[April,

# COTTON MATHER'S SCIENTIFIC COMMU-NICATIONS TO THE ROYAL SOCIETY.

# By George Lyman Kittredge.

No historical student would think of denying that Cotton Mather was one of the best informed Americans of his time in scientific matters. His inquiries embraced all departments of knowledge and he kept in intimate contact with European progress. Hence his letters to the Royal Society are among the most interesting of his many "composures," not only for the light they throw on the active but often misunderstood intellectual life of New England in the early eighteenth century, but for their significance in the annals of scientific theory and investigation. Some day they will be printed. Indeed, it is not very creditable to American scholarship that they were not published years ago. Meanwhile, a list of the documents, with an indication of their contents, of their dates (so far as these are ascertainable), and of the whereabouts of each, will probably be of some use to workers. To bring such information together in convenient form is the sole object of the present paper.

The communications here catalogued will speak for themselves. Still, it may not be out of place to remark, by way of preface, that they should be judged, not from the point of view of a modern specialist, but from that of the eighteenth-century virtuosi to whom they were submitted. This cautionary suggestion would not be hazarded by me, were it not for a rather prevalent misconception. The subjects that Mather treats are highly miscellaneous, and some of them seem to the casual reader more curious than

## 1916.] Cotton Mather's Communications.

edifying. The documents, therefore, are likely to be regarded as symptoms of a trivial and credulous temper. Not at all! A sufficient corrective for this notion is a cursory acquaintance with the writings of Mather's European contemporaries, and in particular with their notes and essays in the scientific journals of the day. For example, the first sixty-five volumes of the Royal Society's Philosophical Transactions contain about forty accounts of monstrous births. It is absurd, therefore, to laugh or shudder at Cotton Mather for recording a few well-attested No physician will find these instances of the sort. cases either ludicrous or disgusting. Mather, we should remember, was not sending them to the newspapers, but to the members of a society that systematically included medical and surgical reports in its publications. And so in general. There is scarcely an item in these letters that cannot be paralleled in the Philosophical Transactions, or in the Ephemerides of what we now style the Leopoldina. Now and then, in the comments appended to the several titles in the list, I have referred to such parallels, but in the main I have been content to leave the subject to the future editor of Mather's scientific works. Let us hope that he will soon present himself!

#### MANUSCRIPTS.

1. The Letter-Book of the Royal Society. I have used a transcript of Mather's letters made therefrom for the late Frederick Lewis Gay—cited as "Gay MS." The Letter-Book contains the following pieces in Mather's handwriting: (1) the First Series of Curiosa entire (thirteen letters, 1712); (2) No. 4 of the Second Series, 1714; (3) a letter to Jurin, May 21, 1723, with a postscript containing a list of communications (except the First Series) sent to date (cited as the "1723 list"); (4) a Series of seven Curiosa written to Jurin, June 3-10, 1723; (5) a letter of June 10, 1723, to Jurin, introducing Isaac Greenwood; (6) a letter of August 3, 1723, introducing John Perkins; (7) a "Decad of Letters" to Woodward and Jurin, 1724; (8) a letter to Jurin, Oct. 5, 1724, introducing Howard Wyborn; (9) a letter to Jurin, Dec. 15, 1724, introducing Zabdiel Boylston. The Letter-Book contains also the Excerpts from the First Series prepared for the press (see p. 22, below).

2. The Guard Books of the Royal Society, XXIII (2) 31. Here is found Mather's letter to Jurin, May 21, 1723, entitled "The Case of the Small-pox Inoculated, further cleared." The paper is not in Mather's hand, but is signed and dated by him (see sec. 5, below).

Mather's holograph draughts in a MS. volume 3. (C. 61. 2. 6) belonging to the Massachusetts Historical Society, to which it was presented by Timothy Alden, Jr., Oct. 20, 1808. These draughts comprise: (1) the Second Series entire, 1713, 1714; (2) "Separate Letter" to Waller in reply to one received from him on Oct. 12, 1713; (3) the Third Series entire, 1716, with the covering letter to Woodward, and with the two letters of Sept. 24, 1716, to Petiver and Woodward respectively; (4) four communications, 1717; (5) the Series of 1724 (ten numbers) except the fourth letter (preceded by a list of all ten, drawn up in Mather's hand). In all, there are 37 draughts (35 Curiosa and two special letters). Prefixed is a list of the Curiosa in Mather's hand (see p. 28, below), which I cite as the "1717 list." It includes those of 1713-1717 (26 numbers).

4. Mather's draught of No. 4 of the Series of 1724 in a small volume of miscellaneous papers given to the Massachusetts Historical Society before 1808 (probably) and marked 91. M. 15. There is a copy in an unknown hand among the Belknap MSS. (M. H. S., 161. A. 26).

5. Mather's holograph draughts in a MS. volume belonging to the American Antiquarian Society. This contains only the Curiosa of 1723, namely "The

# 20

## 1916.] Cotton Mather's Communications.

Case of the Small-Pox Inoculated; further Cleared," May 4, 1723 (see sec. 2, above), and the seven letters to Jurin dated June 3-8, 10, 1723. There is a list of these eight pieces drawn up, in Mather's hand, on the inside of the cover of the volume.

6. A single leaf belonging to the American Antiquarian Society, obviously the table of contents of a sheaf of draughts that have disappeared. It contains thirteen titles, in Mather's hand. I cite it as the "Loose-leaf List" (see p. 48, below).

7. Sloane MS. 3324, fol. 260: a contemporary copy (not in Mather's hand) of a letter to Woodward, March 10, 1722, on small pox and inoculation.

8. Sloane MS. 3339, fols. 99 ff.: contemporary copies (not in Mather's hand) of the First Series, 1712.

9. Sloane MS. 3340, fols. 277-297: contemporary copies (not in Mather's hand) of a part of the Third Series (see p. 36, below).

10. Sloane MS. 4065, fol. 255: Mather's letter to Petiver, Sept. 24, 1716 (holograph).

11. Mather's Biblia Americana (MS., M. H. S.). This contains the first Curiosum of the First Series, and probably more or less other material sent to the Royal Society (see pp. 22, 46, below).

12. Mather's MS. treatise, "The Angel of Bethesda" (A. A. S.). This contains considerable matter sent to the Royal Society. I have identified "Remedies revealed in Dreams" (see p. 25, below); "An Account of the Method and Success of Inoculating the Small Pox" (see p. 48, below); "A Further Account of the Method and Success of the Small-Pox Inoculated" (p. 48, below); "Nishmath Chajim" (p. 48, below); "The Seventh Son Examined" (p. 49, below).

13. Mather's holograph MS. "Triparadisus" (A. A. S.). This includes Nishmath-Chajim (see p. 49, below).

[April,

But few of Mather's communications to the Royal Society have been printed. I append to each article such information on this score as I have obtained.

# FIRST SERIES (1712)

Mather's first series of Curiosa Americana<sup>1</sup> consists of thirteen letters written November 17-29, 1712.<sup>2</sup> The first seven were addressed to Dr. John Woodward, the rest to Richard Waller, Secretary of the Royal Society. The originals (all dated) are preserved in the Society's Letter-Book, M. 2. 21-33 (Gay MS., fols. 1-150), and there are contemporary copies in Sloane MS. 3339, fols. 99 ff., in the British Museum.<sup>3</sup> Excerpts were printed in 1714 in the Philosophical Transactions, No. 339, for April-June (XXIX, 62-71). The Letter-Book also contains (M. 2, 34) these excerpts as prepared for the press (Gay MS., fols. 151-168). Cf. Colonial Society Publications, XIV, 81 ff., for further details. A covering letter accompanied the packet of thirteen. It has not been found, but is mentioned in the MS. Journal of the Royal Society, July 23, 1713.<sup>4</sup>

1. Nov. 17, 1712. To Woodward. Letter-Book, M. 2. 21 (Gay MS., fols. 1-27).

Mather describes his Biblia Americana<sup>5</sup> and gives an extract illustrating Genesis, vi. 4: "There were giants on the earth in those days." Teeth and bones of a giant were discovered near Clavarack, about

<sup>4</sup> N. Darnell Davis, The Nation, N. Y., Feb. 18, 1892, LIV, 128 (Néw England Historical and Genealogical Register, XLVI, 116).

<sup>8</sup> The completed MS. of this large work is in M. H. S.

<sup>&</sup>lt;sup>1</sup> This title does not appear at the head of the letters in the Letter-Book, but it is mentioned as Mather's own in a cancelled passage at the head of the excerpts as prepared for the press (Letter-Book, M. 2. 34; Gay MS., fol. 151).

<sup>&</sup>lt;sup>2</sup> The plan of the series is described in the eighth letter. It was "to write one letter *per* Day, till I had passed thro'a Fortnight." He began on Monday, Nov. 17, and closed on Saturday, Nov. 29. Of course he wrote no letter on Sunday, the 23d, but he made up for it by writing two on Monday the 24th.

<sup>&</sup>lt;sup>3</sup> Of these Sloane copies, the letters to Woodward (Nos. 1-7) are dated as in the originals; but the copies of the letters to Waller are not dated except the first (No. 8; Nov. 24, 1713) and the last.

# 1916.] Cotton Mather's Communications.

thirty miles from Albany. See the MS. of Mather's Biblia Americana (M. H. S.), from which a letter of Governor Joseph Dudley on the fossil remains is printed in 2 M. H. S. Collections, II, 263-264. Mather includes in the Biblia an Indian tradition about this Clavarack giant, to the effect that his name was Maughkompos, that he lived upon fish, and that he was in the habit of eating four sturgeons for breakfast. "But," he adds, "there is very little in any *Tradition* of o<sup>r</sup> Salvages, to be rely'd upon."

There are letters on this discovery in Sloane MS. 4064,—onè from James Abeel (fol. 86), another from Lord Cornbury (Nov. 30, 1705, fol. 93). Cornbury's letter is quoted by C. R. Weld, History of the Royal Society, I, 421. Cf. No. 1 in the Series of 1723 (p. 50, below): "A Monstrous Dragon."

In a later number of the volume of the Philosophical Transactions that contains the excerpts from Mather, Francis Nevile gives an account of certain monstrous teeth and fragments of bone dug up in Ireland.<sup>6</sup> Nevile considers the question "what sort of a Creature this might be, whether Human or Animal." "If Human, it must be larger than any Giant we read of."

2. Nov. 18, 1712. To Woodward. Letter-Book, M. 2. 22 (Gay MS., fols. 27-38).

On American plants and Indian cures. See also the letter to Petiver (p. 42, below). One of the plants, called the "boar-thistle" is recommended as beneficial in the king's evil. As to this plant see also a MS. letter from Mather to Joseph Web in the collection of Mather MSS. belonging to the A. A. S. (p. 49, below).

Another plant is a specific for the bite of the rattlesnake.<sup>7</sup> Dr. Nehemiah Grew had already catalogued "a sort of SNAKEWEED" in 1681, mentioning the

23

<sup>&</sup>lt;sup>6</sup>No. 346 (Nov.-Dec., 1715), XXIX, 367-370.

<sup>&</sup>lt;sup>7</sup> Cf. Tyler, A. A. S. Proceedings, XXV, 359.

fact that it grows "near the River in *Connecticut*," and stating that it is "so called, because the Root is used for the biting of the *Rattle-Snake*."<sup>8</sup> Snakeroot was a regular article of export from Virginia in the eighteenth century.<sup>9</sup>

3. Nov. 19, 1712. To Woodward. Letter-Book, M. 2. 23 (Gay MS., fols. 39-47). On American birds —wild turkeys, eagles, vast flights of pigeons. (See p. 31, below.)

4. Nov. 20, 1712. To Woodward. Letter-Book, M. 2. 24 (Gay MS., fols. 48-56). On antipathies.<sup>10</sup> On the force of the imagination. "Husbands who breed for their wives."<sup>11</sup> Also copy of a letter to Mather from the Rev. Zechariah Walker about a woman who, having a desire for peas, bore ("Jan. 16, 1693") a child marked with a pea. A stone which grew under the tongue of "M<sup>r</sup>. Collier, an honest Man of Hull in New England." The case last mentioned is reported by Increase Mather in his Essay for the Recording of Illustrious Providences, 1684, pp. 303-304. On naevi materni see also the communication of 1721 (p. 48, below). On "Strength of Imagination," see Series of 1716, No. 7 (p. 40, below).

 Nov. 21, 1712. To Woodward. Letter-Book,
 M. 2. 25 (Gay MS., fols. 56-64). Almost all in Latin. Monstrous births. At Boston, to the wife of Mr.
 William Dyer ("D. Gulielmi Tinctoris"); her midwife was an old fortune-teller ("Saga Vetula").<sup>12</sup>

-At Woburn ("Guoburnæ"), to the wife of Joseph Smith ("Josephi Fabri").—At Hartford to the wife of "Samueli Debellij."—At Newichawonoc, to the wife

<sup>8</sup> Musæum Regalis Societatis, 1681, part ii. section iii, chap. 1, p. 227.

<sup>9</sup> Virginia Magazine, I, 98; III, 123.

<sup>10</sup> Cf. I. Mather, Illustrious Providences, pp. 100 ff.

<sup>11</sup> See Child, English and Scottish Popular Ballads, II, 109; V, 292.

<sup>13</sup> See Winthrop's History, ed. Savage, 1, 261 ff. (313 ff.); A Short Story, 1644, pp. 43 ff. (C. F. Adams, Antinomianism, pp. 187 ff.); Josselyn, Two Voyages, pp. 27-28, 258; Newes from New England, Thomason Tracts, LI, no. 22, Savage, 3 M. H. S. Coll., VIII, 285; Mercurius Americanus, 1645, p. 7 (Bell, John Wheelwright, Prince Society, pp. 197-198); Magnalia, bk. vii, ch. 3, p. 20 (1702); S. A. Green, History of Medicine in Massachusetts, pp. 27-29. 1916.]

25

of William Plaisted.—To a woman of Dedham, etc. See pp. 30, 36, 37, below.

6. Nov. 22, 1712. To Woodward. Letter-Book, M. 2. 26 (Gay MS., fols. 65-72).

Remedies revealed in dreams,—three cases, Lydia Ingram of Boston, Thankful Fish of Falmouth, and another. These cases Mather reports also in his Angel of Bethesda (MS.), chap. viii, pp. 62-64 (A. A. S.).

7. Nov. 24, 1712. To Woodward. Letter-Book, M. 2. 27 (Gay MS., fols. 72-87).

Remarkable recoveries from wounds:—<sup>13</sup> Jabez Musgrave; a boy wounded by the Indians in their attack on Deerfield; Simon Stone; John Symonds. Other medical cases:—Sarah Wilkinson; Mrs. Elizabeth Look of Tisbury. The letter likewise reports the case of Abigail Eliot, for which see also Increase Mather's Illustrious Providences, chap. ii, pp. 33-34; Magnalia, 1702, book vi, chap. 2, p. 10 (ed. 1835, II, 356). Robert Boyle gives the details of a case precisely similar (Works, ed. Birch, V, 96); cf. The Old Farmer and his Almanack, pp. 307-308. The Simonds and Wilkinson cases are in Magnalia, book vi, ch. 2, p. 10; the Stone, Musgrave, and Deerfield cases, in bk. vii, p. 74.

8. Nov. 24, 1712. To Waller. Letter-Book, M. 2. 28 (Gay MS., fols. 88-98).

Indian division of time (by sleeps, moons, and winters), etc.—The phenomenon observed by Childrey: "a plainly discernable way of the Twilight striking up towards the Pleiades . . ., and seeming almost to touch them." Cf. The Christian Philosopher, p. 17. In the excerpts in the Philosophical Transactions this phenomenon is called "The *Evening Glade;* first taken notice of by Dr. *Childrey*" (No. 339, XXIX, 66).<sup>14</sup> A table to find the Julian Period.

<sup>13</sup> Cf. Phil. Trans., XLIX, 238. <sup>14</sup> Cf. Phil. Trans., XXV, 2220. 9. Nov. 25, 1712. To Waller. Letter-Book, M. 2. 29 (Gay MS., fols. 99-107). Rainbows and parhelii, etc., with figures.

10. Nov. 26, 1712. To Waller. Letter-Book, M. 2. 30 (Gay MS., 108-119).

Joseph Beacon's vision or dream (May 2, 1687) at Boston, in which his brother in London appeared to him and revealed the fact that he had been murdered (with an attestation from Elizabeth Sharp and Elizabeth Thompson). "This Relation," so runs the editor's comment in the Philosophical Transactions, "seems to be well attested."<sup>15</sup> The agreement between a young Boston woman (Mehetabel Warner) and her friend Mary Johnson, that whichever of them died first should appear to the survivor (1695). The case of Beacon is reported also in Wonders of the Invisible World, and in Magnalia, 1702, bk. vii, chap. 7, pp. 77-78. See the admirable remarks of Josiah P. Quincy, M. H. S. Proceedings, XL, 444-445.

11. Nov. 27, 1712. To Waller. Letter-Book, M. 2. 30 [error for 31] (Gay MS., fols. 119-130).

On the rattlesnake. Cf. The Christian Philosopher, p. 169; Colonial Society Publications XIV, 149, 174-175. See also Series of 1716, No. 5 (p. 39, below); Series of 1723, No. 2 (p. 51, below).

12. Nov. 28, 1712. To Waller. Letter-Book, M. 2. 32 (Gay MS., fols. 130-140).

Thunder and lightning are very violent in this country. On July 24, 1681, a ship about a hundred leagues off the New England coast (Mr. Lad, master) met with a thunderstorm that changed North to South in the compass.<sup>16</sup> Earthquakes: six or seven shocks in January, "1663." [Of this Increase Mather, in his Illustrious Providences, says: "In the year

<sup>16</sup> Nos. 339, XXIX, 67.

<sup>&</sup>lt;sup>16</sup> This case had already been reported in the Philosophical Transactions, No. 157, XIV, 520-522, March 20, 168<sup>‡</sup> (ship Albemarle; Edward Lad, master). It is also reported by Increase Mather, Illustrious Providences, pp. 91 ff., 108. For "More and Strange Effects of Thunder," see Series of 1724, Nos. 7 (p. 56, below).

## 1916.]

1662, on the 26, 27, and 28 of January, the Earth was shaken at least six times in the space of three dayes. I remember that upon the first approach of the Earthquake, the things on the Shelves in the House began to move. Many People ran out of their Houses with fear and amazement; but no House fell, nor was any damage sustained" (p. 322).] On thunder, etc. cf. Magnalia, bk. vi, ch. 3, pp. 14 ff.-Hailstorms.-Whirlwinds.-Pits in the rock at "Ammuskeag, a little above y° hideous Falls of Merrimack River."-The rock inscribed with "unaccountable characters" at Taunton (Dighton Rock: see Delabarre, Colonial Society Transactions for 1916). After the account of the rock a part of the page is cut away, doubtless for the purpose of sending Mather's copy of the inscription to the engraver. This copy is reproduced in Fig. 8 of the plate marked "Philosophical Transact. No. 339."

13. Nov. 29, 1712. To Waller. Letter-Book, M. 2. 23 (Gay MS., fols. 141-150). Cases of longevity and fruitfulness.

# SECOND SERIES (1713 AND 1714)

The Second Series of Mather's Curiosa Americana seems to have consisted of ten letters,—corresponding to the first ten titles in the lists of 1717 and 1723, and I have numbered the papers accordingly. Most of the letters were doubtless sent to London in July, 1714,<sup>17</sup> but Mather certainly began to collect the materials in the autumn of 1713,<sup>18</sup> and the draught of No. 1 is dated Dec. 1, 1713. Perhaps, then, some of the letters went to England before the rest.

When, in 1716, Mather sent his Third Series to England, he included in the parcel fresh copies of the Second Series (or of most of it), not feeling certain that it had reached its destination. No. 2 of the

<sup>&</sup>lt;sup>17</sup> See the date of No. 4 ("The Moose").

<sup>18</sup> See Diary, Oct. 14 and Dec. 2, 1713 (II, 247, 265-266).

Second Series (on the Moon), was I think made to do duty again as No. 9 of the Third Series.

Of the Second Series, only No. 4 (on the Moose) is preserved in the Letter-Book of the Royal Society; it is dated June 21, 1714, and is addressed to Waller. The draughts of the whole series (in Mather's hand) are in M. H. S., in a MS. volume (C. 61. 2. 6) given to the Society by Timothy Alden, Jr., Oct. 20, 1808;<sup>19</sup> but only one of them (my No. 1) is dated. I give the titles as they stand in the draughts. The draughts are preceded by the following list (fol. 1a) in Mather's hand:—<sup>20</sup>

# Communications to Members of the

## Royal Society.

## From C. M.

#### Curiosa Americana—continued.

1. A Woollen Snow.

2. Surprising Influences of y<sup>o</sup> Moon.

3. A Monster.

4. The Moose.

5. The Pigeons.

6. Long Fasting.

7. A Strange Sisterhood.

8. Uncommon Ideots.

9. An unusual Discharge.

10. An Ear Strangely Molested.

11. An Account of the Fagiana.

12. Curiosa Botanica.

13. A Strange Mischief to the Eyes.

14. Curiosities of the Small-Pox.

15. A Monstrous Calf.

16. Monstrous Imprægnations.

17. Strength of Imagination.

18. The Stone Mistaken.

<sup>19</sup> I have referred to these draughts by the numbers of the folios of this part of the MS. (not indicated in the MS. itself),—beginning with "fol. 1."

<sup>20</sup> This list was probably drawn up in 1717 or 1718. I shall call it the 1717 list. I have prefixed numbers to the 26 articles (none in MS.).

#### 28

1916.]

19. A Serpent Securely handled.

20. The Nidification of Pigeons.

21. A Singular Lime-Stone.

22. Fossils.

23. A Triton.

24. An Eclipse observed.

25. A Prodigious Worm.

26. An horrid Snow.

1. Dec. 1, 1713. "A Woollen Snow." To Waller. Draught (dated) in M. H. S., fol. 2; the first article in the 1717 and 1723 lists.

On a strange fall of "a very considerable Quantity of" wool in a snowstorm "a few years ago" at Fairfield "in y° Depth of Winter." A specimen was enclosed.

Immediately following this in M. H. S. is the undated draught of a letter to Waller (fol. 3) in reply to one from him received Oct. 12, 1713. This letter is printed from the draught in Publications of The Colonial Society of Massachusetts, XIV, 86-87. The draught is headed (in brackets but in Mather's hand) "Separate Letter." Next comes the draught of a covering letter to Dr. Woodward, sent with the Series of 1716, and introducing the Secretary of the Province, Samuel Woodward (fols. 4-5):<sup>21</sup> see p. 36, below.

2. [1714.] "Surprising Influences of the Moon." To Waller or Woodward. Draught (undated) in M. H. S., fol. 6; 2d article in 1717 and 1723 lists. When this Second Series was recopied by Mather in 1716, he gave this letter a new date (July 11, 1716), with which it turns up (incomplete) in a contemporary transcript in the Sloane MS. 3340, fol. 293a, as one of the Third Series of Curiosa (see p. 41, below).

"The Georges of my Neighbourhood" have furnished Mather with two curious examples of lunar influence. If chestnut wood "be fell'd while the

<sup>21</sup> This has the docket in Mather's hand "Letters to  $D^r$  Woodward. Sent by  $M^r$ Secretary Woodward. July-1716." Apart from this docket, the letter has no date. Moon is Waxing, it will so sparkle in the Fire, that there shall be no Sitting by it in safety. If it be cutt while  $y^{e}$  Moon is Waining, there will be no such Inconvenience." "Whatever Timber we cutt in Two Wanes of the Moon in a year; the Wane in August, and the Wane in February; it will be forever free from Worms." A third curiosity: "We very much observe it in o<sup>r</sup> Countrey, and govern o<sup>r</sup> affaires by the Observation, That, as the Winds are in the Last Quarter of the Moon, so they generally govern in  $y^{e}$  next Three Quarters."

3. [1714]. "A Monster." To Waller or Woodward. Draught, undated, in M. H. S., fol. 7<sup>22</sup>; 3d article in 1717 and 1723 lists.

The monster consisted of two female children united. It was born to "a woman in my next Neighbourhood" on Oct. 15, 1713. Mather saw the creature himself ("I was myself one of y° Spectators"), and the letter may have been written soon after the event. He adds an account of a cow that bore three calves at a birth—one black, one white, and one red. See also First Series, No. 5 (p. 24, above).

4. June 21, 1714. "To Richard Waller, Esq. Containing the Description of y<sup>e</sup> Moose Deere." So dated and entitled in Letter-Book, M. 2. 35 (Gay MS., fols. 169-172). Draught (undated) in M. H. S., fol. 8, headed simply "The Moose."<sup>23</sup> 4th article ("The Moose") in 1717 list and ("The Moose of America") in 1723 list.

The letter was composed, as the opening sentence shows, in response to a missive from Waller making "particular Enquiries" about the subject. Mather wrote to John Winthrop (H. C. 1700) for such information on March 30, 1714,<sup>24</sup> and in a letter of July

 $^{23}$  But the draught has a cancelled heading "A brief Account of the MOOSE, a Creature frequent in the New English Colonies."

<sup>24</sup> M. H. S. Collections, VIII, 417.

<sup>&</sup>lt;sup>22</sup> The draught is headed "A Monster." There is also a cancelled heading: "A Monster born at Boston, in New England. 15<sup>d</sup>. 8<sup>m</sup>. 1713." For a similar case of the Siamese Twin kind see Philosophical Transactions for 1757, L, 311 ff.

2, 1714, seems to acknowledge the receipt of a satisfactory answer.<sup>25</sup> On the Moose and the Society see Colonial Society Publications, XIV, 88. The communication was read before the Royal Society on Oct. 28, 1714 (Letter-Book).

5. [June, 1714.] "The Pigeons." Probably to Woodward.<sup>26</sup> Draught, undated, in M. H. S., fols. 10-11. 5th article ("The Pigeons") in 1717 list and ("The New English Pigeons") in 1723 list. See also No. 3 in First Series (p. 24, above); No. 3 under 1716.

The letter is chiefly concerned with the prodigious number of the birds:<sup>27</sup>—"thousands in a Flock:" "y<sup>e</sup> best Part of a Mile Square occupied by a Flock." "They have been frequently sold for Two Pence or Three Pence a dozen." Sometimes "the Countrevpeople feed their Hogs with y<sup>m</sup>." "One of my Neighbours killed no fewer than two & thirty dozen at one shott." They spoil orchards by breaking down the trees. A man caught two hundred dozen at once by shutting his barn door. Mather copies an interesting passage from a letter sent him by his friend Captain Billings, who remarks that "the Cocks take care of y<sup>e</sup> young ones in y<sup>r</sup> Nests, for One Part of the Day; and the Hens ye. Other," and adds some other particulars about the male birds and their feeding the nestlings with "a Substance like a Tender Cheese-Curd." This passage is reproduced by Mather in The Christian Philosopher, p. 192, with one or two other items.

<sup>25</sup> M. H. S. Collections, VIII, 418-419.

 $^{\rm z7}$  Josselyn's Two Voyages, p. 99, speaks of the pigeons as occurring in "millions of millions."

<sup>&</sup>lt;sup>26</sup> The letter of Nov. 19, 1712, dealing in part with the same subject, was addressed to Woodward (p. 24), and the beginning of the present letter indicates that it was written in reply to a request for further information: "Proposing to answer your Desire of a treat with a further Mess of o<sup>r</sup> Pigeons." The letter on "The Nidification of Pigeons" (1716, No. 3, p. 38) was certainly addressed to Woodward, and begins with the following reference to the present letter: "You were not so cloy'd with a small Treat of my New English Pigeons, which I endeavoured for you, in a former Letter, that you will be unwilling to hear any further of them."

[April,

6. [June, 1714.] Probably to Woodward.<sup>28</sup> "Long Fasting." Draught<sup>29</sup>, undated, in M. H. S., fol. 12. 6th article ("Long Fasting") in 1717 list and ("A Strange Instance of Long Fasting") in 1723 list.

A young man of about eighteen landed on a rock called Gull Island, near Long Island [Boston Harbor], in the latter end of January "in one of o<sup>r</sup> terrible Winters." His canoe was carried off by the tide, and he lived there, with nothing to eat but about a pint of barnacles and some snow, for twenty-six days. He had his dog with him, but "he never had a Thought of killing him." On the twenty-seventh day he was taken off by one Havens. In three weeks he died. "Before he died, all the Flesh on his Bones was in appearance turned into lice; he was all over a thick, prodigious, and astonishing Swarm of lice."

The letter shows considerable acquaintance on Mather's part with examples of long fasting (including that of "the famous Darby-shire Maid"). One passage from his own experience is worth quoting for its genuine scientific insight with reference to the principle of "suggestion."

"I have myself known, Persons who were Energumens, keep a Rigid Fast for diverse Whole Weeks together. One who had Fasted Nine Dayes, and had liberty to eat for Three Dayes, and then Fasted for Fifteen Dayes more. Hac ipse miserrima vidi.—The Dæmons who kept y<sup>e</sup> miserable in such an horrid Fast, seem'd to take occasion for it, from my mentioning a well-attested Instance given by Henricus ab Heer of an energumen having pass'd thro' a Fast of such Dimensions." The case which Mather cites from his own experience was that of Mercy Short, reported in his tract entitled "A Brand Pluck'd out of the Burning," which was first printed in Professor

<sup>28</sup> The beginning indicates that this letter was addressed to the same correspondent as No. 5: "Having lately sett some American Dishes before you, perhaps you may be y<sup>e</sup> better prepared for a Starvation Story."

<sup>19</sup> Headed "Long Fasting." Cancelled heading: "A Strange Instance and Effect of a Long Fasting."

## Cotton Mather's Communications.

1916.]

G. L. Burr's Narratives of the Witchcraft Cases 1648-1706 (N. Y., 1914): see pp. 265-266; cf. pp. 278-279. He afterwards had occasion to observe an instance of fasting in the case of Margaret Rule (reported in Calef's More Wonders from the Invisible World, 1700).

The Derbyshire maid mentioned by Mather was Mary Taylor, who lived near Bidwell in that county. She began to fast in December, 1667, and had continued, when her case was reported, for more than a year. See John Reynolds, "A Discourse upon Prodigious Abstinence: Occasioned By the Twelve Moneths Fasting of *Martha Taylor*, the Famed Derbyshire Damosell . . . Humbly offered to the Royall Society." London, 1669.<sup>30</sup>

Still more famous is Ann Moor, of Tutbury in Staffordshire, who was thought to have fasted for six years, from 1807 to 1813, when imposture was detected. From "An Account of the Extraordinary Abstinence of Ann Moor," first American from the second London edition,<sup>31</sup> Boston, 1811, it appears that a "Likeness in Wax, of this Wonderful Woman" was exhibited "at the Columbian Museum, *Tremontstreet, next the Stone Chapel, Boston.*" A narrative of the exposure, with much pertinent material, was published by the Rev. Legh Richmond at Burton-on-Trent in 1813—"A Statement of Facts, relative to the supposed abstinence of Ann Moore" (Harvard College Library). The case was discussed in several medical journals.

An early instance is mentioned by Fletcher, Love's Cure, act ii, scene i (ed. Waller, vii, 178): "the miraculous Maid in Flanders"—"She that liv'd three years without any other sustenance, than the smell of a Rose." This person is the subject of a ballad, writ-

33

<sup>&</sup>lt;sup>30</sup> Reprinted in 1809 in the Harleian Miscellany, IV, 43 ff. The Harvard College Library has a copy of the original tract.

<sup>&</sup>lt;sup>81</sup> The Harvard College Library has the first English edition ("by J—\_\_\_\_"), 1809, and the fourth, 1811, as well as this American copy.

ten apparently in 1613: "Of a maide nowe dwelling at the towne of *meurs* in *dutchland*, that hath not taken any foode this 16 yeares, and is not yet neither hungry nor thirsty" (The Shirburn Ballads 1585-1616, edited by Andrew Clark, Oxford, 1907, pp. 54 ff.)<sup>32</sup>

For other cases, more or less noteworthy, see Philosophical Transactions, XIV, 577 (No. 158; April 20, 1684); XXXI, 28-29 (No. 364; Jan.-April, 1720); LXVII, 1-10 (1777); Paullus Lentulus, Historia admiranda de Prodigiosa Apolloniæ Schreiræ, Virginis in Agro Bernensi, Inedia, Berne, 1604 (Harvard College).

7. [June, 1714.] "A Strange Sisterhood." To Waller or (more probably) Woodward. Draught, undated, in M. H. S., fols. 13-14. 7th article in 1717 list (with same title) and ("An Uncommon Sisterhood") in 1723 list. Printed in part (from the draught) in the Collections of the New Hampshire Historical Society, III, 12; see also Joseph Dow, History of the Town of Hampton, II, 862.

An account of the twin sisters Bridget and Jane Moulton, of Hampton, N. H. Mather derived his information from Samuel Penhallow, to whom he wrote on Dec. 24, 1713, asking for "a particular and a well-attested Relation" of "a surprising Curiosity, of two very sympathizing Sisters at Hampton" which Penhallow had mentioned to Increase Mather. The letter to Penhallow (M. H. S.) is printed in Diary II, 291.

8. [June, 1714.] "Uncommon Ideots." To Waller or (more probably) Woodward. Draught,<sup>33</sup> undated, in M. H. S., fol. 15; 8th article in 1717 list (with same title) and ("A Rare Exemple of some Ideots") in 1723 list.

<sup>&</sup>lt;sup>32</sup> Henry Wilson and James Caulfield, The Book of Wonderful Characters, London, [1869,] p. 249.

<sup>&</sup>lt;sup>23</sup> Headed "Uncommon Ideots." Cancelled heading: "A Couple of uncommon Ideots."

Case of two idiot daughters of a paralytic gentleman of Dunstable.

9. [June, 1714.] "An Unusual Discharge of a Mischief, near ye shoulder-blade."<sup>34</sup> Doubtless to Woodward.<sup>35</sup> Draught, undated, in M. H. S., fol. 16. 9th article ("An Unusual Discharge") in 1717 list and ("A Surprising discharge of an Ear of Rye at the Shoulder-blade") in 1723 list.

A young woman of Concord, Massachusetts, was attacked by a violent fit of coughing, which lasted for an hour or two. This grew more moderate, but she was very much indisposed. A tumor came "about her left Shoulder-blade." A large ear of rye was extracted. She recovered her health. She had run to drive some hogs out of a field, with an ear of rye in her mouth, had fallen, and it was driven down her throat. For a somewhat similar case, see Philosophical Transactions, XIX, 180.

10. [June, 1714.] "An Ear Strangely Molested." Doubtless to Woodward. Draught, undated, in M. H. S., fol. 17. 10th article (with same title) in 1717 list, and ("A surprizing Molestation of y<sup>e</sup> Ear, w<sup>th</sup> Fly-blows") in 1723 list.

The case of Lieutenant Fuller at Newton. Cf. The Christian Philosopher, p. 246.

# 1715

In 1715, in lieu of his usual series of letters, Mather sent to England the manuscript of The Christian Virtuoso, which, if it did not find a publisher, was to be handed to Dr. Woodward for deposit in the archives of the Royal Society. The book was printed, under the title of The Christian Philosopher, in 1720 (see, for details, Publications of the Colonial Society, XIV, 98-99).<sup>36</sup> Mather included in this volume some of the material that he had communicated to the

<sup>\*</sup> Cancelled. "An Unusual Discharge" substituted.

<sup>&</sup>lt;sup>25</sup> At the end he speaks of him as having gone far in anatomy.

<sup>&</sup>lt;sup>86</sup> The title-page is postdated 1721.

[April,

Royal Society. See pp. 25, 26, 31, 35, above; pp. 38, 43, 45, 46, below.

## THIRD SERIES (1716)

The Third Series of Mather's Curiosa Americana, all addressed to Woodward, consisted of "a Decad of Letters" and "a sort of a Postscript."87 Into the parcel Mather put fresh copies of the Second Series, and in July, 1716, he entrusted the whole to Samuel Woodward, Secretary of the Province, who was about to sail for London. The original draughts of the eleven letters of the Third Series, as well as of the covering letter, are in M. H. S. They are not dated, but the covering letter is docketed, in Mather's hand: "Letters to D<sup>r</sup>. Woodward. Sent by M<sup>r</sup> Secretary Woodward, July-1716." Contemporary copies of the Series should be in Sloane MS. 3340, fols. 277-297, but three whole letters and parts of two others are lacking between fol. 292 and fol. 293, though the foliation is continuous. The Sloane copies preserve the dates of most of the Series, and leave doubts as to the exact dates and order of Nos. 6-8 only. At the head of the Sloane copies is written the title of the series (fol. 277a): "Curiosa Americana continued in Letters to yº learned & Famous John Woodward, M. D. & F R S & M. Professor from Cotton Mather. In y° year 1716."

To this Third Series I append (as Nos. 12 and 13) two letters written on Sept. 24, 1716, one to Petiver and the other to Woodward.

1. July 2, 1716. "Monstrous Imprægnations."<sup>38</sup> To Woodward. Draught, undated, in M. H. S., fols. 28-29. 16th article (with same title) in 1717 list; 15th article ("Monstrous Imprægnations, of y° *Musquash* on y° Catt") in 1723 list. Contemporary copy, marked "No. 1" (with date), in Sloane MS. 3340, fols. 277-279.

<sup>37</sup> See the covering letter to Woodward and the *Fagiana* letter (No. 11, p. 41, below). <sup>38</sup> I give the titles that stand in the draughts.

36

After some biological observations on the seeds of men and animals, Mather gives an account of the muskrat.

"We have a little Animal called a *Musquash*, pretty frequently lodging about y<sup>o</sup> Brooks that water o<sup>r</sup> Countrey. A small Beast, that lives in Shallow Ponds where it builds notable Houses of Earth and Sticks, and feeds upon *Calamus Aromaticus*. It has a strong scent of Musk, especially about y<sup>o</sup> month of *May*; and its Testicles laid up in Wool, are of a lasting Fragrancy.<sup>38a</sup> It is near ye bigness of an Ordinary Catt; and the *Mus Muscatulus* in the LXVII Table of Johnston, in his *Historia Naturalis*, *De Quadrupedibus*, is y<sup>o</sup> nearest of any thing I have seen, unto y<sup>o</sup> Figure of it."

Mather then tells of a cat in Roxbury that bred with a musquash, and "brought forth a Litter of many Kittens; and each of y° Kittens were of a Mixed Form; some had most of y° *Musquash*, and some had most of y° *Catt*, conspicuous in y<sup>m</sup>." He adds particulars, appends learned remarks about contemporary science, and concludes by mentioning an egg (which "I have newly had in my Hand") found inside a hen's egg.

2. July 3, 1716. "A Monstrous Calf." To Woodward. Draught, undated, in M. H. S., fols. 26-27. 15th article in 1717 list and 14th in 1723 list (same title). Contemporary copy, with date, in Sloane MS. 3340, fols. 280-282.

Mostly taken up with examples of monsters from a considerable range of authors. At the end Mather reports briefly the case of "a Cow in o<sup>r</sup> Vicinity" which this year brought forth a calf with a visage strongly resembling the human face. He encloses

<sup>&</sup>lt;sup>\$56</sup> Cf. Josselyn, Two Voyages, 2d ed., 1675, p. 86: "The *Musquashes* is a small Beast that lives in shallow ponds, where they build them houses of earth and sticks in shape like mole-hills, and feed upon *Calamus Aromaticus*; in May they scent very strong of Muske; their furr is of no great esteem; their stones wrapt up in Cotten-wool will continue a long time, and are good to lay amongst cloths to give them a grateful smell." See also Josselyn's New England's Rarities, 1672, pp. 53-54 (*muskquash*).

38

"a Lively *Icon* of it." There is no trace of the icon. See pp. 24, 30, above. For monstrous calves cf. Philosophical Transactions, I, 10, 20; XX, 79; XXV, 2414; XXVII, 429; XLV, 497.

3. July 4, 1716. "The Nidification of Pigeons." To Woodward. Draught, undated, in M. H. S., fols. 37-38. 20th article (with same title) in 1717 list; 18th article ("The Nidification of or Pigeons") in in 1723 list. Contemporary copy, with date, in Sloane MS. 3340, fols. 282b-284a.

Mather refers to his previous letter to Woodward on the pigeons (Second Series, No. 5, p. 31, above).<sup>39</sup> After citing various instances of the skill shown by birds in building their nests, he describes those of the wild pigeon of New England.

"The build their Nests w<sup>th</sup> little Sticks laid athwart one another, at such Distances, that while they are so near together, as to prevent their Eggs falling through, they are yett so far asunder that their Eggs may feel the cool Air coming at  $y^{m}$ ." Otherwise the eggs would be addled by the exceeding heat of the pigeon's body. All that is material in this letter is printed in The Christian Philosopher, pp. 188-189.

4. July 5, 1716. "A Triton." To Woodward. Draught, undated, in M. H. S., fols. 43a-47a. 23d article in 1717 list and 22d in 1723 list (with same title). Contemporary copy, with date, in Sloane MS. 3340, fols. 284b-290a.

After a surprisingly erudite discourse on fishes, or the like, with human or half-human form (as to which Mather says he has always been incredulous), he avers that he is at last "compelled now to beleeve the existence of a *Triton*; For such an one, has just been exhibited in my own Countrey." On Feb. 22, 1716 ("22<sup>d</sup> XII<sup>m</sup>  $17\frac{15}{16}$ ") the phenomenon was observed. "Three honest and credible men, coming in a Boat from *Milford* to *Brainford*" in Connecticut, saw "a

<sup>39</sup> See also First Series, No. 3 (p. 24 above).

### 1916.]

Creature that seem'd a Man, lying on the Top of a Rock" near the Brainford shore. They tried to capture the animal, but it "Jump'd off ye Rock, & with all Possible Expedition flounced into the Water." They had a full view of the creature, however. Thev "saw his Head, and Face, and Neck, and Shoulders, & Arms, and Elbows, and Breast and Back, all of an Humane Shape, only his Arms, were little more than half the Length of a Mans. He wanted not for Hair, which was of a Grayish Colour. However,-desinit in piscem; His Lower Parts were those of a Fish, and Coloured like a Mackarel. His Tail was forked, and he had Two Fins about half a Foot above y° Tail. The whole Animal was about Five or Six Foot in Length."

The New-England Courant, No. 247 (April 16-23, 1726), reports a merman off Brest.

5. [July 6, 1716.] "A Serpent securely handled." To Woodward. Draught, undated, in M. H. S., fols. 34-36. 19th article (with same title) in 1717 and 1723 lists. The contemporary copy in Sloane MS. 3340, fols. 290b-292b, is imperfect: the last part of the letter is lost, including the date (which, however, is certain enough from the order of the letters in this MS.).

After much learning on the general subject, Mather tells of an Indian who, after anointing himself with the fat of a kite (a bird which "very much makes his Living upon *Rattle-snakes*") handled a rattlesnake "with as much freedom, & as little Damage, as if he had only had an *Eel* in his hands." The reptile "would not so much as attempt the least Bite upon him." Cf. First Series, No. 11 (p. 26, above); Series of 1723, No. 2 (p. 51, below).

6. [July 7, 1716.]<sup>40</sup> "A Strange Mischief to the Eyes." To Woodward. Draught, undated, in M.

<sup>&</sup>lt;sup>40</sup> This letter and the next two are lost in Sloane MS. 3340, and their order and several dates cannot be exactly determined. They must have been written, however, on July 7, 9, and 10, and may well have been composed in the order here indicated (see M. H. S. Proceedings, XLV, 421, note).

H. S., fol. 23. 13th article in 1717 list, 12th in 1723 list (same title). Lost in Sloane MS. 3340.

The circumstance happened to "a Neighbour of mine lately on board a Vessel, which was loaden with Pease, & other Commodities." She was driven off our coast by a storm and "forced unto a Flight for Barmudas." She took in much water, and the steam of the decayed peas afflicted the crew with blindness and pain. They recovered after landing.

7. [July 9, 1716.] "Strength of Imagination." To Woodward. Draught, undated, in M. H. S., fols. 30-31. 17th article (with same title) in 1717 list; 16th in 1723 list ("The Strength of Imagination"). Lost in Sloane MS. 3340.

After miscellaneous remarks on the influence of the imagination, with a mention of "marked Children" and of "ye Death of Le Moliere ye famous Comœdian of or Time," Mather reports the case of "a Gentleman of Carolina" named Mr. Edwards, who had repented of the errors caused by too free use of wine and had a strong physical aversion to it. The minister of the place (Mather's informant) "perswaded him to present himself unto y° Communion," and, when he tried it, "the Wine satt well upon him; and he continued a Religious Comunicant." Later, his wife, as an experiment, at the minister's suggestion, put a few drops of wine in a "pudden," and when it came to the table, it made him very sick, though nobody else could taste the minute quantity of wine in the compound.

On the general subject of this paper compare First Series, No. 4 (p. 24, above).

8. [July 10, 1716.] "The Stone Mistaken." To Woodward. Draught, undated, in M. H. S., fols. 32-33. 18th article in 1717 list, 17th in 1723 list (same title). Lost in Sloane MS. 3340.

The case of "a Good man, who lived not far from me, (nam'd M<sup>r</sup> Call)." The surgeons advised him to be cut for the stone. He refused, and finally died. A post mortem examination showed that there was no stone, but that "his Bladder was grown entirely schirrous."

9. July 11, 1716. "Surprising Influences of the Moon." Draught, undated, in M. H. S., fol. 6. 2d article in 1717 and 1723 lists (same title). Contemporary copy (incomplete, but dated) in Sloane MS. 3340, fol. 293.

This is the same piece, redated, that formed a part of the Second Series, 1714 (see p. 29, above).

10. July 12, 1716. "Curiosities of y° Small Pox." To Woodward. Draught, undated, in M. H. S., fols. 24-25. 14th article in 1717 list, 13th in 1723 list (same title). Contemporary copy, with date, in Sloane MS. 3340, fols. 293b-295b.

A very important document. For a summary and extracts see M. H. S. Proceedings, XLV, 422.

11. July 13, 1716. "The Fagiana." To Woodward. Draught, undated, in M. H. S., fols. 18-19. 11th article ("An Account of the Fagiana") in 1717 list, and ("An American Plant, called, Fagiana") in 1723 list. Mather styles the letter a postscript to Nos. 1-10:—"Unto y° Decad of Letters wherewith I have now address'd you, I shall add this as a sort of a Postscript."

The plant "is a short Sprig, of about Seven or Eight Inches in Length; of a brown Colour; having only Little Knotts rather than Leaves; and usually two or three Stalks upon a Root." He encloses a specimen. It grows in August, and only in the shade of beech trees; hence he names it *Fagiana*. "It was first communicated unto us, by a famous *Indian*, who did very strange cures upon *Cancers*" by administering a decoction of it and using a plaster of the boiled plant. Other uses in medicine are noted. Kindly give this specimen to Mr. Petiver.

The plant was catalogued by Petiver, with due acknowledgments to Mather, in 1717 (see p. 42, below).

Sept. 24, 1716. "Curiosa Botanica." To 12. James Petiver, F. R. S. This communication consisted of a letter and a paper book. In the book were "Six or seven Plants, which are here esteemed peculiar to America," with notes on the same. The packet was entrusted to "M<sup>r</sup> Edward Loud. (One of o<sup>r</sup> Judges,) who will do me the Honour to deliver it with his own hand." M. H. S. has dated draught of the letter and draught of the notes (fols. 20-22), with title as above. The original letter (but not the notes) may be seen (dated) among Petiver's papers in the British Museum (Sloane MS. 4065, fol. 255). Under the date Petiver has written: "Rec<sup>d</sup>  $\delta$  Jan. 15. 171 $\frac{6}{7}$ " (& meaning, of course, "Martis die"). In the 1717 list the 12th article is "Curiosa Botanica"; in the 1723 list the 25th article is "An Hortus Siccus of To Mr Petiver." American Plants.

Petiver catalogued the plants, with Mather's notes, in one of the sheets that he was in the habit of publishing from time to time: "*Petiveriana* III, seu Naturæ Collectanea; Domi Forisque Auctori Communicata" (London, 1717).

One detail in the notes is of some literary interest. Mather's original draught describes a certain plant ("Caltha Sylvatica") as "the greatest Vulnerary in the World," adding that "the Indians are extremely venturesome in their Fighting, if this Traumatic be near  $y^m$ ." In the finished note, as sent to Petiver and by him printed, Mather inserted a cautious "perhaps" before "the greatest," and improved the passage about the aborigines so that it reads: "The Indians will fight like Milton's Devils, if this Traumatick be near them."

Of the seven plants catalogued by Petiver as Mather's gift one is *Ophiophuga* or Snakeweed, as to which see the Publications of the Colonial Society of Massachusetts, XIV, 151, 183-184; another, the *Taututtipoag* or "Geranium Americanum" (see the same, XIV, 151, 185-186); still another, the *Fagiana* 

## 1916.]

(see p. 41, above). All or most of the plants were, I suppose, collected by Nehemiah Walker, for Mather notes in his Diary, Sept. 12, 1716: "Employ my Kinsman at *Roxbury* to make a Collection of *Plants*, peculiarly *American*" (II, 371).

The letter to Petiver includes an account of two agricultural experiments—one with Indian corn of different colors, the other with squashes and gourds. This account is published in The Christian Philosopher, pp. 124-125.

13. Sept. 24, 1716. "A Singular Lime-stone." To Woodward. Draught, dated, in M. H. S., fols. 39-40. 21st article (with same title) in 1717 list; 20th article in 1723 list ("The Limestone produced in S<sup>r</sup> W<sup>m</sup>. Phips's Wreck").

This letter, like that of even date to Petiver, was entrusted to "the Hand of one of or Judges, *Edward Loyd* Esq." The specimen is called "a very curious sort of a Fossil." The pieces of eight which Phips salvaged were covered with the substance. Mather enclosed "a fragment of that Crust with a peece of Eight adhering to it." See Magnalia, bk. ii, Life of Phips, sect. 6, ed. 1702, p. 41.

#### 1717

Four communications from Mather fall in 1717. 1. July 25, 1717. "Fossils." To Woodward. Draught, dated ("25<sup>d</sup> V<sup>m</sup> 1717") in M. H. S., fols. 41-42. 22d article ("Fossils") in 1717 list; 21st ("A Collection of Fossils") in 1723 list.

With the letter went " a Box, which contains between Twenty and Thirty" fossils—the kind of thing that Woodward was most eager to get. These, Mather writes, are furnished by "a young Gentleman, whose name is  $M^{r}$  John Winthrop, and whose Grandfather (y° Governour of one of or Colonies,) was a Virtuoso, in y° very Beginning of y° Royal Society." Mather's letter to Winthrop (H. C. 1700), grandson of the Governor of Connecticut, asking him to collect fossils for Woodward, is printed in 4 M. H. S. Collections, VIII, 419-420 (Oct. 15, 1716). It was accompanied by a copy of Woodward's famous Naturalis Historia Telluris, a gift to Mather from the author. Winthrop's reply, promising to "doe my indeavo<sup>\*</sup> to answer both yo<sup>rs</sup> & D<sup>\*</sup> Woodwards requests" (Nov. 5, 1716), is printed in 6 M. H. S. Collections, V, 332. 2. Oct. 1, 1717. "An Eclipse Observ'd." To Edmond Halley. Enclosing Thomas Robie's "Observations of the Suns Eclipse, Sept. 23. 1717. at Cambridge N. England; Lat. 42-25." Draught, dated ("1<sup>d</sup> VIII <sup>m</sup> 1717") in M. H. S., fols. 48-49.

24th article (with same title) in 1717 list; 26th article
("An Eclipse observed. To D<sup>\*</sup> Halley") in 1723 list.
3. Dec. 10, 1717. "An horrid Snow." To Woodward. Draught, dated, in M. H. S., fols. 52-53.

26th article in 1717 list, 24th in 1723 list (same title). This is the storm mentioned in Mather's Diary, Feb. 28, 1717 (II, 439): "As mighty a Snow, as perhaps has been known in the Memory of Man, is at this Time lying on the Ground." Again, May 24, 1717: "I would make some useful Collections of the rare Occurrences, which were in the Storms and Snows, that we had in the Conclusion of our Winter. I may make a good Use of them. And communicate them [to] the Royal Society" (II, 455). Cf. Douglass, Summary, II, 212, 213: the snow was "upwards of 3 Feet upon a level." Mather's account of the storm is a fine example of his style at its best.

4. Dec. 12, 1717. "A Prodigious Worm." To Woodward. The draught (M. H. S., fols. 50-51) is dated " $12^{d}$  X<sup>m</sup>  $17\frac{17}{18}$ ." I put the letter under Dec. 12, 1717, but possibly it should be assigned to Jan. 12, 1717, since the occurrence took place on Jan. 6, 1717 (see below). 25th article in 1717 list; 23d in 1723 list.

An account of an intestinal worm, including a copy of a letter from John Perkins, the Boston physician, to Mather. Perkins investigated the affair and exam-

44

#### 1916.] Cotton Mather's Communications.

ined the worm, at Mather's request. He found 128 ft. of it remaining after the neighbors had taken away many pieces as souvenirs. Perkins's report is perfectly sober and scientific. He says that the creature is much like that described in the Philosophical Transactions by Dr. Tyson. The occurrence is also reported in the News-Letter, No. 662 (Jan. 7-14, 1717), and is there said to have taken place on the 6th.<sup>41</sup> Mather inserted a brief note in the case in the Christian Philosopher, p. 158.

#### 1720

In February, 1720, Mather sent certain Curiosa to Henry Newman for communication to John Chamberlayne, F. R. S., having heard that Woodward was dead.<sup>42</sup> They reached their destination, and Chamberlayne passed them over to the President of the Royal Society, Sir Isaac Newton.<sup>43</sup> These consisted of twelve letters, as may be made out from the 1723 list.<sup>44</sup>

I append the titles of the twelve pieces as given (without numbers) in that list.

1. A Strong Digester. (27th article in 1723 list.)

2. The Quadrature of the Circle. (28th.)

- 3. The Whale. (29th.)
- 4. Prodigies. (30th).

<sup>41</sup> The passage is quoted by Dr. Green, History of Medicine in Massachusetts, p. 41 (cf. p. 40).

<sup>43</sup> See Mather to Winthrop, Dec. 26, 1720, and March 12, 1722[-23], 4 M. H. S. Collections, VIII, 444, 455; Mather to Newman, Feb. 17, 1720, MS. draught in A. A. S.; Newman's reply, Sept. 17, 1720, MS. in A. A. S.

<sup>43</sup> Chamberlayne to Mather, Aug. 31, 1720, quoted in Mather's letter to Winthrop, Dec. 26, 1720 (4 M. H. S. Collections, VIII, 444). The letters went by the Five Sisters, Capt. William Brown, which is reported as "cleared outwards for London" in the News-Letter, No. 827 (Mon., Feb. 15-Mon., Feb. 22, 1720): see Mather to Winthrop, Dec. 26, 1720 (4 M. H. S. Collections, VIII, 444); Newman to Mather, Sept. 17, 1720 (MS. in A. A. S.).

"In the 1723 list (Gay MS., fol. 180), thirteen communications are marked as sent to "M<sup>r</sup>. Chamberlain." The thirteenth ("A Relation of a New Burning Island") was certainly not sent to Chamberlayne in February, 1720. The other twelve, however, were doubtless the lot in question, for there is no evidence that Mather sent anything to him except on two occasions—the second being that on which the "Burning Island" (alone, it seems) was despatched.

[April,

5. Odd Effects of the Thunder. (31st.)

6. A large Description of the *Mississipi*; by one who sojourned several years in that Countrey. (32d.)

7. A Rocquing Stone. (33d.)

8. A Sea-Lion. (34th.)

9. A Water-Dove. (35th.)

10. The Locusts. (36th.)

11. The Aurora Borealis. (37th.)

12. A Journal of a Voyage round the World. (38th.)

Most of these communications seem to have perished. "The Whale," however, is doubtless preserved in part in The Christian Philosopher, pp. 176-178. As to "The Water Dove," I have little doubt that practically everything that Mather wrote to Chamberlayne on the subject is preserved totidem verbis in the Biblia Americana.<sup>45</sup> "A Rocquing Stone" (No. 7) is mentioned in a letter from Mather to Jurin, Sept. 24, 1724, entitled "A Moveable Rock." In this he notes that he has previously sent "unto or [Alas, Deceased!] Friend, an account of the Rocquing Stone" at Gloucester.<sup>46</sup> "The Moveable Rock" relates to another stone, also at Gloucester.

No. 12 is mentioned in the letter to Halley, Oct. 1, 1717 (see p. 44, above): "I am getting ready for you, some select & more Curious Passages, from a Manuscript Journal of a Late Voyage round o<sup>\*</sup> Globe. which I hope to transmitt by y<sup>o</sup> next opportunity.<sup>47</sup>

# 1721

June 10, 1721. To Chamberlayne. "A Relation of a New Burning Island." This is the thirteenth

<sup>46</sup> Letter-Book M. 2. 50 (Gay MS., fols. 231-232); draught in M. H. S.

47 Draught (M. H. S.).

<sup>&</sup>lt;sup>45</sup> On Nov. 30, 1719, Mather asks Winthrop for a description of "your Water-Dove, that so my Account of it may be Authentic as well as punctual" (i. e. precise), and he adds "pray have your Name . . . incorporated into it" (4 M. H. S. Collections, VIII, 435). On Jan. 11, 1720, he writes to Winthrop that he has inserted an account of the bird in the Biblia Americana (4 M. H. S. Collections, VIII, 436). I have not found the place in this vast manuscript (M. H. S.)

of the Curiosa marked as sent "to Mr Chamberlain" in the list of 1723 (Letter-Book, M. 2. 36; Gay MS., fol. 180). The MS. has perished, but probably its contents were identical with those of Mather's tract (in the form of a letter to "J. C., Esq." dated June 10, 1721) entitled The World Alarum'd, published in June, 1721 (Sibley's No. 370): see Diary, June 15, 1721 (II, 626-627). The News-Letter, No. 906 (June 22-26, 1721, M. H. S.) advertises the pamphlet as "just published" at the price of fourpence. In the A. A. S. loose-leaf list, "The World Alarum'd,with a New Burning Island. To M<sup>\*</sup> Chamberlain" The list is headed: "Curiosa Ameristands first. cana. Continued-In Letters to D<sup>r</sup> John Woodward."

In the Philosophical Transactions, No. 372 (XXXII, 100) is printed a paper "Concerning a new Island lately raised out of the Sea, near Tercera. By Thomas Forster." It is taken chiefly from the account given by John Robinson, master of "a small pink-snow, from Piscataqua in New-England," which arrived at Tercera on Dec. 10, 1720. Mather's narrative is also based upon a report from Capt. John Robinson, "Commander of a Sneau belonging to New-England," who "arrived at the Island of Teircera, Dec. 9. 1720. where he found the poor People in the greatest Consternation imaginable" (p. 9). The eruption had occurred about Nov. 20 (p. 10). On May 22, 1721, the News-Letter published an account of "the new burning island" (No. 898, May 15-22, 1721).

Sept. 7, 1721. "An Account of the Method & Success of Inoculating the Small-pox. To M<sup>r</sup> Dummer" (so the title runs in the list of 1723). Published in London under the title "An Account of the Method and Success of Inoculating the Small-Pox, in Boston in New-England. In a Letter from a Gentleman there, to his Friend in London. London: Printed for J. Peele at Lock's Head in Paternoster Row, M. DCC. XXII." The printed letter is dated at the end "Boston in New-England, Sept. 7, 1721." For a full discussion of this tract, see M. H. S. Proceedings, XLV, 444-459. It is probably the same piece that is entitled "Variolæ triumphatæ: or, The Small-pox Inoculated" in the A. A. S. loose-leaf list. A portion of the "Account" is in Chap. XX of The Angel of Bethesda (see M. H. S. Proceedings, XLV, 467).

November, 1721. "A Further Account, of the Method & Success of the Small-Pox Inoculated" (A. A. S. loose-leaf list); "A Further Account, of the Small-pox Inoculated" (1723 list). Preserved in Chap. XX (MS. pp. 142-147) of The Angel of Bethesda, and printed in part in Philosophical Transactions for January-March, 1722, No. 370, under the title of "The Way of Proceeding in the Small Pox inoculated in New England. Communicated by Henry Newman, Esq.; of the Middle Temple" (XXXII, 33-35). For a full discussion see M. H. S. Proceedings, XLV, 460-467.

The other Curiosa of 1721, sent to London about Nov. 30, 1721, are doubtless the following:

Nishmath-Chajim. The probable seat, & general cure of all Diseases.

The Seventh Son Examined. With a Touch upon the Kings Evil.

Lacus Mirabilis.

An Horrible Tempest.

Ostreophagi or a Matchless Oister-Hill.

Absinthium sempervivum.

Ambergrise discovered & determined.

Nævi Materni.

Melissologia, with a New Method of Bee-Hunting. The titles are identical, with a minute variation or two, in the A. A. S. loose-leaf list and the list of 1723. For a discussion, see M. H. S. Proceedings, XLV, 467-475.

Nishmath-Chajim was composed for The Angel of Bethesda (chap. V in the MS., A. A. S.), and was published separately in 1722 or 1723 (see M. H. S. Proceedings, XLV, 469). It is also included in Mather's Triparadisus (MS., A. A. S.), pp. 18 ff. The Seventh Son is preserved, as a whole or in part, in chapter LXII of The Angel of Bethesda (see the same Proceedings, XLV, 469-475). On *naevi materni* cf. First Series, No. 4 (p. 24, above).

The question of the Seventh Son and his curative powers was not a mere curiosity in Mather's day: it had a very practical bearing. This appears from a letter of Mather's to "Mr. Jos. Web," the draught of which is among our Mather MSS. Webb, it appears, had a scrofulous child, and consulted Mather on the subject. Mather replies that "ye Opinion, & Expectation of Curing ye King's Evil, by ye Touch of a Seventh Son, is not only a Vulgar Error, but also a very Foolish One." Even the king's custom of touching for the evil, he adds, is "managed with a very unjustifiable Superstition." He recommends a decoction of the "Boar Thistle,"—"ye Lowest of ye Tribe; very prickly; and of a Large Root."<sup>48</sup>

#### 1722

March 10, 1722. A letter from Mather to Woodward on small pox and inoculation. Preserved in a contemporary copy, Sloane MS. 3324, fol. 260, where it is headed "D<sup>r</sup> Mather of New England" and dated at the end, "March 10.  $17\frac{2}{2}\frac{1}{2}$ ." This is doubtless the paper entitled "Curiosa Variolarum" in the loose-leaf list (A. A. S.) and the list of 1723. See M. H. S. Proceedings, XLV, 475-477.

#### 1723

May 4, 1723. "The Case of the Small-Pox Inoculated; further Cleared. To D<sup>r</sup> James Jurin." Draught, dated, in A. A. S.; copy not in Mather's hand, but signed and dated (May 21st, 1723) by him in the archives of the Royal Society (Guard Books, XXIII. (1) 31). Sent in a letter to Jurin, May 21,

<sup>48</sup> Draught in A. A. S. (undated). On this thistle, see p. 23, above.

1916.]

[April,

1723, which is preserved in the Letter-Book of the Royal Society, M. 36 (Gay MS., fols. 173-178). See M. H. S. Proceedings, XLV, 478-479.

The following seven papers, were sent to Jurin somewhat later in 1723, probably in June. They are preserved in the Letter-Book of the Royal Society (copies in Gay MS.) and the draughts are in the A. A. S. MS. volume. The dates are in the draughts and the Letter-Book both. I give the titles as they read in the draughts. Inside of the cover of the A. A. S. MS. volume is also a list of the eight papers in Mather's hand, as follows:—

> Curiosa Americana— Continued.

In Eight Letters to

D' James Jurin

The Case of the Small-Pox Inoculated, further cleared.

A Monstrous Dragon.

A New Rattle-snake.

Carcharias Mirabilis:

Mysterious Rains.

The Land Sail'd upon.

Subterranea.

A Singular Case.

1. June 3, 1723, "A Monstrous Dragon." To Jurin. Letter-Book, M. 2. 37 (Gay MS., fols. 181-186). Draught, dated, in A. A. S.

"A few Months ago, near the Falls of James-River in Virginia, some digging a Water-Course for a Mill, by a Small Run of Water under  $y^{\circ}$  Side of an Hill, Ten foot under ground, they found the Back-Bone of a Snake, lying in such a Form as this  $\sim \sim \sim \sim \sim$ . They dug along from  $y^{\circ}$  Head to  $y^{\circ}$  Tail of it." "The Monster extended above one hundred & fifty foot in Length." This is certainly the creature about which Mather wrote to the Rev. Thomas Prince on Feb. 19, 1723, requesting an account of "the Leviathan dug

#### 1916.]

up at Virginia" (Diary, II, 686). Cf. First Series, No. 1 (p. 22, above).

2. June 4, 1723. "A New Rattlesnake." To Jurin. Letter-Book, M. 2. 38 (Gay MS., fols. 186-189); draught in A. A. S.

"Lately discovered"——"in all things has y<sup>°</sup> Resemblance of the *Rattlesnake*: Only it has no *Rattles*, but an Hard *Bone* instead of them." "It has been observed, That he exercises a sort of a Government among them; and if any of them do not Conform to his Expectation, with his Tail he strikes them Dead upon y<sup>°</sup> Spott." This is the reptile about which Mather made inquiries of Winthrop on March 12, 1723: "a New Snake, who commands & governs the Rattle-Snakes, and upon their not observing order strikes them Dead, with a Bone, which he has instead of a Rattle." (4 M. H. S. Collections, VIII, 454.) Cf. First Series, No. 11 (p. 26; above); Series of 1716, No. 5 (p. 39, above).

"Carcharias Mirabilis." 3. June 5, 1723. To Jurin. Letter-Book, M. 2. 39 (Gay MS., fols. 189-194); draught in A. A. S. The account is "Indeed but a Postscript unto what I have written, of the Whale, in my former Letters."49 "Off of 0r Cape-Cod, we now and then kill a Shark; . . . A Shark, which is not only destitute of Teeth; a Shark wholly Toothless; but also has no Bone at all in his Body. all the Bone he has, is only a Gristle. He is usually Thirty foot long: but or People catch him only for the Sake of his *Liver*; which alone usually yields at least a Tun of Oyl unto them."

4. June 6, 1723. "Mysterious Rains." To Jurin. Letter-Book, M. 2. 40 (Gay MS., fols. 194-198); draught in A. A. S.

Last autumn in Rutland, a' shower of barley. Very lately, in Newtown, several seafowl, too young to fly, and of an unknown sort. In "Lyn," a little

<sup>&</sup>lt;sup>49</sup> This is certainly a reference to the third of the twelve letters sent to Chamberlayne in 1720 and now lost (p. 45, above.)

while ago, a black snake. In a letter to the Rev. Thomas Prince, Feb. 19, 1722-3 (M. H. S.), Mather inquires about "the Birds rained at *Newtown*." In the copy printed in Diary, II, 686, "raised" is an error for "rained."

5. June 7, 1723. "The Land Sail'd upon." To Jurin. Letter-Book, M. 2. 41 (Gay MS., fols. 198-203); draught in A. A. S.

Joseph Morgan, of New Jersey, Minister of the Gospel, has invented a contrivance for sailing upon land. Mather quotes Morgan's letter at some length. This article is endorsed in the Letter-Book, "Read Dec: 5. 1723. Enter'd."

6. June 8, 1723. "Subterranea." To Jurin. Letter-Book, M. 2. 42 (Gay MS., fols. 203-205); draught in A. A. S.

In digging a well at Springfield, an axe-marked treelimb was discovered, about seventeen feet below the surface, and, at the same place, chips and butternuts about twenty feet underground.

7. June 10, 1723. "A Singular Case." To Jurin. Letter-Book, M. 2. 43 (Gay MS., fols. 205-209); draught in A. A. S.

Mather gives the very words of the patient, a shipwright, who signs himself Joseph Sheath. He sailed from Boston for Jamaica, Dec. 19; was badly burned by an explosion of powder; was blind for fifteen days. In Jamaica he "received a Cure." Later, he adds, he was marooned: "My Jaw-bone perished, and broke away; I have now two Considerable Pieces of it in my hand; with Six of my Teeth." Endorsed in Letter-Book: "read Dec: 12. 23, Entered."

After this comes in the Letter-Book (M. 2. 44, Gay MS. fols. 210-211; no draught in A. A. S.) the covering letter (to Jurin) for these seven items. It is dated June 10, 1723, and introduces "the Bearer, (M<sup>r</sup> Isaac Greenwood)" as "an Ingenious Young Gentleman, & a Graduate in o<sup>r</sup> Colledge; who proposes to make some Additions to his Accomplishments, by Visiting Europe, and particularly by visiting of  $D^r$  Jurin." There follows in the Letter-Book (M. 2. 45, Gay MS., fols. 211-213; no draught in A. A. S.) another letter to Jurin, dated August 3, 1723, introducing "M<sup>r</sup> John Perkins," who is described as "a Physician of Great Learning & Wisdom & Success; and Inferiour to none that we have in this Countrey."

#### 1724

The Series of 1724 consisted of ten letters. All are preserved in the Letter-Book of the Royal Society, and the original draughts of all but one (No. 4) are in the M. H. S. manuscript. The dates are preserved in both the Letter-Book and the draughts. The draughts are preceded (fol. 54a) by the following list, in Mather's hand:

## Curiosa Americana, Continued, In a Decad of Letters to D<sup>r</sup> John Woodward, and

#### D<sup>r</sup> James Jurin.

Climacterical Influences.

An Amphisbæna.

An Unusual Vomit.

A Tide & Storm of Uncomon Circumstances.

A Moveable Rock.

A New-found-land.

More & Strange Effects of Thunders.

A Rare Discharge of Bullets.

Nature at Work with a Needle;

And some Reports of y<sup>e</sup> Emplastrum Magneticum. Uncommon Dentition.

1. Oct. 1, 1724. "Climacterical Influences."<sup>50</sup> To Woodward and Jurin. Letter-Book, M. 2. 46 (Gay MS., fols. 213-214). Draught in M. H. S.

The Indians "have no Family-Government among them." "Their Children are y<sup>o</sup> most Humoured,

<sup>&</sup>lt;sup>50</sup> I give the titles as they read in the draughts.

## American Antiquarian Society.

[April,

Cockered, Indulged Things in the World." The English in America are getting to be like the Indians in this respect. The Indians are lazy, and the English Americans, though sober and industrious in the main, might well be more energetic in developing the resources of the country. Mather refers to himself jocosely as "a tame Indian" (as in his letter of 1713 to Waller)<sup>51</sup> Cf. also one of his letters to Sir William Ashhurst, with which he sends "a small quantity of o<sup> $\tau$ </sup> Squash-seed" from Sewall, adding: "It comes by a Tame Indian; for so y<sup> $\circ$ </sup> Europeans are pleased sometimes to denominate y<sup> $\circ$ </sup> Children that are born in these Regions" (draught, undated, in A, A, S.).

2. Sept. 21, 1724. "An Amphisbæna." To Woodward. Letter-Book, M. 2. 47 (Gay MS., fols. 214-222). Draught in M. H. S.

Mather copies, with comments, the account sent him by the Rev. Christopher Toppan, of Newbury. The original of Toppan's letter is in A. A. S. (July 6, 1724). See Joshua Coffin's History of Newbury, 1845, p. 195, for an extract from Toppan's letter.<sup>52</sup> Cf. Publications of the Colonial Society, XIV, 107. It may be noted that Mather did *not* 

> "come galloping down All the way to Newbury town, With his eyes agog and his ears set wide, And his marvellous inkhorn at his side,"

nor is it quite easy to see how Whittier got the impression that he made any such journey. He contented himself with writing to Toppan, who was both minister and physician, and he was scrupulous to report nothing but what Toppan himself believed after careful investigation.

3. Sept. 22, 1724. "An Unusual Vomit." To Jurin. Letter-Book, M. 2. 48 (Gay MS., fols. 223-227). Draught in M. H. S.

<sup>51</sup> Colonial Society Publications, XIV, 86.

<sup>&</sup>lt;sup>28</sup> See also the letter signed "Nath. Coffin" in the New-England Courant, No. 100 (June 24-July 1, 1723).

### 1916.]

"A gentleman, at or Newbury" has "lately Vomited a Lizard." Mather transcribes an account of the case from the narrative of the gentleman's physician, "who is also yo Minister of yo Place," that is the Rev. Christopher Toppan, who gave Mather the facts in the same letter (July 6, 1724) in which he described the Amphisbæna (original in A. A. S.). Toppan writes that the creature "was by relation what is commonly called as *Evett*, not differing but little, if at all from the Lizard." Toppan did not see the newt. The story, it may be added, is a good example of a large class of such tales, and, whatever its scientific value, a welcome addition to the records of folklore. Similar cases are often reported now-a-days, and sometimes get into the newspapers.

"A Tide and Storm of Un-4. Sept. 23, 1724. common Circumstances." To Woodward. Letter-Book, M. 2. 49 (Gay MS., fols. 227-230). Draught missing in the M. H. S. MS. volume (C. 61. 2. 6), but preserved in another volume of miscellaneous papers belonging to the Society (91. M. 15). The draught is dated "Sept. 23, 1724." There is a copy in an unknown hand (but with a note in Dr. Jeremy Belknap's hand prefixed) among the Belknap MSS. in M. H. S. (161. A. 26.) From this copy the letter is printed in 4 M. H. S. Collections, VIII, 456-457.

This was the storm of February 24, 1723. There is an account of it in the Boston News Letter of March 28, 1723, which is almost identical with Mather's in some places.<sup>53</sup>

5. Sept. 24, 1724. "A Moveable Rock." To Jurin. Letter-Book, M. 2. 50 (Gay MS., fols. 231-232); draught in M. H. S.

Mather notes that he has previously sent "unto or [Alas, *Deceased!*] Friend, an Account of the *Rocquing Stone*" at Gloucester. This is a reference to the letter to Chamberlayne on "A Rocquing Stone,"

<sup>53</sup> I am indebted to Mr. Tuttle and Mr. Edmonds for information about the draught and the printed account. Feb., 1720 (see p. 46, above). The phenomenon described in the present letter was also at Gloucester. On the two Rocking Stones, see John J. Babson, History of Gloucester, 1860, pp. 5-6, where an extract from this letter is printed.

6. Sept. 25, 1724. "A New-found-land." To Woodward. Letter-Book, M. 2. 51 (Gay MS., fols. 233-235); draught in M. H. S.

On a curious kind of jetblack earth dug up in the neighborhood of Woodstock, about seventy miles from Boston.

7. Sept. 26, 1724. "More<sup>54</sup> and Strange Effects of Thunder." To Jurin. Letter-Book, M. 2. 52 (Gay MS., fols. 236-241); draught in M. H. S.

This contains a copy of a letter from "Newtown. Jun. 24 (1724)" containing a highly circumstantial account of the effects of "a very Severe Clap of Thunder, and a terrible Flash of Lightning."

Mather adds an account of the felling of a white oak by a gentleman of Cambridge. His man accidentally set fire to it; the result was a quantity of "Salt of Tartar." This story, Mather remarks, "I had sent you many Months ago, if I had not supposed, that you might have it from another & a better hand. But being uncertain of its having reached you, I will venture to insert it." The account had, in fact, already reached the Society, and had been printed in the Philosophical Transactions for Sept.-Dec., 1720, No. 366, XXXI, 121-124: "An Account of a large Quantity of Alcalious Salt produced by burning rotten Wood. By Mr. Robie of Harvard College in Cambridge, New-England. Communicated by the Rev. Mr. Derham, Prebendary of Windsor, F. R. S."

8. Sept. 28, 1724. "A Rare Discharge of Bullets." To Woodward. Letter-Book, M. 2. 53 (Gay MS., fols. 241-245). Draught in M. H. S.

The case of Joseph Meader's wife, of Dover, N. H. She "had been long afflicted with that *Miserable* 

54 So entitled with reference to First Series, No. 12, and 1720, No. 5 (pp. 26, 46, above).

## 1916.]

Distemper, which they call, The twisting of the Gutts." She swallowed a couple of leaden bullets by the advice of her physician. Her pains abated and she recovered the use of her limbs. A year later a bullet fell out a little below the navel. The wound closed and healed. Soon after, the other fell out of another orifice above the navel. For bullet stories cf. Philosophical Transactions, III, 803; XXVI, 317.

9. Sept. 29, 1724. "Nature at work with a *Needle*. And some Reports of the *Emplastrum Magneticum*." To Jurin. Letter-Book, M. 2. 54 (Gay MS., fols. 245-250); draught in M. H. S.

Two cases: (1) a needle extracted by means of a magnetic plaster; and (2) a needle-point that worked out of a person. The latter is reported in the words of "an Honourable Member of the Kings Council in or Province of New Hampshire." Cf. Philosophical Transactions, XLI, 767-768.

10. Sept. 30, 1724. "Uncommon Dentition." To Woodward. Letter-Book, M. 2. 55 (Gay MS., fols 251-253); draught in M. H. S.

An account of a young gentleman of Harvard College who has continuous bones instead of teeth. He is of Dedham. The thing is hereditary in his family.

For the two following letters preserved in the Letter-Book of the Royal Society, I find no draughts in M. H. S. or A. A. S.

Oct. 5, 1724. Mather to Jurin. Letter-Book, M. 2. 56 (Gay MS., fols. 253-256).

Mentions his letter to Jurin "Justifying the Inoculation of the Small-pox,"—that is, the letter of May 4, 1723, entitled "The Case of the Small-Pox Inoculated; further Cleared" (see p. 49, above). His Angel of Bethesda is ready for the press. Introduces Mr. Howard Wyborn.

Dec. 15, 1724. Mather to Jurin. Letter-Book, M. 2. 57 (Gay MS., fols. 256-259).

Introducing Mr. Zabdiel Boylston.

Copyright of Proceedings of the American Antiquarian Society is the property of American Antiquarian Society and its content may not be copied or emailed to multiple sites or posted to a listserv without the copyright holder's express written permission. However, users may print, download, or email articles for individual use.