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978-0-521-19030-5 - The Correspondence of Charles Darwin, Volume 17 - 1869

Edited by Frederick Burkhardt

Excerpt

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THE CORRESPONDENCE OF CHARLES DARWIN
1869

From James Paget [1869]¹

I enclose a note from Lord Fitzwilliam about his horse with zebra-marks.² The case seems as striking as I believed.

Incomplete

Paget ed. 1901, p. 408

¹ The year is given in the printed source.

² The note from William Wentworth Fitzwilliam has not been found. CD had discussed stripes in horses in *Variation* 1: 61–4 and 2: 41.

From William Erasmus Darwin [January 1869]¹

N. Staffordshire— ²	48	.	15	
Gr. Northern ³	62	.	2	.
Great Eastern ⁴	87	.	12	.
Midland ⁵	8	.	16	.
Monmouth ⁶	54	.	9	.
Shrewsbury	11	.	14	.
Street mortgage	}			
Castle Morton tithes ⁷	19	.	3	.
City Bonds	34	.	14	.
Penarth Harbour ⁸	}			
to 31 Dec 1866	213	.	1	.
	7/10)	540	.
			8	.
			378	.
			4	.
Business Bonds			17	.
			£383	.
			3	.
			6	.

PS. I invested the £160 you did not think should be divided in Russian Gov. Bonds.—

Your affect son | W. E. Darwin

Incomplete

DAR 262.11: 6 (EH 88206193)

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January 1869

CD ANNOTATION

1.1 N. . . . 3—6 1.15] 'Jan. 1869' *ink*¹ The date is established by CD's annotation.² North Staffordshire Railway Company.³ Great Northern Railway Company.⁴ Great Eastern Railway Company.⁵ Midland Railway Company.⁶ Monmouth Canal and Railway Company.⁷ CD's father, Robert Waring Darwin, had inherited a share of Castle Morton tithes from Josiah Wedgwood I (DAR 227.9: 52), and this share or some part of it had evidently been bequeathed to CD.⁸ Penarth Harbour, Dock & Railway Company.From Vladimir Onofrievich Kovalevsky [January–March 1869]¹

My dear Sir

I did not answer your first letter immediately, and yesterday I received your second letter with questions concerning the Edition of your "Origin"² The publisher is not living here but at Moscow, I write to him to day and shall directly after receiving his answer send it to you. There are two russian editions of the "Origin", no remark is made to show from which Engl-edition the translation was made but I think it is from the Second Engl. edition; the second Russ. edition is merely a reprint from the first without any corrections or additions.³ At all events if there is no hope of a new edition appearing in a short time I will with your permission translate all the additions of the Fifth Engl. edition of the "Origin" and print them aparte as a supplement.—⁴

I am very astonished that Messr. Petter & Cassel have complained to you of my not fulfilling an engagement towards them⁵—but as there never was an engagement I dont well understand what they are complaining for,—the matter is simply thus: One of my partners asked me to go, during my visit in England, at Messr Cassel and ask them if "in case there will be a Russian edition of an illustrated Bible they will sell coppercasts of their great illustrated Bible",—he gave me full power to treat about the price;—M^{rs} Cassel consented to sell coppercasts at 6d per sq. inch.— After my returning in Russia I knew that all endeavours of my partner to have a permission for printing an illustrated Bible were in vain, all the holy & Scriptural books being considered as litterary property of the Chief Church establishment (Synode)—and in this sense I wrote to M^{rs} Cassel, saying that our Government did not allow to print holy books to private persons and therefore there could be no russian Edition of the Illust. Bible, thanking them for their readiness to furnish *casts* I could make no use of them.— Not one single inch of casts was commanded, and not one made for me, so that I consider M^{rs} Cassel pretension as wholly unfounded, but I thank you very much you wrote me about it.

My brother is now in the University of Casan, he will be very pleased with the good opinion you formed on account of his *Ascidiae*—⁶ The year beeing at Triest

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he made the full development of the “*Pyrosoma*” and came to entirely different conclusions with Mr Huxley, who wrote his memoir I think only studying preserved specimens.—⁷

Yours very truly | V. Kovalevsky

As soon as I receive an answer from Moscow, I shall communicate it to you.—

DAR 169: 54

¹ The date range is established by the relationship between this letter and the letter from V. O. Kovalevsky, 13 September 1869, and by the dates of CD’s preparation of the fifth edition of *Origin* (see ‘Journal’ (Appendix II)).

² CD’s two letters to Kovalevsky have not been found.

³ The Russian editions of *Origin* (Rachinskii trans. 1864 and Rachinskii trans. 1865) were published by the firm A. I. Glazunov.

⁴ *Origin* 5th ed. was published in 1869; Kovalevsky’s proposed supplement was not printed.

⁵ The reference is to the publishing firm, Cassell, Petter, & Galpin. No letter from the firm to CD registering a complaint about Kovalevsky has been found, but see *Correspondence* vol. 16, letter to Cassell, Petter & Galpin, [August–December 1868].

⁶ Alexander Onufrievich Kovalevsky was a professor at Kazan from 1868 to 1869 (*DSB*). CD had received a copy of ‘Entwicklungsgeschichte der einfachen Ascidien’ (Developmental history of simple ascidians; A. O. Kovalevsky 1866) in 1867 (see *Correspondence* vol. 15, letter from V. O. Kovalevsky 15 March 1867 and n. 6). CD’s heavily annotated copy of the paper is in the Darwin Pamphlet Collection–CUL. CD referred to Kovalevsky’s discovery of the relation between larval ascidians and vertebrates in *Descent* 1: 205.

⁷ *Pyrosoma* is a genus of colonial pelagic tunicates. Kovalevsky refers to Thomas Henry Huxley and his paper ‘On the anatomy and development of *Pyrosoma*’ (T. H. Huxley 1859). When A. O. Kovalevsky published his observations on development of *Pyrosoma* in 1875 (A. O. Kovalevsky 1875), he referred favourably to Huxley’s work.

From George Cupples 4 January 1869

The Cottage | Guard Bridge | Fifeshire. N.B.

Jan^y 4th 1869.

Dear Mr Darwin,

(If I may be permitted so to say,)

I seize on any pretext in order to have an opportunity of wishing you the best wishes of the season, with health improved from that reported in your last kind communication to me. I trust the seaside change did good, so as to refresh you for further work in the great cause.¹

My said pretext is merely this—that I have lately got a fine *Pyrenean* dog, and find there is an singular peculiarity in the breed (the breed being an old one, the main foundation of others better-known) --viz. that they have *six* well-developed toes on the hind-foot, and I understand this is always the case when they are pure. In this country, when there are *five*, I think (as in “*collies*”,) the dew-claw is considered an excrescence—and a dog of high-breed, as in deerhounds, is bound to have only *four* hinder-toes.²

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January 1869

I do not know that this is worth mentioning to you—but you will perhaps pardon the officiousness as before, on the ground of the deferential homage meant to be expressed. And it may stand for what it is worth.

With sincere regards | I am | Dear Sir, ever truly yours | George Cupples

Charles Darwin, Esq.

F.R.S. &c. &c. &c.

P.S. I have been and am receiving some interesting notes on *in-breeding* from Mr Wright (who wrote to you some time ago.)³ I do not know if he made any such statements to you—but he has had large experience—and if ever there is anything of the sort you might want, I could get it for you.

G.C.

DAR 161: 287

¹ CD had been at Freshwater on the Isle of Wight from 17 July until 20 August 1868 (see *Correspondence* vol. 16, Appendix II).

² In *Variation 2*: 317–18, CD noted the development of the rudimentary fifth toe in some large breeds of dogs.

³ John Wright had written to CD on 11 June 1868, sending information on female preference in mating and proportional numbers of sexes for horses and dogs (*Correspondence* vol. 16). He later sent information on the size of male and female deer-hounds (see *Correspondence* vol. 16, letter from George Cupples, 13 July 1868).

From James Orton 4 January 1869

Rochester, New York, U.S.

Jan. 4. 1869.

Charles Darwin, Esq

Dear Sir—

I take the liberty to make a request.

I have lately returned from a Scientific Expedition, under the auspices of the Smithsonian Institution, across equatorial America, via Quito, the Napo and the Amazons.¹ My party made collections in every department of Natural History, to which I added a continuous series of barometrical and other physical observations across the continent, an account of which was published in Silliman's *Journal* for last September.² I made a special study of the geology of the Ecuadorian volcanoes and the Amazonian valley. Of fossils, I found at Paita on the coast three forms additional to those described by D'Orbigny in your 'Observations',—*Cinthisium laeviuscula*, *Ostrea gallus* and a new sp. of *Ampullina*.³ In the high valley of Quito near Rio-bamba, I discovered a vast deposit of mammalian bones, chiefly of the mastodon, horse, tapir and llamas.⁴

In the valley of the Amazons at Pebas, 2200 miles above Pará, I discovered a bed of fossil shells in the peculiar clay formation which overspreads the whole valley. Those

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determined are *Neritina pupa* (a familiar West Indian sp.), new sp. of *Turbonilla*, *Mesalia* and *Tellina*, and representatives of a new genus related to *Isocardia*.⁵ You will recollect that Bates, Wallace and Agassiz found no fossils in the Valley, and the glacial theory of the last rests somewhat on that “negative evidence”.⁶ You may be interested also, in the fact that on a little lake on the slope of Antisana, 13,300 ft. above the Pacific, I found a grebe-like bird with undeveloped wings and scarcely able to walk, but at home on the water.⁷ Associated with it were Penguins (in appearance): they were so shy we failed to secure one.

I will also state that I met a peccari, a “cock of the rock” and fine reptilian sp. common to both sides of the Andes,—Esmeraldas and Napo.⁸

The collections are in the hands of eminent naturalists, and will be reported on at an early day.⁹ I am myself preparing, and have nearly ready for the press, a Narrative of the Expedition, modeled after your charming Voyage of the *Beagle*,¹⁰ weaving in the most important scientific results.

And now, my dear Sir, this is the burden of this letter;—I desire the high honor and privilege of dedicating this work on “The Andes and the Amazons” to one whose name is so pleasantly associated with our southern continent.¹¹

With the very highest respect I am, dear Sir, | Your obedient Servant | James Orton.

DAR 173: 37

CD ANNOTATION

3.1 In the . . . valley. 3.2] *scored pencil*

¹ Orton led an expedition to the Andes from 1867 to 1868; the expedition was sponsored by Williams College, Massachusetts, and the Smithsonian Institution, Washington DC (Elliott 1979). Quito, the capital city of Ecuador, is in Pichincha province in the north central part of the country. The Napo river flows through north-eastern Ecuador and Peru into the upper Amazon river.

² Orton refers to his paper ‘Physical observations on the Andes and the Amazons’ (Orton 1868). The *American Journal of Science and Arts* was popularly known as ‘Silliman’s Journal’ after its founder, Benjamin Silliman.

³ In *South America*, p. 130, CD referred to fossil gastropods from Paita (a province in north-western Peru) that had been described by Alcide Charles Victor Dessalines d’Orbigny. In Orton 1868, p. 116 n., Orton mentions *Cerithium laeviuscula*, *Ostrea gallus*, and *Ampullina ortonii*.

⁴ Riobamba is a city in Chimborazo province in central Ecuador. The deposit of bones is mentioned in Orton 1870, p. 154.

⁵ Pebas is a town in north-eastern Peru on the banks of the upper Amazon; Pará is a region (now state) in northern Brazil. The species *Neritina pupa*, *Turbonilla minuscula*, *Mesalia ortonii*, *Tellina amazonensis*, as well as two others are mentioned in Orton 1870, p. 283. The passage is scored in CD’s copy (see n. 11, below).

⁶ Orton refers to Henry Walter Bates, Alfred Russel Wallace, and Louis Agassiz. In Orton 1870, p. 282 n., Orton refers to *A Journey in Brazil* for Agassiz’s view that the sandstone deposits in the area had resulted from glacial drift and showed no sign of marine origin (see J. L. R. Agassiz and Agassiz 1868, pp. 250, 411, and 424).

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- ⁷ Antisana is a volcano in north central Ecuador near Quito. The grebe was later identified as *Podiceps occipitalis* (the silvery grebe; see Orton 1870, p. 146). CD had collected specimens of this bird (identified as *P. kalipareus* in *Zoology* pt. 3, p. 136) during the *Beagle* voyage.
- ⁸ Esmeraldas and Napo are provinces in northern Ecuador on the western and eastern sides respectively of the Andes.
- ⁹ For a list of the naturalists who identified and catalogued the specimens collected, see Orton 1870, pp. xii–xiii.
- ⁰ *Journal of researches*.
- ¹ Orton refers to *The Andes and the Amazon* (Orton 1870). The dedication reads, “To Charles Darwin, M.A., F.R.S., F.L.S., F.G.S., whose profound researches have thrown so much light upon every department of science, and whose charming “Voyage of the Beagle” has so pleasantly associated his name with our southern continent, these sketches of the Andes and the Amazon are, by permission most respectfully dedicated.” CD’s annotated copy is in the Darwin Library–CUL (see *Marginalia* 1: 644–5).

To Julius Victor Carus 5 January 1869

Down. | Bromley. | Kent. S.E.
Jan 5. 1869.

My dear Sir

I am going to beg a favour of you which I shall be very much obliged if you will grant.

The females of the Merino breed of sheep do not possess horns, & I am particularly anxious to learn at what age the horns are developed in the young rams, in comparison with other breeds in which both sexes have horns. I am very anxious to know whether the horns in the young Merino rams appear *earlier* or *later*, or grow *quicker* or *slower* than in other breeds of sheep in which both sexes are horned in the same district. Merinos appear to be extinct in England, but as Saxony is their head quarters perhaps you c^d communicate with some agriculturist, & procure for me trustworthy information, & this w^d be a very great kindness.¹

It caused me very great regret that owing to my absence from home I did not have the pleasure of making your acquaintance when you were in England.²

My dear Sir | yours very sincerely | Ch. Darwin

P.S. Do you know how your translation of my last book has sold?³

LS(A)

Staatsbibliothek zu Berlin – Preußischer Kulturbesitz, Slg. Darmstaedter Lc 1859 Darwin, Charles, Bl. 37/38

¹ In the nineteenth century Saxony was a centre for the breeding of merino sheep; the breed had been popular in England earlier in the century but had declined dramatically (see Ponting 1980, pp. 16–21, 23–4).

² Carus had been in England for the meeting of the British Association for the Advancement of Science at Norwich in August 1868, but CD was staying at Freshwater on the Isle of Wight from 17 July until 20 August 1868 (see *Correspondence* vol. 16, letter to J. V. Carus, 16 August [1868], and Appendix II).

³ CD refers to the German translation of *Variation* (Carus trans. 1868).

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January 1869

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To Sven Nilsson 5 January 1869

Down. | Bromley. | Kent. S.E.
Jan 5 1869

Dear & Honoured Sir

I thank you sincerely for your great kindness in having taken so much trouble to oblige me.

The information which you have sent is exactly what I wanted, & will be of the greatest value to me.¹

I am very proud to be able to add your photograph to my collection of eminent naturalists.²

With my best thanks & the most sincere respect | I remain my dear Sir | yours truly obliged | Charles Darwin

LS

University Library of Lund

¹ In his letter of 31 December 1868 (*Correspondence* vol. 16), Nilsson had sent CD information on the age at which reindeer acquired antlers and on the possession of antlers by both sexes. In *Descent* 1: 288, CD cited Nilsson for the information.

² Nilsson had enclosed his photograph with his letter of 31 December 1868, but it has not been found in the Darwin Archive–CUL.

To George Cupples [6–9? January 1869]¹

For example, and before I in the least knew what the result would be, I fixed on this as a crucial instance,—the reindeer *alone* (of *cervidae*) has horns in both sexes, therefore, according to my rule, their horns should be developed very early in life;² and I now hear from Sweden that these appear within two or three weeks after birth:³ whilst with all other deer, in which the horns are confined to the male, these do not, as far I have hitherto ascertained, appear till nearly a year after birth. So it is with the horns of antelopes. Now you will see that if a large part of the variation in stature occurs late in life among male deer-hounds, this variation will (on such a principle) tend to be transmitted to the males alone, and will not affect the females as any other ordinary variation would do.⁴

Incomplete

Cupples 1894, p. 165

¹ The date is conjectured from the relationship between this letter and the letters from George Cupples, 4 January 1869, 11 January 1869, and 21 January 1869, and the letter to Sven Nilsson, 5 January 1869. The responses contained in Cupples's letter of 21 January 1869 indicate that he had passed on CD's query about the first appearance of horns in the sexes of different species of deer.

² The reindeer is *Rangifer tarandus* (family Cervidae). For CD's theory of the emergence of characteristics at different developmental stages, see *Descent* 2: 244.

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³ CD had received the information from Sven Nilsson (see letter to Sven Nilsson, 5 January 1869 and n. 1).

⁴ In *Descent* 2: 261–2, CD cited Cupples for information on the development of deer-hounds.

From George Maw 9 January 1869

*Benthall Hall, | n^o. Broseley.*Jany 9th. 69

Dear Sir

I am looking forward to visiting Gibraltar. Tangiers & Tetuan & if I find it tolerably safe shall try & get as far south as Mount Anna (20 miles S of Tetuan & 7219 feet high) for the purpose of collecting plants & examining the geology. I also hope to visit the district N of Malaga.¹

I write this to say that if there is anything in the parts I am about to visit about which I can collect information that will be of use to you (as to local breeds of domesticated animals &c &c &c.) I shall be most happy to place myself at your service if you will name any points on which you require special observations (or specimens collected) I think I shall sail from Liverpool on the 3rd. of Feby & be absent Five or Six weeks.

I have taken the liberty of forwarding for the favor of y^r acceptance a copy of a paper I have recently written on Ferruginous variegation.²

I am d^r Sir | yrs very truly | Geo Maw

C Darwin Esq^{re}

We have here a Tortoiseshell cat exhibiting rather curious characters Her fur is almost as long as that of the long haired Persian or French, but there is no long-haired cat in the neighbourhood the mother was a Tabby I think & all the other kittens of the same litter & succeeding litters were of the ordinary kind. If you would like to see her I shall be very happy to bring her up with me the next time I am in Town & can also ascertain all particulars as to her pedigree

DAR 171: 102

¹ Tangiers (also spelled Tanger) and Tetuan (or Tétouan) are cities in northern Morocco. Málaga is a port city in southern Spain.

² Maw refers to his paper 'On the disposition of iron in variegated strata' (Maw 1868). CD's copy has not been found.

From George Cupples 11 January 1869

The Cottage | Guard Bridge | Fifeshire. N.B.

Jan^y. 11/69.

Dear Mr Darwin,

Thanks for your kind letter.¹ I have no doubt I can get exact information on the

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point you refer to—and by this post write on *fallow-deer* to *Mr Wright* (whom I shall request to communicate direct with you.)² I also write to Mr Macneil of Colonsay as to red-deer and roe-deer—and about the same to my friend the head-forester of the great Breadalbane forest of Black Mount, who has been more than 40 years among deer.³ I shall write to you with their replies as to all three species.

My brochure on deerhounds, I hope, may get out this year—but has been kept back by other literary matters.⁴

Yours very truly | George Cupples

Charles Darwin, Esq^r.

DAR 161: 288

¹ Cupples probably refers to the letter to George Cupples, [6–9th January 1869].

² Cupples refers to John Wright. See letter from George Cupples, 4 January 1869 and n. 3.

³ Cupples refers to Archibald McNeill and Peter Robertson. McNeill had sent information to Cupples on the size of male and female deer-hounds and Robertson had given information on the proportion of the sexes in the breed (see *Correspondence* vol. 16, letter from George Cupples, 13 July 1868).

⁴ Cupples's only work on deer-hounds (Cupples 1894) was published posthumously.

From Fritz Müller 12 January 1869

Itajahy, S^a Catharina, Brazil
January 12. 1869.

My dear Sir

As the *Eschscholzia*-seed, which I formerly sent you, has not germinated, I send you some fresh seeds from my plants, which this summer again have proved self-impotent.¹

The plants raised from your seeds have suffered so much from the extraordinary heat and the heavy thunderstorm, which in November followed after an extremely rainy winter and spring, that I could make but very few experiments.² Only four plants escaped and three of these flowered tolerably well. My own plants, which were introduced here about six years ago, suffered but little from the weather and none has perished.—

Here are the experiments, I tried on the *Eschscholzia* raised from your seeds:

First plant:

- | | | |
|-----|-------------------|---|
| 1.) | <i>Octbr. 23.</i> | A flower fertilized with its own pollen. |
| | <i>Novbr. 15.</i> | Germen, 12 ^{mm} long, begins to wither. |
| 2.) | <i>Novbr. 3.</i> | Fertilized two flowers, one (<i>a</i>) with pollen from a distinct flower of the plant, the other (<i>b</i>) with pollen from a distinct plant. |
| | <i>Novbr. 5.</i> | Stigmas of the flower (<i>a</i>) fresh, those of (<i>b</i>) withering |
| | <i>Novbr. 9</i> | Germen of (<i>a</i>) 12 ^{mm} , of (<i>b</i>) 26 ^{mm} long |
| | <i>Novbr. 11</i> | 19 ^{mm} , 47 ^{mm} — |
| | <i>Novbr. 15</i> | 30 ^{mm} , 56 ^{mm} —. |

- Novbr. 30.* Fruits ripe; the pod (a) 32^{mm} long, with 10 seeds, 4 of which are very small; the pod (b) 58^{mm} long, with 59 good seeds.
- 3) *Novbr. 9* Repeated the same experiment.
Novbr. 10 Stigmas of (a) fresh, those of (b) withering.
Novbr. 15 Germen of (a) 11^{mm}, that of (b) 18^{mm} long
Novbr. 18. ————— 12^{mm}, ——— 49^{mm} long;
 The pod (a) fell off unripe; the pod (b), 53^{mm} long, yielded 45 seeds (Decbr. 4.)
- Second plant.*
- 1.) *Novbr. 1.* Fertilized two flowers with each other's pollen.
Novbr. 2. Stigmas withering, having remained in a horizontal position in one of the flowers, while the had become [exerted] in the other.
Novbr. 9. Germens 16^{mm} and 46^{mm} long
Novbr. 11. ——— 17^{mm} — 50^{mm} —
Novbr. 15. The smaller germen withered, the larger 53^{mm} long
Novbr. 30. Pod ripe, 56^{mm} long, with 24 apparently good seeds (a remarkably small number for so large a pod.)
- 2.) *Novbr. 19,* midday. Fertilized one flower (a) with pollen from a distinct flower of the plant; a second flower (b) with pollen from a distinct plant; a third flower (c) simply protected from insects.
Novbr. 22. Germens of (a) and (c) 10^{mm}, that of (b) 16^{mm} long
Novbr. 27. Germen of (a) 40^{mm}, of (b) 64^{mm}, of (c) 32^{mm} long. The extremity of the germen (c) putrifying.
Novbr. 30. Germen of (a) 40^{mm}, that of (b) lost by an accident, that of (c) withered.
Decbr. 13. The pod (b) ripe, 45^{mm} long, with 9 seeds.
- 3.) *Novbr. 25.* Fertilized two flowers (a, b) with pollen from distinct flowers of the plants, and one flower (c) with pollen from a distinct plant.
Novbr. 30. Germen of (a) not increased, (b) 10^{mm}, (c) 27^{mm} long.
Decbr. 6. Germen (a) and (b) withered; (c) 40^{mm} long.
Decbr. 17. Germen (c) putrified.

A third plant, all the germens of which withered or putrified, showed the same difference in the growth of the germens fertilized with the same plants and a distinct plant's pollen: The experiments ought to be repeated on a larger scale and on *healthy* plants.

I have lately met with a most curious grass, the *Streptocheta* Nees.³ The rhachis of the simple ear is prolonged beyond the last floret and its extremity is club-shaped and densely covered by strangely curled short, stiff hairs. Each floret has an extremely long barb, which adheres to the club-shaped extremity of the rhachis and then contracts spirally in reversed directions, just as a tendril would do after having caught a support. This is effected long before the ear begins to peep out from