

Sept 17th 72

Read First

Dear

(1)

My dear Gray. - I thank you sincerely for your
very long & interesting letter, political &
scientific, of Augst 27th & 29th ^{& Sept 2nd} received this
morning. - I agree with much of what you say
& I hope to God we English are willing
willing in doubt (1) whether we can conquer
the S. (2) whether we have many friends in
the South & (3) whether your noble men of
Independents are right in transferring your
own good feelings to the men of Washington.
Again I say I hope to God we are wrong
in doubting on these points. It is number (3)
which alone causes England not to be
enthusiastic with you. What it may be in
Lancashire I know not, but in S. England
cotton has nothing whatever to do with our
doubts. - If abolition does follow with

your victory, to which world will look
brighter in your eyes & in many eyes.
It would be a great gain even to stop
the spread of Slavery into the Territories:—
if this be possible without abolition, which
I sh^d have doubted. You ought not to
wonder so much at England's conduct, when you
remember that ^{the commencement of the war} how
many propositions were made to get things
back to the N^o State with the N^o
line of Latitude. — But enough of this:
all I can say in the Independent & the
adjuring States here the full sympathy
of every good man whom I see; & that
sympathy must be extended to whole
Federal States, if we could be
persuaded that your feelings were at all

cordant to them. — But enough of this. It is
not of your line, though I read very much of
hers & formerly with studied Rastland.
The letter ^{ended} was unfortunately written last
night: I sent ^{it} because I am getting late
when the you understand what I write. [I
have just looked at your "Mammal" & have
seen the ^{of the Rubiacaceae} color, in exactly the same
as in Spizella & Linum]. Did you
know that the pollen of the one form
was not fitted to ^{fully} fertilize the other stigma?
— that sterility ensued of about the same
degree as when allied species are
crossed? This fact seems to me to
make the case very interesting. I sh^d.
be very grateful for any other cases
in other Orders: I have found an N^o

note of yours in which you say cases
abundant in "Rubiaceae, Boraginaceae Labiales
etc." Could you send me seed of any
such Rubiaceae? I thought these would be best plants
to experiment on; yet I could not ascertain
extent. I was looking for Gelium
this summer & found many flowers
exclusively male; but I did not think of
looking for the hermaphrodite flowers.

I fear I shall weary you; but I
must write a little about Spiranthes.
At Jersey I was able to examine
(+ cover up) growing plants; before I had
examined any cut flowers. In my note to
you I blundered somewhat. - I probably spoke
of the "cone" as being embedded within
the involucre; so it is in fact but, in 10

May 72

that the back of "canoe" is covered with (2)
for in a back of "canoe" is covered with
large cells with vivid matter, which burst &
thus attach to pollinia, - a process which I
could never understand. - Just as you
say, when flower first opens up a hair
at needle can be pushed down & then
it is removed the pollinia;
though strength of the flower with never (in)
in this condition, you will never find
pollen on stigma; but after 24-48
hours, the Labellum moves, a little
then position of nectary & stigma fixing
itself, the pollen - masses beautifully
to strike stigma. - If pollen masses have
not been removed in early period, the
bringing of the pistil in is necessary -
The Bee which I saw at work (one had
5 canoes stuck to its pilosities, one on the
the) alight at base of spike & go off to it

have been painted in Sappho - Plato.

Heaven forgive me, if you cannot, for
scribbling at such length. -

Your presentment what would convince me of
Design in a poet. If I saw an
angel come down to teach us good, & I was
convinced, for ~~others~~ seeing him, that I was
not mad, I sh^d. believe in Design. - If
I could be convinced thoroughly that life &
mind was in an unknown way a
function of the inflexible force, I
sh^d. be convinced. - If man was made
of stuff or iron & no way connected
with any other agencies which had
ever lived, I sh^d. perhaps be convinced.

But this is childish writing. -

I have lately been corresponding with
Felt, who, I think, adopts your

Gray 72

your idea of the stream of variation being (3+
been led or designed. I have asked
him (& he says he will hereafter reflect &
answer me) whether he believes this to
have been designed. If
I hear of you more was designed. If
he does, I have nothing more to say.
If not, seeing what Francis has done
of selecting individual differences in
the nasal bones of Pigeons, I
must think that it is illogical
to suppose that the variations, which
Nat. Selection, proceeds for the good
of any being, have been designed.
But I know that I am in the same
sort of muddle (as I have said before)
as you would seem to be in
with respect to free will, & yet try

supposed to have
being been preserved or preserved.

Thank you very much, with
very thanks for your interesting

letter - your unwearied confidence

C. Darwin

Our English Holly (& all the cultivated ones)
are absolutely dioecious: I have just been
looking at your Manual: but I anywhere
find out a fuller account of the state
of some of the species? (our has neither but no pollen)
the female flowers have any pollen?
whether to make flowers ever set seeds.
Our male trees never bear a berry.
This would make a good case of
gradation. - Henry Mead our Holly years ago
I have always felt curious about the steps by
which it became dioecious.



Darwin, Charles. 1861. "Darwin, Charles Sept. 17, 1861." *Charles Darwin letters to Asa Gray*

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