

Cambridge University Press
978-1-107-03844-8 - The Correspondence of Charles Darwin: Volume 20 1872
Editors Frederick Burkhardt, James A. Secord and Janet Browne, Samantha Evans,
Shelley Innes, Francis Neary, Alison M. Pearn, Anne Secord and Paul White
Excerpt
[More information](#)

THE CORRESPONDENCE OF CHARLES DARWIN
1872

From James Paget [1872]¹

I am at work on the nervous mimicry of organic disease: I have some hope that, during my work, I may fall on some facts which may be of interest to you, and you may be sure that I shall send them to you.²

Incomplete
S. Paget ed. 1901, p. 408

¹ The year is established by the printed source, which assigns this extract from a letter to 1872.
² Paget’s lectures on the nervous mimicry of organic disease were published in the *Lancet* in 1873 (J. Paget 1873).

From ? [1872–4]¹

The Descent of Man 1st. edⁿ.
Vol 1.

Page.

- 4. footnote. “D^r Barrago Francesco” for *D^r. Francesco Barrago*—the Italians being in the habit of putting the family name first. See for example the Visiting Card inclosed—
- 98. line 20. “appropriate” employed for “correct”.
- 158. lines 7–8 ... man ... *would have been* but little liable to *have had* his bodily structure modified ... —for. “would have been but little liable to *have* his bodily &c.”²
- 160. line 23. “Undoubtedly it *would have been* interesting to *have traced*” for “to trace”—³
- 160 line 27. “neither my ability nor knowledge *permit* the attempt” for “*permits*”

Page

- 160. line 32 ... “as soon as the progenitors of man became social ... the advancement of the intellectual faculties *will have been aided*” ... for “would have been”⁴

- 165/. line 7— “We may therefore conclude that primaeval man at a very remote period *would have been* influenced” ... for “*was* influenced” ...
229. line 3. “ranked species” *as* omitted—
228. line 22... “they must decide what forms to rank as species”. . . for “what forms they will rank as species” . . .
186. line 5. } we have *every* reason to believe. . . .⁵
187. line 26 } ? we have reason to believe. . . .⁶
406. line 18. “*D^r* Wallace”
line 35 “*M^r* Wallace”.⁷
413. line 9. “*Diadema anomala*” for *anomalum*.⁸
- Vol 2^d*
9. line 29. “*anal* fin” for “*caudal* fin” as shewn in the engraving.
- 34 line 25. “we come to the *climax* of difference”. for *acme*. (climax being the ladder by which the acme is approached)—
43. line 15. “The males of many birds are larger than the females and this (increase of size) no doubt is an advantage to them in their battles with their rivals” ...
Would increase of size in the *males* compared with *females* be of advantage to the *males* as between themselves?⁹
45. lines 10 & 11. “the love dance and love song of the Black cock *is* called”
...¹⁰

DAR 88: 151–2

CD ANNOTATIONS

- 4.1 4. ... inclosed— 4.3] *crossed ink*
5.1 98. ... “correct”.] *crossed blue crayon*
6.1 158. ... believe ... 14.1] *crossed ink*
16.1 406. ... *anomalum*. 17.1] *crossed red crayon*
18.1 9. ... engraving.] *crossed ink*
18.1 9. ... approached)— 19.2] *crossed ink*
20.2 (increase of size)] *square brackets in ms*
20.2 is an advantage ... rivals” ... 20.3] ‘result’ *pencil, right margin*

¹ The date range is established by the fact that these corrections were made in the second edition of *Descent*, published in 1874, but not in the last printing of the first edition, which appeared in December 1871 (Freeman 1977). All corrections were made essentially as suggested by the letter writer unless otherwise noted.

² In *Descent* 2d ed., p. 127, CD changed this text to read, ‘would have been but little liable to bodily modifications’.

³ In *Descent* 2d ed., p. 128, CD changed this text to read, ‘Undoubtedly it would be interesting to trace’.

⁴ In *Descent* 2d ed., p. 129, CD changed this text to read, ‘the principle of imitation, and reason, and experience would have increased, and much modified the intellectual powers in a way, of which we see only traces in the lower animals’.

⁵ In *Descent* 2d ed., p. 146, CD omitted ‘every’ from this phrase.
⁶ In *Descent* 2d ed., p. 148, CD retained the text, ‘we have every reason to believe’.
⁷ This chapter of *Descent* was extensively altered in the second edition; however, Dr Wallace and Mr Wallace were correctly titled in both editions (they were Alexander Wallace, MD, and Alfred Russel Wallace).
⁸ *Diadema anomala* (now *Hypolimnas anomala*, the Malayan eggfly) was not mentioned in *Descent* 2d ed.
⁹ In *Descent* 2d ed., p. 362, CD changed this text to read, ‘The males of many birds are larger than the females, and this no doubt is the result of the advantage gained by the larger and stronger males over their rivals during many generations.’
¹⁰ In *Descent* 2d ed., p. 363, CD changed this text to read, ‘the love-dances and love-songs of the Black-cock are called’.

From W. E. Darwin [1 January 1872]¹ Monday

My dear Father,
I went to Stonehenge yesterday. about $4\frac{3}{4}$ m. from Salisbury I saw an old ridged & furrowed field (which shepherd at Stonehenge said had been so out of memory)²
The hill sloped perhaps 7° at top to 10° or $12^{\circ}\frac{3}{4}$ way down & then gradually lessened its slope to the valley.
The ridges were straight down the slope & faint and seemed to terminate in a common transverse furrow at the bottom of the steepest pitch, & therefore some little way from base of slope.
It was so gastly cold I could not stay long, meaning to go again, unless anything else turned up.
I unfortunately did not examine carefully enough transverse furrow
Beginning at top of slope

	depth of furrow—	$5\frac{1}{8}$	inch	deep
70	strides down—	4	"	deep
60	" lower	$5\frac{1}{4}$		"
10	" "	$4\frac{1}{4}$		"
10	" "	5		"

I do know what the interval is between these two measurements.

18 strides from transverse furrow where the other ends	}	furrow	was	$3\frac{1}{2}$	deep
8 strides nearer transverse furrow		"	"	$3\frac{1}{2}$	"
4 strides nearer transverse furrow (i.e. 4 strides from it)	}	"	"	$3\frac{1}{4}$	

This is quite incomplete, and should be measured all again; it wants 2 or 3 persons to do it quickly.

at Stonehenge itself little was to be made out. the main outer range of stones with flat ones on the top were all of same level and therefore certainly had not sunk.

A pair of large ones with top one fell in 1797; these have made a great indentation in the ground, and have squeezed some of their corners into the ground, but they are undermined by rats or rabbits and are of such gigantic size that nothing could be told as to the work of worms.

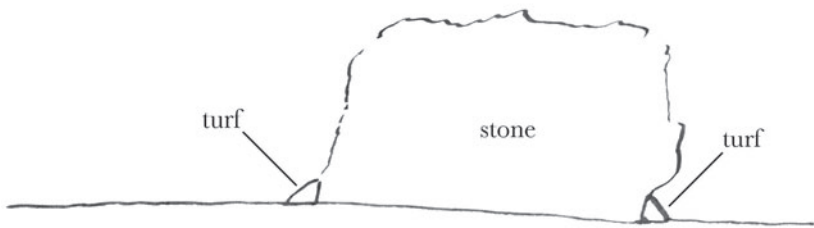
In several places the outer stones have fallen outwards and broken in two, and these great blocks are all sunk in the grass at various angles.

I examined one which may have lain for many centuries as the fracture between the two halves was quite weather worn. By means of my trowel I found that this was sunk at the spot I examined 10 inches into the mould (it was evidently worm mould v. full of worms); the shepherd said the earth had probably been disturbed there, but I could see no signs of it and the turf was smooth all round the block. at almost 8 yards from the point outwards and falling about 10 inches to a foot, I found the depth of the mould above the mixed flint and chalk to be $5\frac{1}{2}$ inches and at a depth of about 4 inches I found a bit of tobacco pipe.

I should think therefore the blocks had long sunk as deep as they could, tho' by driving my skewer (of 6 inches) down down at bottom of my trowel hole (of 12 inches deep) I did not find the bottom.³

I found I had reached bottom of stone on that side by being able to drive my skewer underneath it at right angles to my trowel hole. The two halves of the stone I think have sunk to the same amount into the soil as they are about the same level above it namely 2 ft; a corresponding stone standing up is about 2ft 10 inches in depth which agrees with this one, but they are not very regular, and the block may easily have sunk on certain points as far as the rubble so as to prevent this block sinking any more on the side I examined.

round many of the buried (not round the upright) stones the angle between the turf & stone was filled with turf to the height of 3 to 4 inches



this turf was pretty evidently caused by worms as the castings were coming out between the stone & the upper edge of the turf, and in some cases in the little slope itself. this turf band was not all round the blocks, and as far as I could decide anything, there was no band of turf where the stone went sheer (perpendicular) down. the irregularities in the stone were mostly filled in. As this patch pointed out by the

January 1872

5

shepherd as having been untouched during memory of man I send you particulars on another sheet.

I go tomorrow to examine a field which I hear on first rate authority was corn about 50 years ago & has not been touched since.

I also hear of a similar field in Beaulieu Park which I hope to go to soon as well as the Abbey armed with an introduction.⁴

Your affect Son | WED

DAR 162: 105

CD ANNOTATIONS

- 3.1 faint] *underl red crayon*
3.2 furrow] 'or sort of ditch' *added after pencil*
5.1 furrow] ', or sort of ditch.—' *added after pencil*
6.1 Beginning ... slope] 'Not at bottom of slope.' *added pencil*
6.2 depth ... 5 " 6.6] '6 miles from Stonehenge' *added pencil*
9.1 at ... worms. 10.4] 'if built on chalk no sinking' *added pencil*
9.2 not sunk] 'or all sunk equally' *inserted pencil after 'sunk'*
11.1 In several ... angles. 11.2] *scored red crayon*; 'several' and 'stones' *underl red crayon*; 'this looks like subsidence' *inserted pencil after 'outwards'*
12.4 the shepherd ... pipe. 12.8] 'But why has more mould accumulated close to stone than at distance of 8 yards Did not block indent the mould?' *added pencil*
12.3 10 inches] *underl red crayon*
12.3 into the mould] 'mould' *underl red crayon*
12.4 full of worms] *underl red crayon*
12.6 8 yards] *underl red crayon*
12.7 5 $\frac{1}{2}$ inches] *underl red crayon*
12.8 tobacco pipe.] *underl red crayon*
13.1 I ... bottom 13.3] 'Is turf abruptly higher close to stones?' *added pencil*; 'of mould.?—' [*altered from 'of what? mould?—'*] *inserted after 'bottom'*
15.2 filled ... inches] *scored red crayon*
15. *diagram* turf ... turf] 'How [wide] is this little slope?' *below 'turf', left of diagram*; 'How big?' *above 'stone'*; 'Perhaps from falling, if so only at fallen [end]' *below 'stone'*; '— This seems very curious & perhaps explains my query on p. 4— I do not understand' *above 'turf', right of diagram*
15.3 this turf ... itself. 15.5] *scored red crayon*
15.7 the irregularities ... filled in.] *scored and underl pencil*
16.1 I go ... introduction. 17.2] *crossed pencil*
Bottom of second page: 'Jan 1st 1872' *pencil*
Top of letter: 'William thinks of no use | Jan 1. 1872' *pencil*

¹ The date is established by CD's annotation.
² Stonehenge is a group of standing stones on Salisbury Plain in Wiltshire. William's observations of the field are given in *Earthworms*, p. 296.
³ CD gave William's observations at Stonehenge in *Earthworms*, pp. 154–6.
⁴ William examined the buried pavement at Beaulieu Abbey in Hampshire on 5 January 1872; CD himself visited in 1877 (*Earthworms*, pp. 193–7).

From J. D. Hooker 1 January 1872

Royal Gardens Kew
Jany 1/72.

Dear Darwin

I have a confidential communication from Mr Gladstone's P.S. to the effect that a

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[More information](#)

6

January 1872

plan is under the consideration of Govt., by which my “position as regards the First Comms of Works would be materially altered”—¹ So I hope I see a way out of the wood.—

Huxley writes, no better for his Brighton trip & evidently much out of sorts. I am quite sure that this miscellaneous work is very prejudicial to him, mentally & bodily—and I do wish he could be put into some good post that would allow the full exercise of his Scientific & administrative abilities, without taxing them too much.² I fancy that you & I are the only men for whose opinion he cares much.

The organization of the new Nat. Hist. Museum would be just the thing for him. They should give him £1500 a year for 5 years to do it.— I wonder if he would accept this:— he would not I feel sure take the permanent post of Director. I know of no one else competent for the task.³

They should have sent you 2 *Pleromas*— keep & flower that you have, & I will let you know when mine are coming into flower. I have 2 of them.⁴

Have you not plenty of Hazels in the coppice where you take your exercise?⁵ if so may I send a man to take a Score or two of strong suckers? I want to make some Hazel thickets here.

I go to Torquay tomorrow for two days.⁶

Many happy returns of the season to you & yours’— I hope Henrietta is better.⁷

Ever yours affec | J D Hooker

I have informed Sir H Holland of Mr West’s communication.⁸

DAR 103: 101–2

¹ William Ewart Gladstone’s secretary was Algernon Edward West. Hooker had been in dispute with the first commissioner of works, Acton Smee Ayrton, since before 1871, over the running of the Royal Botanic Gardens, Kew. On Hooker’s dispute with Ayrton, see *Nature*, 11 July 1872, pp. 211–16; L. Huxley ed. 1918, 2: 159–77; Macleod 1974; Port 1984; Drayton 2000, pp. 211–20; Endersby 2008, pp. 282–300; and *Correspondence* vol. 19. Hooker’s most recent letter to CD mentioning the subject is that of 22 December 1871 (*Correspondence* vol. 19).

² Thomas Henry Huxley’s health had failed at the end of 1871 and he had gone to Brighton for a short holiday (L. Huxley ed. 1900, 1: 365). On Huxley’s overworking at this period, see A. Desmond 1994–7, 2: 26–8; he broke down completely in early January 1872.

³ In 1870, a site at South Kensington was confirmed for the building of a new Natural History Museum to contain the natural history collections of the British Museum. Building work did not begin until 1873, and the museum opened in 1881. The first director was William Henry Flower. See Stearn 1981, pp. 3, 46, 67.

⁴ CD made a brief reference to his experiments on a *Pleroma* (‘unnamed species from Kew’) in *Cross and self fertilisation*, p. 364. *Pleroma* is a genus in the family Melastomataceae.

⁵ CD took his exercise in the sandwalk, or ‘thinking path’, through a wood planted near Down House in 1846 (see Atkins 1974, pp. 25–8).

⁶ Hooker’s mother, Maria Hooker, and sister, Elizabeth Evans-Lombe, lived at Torquay (Allan 1967, p. 224).

⁷ In her diary (DAR 242), Emma Darwin noted that Henrietta Emma Litchfield was ill on 2 and 21 December 1871.

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Excerpt

[More information](#)*January 1872*

7

⁸ Henry Holland had acted as an intermediary in Hooker's dispute with Ayrton in 1871 (see *Correspondence* vol. 19, letter from J. D. Hooker, 20 October 1871).

From J. J. Moulinié 1 January 1872

Geneva
January 1 1872

Dear Sir,

Excuse me for the long delay between my answer to your kind letter of the beginning of this month and my answer at the end, but the numerous occupations, private (corrections of the *Origin* & *Dessendance*) and official, have left me hardly any time to compare the new edition of *Origin*, of which I have received since the four first accompanying your letter, eleven others, in total 240 pages, to give you my opinion on the manner of introducing them in the printed translation.¹ The most important change between the 5th & 6th edition, is the fact that the VIIth chapter has an another object in the last, than in the VIIth of the preceding; and the VIIIth (*Instinct*) corresponds to the VIIth of the translation of the 5th Edition; the IXth to the VIIIth, I cannot tell more, not having above the beginning of the IXth chapter.² As all the chapters of the translation are printed with their titles and summary heads, they must remain so, but will not concord by their ciphers with those of the 6th, except in the six first; I suppose at least that this will have the result of establishing 15 chapters instead of 14 in the 6th English edition, the number of 14 subsisting in the translation. This will require a preface as clear as possible to attract the reader to the corrections, and great attention in the cases of citations, the difference of number of the English edition, with that of the French, must be given. All this difficulty will be, when all the elements of the supplemental part will be collected, to give them the predominance on the old text, the first by order, and in which no where references to the supplementary can being now inserted. I think a table placed before the Introduction, giving the pages of the text, and those corresponding to the same object in the supplement might be very useful to recall to his mind the moment where he is to recur to it, and give him the means of finding it immediately.³

The first volume of *Dessendance* will I hope soon be published, it is actually at the 22^d sheet on 30 total, calculated by what is done. The second will follow immediately.⁴

With my respectful compliments to M^{rs} Darwin, may the year on the first day of which this letter carries the date, be less unfortunate than the last,⁵ and I conclude by a Happy New Year for M^r Darwin and his family; and hoping this will find you in good health, I remain dear Sir, | your's most respectfully devoted | J. J. Moulinié

DAR 171: 277

¹ CD had written to Moulinié, sending four proof-sheets of the sixth edition of *Origin*, on 5 December 1871 (*Correspondence* vol. 19). Moulinié was translating *Descent* and *Origin* 6th ed. into French (Moulinié

trans. 1872 and 1873). Moulinié had almost finished translating *Origin* 5th ed. when CD wrote to him that a sixth edition was in preparation (*Correspondence* vol. 19, letter to J. J. Moulinié, 28 June [1871] and nn. 4 and 5, and letter from J. J. Moulinié, 7 July 1871).

² CD had inserted a new chapter 7 into *Origin* 6th ed. to counter the objections of St George Jackson Mivart and others to the theory of natural selection. In the French translation (Moulinié trans. 1873), this chapter was printed at the end of the book, before the glossary and index.

³ Moulinié trans. 1873, pp. 517–24, summarised additions to be made to the first half of the translation to bring it into accord with the sixth edition.

⁴ Moulinié refers to his translation of *Descent* (Moulinié trans. 1872).

⁵ Moulinié alludes to the Franco-Prussian War of 1870 and 1871, and its aftermath (see Wawro 2003).

To J. D. Hooker 2 January 1872

Down, | Beckenham, Kent.
Jan 2. 1872

My dear Hooker

I am heartily glad of yr news, & now I hope that you will be able to work with an undisturbed mind.¹ I feel yr news quite as a relief, & you must do so in a much greater degree.

There are a good many hazels in the sand walk & you are perfectly welcome to have them all; but what appear like suckers seem to me more like branches from old underground cut down stems, & I do not think they w^d be easily removed.² I fully believe you c^d buy 100s at a less cost than the journey of yr messenger to & fro; but as I said you are perfectly welcome to send if you think fit.

I saw Huxley when I was in town & thought he looked very unwell. I quite agree with what you say about his doing too much miscellaneous work.³ I have often preached to him & will do so again; but I believe he partly does this work for money for his family & then what can one say.

If your scheme could be organized of making him a sort of Director General for the transference of the British Museum & for other Scientific work, this w^d be splendid; but how can it possibly be effected?⁴

Yours affectionately | Ch. Darwin

LS
DAR 94: 216–17

¹ See letter from J. D. Hooker, 1 January 1872.

² See letter from J. D. Hooker, 1 January 1872 and n. 5.

³ CD refers to Thomas Henry Huxley. See letter from J. D. Hooker, 1 January 1872 and n. 2. CD was in London from 14 to 22 December 1871 (see *Correspondence* vol. 19, Appendix II).

⁴ See letter from J. D. Hooker, 1 January 1872 and n. 3.

To W. E. Darwin 3 January [1872]¹

Down
Jan 3^d.

My dear William

Your letter & facts are quite splendid.—² I cannot conceive how you could have observed so much without aid.—

January 1872 9

The depth of mould at different parts of slope & base is a most valuable observation.— The little step or slope round the great fallen stones very curious;— I suppose the worms work under the stones, & come up at nearest point, viz close outside.— There are many points which I want to discuss & get explained. Shall you be coming to Down within a month or so? We cannot reconcile the large & capital diagram with the 2^d page of your letter: I imagine they refer to different parts.³ Again I am curious to know whether in the middle part of slope in diagram, whether the inclination is greater, for the furrows for a space are decidedly deeper than above or below.— I have made pencil notes on your letter,⁴ so that I shall not forget what to

Incomplete⁵
Natural History Museum (Gen. Lib. MSS/DAR: 30)

¹ The year is established by the relationship between this letter and the letter from W. E. Darwin, [1 January 1872].
² See letter from W. E. Darwin, [1 January 1872].
³ The diagram has not been found in the Darwin Archive–CUL. CD’s notes for *Earthworms* are in DAR 63–5. The second page of the letter from W. E. Darwin, [1 January 1872], runs from ‘I unfortunately’ to ‘to do it quickly.’
⁴ See CD’s annotations to the letter from W. E. Darwin, [1 January 1872].
⁵ The bottom third of the third page of the letter has been excised.

From A. C. Ramsay 3 January 1872
London
3 Jan^y 1872

My dear Mr Darwin
There are 4 stones down the midle 16 inches square.
3 at the sides 18 in x 8, 1, 12 x 8 in
1, 17 x 2 in, 1, 18 x 14 in 2 24 x 14 in
besides the 2 sides & top & bottom of the paved space, each 7 ft 2 by 3 ft 2.
But perhaps the best mode of estimate is as follows. I measured all the lines of the junction of the stones with the walls that bound the pavement, & of the stones with each other. The result is 39 feet 2 inches of narrow interspaces through which worms could come to the surface taking the whole 7 ft 2 in by 3 ft 2 in into account.¹
I am sorry I have delayed a little & hope I am not too late for you. Daylight at this time of the year is rather scarce with me at home except on Sundays & Sir John Lubbocks holidays.²
Yours very sincerely | And^w C Ramsay

DAR 176: 18
¹ Ramsay describes a pavement running from his house to his garden; the pavement had subsided apparently as a result of the action of earthworms (see *Earthworms*, pp. 192–3, and *Correspondence* vol. 19, letter to A. C. Ramsay, 21 December [1871], and letter from A. C. Ramsay, 27 December 1871). Ramsay lived at 29 Upper Phillimore Place, Kensington (*Post Office London directory* 1871).

10

January 1872

² John Lubbock had drafted the Bank Holiday Bill, which was passed in 1871 (*ODNB*).

From St G. J. Mivart 4 January 1872

7, North Bank, | N.W.
Jan^{ry}. 4th 1872

My dear Sir

I herewith forward, by book post, a separate copy of my reply to Prof. Huxley's criticism on the "Genesis of Species"—¹ I had hoped to have been able to have sent you at the same time my reply to M^r Chauncey Wright but owing to an accident I must wait till April when I hope it will be out.²

Wishing you very sincerely a happy new year | I remain | My dear Sir | Yours very truly | S^t Geo Mivart

To | C. Darwin Esq

DAR 171: 197

¹ There are two copies of Mivart's reply to Thomas Henry Huxley, published in the January 1872 issue of *Contemporary Review* (Mivart 1872a), in the Darwin Pamphlet Collection-CUL; one is an offprint, and the other has been torn from a copy of the *Contemporary Review* and is lightly annotated. Mivart also refers to his book criticising CD's theory of natural selection, *On the genesis of species* (Mivart 1871a). Huxley's criticism of Mivart was also published in *Contemporary Review* (T. H. Huxley 1871a).
² Mivart published a reply to Chauncey Wright's review of *Genesis of species* (Wright 1871a, Mivart 1871a) in the April 1872 issue of *North American Review* (Mivart 1872b).

To J. J. Moulinié 4 January 1872

Down, | Beckenham, Kent.
Jan 4. 1872

My dear Sir

I am much obliged for your letter. I was not at all aware that the headings of the chapters had been printed off. Under these circumstances I w^d suggest that you sh^d print the new part of the new chapter VII as an appendix, & explain the circumstances.¹ You could also correct all the part that is not printed off in accordance with the new edition; & the corrections are not very numerous. I hope soon to send you some new sheets; but the printers have been unusually slow over this vol.

As far as I can judge the new part of Chapter VII w^d be worth publication in France.² I hope you will soon have more leisure. Mrs Darwin joins me in thanking you for your good wishes—

Believe me my dear Sir | yours sincerely | Ch. Darwin

LS
Bibliothèque de Genève, Ms. suppl. 66 fol. 26–7

¹ See letter from J. J. Moulinié, 1 January 1872 and nn. 2 and 3. Moulinié was translating *Origin* 6th ed. into French (Moulinié trans. 1873).