

T.W. Wood

PRAIRIE GROUSE.—TETRAO CUPIDO.

THE COURTSHIP OF BIRDS.

BY T. W. WOOD, F.Z.S.

(With two Plates; one coloured.)

THE study of Ornithology is by no means neglected in the present day, good and useful works on this delightful subject are rather frequently issued; yet one branch of it has been most inadequately dealt with by authors, artists, and taxidermists. I allude to the courtship of birds, a phase of their existence which most assuredly cannot yield to any other in interest and entertainment to those who study and admire nature's marvellous works. It is the tender passion (albeit a very strong one) which prompts the nightingale and skylark in their songs, the cuckoo and many other birds to utter their call notes, and the peacock to spread out his glories in the sunshine, in hopes to win the favour of his mistress, that she may look "and find delight writ there with beauty's pen."

The popular idea of the peacock's disposition is well expressed by the proverb "as proud as a peacock." My own opinion, however, after closely watching the bird's actions, does not quite coincide with this; still I may be mistaken. All we know for a certainty is that creatures so highly decorated as the peacock, birds of paradise, and others belonging to different orders of animated existence, are always possessed of the power and disposition to display those decorations. This action of display is performed by the males, generally, though not always in presence of the females, and undoubtedly has for its object the winning of their favours. How intently is the attention of the peacock fixed upon the peahen when he stands before her with his glorious train of ocellated feathers fully expanded! Still this bird will often spread out his plumes when not blessed with a female companion, and the peahen sometimes erects her tail and tail coverts; but we cannot attribute this action of the hen to a feeling of pride, seeing how little beauty of colour she is possessed of. When the peacock expands his train, the wings and under parts of the body are entirely hidden from the view of an observer standing in front of him. The specimen in the national collection is incorrect in this and other respects, and the only stuffed specimen which has struck me as being true to nature, was in the Great Exhibition of 1851. The very peculiar feathers which border the peacock's train are most probably the

upper tail coverts, the rest of the feathers composing it grow from the lower part of the back.

Birds are gifted with an instinct which impels them to act as if they knew what part or parts of their bodies are specially decorated, these decorations being always displayed fully, and in the best manner possible during courtship. The peacock as we have seen conceals his wings while displaying his more showy plumage; but the peacock-pheasant, or Polyplectron, displays the wings; as they, with the tail, are most chastely ornamented with gem-like spots. The note of this bird is a sort of coarse laugh, not uttered during display, but generally while perched, and so frequently repeated when it once begins as to tire the ear of anybody obliged to hear it.

The wild turkey of Honduras, *Meleagris ocellata*, is perhaps more varied and brilliant in colouring even than the peacock, though not possessed of a long train. This magnificent bird is not a true turkey, but assimilates to the Polyplectrons in many details of structure; and like those birds, it can, while strutting, move its expanded tail, so as to give the observer standing at the side of the bird a full view of it. A fine male of this species was strutting about at the Zoological Gardens with great apparent pomposity one fine morning, not looking to see where he was going, when he suddenly stepped into the water in the centre of his compartment; his ardour was thereby greatly cooled, and he presented a very comical appearance for a short time. The bare skin of the head and neck of this rare bird is light greyish blue; space round the eye and tubercles on the neck, coral red; tubercles over the eyes and on top of the head, light orange buff; legs and feet, coral red.

The monal or impeyan pheasant, *Lophophorus impeyanus*, of the Himalayas, is very fond of "showing off," as it may be called. I have seen him taking very long strides, stopping a moment between each, with the beak bent down and touching the neck, the light greenish blue skin round the eye extended backwards, and the crest erected, the ear coverts also appear to project, the beautiful wings by being slightly opened and elevated are fully shown, excepting the black primaries, which are concealed, the tail is spread, and if the female be at the side of the bird, the male bird hides his black breast and under parts on that side nearest to her by extending the brilliant plumage of the neck downwards and lowering one wing. There is a pair of these birds in a separate case at the British Museum, in which the male is represented as paying his addresses to his mate; but the peculiarities just mentioned have not

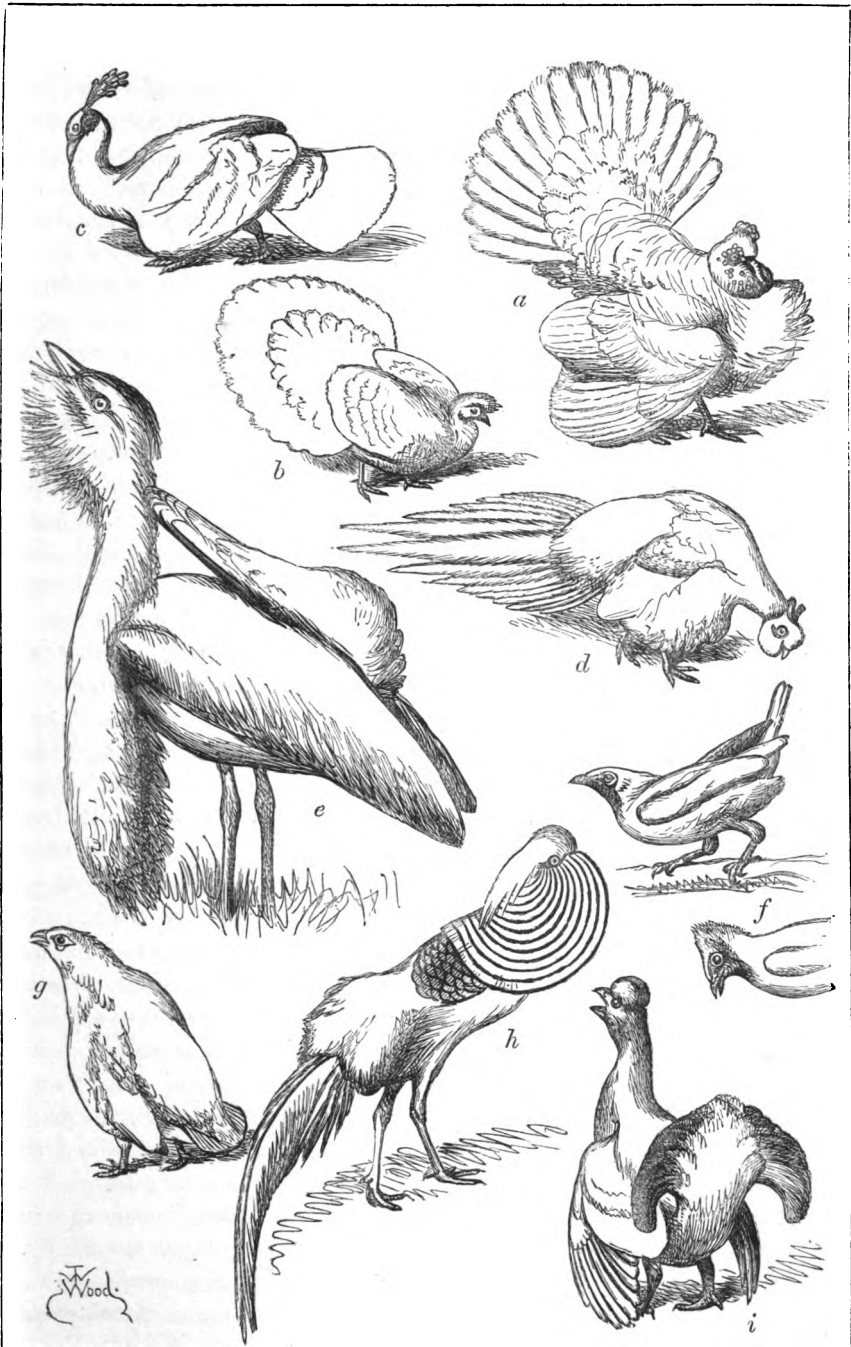
been attended to, still the arrangement is artistic and the beautiful plumage is well seen.

I will call the action last alluded to the lateral, or one-sided mode of display, and the more typical pheasants seem to possess no other method. We may reasonably conclude from this that the females of these birds prefer colour and markings to beauty of form, as the males distort themselves in order to show a greater number of beautiful feathers than could be seen otherwise at one view. A description of this very peculiar attitude need not be attempted, as the figure of the Japanese pheasant (*Phasianus versicolor*) on Plate II., sketched from life at the Zoological Gardens, will convey the idea at once to the reader. It will be seen how greatly the skin round the eye (of a bright vermilion colour) is extended, and the little purple aigrettes are erected. The common partridge (*Perdix cinerea*), displays one side to his mate; so do the horned tragopans: but these birds have other modes in addition, for a description of which the reader is referred to No. xx. of the "Intellectual Observer." I regret to state that all the specimens of the species described in that article, including the young ones, have since died; but Temmnick's tragopan (*Cerionis Temminckii*) has taken their place in our aviaries. This species is somewhat smaller, but stouter in build than the other, and possesses a much larger wattle, which is square at the lower end. This magnificent appendage is of a deep ultramarine blue in the central part, which colour descends in a broad band from the throat to the extremity of the wattle, and is regularly spotted with light blue; the lateral bands, much more numerous than in the other species, are also of this latter colour, and the space between each is filled in with a most lovely carmine; it is edged all round with light blue. I was fortunate enough to obtain a good sight of the wattle one fine evening in spring, while the bird stood very still on an elevated perch in a grotesque, almost comical, attitude; nearly all his feathers being erected, his crest expanded laterally, and his wattle pendant, but not expanded; he looked as if bent upon sport or mischief. The wattle and horns are fully exhibited only when the male is paying his addresses very ardently to the female. I have only seen this species do so once; this was at the Zoological Gardens, and my vexation was great at not being able to place myself so as to obtain a front view of the bird, owing to the door of the aviary being kept locked; and I will here express my opinion, that a fellow of the society, who sits and watches the birds for hours, and who would take every care not to disturb them, ought to be allowed

every facility for prosecuting his researches. On the occasion referred to, it was evident that the wattle was being let down, and also expanded on each side like a large and gorgeous apron, covering half, and perhaps more, of the bird's body in front; the horns were then seen to be of a very vivid light greenish blue, and the edge of the wattle viewed from behind, carmine. The cheeks in this bird are bare, and of a blue colour.

The last, though not least remarkable example of the lateral mode of display which will be mentioned here is the golden pheasant (*Thaumalea picta*), whose elegant form and brilliant colouring are so well-known in this country. The male runs very playfully after the female, and placing himself in front of her, quickly expands his collar, bringing nearly the whole of it round to the side where it is to be exhibited, and thereby presenting to view a flat disc of bright orange red, banded with perfect regularity by blue-black semicircles; the hen on seeing this frequently runs away pursued by her would-be mate, who generally finds himself placed with his other side towards her, and the collar is accordingly shown on that side. At the moment the full expansion of the collar takes place the bird utters a very snake-like hiss, which, according to our notions, would not be very fascinating as a love-song; the body is very much distorted, as is the case with the true pheasants, but the tail is not spread so much, as the curved, roof-like shape prevents its forming a flat surface. Slight breaks would occur in the black stripes of the collar when expanded were it not that each feather has a second black stripe which is so placed as effectually to prevent this.

Nature has, in one of her fits of eccentricity, furnished the males of certain species of grouse in America with large pouches, or wind-bags. The pinnated grouse (*Tetrao cupido*), well known in its native land as the Heath hen, is a good example of them. In the year 1862 a considerable number of these birds, mostly of the male sex, were living in the Zoological Gardens, and I had an excellent opportunity of observing their actions, as I was in a compartment of the aviary in which was a male and female: the coloured plate will convey an idea of their appearance; the male bird in the background is represented having his neck plumes pendant. This curious fellow commences his eccentric performances by erecting his long wing-like neck plumes till they meet over the top of his head; he also erects and expands his tail, showing the white under coverts, and with drooping wings, trots, or toddles along (the movement is not like walking), slightly turn-



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ing in his course, and accompanying his steps with a knocking noise, which somewhat resembles the sound made by water escaping from an inverted bottle, and is not loud—indeed, I question whether I should have noticed these curious sounds had I not sat perfectly still; but, as it was, the bird showed no signs of fear, but frequently came so close to me that I could have touched him. And I would here observe that this stone-like stillness must frequently be adopted by those who desire to study the habits of wild creatures. But to return to my description. After strutting a short distance in the manner described, the bird stands still and utters his own peculiar “cock-a-doodle-doo,” in doing which he does not raise his head nor open his bill, but he suddenly inflates his neck-pouches, and gives vent to his feelings in three rather loud windy hootings, of which the first note is the highest and the second one the lowest. If he hears a rival he utters a loud *quawk*, indicative of the highest excitement, and repeats his own performances with renewed energy. The beautiful yellow combs, with serrated edges, one over each eye, must not be forgotten. They are seen to sprout, as it were, from amongst the feathers at the same time that the neck plumes are raised. These plumes hang down and cover the naked pouches when the bird is not strutting. The pouches, when inflated, are about the size of a large orange, which fruit they also resemble in colour, with the exception of being slightly darker and tinged with brown, and there is an elongation towards the head of a carmine colour. The figure of the pinnated grouse strutting, as given by Wilson, in his “American Ornithology,” is extremely inaccurate; and it is a pity that, when he went out to observe these birds in their native haunts, he should have used his gun before doing justice to them by his pencil and note-book. The bird does not flutter his neck-wings, as stated by this author, but merely erects them. Audubon has not attempted to represent the strutting attitude of these birds, but has figured two males about to fight. I will say, at the same time, that both his and Wilson’s accounts of their habits are very entertaining. The cock of the plains (*Tetrao urophasianus*) is a very fine example of a pouched grouse. The ruffed grouse (*T. umbellus*) is a smaller species, but very handsome, and I do not despair of seeing them alive at the Zoological Gardens.

The following facts relating to the pinnated grouse are extracted from a letter communicated by Dr. S. L. Mitchell, of New York, to Wilson’s “American Ornithology.” Dr. Mitchell’s observations were made in that peculiar tract known as the Brushy Plains of Long Island, probably for time immemorial a resort of this bird.

He found them inhabiting chiefly the forest range, a district between forty and fifty miles in length, extending from Bethphage, in Queen's County, to near the Court House, in Suffolk. The breadth of this district is not more than six or seven miles. The situation is so retired, that the game laws are habitually disregarded, informers being easily silenced by bribes. The birds are assailed on all sides almost without cessation, and their scarcity may be viewed as foreboding their eventual extermination.

“The season for pairing is in March, and the breeding-time is continued through April and May. Then the male grouse distinguishes himself by a peculiar sound. When he utters it, the parts about the throat are sensibly inflated and swelled. It may be heard on a still morning for three or four miles; some say they have perceived it as far as five or six. This noise is a sort of ventriloquism. It does not strike the ear of a bystander with much force, but impresses him with the idea, though produced within a few yards of him, of a voice a mile or two distant. This note is highly characteristic. Though very peculiar, it is termed *tooting*, from its resemblance to the blowing of a conch or horn from a remote quarter. * * * The males' places of assembly are called *scratching places*. Men lying concealed near these places of resort have been known to discharge several guns before either the report of the explosions or the sight of their wounded and dead fellows would rouse them to flight.”

Wilson says that these birds inhabit different and very distant districts of North America, and that they are very particular in selecting their places of residence. Open, dry plains, thinly interspersed with trees, or partially overgrown with shrub-oak, are their favourite haunts. They have a dislike of ponds, marshes, or watery places, which they avoid, and never drink from them: a hen in confinement was observed even to avoid that part of her cage in which the water was placed, but she picked it eagerly, drop by drop, from the bars, when it was allowed to trickle down them.

“The three notes are of the same tone, resembling those produced by the night-hawks in their rapid descent; each strongly accented, the last being twice as long as the others. When several are thus engaged, the ear is unable to distinguish the regularity of these triple notes, there being, at such times, one continued humming, which is disagreeable and perplexing, from the impossibility of ascertaining from what distance, or even quarter, it proceeds. While uttering this, the bird exhibits all the ostentatious gesticulations of a turkey-cock—erecting and fluttering his neck wings,

wheeling and passing before the female, and close before his fellows, as in defiance. Now and then are heard some rapid cackling notes, not unlike that of a person tickled to excessive laughter; and, in short, one can scarcely listen to them without feeling disposed to laugh from sympathy. These are uttered by the males while engaged in fight, on which occasion they leap up against each other, exactly in the manner of turkeys, seemingly with more malice than effect. This humming continues from a little before daybreak to eight or nine o'clock in the morning, when the parties separate to seek for food."

Birds of the grouse tribe, however, do not stand alone in the possession of these curious air-bags, as they are a well-known feature of some species of bustard. The common bustard (*Otis tarda*), formerly found wild in this country, is an example, and its very singular aspect during display has been portrayed by Mr. Joseph Wolf, in his "Zoological Sketches." The large Australian bustard (*O. Australasianus*) is equally remarkable. The Zoological Society are fortunate enough to possess examples of this bird; and, for the last three or four years an adult male may have been seen putting on an appearance which, I should think, few other birds would envy. This great change in the outlines of the male takes place in the spring, and continues to the early summer time; and what a change! From his breast hangs loosely a large pouch covered with whitish feathers, and so long, that it reaches the ground; the tail appears to lie on the back, and is just long enough to touch the neck: the feathers of the tail are not spread, and this is somewhat remarkable. The skin of the throat seems to be distended with air, the white feathers in that part all standing on end, the head and neck appear very stiff, the bill pointing upwards, and giving the bird a haughty aspect; the very large pouch swings to and fro with every action of the bird, and his movements are greatly impeded by it. The call note is, I am afraid, indescribable; yet I will endeavour to convey some idea of it to the reader. The head is lowered for a moment, the bill is then opened and closed with great violence, and this causes a loud *pop* to be heard; the head is then raised, and a curious vibrating sound is produced, during which the whole body is seen to quiver.

The figure of the black grouse (*Tetrao tetrix*) crowing, is copied from a drawing by Mr. Wolf, who has kindly favoured me with the following account of his own observations while at Odenwald in Germany—"These birds select open spaces in their native woods, where they arrive at dawn of day. The males commence by a sort of

hoarse crow ; they also utter a much louder crowing note which could be heard for a mile or so when all else is quiet. In the midst of their strutting, a male will suddenly start in the air with a great fluttering to a height of eight or ten feet, and descend almost to the same spot. Of course there is sure to be a fight if two rival males approach each other. The peculiar call-note of the hens is *cuck, cuck, cuck*, which may be heard in the surrounding woods, and they will also, sometimes, come to the open. The strutting, probably, does not last after sunrise as the birds then retire into the woods. The combs over the eyes are of a very bright-red colour, full and round, like strawberries (not flat, as in the dead bird), forming a very conspicuous feature when the sun is shining, with green grass, or heather, for a background." Mr. Wolf also saw the capercaillie (*Tetrao urogallus*) to advantage when performing on a tree on which he had been roosting. This bird also begins at dawn of day with a kind of double click, which resembles the sound produced by striking two hard pieces of wood together ; these sounds are gradually increased in number, and become quicker in succession, till at last they culminate in a hissing. Whilst he utters this last sound his neck is stretched out straight to its full length, the wings are drooped, and the tail is erected and spread ; the head is seen to vibrate violently, and the bird at that moment seems neither to see nor to hear ; for even if fired at, at that moment, and missed, it is well known he does not seem to be aware of the fact. The vibration is so strong that, according to Mr. Lloyd, it is communicated even down to the trunk of a large tree on which the bird stands. This fine grouse possesses a sort of beard formed by the elongation of the throat-feathers, and these are thrown forwards during display. On hearing the call-note the hens will congregate on the ground, they also possessing a call-note rather louder than that of the grey hen ; sometimes one will alight on the same tree with the male, these being more arboreal in their habits than the black grouse.

A portrait of the bell-bird (*Chasmorhynchus nudicollis*), in a very singular attitude, is given in Plate II. This bird will occasionally stop in the midst of his song (if such it may be called), and assume the curiously strained position represented, remaining for two or three minutes as still as a statue ; suddenly he will bend his head down, moving it rapidly, as if nodding to his neighbours in the next cage. This attitude of the head is also shown in the Plate. The bill at this time is open, and a very low gobbling note is uttered. For further particulars of the bell-birds the reader is referred to an article in No. lx. of the "Intellectual Observer." The birds of

paradise, which should be mentioned here, will not be further alluded to than by stating that the actions of the two individuals which were at the Zoological Gardens, have been described in No. viii. of the "Intellectual Observer."

In the proceedings of the Zoological Society of London, Mr. A. D. Bartlett gives the following account of the very singular antics of the kagu (*Rhinochetus jubatus*), as observed by him: "With its crest erect, and wings spread out, the kagu runs or skips about, sometimes pursuing and driving before him all the birds that are confined with him in the same aviary—among these are several blue water-hens (*Porphyrio*)—evidently enjoying the fun of seeing them frightened; at other times he will seize the end of his wing or tail, and run round, holding it in his bill; from a piece of paper, or dry leaf, he derives amusement by tossing it about and running after it. During his frolic he will thrust his bill into the ground, and spread out his wings, kick his legs in the air, and then tumble about as if in a fit." The sun bittern (*Eurypyga helias*) is another bird whose wings are expanded during play, and courtship also, no doubt, and most charming are the contrasts of colours on the flight feathers; indeed, during flight, the creature looks like a very large and gaily painted moth.

But by far the most notable example of wing ornamentation is seen in the argus pheasant (*Argus giganteus*), whose lovely blended tints and intricate markings seem to set faithful description and imitation at defiance. I wish to call attention to one or two curious facts relating to this bird. The large oval spots so conspicuous on the secondary quill feathers which have hitherto always been considered to resemble eyes, and from which the bird derived its name, if attentively studied, will be seen not to resemble eyes at all, but appear, at a little distance, like rows of convex and highly-polished pebbles, set in the web of each feather. The stone which they resemble most nearly, as far as I can ascertain, is the *cat's-eye*, which comes to us from India, and the general effect of the whole design would strongly remind an architect of an embellishment known as the *egg and dart* in classic architecture. The oval spots present exactly the appearance of having been painted with consummate skill by an artist whose perfect knowledge of the laws of light and shade enabled him so to deceive the eyes as to cause a flat surface to appear convex. An artist will generally arrange the lights and shades of his work on the very correct supposition that the chief light proceeds from above, especially in out of doors subjects; and, marvellous to relate, this rule has been rigidly adhered

to by Nature in the painting of the spots on these feathers, and in them we find an index pointing, as it were, to the position in which the wings are placed, when displayed by the bird. And what is that position? To a certainty the wings are widely expanded, and it is almost as certain that they are erected and placed much in the same position with regard to the bird's body as the peacock's train; for in this way only would the light appear to fall truly on the apparently raised spots. Then, indeed, would the appearance of convexity be perfect, for the lights and shades of these large spots are slightly varied on each succeeding feather; and this is necessary, so to speak, as some few of the secondary quills are placed in a line with the direction of the light, while others are almost at right angles to it. Strange and mysterious does it seem that such a superabundance of the most beautiful ornamentation that can be imagined should grow out of the flesh of a poor bird, and be renewed annually, for the sole purpose of fascinating his lady love. And here the question arises as to the capacity of the female for appreciating all this. It is, indeed, very difficult to believe that these birds can fully appreciate such perfect beauty as they are gifted with; for, even amongst mankind, the possession of a refined taste for the beautiful is a characteristic mark of the highest civilization.

How very remarkable is the fact that in birds of the ostrich tribe it is the males who hatch the eggs and rear the young! The females assuming the airs so characteristic of the males in all other known families. A fine female cassowary (*Casuarus casoar*) at the Zoological Gardens exhibits a most pugnacious disposition at breeding time, the beautiful colours of the naked skin of the head and neck being then very brilliant. The two wattles are much larger than those of her partner at this time, and on the least excitement the splendidly-coloured skin of the neck is extended downwards, and also considerably puffed out. Woe betide the luckless individual who comes within reach of the terribly-powerful inner-toe spurs of this enraged female!

Courtship being a very potent cause of war in the animal creation, the following account of a great battle will not be considered out of place here. It is extracted from "Land and Water" of Dec. 1, 1866:—

"In an Australian newspaper, the 'Menaro Mercury,' a detailed description of the habits of the lyre bird (*Menura superba*) is furnished by a correspondent, who is evidently very familiar with the bird. Mr. Gould, however, in his 'Handbook of the Birds of

Australia,' has given a nearly similar account, only that the following observation appears to be novel: 'During one of these rambles,' remarks the writer, 'I beheld a sight which, to me, was grand in the extreme. In working my way through the tedious scrub, and being upon the brow of a hill, making my way to camp, I heard a din in the valley below which completely astonished me. As I neared it, the noise became abominable, and I wondered what it all meant. Knowing the shyness of bush-scrub animals, I sneaked nearer the scene of noise, and came in view of as fine a sight as I have witnessed in all my life. About as near as I could guess, a hundred and fifty lyre-cocks were ranged in order of battle, and fighting with indescribable fury. So astonished was I, that I forgot to place my gun on full cock, and, in almost a second of time, they took alarm and disappeared, leaving me greatly disappointed.'"

Amongst the duck tribe, the mandarine (*Aix galericulata*) is a pre-eminently beautiful species, the male being very richly adorned, and possessing what may be termed specialities, the most remarkable of which are two very broad feathers in his wings, of a rich tawny brown colour, edged with white, black and glossy purple. During courtship these feathers are vertically elevated and retained in that position by the bird's beak, which is incessantly applied to them with a very peculiar jerking movement, at the same time uttering a note which has a remarkably *watery* sound. Like many of its congeners, all the finery of the male of this species is lost when the breeding-time is over, and replaced, for a few months only, by the sober browns and greys of the female. These birds are said to be regarded by the Chinese as emblems of conjugal fidelity, being often carried about in their marriage processions.

Thus much on this most fascinating subject, for such it is, although it has been strangely neglected by naturalists. There are yet numbers of highly-decorated birds whose modes of display have never yet been observed by human eyes; these remain as pleasurable objects to hope for and to observe when the opportunity occurs.

COLOURED PLATE.—The pinnated grouse (*Tetrao cupido*), showing in the distance a male having the neck-plumes pendant.

PLATE II.—Male birds during courtship. *a*, Honduras turkey, *Meleagris ocellata*; *b*, Peacock pheasant, *Polyplectron chinquis*; *c*, Impeyan pheasant, *Lophophorus impeyanus*; *d*, Japanese pheasant, *Phasianus versicolor*; *e*, Australian bustard, *Otis Australasianus*; *f*, Bell bird, *Chasmorhynchus nudicollis*; *g*, Common partridge, *Perdix cinerea*; *h*, Golden pheasant, *Thaumalea picta*; *i*, Black grouse, *Tetrao tetrix*.