

Nov. 26

Dear Emily West.

My dear Greg.

I have to thank you for two letters. The latter with corrections, written asking for an American Report & before you received my letter, saying that it was useless to print your Review as a pamphlet, owing to impossibility of getting pamphlets known. - I am ^{very} glad to say that to August or next Atlantic article has been reprinted in number & by J. H. H. H. I have not yet seen it there. Yesterday I read ^{over} with care the third article; & it seems to me, as before, admirable. But I hesitate to say that I cannot honestly go as far as you do about Design. I am conscious that I am in an utterly helpless muddle. I cannot think that the world, as we see it, is the result of chance; & yet I cannot look at each separate thing as the result of Design. - To take a trivial example, you led me to infer (p. 414) that you believe "that variation has been led along certain beneficial lines." - I cannot believe this; & I think you would have to believe, that the tail of the Fan-tail was led to say in the number & direction of its feathers in order to gratify the caprice of a few men. Yet if the fan-tail had been a wild bird & had used its abnormal Tail for some special end, as to sail before the wind, unlike other birds, everyone would have said what beautiful & designed a disposition. Again I say I am, & shall ever remain, in a helpless muddle. - I thank you much for Bowen's 4th Review. The confusion with which he makes all animals to be destitute of reason is simply absurd. His monstrous at h. 103, that he should argue against the

with send you a copy; for chance to see
the paper; but send Reviewers
how rich you must be of it.

possibility of accumulative variation & actually leaves out entire selection!
~~He would be~~ The chance that an insect that - born, or imported
Pouter-pigeon should be produced by accumulative variation, without
man's selection, is as almost infinitely to nothing; as with
natural species without natural selection. How especially
in the Atlantic, you show that Geology & history agree
according to Bower's metaphysics; but he leaves out the
sublime in the 4th memoir. I have not much to
tell you about my Book. - I have just heard that
Dubois's Regard agrees with me. The sale of my Book
goes on well, & the multitude of Reviews has not stopped
the sale. Murray sold a few days ago at his sale
700 copies; & he has not half; so I must begin at
once a new ^{companion} edition. - Huxley has returned "very
fat & jolly". I am glad to say; but I have not seen him
& at least heard much less; except that he had "stayed
of glacial action on Labrador. - I have some in working
at Ipswich, he has not published this last season, as I am frightened
by results & must retreat. (By the way I have been
succeeding in consequence some part of your paper in Biology, & have
been so much pleased with the strong clear way you
put things), but you may rely on the truth of the facts
that the postaged weight of an immemorial atom,
placed with all care on one of glands, that
it weighed 1 ¹⁰⁰⁰ of one grain caused conspicuous movement.
I got the weight & weighing a length of fine hair & cutting
off atoms & measuring them with microscope.

Gray
This weight is 78 times less than ^{that with which} best balance with
them with; & yet you may rely on it, this
suffices to start the movement. Moreover it produces
such changes within the cells of the glandular hairs;
that an hour after weight had been put on,
I could distinguish which hair had carried the
fairly weight for all the other 100 or more ^{hairs} on the
leaf. — I suppose in summer you take walks
in the country: I see in your Flora, you say that

Apocynum androsaemifolium is common & another species
tells you from whether ^{the flower of} both species catch numbers of flies
for their proboscis, as the former does in England. But
whether been visit to flowers. I mean to get this
plant, if I can, & draw it; as a Bug I was surprised
at number of flies captured. I then make a memorandum
about this plant & the Spiranthes. —
My daughter is from very ill & I have now to
leave to work again very in hard (stiff)
as lightly as I can. — My dear Gray
Ever your most truly

C. Darwin
How you need Amster Juncus in the Back County;
what a remarkably interesting Book. —



Darwin, Charles. 1860. "Darwin, Charles Nov. 26, 1860." *Charles Darwin letters to Asa Gray*

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