Abstract: D'Arcy Wentworth Thompson (1860-1948) was a biologist who, despite writing one of the first major biomathematical works, stated several times that he was 'no mathematician'. In order to include mathematics in his works, then, Thompson built a large informal network of mathematicians and physicists who gave him significant assistance with putting together his magnum opus On Growth and Form (1917, 2nd edn 1942). This talk will use Thompson's work on proportion and polyhedra as case studies to explore his interactions with the mathematicians in his network, the reception of his work by other mathematicians, and Thompson's ideas on the hierarchy of himself as a biologist versus the mathematicians whom he consulted. It will show how Thompson, despite holding no qualifications in mathematics, and perhaps lacking knowledge even of basic calculus, was able to become respected enough among mathematicians of his time to be invited to speak at mathematical events, and given an honorary membership to the Edinburgh Mathematical Society. The talk will raise questions on the interests and motivations of mathematicians in mathematical engagement with non-mathematicians, their practices in doing so, and what their expectations were of the outcome of such engagement in terms of such things as authorship, acknowledgement and reputation