John Allason of Godfrid's mathematics book, 1676

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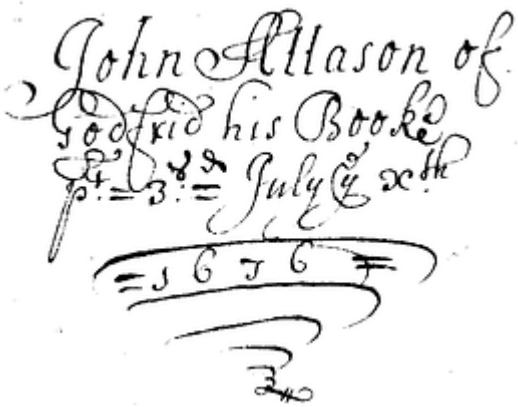
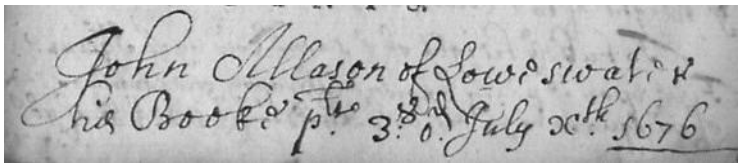
About 35 years ago an elderly lady in Bentham, North Yorkshire gave me a book that had been left behind by accident at the back of a bookcase after she had arranged for auctioneers to clear her house before moving. She said that it had belonged to her late husband and as I was a mathematician it was evidently meant to go to me since this volume was entitled *"Mathematical Recreations: Or a Collection of many Problems"*. That is the sum total of my knowledge about the recent history of the volume. However, the book is well-preserved, leather bound and embossed front and back with the monogram

of its owner, who had inscribed his name thus inside the front and back:



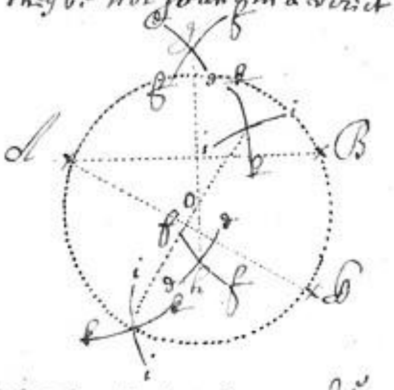


Which latter places his abode, Godfrid, in the Loweswater area and we believe this to coincide with the 17th century part of what is now called Godferhead and of which a photograph is given below. So John Allason had some of the best views of the region from his window facing down the valley while he enjoyed his mathematical recreations.

The book, measuring seven by five inches, written by H. Van Etten, published in London in 1674, runs to some 300 pages with problems collected in 14 chapters entitled "*Experiments in …*" *Arithmetic*, *Geometry*, *Cosmography*, *Horologiography*, *Astronomy*, *Navigation*, *Musick*, *Opticks*, *Architecture*, *Statick*, *Mechanicks*, *Chymistry*, *Water-Works*, *Fire-Works*, and a final appendix on using an astrolabe or as Van Etten calls, it a *Double Horizontal Dyal*.

The mathematical content is elementary but the breadth of application topics, accompanied by superb grey-tone illustrative drawings makes it fascinating reading. Even more fascinating is the fact that John Allason filled every spare blank page with neatly penned solutions to various of the problems, for example:

3 points given to draw a Circle yt shall exactly pass through those points, provided they be not standing in a direct line.



Set A.B.D. be ye points given, 1. of ye 3 points make a Triangle by drawing the lines A.B, B.D, D.A; then set one foot of ye compasses in A. wth any distance greater yn ½ ye line AB describe ye Arches e, d, both above & below ye line, then set one foot of ye compasses in B, wth ye other describe ye arch f.f. crossing ye 2 former Arches in g & h. from wch draw a right line, wch shall divide ye line AB in 2 equall parts & shall be perpendicular thereunto, then set ye foot of ye Compasses in A & D & describe ye Arches i.i. & k.k. & from those intersections draw ye line crossing ye other perpendicular at O. So yt O is ye center of a Circle in wch if you set one foot of ye Compasses the other will draw a Circumference through ye given points A.B.D.

Fist, the Mallet, or Hatchet rest upon the Scale, or upon the Beam of the Ballance, and put into the other Scale as much weight as may counterpoise it, then charging or laying more weight into the Scale, and striking upon the other end, you may see how much one blow is heavier than another, and so consequently how much it may weigh: for as *Aristotle* saith, *The motion that is made in striking adds great weight unto it, and so much the more, by how much it is quicker*: therefore in effect, if there were placed a thousand Mallets, or a Thousand Pound weight upon a stone, nay, though it were exceedingly pressed down by way of a Vice, by Levers, or other Mechanick Engine, it would be nothing to the rigor and violence of a blow.

Is it not evident that the edge of a Knife laid upon Butter, and a Hatchet upon a Leaf of Paper, without striking makes no impression, or at least enters not? But striking upon the Wood a little, you may presently see what effect it hath; which is from the Quickness of the Motion, which breaks and enters without resistance, if it be extream quick; as experience shews us in the blows of Arrows, of Cannons, Thunder-bolts, and such-like.

Exami-

Examination.

THis Problem *was extracted from* Scaliger, *who had it from* Aristotle, *but somewhat refractory compiled, and the strength of the Effect he says depends onely in the violence of the Motion, then would it follow that a little light* Hammer *upon a piece of* Wood *being quickly caused to smite, would give a greater blow, and do more hurt than a great Sledge striking soft; this is absurd, and contrary to Experience. Therefore it consists not totally in the Motion: for if two several Hammers, the one being twenty times heavier than the other, should move with like Quickness, the Effect would be much different: there is then something else to be considered besides the Motion, which* Scaliger *understood not: for if one should have asked him what is the reason that a* Stone *falling from a Window to a place near at hand, is not so forceable as if it fell farther down; and when a Bullet flying out of a* Piece, *and striking the Mark near at hand, will not make such an Effect as striking the Mark further off. But we suppose that* Scaliger *and* Cardanus *who handles this subject, would not be less troubled to resolve this, than they have been in that.*

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Unfortunately, we know very little about John Allason's personal details. Part of the reason for an item I wrote for the *Newsletter of The Lorton & Derwent Fells Local History Society*, *Vol 38 (2006) 3-5*, was to stimulate local historians to discover more details of his life and family. Here are a few possible connections that I have discovered:

Allasons are listed in Cumberland in 16th and 17th century parish records, including

- Penrith 1558,1576,1577,1581,1595,1642, Gilcrux 1697,1705,1706,
- Newton Reigny 1596,1601,1604,1607,1614,1622,1623,1625,1643,1698
- Dearham 1673,1676,1686,1702,1707
- Lamplugh 1621,1632 (Peter Allason of Loweswater m Janet Robertson of Winder)
- A John Allason was curate at Forrest Hill (Oxford Diocese) in 1697.

Derek Denman and another local historian, Michael Baron drew my attention to this item from the Loweswater Parish Papers mentioned by Rosemary Southey in *The Link—Lorton Parish Magazine*, *October/November 1990*:

"In 1700 a belfry was built onto the church by John Bowman of Ullock. The money necessary for this work was raised by the overseers of the work, John Allason of Godferhead and John Tolson (probably of High Nook). A church rate was levied though the parish's many Quakers refused to pay as indeed they had refused to pay for the previous repairs in 1683. John Allason for one must have regretted the days before the Toleration Act of 1689 when he could confiscate property in lieu of unpaid rates. *1683*, say Quaker records, *the 20th day of the 12th month (February) came John Allason of Grafred and took away from Anne Dixon of Waterend a pair of leather mittens worth 7d for 6d demanded for repair of the bell-house*. (There were about 80 households in the parish, so if each was required to pay 6d for the repairs the approximate cost would have been 40/- or £2.)"

I would be very glad to receive any comments, suggestions and information that may help me assemble some historical details of John Allason of Godfrid; I can be reached by email at:
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