

IV) EXTERNAL ANATOMY OF THE FOWL

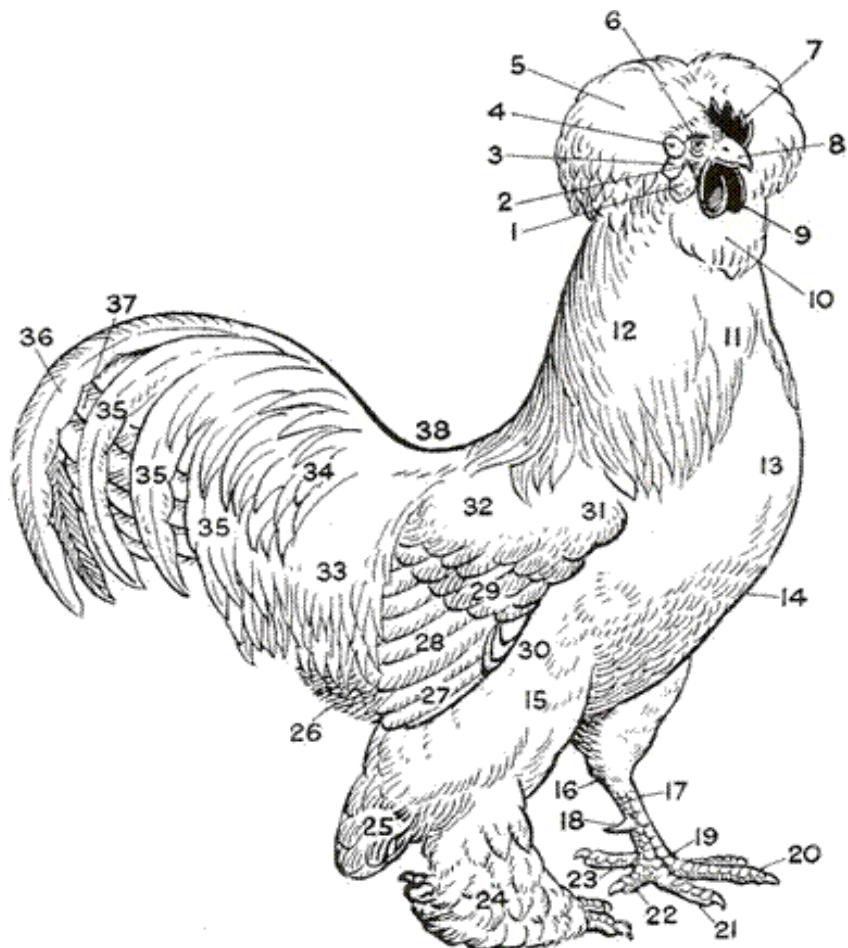


Figure 1

1) Muffling	11) Neck	21) Third Toe	31) Shoulder
2) Face	12) Neck Hackle	22) Fourth Toe	32) Wing Bow
3) Ear-lobe	13) Breast	23) Fifth Toe	33) Saddle Hackle
4) Ear	14) Keel	24) Footings	34) Tail Covers
5) Crest	15) Thigh	25) Vulture Hock	35) Side Hangers
6) Eye	16) Hock Joint	26) Abdomen	36) Tail Sickle
7) Comb	17) Shank	27) Primary Flights	37) Main Tail Feathers
8) Beak	18.) Spur	28) Wing Bay	38) Back
9) Wattles	19) Foot	29) Wing Bar	
10) Beard	20) Middle Toe	30) Wing Covert	

V) MAIN WING FEATHERS OF POULTRY.

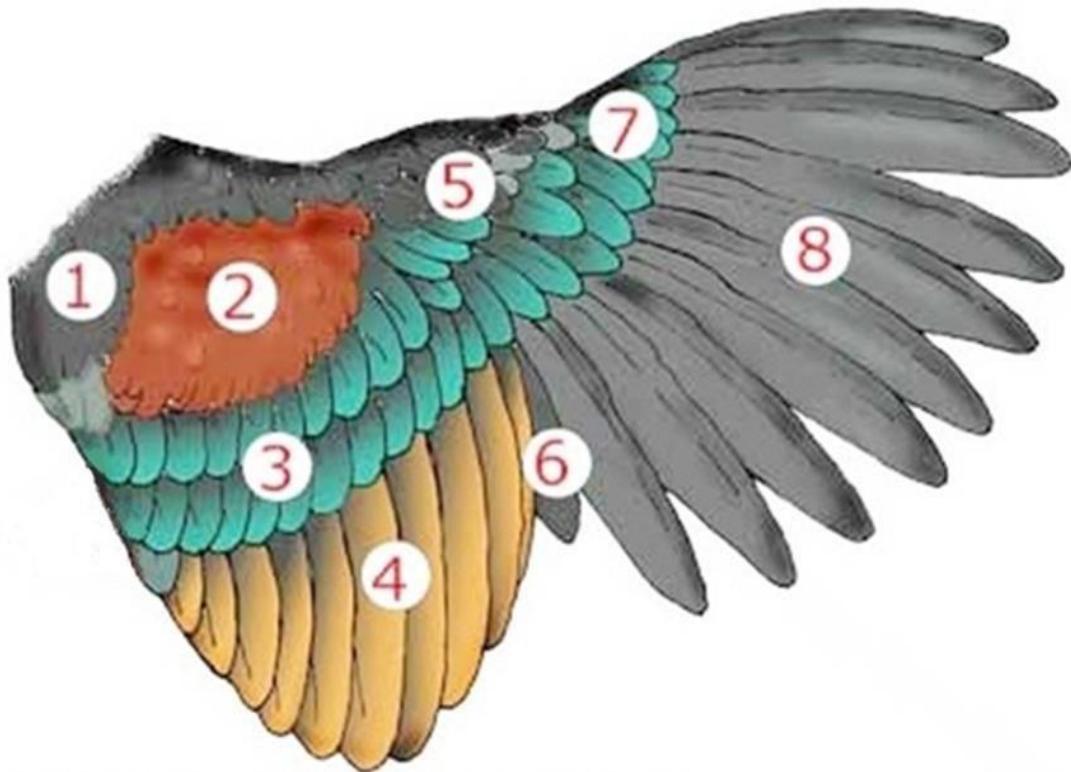
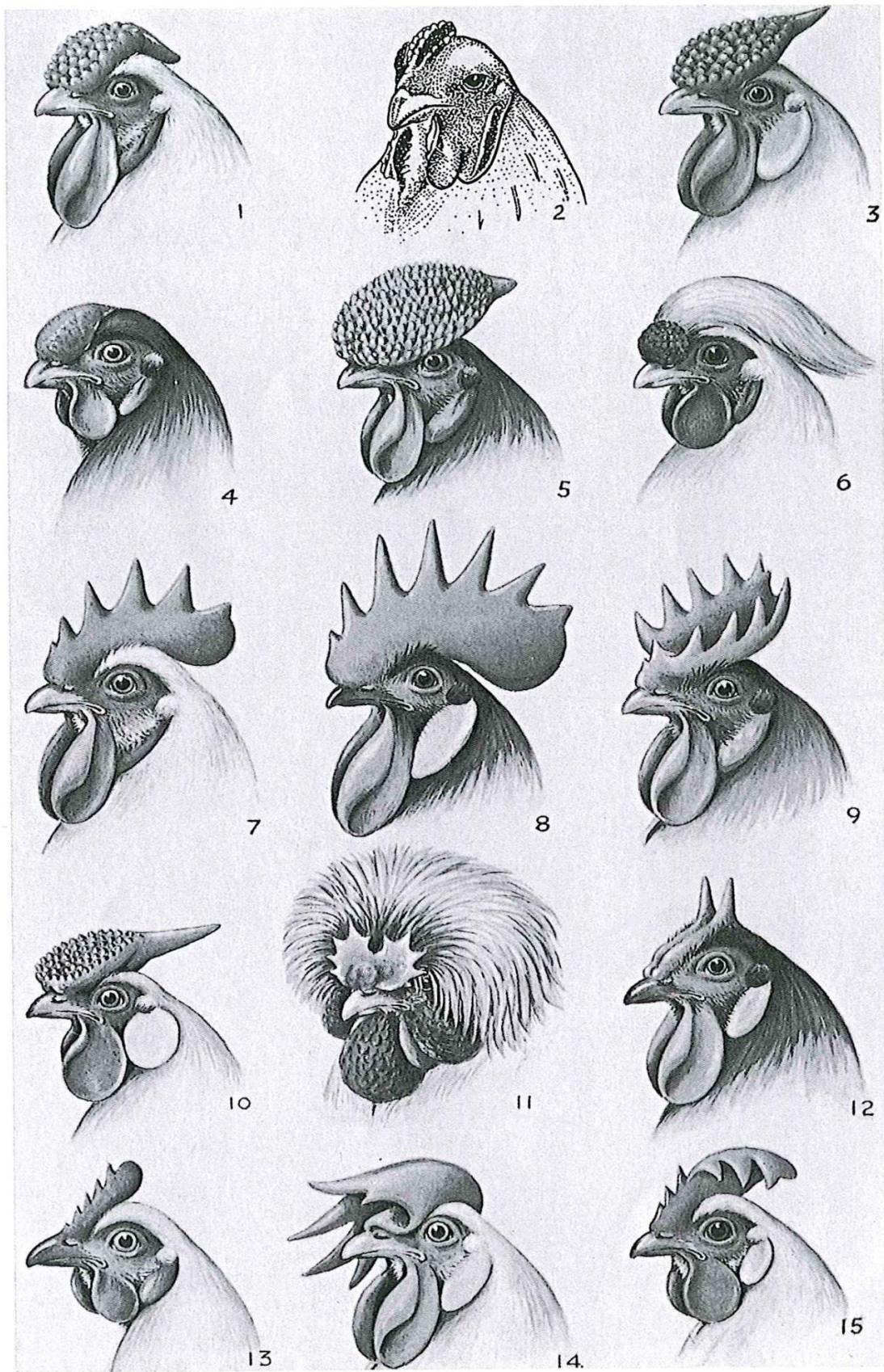


Figure 2

Figure 2:

- 1.) Shoulder butt or scapulars
- 2.) Wing bow coverts or lesser wing coverts forming the wing bow
- 3.) Secondary coverts and median coverts (top) forming the wing bar or speculum
- 4.) Secondaries or secondary flight feathers forming the wing bay
- 5.) Wing bow coverts or alular coverts
- 6.) Axial feather (absent in waterfowl)
- 7.) Primary coverts
- 8.) Primaries or primary flight feathers

VI) TYPES OF COMB



Types of comb:

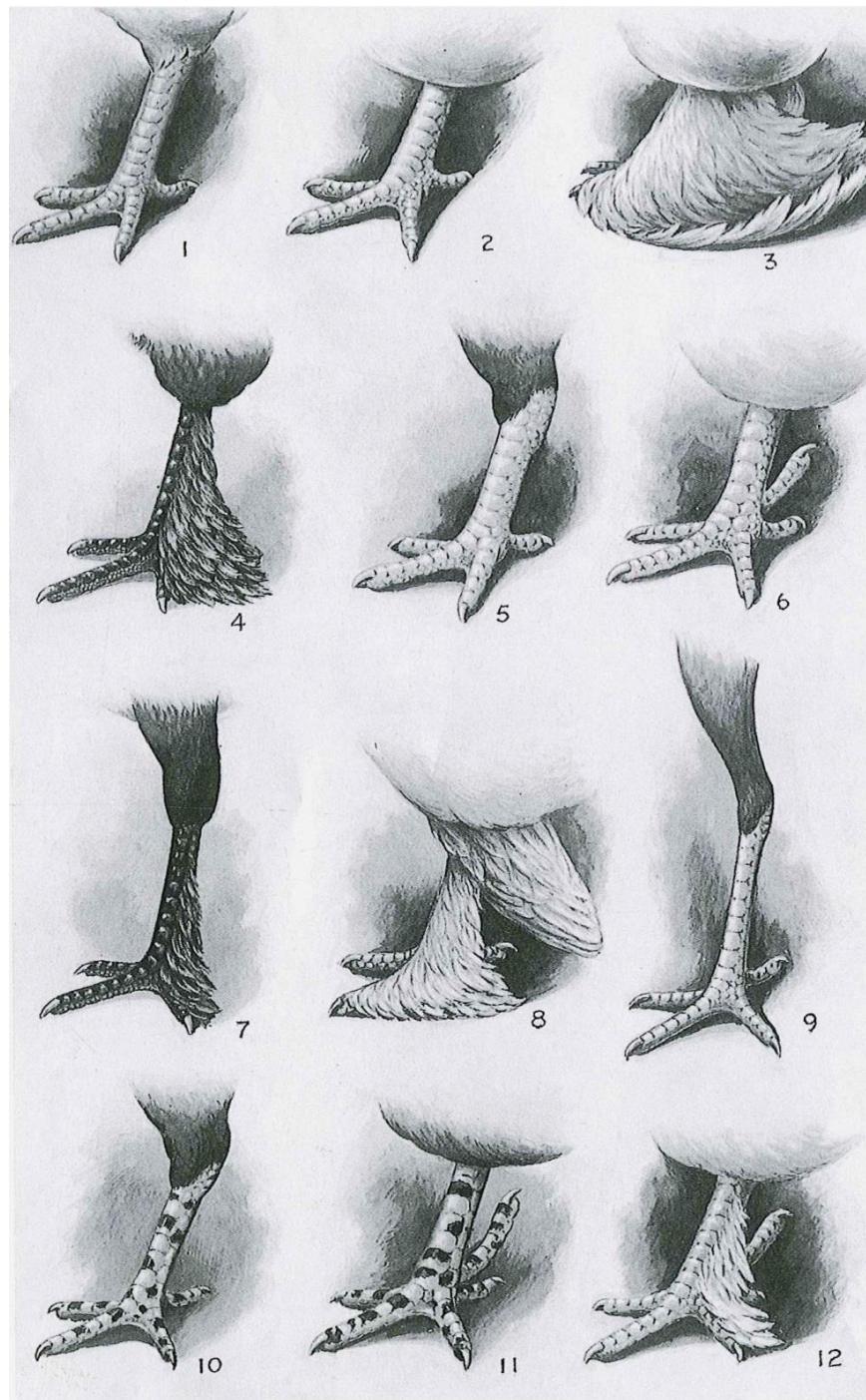
1.) Rose with leader following line of neck	8.) Large single comb
2.) Triple or pea comb	9.) Cup, as in the Sicilian Buttercup
3.) Rose with short leader	10.) Rose with long leader
4.) Walnut comb	11.) Leaf, as in Houdan
5.) Cap	12.) Horn
6.) Mulberry	13.) Small single
7.) Medium single comb	14.) Folded Single
	15.) Semi-erect single

16.) Carnation Comb or King's Crest



Penedesencas, from the Catalan region from Spain, and a sister breed called the Empordanesa, have an interesting comb which is unique to them. The “carnation comb” or “king’s crest” starts out as a single comb in the front but then branches off into several lobes at the rear, roughly taking on the appearance of a flower or a crown, thus the name carnation comb or king’s crest.

VII) LEG TYPES



1. Clean legged, flat side (Leghorn)
2. Clean legged, round shanks (Game)
3. Heavy feather and feathered toes (foot feather)
4. Feather legged, no feathers middle toe (Croad Langshan)
5. Short round shanks (Indian Game)
6. Five toed (Dorking)
7. Slightly feathered shanks (Modern Langshan)
8. Feather legged and vulture hocked
9. Thin round shanks (Modern Game)
10. Mottled shanks (Ancona)
11. Mottled and five toed (Houdan)
12. Feather legged and five toed (Faverolles).

IX) FEATHER MARKINGS

a.) A QUICK REFERENCE GUIDE



Laced



Double Laced



Spangled



Mottled or Speckled



Pencilled



Pencilled



Barred



Barred

b.) FEATHER MARKINGS AND DEFECTS

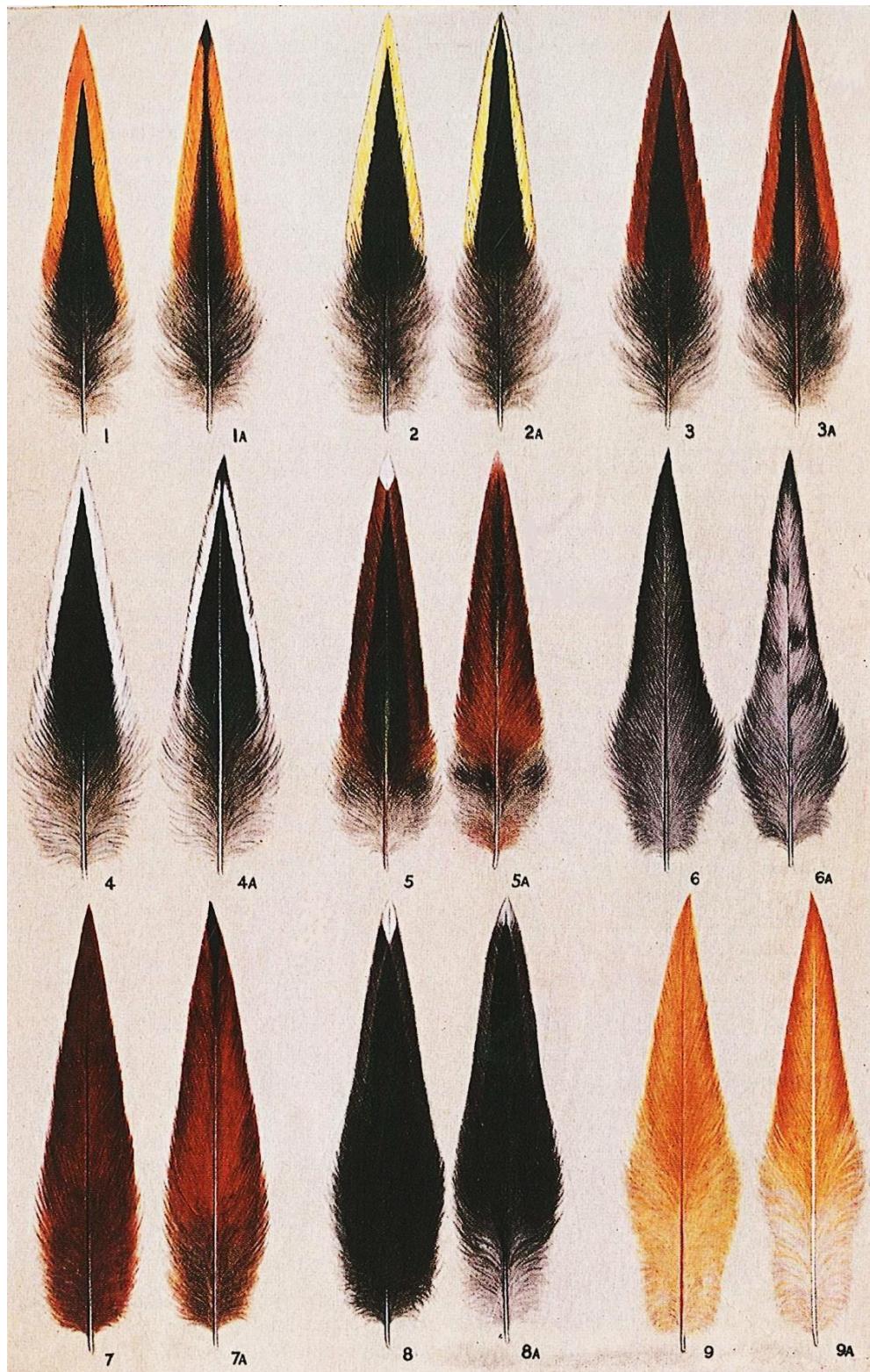


Plate 1

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1 Hackle feather conforming to standard as applying to brown Leghorn and other males of black-red colouring. Note the absence of shaftiness, black fringing and tipping. Actual colour of outer border varies in different breeds between dark orange and pale lemon. In such breeds saddle hackle should conform closely to neck hackle.

1A Faulty hackle in same breeds. There is considerable shaftiness, the striping runs through and the feather is tipped with black. Striping is also indefinite and fouled with red.

2 Hackle feather conforming to standard from partridge Wyandotte male. There is no shaftiness and the striping is very solid and distinct. In partridge Wyandottes lemon-coloured hackles are a desirable exhibition point.

2A Faulty neck hackle in the same breed. Note that the black striping runs through to tip and is irregular in shape. There is also a distinct black outer fringing to the gold border.

3 Standard hackle feather from male of gold-laced Wyandotte and similar breeds with rich bay ground colour. Note intensity of centre stripe, absence of shaftiness and freedom from blemish in outer border. Note also soundness of colour in underfluff.

3A Faulty hackle feather from similar breeds, showing indistinct striping, with foul colour, shaftiness and black running through to tip. Underfluff is a mixture of red and dark grey.

4 Standard hackle feather from male of light Sussex and similar breeds of ermine markings, such as light Brahma, columbian Wyandotte and ermine Faverolles. The demand is for solid black centre with clear white border extending to underfluff. Green sheen is an important feature.

4A Faulty hackle from similar breeds, showing black fringing to border, black tipping and shaftiness in quill. Underfluff also lacks distinction.

5 Perfect tri-coloured hackle feather from a speckled Sussex male. The black striping is solid, with green sheen, and the border is the desired rich mahogany colour, finishing with clean white tip. Note clarity of undercolour.

5A Faulty speckled Sussex hackle feather showing almost complete lack of black striping, varying ground colour in border, and indistinct white tipping.

6 Neck hackle conforming to standard Andalusian male. The so-called Andalusian blue is a diffusion of black and white, and in male hackles a dark border or lacing surrounds the slate-blue feather. Undercolour is sound and even.

6A Faulty hackle from same breed. The colour generally is blotchy and lacing is indefinite.

7 Standard neck hackle of a Rhode Island Red male. No attempt has been made to show the ultra-dark red usually seen in show specimens, but the colour seen here conforms with standard and should be agreeable for exhibition. Note purity of undercolour – a very important point in this breed.

7A Faulty hackle feather from the same breed, showing uneven ground colour, black tipping and smutty undercolour, which is a very severe defect in a Rhode Island Red.

8 Hackle from Ancona male, conforming closely to standard. Note clear V-shaped white tipping, complete absence of shaftiness, rich green sheen and solidity of dark underfluff, a particularly strong point in the breed.

8A Faulty hackle feather from same breed, showing indistinct tipping of greyish-white and faulty undercolour not dark to skin.

9 Hackle feather conforming to standard from buff Orpington male, very similar, except for exact shade, to feathers from other buff breeds, such as Cochins and Rocks. Note even colour throughout, absence of shaftiness and sound colour in underfluff, with quill buff to skin.

9a Faulty hackle feather from similar breed, showing severe shaftiness, uneven ground colour with darker fringe, and impure undercolour.

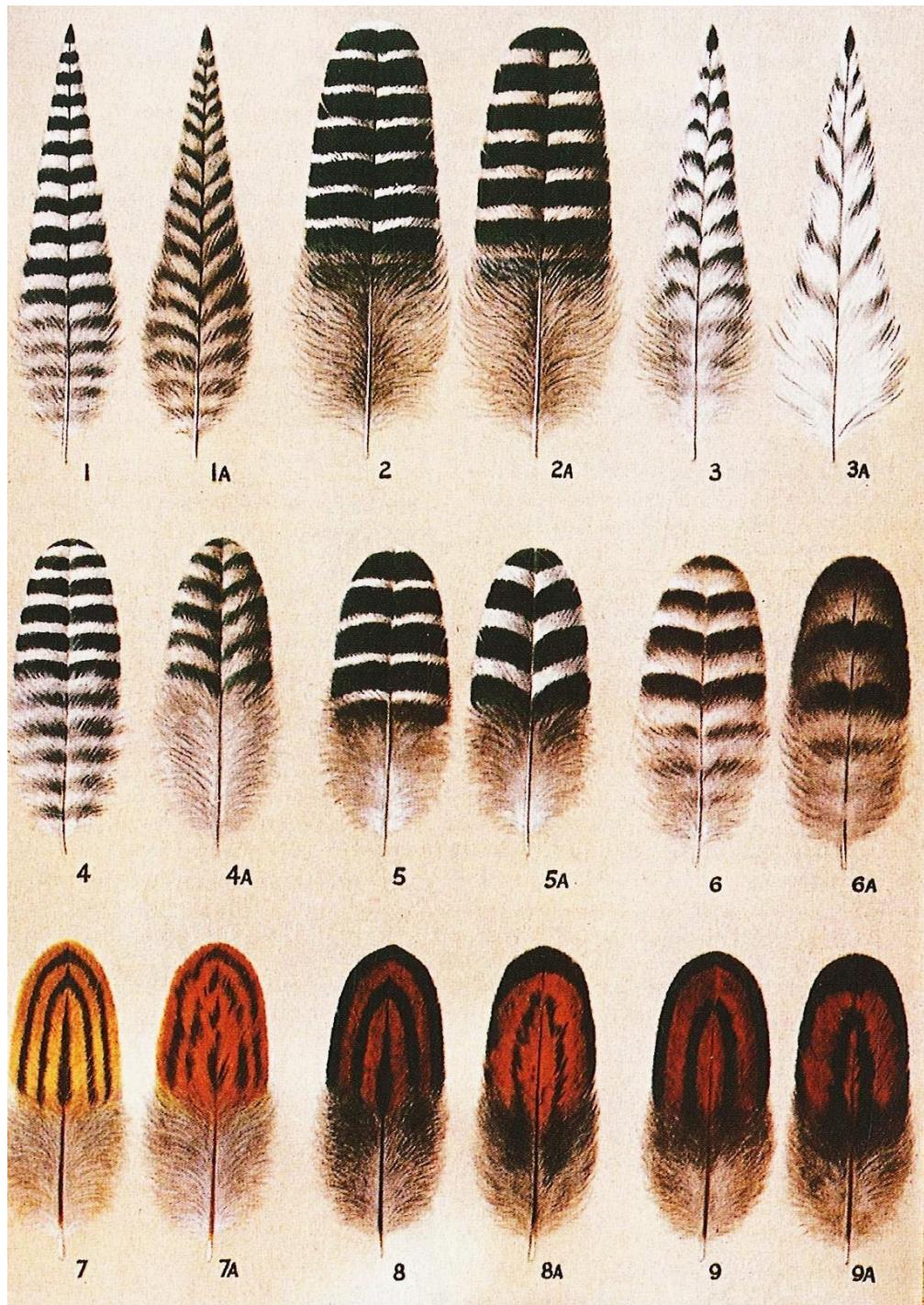


Plate 2

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1 Standard hackle from barred Plymouth Rock male and similar breeds. Note the points of excellence – barring practically straight across feather, sound contrast in black and blue-white, barring and ground colour in equal widths, and barring carried down underfluff to skin. Tip of feather must be black.

1A Faulty saddle or neck hackle from similar variety. There is lack of contrast in barring, with dull grey ground colour and V-shaped bars.

2 Hackle as standard description from silver Campine, in which males are inclined to hen feathering. Note that the black bar is three times the width of ground colour and tip of feather is silver.

2A In this faulty hackle (also from silver Campine male) ground colour is too wide and barring narrow. Feather is without silver tip.

3 Standard hackle from Marans male. In this and some similar breeds evenness of banding is not essential, but it is expected to show reasonable contrast. It should, however, carry through to underfluff.

3A From the same group of breeds this feather is far too open in banding and lacks uniformity of marking. It is also light in undercolour.

4 Standard markings of female body feather in Plymouth Rocks and similar barred breeds where barring and ground colour are required to be of equal width. Note that barring runs from end to end of feather and that tip is black.

4A Faulty feather from same group. Note absence of barring to underfluff and V-shaped markings; also blurred and indistinct ground colour.

5 Sound body feather from silver Campine female showing standard silver tip and barring three times as wide as ground colour, as in the male. Gold Campine feathers are similar but for difference in ground colour.

5A Faulty female feather, again from silver Campine. Here again, as in 2A, barring is too narrow in relation to silver ground colour and tip of feather is black.

6 Body feather from Marans female, conforming to standard requirements. Note that the markings are less definite than in Rocks and Campines, and the black is lacking in sheen, while ground colour is smoky white.

6A Faulty Marans female feather. Lacks definition and contrast in banding, which is indefinite in shape, the blotchy ground colour making an indistinct pattern.

7 Excellent body feather from partridge Wyandotte female, showing correct ground colour and fine concentric markings. Note complete absence of fringing, shaftiness and similar faults. Fineness of pencilling is a standard requirement.

7A From the same breed this faulty female feather shows rusty red ground colour and indistinct pencilling, with faulty underfluff.

8 Body feather of standard quality from Indian or Cornish Game female. The illustration shows clearly two distinct lacings with a third inner marking. Lacing should have green sheen on a rich bay or mahogany ground.

8A Faulty feather from same breed. Missing are evenness of lacing and central marking. The outer lacing runs off into a spangle tip.

9 Standard feather from laced Barnevelder female. In this breed ground colour should be rich with two even and distinct concentric lacings. Quill of feather should be mahogany colour to skin.

9A Faulty Barnevelder female feather, showing spangle tip to outer lacing and irregular inner markings on ground colour that is too pale.

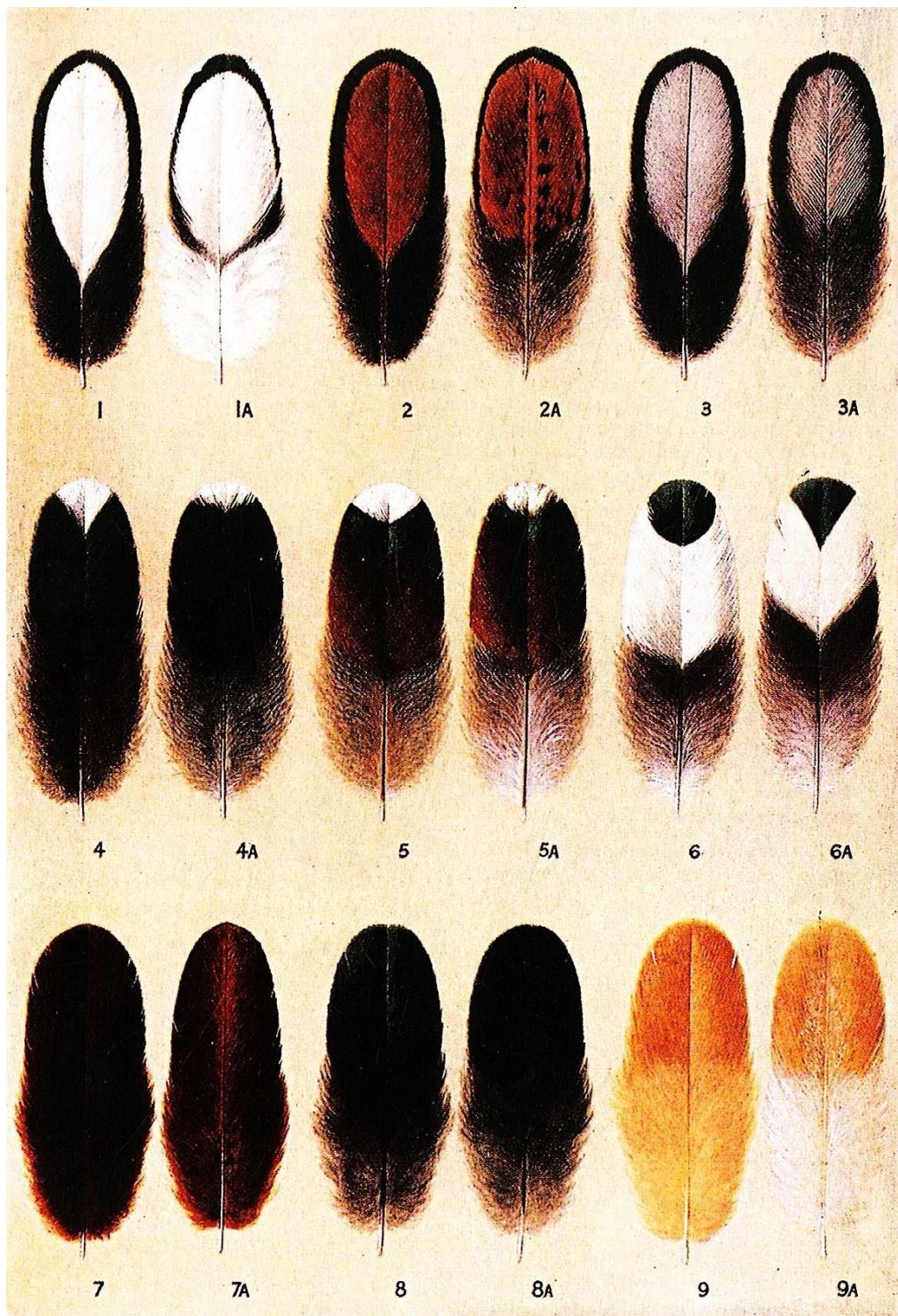


Plate 3

PLATE 3

1 Standard markings on silver laced Wyandotte female feather, showing very even lacing on clear silver ground colour and rich colour in underfluff. In this breed clarity of lacing is of greater importance than fineness of width.

1A Faulty female feather from same breed. In this there is a fringing of silver outside the black lacing, which is irregular in width and runs narrow at sides. Undercolour is also defective.

2 Excellent feather from gold laced Wyandotte. In this ground colour is a clear rich golden-bay and there is a complete absence of pale shaft. Undercolour is sound and lacing just about the widest advisable.

2A This shows a very faulty feather from same breed. It portrays mossy ground colour with blotchy markings and uneven width of lacing at sides of feather. Undercolour is not rich enough.

3 Standard markings on Andalusian female feather showing well-defined lacing on clear slate-blue ground and good depth of colour in underfluff. The dark shaft is desirable and is not classed as a fault.

3A Faulty feather from female of same breed. In this the ground colour is blurred and indistinct, and the lacing is not crisp, while undercolour lacks depth.

4 This shows a feather from an Ancona female, almost perfect in standard requirements. The white tipping is clear and V-shaped and undercolour is dark to skin.

4A Faulty feather from female of same breed. Here the tip of feather is greyish-white and lacks the necessary V-shape, while undercolour is not rich enough.

5 An almost perfectly marked feather from a speckled Sussex female – though the white tip might be criticized by some breeders as rather too large. The black dividing bar shows good green sheen and the ground colour is rich and even.

5A As a contrast this faulty feather shows a blotchy white tip and lack of colour in underfluff. The ground colour is also uneven.

6 An excellent example of 'mooning' on the feather of a silver spangled Hamburg female. Note the round spangle and the clear silver ground with sound undercover.

6A In this feather from the same breed the spangling at tip is not moon-shaped and there is too much underfluff and insufficient silver ground colour to body of feather.

7 A good example of the desired colour in Rhode Island Red female plumage. Note the great depth of rich colour and the sound dark undercolour.

7A Faulty colour in a feather from the same breed. Here the middle of feather is paler and inclined to shaftiness, and colour generally is uneven.

8 Standard plumage in females of Australorp and similar breeds of soft feather with rich green sheen. Note the brilliance of colour and general soundness of underfluff.

8A This shows a common fault in similar breeds, a sooty or dead black colour without sheen and lacking lustre. This sootiness is, however, usually accompanied by dark undercolour.

9 Standard colour and feather in the buff Rock female and similar breeds which perhaps vary in exact shade and in quantity and softness of underfluff. Note the clear even buff and lack of shaftiness or lacing, also the sound rich undercolour.

9A This feather from a similar buff breed shows very bad faults – mealiness and bad undercolour with a certain amount of pale colour in shaft.

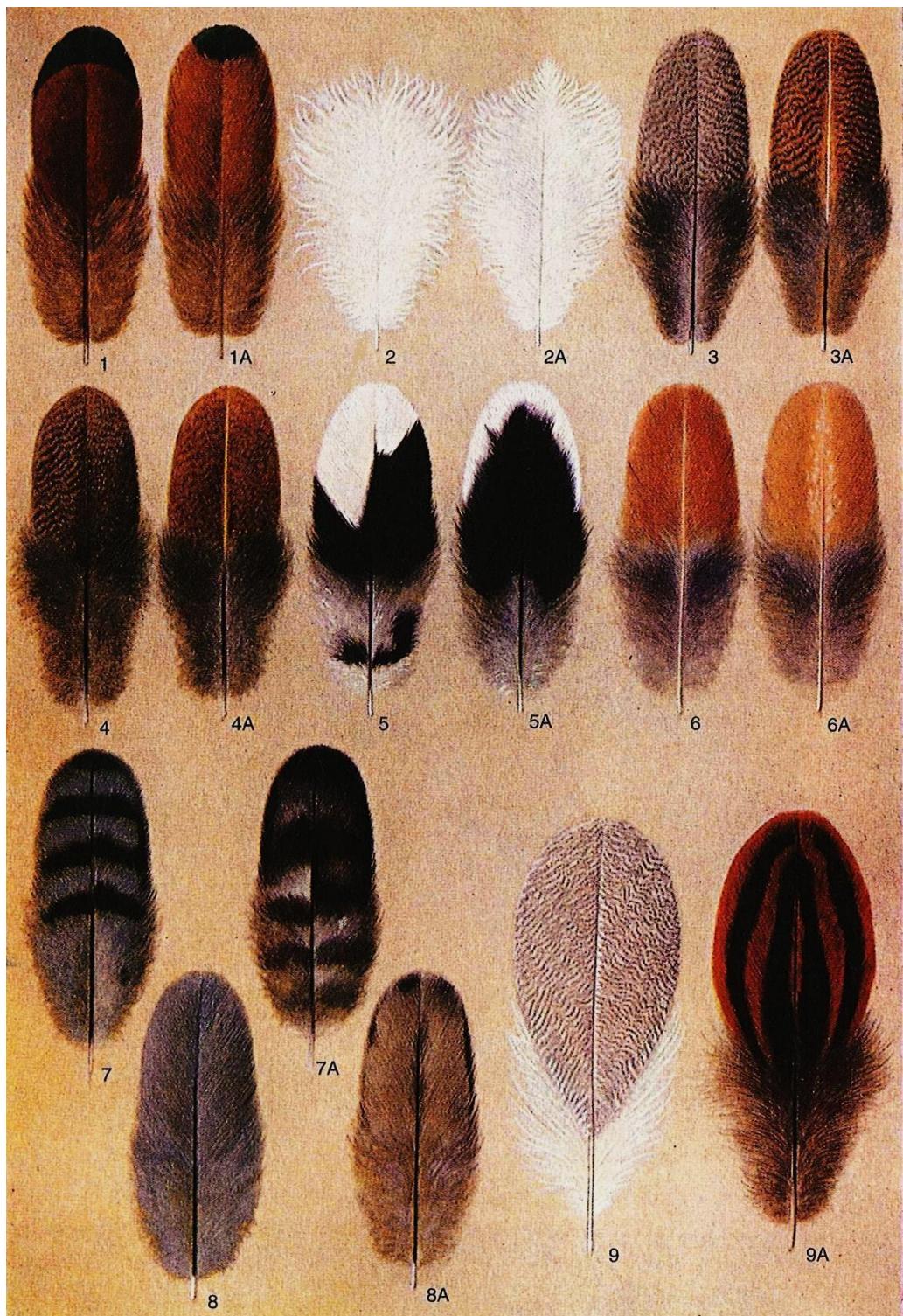


Plate 4

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1 This shows a typical standard bred feather from a Derbyshire Redcap female. Note the rich ground colour and the crescentic black markings, which are really midway between spangling and lacing.

1A In this faulty feather from a female of the same breed the ground colour is uneven and lacks richness, while the black tip is too small and indefinite and too closely resembles moon-shaped spangling.

2 This is a standard example of the webless type of plumage associated with Silkies in which the feather vane has no strength and the barbs no cohesion. This plumage is common in all colours.

2A Faulty feather from the same breed. In this the middle of feather is too solid and lacks silkiness, while the fluff has insufficient length.

3 A delicately pencilled body feather from a silver grey Dorking female. Note the silvery colour and absence of ruddy or yellow tinge in ground colour. This type of feather is also usual in duckwing females of various breeds.

3A Faulty colour in female feather from same breed. Here there is a distinctly incorrect ground colour and pronounced shaftiness.

4 A good example of standard bred colour and markings in body feather of brown Leghorn female, where the ground colour is a soft brown shade and the markings finely pencilled. This type of feather is common to many varieties of partridge or grouse colouring.

4A This shows a body feather from the same breed, in which ground colour is ruddy and shaftiness is pronounced – both severe exhibition faults.

5 A well-chosen example of the irregularity in markings of an exchequer Leghorn female. In this breed the black and white should be well distributed but not regularly placed, and underfluff should be parti-coloured black and white.

5A This faulty feather from the same breed shows a too regular disposition of markings, the body of the feather being almost entirely black and the white markings almost resembling lacing.

6 This is a standard feather from the breast of a silver Dorking, and with slight variations of shade from pale to rich salmon applies to a number of varieties with black-red or duckwing colouring. Colour should be even with as little pale shaft as possible.

6A A faulty sample of breast feather from the same group. Here the ground colour is washy and disfigured by pale markings known as mealiness.

7 Standard markings in North Holland Blue female. Note the defined but somewhat irregular banding on a distinctly bluish ground. No banding or other requirements in underfluff are called for in the standard.

7A This shows a faulty female feather in the same breed, which is not closely standardized for markings. The ground colour is smoke-grey instead of blue, and is blotchy, with uneven markings.

8 A good example of clear colour in an unlaced or self-blue female feather, where no lacing is permissible, such as in blue Leghorns, blue Wyandottes, etc. Note even pale blue shade and absence of any form of markings. This is an example of the true-breeding blue colour found in Belgian bantams.

8A This faulty female feather is a dull dirty grey instead of clear blue, and has blotchy markings as well as a suggestion of irregular lacing.

9 A good sample of exquisitely patterned thigh fluff in Rouen drakes. The ground colour is a clear silver and the markings a delicate but clear black or dark brown. These markings are sometimes known as chain mail.

9A Another good Rouen feather – this time from the duck. Ground colour is very rich and markings intensely black, though seldom so regular and even as in domestic fowl.

c.) FEATHERS AND FEATHER MARKINGS

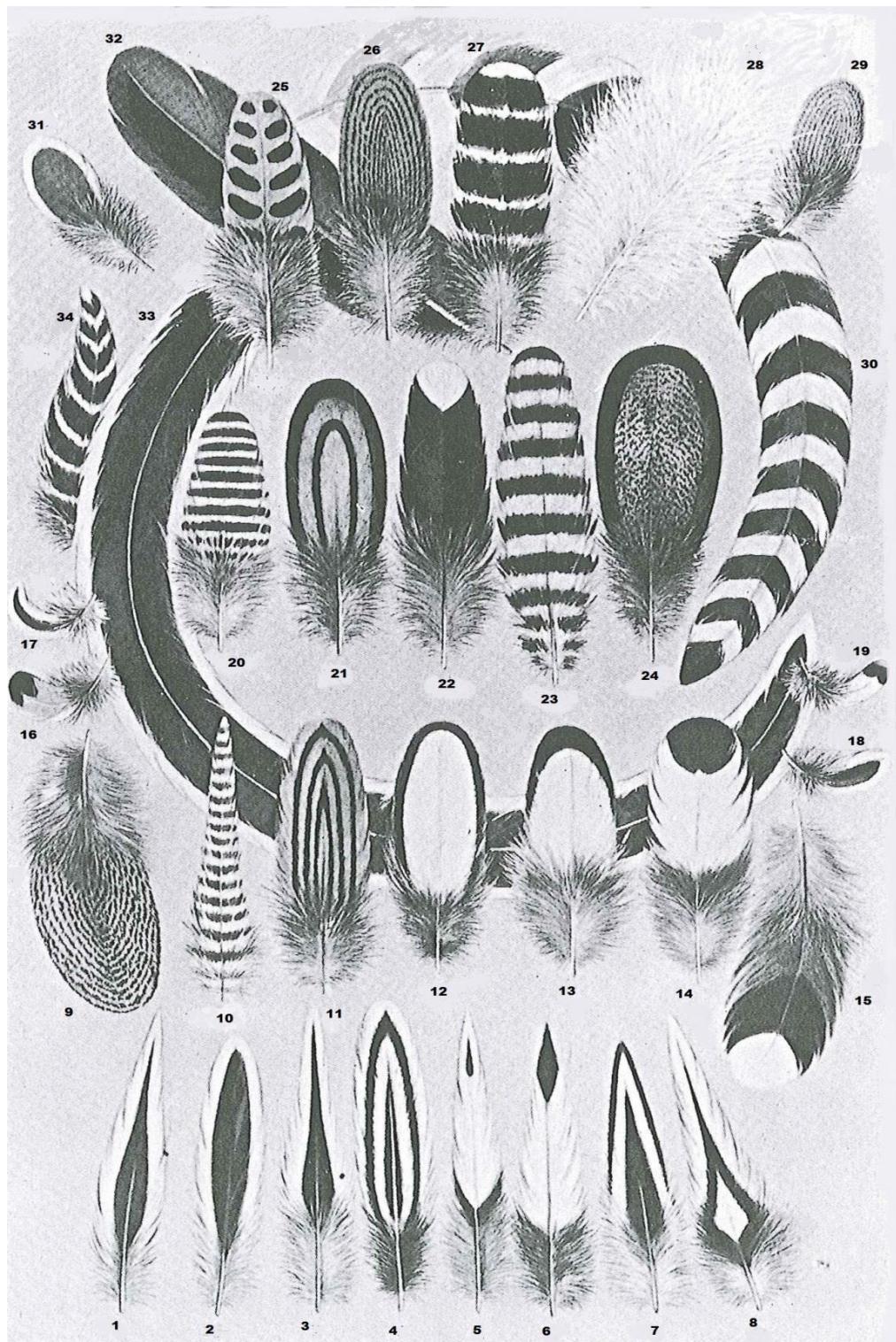


Plate 5

PLATE 5

1.) Striped neck hackle, cock	19.) Crescent marked
2.) Laced neck hackle, hen	20.) Barred as in Hamburg. Dark and light bars same width
3.) Striped saddle hackle, cock	21.) Double laced
4.) Pencilled hackle, hen	22.) Tipped, showing 'V'-shaped tip, as in Ancona
5.) Ticked hackle	
6.) Tipped neck hackle, cock, as in spangled Hamburg	23.) Barred as in barred Rock, showing barring in Undercolour. To finish with black bar
7.) Striped hackle, cock, showing outer fringing of colour – a fault	24.) Laced and ticked, as in dark Dorking
8.) Striped saddle hackle, cock, showing open centre (desired only in pullet-breeder)	25.) Elongated spangle, as in Buttercup
9.) Pencilled feather, cushion, hen, as in silver grey Dorking and brown Leghorn	26.) Finely pencilled, as in dark Brahma hen
10.) Barred neck hackle, cock	27.) Barred, as in Campine. Finishes with white end. Light bars a $\frac{1}{4}$ to a third of the width of dark bars
11.) Triple pencilled back, hen	28.) Silkie, no webbing in feather
12.) Laced	29.) Fine pencilling as in black marks of black-red and duckwing Game
13.) Faulty laced, i.e. horseshoed	30.) Barred Rock sickle
14.) Spangled, moon-shaped	31.) Buff laced
15.) Speckled, irregular-shaped white tick shows three colours on feather	32.) Wing marking on flight feather
16.) Shoulder feather in spangled varieties	33.) Laced sickle
17.) Laced crest, Polish pullet	34.) Saddle hackle mackerel marked as in Campine cockerel
18.) Crest, Polish hen	

c.) ANATOMY AND TYPES OF FOWL FEATHERS

