Down,
Beckenham, Kent.

I. xiv

Tuesday Sep. 9 1873

My dear Dr Sanderson

I will send up early tomorrow two plants with 5 goodish leaves, which you will know by their being tied to sticks. Please remember that the slightest touch, even by a hair, of the 3 filaments on each lobe, makes the leaf close; & it will not open for 24 hours. You had better put 1/4 of inch of water into the saucers of the pots. The plants have been kept too ~~clos~~ cool in order to

retard them. You had better keep them rather warm (i.e. temp. of warm green house) for a day, & in a good light.

I am extremely glad you have undertaken this subject. If you get a positive result, I shd think you ought to publish it separately, & I cd quote it; or I shd be most glad to introduce any note by you into my account.

I have no idea whether it is troublesome to try with the thermo-electric pile, any change of temp. when the leaf closes. I cd detect none with

a common thermom. But if there is any change of temp., I shd expect it wd occur some 8 to 12 or 24 hrs after the leaf has been given a big smashed fly, & when it is copiously secreting its acid digestive fluid.

I forgot to say that as far as I can make out, the inferior surface of the leaf is always in a state of tension, & that the contraction is confined to the upper surface; so that when this contraction ceases, or suddenly fails (as by immersion in boiling water) the leaf opens again, & more widely than is natural to it. —

Whenever you have quite finished I will send for the plants

in their basket. My son Frank is staying at 6 Queen Anne St, & comes home on Sat. afternoon, but you will not have finished by that time

yours very sincerely

C. Darwin

P.S. I have repeated my exper. on digestion in Drosera with complete success. By giving leaves a very little weak hydro-chloric acid, I can make them digest albumen i.e. white of egg & quicker than they can do naturally -

I must heartily thank you for all your kindness. I have been pretty bad lately & must walk v. little.