

Aug 1st Down Brandy Ketch

My dear Gray

I have been bad sick for 2 or 3 weeks, but

am better ~~now~~ to night, & mean to

amuse myself by scribbling a few
(I have no other choice)

lines on orchids. Since writing last,

I have received your notes on *Platanthera*

hookeri & on diversity of forms of

Cypripedium. On the latter you ought, if you

can spare time, ^{to} write a paper. *Platanthera*

hookeri is really beautiful & quite a

new case. It is almost laughable the

variety does getting so far apart

that the fruit of the flower has

to be divided into two ^{bridal} chambers!

I have added a note to the German
edition about this & a few words
on Cypripedium on your authority.
On getting your letter I wrote to
Müller to send the 1/2 dozen copies:
I wish you would let me pay for
them; but you are so punctilious
with respect to first quality
that you would fling the money away
to let them in the same shape as
now in which you sent the 8.
My son George, who is an entomologist, has
been watching orchids with enthusiasm
& infinite patience. He has made
out clearly that it ^{is} a *Fp.* (*Empis*) which

fertilizes *P. maculata*, & fertilizes the *Drift*
further the class of species: it was
just to see the pollinia applied to
their spherical eyes, & after the act
of deposition parallel to & rather above
the furrows. But the most remarkable
case is that of *Herminium monorchis*:
he has brought me 24 specimens of
very minute Hymenoptera with pollinia
attached to them, & drops to the same
exactly spots ^{to} the exterior base of
femur of front legs. Nothing has
given me such an idea of close
adaptation of form of whole flower: the
labellum hangs oblique downwards &
the minute insect enters between its

Edge & the large vessel die as
one side; & in retreating ^{they} hit their
furniture fence against the under
side of the die. So closely fitted is
the piece to the insert, that by
the saw several times under
after entering in ^{a wrong} ~~easy~~ position comes
out, change their position & reenter.
So much for a child: I am fairly as-
= tounded at the success of my book (which
the I know better it sells) with
Bates: Berkeley has reviewed it
in the R. rather vigorously, &
Harker writes ~~of~~ strongly. So that
now I can finish the subject &
stick to the work. I stay I

have done my little, except some copying of plants.

I have made a great series of copies as
to the pelvian flowers of *Pelargonium*: but I
doubt whether I shall get such good results,
as I at first hoped with respect to
the history of the plants. By the way Haudin
writes that he is going to publish on the
subject this autumn: his paper gives me the
idea that he does not know what has been
done in Germany. — *Pelvia glandulosa*, J

over require visit agency to set seed; but
I see no set no fertility of *Trichoglossum*.
You mentioned some genus (name forgotten without
searching your letter) in which you found two
forms like *Trichocela*, & a third form with
both joints & stamens short. Can you tell me
whether the flowers on the specimen were
(then characterized)? I would wish to know
because *Syctum* is *Trichoglossum*.
Yours ever most truly
C. Darwin

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Darwin, Charles. 1862. "Darwin, Charles July 1, 1862." *Charles Darwin letters to Asa Gray*

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