A lost letter from Hobbes to Mersenne found

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A Lost Letter from Hobbes to Mersenne Found

ONE of the important sources of information for the history of science and the history of ideas in the seventeenth century is the correspondence of the eminent men of that period. Foremost among the scientific correspondents in the time before the founding of the learned societies, such as the Royal Society of London and the Académie Royale des Sciences, was the reverend Father Marin Mersenne (1588-1648), who exchanged letters with Descartes and Hobbes, amongst others, and who acted as a personal clearing-house for new ideas. Thus Mersenne asked the opinion of Descartes concerning the Two New Sciences of Galileo, and brought to the attention of scientists the great discoveries of Torricelli concerning the vacuum and the barometer. Through Mersenne's activities, Pascal learned of the Torricellian experiments and was led to perform his own, culminating in the famous demonstration that the height of a barometer falls as one ascends a mountain.

In a recent number of Isis,¹ Harcourt Brown called attention to the fact that a lost letter of Hobbes to Mersenne had been listed in a Maggs Bros. catalogue, where a photostatic reproduction of it was given.² Brown published a transcription based on the reproduction in the catalogue. Since that time the original holograph has been located in a collection of books and manuscripts at present on deposit in the Houghton Library.

The letter in question, written in French by Hobbes, and dated 'St. Germ. May. 25, 1648,' deals with the Torricellian experiments and the supposed proof of the existence of a vacuum. Hobbes declares: 'All the experiments made by you and others with quicksilver do not conclude that there is a vacuum . . . .' The reason he gives is that a 'subtiler' matter in the air passes through mercury and other coarse fluids in much the same way that smoke passes through water. Hobbes never accepted the reality of the vacuum. An ardent opponent of his compatriots who were banding together to form a group which eventually was to become the Royal Society, Hobbes was not an advocate of the experimental methods of the 'new science' or the 'new philosophy,' which, according to the poet Donne, 'casts all in doubt.' A lover of controversy, he became embroiled with various of the protagonists of the 'new science.' He had a spirited quarrel, involving many publications, with John Wallis, the mathematician, about the possibility of 'squaring the circle.' With Boyle,

²Maggs Bros., Autograph Letters, Historical Documents and Authors' Original Manuscripts (London, 1925), (Catalogue 471, lot 2835, reproduction on pl. xvii, opp. p. 139).

father of the science of chemistry. Hobbes disagreed concerning the interpretation of the famous experiments which Boyle made with his new vacuum pump, or 'pneumatic engine.' The issue of that controversy was the existence of the vacuum, the subject, in part, of Hobbes' letter to Mersenne. Because Boyle was attacked by Hobbes, and also by an English Jesuit named Linus, he made further experiments in the course of which he discovered the law named after him, which states that the volume of an enclosed gas at constant temperature is inversely proportional to the pressure at which it exists.

The brevity of the letter is interesting in itself, as Brown has pointed out, because it indicates that Hobbes and Mersenne were living in the same town and consequently not dependent on letters for their contacts. Hence this one lacks the news of general interest with which others are marked.

I. Bernard Cohen

A Funeral Elegy for Thomas Danforth, Treasurer of Harvard

One of the steadiest plodders on the nether slopes of the Puritan Parnassus was the pastor of Dorchester, John Danforth (1660-1730). A modest man, he probably had no illusions about his poetic stature. His most notable literary characteristic was the faithfulness and simplicity (too great at times) with which throughout his life he prepared a suitable 'copy of verses' whenever the occasion called for it. In almost every piece he rises to at least one brief passage of real though minor poetry; at least once in his life he achieved a poem of intensely personal though stark and thorny expression; once too, in his New Year's poem for 1720, he came close to perfection in simple naive charm.

Nearly all of his works were written for special occasions, most of them upon the deaths of friends, relatives, and parishioners. Their value is not so much literary as historical and biographical, for conscientious workman that he was, he rarely turned out the vague generalities prevalent in many an elegy of the day, but rather gave a solid factual account of the life of the deceased and a careful delineation of his character — this often the best part of the elegy literally. Thus in his verses the spirit of the second era of Puritan New England lives in its activities, principles, and aspirations; and from his lines the historian can attain an insight into the temper and attitudes of the period often lacking in the more material sources. To give just one example: in the elegy before us (Plate I) and in the one on Hannah Sewall (when speaking of her father John Hull) Danforth's terse, graphic depiction of the New England Puritan attitude toward great wealth epitomizes a whole course of development.

The elegies generally appeared as printed broadsides, occasionally as appendices to books or pamphlets, occa-
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