which is dusky.

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**,

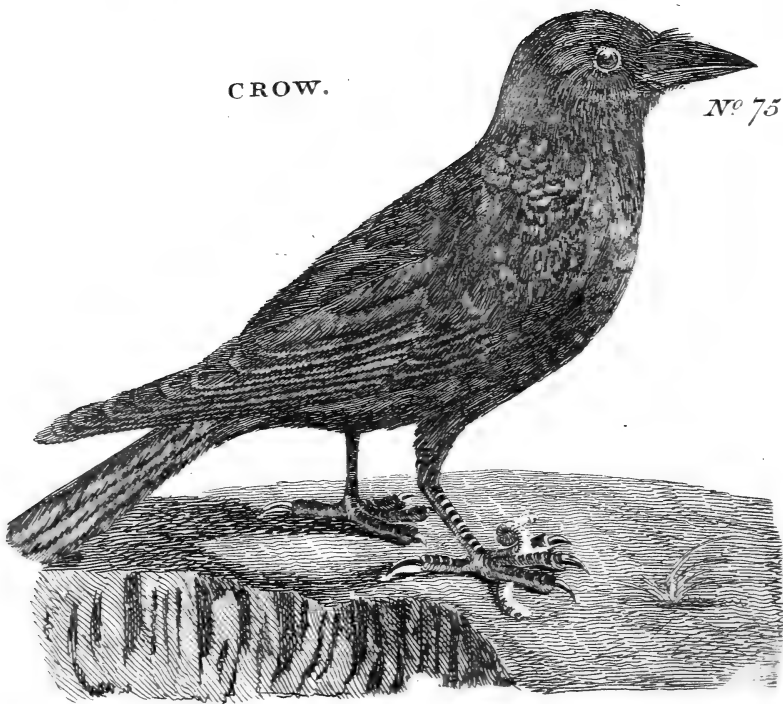
* *Hasselquist itin.* 23.





CROW.

Nº 75



W. Griffiths del

and for the same reason; for devouring the carcases 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 *Abab**. The raven is a very docile bird, may be taught to speak, and fetch and carry. In clear weather they fly in pairs a great height, making a deep loud noise, different from the common croaking. Their scent is remarkably good; and their life prolonged to a great space.

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.

La Corneille. *Belon av.* 281.

Cornix (Krae). *Gesner av.*
320.

Cornice, Cornacchio. *Aldr.*
av. I. 369.

Wil. orn. 122.

Raii syn. av. 39.

La Corbine. *Hist. d'Oys.* III.

45.

La Corneille. *Briffon av.* 12.

Corvus corone. *Lin. syst.* 155.

Faun. Suec. 86.

Krage. *Br.* 30.

Br. Zool. 75.

Oru. Scopoli, No. 36.

75. CAR-
RION.

THE crow in the form of its body agrees with the raven; also in its food, which is

* 1. *Kings* 17.

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 Johnson* in his *Fox*, *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, especially if it happened to be seen on the left hand:

Sæpe sinistra cava prædixit ab illice 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 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 space, to consult the properest method of extirpating them.

Though the crow abounds in our country, yet in
Sweden

Sweden it is so rare, that *Linnaeus* mentions it only as a bird that he once knew killed there.

It lays 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 any others: 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 eighteen inches: its breadth two feet two inches.

- | | | |
|---|--|-----------|
| La Graye, Grolle ou Freux.
<i>Belon av.</i> 283. | La Corneille Moiffoneuse.
<i>Briffon av.</i> II. 16. | 76. Rook. |
| Cornix frugivora (Roock).
<i>Gesner av.</i> 332. | Roka. <i>Faun. Suec.</i> 87. | |
| <i>Aldr. av.</i> I. 378. | Spermologus, feu frugilega.
<i>Caii opusc.</i> 100. | |
| <i>Wil. orn.</i> 123. | Schwartzte krau, Schwartzte
krahe. <i>Kram.</i> 333. <i>Frisch,</i> | |
| <i>Raii syn. av.</i> 39. | I. 64. | |
| Corvus frugilegus. <i>Lin. syst.</i>
156. | <i>Br. Zool.</i> 76. | |
| Le Freux, ou la Frayonne.
<i>Hist. d'Oys.</i> III. 55. | | |

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 size of the rook is superior; but the colors in each are the same, the plumage of both being glossed with a rich purple. But what 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, that do incredible damage by eating the roots of the corn. 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 be plundered by its brethren: they lay the same number of eggs as the crow, and of the same color, but less. 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 †.

* *Scarabæus melolantha*. *Lin. syst.* 351. *Rafel*, II. *Tab.* 1. *List. Goed.* 265.

† *Calendar of Flora*.

- La Corneille emantelée. *Belon.* av. II. 19. *Hist. d'Ois.* 77. HOODED.
av. 285. III. 61.
- Cornix varia, Marina, Hyberna, (Nabelfrae.) *Gesner* Mulacchia cinerizia, Monacchia. *Zinan.* 70.
av. 332. Corvus cornix. *Lin. syst.* 156.
- Cornix cinerea. *Aldr.* av. I. Kraka. *Faun. Suec. sp.* 88.
379. Grave Kran, Kranveitl. *Kram.*
Raii syn. av. 39. 333.
- Martin's West. Isles,* 376. Graue - Krøche (grey - Cow),
Hooded Crow. *Sib. Scot.* 15. Nebel-Krøche (mist Crow).
Pl. Enl. 76. *Frisch,* l. 65.
- La Corneille mantelée. *Briffon* *Br. Zool.* 76. plate D. 1.
Urana. Scopoli, No. 37.

THE bill of this species agrees in shape with that of the rook, to which it bears great similitude in its manners, flying in flocks, and feeding on insects. In *England* it is a bird of passage; it visits us in the beginning of winter, and leaves us with the woodcocks. They are found in the inland as well as maritime parts of our country; in the latter they feed on crabs and shellfish.

It is very common in *Scotland*: in many parts of the *Highlands*, and in all the *Hebrides*, *Orknies*, and *Sbetlands*, is the only species of genuine crow; the *Carrion* and the *Rook* being unknown there. It breeds and continues in those parts, the whole year round. Perhaps those that inhabit the northern parts of *Europe*, are they which migrate here. In the *Highlands* they build indifferently in all

kinds of trees : lay six eggs : have a shriller note than the common crows, 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. For want of other food, they will eat cran-berries and other mountain berries.

Belon, *Gesner*, and *Aldrovand*, agree that this is a bird of passage in their respective countries : that it resorts in the breeding season to high mountains, and descends into the plains on the approach of winter. It breeds also in the southern parts of *Germany*, on the banks of the *Danube* *.

DESCRIP.

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.

* *Kram.* 333.

- La Pie. *Belon av.* 291. Corvus Pica. *Lin. syst.* 157. 78. MAGPIE.
 Pica varia et caudata. *Gesner* Skata, Skiura, Skara. *Faun.*
 av. 695. *Suec. sp.* 92.
Aldr. av. 1. 392. *Danish* Skade, Huus Skade.
 The Magpie, or Pianet. *Wil.* *Norv.* Skior, Tunfugl.
 orn. 127. *Brunnich,* 32.
Raii syn. av. 41. *Aelster. Frisch,* I. 58.
 La Pie. *Briffon,* II. 35. *Hist.* *Alster. Kram.* 335.
 d' Oys, III. 85. *Br. Zool.* 77. plate D. 2.
 Gazza, Putta. *Zinan.* 66. *Praka. Scopoli,* No. 38.

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. 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;

ens ; is a crafty, restless, noisy bird : *Ovid* therefore with great justice styles it,

----- *Nemorum convicia Pica.*

It is easily tamed ; 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 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.

79. JAY.

Le Jay. *Belon av.* 289.
Pica glandaria. Gesner av. 700.
Aldr. av. I. 393.
Olina, 35.
Wil. orn. 130.
Raii syn. av. 41.
Ghiandaia. Zinan. 67.
Corvus glandarius. Lin. syst.
 156.
Le Geay, Garrulus. Brisson av.
 II. 47. *Hist. d' Oys.* III. 107.

Allonskrika, Kornskrika.
Faun. Suec. sp. 90.
 Skov-skade. *Br.* 33.
 Nuff-heher. *Kram.* 335.
 Eichen-Heher (Oak-Jay), or
 Holtz-Schreyer (Wood-
 Cryer). *Frisch,* I. 55.
Br. Zool. 77. plate D.
 Skoia, Schoga. *Scopoli,* No.
 39.

DESCRIP.

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

large black spots. The forehead is white, streaked with black: the head is covered with very long feathers, which at pleasure it can erect into the form of a crest: the whole neck, back, 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. It lays five or six eggs, of a dull whitish olive, mottled very obscurely with pale brown. 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. 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**

* *Kram. elench.* 335.

observes,

observes, that they will kill small birds. Jays are very docil, 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 mewing of a cat.

80. RED
LEGGED.

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. *Hist. d'Oys.*

III. 1.

The Killecrew. *Charlton ex.*

75.

Cornwall Kae. *Sib. Scot.* 15.

Borlase Cornw. 249. *Tab.* 24.

Camden, Vol. I. 14.

Le Coracias. *Briffon av.* II.

4. *Tab.* 1.

Corvus gracculus. *Lin. syst.*

158.

Monedula pyrrhocorax. *Haf-*

selquist itin. 238.

Br. Zool. 83. plate L*.

Gracula pyrrhocorax. *Scopoli,*

No. 46.

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

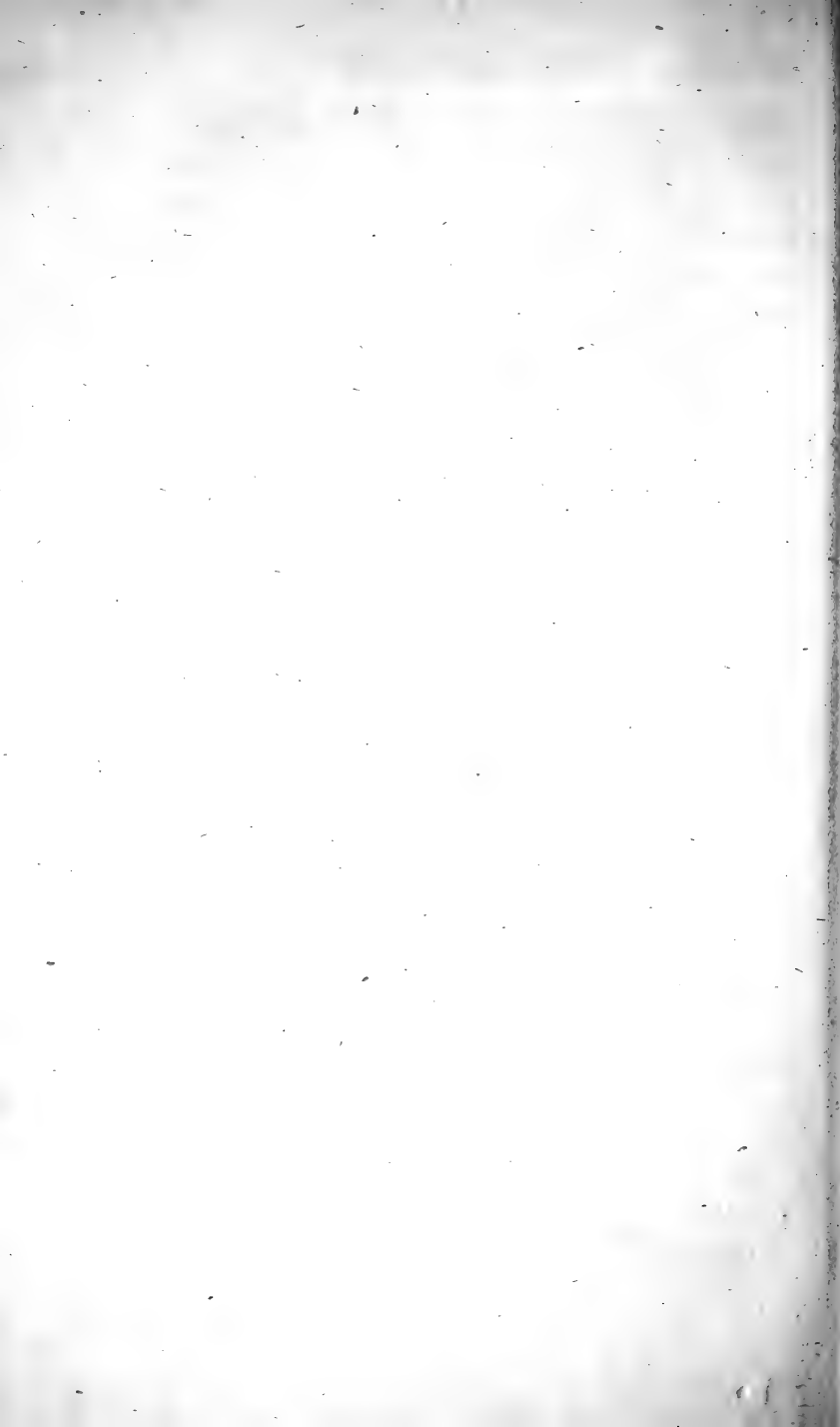
* *Plin. nat. hist. lib. X. c. 48. Briffon, II. 5.*

† *Belon obs.* 17.

‡ *Hasselquist itin.* 240.

RED LEGGED CROW.





Ægypt it affects mountainous and rocky situations; and builds its nest in high cliffs, or ruined towers, and lays four or five eggs, white spotted with a dirty yellow. It feeds on insects, and also on new sown corn: they commonly fly high, make 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 *Anglesea*, in the cliffs and castles along the shores; and in different parts of *Scotland* as far as *Straitnavern*; and in some of the *Hebrides*. They are 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 thirty-three inches: the length sixteen: its color is wholly black, beautifully glossed over with blue
and

DESCRIP.

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.

81. JACK-
DAW.

Chouca, Chouchette, ou Chouette. *Belon av.* 286.
Gracculus, feu monedula. *Gesner av.* 521.
Aldr. av. I. 387.
Wil. orn. 125.
Raii syn. av. 40.
Le Choucas. *Briffon av.* 24.
Scopoli, No. 38.
Mulacchia nera. *Zinan.* 70.

Corvus monedula. Lin. syst. 156.
Kaja. Faun. Suec. sp. 89.
Danish Alike. Norw. Kaee, Kaye, Raun Kaate, Raage. Br. 31.
Tagerl, Dohle, Tschockerl. *Kram.* 334.
Graue-Dohle. *Frisch, I.* 67.
Br. Zool. 78.
Hist. d'Oys. III. 69.

DESCRIP.

THE jack-daw weighs nine ounces: the length 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 docil loquacious bird.

Jack-daws breed in steeples, old castles, and in high

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 transverse 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. They are gregarious birds; and feed on insects, grain, and seeds*.

* The *Caryocatactes*, *Wil. orn.* 132. *Edw. tab.* 240. a bird of this genus, was shot near *Moslyn, Flintshire*, in *October*, 1753; supposed to have straggled from *Germany*, where they are common: and the *Roller*, another bird of this class, was killed near *Helstone bridge, Cornwall*, in the autumn, 1766. It is also a native of *Germany*; and is far the most beautiful of the *European* birds. As an acquaintance with these wanderers may be agreeable to our readers, we have given its figure, as well as that of the former. The one is copied from Mr. *Edwards*; the other from a drawing by *Paillon*. *Vide Appendix.*

V.
CUCKOO.

Bill a little arched.
Short tongue.
Ten feathers in the tail.
Climbing feet.

82. CUCKOO. Le Coqu. *Belon av.* 132. *Cuculus canorus Lin. syst.* 168.
Cuculus. *Gesner av.* 362. *Gjok. Faun. Suec. sp.* 96.
Aldr. av. I. 20. *Danish Gjoeg v. Kuk. Norv.*
Cuculo. *Olin* 38. *Gouk. Br.* 36.
Wil. orn. 97. *Kuckuck. Frisch. I.* 40, 41, 42.
Raii syn. av. 23. *Kuctuct. Kram.* 337.
Le Coucou. Brisson av. 105. *Br. Zool.* 80. plate G. G. 1.
Kukautza. Scopoli. No. 48.

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 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

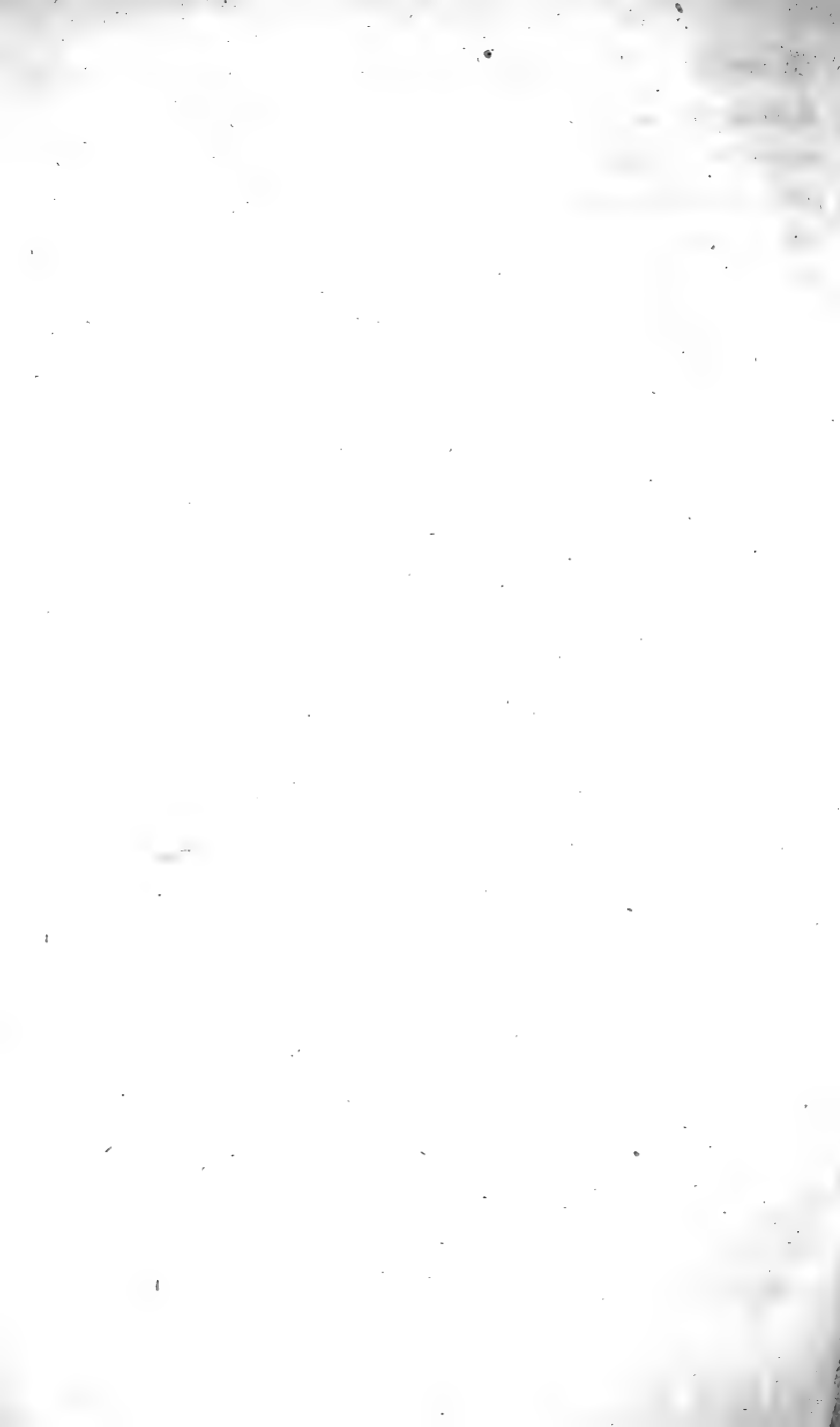
* *Calendar of Flora. vid. Preface throughout.*

F. CUCKOO.



WRYNECK. N^o 83.





insisted on, 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 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 1771, the other on the fourth 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 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

* In *Sweden*, which is a much colder climate than our own, the cuckoo does not appear so early by a month.

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 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 overlaying them as their growth is

* *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.

soon

soon so superior. This want in the cuckoo of the common attention other birds have to their young, seems to arise from some defect in its make, that 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 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.

The weight of the cuckoo is a little more than five ounces; the length is fourteen inches; breadth twenty-five. The bill black, very strong, a little incurvated, and about two-thirds of an inch long. The irides 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

DESCRIP.

* *Lib. X. c. 9.*

neck are of a pale grey; the breast and belly white, crossed elegantly with undulated lines of black. The vent feathers 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; they 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 white. The young birds are brown mixed with ferruginous and black, and in that state have been described by some authors as old ones.

Weak BILL, slightly incurvated.

NOSTRILS bare.

TONGUE long, slender, armed at the point.

Ten flexible feathers in the TAIL.

Climbing FEET.

VI.
WRYNECK.

Le Tercou, Torcou, ou Turcot.
Belon av. 306.

Jynx. *Gesner av.* 573.

Aldr. av. 1. 421.

The Wryneck. *Wil. orn.* 138.

Raii syn. av. 44.

Le Torcol, Torquilla. *Briffon*
av. IV. 4. *Tab.* 1. *fig.* 1.

Collotorto, Verticella. *Zinan.* 72.

The Emmet Hunter. *Charl-*
ton ex. 93.

Jynx torquilla. *Lin. syst.* 172.

Gjoktyta. *Faun. Suec. sp.* 97.

Bende-Hals. *Br.* 37.

Natterwindl, Wendhals.
Kram. 336.

Dreh-Hals. *Frisch,* I. 38.

Br. Zool. 80. plate F.

Ishudesch. *Scopoli,* No. 50.

83. WRY-
NECK.

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

DESCRIF.

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 forerunner or servant of that bird, and call it *Gwás y gog*, 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 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

* *Jynx hieme non apparet, vere autem remigrans, cuculi, post quatuordecim dies, adventum ruricolis annuntiat. Amœn. acad. IV. 584.*

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. This bird builds in the hollows of trees, making its nest of dry grass, in which we have counted nine young.

VII. WOOD- PECKER. Strait strong angular BILL. Nostrils covered with bristles.

TONGUE very long, slender, and armed at the end with a sharp bony point.

TEN stiff feathers in the tail.

Climbing feet.

84. GREEN. Le Pic mart, Pic verd, Pic jaulne. *Belon av.* 299. Wedknar, Gronspik, Grongjoling. *Faun. Suec. sp.* 99. *Gesner av.* 710. *Hasselquist itin. Ter. Sanct.* 291. Pico verde. *Aldr. av.* I. 416. *Girald. Cambrens.* 191. Green Woodpecker, or Woodspite; called also the Rain Fowl, High Hoe, and Hewhole. *Wil. orn.* 135. *Danish & Norw. Groenspet.* *Br.* 39. *Raii syn. av.* 42. *Grunspecht. Kram.* 334. *Frisch, I.* 35. Le Pic verd. *Briffon av.* 4. 9. *Br. Zool.* 78. plate E. *Picus viridis. Lin. Syst.* 175. *Deteu, Detela. Scopoli, No.* 52.

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

* Ray on the Creation, p. 143.

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 make their nests in the hollows of trees: 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. Yet it has not 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 do 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

NEST.

* *Phil. Transf. Martin's abridg.* V. p. 55. plate 2.

when

when they would ascend, or even keep in a line.

This species feeds oftener on the ground than any other of the genus: all of them make their nests in the hollows of trees; and lay five or six eggs, of a beautiful semitransparent white.

EGGS.

DESCRIP.

This kind weighs six ounces and a half. Its length is thirteen inches; the breadth twenty and a half: the bill is dusky, triangular, and near 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.

- L'epeiche, Cul rouge, Pic rouge. *Belon av.* 300.
 Picus varius, feu albus. *Gefner av.* 709.
 Greater spotted Woodpecker, or Witwal. *Wil. orn.* 137.
Raii syn. av. 43.
 Picchio. *Zinan.* 73.
 Le grand Pic varié. *Briffon av.* IV. 34.
- Picus major. *Lin. syst.* 176. 85. GREAT SPOTTED.
 Gyllenrenna. *Faun. Suec. sp.* 100.
 Hakke-speet. *Brunnich,* 40.
 Groffes Baumhackl. *Kram.* 336.
 Bunt Specht. *Frisch,* I. 36.
Br. Zool. 79. plate E.
 Kobilar. *Scopoli,* No. 53.

THIS species weighs two ounces three quarters: the length is nine inches; the breadth is sixteen. The bill is one 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 that passes from the corner of the mouth, and surrounds the hind part of the head. The neck is encircled with a black color. The throat and breast are of a yellowish white. The vent feathers of a fine light crimson. The back, rump, and coverts of the tail, and lesser coverts of the 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.

DESCRIP.

The four middle feathers of the tail are black, the next tipped with dirty yellow; the bottoms of the

TAIL.

the

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.

86. MIDDLE. *Picus medius*. P. albo nigroque
 varius, crisso pileoque ru-
 bris. *Lin. syst.* 176. *Faun.* *Suec. sp.* 82. *Scopoli*, No.
 54. Le Pic variè. *Briffon av.* IV.
 38.

THIS species 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 black; and the crimson is in form of a bar on the hind part.

Birds thus marked have been shot in *Lancashire*, and other parts of *England*; but I am doubtfull whether they are varieties, or distinct species.



MIDDLE & LITTLE SPOTTED WOODPECKERS.



- Gesner av.* 709. *Faun. Suec. sp.* 192. *Scopoli.* 87. LEST
Aldr. av. I. 416. No. 55. SPOTTED.
 Lesser spotted Woodpecker, *Hasselquist itin.* 242.
 or Hickwall. *Wil. orn.* 138. Kleiner Bunt-Specht. *Frisch.*
Raii syn. av. 43. I. 37.
Picus minor. *Lin. syst.* 176. Kleiner Baumhackl. *Kram.*
 Le petit Pic variè. *Briffon av.* 336.
 IV. 41. *Br. Zool.* 79. plate E.

THIS species is the left of the genus, scarce DESCRIP.
 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 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 bar-
 red with black and white: the scapulars and quill
 feathers spotted with black and white: the four mid-
 dle 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.

VIII. KING- Strait, strong, sharp pointed BILL.
FISHER. Tongue short and pointed.
Three lowest joints of the outmost TOE connected
to the middle toe.

88. KING-
FISHER

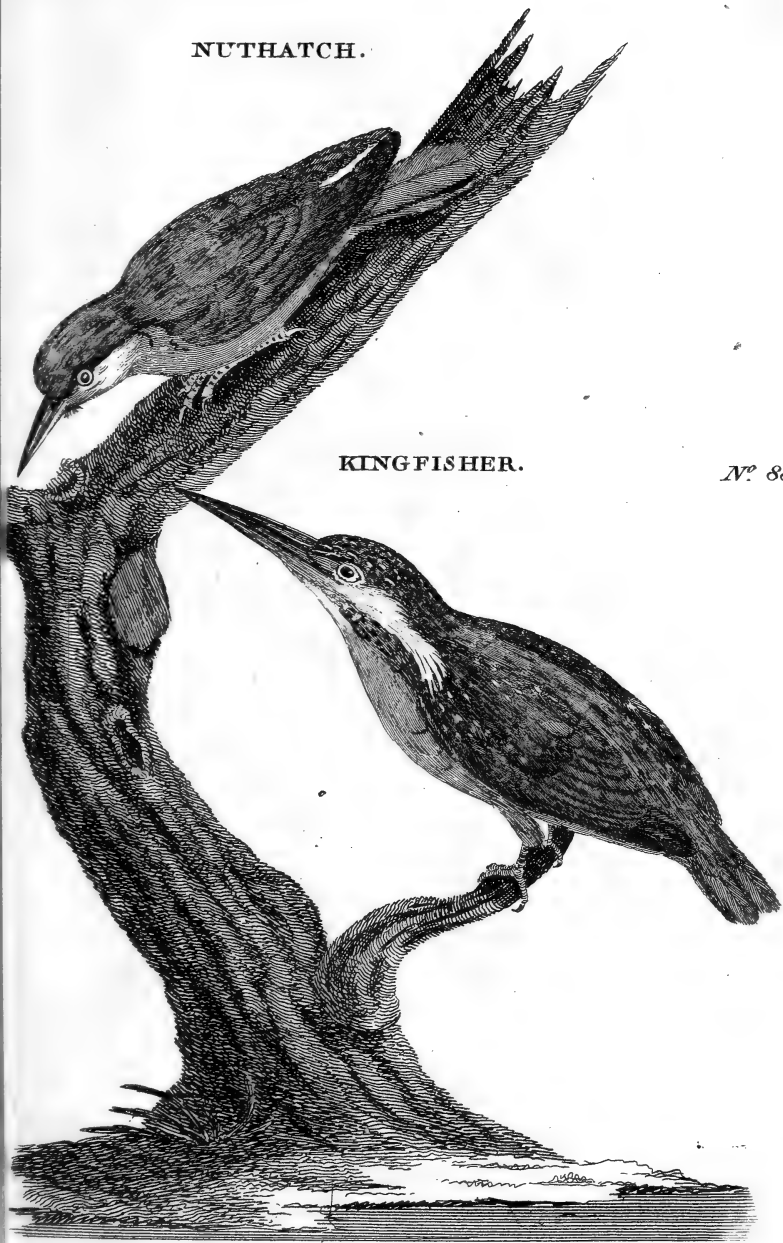
Le Martinet pefcheur. <i>Belon</i>	Piombino, Martino pefcatore, Pefcatore del re. <i>Zinan</i>
<i>av.</i> 218.	116.
Ispida (Isvogel) <i>Gefner av.</i> 571.	Isvogel. <i>Muf. Fr. ad.</i> 16.
<i>Aldr. av.</i> III. 200.	<i>Scopoli.</i> No. 64.
<i>Olina</i> 39, 40.	Jis-fugl. <i>Brunnich in Ap-</i>
<i>Wil. orn.</i> 146.	<i>pend.</i>
<i>Raii fyn. av.</i> 48.	Eisvogel. <i>Frisch.</i> II. 223.
<i>Pl. Enl.</i> 77.	Meerfchwalbe. <i>Kram.</i> 337.
Alcedo ifpida. <i>Lin. fyft.</i> 179.	<i>Br. Zool.</i> 82. plate I.
Le Martin-pêcheur. <i>Briffon</i>	
<i>av.</i> iv. 471.	

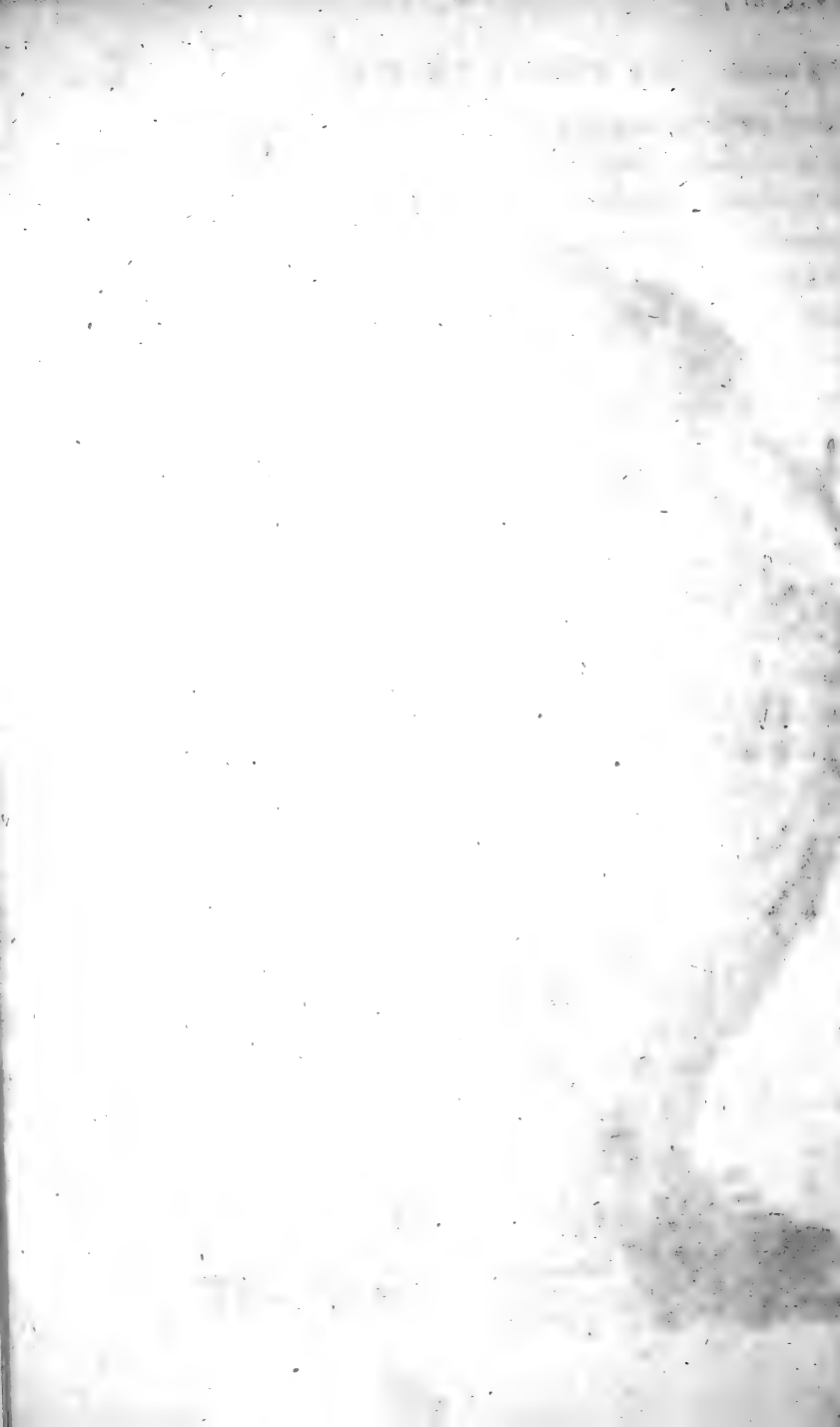
DESCRIP. **T**HIS bird weighs an ounce and a quarter: its length is seven inches; its breadth eleven: its shape is very clumsy, the head and bill being very large, and the legs disproportionably small: the bill is two inches long; the upper mandible black, the lower yellow: the irides are red: the colors of this bird atone for its inelegant form: 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

NUTHATCH.

KING FISHER.

N^o 88





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 three lower joints of the outmost toe adhere to the middle toe: the inner toe adheres to it 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 space, then darting below the surface, brings the prey up in its feet. While it remains suspended in the air, in a bright day, the plumage exhibits a most beautiful variety of the most dazzling and brilliant colors. This striking attitude did not escape the notice of the ancients, for *Ibycus*, as quoted by *Athenæus*, styles these birds ἀλκυονες πανσιπτεροι *, 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 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.

This species is the ἀλκυοναφωνϙ, or mute *halcyon* of *Aristotle* ‡, which he describes with more preci-

* P. 388.

† *Gesner* says he found nine young in one nest.

‡ *Hist. an.* 892, 1050.

N E S T.

sion 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 sea-water; 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 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

* 1050. See also *Ælian*. lib. ix. c. 17. *Plin*. lib. x. c. 32.

† *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 infiltrarsi nel di lui foro; e fa egli detto nido incavando interamente il terreno in tondo per la lunghezza di tre piedi, e riducendo

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 that frequents the sea, must not confine their ideas to our northern shores; but reflect, that birds that inhabit a sheltered place in the more rigorous latitudes, may endure exposed ones in a milder clime. *Aristotle* made his observations 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 nidist.

it was therefore necessary to place it in a tranquil sea, and to supply the bird with charms to allay the
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.

* *Αναβαίνει δε τε επί τες ποταμους* Hist. an. 1050.

† *Ovid Met.* lib. xi.

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 πορροεῦντι τὰ κύματα, την τε θάλασσαν,
 Τόν τε νότον, τον τ' εὐρον, ὅς ἐσχατα φύκια κινεῖ·
 Ἀλκυόνες, γλαυκαῖς Νηρηίσι ταί τε μάλιχα
 Ορνίθων ἐφίλαθεν. *Theocrit. Idyl. vii. l. 57.*

May *Halcyons* smoothe 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.

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 that disturb their submarine retreats, and 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 fat only a few days, and those in the depth of winter ; and during that period the mariner might sail in full security ;

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 compreh's'd,
Seven days sits brooding on her watery nest
A wintry queen; her fire at length is kind,
Calms every storm and hushes every wind. *Dryden.*

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, & *Acanthida* dumi.
Georg. III. 338.

And *Silius Italicus* celebrates its music, and its floating nest:

Cum sonat *Halcyone* cantu, nidofque 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

* *Arist. hist. an. 541. Plin. lib. x. c. 32. lib. xviii. c. 24.*
Αλκυονεϊαι ημεραι of the former; and *dies halcyonides* of the latter.

the *vocal alcedo* of the philosopher, καὶ ἡ μὲν φθέγγεται, καθιζάνουσα ἐπὶ τῶν δούλων *, which was vocal and perched upon reeds. Aristotle says, it is the left of the two, but that both of them have a cyanean back †. Belon labors to prove the *vocal alcedo* to be the *roufferole*, or the *greater reed sparrow* ‡, a bird found in France 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; but 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, that 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 others contain a mixture of fable and reality, which certainly merit the trouble of separation. It is much to be lamented that travel-

* *Hist. an.* 892.

† Νῶτον κυανέον, the color of the *cyanus*, or *lapis lazuli*.

‡ Le Roufferolle, *Belon av.* 221. Le Roucherolle, *Briffon av.* II. 218. Greater reed sparrow, *Wil. orn.* 143. *Turdus arundinaceus*, *Lin. syst. sp.* 296.

lers, 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 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. Ruffel*, 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 what relates 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

trating 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.

Strait triangular BILL.

Short TONGUE, horny at the end, and jagged.

IX. NUT-
HATCH.

Le grand Grimpereau, le
Torchepot. *Belon av.* 304.

Picus cinereus, seu Sitta. *Gef-
ner av.* 711.

Ziolo. *Aldr. av.* I. 417.

The Nuthatch, or Nut-job-
ber. *Wil. orn.* 142.

Raii fyn. av. 47.

The Woodcracker. *Plott's
hist. Ox.* 175.

Sitta Europæa. *Lin. syst.* 177.

Le Torchepot, Sitta. *Brisson*

av. III. 588. *tab.* 29. *fig.* 3.

Picchio grigio, Raparino. *Zi-
nan.* 74.

Notwacka, Notpacka. *Faun.
Succ. sp.* 104.

Danish Spætt-meise. *Norv.
Nat-Bake. Br.* 42.

Klener, Nuffzhacker. *Kram.
362.*

Blau-specht. *Frisch,* I. 39.
Br. Zool. 81. plate H.

Barlefs. *Scopoli,* No. 57.

89. NUT-
HATCH

THE nuthatch weighs near an ounce; its length is near five inches three-quarters; breadth nine inches; the bill is strong and strait, 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

DESCRIP.

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 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, breaks the shell, and catches up the kernel: it breeds in the hollows of trees; if the 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 Plott* 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 asunder, so that the noise may be heard at least twelve score yards.





CREEPER.



HOOPO.

Nº 9



Slender incurvated BILL.

Very short TONGUE.

Ten feathers in the TAIL.

X.
HOOPOE.La Huppe. *Belon av.* 293.Upupa. *Gesner av.* 776.*Aldr. av.* II. 314.Bubbola. *Olina*, 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.*Pl. enl.* 52.La Hupe ou Puput. *Briffon*
av. III. 455. *tab.* 43.Upupa epops. *Lin. syst.* 183. 90. HOOPOE.Harfogel, Pop. *Faun. Suec.**sp.* 105.Ter Chaous *Pococke Trav.* I.
209.Her-fugl. *Brunnich*, 43.Widhopf. *Kram.* 337.Upupa; arquata *fierecoraria*;gallus lutosus. *Klein Stem.**av.* 24. *tab.* 25.*Br. Zool.* 83. plate L.Smerda kaura. *Scopoli*, No.

62.

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 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

DESCRIP.

birds marked with narrow dusky lines pointing down: 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: the exterior toe is closely united at the bottom to the middle toe.

According to *Linnaeus* it takes its name from its note*, which has a sound similar to the word; or it may be derived from the *French huppè*, or crested: it breeds in hollow trees, and lays two ash-colored eggs: it feeds on insects which it picks out of ordure of all kinds: the ancients believed that it made its nest of human excrement; so far is certain, that its hole is excessively foetid from the tainted food it 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,

* *Faun. Suec.* 2d edit. 37.

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 cuspidè 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*

XI.
CREEPER.

Very slender BILL, very much incurvated.
Twelve feathers in the TAIL.

91. CREEP- ER.	Le petit Grimpereau. <i>Belon</i> <i>av.</i> 375. Certhia. <i>Gesner av.</i> 251. <i>Aldr. av.</i> I. 424. <i>Wil. orn.</i> 144. <i>Raii fyn. av.</i> 47. The Oxeye Creeper. <i>Charl-</i> <i>ton ex.</i> 93. Picchio piccolo. <i>Zinan.</i> 75.	Le Grimpereau. <i>Briffon</i> III. 603. <i>Cat. Carol.</i> app. 37. Certhia familiaris. <i>Lin. syst.</i> 184. <i>Krypare. Faun. Suec. sp.</i> 106. Træ-Pikke v. Lie-Helten. <i>Br. p.</i> 12. <i>Scopoli,</i> No. 59. Grau-Specht. <i>Frisch,</i> I. 39. Baumlaufferl. <i>Kram.</i> 337. <i>Br. Zool.</i> 82. plate K.
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DESCRIP.

THE creeper weighs only five drams: and next to the crested wren is the least 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 hazel: the legs slender: the toes and 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 lays sometimes twenty eggs: 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

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.

ORDER III. GALLINACEOUS.

XII.
GROUS.

Short arched BILL.

Outmost, and inner TOES connected to the first joint of the middle toe by a small membrane.

* With legs feathered to the feet: broad scarlet eye-brows.

** With naked legs.

- | | | |
|-----------|--|---|
| ♂2. Wood. | Le Coc de bois ou Faifan
bruyant. <i>Belon av.</i> 249. | Le cocque de Bruyeres. <i>Briffon</i>
<i>av.</i> I. 182. <i>Hist. d'Oys.</i> |
| | Urogallus major (the Male).
<i>Gesner av.</i> 490. | II. 191. |
| | Grygallus major (the Fe-
male). 495. | Tetrao urogallus. <i>Lin. syst.</i>
273. |
| | Gallo cedrone, Urogallus five
Tetrao. <i>Aldr. av.</i> II. 29. | Kjader. <i>Faun. Suec. sp.</i> 200. |
| | Gallo alpeftre, Tetrax Neme-
fiani (fem.) <i>Aldr. av.</i> II.
33. | <i>Pontop.</i> II. 101. |
| | Pavo fylvefttris. <i>Girald. To-
pogr. Hibern.</i> 706. | Tjader-hona. <i>Haffelquift itin.</i>
† 571. |
| | Cock of the Mountain, or
Wood. <i>Wil. orn.</i> 172. | <i>Klein Stem. tab.</i> 27. |
| | <i>Raii fyn. av.</i> 53. | Mas <i>Norvegis</i> Tiur, Teer,
Toedder. <i>Foemina Norv.</i>
Roey. <i>Brunnich,</i> 194. |
| | <i>Pl. Enl.</i> 73, 74. | Aurhan. <i>Kram.</i> 356. |
| | Capricalca. <i>Sib. Scot.</i> 16. <i>tab.</i>
14, 18. | Auerhahn. <i>Frifch,</i> I. 107,
108. |
| | | <i>Br. Zool.</i> 84. plates M. M*. |
| | | <i>Pl. Enl.</i> 73, 74. |
| | | Devi peteln. <i>Scopoli,</i> No. 169. |

† *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 *Haffelquift* gives a false name to the bird, calling it the *Black Game*.

THIS

WOOD GROUS .





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*. We believe that the breed is extinct in *Ireland*, where it was formerly found.

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 gives an exact description of the *black cock*, but gives it the name of the cock of the wood, a name now confined to this species. Bishop *Lefly*|| is a third of our historians who makes 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.

* For the same reason the *Germans* call it *Aur-ban*, or the *Urus* or wild ox cock.

† *Topogr. Hibern.* 706. ‡ *Descr. Regni Scotiæ.* 7.

|| *Scotiæ Descr.* 24.

It

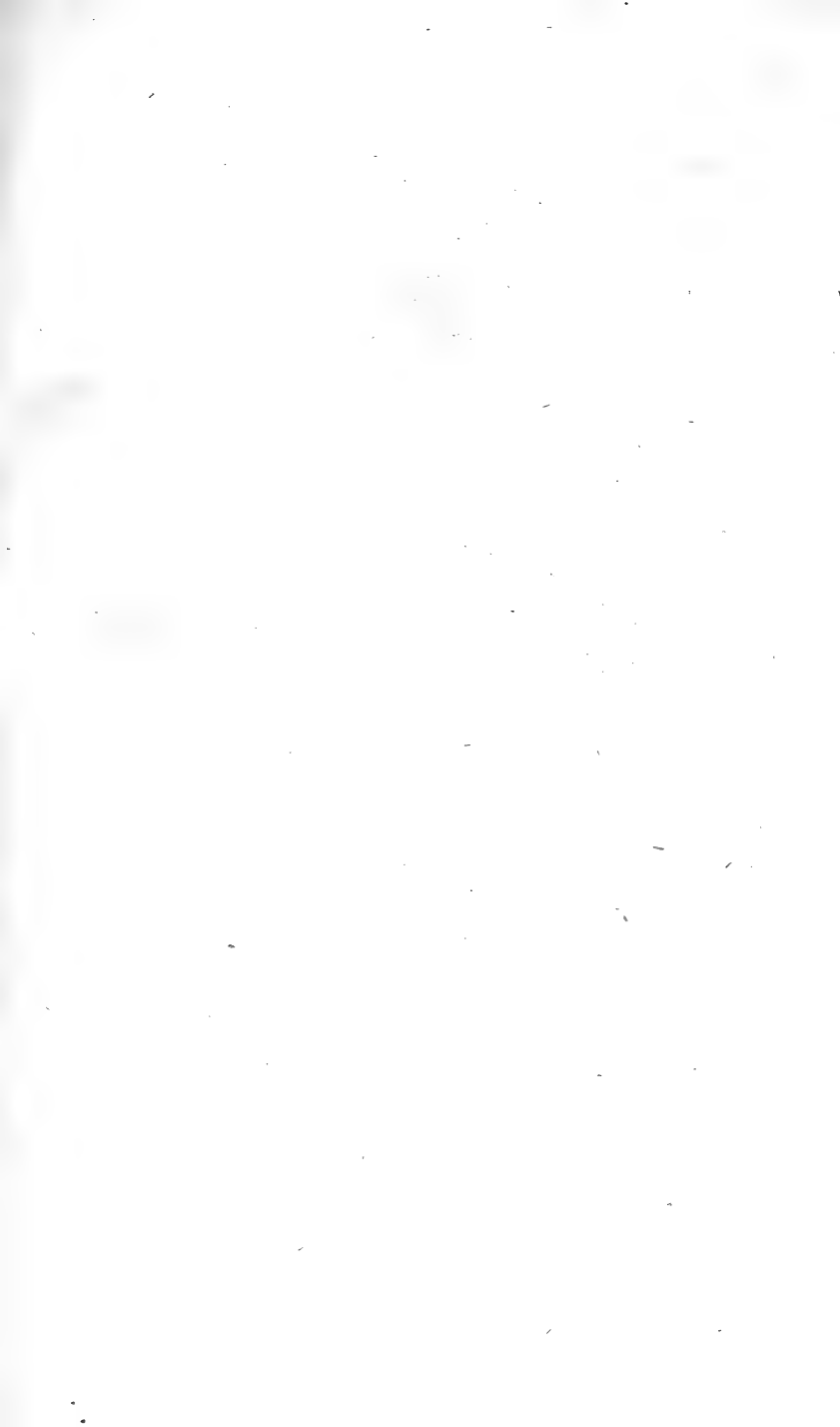
It inhabits wooded and mountainous countries; in particular, forests of pines, birch trees and junipers; feeding on the tops of the former, and berries of the latter; the first infects often the flesh with such a taste, as to render it scarcely eatable. In the spring it calls the females to its haunts 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. They lay 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 at *Inverness*, a male, killed in the woods of Mr. *Chisolme*, North of that place.

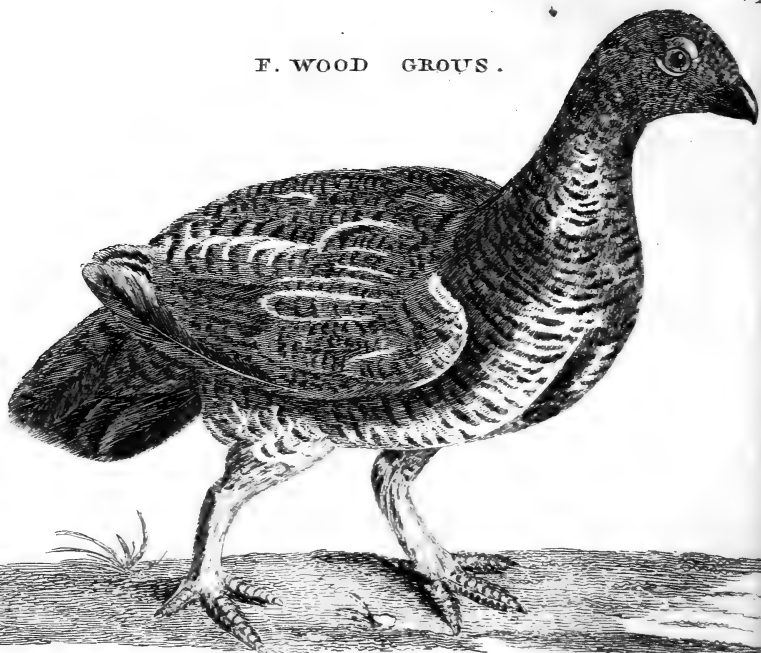
DESCRIP.

The length of the male is two feet eight inches; the breadth three feet ten: 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 colors. 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, 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.

* *Schwenckfelt Aviarium Silesiæ. 372.*



F. WOOD GROUS.



P. Mayall

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; are black, marked on each side with a few white spots: the vent 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: 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 ob-

* *Wil. orn.* 173. *Gesner av.* 490. 495.

served, deceived by the very different plumage of the male and female of this kind, has formed of them two species.

93. BLACK. *Urogallus minor* (the Male). *Gesner av.* 493. *Grygallus minor* (the Female). 496. *Fasan negro*, *Fasiano alpestre*, *Urogallus five Tetrao minor Gallus Scoticus fylvefris.* *Aldr. av.* II. 32. 160. *Raii syn. av.* 53. Heath-cock, black Game, or Grous. *Wil. orn.* 173. *Tetrao tetrix.* *Lin. syst.* 274. *Orre. Faun. Suec. sp.* 102. *Le Coq-de-bruyeres a queue fourchue.* *Briffon av.* I. 186. *Hist. d'Oys.* II. 210. *Cimbris mas Urhane, fæmina Urhoene.* *Norvegis Orrfugl.* *Brunnich,* 196. *Berkhan, Schildhan. Kram.* 356. *Birckhahn. Frisch,* I. 109. *Br. Zool.* 85. *tab. M.* 1. 2. *Pl. Enl.* 172, 173. *Gallo sforcello Italis. Scopoli,* No. 169.

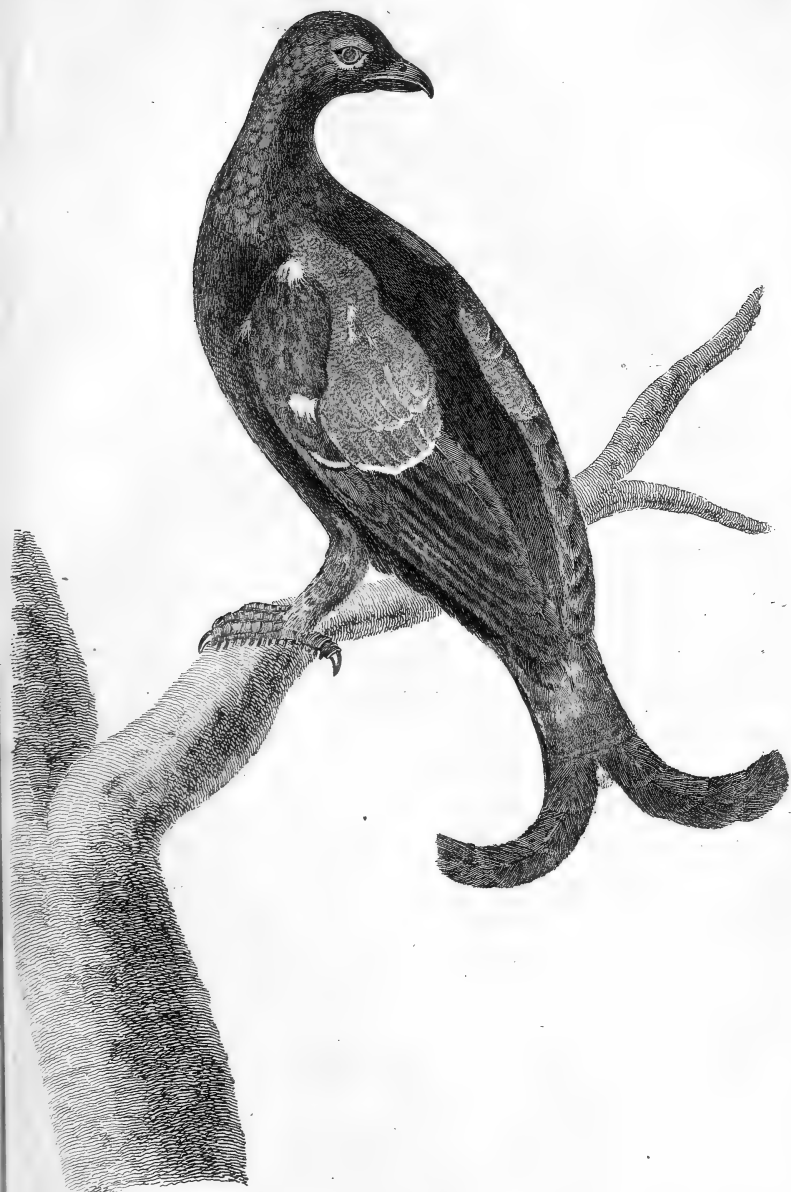
MANNERS.

THESE birds, like the former, are fond of wooded and mountainous 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 all the females within

* The ruffed heathcock of *America*, a bird of this genus, does the same. *Edw. Gl.* p. 80. The cock of the wood agrees too 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.

hearing

BLACK COCK.





hearing resort to him: the hen lays seldom more than six or seven eggs. 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.

An old black cock weighs near four pounds: DESCRIP. its length is one foot ten inches; its breadth two feet nine: the bill 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.

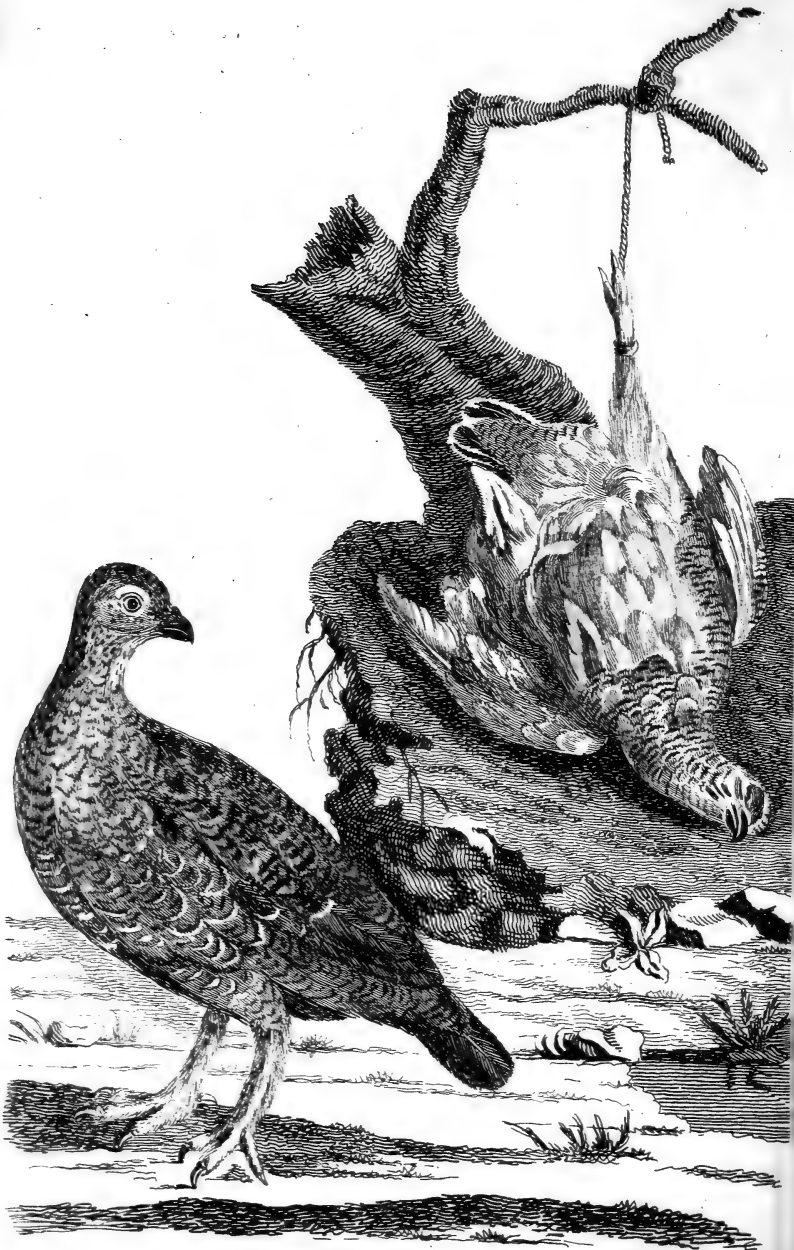
The female weighs only two pounds: FEMALE. its length is one foot six inches; its breadth two feet six. The head and neck are marked with alternate bars of dull red and black: the breast with dusky, black

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 the 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.

MIXED
BREED.

Besides the common species of black cock, M. *Briffon* 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 *Sweden*, and described by *Linnaeus* in his *Faun. Suec.* sp. 201. by the title of *Tetrao caudâ bifurcâ subtus albo punctata*, in *Swedish*, *Rackebane* or *Roflare*: the legs of this and the preceding kind are feathered only





F. GROUS. N^o. 94

PTARMIGAN. N^o.

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.

- | | | |
|--------------------------------------|---|------------|
| Gallina campestris. <i>Girald.</i> | La Gelinote Hupée. <i>Briffon</i> | 94. R E D. |
| <i>topogr. Hibern.</i> 706. | <i>av.</i> I. 209. <i>Hist. d'Oys.</i> | |
| Red Game, Gorcock, or | II. 252. | |
| Moor-cock, <i>Wil. orn.</i> 177. | La Gelinote d'Ecoffe, Bonafa | |
| Lagopus altera <i>Plinii. Raii</i> | Scotica. <i>Idem</i> 199. <i>tab.</i> 22. | |
| <i>syn. av.</i> 54. | f. 1. <i>Hist. d'Oys.</i> II. 242. | |
| Moor-cock, or Moor-fowl. <i>Sib.</i> | <i>Br. Zool.</i> 85. plate M. 3. | |
| <i>Scot.</i> 16. | | |

THE male weighs about nineteen ounces. DESCRIP.
 The length is fifteen inches and a half: the breadth twenty-six. The bill is black: the nostrils covered with red and black feathers: 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 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 the *British* islands; not having met with any account of it, except in the writings of our countrymen Mr. *Ray* and *Willughby*, and in *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

* 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.

† Est et alia nomine eodem, a coturnicibus magnitudine tantum differens, croceo tinctu cibus gratissima. lib. x. c. 48.

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 remarkably shy and wild: they always keep on the tops of the hills, are scarce ever found on the sides, and never descend into the vallies; their food is the mountain berries, and the tops of heath.

- | | | |
|--|---|---------------------|
| La perdrix blanche. <i>Belon av.</i>
259. | White Game, erroneously
called the white Partridge. | 95. PTARMI-
GAN. |
| Lagopus. <i>Gesner av.</i> 576. | <i>Wil. orn.</i> 176. | |
| Perdrix alba feu Lagopus,
Perdix alpestre. <i>Aldr.</i>
<i>av.</i> II. 66. | The Ptarmigan. <i>Sib. Scot.</i> 16.
<i>Pl. Enl.</i> 129. <i>Hist. d' Oys.</i> II.
264. | |
| Lagopus. <i>Plinii lib.</i> x. c. 48. | <i>Norv.</i> Rype. <i>Mas Islandis,</i>
Riupkarre, <i>Fam.</i> Riupa.
<i>Brunnich</i> 199. | |
| Tetrao Lagopus. <i>Lin. syst.</i>
274. | Schneehuhn. <i>Frisch,</i> I. 110.
Schneehun. <i>Kram.</i> 356.
<i>Br. Zool.</i> 86 plates M. 4. 5.
<i>Scopoli.</i> No. 118. | |
| Snoripa. <i>Faun. Suec. sp.</i> 203. | | |
| La Gelinote blanche. <i>Briffon</i>
<i>av.</i> I. 216. | | |
| <i>Raii syn. av.</i> 55. | | |

THIS bird is well described by Mr. *Willughby*, under the name of the white game.

* Plate 246.

M. *Briffon** joins it with the white partridge of Mr. *Edwards*, plate 72. I have received both species at the same time from *Norway*, and am convinced that they are not the same.

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 intirely white, except as follows: in the male a black line occurs between the bill and the eyes; the shaft 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 black, and tipt with white; the two next black slightly marked with white at their ends, the rest wholly black; the fea-

DESCRIP.

* *Tom. I. p. 216.*

thers 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, taking a small circuit like pigeons: they taste so like a grouse as to be scarcely distinguished; like the grouse they keep in small packs; but never like those birds take shelter in the heath; but beneath loose stones.

These birds are called by *Pliny*, *Lagopi*, their feet being cloathed 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 from the cold: the feet of the grouse are cloathed in the same manner, but those of the two first species here described, which perch upon trees, are naked, the legs only being feathered, not being in want of such a protection.

In *Scotland* they inhabit from the hill of *Benlomond*

mond to the naked mountain of *Scaroben* in *Cathness*, the isle of *Arran*, many of the *Hebrides*, and the *Orknies*.

** With naked legs.

96. PART- RIDGE.	La Perdris grise ou Gouache.	La Perdrix grise. <i>Briffon av.</i>
	<i>Belon av.</i> 257.	I. 219.
	Perdix (Waldhun) <i>Gesner av.</i>	<i>Pl. Enl.</i> 27. <i>Hist. d'Oys.</i> II.
	669.	401.
	Perdix minor five cinerea.	<i>Starna. Zinan.</i> 30.
	<i>Aldr. av.</i> II. 66.	<i>Agerhoene. Br.</i> 201.
	<i>Wil. orn.</i> 166.	<i>Rebhun. Kram.</i> 357.
<i>Raii syn. av.</i> 57.	<i>Rebhuhn. Frisch,</i> I. 114.	
Tetrao Perdrix. <i>Lin. syst.</i> 276.	<i>Br. Zool.</i> 86. plate M.	
Rapphona. <i>Faun. Suec. sp.</i>	<i>Serebitza Scopoli.</i> No. 175.	
205.		

DESCRIP.

THE male partridge weighs near fifteen ounces; the female near two ounces less: the length to the end of the tail 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 of a deep orange color, but in the females 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 the neck is a strong mixture of rust color: on the breast of the male is
a broad

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.

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 reader's 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*.

SALACIOUS.

The *British* name of this bird is *Kor-iâr*, a word now obsolete; that now in use is *Pertrisen*, borrowed from the *Normans*. *Sâr* is the generic name for the tribe.

* *Pliny* lib. 10. c. 23. *Wil. orn.* 168. *Edw. preface to Gleanings, part 2.*

97. QUAIL. La Caille. *Belon av.* 263.
Gesner av. 334.
 Coturnix Latinorum. *Aldr. av.*
 II. 69.
Wil. orn. 169.
Raii syn. av. 58.
 La Caille. *Briffon av.* I. 247.
Hist. d'Oys. II. 449.
- Quaglia. *Zinan.* 36.
 Tetrao coturnix. *Lin. syst.*
 278.
 Wachtel. *Faun. Succ. sp.* 206.
 Vagtel. *Brunnich,* 202.
 Wachtel. *Kram.* 357. *Frisch,*
 I. 117.
Br. Zool. 87. plate M. 6.
 Perpelitza *Scopoli,* No. 176.

DESCRIP.

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 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 countries, 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 Mr. *Holland* of *Conway*, 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

* *Bell's Travels*. I. 371.

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*. *Chaudé 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*.

To the birds of this genus we should add the whole tribe of domestic land fowl, such as *Peacocks*, *Pheasants*, &c. but these cannot clame even an *European* origin.

PEACOCKS. *India* gave us *Peacocks*; and we are assured † they are still found in the wild state, in vast flocks, in the islands of *Ceylon* and *Java*. So 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 Libanon, even unto the byssop 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

* *Osbeck's Voyage*. I. 269.

† *Knox's hist. of Ceylon*. 28.

‡ *Kings*, I. 10.

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 3*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 originally 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 antient times, were among the ornaments of the Kings of *England*. *Ernald de Aclent* fined to King *John* in a hundred and forty palfries, with sackbuts, lorains, gilt spurs and peacocks' crests, such as would be for his credit. *Maddox Antiq. Exch* .i. 273.

Our common *poultry* came originally from *Per-* POULTRY.
sia and *India*. *Aristophanes* || calls the cock *περσινός*
ὄρνις, the *Persian* bird; and tells us, it enjoyed

* *Ælian de nat. an.* lib. v. 21.

† *Athenæus.* lib. xiv. p. 655.

‡ *Q. Curtius.* lib. ix. || *Aves,* lin. 483.

that

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; 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 Britains*. 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*

* *Dampier's voy.* I. 392. *Lord Anson's voy.* 309.

† For this information we are indebted to governor *Loten*.

of

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* 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 *Pli-*

* *Bosman's history of Guinea.* 248. *Voyages de Marchais* III. 323. *Barbot's descr. Guinea.* *Churchill's coll. voy.* v. 29.

† Ἔστι δὲ ἄσπορον πρὸς τὰ ἐμγονα τὸ ὄρνεον, καὶ ὀλιγορεῖ τῶν νεωτέρων, — ἐπ' αὐτῆς δὲ λόφον σάρκινον σκληρὸν, στρογγύλον ἐξέκοντα τῆς κεφαλῆς ὡσπερ πάτταλον — πρὸς δὲ ταῖς γνάθοις ἀπὸ τῆς σάμαϊ⊕ ἀρξαμένην ἀντὶ πώγων⊕ μακρὰν σάρκα, καὶ ἐρυθρόθεραν τῶν ὀρνιθῶν τὴν δὲ τοῖς ὄρνεσιν ἐπὶ τῷ ρύγχει γινομένην, ἣν ἔνιοι πώγωνα καλεῖσιν, ἣν ἔχει, διὸ καὶ ταύτην πολοθόν ἐστι — σῶμα ἅπαν ποικίλον, μέλαν⊕ ὄνλος τῆς χρώμαϊ⊕ ὀλεπτίλοις λευκοῖς — σκέλη καὶ ἄκεντρα — παραπλήσια δὲ εἰσὶν αἱ θήλειαι τοῖς ἀρρεσίν· διὸ καὶ δυσδιάκριτόν ἐστι τὸ τῶν μελεαγρίδων γέν⊕. *Athenæus*, 655.

ny* take notice of their spotted plumage, and the gibbous substance on their head: so that from these citations we find every character of the *Guinea hen*, but none that agrees with the *Turky*.

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 perch in trees, 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 *Turky*.

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 *Turky* was unknown to the ancient naturalists, and even to the *old world* before the discovery of *America*. It was a bird peculiar to

* *Varro*. lib. 3. c. 9. *Pliny*. lib. 10. c. 26. † *Barbot* 217.

‡ *Tavernier*. 146.

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** that 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 *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.*

XIII.
BUSTARD.

Strong BILL, a little incurvated.
No back TOE.

98. GREAT. Tetrax. *Athenæi*, lib. IX. 398. L'Outarde. *Briffon av.* V.
L'Ostarde. *Belon av.* 235. 18. *Hist. d'Oys.* II.
Otis, vel Bistarda. *Gesner av.* Otis tarda. *Lin. syst.* 264.
484, 486. *Faun. Suec. sp.* 196.
Otis five Tarda. *Aldr. av.* II. 39. Trap. *Kram.* 355.
Wil. orn. 178. Acker-Trappe. *Frisch,* I.
Raii syn. av. 58. 106. *Scopoli,* No. 160.
Gustard. *Boethii,* 7. and *Sib.* *Br. Zool.* 87. plate N. *Pl*
Scot. 16. *Enl.* 245.
Edw. Tab. 73, 74.

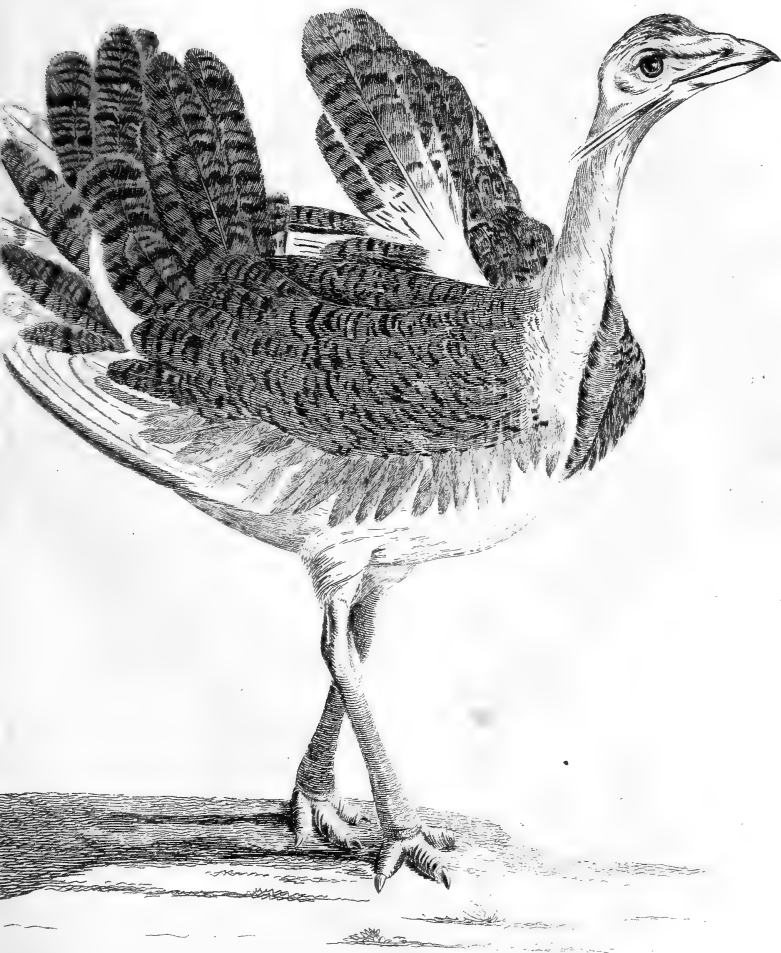
DESCRIP.

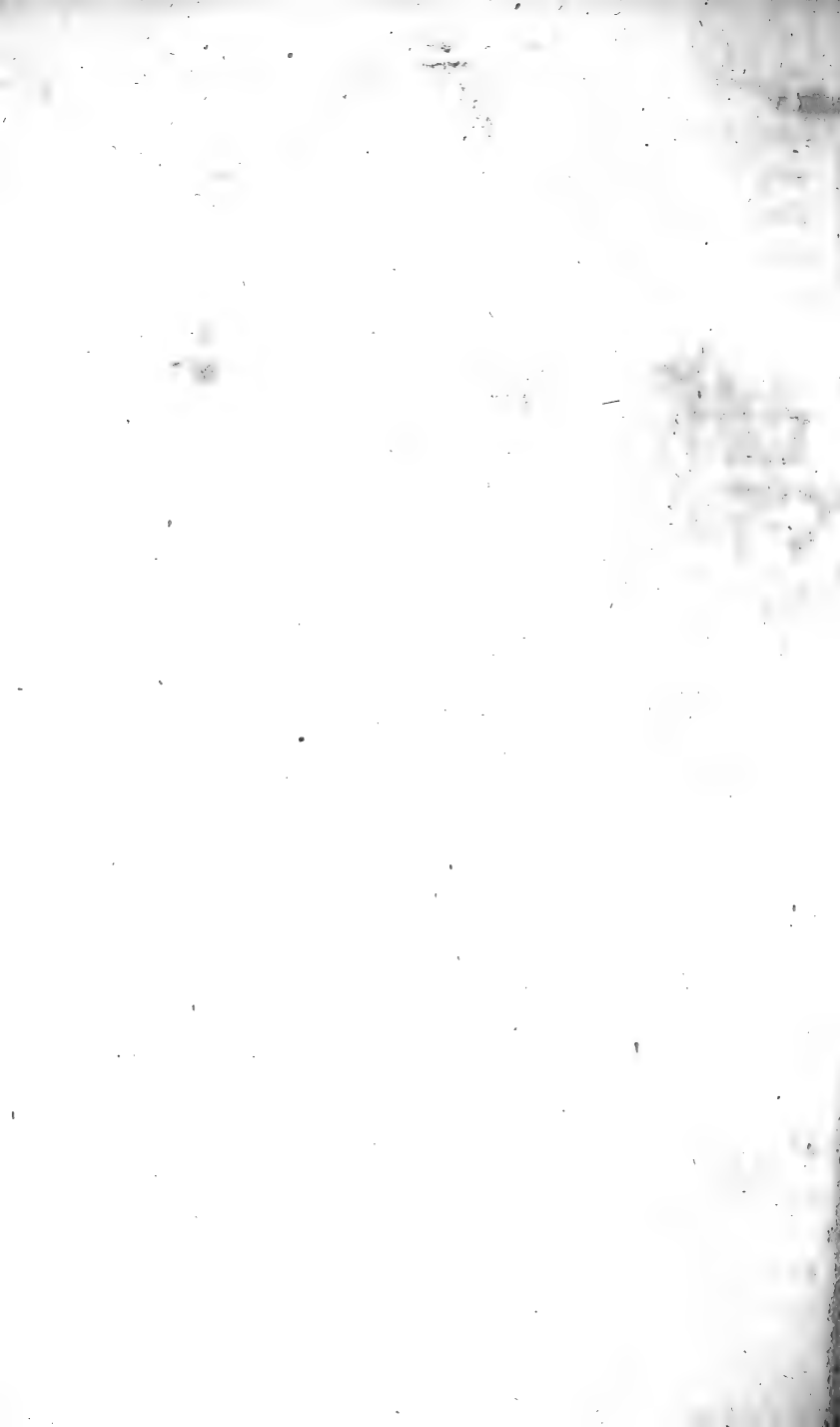
THE bustard is the largest of the *British* land fowl; the male at a medium weighing twenty-five pounds; there are instances of some very old ones weighing twenty-seven. The breadth nine feet; the length near four. Besides the size and difference of color, the male is distinguished from the female by a tuft of feathers about five inches long on each side the lower 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 dusky.

FEMALE.

The female is about half the size of the male:
the

BUSTARD.





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 countries of the south and east parts of this island, from *Dorsetshire*, as far as the *Wolds* in *Yorkshire* *. They are exceeding 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 grehounds. They keep near their old haunts, seldom wandering above twenty or thirty miles. Their food is corn and other vegetables, and 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

PLACE.

* In Sir Robert Sibbald's time they were found in the *Mers*, but I believe that they are now extinct in *Scotland*.

† The world is obliged to the late Dr. *Douglas* for this discovery; and to Mr. *Edwards* for communicating it.

of holding near seven quarts; 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.

99. LESSER. The *French Canne-patiere*. V. 24. de *Buffon*, II. 40.
Wil. orn. 179. *Pl. Enl.* 10. 25.
 La petite outard. *Briffon av.* Otis *Tetrax*. *Lin. syst.* 264.

THERE have been three or four instances of this species being shot in *England*, but the specimens I have seen have been all 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.

lines. The quill feathers black 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.

The neck of the female agrees in colors with the back: in other respects the marks pretty nearly agree.

They inhabit open countries; feed on grain, seeds, and insects.

- | | | | | |
|--------------------------------------|----------------------|---|---------------------------|-------------------|
| <i>Norfolk Plover.</i> | <i>Br. Zool.</i> II. | <i>Le grand Pluvier, Courly de terre.</i> | <i>Briffon av.</i> V. 76. | 100. THICK-KNEED. |
| 378. | | | | |
| <i>Un Ostardeau, Oedicnemus.</i> | | <i>Tab. 7. fig. 1.</i> | | |
| <i>Belon av.</i> 239. | | <i>Charadrius oedicnemus.</i> | <i>Lin.</i> | |
| <i>Charadrius (Triel vel Griel).</i> | | <i>syst.</i> 255. | | |
| <i>Gesner av.</i> 256. | | <i>Br. Zool.</i> 127. | | |
| <i>The Stone Curlew. Wil. orn.</i> | | <i>Kervari. Hasselquist Itin.</i> 210? | | |
| 306. | | <i>Engl. Ed.</i> 200. | | |
| <i>Raii syn. av.</i> 108. | | | | |

THE weight of this species is eighteen ounces. DESCRIP.
 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 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 it 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 *Oedicnemus* *.

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 boroughs; 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 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

* From οἰδεω, and κνήμη.

be heard near 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 that genus, from that of *Plovers*.

They are migratory: appear in *England* about the middle of *April*, and retire in autumn.

ORDER IV. COLUMBINE.

XIV.
PIGEON.

Soft strait BILL.

NOSTRILS lodged in a tuberos naked skin.

TOES divided to their origin.

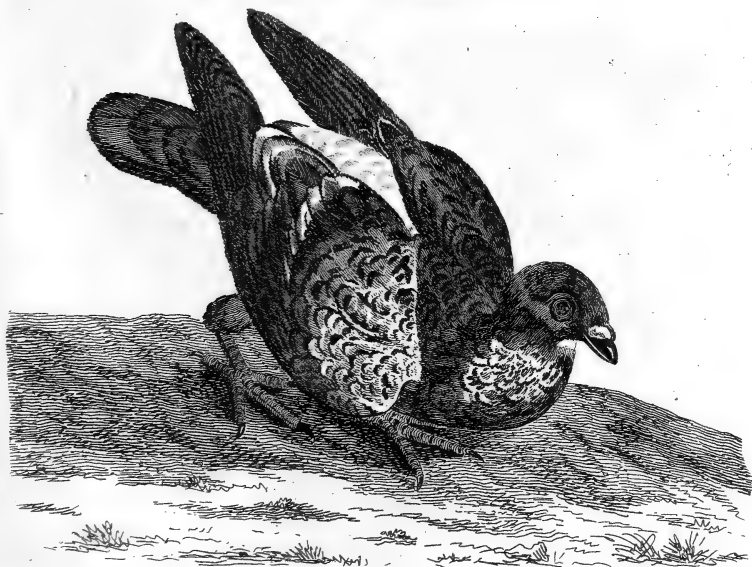
- | | | |
|-------------------|---|---|
| 101. COM-
MON. | La Pigeon privé. <i>Belon av.</i> 313. | Le Bifet. 498. |
| | Columba vulgaris. <i>Gesner av.</i> 279. <i>Livia.</i> 307. | Columba Oenas. <i>Lin. syst.</i> 279. |
| | Columba domestica. <i>Aldr. av.</i> II. 225. | Skogs dufwa, Dufwa, Hemdufwa. <i>Faun. Suec. sp.</i> 207. |
| | Common wild Dove, or Pigeon. <i>Wil. orn.</i> 180. and the Stock Dove, or Wood Pigeon *. 185. | Kirke-Due, Skov-Due. <i>Brunnich,</i> 203. |
| | <i>Raii syn. av.</i> 59, 62. | Feldtaube, Hauttaube, Hohltaube. <i>Kram.</i> 358. |
| | Golob. <i>Scopoli,</i> No. 177. | Blau-Taube, or Holtz-Taube. <i>Frisch,</i> I. 139. |
| | Le Pigeon domestique. <i>Briffon av.</i> I. 68. <i>Hist. d'Oys.</i> II. 491. | <i>Br. Zool.</i> 88. plate 88. |

THE tame pigeon, and all its beautifull varieties, derive their origin from one species, the *Stock Dove*: the *English* name implying its being the *stock* or *stem* from whence the other domestic kinds sprung. These birds, as *Varro*† observes, take their (Latin) name, *Columba*, from their voice

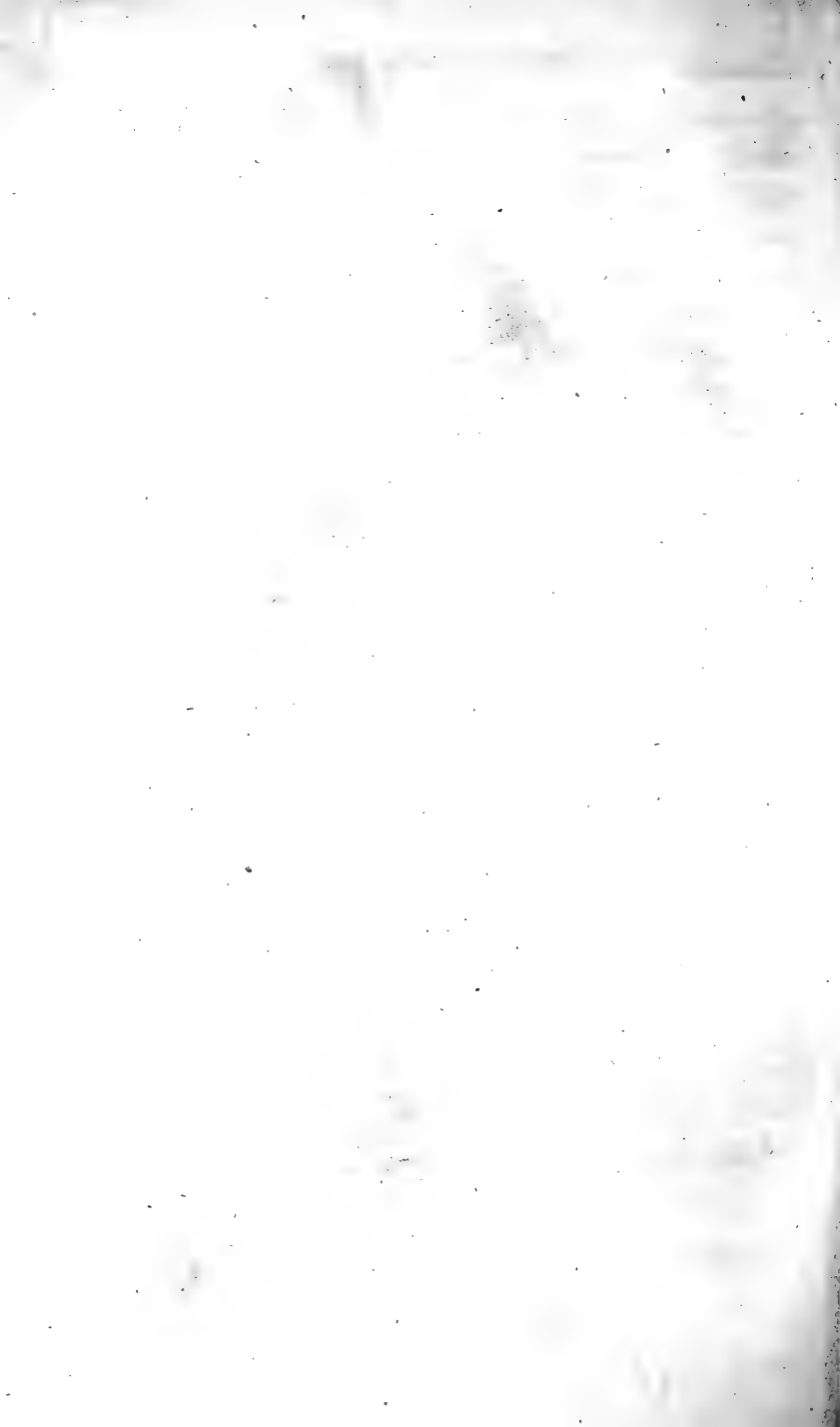
* *Columba livia.* *Aldr. av.* II. 234. et *Oenas,* seu *vinaeo.* 233.

† *De Ling. Lat.* lib. IV.

TURTLE



ROCK PIGEON.



or cooing; and had he known it, he might have added the *British*, &c. for *K'lommen*, *Kylobman*, *Kulm* and *Kolm* signify the same bird. They were, and still are in most parts of our island, in a state of nature; but probably the *Romans* taught us the method of making them domestic, and constructing pigeon houses. Its characters in the state nearest that of its origin, is a deep bluish ash color; the breast dashed with a fine changeable green and purple; the sides of the neck with shining copper color; its wings marked with two black bars, one on the coverts of the wings, the other on the quill feathers. The back white, and the tail barred near the end with black. The weight fourteen ounces.

DESCRIP.

In the wild state it breeds in holes of rocks, and hollows of trees, for which reason some writers stile it *columba cavernalis* *, in opposition to the Ring Dove, which makes its nest on the boughs of trees. Nature ever preserves some agreement in the manners, characters, and colors of birds reclaimed from their wild state. This species of pigeon soon takes to build in artificial cavities, and from the temptation of a ready provision becomes easily domesticated. The drakes of the tame duck, however they may vary in color, ever retain the mark of their origin from our *Eng-*

* The *Columba saxatilis*, a small sort, that is frequent on most of our cliffs, is only a variety of the wild pigeon.

lish mallard, by the curled feathers of the tail: and the tame goose betrays its descent from the wild kind, by the invariable whiteness of its rump, which they always retain in both states.

Multitudes of these birds are observed to migrate into the south of *England*: and while the beech woods were suffered to cover large tracts of ground, they used to haunt them in *myriads*, reaching in strings of a mile in length, as they went out in the morning to feed. They visit us the latest of any bird of passage, not appearing till *November*; and retire in the spring. I imagine that the summer haunts of these are in *Sweden*, for Mr. *Eckmark* makes their retreat thence coincide with their arrival here*. But many breed here, as I have observed, on the cliffs of the coast of *Wales*, and of the *Hebrides*.

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*, *Powters*, *Runts*, *Turbits*, *Owls*, *Nuns*, &c. † The most celebrated of these is the

CARRIER.

Carrier, which from the superior attachment that

* *Aman. Acad.* IV. 593.

† 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.

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 returns to the home it was brought from, with its advices*. 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 aerial messengers have been employed for a very singular purpose, being let loose at *Tyburn* at the moment the

* 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 custome, whan thei schulle usen werre, and whan men holden sege abouten cytee or castelle, and thei withinnen dur not fenden out messagers with lettere, fro lord to lord, for to aske fokour, thei maken here letters and bynden hem to the nekke of a *Colver*, and leten the *Colver* flee; and the *Colveren* ben so taughte, that thei fleen with tho letters to the verry place, that men wolde fend hem to. For the *Colveres* ben norysht in tho places, where thei ben sent to; and thei fenden hem thus, for to beren here letters. And the *Colveres* retournen azen, where as thei ben norisht 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.

fatal cart is 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* :

Tofto che'l Castellan di *Damiata*
 Certificossi, ch'era morto *Orrilo*,
 La *Colomba* lasciò, ch'avea legata
 Sotto l'ala la lettera col filo.
 Quelle andò al *Cairo*, ed indi fu lasciata
 Un' altra altrove, come quivi e filo :
 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 beautifull *Bathyllus*, by a dove.

Εγὼ δ' Ἀνακρέοντι
 Διάκονῶ τῶσαῦτα·
 Καὶ νῦν οἶσ' ἐκείνῃς
 Ἐπιστολὰς κομίζω †.

* '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 περιστεράν.

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 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 §;

* *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 vigili obfidio atque etiam retia amne pretenta profuere *Antonio*, per cælum eunte 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.

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.

102. RING. Le Ramier. *Belon av.* 307. *Raii syn. av.* 62.
 Phassa. *Belon obs.* 13. *Columba palumbus. Lin. syst.*
 Palumbus. *Gesner av.* 310. *sp.* 282.
 Palumbus major five torquatus. *Ringdufwa, Siutut. Faun.*
Aldr. av. II. 227. *Succ. sp.* 208.
 Colombaccio. *Olina,* 54. *Wildtaube, Ringltaube.*
 Ring-dove, Queest, or Cufhat. *Kram.* 359.
Wil. orn. 185. *Ringel-Taube. Frisch, I.*
 Le Pigeon Ramier. *Briffon av.* 138.
 I. 89. *Hist. d' Oys.* II. 531. *Dan. Ringel-due Bornholmis,*
 Griunik. *Scopoli,* No. 178. *Skude. Brunnich,* 204.
Br. Zool. 89. plate O.

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;

DESCRIP.

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.

- | | | |
|-------------------------------------|---------------------------------------|-----------|
| La Turtrelle. <i>Belon av.</i> 309. | Wilde Turtel taube. <i>Kram.</i> | 103. TUR- |
| Turtur. <i>Gesner av.</i> 316. | 359. | TLE. |
| Turtur. <i>Aldr. av.</i> II. 235. | Turtel-Taube. <i>Frisch</i> , I. 140. | |
| Tortora. <i>Olina</i> , 34. | Le Tourterelle. <i>Briffon av.</i> | |
| The Turtle-dove. <i>Wil. orn.</i> | I. 92. <i>Scopoli</i> , No. 181. | |
| 183. | <i>Br. Zool.</i> 89. plate O. 1. | |
| <i>Raii syn. av.</i> 61. | <i>Hist. d' Oys.</i> II. 545. | |

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 countries in autumn.

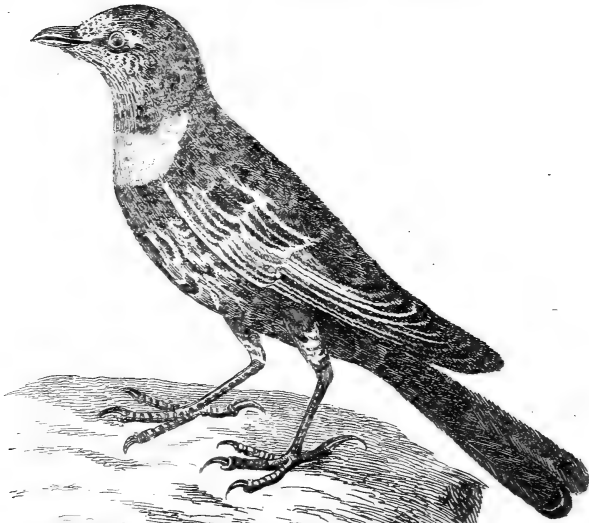
The length is twelve inches and a half; its breadth
DESCRIP.
twenty-one: the weight four ounces. The irides

VOL. I. X are

are of a fine yellow : a beautifull crimfon 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 tipt 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.



RING OUZEL.



Nº 10

STARE.



ORDER V. PASSERINE.

Strait BILL; depressed: the NOSTRILS surrounded with a prominent rim.

XV.
STARE.

- | | | |
|--------------------------------------|--|-------------|
| L'Estourneau. <i>Belon av.</i> 321. | Storno. <i>Zinan.</i> 69. | 104. STARE. |
| Sturnus. <i>Gesner av.</i> 746. | <i>Olina,</i> 18. | |
| <i>Aldr. av.</i> II. 284. | Sturnus vulgaris. <i>Lin. syst.</i> | |
| Stare, or Starling. <i>Wil. orn.</i> | 290. | |
| 196. | Stare. <i>Faun. Suec. sp.</i> 213. | |
| <i>Raii syn. av.</i> 67. | <i>Hasselquist, Itin.</i> 284. | |
| L'Etourneau. <i>Briffon av.</i> II. | <i>Danis & Norvegis, Stær. Br.</i> | |
| 439. <i>Hist. d'Oys.</i> III. | 229. | |
| 176. | Staar. <i>Frisch,</i> II. 217. | |
| Sanfonet. <i>Pl. Enl.</i> 75. | Starl. <i>Kram.</i> 362. | |
| Starl. <i>Scopoli,</i> No. 189. | <i>Br. Zool.</i> 93. plate P. 2. f. 1. | |

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 four or five eggs, of a pale greenish ash color; and makes its nest 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 scarce eatable. They are very docil, and may be taught to speak.

DESCRIP.

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. Bill, in old birds, 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 of a reddish brown.

Strait BILL, a little bending at the point, with a small notch near the end of the upper mandible. Outmost TOE adhering as far as the first joint to the middle toe.

XVI.
THRUSH.

- | | | |
|---|--|---------|
| La Grive ou Siferre. <i>Belon av.</i>
324. | La Draine. <i>Hist. d'Oys.</i> III. 105. | MISSEL. |
| Turdus viscivorus. <i>Gesner av.</i>
759. | La grosse grive, Turdus major. <i>Briffon av.</i> II. 200. | |
| <i>Aldr. av.</i> II. 273. | <i>Scopoli</i> , No. 193. | |
| Tordo. <i>Olina</i> , 25. | Biork-Traft. <i>Faun. Suec. sp.</i>
216. | |
| Miffel-bird, or Shrite. <i>Wil.</i>
<i>orn.</i> 187. | Dobbelt-Kramsfugl. <i>Brun-</i>
<i>nich</i> , 231. | |
| <i>Raii syn. av.</i> 64. | Zariker, Mistler, Zerrer.
<i>Kram.</i> 361. | |
| Miffeltoe-thrush, or Shreitch.
<i>Charlton ex.</i> 89. | Miffel-Droffel, or Schnarre.
<i>Frisch</i> , I. 25. | |
| Turdus viscivorus. <i>Lin. syst.</i>
291. | <i>Br. Zool.</i> 90. plate P. f. 1. | |
| Tordo viscada, Zicchio. <i>Zi-</i>
<i>nan.</i> 39. | | |

THIS is the largest of the genus, and weighs near 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* hazel.

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. Tail brown; the three outmost feathers tipt with white. Cheeks and throat mottled with brown and white: 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 skreek; from whence some of its *English* names; its song though is very fine, which it begins, 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* to call it the *Storm-cock*. It feeds on insects, holly and miffeltoe 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*, continues the whole year. The *Welsh* call this bird

Pen y llwyn, or the master of the coppice, as it will drive all the lesser species of thrushes from it. The ancients 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 superior being either screaming, croaking, chattering, &c. the pigeon kind excepted, whose slow plaintive continued monotone has something sweetly soothing in it. *Thompson* (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 unpleasing by itself.

The jay, the rook, the daw,
 And each harsh pipe (discordant heard alone)
 Aid the full concert: while the stock-dove breaths
 A melancholy murmur thro' the whole*.

* *Seasons. Spring. I. 606.*

106. FIELD-
FARE.
- La Litorne. *Belon av.* 328.
Turdus pilaris. Gesner av. 753.
Aldr. av. II 274.
Wil. orn. 183.
Raii syn. av. 64.
 La Litorne, ou Tourdelle.
Briffon av. II. 214. *Hist.*
d'Oys. III. 301.
Lin. syst. 291.
 Kramsfogel, snoskata. *Faun.*
Suec. No. 215
 Brinauka. *Scopoli,* No. 194.
- Dan.* Dobbelt Kramsfugl.
Cimbris. Snarrer. *Norve-*
gis, Graae Trost, Field-
 Trost, Nordenvinds Pibe,
Bornholmis, Simmeren. *Br.*
 232.
 Kranabets vogel, Kranabeter.
Kram. 361.
 Wacholder-Drossel, Juniper
 Thrus(h), or Ziemer.
Frisch, I. 26.
Br. Zool. 90. plate P. 2. f. 1.

THIS bird passes the summer in the northern parts of *Europe*; also in lower *Austria**. It breeds in the largest trees†; feeds on berries 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

* *Kramer elench.* 361. † *Faun. Suec. sp.* 78.

‡ *Klein hist. av.* 178.

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 to olive, and spotted with black; the back and greater coverts of the wings of a fine deep chefnut; 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 talons very strong.

DESCRIP.

* *Varro*, lib. III. c. 5.

107. THROSTLE. La petite Grive. *Belon av.* 226. *Faun. Suec. sp.* 217.
 Turdus minor alter. *Gesner av.* 762. *Turdus in altissimis. Klein stem. av. tab.* 13.
Aldr. av. II. 275. Weindroschl, Weißdroschl, Sommer-droschl. *Kram.* 361.
 Storno. *Olina,* 18. Sing-Drossel, or Weiß-drossel. *Frisch,* I. 27.
 Mavis, Throstle, or Song Thrush. *Wil. orn.* 188. *Cimbris & Bornholmis, Vündrossel. Norvegis, Tale*
Raii syn. av. 64. *Traut. Br.* 236.
 La petite Grive, Turdus minor. *Briffon av.* II. 205. *Br. Zool.* 91. plate P. f. 2.
Hist. d' Oys. III. 280. *Draſich. Scopoli,* No. 195.
 Turdus musicus. *Lin. syst.* 292.

DESCRIP.

THE weight of this species is three ounces: the length nine inches: the breadth thirteen and a half. In colors it so nearly resembles the missel thrush, that no other remark need be added, but that it is lesser, 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 long continuance of its harmony; for it obliges us with its song for near three parts of the year. Like the missel bird, it delivers its music from the top of some high tree; 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 plastered with clay. It lays five or six
 eggs,

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*.

- | | | |
|--------------------------------------|--|-----------|
| Le Mauvis. <i>Belon av.</i> 327. | <i>Scopoli</i> , No. 196. | 108. RED- |
| Turdus minor. <i>Gesner av.</i> | <i>Pl. Enl.</i> 51. | WING. |
| 761. | Turdus iliacus. <i>Lin. syst.</i> 292. | |
| T. Illas feu Tylas. <i>Aldr. av.</i> | Klera, Kladra, Tall-Traht. | |
| II. 275. | <i>Faun. Suec. sp.</i> 218. | |
| Redwing, Swinepipe, or Wind | Rothdroschl, Walddroschl, | |
| Thrush. <i>Wil. orn.</i> 189. | Winterdroschl. <i>Kram.</i> 361. | |
| <i>Raii syn. av.</i> 54. | Wein-Drossel. Roth-Drossel. | |
| Le Mauvis. <i>Briffon av.</i> II. | <i>Frisch</i> , I. 28. | |
| 208. tab. 20. fig. 1. <i>Hist.</i> | <i>Br. Zool.</i> 91. plate P. f. 2. | |
| <i>d' Oys.</i> III. 309. | | |

THESE birds appear in *Great-Britain* a few days before the fieldfare; they come in vast flocks, and from the same countries as the latter. With us they have only a disagreeable piping note; but in *Sweden* during the spring 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*.

They have a very near resemblance to the thrush. DESCRIp.

* *Faun. Suec. sp.* 218.

tle; but are less, only weighing two ounces and a quarter: their colors are much the same; only the sides under the wings and the inner coverts in this are of a reddish orange; in the thrortle 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 thrortles, the author of the *epitome of the art of husbandry**, mentions a fourth kind under the name of the *heath thrortle*, 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.

109. BLACK-
BIRD.

Le Merle noir. *Belon av.* 320.
Merula. *Gesner av.* 602.
Aldr. av. II. 276.
Merlo. *Zinan.* 39. *Olina,* 29.
Wil. orn. 190.
Raii syn. av. 65.
La Merle. *Brisson av.* II. 227.
Hist. d'Oys. III. 330.
Pl. Enl. 2.
Turdus merula. *Lin. syst.*
295.

Kohl-Traut. *Faun. Suec. sp.*
220.
Dan. & Norvegis Solfort. *Br.*
234.
Amfel, *Amarl. Kram.* 360.
Schwartzte Amfel. *Frisch,* I.
29.
Br. Zool. 92.
Kofs. *Scopoli,* No. 197.

THIS bird is of a very retired and solitary nature: frequents hedges and thickets, in

* *By J. B. gent. third edit.* 1685.

which

M. & F. BLACKBIRD.



affinis del.



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.

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 eye-lids yellow. When young the bill is dusky, and the plumage of a rusty black, so that they are not to be distinguished from the females; but at the age of one year they attain their proper color.

DESCRIP.

110. RING-
OUZEL.

- Le Merle ou Colliér. *Belon av.* 318.
 Merula torquata. *Gesner av.* 607.
 Merlo alpestre. *Aldr. av.* II. 282.
Wil. orn. 194. Rock or Mountain-Ouzel, 195.
 Mwyalchen y graig. *Camden Brit.* 795.
 Le Merle a plastron blanc. *Hist. d'Oys.* III. 340.
Raii syn. av. 65.
- Morton Northhampt.* 425.
 Le Merle a Collier. *Briffon av.* II. 235.
 Turdus torquatus. *Lin. syst.* 296.
Faun. Suec. sp. 221. *Scopoli,* No. 198.
Dan. Ringdroffel. *Norvegis* Ring Trost. *Br.* 237.
 Ringlamsel. *Kram.* 360.
 Ringel-Amsel. *Frisch,* I. 30.
Br. Zool. 92. plate P. 1. f. 1.

DESCRIP.

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 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 white crescent, the horns of which point to the hind part of the neck. 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.

The *Ring-Ouzel* inhabits the *Highland* hills, the north of *England*, and the mountains of *Wales*.

They

They are also found to breed in *Dartmoor*, 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 *Selborn*, 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, 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 places 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 in *France* at the latter 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*.

- III. WATER-OUZEL. *Merula aquatica*. *Gesner av.* 608. *Povodni Kofs. Scopoli, No. 223.*
Lerlichirolo. Aldr. av. 252. *Le Merle d'eau. Brisson av. v.*
 III. 186. *Merlo aquatico. Zinan. 109.*
Water-craw. Turner. Norvegis, Fosse Fald, Fosse Kald,
The Water-Ouzel, or Wa- Quærn Kald, Stroem-Stær,
ter-Crake. Wil. orn. 149. Bække Eugl. Brunnich. 230.
Raii syn. av. 66. Wasser-amsel, Bach-amsel. Kra.
Sturnus cinclus. Lin. syst. 374.
 290. *Br. Zool. 92. plate. P. 1. f. 2.*
Watnstare. Faun. Suec. sp. 214.

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 eggs adorned with a fine blush of red. It feeds on insects and small fish; and as Mr. *Willughby* observes, though not web-footed, will dart itself after them quite under water. 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.

NEST.

DESCRIP.

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

of

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 fitting.

These are all the birds of this genus that can claim a place in this work. The rose colored ouzel, *Wil. orn.* 194. *Edw.* 20. a foreign bird, has been shot at *Norwood* near *London*; for its history we refer our readers to the appendix.

XVII.
CHAT-
TERER.

BILL frait, 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.

Middle TOE connected at the base to the outmost.

112. WAXEN. *Garrulus Bohemicus*. *Gesner - Phil. Transf.* No. 175.
av. 703. *Ampelis garrulus. Lin. syst.*
Aldr. av. I. 395. 297.
 Bohemian Chatterer. *Wil.* Siden-Suantz, Snotuppa.
orn. 133. *Faun. Suec. sp.* 82.
Bell's Travels. I. 198. Sieden vel Sieben Suands.
Silk Tail. Raii syn. av. 85. *Brunnich* 25.
Ray's Letters, 198. 200. *Zuserl, Geidenschweiff. Kran.*
 Le Jaseur de Boheme, *Bomby-* 363.
cilla Bohemica. Brisson av. Seiden-schwantz. *Frisch,* I.
 II. 333. *Scopoli.* No. 20. 32.
Br. Zool. 77. plate C. 1.

THESE birds appear but by accident in *South Britain*: about *Edinburgh* in *February*, they come annually 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. Their native country is *Bohemia*, from whence they wander over *Europe*, and were once superstitiously considered as presages of a pestilence. They are gregarious: feed

CHATTERER.



feed on grapes where vineyards are cultivated; are esteemed delicious food: easily tamed.

The length of the bird I saw was eight inches: DESCRIP.
the bill short, thick, and black; the base covered with black bristles; from thence passes to the hind part of the head over each eye a bar of black: on the head is a sharp pointed crest reclining backwards: the *irides* are of a bright ruby colour: the cheeks tawny: the throat black, with a small bristly tuft in the middle.

The head, crest, and back ash colored mixed with red: the rump a fine cinereous: breast and belly, pale chestnut 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.

XVIII.
GROSBEAK

BILL strong, thick, convex above and below.

NOSTRILS small and round.

TONGUE as if cut off at the end.

113. HAW. Le Grosbec ou Pinfen royal. Le Grosbec. *Briffon av.* III.
Belon av. 373. 219.
 Coccothraustes (steinbeisser) *Pl. enl.* 99, 100.
Gesner av. 276. *Loxia coccothraustes. Lin. syst.*
Aldr. av. II. 289. 299.
 Frosone. *Olin* 37. *Stenkneck. Faun. Suec. sp.* 222.
 Grosbeak, or Hawfinch. *Wil.* *Kernbeis, Nusbeisser. Kram.*
orn. 244. 365.
Raii syn. av. 85. *Kirschfinch (Cherry-finch).*
Charlton ex. 91. *Frisch, I.* 4.
 Dleschk. *Scopoli*, No. 261. *Brunnich. in append.*
Edw. av. 188. The male. *Br. Zool.* 105. plate U. F. 1.

THE birds we describe were shot in *Sbropshire*: they visit us only at uncertain times, and are not regularly migrant. They feed on berries; and even on the kernels of the strongest stones, 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, laying five or six eggs; but in the winter they come down into the plains.

DESCRIP.

This species weighs near two ounces: its length is seven inches; the breadth thirteen: the bill is of
 a fun-

F. CROSS BILL.



PINE GROSBEAK. . . 2

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 short, spotted with white on the inner sides. The legs 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.

Loxia enucleator. <i>Lin. syst.</i>	Greatest Bulfinch. <i>Edw.</i> 123,	114. PINE.
299.	124.	
Tallbit, Natt-waka. <i>Faun.</i>	Coccothraustes Canadensis.	
<i>Suéc.</i> No. 223.	<i>Briffon</i> , III. 250.	

THESE are common to *Hudson's Bay*, *Sweden* and *Scotland*. I have seen them flying above the great pine forests of *Invercauld*, *Aberdeenshire*.

I imagine they breed there, for I saw them *August 5th*. They feed on the seeds of the pine. *Linnaeus* says, they sing in the night.

It is near twice the size of the bulfinch. The bill strong, dusky, forked at the end; less thick than that of the common bulfinch: head, back, neck, and breast 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; exterior edges of the same color: the quill-feathers and tail dusky; their exterior edges of a dirty white: legs black: length nine inches and a half. There seems an agreement in colors, as well as food, between this species and the cross-bill; one that I saw in *Scotland*, and believe to be the female, was (like the female cross-bill) of a dirty green; the tail and quill-feathers dusky.

- Loxia*. *Gesner av.* 591. *Loxia curvirostra*. *Lin. syst.* 115. CROSS-
Aldr. av. I. 426. 299. BILLED.
 Shell-apple, or Cross-bill. *Korffnaff, Kinlgelrifvare.*
Wil. orn. 248. *Faun. Suec. sp.* 224. *Scopoli*, No. 200.
Raii syn. av. 86. *Krumschnabl, Kreutzvogel.*
Charlton ex. 77. *Kram.* 365.
Edw. av. 303. *Kreutz-Schnabel. Frisch*, I. II.
Cat. Carol. app. 37. *Norveg. Kors-Næb. Kors-fugl.*
Le Bec-croise. Brisson av. III. *Br.* 238.
 329. *tab.* 17. *fig.* 3. *Br. Zool.* 106. plate U. f. 2.

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 out of *Shropshire*, which were superior in size to the former, the bill remarkably thick and short, more incurvated than that of the common kind, and the ends more blunt.

These birds, like the former, are inconstant visitants of this island: in *Germany* and *Switzerland** they inhabit the pine forests, and breed in those trees so early as the months of *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

* *Gesner* 59. *Kramer Elench.* 365.

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.

116. BUL-
FINCH.

- | | |
|---------------------------------------|--|
| Le Pivoine. <i>Belon av.</i> 359. | <i>Pl. enl.</i> 145. |
| Asprocolos, <i>obs.</i> 13. | Monachino, Sufolotto. <i>Zinano.</i> |
| Rubicilla, five pyrrhula. <i>Ges-</i> | 58. |
| <i>ner av.</i> 733. | <i>Loxia pyrrhula. Lin. syst.</i> 300. |
| <i>Aldr. av.</i> II. 326. | Domherre. <i>Faun. Suec. sp.</i> |
| Ciufolotto. <i>Olina,</i> 40. | 225. |
| Bulfinch, Alp, or Nope. <i>Wil.</i> | <i>Gumpl. Kram.</i> 365. <i>Gimpl.</i> |
| <i>orn.</i> 247. | <i>Scopoli,</i> No. 202. |
| <i>Raii. syn. av.</i> 86. | <i>Danis & Norvegis Dom-pape,</i> |
| Blutfinck, <i>Frisch,</i> I. 2. | <i>quibusdam Dom-Herre. Br.</i> |
| Le Bouvreuil. <i>Briffon av.</i> III. | 240. |
| 308. | <i>Br. Zool.</i> 106. plate U. f. 3.4. |

THE wild note of this bird is not in the left musical; but when tamed it becomes remarkably docil, 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

* *Faun. Suec. sp.* 224.

will become so tame as to come at call, perch on its master's shoulders, and (at command) go through a difficult musical lesson. They may be taught to speak, and some thus instructed are annually brought to *London* from *Germany*.

The male is distinguished from the female by the superior blackness of its crown, and by the rich crimson that 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 are grey: the coverts of the wings are 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.

DESCRIP.

In the spring these birds frequent our gardens, and are very destructive to our 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 Northampton-*

Northamptonshire * gives another instance of such a change, with this addition, that the year following, after moulting, the bird recovered its native colors. Bulfinches fed entirely on hemp-feed are aptest to undergo this change.

117. GREEN. *Belon av.* 365.
Affarandos, obs. 13.
Chloris. Gesner av. 258.
Aldr. av. II. 371.
Olin. 26.
Wil. orn. 246.
Raii syn. av. 85.
Le Verdier. Brisson av. III.
 190.
Grindling. Scopoli, No. 206.
- Verdone, Verdero, Antone.*
Zinan. 63.
Loxia chloris. Lin. syst. 304.
Swenska. Faun. Succ. sp. 226.
Svenke. Br. 242.
Grunling. Kram. 368.
Grünfinck (Greenfinch) Frisch
 I. 2.
Br. Zool. 107.

DESCRIP.

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:
 NEST. 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. During breeding-time, that bird which is not engaged in incubation, or nutrition, has a pretty way of sporting on wing over the bush. They lay five or six eggs of a pale green color, marked with blood colored spots. 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.

This bird is so easily tamed, that it frequently eats out of one's hand five minutes after it is taken, if you have an opportunity of carrying it into the dark; the bird should be then put upon your finger, which it does not attempt to move from (as being in darkness it does not know where to fly) you then introduce the finger of your other hand under its breast, which, making it inconvenient to stay upon the first finger on which it was before placed, it climbs upon the second, where it likewise continues, and for the same reason. When this hath been nine or ten times repeated, and the bird stroked and caressed, it finds that you do not mean to do it any harm; and if the light is let in by degrees, it will very frequently eat any bruised feed out of your hand, and afterwards continue tame.

XIX.
BUNTING.

BILL strong and conic, the sides of each mandible bending inwards: in the roof of the upper, a hard knob, of use to break and comminute hard seeds.

118. COMMON. Le Proyer, Prier, ou Pruyer. Petrone, Capparone, Stardachio. *Zinan.* 63.
Belon av. 266. Emberiza Miliaria. *Lin. syst.* 308.
 654. *Aldr. av.* II. 264. *Faun. Suec. sp.* 228.
 Strillozzo. *Olina,* 44. Korn Larkor. *Lin. it. scan.* 292. *tab.* 4.
Wil. orn. 267. *Cimbris* Korn-Lærke. *Norweg.*
Raii syn. av. 93. Knotter. *Brunnich* 247.
 Le Proyer, Cynchramus. Graue Ammer. *Frisch,* I. 6.
Briffon av. III. 292. Brasler. *Kram.* 372.
Pl. Enl. 30. *Br. Zool.* 111. plate W. f. 7.

DESCRIP.

THE bill of this bird, and the other species of this genus, is singularly constructed; the sides of the upper mandible form a sharp angle, bending inwards towards the lower; and in the roof of the former is a hard knob, adapted to bruise corn or other hard seeds.

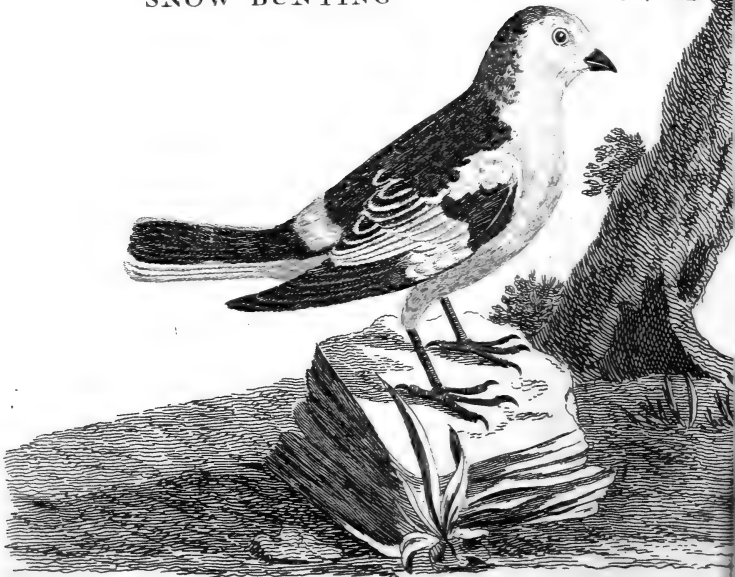
The throat, breast, sides, and belly are of a yellowish white: the head and upper part of the body of a pale brown, tinged with olive; each of which (except the belly) are marked with oblong black spots; towards the rump the spots grow fainter. The quill-feathers are dusky, their exterior edges

YELLOW HAMMER.



SNOW-BUNTING

N^o 122



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.

Belon av. 366.
Emberiza flava. Gesner av.
 653.
Cia pagglia riccia, Luteæ
alterum genus. Aldr. av.
 II. 372.
Wil. orn. 268.
Yellow Hammer, Raii syn.
av. 93.
Le Bruant. Brisson av. III.
 258.

Pl. Enl. 30. f. 2.
Sternardt. Scopoli, No. 209.
Emberiza citrinella. Lin. syst.
 309.
Groning, Golpink. Faun.
Suec. sp. 230.
Ammering, Goldammering.
Kram. 370. *Frisch, I.* 5.

119. YEL-
 LOW.

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 one of our commonest birds, 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:

DESCRIP.

color: the back 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.

120. REED. *Scoenicius*. *Gesner av.* 573, *tulanus arundinaceus*. *Briffon av.* III. 274.
 652. *Wil. orn.* 269. *Emberiza scoenicius*. *Lin. syst.*
 Reed Sparrow. *Raii syn. av.* 311.
 95. *Saf-sparf. Faun. Suec. sp.* 231.
 The Nettle-monger. *Morton Rohrammering, Meerspatz. Kram.* 371.
Northampt. 428.
 Ror-Spurv. *Brunnich* 251. *Rohrammer (Reed-hammer)*
 L'Ortulan de Roseaux, *Hor-Frisch*, I. 7.
Br. Zool. 112. plate W.

THE reed sparrow inhabits marshy places, most commonly among reeds; from which it takes its name. Its nest is worthy notice for the artful contrivance of it, being fastened to four reeds, and suspended by them like a hammock, about three feet above the water; the cavity of the nest is deep, but narrow, and the materials are rushes, fine bents and hairs. It lays four or five eggs, of a bluish white, marked with irregular purplish veins, especially on the larger end. It is a bird much admired for its song, and like the nightingale it sings in the night.

NEST.

In the male, the head, chin, and throat are black: the tongue livid: at each corner of the mouth commences a white ring, which encircles the head. At 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-coloured, spotted with black; it wants the white ring round the neck: but in most other respects resembles the male.

DESCRIP.

Great pied Mountain Finch, *Wil. orn.* 255. *nus nivalis. Brisson av. III.* 121. TAWNY.
 or Brambling. *Wil. orn.* 285.
Raii. syn. av. 88. Schnee-ammer (Snow-hammer). *Frisch, I.* 6.
 L'Ortolan de Neige, Hortula- *Br. Zool.* 112. plate f. 6.

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 the point, which is black. The crown of the head is of a tawny color, darkest near the forehead: the whole neck is of the same color, but paler: the throat almost

DESCRIP.

almost white: the upper part of the breast is of a dull yellow; the breast 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 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.

These

These birds are sometimes found in different parts of *England*; but are not common. I am unacquainted with their breeding places, or their history: are sometimes found white, and then mistaken for white larks.

- Emberiza nivalis.* *Lin. syst.* 308. *Avis ignota a Piperino missa.* 122. SNOW.
Gesner av. 798.
Scopoli, No. 214.
 227. Snow-bird, *Edw.* 126. *Egede*
Greenl. 64. *Marten's Spitz-*
bergen, 73.
Le Pincon de neige ou la *Forster in Ph. Tr. vol. LXII.*
niverolle. Brisson, III. 162. *p.* 403.
Cimbris, sneekok, vinter fugl.
Norvegis. Sneefugl, Fialster.
Brunnich, 245.

THE weight of this species is one ounce and a quarter: the bill and legs black: the forehead and crown white, with some mixture of black on the hind part of the head: the back of a full black, the rump white: the bastard wing and ends of the greater coverts black, the others white: the quill-feathers black, their base white: the secondaries white, with a black spot on their inner webs. The middle feathers of their tail black; the three outmost white, with a dusky spot near their ends: from chin to tail of a pure white.

These birds 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 appear in the *Shetland* islands, then in the *Orkneys*, 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*, *Orkneys*, *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.

* *Kram. Austria*, 372. *Bell's Travels*, I. 198.

Leffer Mountain-finch, or Morton Northampt. 423. tab. 123. MOUN-
 Brambling. Wil. orn. 255. 13. fig. 3. Br. Zool. 113. TAIN.

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 former, but Mr. *Morton*, having frequent opportunity of examining this species, proves it to be a distinct kind. DESCRIPT.

According to Mr. *Johnson*, its bill is short, thick, and strong; black at the point, the rest yellow. The forehead is of a dark chestnut; 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 five first feathers 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*.

XX. FINCH. BILL perfectly conic, slender towards the end, and sharp-pointed.

124. GOLD-FINCH.

Belon av. 353.
Carduelis. Gesner av. 242.
Aldr. av. II. 349.
Cardelli. Olina, 10.
 Goldfinch, or Thistlefinch.
Wil. orn. 256.
Raii syn. av. 89.
 Le Chardonneret. *Briffon av.*
 III. 53.
Pl. Enl. 4. f. 1.

Cardellino. *Zinan.* 59.
Fringilla carduelis. Lin. syst.
 318.
Stiglitz. Faun. Suec. sp. 236.
Stiglitz. Br. 257. *Scopoli,*
 No. 211.
Stiglitz. Kram. 365. Distel-
 finck. *Frisch,* I. 1.
Br. Zool. 108. plate V. f. 1.

DESCRIP.

THIS is the most beautifull 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, tipt with black, the base is furrounded 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 is black; and the white on the cheeks is bounded almost to the forepart of the 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 beautifull yellow; the tips white: the

the tail is black, but most of the feathers marked near their ends with a white spot: the legs are white.

The female is distinguished from the male by these notes; the feathers at the end of the bill in the former are brown; in the male black: the lesser coverts of the wings are brown: and the black and yellow in the wings of the female 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*.

There is another 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.

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. It is fond of orchards; and frequently builds in an apple or pear tree: its nest is very elegantly formed of fine moss, liverworts, and bents on the outside; lined first with wool and hair, and then with the gossin or cotton of the fallow. It lays five white eggs, marked with deep purple spots on the upper end.

This bird seems to have been the χρυσομίτρις* 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* dumī.

In our account of the *Halcyon* of the antients, 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 *χρυσομίτρις*, which has no meaning; neither does the critic support his alteration with any reasons. *Hist. an.* 887.

† *Dr. Martyn.*

‡ *Hist. an.* 1055.

- Le Pinçon. *Belon av.* 371. *Pl. enl.* 54. f. 1.
 Fringilla. *Gesner av.* 337. *Fringilla cœlebs.* *Lin. syst.* 318.
Aldr. av. II. 356. *Fincke, Bofincke: Faun. Suec.*
Olina 31. *sp.* 232.
Wil. orn. 253. *Buchfinck (Beachfinch) Frisch,*
I. 1.
Raii syn. av. 88. *Finke. Kram.* 367.
 Fringuello. *Zinan.* 61. *Fincke. Br.* 253.
 Le Pinçon. *Briffon av.* 148. *Br. Zool.* 108. plate V. f. 2. 3.
 Schinkovitz. *Scopoli, No.* 217.

125. CHAFFINCH.

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; 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 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

DESCRIP.

* *Amœn. acad.* II. 42. IV. 595.

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 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.

- Le Montain. *Belon av.* 372. Fringilla montifringilla. *Lin.* 126. BRAM-
 Montifringilla montana. *Ges-* *lyst.* 318. BLING.
ner av. 388.
Aldr. av. II. 358. Pinofch. *Scopoli*, No. 218.
 Fringuello montanina. *Olina* Norquint. *Faun. Suec. sp.* 233.
 32. Quæker, Bofinkens Hore-
 Unge, Akerlan. *Brunnich*
 255.
 Bramble, or Brambling. *Wil.* Nicowitz, Mecker, Piencken.
orn. 254. *Kram.* 367.
 Mountain-finch. *Raii syn. av.* Bergfinck (Mountainfinch).
 88. *Frisch*, I. 3.
 Le Pinçon d'ardennes. *Bris-* Br. *Zool.* 108. plate V. f. 4.
son av. III. 155.
Pl. enl. 54. f. 2.

THIS bird is not very common in these islands. DESCRIP.
 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, tipped 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 tipped with ash color.

127. SPAR-
ROW.
- | | |
|--------------------------------------|--|
| Le Moineau, Paisie, ou Mo- | <i>Pl. enl. 6. f. 1. 55. f. 1.</i> |
| iffon. <i>Belon av. 361.</i> | <i>Fringilla domestica. Lin. syst.</i> |
| Passer. <i>Gesner av. 643.</i> | 323. |
| <i>Aldr. av. II. 246.</i> | Tatting, Grasparf. <i>Faun. Suec.</i> |
| <i>Passera nostrale. Olin, 42.</i> | <i>sp. 242.</i> |
| The House-sparrow. <i>Wil.</i> | <i>Danis Graae-Spurre. Norweg.</i> |
| <i>orn. 249.</i> | Huus-Kald. <i>Br. 264.</i> |
| <i>Raii syn. av. 86.</i> | Haußpatz. <i>Kram. 369.</i> |
| Le Moineau franc. <i>Briffon av.</i> | <i>Br. Zool. II. 300.</i> |
| III. 72. | |

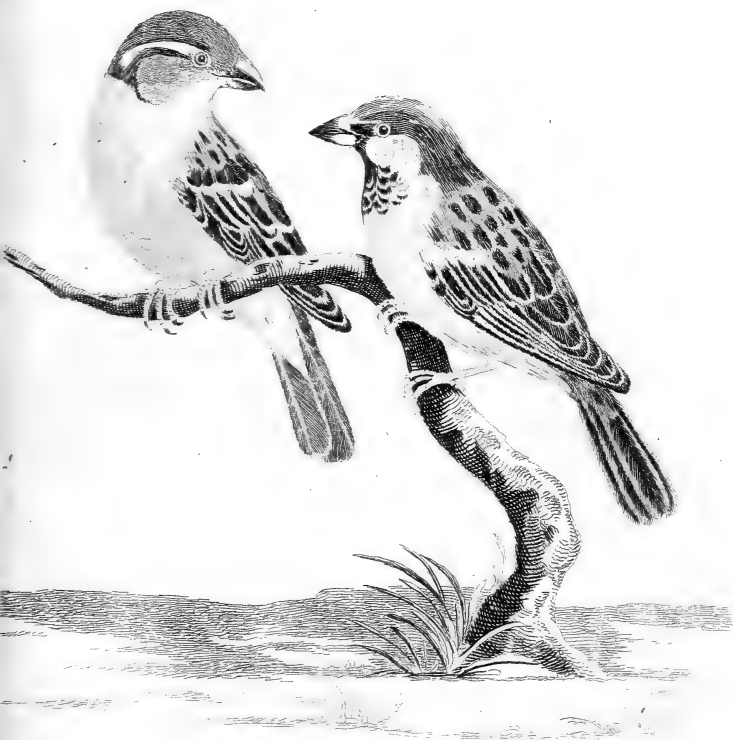
DESCRIP.

THE bill of the male is black: the crown of the head is grey: under each eye is a black spot; above the corner of each is 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: tail dusky.

The lower mandible of the bill of the female is white: beyond each eye is a line of white: 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 falacious: they breed early

M. & F. SPARROWS.



A Griffiths del





TREE SPARROW.



SEDGE BIRD.



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's nests, and in the forks of boughs beneath them.

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.

Passere Montano. Zinan. 81.

Fringilla montana. Lin. syst.

324.

Faun. Suec. sp. 243. Scopoli,

No. 221.

Skov-Spurre. Brunnich, 267.

Feldspatz, Rohrspatz. Kram.

370. *Frisch, I. 1.*

Br Zool. 109.

Grabetz. Scopoli, No. 220.

128. TREE
SPARROW.

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, 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

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 : quill-feathers dusky, edged with pale red : lower part of the back of an olive brown : tail brown : legs straw color.

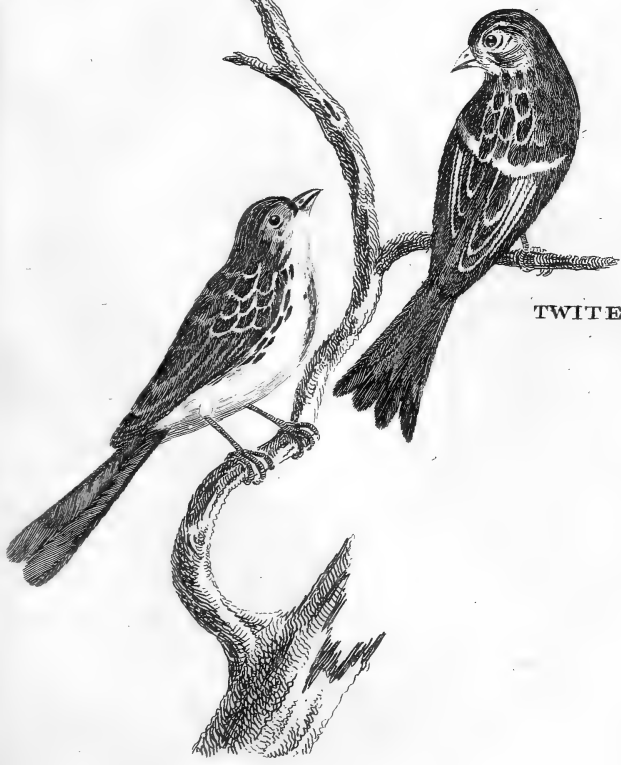
These birds are very common in *Lincolnshire* ; are conversant among trees, and collect like the common kind in great flocks.

129. SISKIN. *Belon av.* 354.
Acanthis, ipinus, ligurinus.
Gesner av. 1.
Aldr. av. II. 352.
Lucarino. Olin. 17.
Wil. orn. 261.
Raii syn. av. 91.
Le Serin. Brisson av. III.
 65.
- Fringilla spinus. Lin. syst.*
 322.
Siska, Gronsfiska. Faun. Suec.
sp. 237.
Sifgen. Brunnich, 261.
Zeisel, Zeiserl. Kram. 366.
Frisch, I. 2. Scopoli, No.
 212.
Br. Zool. 109. plate V.

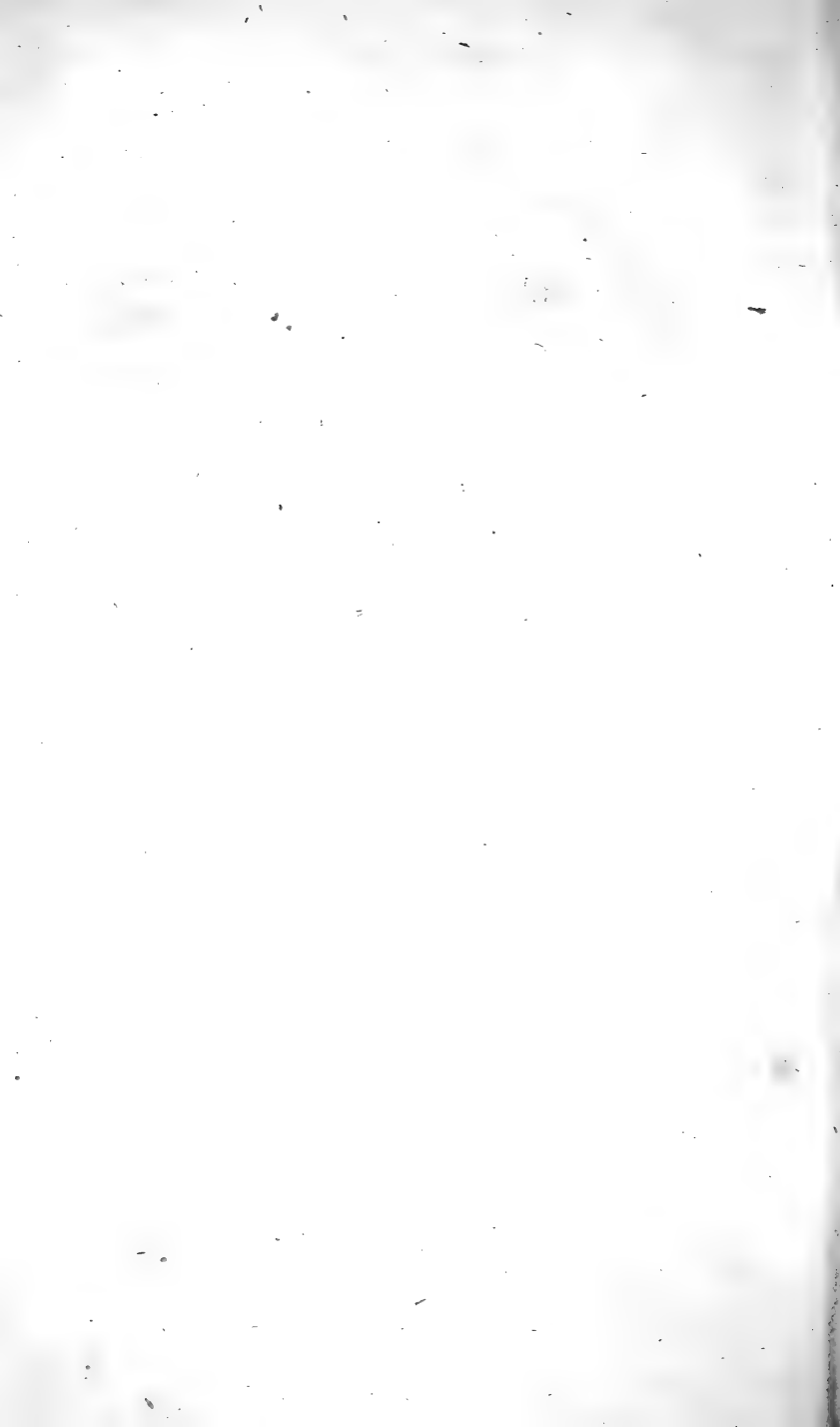
DESCRIP.

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 their middle : the pinion quill 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

SISKIN. M. & F.



TWITE. M. & F. Nº 133



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 *Suffex* 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 times, 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 of its coming out of *Russia*. Dr. *Kramer* * informs us, that this bird conceals its nest with great art; though there are infinite numbers of young birds in the woods on the banks of the *Danube*, that seem just to have taken flight, yet no one could discover it.

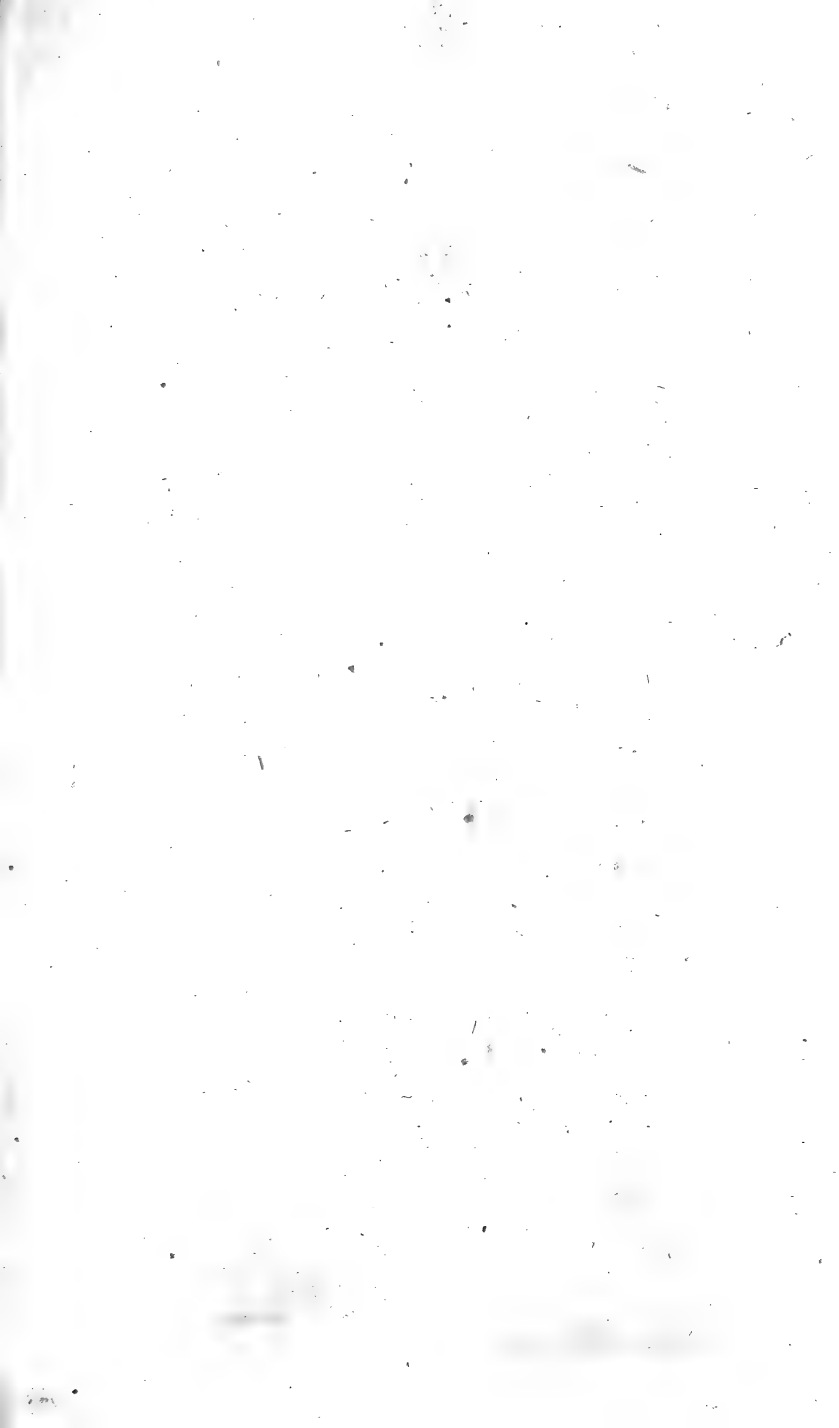
* *Kramer elench.* 366.

130. LINNET. *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. *Briffon av.* III.
 131.
Pl. enl. 151. f. 1.
Br. Zool. 110.

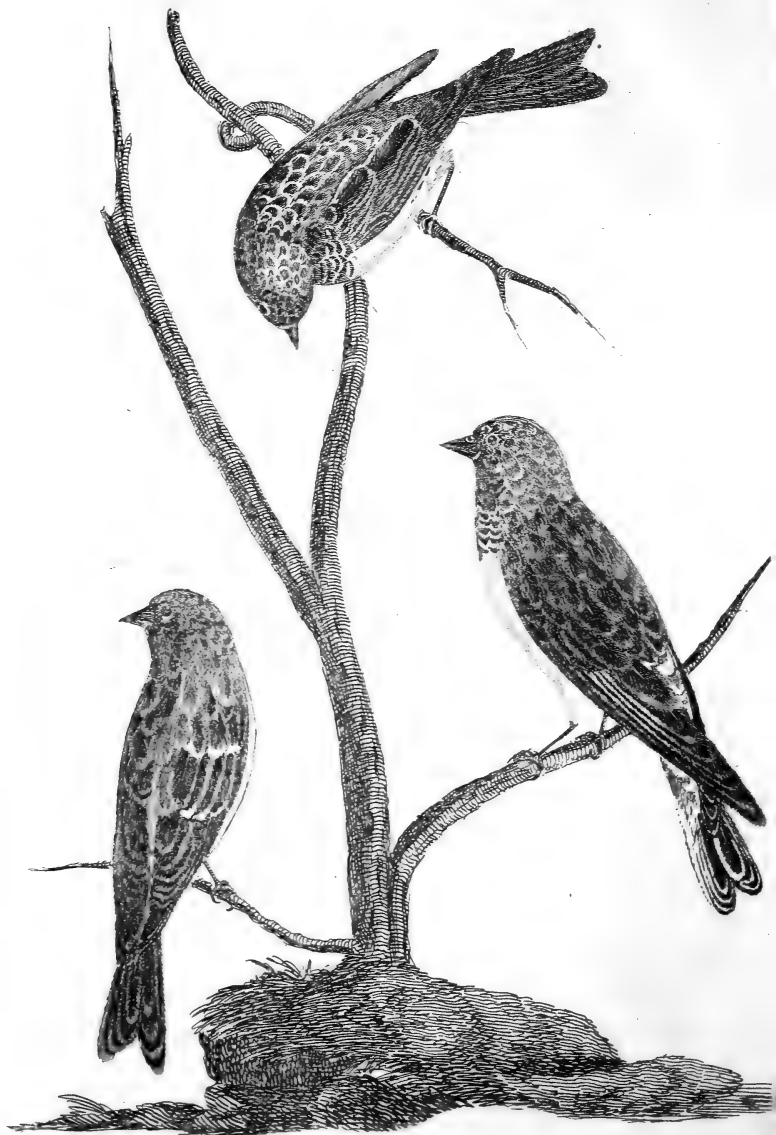
DESCRIP.

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 white: the coverts incumbent on them black; the others of a reddish brown; the lowest order tipped 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



GREATER AND LESSER RED POLLS.



H. J. G. S.

These birds are much esteemed for their song: they feed on feeds 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.

Linaria rubra. <i>Gesner av.</i> 591.	Hampling. <i>Faun. Suec. sp.</i>	131. RED
Fanello marino. <i>Aldr. av.</i> II.	240.	HEADED
360.	Torn-Irisk. <i>Brunnich</i> , 263.	LINNET.
<i>Wil. orn.</i> 260.	Hauesserl, Hampling. <i>Kram.</i>	
<i>Raii syn. av.</i> 91.	368.	
La grande Linotte des vignes.	Blut Hänfling (Bloody Lin-	
<i>Briffon av.</i> III. 135.	net). <i>Frisch</i> , I. 9.	
Fringilla cannabina. <i>Lin. syst.</i>	<i>Br. Zool.</i> 110.	
322. <i>Scopoli</i> , No. 219.		

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

DESCRIP.

LESS RED HEADED LINNET. CLASS II.

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 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 cheerful in five minutes after it is caught.

- | | | |
|------------|--------------------------------------|---------------------------------------|
| 132. LESS | <i>Wil. orn.</i> 260. | <i>Grafiska. Faun. Suec. sp.</i> 241. |
| RED HEADED | <i>Raii syn. av.</i> 91. | <i>Grafel, Meerzeifel, Tschot-</i> |
| LINNET. | <i>La petite Linotte des vignes.</i> | <i>scherl. Kram.</i> 369. |
| | <i>Briffon av.</i> III. 138. | <i>Rothplattige Staenfling. Fris-</i> |
| | <i>Pl. enl.</i> 151. f. 2. | <i>I.</i> 10. |
| | <i>Fringilla linaria. Lin. syst.</i> | <i>Br. Zool.</i> III. |
| | 322. | |

DESCRIP.

THIS is the least of the linnets, being scarce 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

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 was 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. The bird 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*: is gregarious.

133. TWITE. Le Picaveret? *Belon av.* 358. baret. *Briffon av.* III. 142,
Wil. orn. 261. 145.
Raii syn. av. 91. *Linaria fera faxatilis. Klein.*
Linaria montana. Linaria mi-
nima. *hist. av.* 93.
Br. Zool. III.
 La petite Linotte, ou le Ca-

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 that of the common linnet: that the feathers on the throat and breast are black edged with white: the rump is of a rich scarlet or orange tawny color. 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 are 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 are rather inferior to the common linnet, and of a more taper make: their bills short and entirely yellow: above and below each eye is a pale brown spot: the edges of the greater coverts of the wings white; in other respects both agree. The female wants the red mark on the rump.

DESCRIP.

These

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 pro-

CANARY
BIRD.

* *Wil. orn.* 262. *Raii syn. av.* 91. *Vide Serin des Canaries. Brisson av.* III. 184. *Fringilla Canaria. Lin. syst.* 321.

† *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.*

bable then, that our species was not introduced into *Europe* till after the second discovery of these isles, which was between the thirteenth and fourteenth centuries. We are uncertain when it first made its appearance in this quarter of the globe. *Belon*, 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; 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*, and 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.

* *Gesner av.* 240.

† *Aldr. av.* II. 355.

‡ *Olin uccel.* 7.

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.

* *Glas's hist. Canary Isles, 199.*

XXI. 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.

134. SPOTTED.

Stoparola. Aldr. av. II. 324.

A small bird without a name, like the *Stopparola* of *Aldrovand. Wil. orn. 217.*

Zinan. 45.

The Cobweb. *Morton Northampt. 426.*

Raii syn. av. 77.

Le Gobe-mouche, *Muscicapa.*

Briffon av. II. 357, tab. 35. f. 3.

Muscicapa grifola. Lin. syst.

328.

Br. Zool. 99. plate P. 2. f. 4.

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: *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. When the young can fly the old ones withdraw with them into thick woods, where they frolick among the top branches; dropping from the boughs frequently quite perpendicular on the flies that sport beneath, and rise again in the same direction. It will also take its stand on the top of some stake or post, from whence it springs forth on its prey, returning still to the same stand for many times together. They feed

feed also on cherries, of which they seem very fond.

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, is 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.

DESCRIP.

Atri capilla five ficedula.	Meerschwartz pluffe.	Kra-	135. PIED.
<i>Aldr. av. II. 331.</i>	<i>mer Aufst. 377.</i>		
Cold finch. <i>Wil. orn. 236.</i>	Cold-finch. <i>Br. Zool.</i>		
<i>Raii syn. av. 77. Edw.</i>	Muscicapa atricapilla. <i>Lin.</i>		
<i>30. Frische, I. 22.</i>	<i>syft. 326. Faun. Suec. No.</i>		
Le Traquet d' Angleterre.	<i>256. Tab. 1.</i>		
Rubetra anglicana. <i>Brif-</i>			
<i>son, III. 436.</i>			

THIS is lesser than a hedge sparrow. The bill and legs black: the forehead white: head, cheeks, and back black: the coverts of the tail spotted with white: coverts of the wings dusky, traversed with white bar: quill feathers dusky: the exterior sides of the secondaries white; the interior dusky: the middle feathers of the tail black;

MALE.

the exterior marked with white: the whole under side of the body white.

FEMALE.

The female wants the white spot on the forehead: the whole head, and upper part of the body dusky brown: the white in the wings less conspicuous: the under side of the body of a dirty white.

Found in different parts of *England*: but is a rare species.

Weak BILL, 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.

XXII.
 L A R K.

- | | | |
|---------------------------------------|--|-----------|
| L' Alouette. <i>Belon av.</i> 269. | Allodola, Panterana. <i>Zinan.</i> | 136. SKY. |
| Chamochilada. <i>Obs.</i> 12. | 55. | |
| Alauda fine crista. <i>Gesner av.</i> | Alauda arvensis. <i>Lin. syst.</i> 287. | |
| 78. | Larka. <i>Faun. Suec. sp.</i> 209. | |
| <i>Aldr. av.</i> II. 369. | Alauda cœlipeta. <i>Klein stem.</i> | |
| Lodola. <i>Olin,</i> 12. | <i>Tab.</i> 15. f. 1. | |
| Common Field Lark, or | Sang-Lœrke. <i>Br.</i> 221. | |
| Sky Lark. <i>Wil. orn.</i> 203. | Feldlerche. <i>Kram.</i> 362. <i>Frisch,</i> | |
| <i>Raii syn. av.</i> 69. | I. 15. | |
| L' Alouette. <i>Briffon av.</i> III. | <i>Br. Zool.</i> 93. plate S. 2. f. 7. | |
| 335. | Lauditza. <i>Scopoli,</i> No. 184. | |

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 mandible
 dusky, the lower yellow: above the eyes is a
 yellow spot: the crown of the head a reddish
 brown spotted with deep black: the hind part of
 the head ash-color: chin white. It has the faculty
 of erecting the feathers of the head. The feathers
 on the back, and coverts of the wings dusky
 edged with reddish brown, which is paler on the
 latter: the quill-feathers dusky: the exterior web
 edged

DESCRIP.

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: soles of the feet yellow: the hind claw very long and strait.

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 beautifully expresses these circumstances: and *Bp. Newton* observes, that the beautiful scene that *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 they assemble in vast flocks, grow very fat, and are taken in great numbers for our tables. They build their nest on the ground, beneath some clod; forming it of hay, dry fibres, &c. and lay four or five eggs.

The place these birds are taken in the greatest quantity, is the neighbourhood of *Dunstable*: the season begins about the fourteenth of *September*, and ends the twenty-fifth of *February*; and during that space, about 4000 dozen are caught, which supply the markets of the metropolis. Those caught in the day are taken in clap-nets of fiveteen yards 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 inviegled 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

they hear or feel a lark hit the net, they drop it down, and so the birds are taken.

137. WOOD. Tottavilla. *Olina*, 27. *Faun. Suec. sp.* 211.
Wil. orn. 204. Ludlërche, Waldlërche
Raii syn. av. 69. *Kram.* 362.
 L' Alouette de Bois ou le *Danis Skov-Lerke*, *Cimbris*
 Cujelier. *Brisson av.* III. Heede-Leker, Lyng-Lreke.
 340. *Tab.* 20. *fig.* 1. *Br.* 224.
 Alauda arborea. *Lin. syst.* *Br. Zool.* 94. plate Q f. 3.
 287. *Zippa. Scopoli*, No. 186.

THIS bird is inferior in size to the sky lark, and is of a shorter thicker form; the colors are paler, and its note less sonorous and less 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 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

is near 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, marks darkest at the thicker end.

The males of this and the last are known from the females by their superior size. But this species is not near so numerous as that of the common kind.

- | | | |
|---|---|-----------|
| La Farlouse, Fallope ou
L'Alouette de pre. <i>Belon</i>
<i>av.</i> 272. | Mattolina, Petragiola, Corri-
era. <i>Zinan.</i> 55. | 138. Tit. |
| <i>Aldr. av.</i> II. 370. | Alauda pratensis. <i>Lin. syst.</i>
287. | |
| Lodolo di Prato. <i>Olini,</i> 27. | <i>Faun. Suec. sp.</i> 210. | |
| <i>Wil. orn.</i> 206. | Wiesen Lerche (Meadows
Lark) <i>Frisch,</i> I. 16. | |
| <i>Raii syn. av.</i> 69. | Englerke. <i>Br.</i> 223. | |
| L'Alouette de prez ou la
Farlouse. <i>Briffon av.</i> III. 343. | <i>Br. Zool</i> 94. plates Q. f. 6.
P. 1. f. 3. | |

THIS bird is found frequently in low marshy grounds: like other larks it builds its nest among the grass, and lays five or six eggs. Like the

the woodlark it sits on trees; and has a most remarkable fine note, singing in all situations, on trees, on the ground, 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 the interval is the most mute of the year's three vocal seasons, spring, summer, and autumn. Perhaps the birds are induced to sing again as the autumnal temperament 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: the subject figured in plate P. 1. of the *folio* edition, is a variety with dusky legs, shot on the rocks on the coast of *Caernarvonshire*.

DESCRIP.

139. FIELD.

The Lesser Field Lark. *Wil. orn.* 207.

DESCRIP.

THIS species we received from Mr. *Plymly*. It is larger than the *tit lark*; the head and hind part

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: 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 brown; and the claw on the hind toe very short for one of the lark kind, which strongly distinguishes it from the *tit lark*.

Edw. 297. *Br. Zool.* II. 239. *Brisson Suppl.* 94.

140. RED.

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.

This species is equal in size to the common lark. A white line crosses each eye, and another passes beneath.

beneath. The bill is thick: the chin and throat whitish: the head, neck, back, and coverts of the wings of a rusty brown, spotted with black: breast whitish, with dusky spots: belly of a dirty white: the middle feather of the tail black edged with brown: the two exterior white: legs of a pale brown.

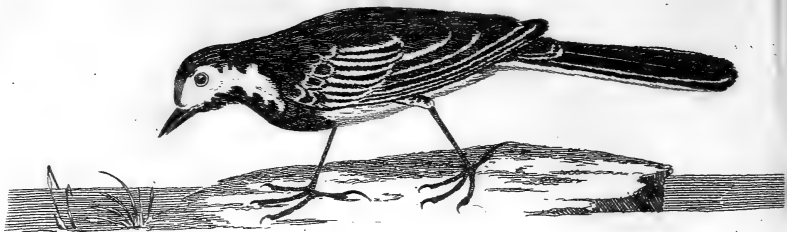
This bird is common to the neighbourhood of *London*, to *North America*, and to the South of *Europe*; but with us is rare. Mr. *Edwards* first discovered it: he remarks, that when the wing is gathered up, the third primary feather reaches to the tip of the first.

141. CREST-
ED. *Alauda cristata minor.* *Aldr.* La petite alouette hupée.
av. II. 371. *Briffon av.* III. 361.
Wil. orn. 209. *Br. Zool.* 95.
Raii syn. av. 69.

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*: 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 in plenty in that country.

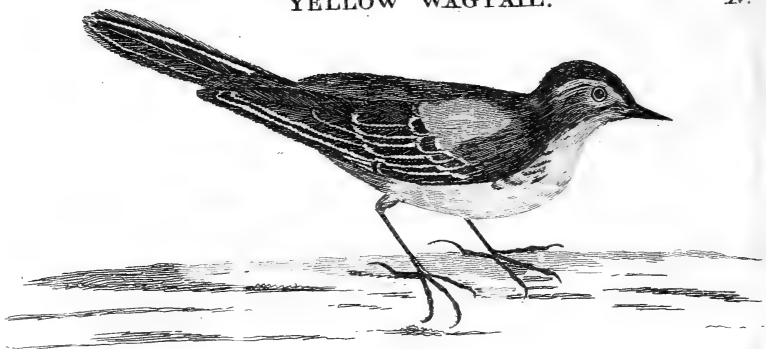
Slender

WHITE WAGTAIL.



YELLOW WAGTAIL.

N^o



SKY LARK.

N^o



Slender BILL, with a small tooth near the end
of the upper mandible.

XXIII.
WAGTAIL.

Lacerated TONGUE.

Long TAIL.

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.

Monachina. Zinan. 51.

Pliska, Pastaritra. Scopoli,

No. 224.

M. alba. Lin. syst. 331.

Arla, Sadefarla. Faun. Suec.

sp. 252.

Danis Vip-Stiert, Havre-Sæer.

Norvegis Erle, Lin-Erle.

Brunnich, 271.

Weifs und schwarzte Bach-
feltze. Frisch, I. 23.

Graue Bachfelze. Kram. 374.

Br. Zool. 104.

142. WHITE
WAGTAIL.

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.

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 others black : the bill, inside of the mouth, and the legs, are black. The back claw very long.

143. YEL-
LOW WAG-
TAIL.

Sufurada. *Belon obs.* II.
Motacilla flava (Gale Waffar-
feltz). *Gesner av.* 618.
Aldr. av. II. 323.
Wil. orn. 238.
Raii syn. av. 75.
Edw. av. 258. The Male.
Codatremola. *Zinan.* 51.
La Bergeronette du Prin-
temps, Motacilla verna.

Briffon av. III. 468. *Pl.*
enl. 28. f. 1.
Motacilla flava. *Lin. syst.* 331.
Gelb-brüftige Bachstelze.
Frisch, I. 23.
Faun. Suec. sp. 253.
Gulfpink. *Brunnich.* 273.
Gelbe Bachstelze. *Kram.* 374.
Scopoli, No. 225.
Br. Zool. 105.

DESCRIP.

THE male is a bird of great beauty : the breast, belly, thighs, and vent-feathers, being of a most vivid and lovely yellow : the throat is marked with some large black spots : above the eye is a bright yellow line : beneath that, from the bill cross 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,

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.

The colors of the female are far more obscure than those of the male: it wants also those black spots on the throat.

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. This species migrates in the North of *England*, but in *Hampshire* continues the whole year.

La Bergerette. *Belon av.* 351.
 Motacilla flava alia. *Aldr.*
av. II. 323.
Wil. orn. 238.
Raii syn. av. 75.
Edw. av. 259. The Male.

La Bergeronette jaune, Motacilla flava. *Briffon av.* III. 471. *tab.* 23. *fig.* 3. The Male.
Br. Zool. 105.

144. GREY WAGTAIL.

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 black: the breast,

DESCRIP.

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: perpetually flirting their tails: scream when they fly: frequent waters: feed on insects; and make their nests on the ground.

BILL slender and weak.

NOSTRILS small and sunk.

Exterior TOE joined at the under part of the last joint to the middle toe.

XXIV.
WARBLERS.

* Those with tails of one color.

** Those with particolored tails.

- | | | |
|---------------------------------------|--|--------------|
| Le Rossignol. <i>Belon av.</i> 335. | Motacilla lusciniæ. <i>Lin. Syst.</i> 145. | NIGHTINGALE. |
| Adoni, Aidoni. <i>Obs.</i> 12. | 328. | |
| Lusciniæ. <i>Gesner av.</i> 592. | Nachtergahl. <i>Faun. Suec. sp.</i> | |
| <i>Aldr. av.</i> II. 336. | 244. | |
| <i>Wil. orn.</i> 220. | <i>Hasselquist Itin. Ter. Sanct.</i> 291. | |
| <i>Raii syn. av.</i> 78. | Nattergale. <i>Brunnich in append.</i> | |
| Le Rossignol. <i>Briffon av.</i> III. | Au-vogel, Auen-nachtigall. | |
| 397. | <i>Kram.</i> 376. | |
| Slauz. <i>Scopoli</i> , No. 227. | Nachtigall. <i>Frisch</i> , I. 21. | |
| Rusignolo. <i>Zinan.</i> 54. | <i>Br. Zool.</i> 100. plate S. 1. f. 2. | |

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 *redstart*; 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,

DESCRIP.

and upper part of the belly 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 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 they are met with in great plenty about *Doncaster*. They have 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 air during the whole year: neither are they found in *Ireland*. *Sibbald* places them 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

* For this reason, *Oppian*, in his *halieutics*, l. I. 728. gives the *nightingale* the epithet of ἀιολοφώνη, or *various voiced*; and *Hesiod*, (figuratively) of ποικιλοδείρα, or *various throated*. *Εργα και ημέραι*, l. 201.

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 along the hedge the passengers.

They begin their song in the evening, and continue it the whole night. These, their vigils, did not pass unnoticed by the ancients: 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 serve to compose part of the solemn scenery of his *Penferoso*; 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' accusom'd oak;
 Sweet bird, that shunn'd the noise of folly,
 Most musical, most melancholy!
 Thee, chauntress, oft the woods among,
 I woo to hear thy evening song.

* *Ælian var. hist.* 577. both in the text and note. It must be remarked, that nightingales sing also in the day.

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 sunk; 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

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 ancients, 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 inplumes 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.

F. Warton.

Pliny has described the warbling notes of this bird, with an elegance that bespeaks an exquisite sensibility

fenfibility 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, 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
 “ intermissu cantus, densante se frondium germine, non in
 “ novissimum digna miratu ave. Primum tanta vox tam parvo
 “ in corpusculo, tam pertinax spiritus. Deinde in una per-
 “ fecta musicæ scientia modulatus editur sonus: & nunc con-
 “ tinuo spiritu trahitur in longum, nunc variatur inflexo,
 “ nunc distinguitur conciso, copulatur in torto: promittitur
 “ revocato, infuscatur ex inopinato: interdum & secum ipse
 “ murmurat: plenus, gravis, acutus, creber, extentus, ubi
 “ visum est, vibrans, summus, medius, imus. Breviterque
 “ omnia tam parvulis in faucibus, quæ tot exquisitis tibi-
 “ arum tormentis ars hominum excogitavit: ut non sit dubi-
 “ um hanc suavitatem præmonstratam efficaci auspicio, cum
 “ in ore *Steficori* cecinit infantis. Ac ne quis dubitet artis
 “ esse, plures singulis sunt cantus, nec iidem omnibus, sed
 “ sui cuique. Certant inter se, palamque animosa conten-
 “ tio est. Victa morte finit sæpe vitam, spiritu prius defici-
 “ ente, quam cantu. Meditantur aliæ juniores, versusque
 “ quos imitentur accipiunt. Audit discipula intentione mag-
 “ na & reddit, vicibusque reticent. Intelligitur emendatæ
 “ correctio & in docente quædam reprehensio” *.

* *Plin.* lib. 10. c. 29.

- Le Rossignol de Muraille. *Belon av.* 347. Culo ranzo, Culo rosso. *Zinnan.* 53. *Scopoli*, No. 232. 146. RED-
Ruticilla, five *Phœnicurus* Motacilla *Phœnicurus*. *Lin.* START.
 (Sommerotele) *Gesner av.* *syft.* 335.
 731. Rodtjert. *Faun. Suec. sp.* 257.
Aldr. av. II. 327. *Norvegis* Blod-fugl. *Danis*
 Codorosso. *Olina*, 47. Roed-fiert. *Brunnich*, 280.
Wil. orn. 218. Schwartzkehlein (Blackthroat)
Raii syn. av. 78. *Frisch*, I. 19.
Ruticilla. Brisson av. III. 403. Waldrothschweiff. *Kram.* 376.
Br. Zool. 99. plate S. f. 6. 7.

THIS also appears among us only in the spring and summer, and is observed to come over 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 less 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 fullen bird, is with difficulty kept alive in confinement. It is remarkable in shaking its tail, it 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

DESCRIBE.

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.

147. RED-BREAST.

Rubeline. *Belon av.* 348.

Rubecula. *Gesner av.* 730.

Erithacus. *Aldr. av.* II. 325.

Olin, 16.

Robin Red-breast, or Ruddy. *Wil. orn.* 219.

Raii syn. av. 78.

Le Rouge-gorge. *Briffon av.* III. 418.

Pettoroffo. *Zinan.* 46.

Motacilla rubecula. Lin. syst.

337.

Rotgel. *Faun. Succ. sp.* 260.

Roed-Finke, Roed-Kielke.

Br. 283.

Rothkehlein. *Frisch, I.* 19.

Rothkropfl. *Kram.* 376.

Br. Zool. 100. plate S. 2.

Smarnza, Tafchtza. *Scopoli,*

No. 231.

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 household gods,
Wifely regardful of th' embroiling sky,

* In his *Seasons, vide Winter*, line 246.

In joyless fields, and thorny thickets, leaves
 His shivering mates, and pays to trusted Man
 His annual visit. Half afraid, he first
 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 œconomy of animals; and the happy use* he hath made of natural knowlege, 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 beautifull 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 through great part of

* *Vide our Preface.*

† Reliques of antient *English* Poetry, Vol. III. p. 170.

the summer, but its notes are 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. 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.

148. BLACK-CAP. *Atricapilla. Gesner av.* 371, *Motacilla atricapilla. Lin. syst.* 332.
 384. *Aldr. av.* II. 329. *Faun. Suec. sp.* 256.
Wil. orn. 226. *Hav-Skade. quibusdam Spikke.*
Br. 228.
 La Fauvette a tete noire, Curruca atricapilla. *Brisson av.* Moench mit der Schwarzen Platte (Monk with the black crown) *Frisch, I.* 23.
 III. 380. *Schwartz plattl. Kram.* 377.
Capinera. Zinan. 56. *Br. Zool.* 101. plate S. f. 5.
Olina, 9. Scopoli, No. 229.
Raii syn. av. 79.

DESCRIP. THIS bird is among the smallest of this tribe, scarce weighing half an ounce. The crown of the head in the male is black: the hind part of the neck 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

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 pipe; yet the strain is of short continuance; and his motions are desultory: but when that bird sits calmly, and in earnest engages in song, he pours forth very sweet but inward melody; and expresses great variety of sweet and gentle modulations, superior perhaps to those of any of our warblers, the nightingale excepted: and while they warble, their throats are wonderfully distended.

The black-cap frequents orchards and gardens. The 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 the fibres of roots, thinly covered with black horse hair. There were five eggs of a pale reddish brown, mottled with a deeper color, and sprinkled with a few dark spots.

149. PETTY-CHAPS. Ficedula. *Gesner*, 385.
 Beccafigo, or Fig eater. *Wil. orn.* 216. *Raii syn. av.* 79.
 La Fauvette, curruca. *Briffon av.* III. 372.
 Beccafico cinerizio. *Zinan.* 44.
 Motacilla Hippolais. M. vire-
 scente cinerea fubtus flavescens abdomine albedo, artubus fuscis, superciliis albidis. *Lin. syst.* 330. *Faun. Suec. sp.* 248.
 Bräune grafs-mucke, Kleiner spottvogel. *Kram.* 377.

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.

Mr. *Willughby* says, this bird is found in *Yorkshire*, and called the *Beam-bird*, from its nesting under beams in out-buildings, &c.

150. HEDGE. Le petit Mouchet. *Belon av.* 375.
 Potamida, *cbf.* 12.
 Passier sepium *Angl. Alar. av.* II. 329.
 Curruca *Eliotæ* (Zaunschlipfle). *Gesner av.* 371. *Wil. orn.* 215. *Raii syn. av.* 79.
 La Favette de haye, ou la passe buse. Curruca sepiaria. *Briffon av.* III. 394.
 Jarnsparf. *Faun. Suec. sp.* 245.
 Motacilla, Modularis. *Lin. syst.* 329.
 Braunflekkige Grafmücke (Brown spotted Petty-chaps.) *Frisch*, I. 21. *Br. Zool.* plate S. 1. f. 3. 4.

DESCRIP. **T**HIS bird weighs twelve drams. Its head is of a deep brown, mixed with ash color, the cheeks

cheeks marked with oblong spots of dirty white: 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 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 *Linnaeus*; 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.

151. YELLOW Chofsi, ou Chanteur. *Belon* Schmittl. *Kram.* 378.
av. 344. Le Pouillot, ou chantre. *Af-*
Trochilus. *Gesner av.* 726. *lus. Brisson av.* III. 479.
Aflus. *Aldr. av.* II. 293. Motacilla trochilus. *Lin. Syst.*
Little yellowish Bird. *Wil.* 338. *Scopoli,* No. 238.
orn. 228. *Faun. Suec. sp.* 264.
Raii syn. av. 80. Spurre-Konge, Fager-Fiis.
Edw. av. 278. *Br.* 286.
Schnee Rienig (Snow king). *Br. Zool.* 101. plate S. f. 2.
Frisch, I. 24. S. 2. f. 1.

THE yellow wren frequents large moist woods, and places where willow trees abound from which it takes one of its names.

DESCRIP. 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 are of a bright yellow, in others it fades almost into white.

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 seven 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.

W. WITH

W WITH forehead and underfide of the 152. SCOTCH
 • body of a fine pale yellow: wings of
 the fame color: back and tail of a pale brown.
 Communicated by Mr. *Latham* of *Dartford*, who
 thought that it was shot in the Highlands of *Scot-*
land. It was of the fize of a wren.

La Soulcie. *Belon av.* 345.

Tettigon. *obf.* 12.

Regulus. *Gesner av.* 727.

Fior rancio. *Olina*, 6.

Aldr. av. II. 290.

Wil. orn. 227.

Raii fyn. av. 79.

Edw. av. 254.

Cat. Carol. app. 36, 37.

Kratlich. *Scopoli*, No. 240.

Le Poul, ou Souci, ou Roi- 153. GOLDEN
 telet hupé, *Calendula.* CRESTED.

Briffon av. III. 579.

Motacilla regulus. Lin. syst.

338.

Kongsfogel. Faun. Suec. sp.

262.

Sommer Zaunkoenig (Sum-
 mer Wren). *Frisch*, I. 24.

Goldhannel. *Kram.* 378.

Fugle-Konge. *Br.* 285.

Br. Zool. 101. plate S. f. 3.

T HIS is the left of the *British* birds, weigh-
 ing only feventy-fix grains. Its length is DESCRIP.
 three inches and a half; the breadth five inches:
 it may readily be diftinguifhed from all other birds,
 not only by its fize, but by the beautiful fcarlet
 mark on the head, bounded on each fide by a fine
 yellow line. The bill is dufky: 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 seen 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.

354. WREN. Roylelet, Bœuf de Dieu, & Berichot. *Beloz av.* 343.
 Trilato, *obs.* 12.
 Passer troglodytes. *Gesner av.* 651.
Aldr. av. II. 292.
 Reatino. *Olin.* 6.
Wil. orn. 229.
Raii syn. av. 80.
 Strefsch; Storschek. *Scopoli.* No. 239.
- Le Roitelet, Regulus. *Briffon av.* III. 425.
 Motacilla troglodytes. *Lin. syst.* 337.
Faun. Suec. sp. 261.
 Nelle-Konge. *Brunnich,* 284.
 Schneekoning, Konickerl, Zaunschlupfrel. *Kram.* 378.
 Schneekoenig (Snow king). *Frisch,* I. 24.
Br. Zool. 102.

THE wren may be placed among the finest of our singing birds. It continues its song through-

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 as often brings up as many young; which, as Mr. *Ray* observes, may be ranked among those daily miracles that 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.

- | | | |
|-----------------------------------|---|--------|
| Willow Lark, <i>Br. Zool.</i> II. | <i>Passer arundinaceus minor.</i> 155. | SEDGE. |
| 241. | <i>Raii syn. av.</i> 47. | |
| Sedge Bird. <i>Br. Zool.</i> IV. | <i>Motacilla falicaria.</i> <i>Lin. syst.</i> | |
| tab. X. | 330. <i>Faun. Suec.</i> No. 249. | |
| Lesser Reed Sparrow. <i>Wil.</i> | <i>La Fauvette babillarde.</i> <i>Bris-</i> | |
| son. 144. | <i>son, av.</i> III. 384. | |

THIS species is of a slender elegant form: the bill black: the head brown, marked with
C c 3
dusky

dusky streaks : over each eye a line of pure white, over that another of black : cheeks brown : throat, breast, and belly white ; the two last tinged with yellow : hind part of the neck and back of a reddish brown : the back spotted with black : coverts of the tail tawny : coverts of the wings dusky, edged with pale brown : quill-feathers dusky : tail brown, cuneiform : forming a circle when spread : 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.

156. GRASS-HOPPER. Tit-lark, that sings like a Grasshopper. *Wil. orn.* 209.
Alauda minima locustæ voce.
Locustella, D. Johnson.
Raii syn. av. 70.
Ray's Letters, 108.
- Alauda sepriaria, L'Alouete de Buisson. Brisson av. III. 347.*
 Piep Lerche (Chirping Lark).
Frisch. I. 16.
Alauda trivalis. Lin. syst. 288.
Br. Zool. 95. plate Q. f. 5.

THIS bird was received out of *Shropshire* : it is the same with that Mr. *Ray* describes as having the note of the grasshopper, but louder and shriller. It is a most artful bird, will sculk 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 :

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 is 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 shorter, and more crooked, than is usual in the lark kind.

** With party colored Tails.

Belon av. 352.

Oenanthe. Gesner av. 629.

Aldr. av. II. 332.

Wheat-ear, Fallow-smich,

White-tail. *Wil. orn.* 233.

Raii syn. av. 75.

Motacilla oenanthe. Lin.

syn. 332.

Steniquetta. Faun. Suec. sp.

254.

Le Cul blanc, Vitrec, ou

Moteux, Vitiflora. Brisson av. III. 449.

Culo bianco, Fornarola, Petragiola. Zinan. 41.

Norvegis, Steendolp, Steen Squette, Steengylpe. Brunnich, 276.

Steinschwaker, Steinschnaperl. Kram. 374.

Bella. Scopoli, No. 230.

Br. Zool. 102. plate S. 1. f. 5. 6.

157. WHEAT-EAR.

THE wheat-ear begins to visit us about the middle of *March*, and continues coming till the

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. About *Eastbourn* in *Sussex* 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, and so they are taken. The numbers annually ensnared in that district alone, amount to about 1840 dozen, which sell usually at six-pence *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 reason that such a quantity are taken in the neighbourhood of *Eastbourn* is, that it abounds with a certain *fly* which frequents the adjacent hills, for the sake of the wild thyme they are covered with, 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

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* many of them continue the whole winter.

Le Tarier. *Belon av.* 361.

Rubetra. *Gesner av.* 729.

Le grand Traquet, ou le
Tarier. *Briffon av.* III.
432. tab. 24. fig. 1. The
Male.

Wil. orn. 234.

Raii syn. av. 76.

Motacilla rubetra. *Lin. syst.* 158. WHIN-
CHAT.

332.

Faun. Succ. 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.

THIS is in the north of *England*, also a bird of passage: but we are not certain whether it quits this island, but are rather inclined to think

it only shifts its quarters: in the south it continues the whole year.

DESCRIP.

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.

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 that of the male.

159. STONE-CHATTER.

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. *Bris-
son av.*

III. 428. *tab.* 23. *fig.* 1.

The Male.

Pontza. Scopoli, No. 236.

Occhio di bue. Zinan. 52.

Motacilla rubicola. Lin. syst.

332.

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

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. The head, neck, and throat are black; but on both sides the latter is a white bar, so that it appears on 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.

DESCRIP.

Wil. orn. 236.*Raii syn. av.* 77.

La Mefange cendrée, *Parus*
cinereus. *Briffon av.* III.
 549.

Motacilla sylvia? *Lin. syst.* 160. WHITE-
 330. THROAT.

Kogfnetter, *Mefar. Faun. Suec.*
Sp. 250.
Br. Zool. 104. plate S. f. 4.

THIS frequents our gardens in the summer time; in the winter it leaves us. It builds
 in

WHITE-THROAT. CLASS II.

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, and often attended with odd gesticulations of the wings: is harsh and displeasing: 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.

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 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.

* *Wil. orn.*

DARTFORD WARBLER.



W. WITH reddish *irides*: eye-lids deep 161. DART-
 crimson. A slender bill a little curved FORD.
 at the point: whole upper part of the head, neck,
 and back, of a dusky brown tinged with a dull
 yellow: throat, under side of the neck, the breast
 and belly deep ferruginous; the middle of the
 belly white; quill-feathers dusky edged with white:
 bastard wing white: exterior side of the interior
 feather of the tail white, the rest dusky; and long
 in proportion to the size of the bird: 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.

XXV. TIT-MOUSE. BILL strait, short, hard, strong, sharp-pointed, a little compressed.

NOSTRILS round covered with bristles.

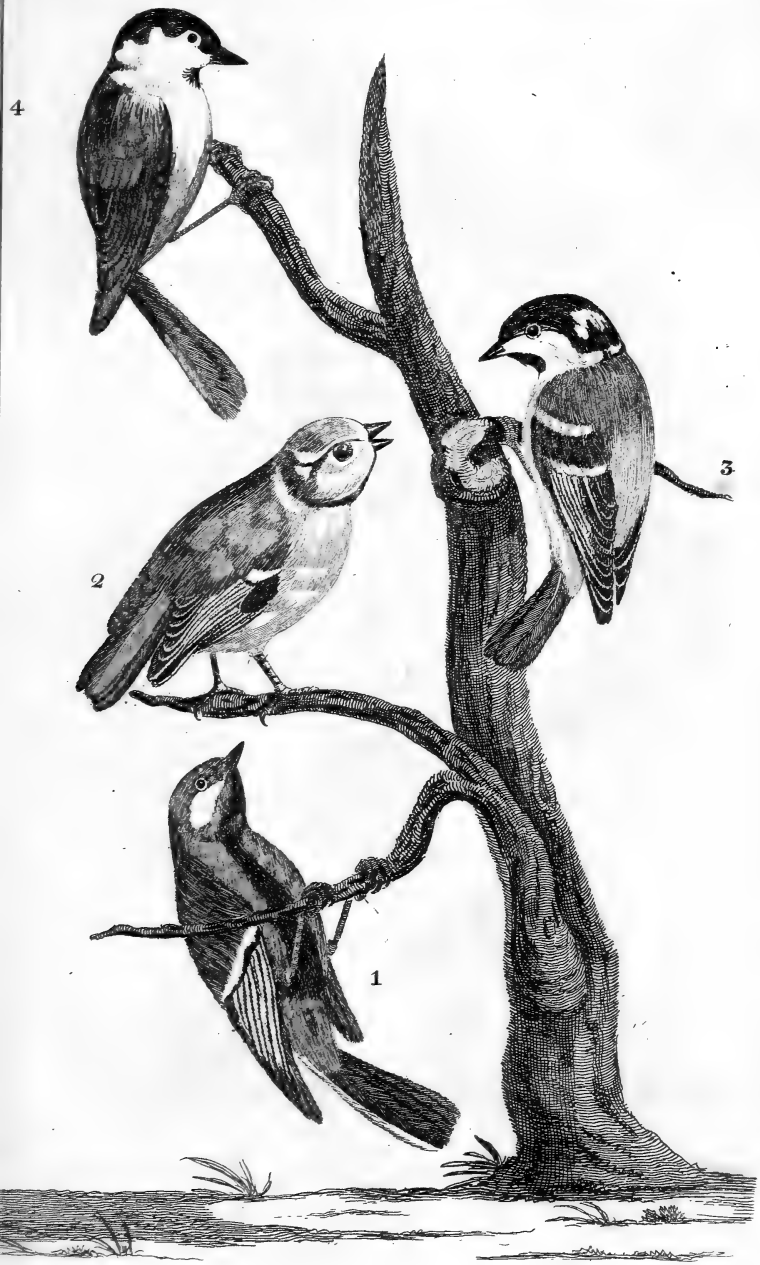
TONGUE as if cut at the end, terminating with two or three bristles.

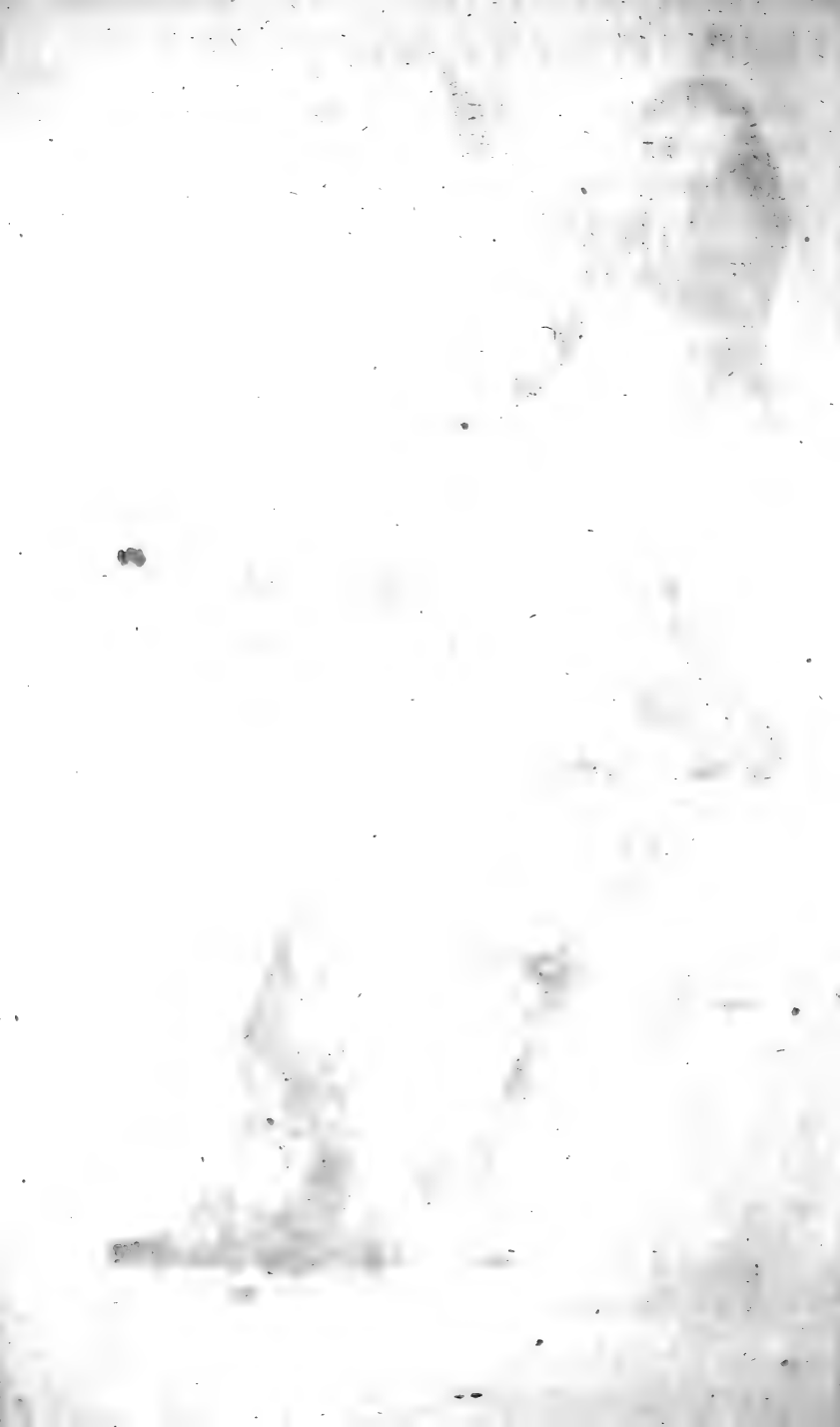
162. GREAT. Nonette ou Mefange. *Belon* *Lin. syst.* 341.
av. 376. Talg-oxe. *Faun. Suec. sp.* 265.
 Parus major. *Gesner av.* 640. Le grosse Mefange ou la Char-
Aldr. av. II. 319. bonniere. *Briffon av.* III.
 Spernuzzola, Paruffola. *Oli-* 539.
na, 28. *Pl. Enl.* 3. f. 1.
 Great Titmouse, or Ox-eye. *Mufvit. Brunnich,* 287.
Wil. orn. 240. Kohlmeife. *Kram.* 378.
Raii syn. av. 73. *Frisch,* I. 13.
 Snitza. *Scopoli,* No. 242. *Br. Zool.* 113. plate W. f. 4.

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 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 cheerful notes, which it begins to utter in the month of *February*.

DESCRIP. The head and throat of this species are black; the cheeks white; the back green the belly of a yellowish

1 GREAT, 2 BLUE, 3 COLE, 4 MARSH TITMOUSE.





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 tip 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. Toes divided to the origin; and the back toe of the whole genus very large and strong.

- | | | |
|---|---|--|
| <i>Belon av.</i> 369. | <i>Pl. Enl.</i> 3. f. 2. | |
| <i>Parus cœruleus. Gesner av.</i> | <i>Parozolino, o Fratino. Zinar.</i> | |
| 641. | 76. | |
| <i>Aldr. av.</i> II 321. | <i>Lin. syst.</i> 341. | |
| Blue Titmouse, or Nun. <i>Wil.</i> | <i>Blamees. Faun. Suec. sp.</i> | |
| <i>orn.</i> 242. | 267. | |
| <i>Raii syn. av.</i> 74. | <i>Blaaemeise. Br.</i> 288. | |
| La Mefange Bleue. <i>Briffon</i> | <i>Blaumeise. Kram.</i> 379. <i>Frisch,</i> | |
| <i>av.</i> III. 544. | I. 14. | |
| Blava snitza, Blau mandlitz. <i>Scopoli,</i> No. 244. | <i>Br. Zool.</i> 114. plate W. f. 5. | |

163. BLUE.

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.

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

DESCRIP.

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 of a lead color.

164. COLE. Quatrieme espece de Me- moufe) *Frisch*, I. 13.
 fange. *Belon av.* 370. La Mefange a teste noire, Pa-
 Parus ater. *Gesner av.* 641. rus atricapillus. *Brisson av.*
Aldr. av. II. 321. III. 551.
Wil. orn. 241. *Cat. Carol. app.* 37.
Raii syn. av. 73. P. ater. *Lin. syst.* 341.
 Speermiefe, Creuzmeife. *Faun. Suec. sp.* 268. *Scopoli,*
Kram. 379. No. 245.
 Tannen Meife (Pine Tit- *Br. Zool.* 114.

DESCRIP. **T**HE head of the colemouse 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.

- Parus palustris. *Gesner av.* *Lin. syn.* 341.
 641. Entita, Tomlinge. *Faun.*
 Paronzino. *Aldr. av.* II. 32. *Suec. sp.* 269. *Scopoli*, No.
 Marsh Titmouse, or Black- 246.
 cap. *Wil. orn.* Afch Meise (Afh Titmouse)
Raii syn. av. 73. *Frisch*, I. 13.
 Frattino palustre. *Zinan.* 77. Hundfmeise. *Kram.* 379.
 La Mefange de Marais ou *Norvegis* Graae-Meise. *Brun-*
 la Nonette cendrée. *Briffon* *nich.* 190.
av. III. 555. *Br. Zool.* 114. plate W. f. 3.
Pl. enl. 3. f. 3.

165. MARSH.

THIS species is called by *Gesner* the marsh titmouse; because it frequents wet places. With us they inhabit woods, with the last kind; and seldom infest our gardens: early in *February* it emits two notes, not unlike the whetting of a saw.

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 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.

166. LONG TAILED. *Belou av.* 368. *La Mefange a longue queue,*
Parus caudatus. Gefner av. *Parus longicaudus. Brisson*
 642. *av.* III. 570.
Monticola. Aldr. av. II. 319. *Lin. syst.* 342.
Wil. orn. 242. *Alhtita. Faun. Suec. sp.* 83.
Raii syn. av. 74. *Belzmeife Pfannenfiel. Kram.*
Pendolino, Paronzino. Zinan. 379.
 77. *Langfchwaentzige Meife.*
Gaugartza. Scopoli, No. 247. *Frisch, I.* 14.

DESCRIP.

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 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 are wholly so; the lesser and more remote have their exterior sides edged with white.

The

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.

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 external 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 slimmness 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 in their road to some other place, never making any halt.

167. BEARD- Left Butcher Bird. *Briffon av.* III. 567.
 ED. *Edw. av.* 55. *Parus biarmicus.* *Lin. syst.*
 Bearded Titmouse. *Aldr. av.* 342. *Br. Zool.* 74. plate
 I. *tab.* 48. *Scopoli*, No. 241. C. 2.
 La mesange barbue, ou le Left Butcher Bird. *Br. Zool.*
 moufache, *Parus barbatus.* Ed. 2d. I. 165.

DESCRIP.

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 they breed. It is of the same shape as the long tailed titmouse, but rather larger. The bill is short, strong, and very convex; of a box color: *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 three quarters long: the two middle feathers of the tail 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 of a pale black: of the female

female of a dull orange. The legs are of a deep shining black.

The *female* wants the black mark on each cheek, and the fine flesh color on the breast: 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.

FEMALE.

XXVI
SWALLOW.

Short weak BILLS.
Very wide MOUTHS.
Short weak LEGS.

168. CHIM-
NY. La petite Hironnelle. *Belon* Hirundo rustica. *Lin. Syst.*
av. 378. 343.
Hirundo domestica. *Gesner* Ladu-Swala. *Faun. Suec. sp.*
av. 548. 270.
Aldr. av. II. 294. Fortue-Svale, Mark-Svale.
House or Chimney Swallow. *Brunnich*, 289.
Wil. orn. 212. Haus-Schwalbe. *Frisch*, I. 17.
Raii syn. av. 71. Haus Schwalbe. *Kram.* 380.
Rondone. *Zinar.* 47. *Br. Zool.* 96.
L' Hironnelle de Cheminée. *Lautaza. Scopoli*, No. 249.
Briffon av. II. 486.

THIS species appears in *Great Britain* near 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, they assemble in vast flocks on house tops, churches, and even trees, from whence they take their flight. It is now known that swallows take 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

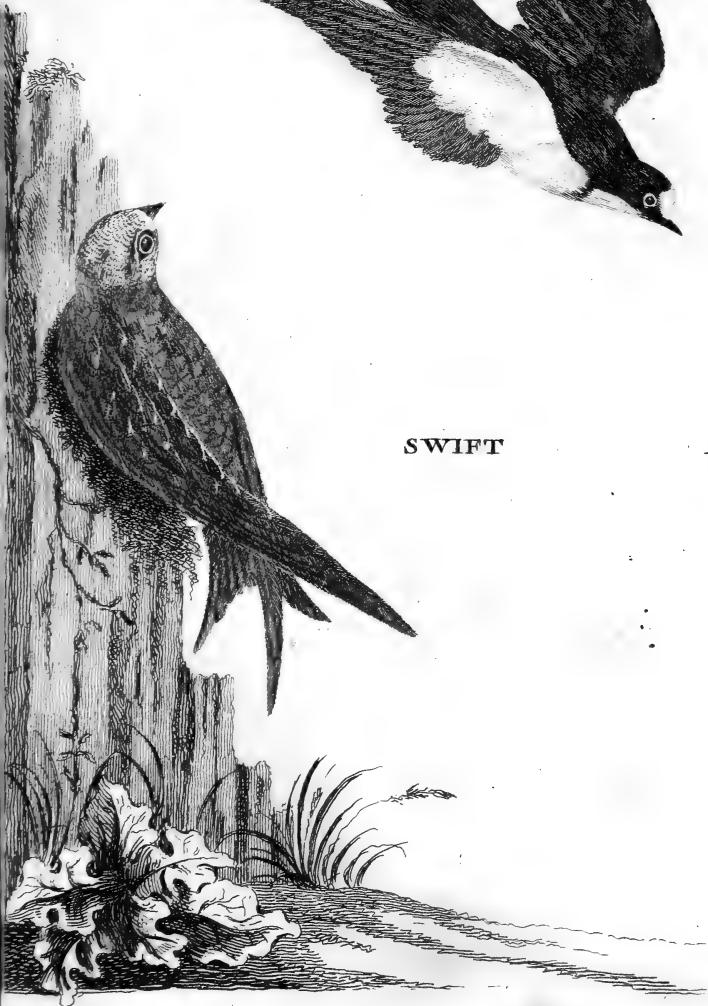
* *Voyage to Senegal*, p. 121. 163.

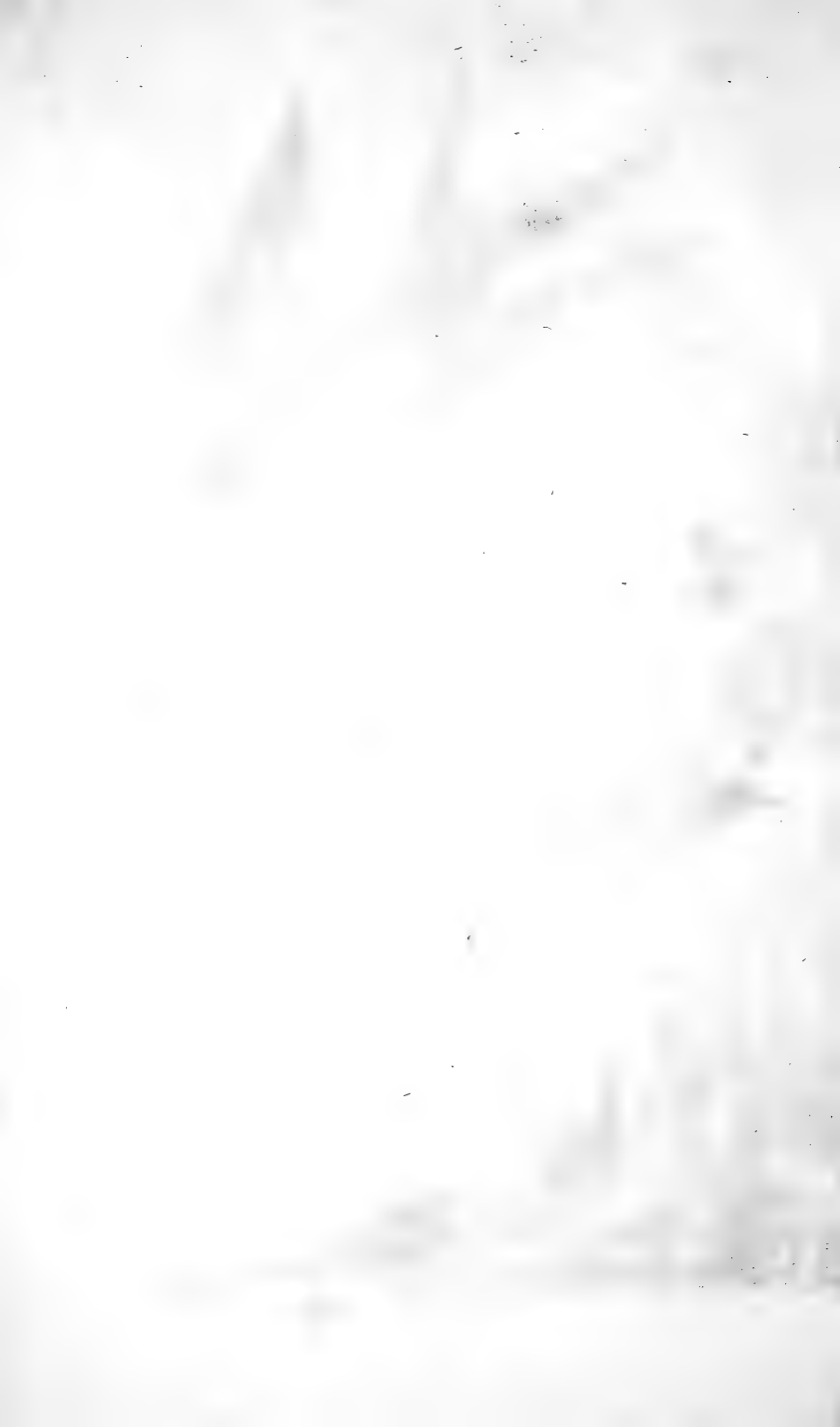
SWALLOW.



SWIFT

Nº 171





month of *October*, after their migration out of *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 stiled there *Laduswala*, or the barn swallow: and in the hotter climates, they make their nests in porches, gateways, galleries, and open halls.

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: 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.

DESCRIP.

Its food is the same with the others of its kind, viz. insects; for the taking of which in their swiftest flight, nature hath admirably contrived their several parts; their mouths are very wide to take in flies, &c. in their quickest motion; their wings are long, and adapted for distant and continual flight; and their tails are forked, to enable them

to turn the reader 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 take 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.

- Le Martinet. *Belon av.* 380.
 Hirundo sylvestris. *Gesner av.*
 564. *Frisch*, I. 17.
Aldr. av. II. 311.
 Martin, Martlet, or Marti-
 net. *Wil. orn.* 213.
Raii syn. av. 71.
 Rondone minore, e Grassolo.
Zinani. 48.
 Huda urnik. *Scopoli*, No. 250.
 La petite Hirondelle, ou le
 Martinet a cul blanc. *Bris-
 son av.* II. 490.
 Hirundo urbica. *Lin. syst.* 344.
 Hus-Swala. *Faun. Suec. sp.*
 271.
 Speyerl. *Kram.* 380.
 Danis Bye v. Tagkiæg-Svale,
Langelandis, Rive. *Br.* 290.
Br. Zool. 96. plate Q. f. 2.
Pb. Tr. 1774. p. 196.

169. MAR-
TIN.

THE *Martin* is inferior in size to the former, and its tail 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 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.

DESCRIP.

It is a later breed than the preceding by some days:

days: but both will lay twice in the feason; 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.

170. SAND. L' Hirondelle de rivage. *Belon av.* 379.
 Hirundo riparia, feu Drepanis. *Gesner av.* 565.
 Dardanelli. *Aldr. av.* II. 312.
 Sand Martin, or Shore Bird. *Wil. orn.* 213.
 Raii fyn. *av.* 71.
 L' Hirondelle de rivage. *Briffon av.* II. 506.
Cat. Carol. app. 37.
 Rondone riparia. *Zinan.* 49.
 Hirundo riparia. *Lin. syst.* 344.
 Strand-swala, Back swala. *Faun. Suec. sp.* 273.
 Danis Dig-v. Jord-ivale, Soilbakke. *Norveg.* Sand Rænne. *Br.* 291.
 Ufer-Schwalbe (Shore Swallow) *Frisch,* I. 18.
 Gestetten-schwalbe. *Kram.* 381.
Br. Zool. 97. plate Q. f. 1.

DESCRIP.

THIS is the left 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.

It builds in holes in sand pits, and in the banks of rivers, penetrating some feet deep into the bank, boring

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.

La grande Hirondelle, Moutardier 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. *Zinán.* 47.

Le Martinet. *Briffon av.* II. 171. SWIFT.

514.

Hirundo apus. *Lin. syst.* 344.

Ring-swala. *Faun. Suec. sp.*

272.

Steen, Kirke-v. Sæe-Svale.

Br. 292.

Speyer, grosse thurn schwalbe.

Kram. 380. *Scopoli,* No.

251.

Br. Zool. 97.

THIS species is the largest of our swallows; but the weight is most disproportionately small to its extent of wing of any bird; the former being scarce one ounce, the latter eighteen inches. The length near eight. 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

DESCRIP.

cies *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 footy 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. 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. The feet are of a particular structure, all the toes standing forward; the left consists of only one bone; the others of an equal number, viz. two each; in which they differ from those of all other birds.

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.

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*, 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

except the small time it takes in sleeping, and what it devotes to incubation; every other action is done on 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 aerial 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 thundry 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

To the curious monographics 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 tribes 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.

* *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.*

|| *Ruffel Alep. 70.*

** *Phil. Transf. No. 36.*

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 *European* 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 founding 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

“ with a night’s rest, took their flight in the morning”*. This vast fatigue, proves that their journey must have been very great, considering the amazing swiftness of these birds: in all probability they had crossed the *Atlantic* 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*.

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 †.

* *Phil. Transf.* Vol. LI. Part 2. p. 459.

† 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*.

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 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,

* *Hist. an.* 935.

† *Lib.* 10. c. 24.

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* 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 *Suffex*; as was seen on the fall of a great fragment some years ago.

Secondly, In a decayed hollow tree that was cut down, near *Dalgelli*, in *Merionethshire*.

Thirdly, In a cliff near *Whitby*, *Yorkshire*; where,

* By letter, dated *June* 14, 1764.

† *Phil. Trans.* Vol. LIII. p. 101. art. 24.

‡ *Klein* gives an instance of *swifts* being found in a torpid state. *Hist. av.* 204.

on digging out a fox, whole bushels of swallows were found in a torpid condition. And,

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 returns, they withdraw 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 *martin* 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 migrate, 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 reason 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 experi-
ence;

ence; and so dispose, or we may say, necessitate, this tribe of birds, or part of them, at least, 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 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, being 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 some-

* *Derham's Phys. Theol.* note d. p. 349. *Pontop. hist. Norw.* I. 99.

times 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 their immerſion was precluded by a dirge of a quarter of an hour's length. That others would unite in laying hold of a ſtraw with their bills, and ſo plunge down in ſociety. 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 that are fond of this opinion, and 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 ſo delicate a bird;

* *Gefner Icon. An.* 100.

† *Derham's Phyſ. Theol.* 340. 349. *Hildrop's Tracts*, II. 32.

‡ *Klein hiſt. av.* 205, 206. *Ekmarck migr. av. Amæn. acad.* IV. 589.

when we know that the otter*, the corvorant, and the grebes, soon perish, if caught under ice, or entangled in nets: and it 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.

* 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.

XXVII.
GOAT-
SUCKER.

BILL very short, bent at the end, bristles round the base.

NOSTRILS tubular, very prominent.

TAIL consisting of ten feathers, not forked.

172. Nocturnal.

L' Effraye ou Frefaye. *Belon av.* 343.

Caprimulgus, Geiffmelcher. *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.

Dorhawk, accipiter Cantharophagus. *Charlton ex.* 79.

Le Tette Chevre ou Cra-paud volant. *Briffon av.* II. 470. *Tab.* 44.

Covaterra. *Zinanni*, 94. *Scopoli*, No. 254.

Caprimulgus europeus. *Lin. syst.* 345.

Natskrafa, Natskarra, Quallknarren. *Faun. Suec. sp.* 274.

Hirundo cauda æquabili. *H. caprimulga.* *Klein av.* 81.

Nat-Ravn, Nat-Skade, Aften-bakke. *Brun.* 293.

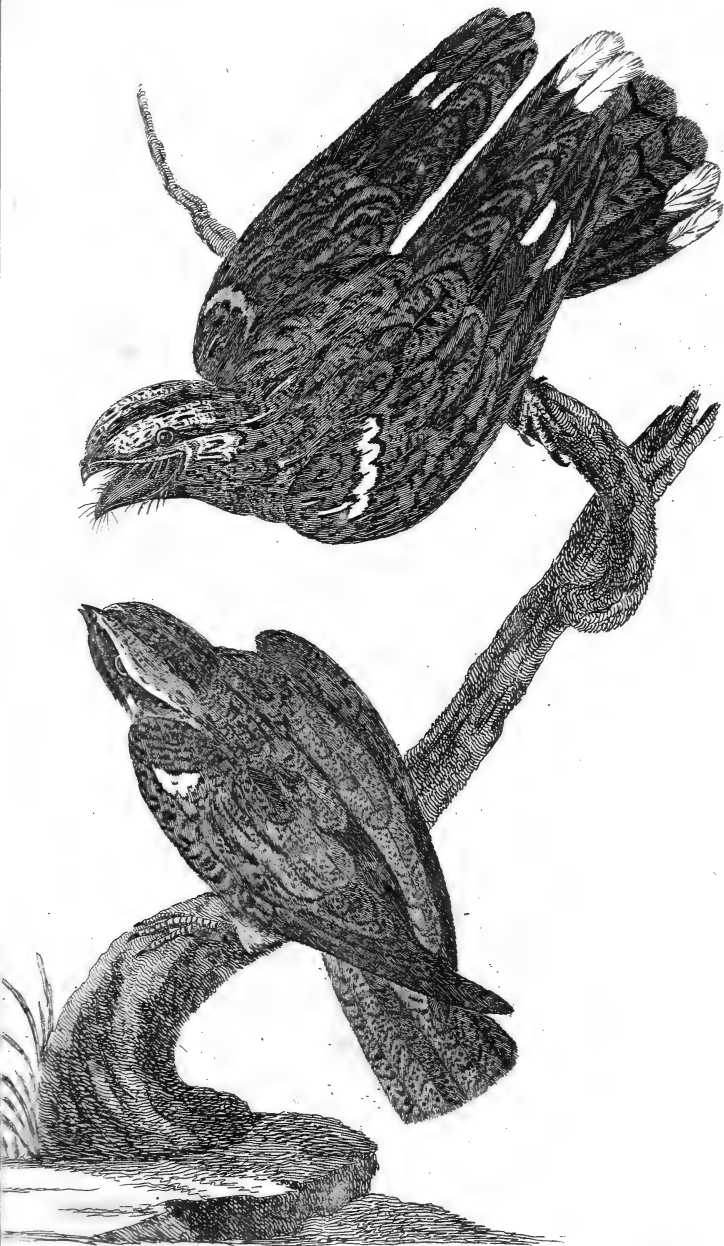
Mucken stecker, Nachtrabb. *Kram.* 381.

Br. Zool. 97. *Tab. R. R.* I.

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. It is also a bird of passage; agrees in food with this genus, and 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, knats, dorrs or chaffers; from which *Charlton* calls it a *Dorr-hawk*, its food being entirely that species of beetle during the month of

July,

M.& F. GOATSUCKERS.





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 *Cornwal* to the county of *Rofs*. Mr. *Scopoli* seems to credit the report of their sucking the teats of goats, an error delivered down from the days of *Aristotle*.

MIGRATES.

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 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.

NOTES.

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.

EGGS.

* *Scarabæus Melolontha*.

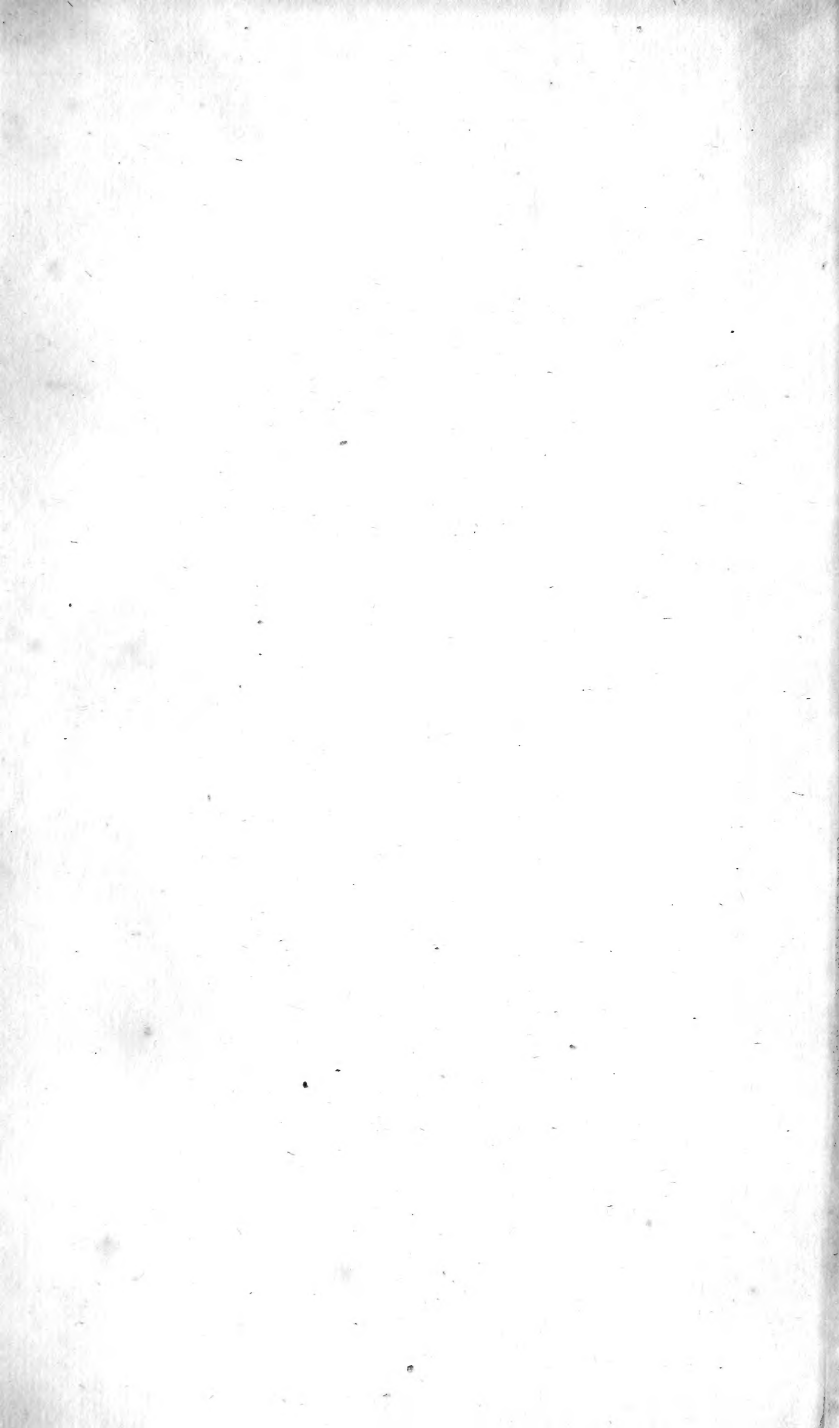
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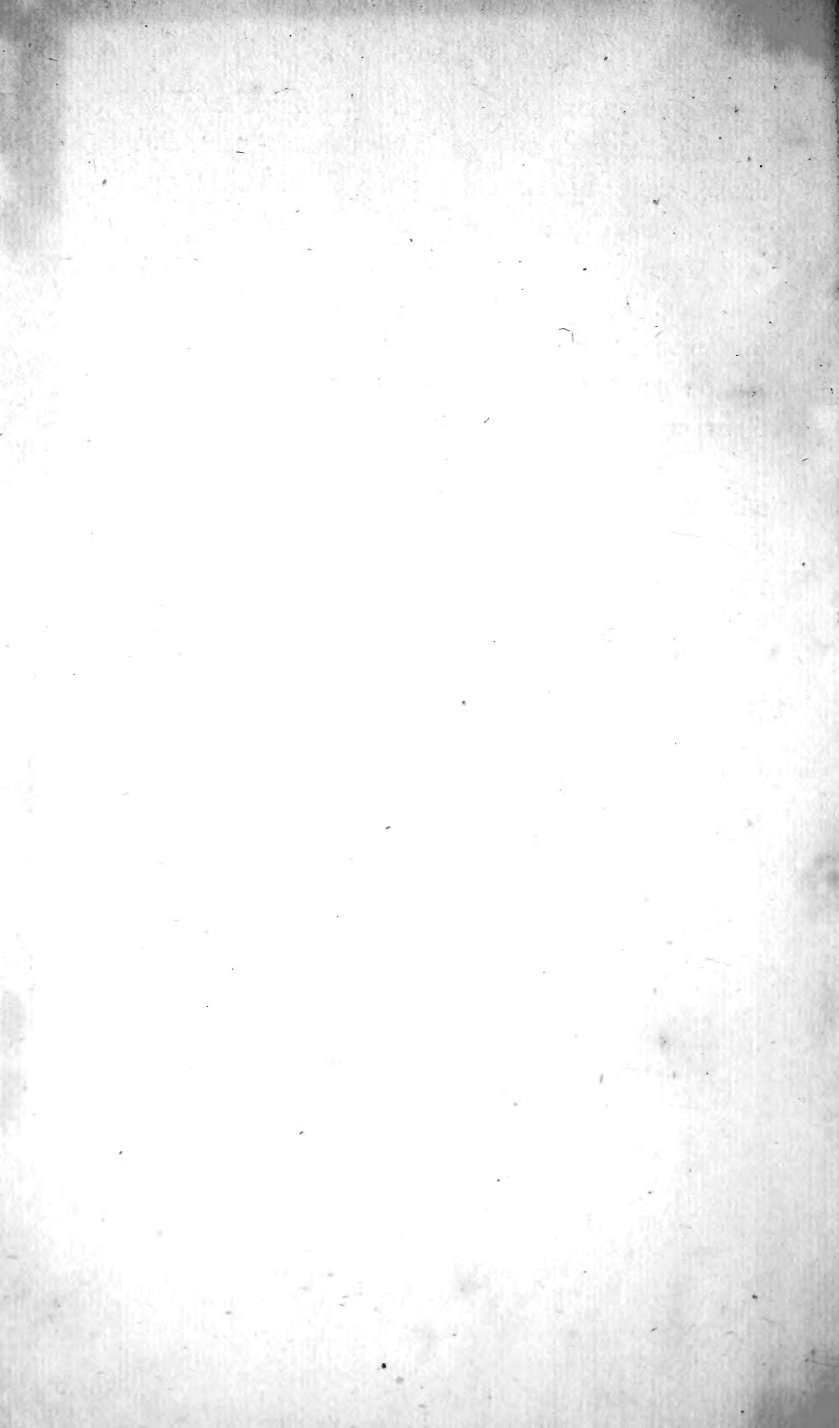
The weight of this bird is two ounces and a half: length ten inches and a half: extent twenty-two. Bill very short: the mouth vast: irides hazel.

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 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.





V-VA

Listed by Junk III, 1973 at MDL ED

Note branch & paragraph on p. 112
of profesa

