

2 of modified petals, all covering;
& the 2nd colored petals belong
to an inner whorl & are
modified stamens. By the way
can you tell me of any flowers,
with further sections of different
colors; I believe the this will
be pretty rare grader to *Lithospermum*
or *Turritis*? - All my semi-
botanical work, as you know, has been
connected with insects, & now I am
almost sure [but I find it a difficulty
to tell the with the first breeding as
generally all "blended"] the flowers have
led me to a curious little discovery
which expect to be best known much
in the world, to this Bee. I saw
in the day to *Lithospermum* (see Origin)
Horn Bee sucking to common red
dresses, but it was a second crop, which
I am old produces shorter flowers;
but many of the Bees were attracted
to this, but always visited their beds

68 Cliff Cottage. Bournemouth. Hants
My dear Sir. I have just received
your most kind letter of Aug 18th 19^c
& will answer myself, now & patients
are in bed, by beginning a letter to
you. My son Bay (whose wan face
blushed up to the eyes at the thought
of writing to a live Professor) has
the day made a marked step & has
taken several walks of a few hundred
yards; & his wife is recovering well &
her skin will peeling. - We here
have two hours here, so I hope to
trust this dreadful fever will not
speed. - I am very glad that at
present you intend to publish some
report with an Article, which you
have so capably worked at. No doubt
I am not a fair judge; but I think
that it is worth your while. - I am
pleased to hear about *Gordonia* & about
Gymnosperma. Your account makes
me think the latter like the *Boronia*

speciosa & often & then here I speak
what on earth could be meaning of
the wonderful ^{horn-like} stigmas & projecting
anthers. I suspect ^{its} the bees may have
been attracted at first & apparently
analogous to the willow produced
the wonderful nectary of *Lugtia* am
surprised. It would appear
the self-fertilisation is enhanced
then I thought: now publishing I
have found that *Houstonia* is also
fertilised itself, if insects
fail to do the job. - many
fail for *Houstonia* seed. -

Thanks for *Houstonia* seed.
I am glad to hear, but disappointed,
about the *Specularia* pollen-tubes.
I cannot wait sending you a
diagram about *Glycine* [why don't
I wait? does not permission
give a right?] & here I now
for long years written on botany

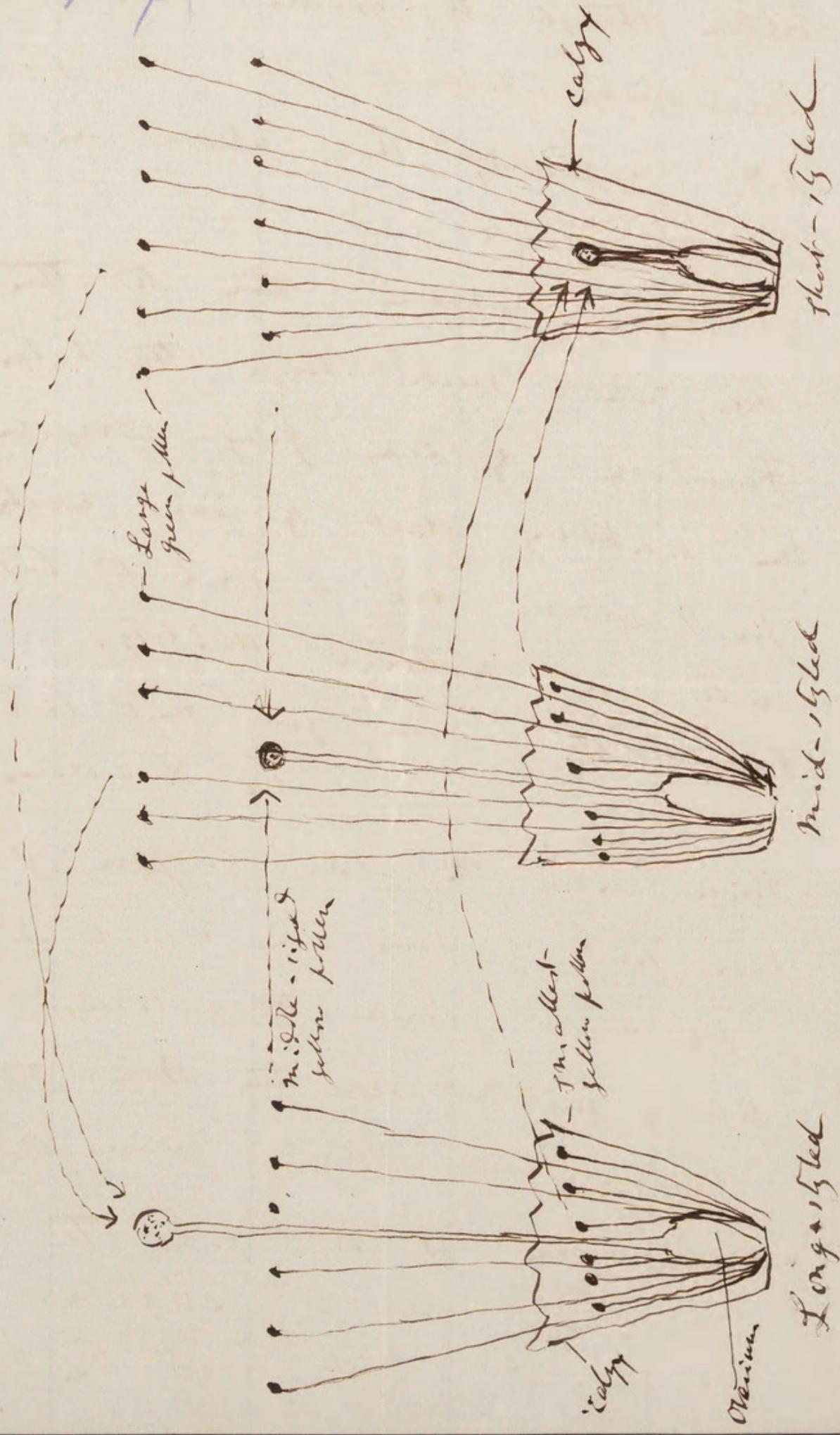
you about all sorts of things.] *Glycine*
has 3 kinds of stigmas & 3 kinds of
pollen; the stamens of same length
are two of the three producing the
same sort of pollen, & I cannot
see how an little to fertilise the
ovule of the length. I conclude
stigma of the Bees; but
10 fm watching the Bees; but
like to prove it by copies. So the
one here three homogamous forms
each depending on half the stamens
of either one of the two others
forms. This is shown by the lines with
the arrows. This strikes me as a
very curious case. The three forms
exist in about equal numbers.
By the way it seems to me that
Lindley in *Veg. Kingdom* describes the
homospilous structure of flowers wrong:
the so called calyx, with its 12
bundles of spirally arranged, appears
to consist of 6 narrow deeply

between the flowers & sucked at holes
bitten through to corolla. - The same
bee always followed the same practice.
And apparently those which suck
at the mouth of the flower have
a larger portion than the other
bees, which suck through the holes.
Farewell & dear Gray, forgive
me scribbling about of our work;
for I seldom see a soul to talk
with on natural history.
Goodnight - Even you will say
C. Dension.

Since writing the above of you I
have found I have as much at first
blundered about the practices;
but if you had seen the Bee, the
blunder was almost excusable -
What an off I was to
scribble all the above. -

Syphonia salicaria

Gray 6/8/68



Inspiration of Education - one of ^{city} my
Bros. ^{Horace} said to me, "There are
a terrible number of adders
here; but if we can kill
as many - they will, if
we do, sting less." - I answered
"of course they will be fewer"
Horace "of course, he I
but what mean that; what
I meant was, that the
more timid adders, which

Grey 68

run away & do not bring
onto be saved, &
after a time none
of the Ides would
bring" —

No adult selection!!



Darwin, Charles. 1862. "Darwin, Charles Sept. 4, 1862." *Charles Darwin letters to Asa Gray*

View This Item Online: <https://www.biodiversitylibrary.org/item/225921>

Permalink: <https://www.biodiversitylibrary.org/partpdf/254358>

Holding Institution

Harvard University Botany Libraries

Sponsored by

Arcadia 19th Century Collections Digitization/Harvard Library

Copyright & Reuse

Copyright Status: Public domain. The Library considers that this work is no longer under copyright protection

This document was created from content at the **Biodiversity Heritage Library**, the world's largest open access digital library for biodiversity literature and archives. Visit BHL at <https://www.biodiversitylibrary.org>.