Tormula for specimen (W. A. Johnson to Jas. Bovell Johnson)

"The Parsonage" (Weston Jan 23rd 1874

My dear Jimmie,

If I were near at hand I could easily put up a few hundred specimens for the microscope for you, & shew you how to do it: but how to write any more than is written in any book on the microscope, I really do not know. For dry specimens all that is necessary is a little Canada Balsam (Pure). It may be fined with Chloroform or Benzine, these make it a little thinner: but no better, rather worse; because they crystalize more or less in process of time, & thereby spoil the specimen. As an experiment try a fly's wing. Cut it off, & very carefully put it between two bits of glass to dry for a week. By this time all the air will be out of it: supposing it to be perfectly clean, if not it must be washed in a saucer full of clean water, held at the thick end by a cork point or any soft thing so as not to damage it, then wipe from union with the body towards the tip with a camels hair brush or a bit of pith of Elder: dry again, perfectly dry, a day or two will do it. Lay it on the middle of the slide, cover with one drop of clean Balsam, breathe on the top cover, & let it down gently: it will soon become flat & in a couple of days bear pressure. The air will escape in time, & it will be fit for examination. So with every thing dry object.

Soft tissues may be tied firmly with thread between two pieces of cork, then cut slices with a razor, wet with water, very very thin; drop into staining fluid for a few hours 6 or 8. a night, wash as above in Glycerine & water 1 gly. to 12 water, with one drop glacial acetic acid. Plunge into Spts Terpentine. At leisure, soak in oil of cloves to remove all trace of Glycerine &c. Wash thoroughly in clean water to remove dirt &c dry well & put up in Balsam as before. A little practise will make you perfect, but I could shew you more in ten minutes, than I can write in

an hour. Buy "carmine fluid" (1 oz).

You were going to get some handkerchiefs & you did not tell me anything about them. Let me know, so as to send the "needful" by the first of Feby. Only Feby & March now: go in for work with all your heart: do not lose one moment, if you can help. Let nothing take off your attention just now. We had anice little service at the Guild on St. Agnes Day Jany 21 an early celebration at 7.30 A.M. I forget whether I had promised to attend to it for them before you went off, or not. Letters from Lou as usual; nothing in them, more & more barren every month. No news from Maggie. I hear Thunder Bay has been open all the year. Armstrong called & took away the scraps sketches & yesterday. Poddington came some time ago & bought the books, but has not taken them yet. No news in the Village worth naming. An open winter so far, very icey, & bad walking. Willie getting better. Old Fannie as usual. With much love, & great hopes for your health & success with your lectures, & ever remembering you before the Throne of Grace, believe me

Your very affecte father

W. A. Johnson