Gulf of the Proſtate. O. *The Gulf of the* Proſtate. P. P. P. *Sort of Elbows, or blind Cavities, found therein.* Q. *The Streights of the Entry into the Bladder.*

VI. *A Letter from* George Lynn, *Eſq; to* Ja. Jurin, *M. D.* F. R. S. *containing ſome Remarks on the* Weather, *and accompanying Three Synoptical Tables of* Meteorological Obſervations *for* 14 *Years*, viz. *from* 1726 *to* 1739. *both inclusive.*

SIR,

HAving, for theſe 14 Years laſt paſt, kept a conſtant Regiſter or Diary of the Altitudes of the Barometer and Thermometer, the Quantity of Rain, Courſe of the Winds, *&c.* according to your Invitation (in the *Philoſophical Tranſactions;*) the Five firſt Years of which have been by you communicated to the ROYAL SOCIETY, and taken notice of in the *Tranſactions*; I now, Sir, ſend you the remaining Nine Years at large, ending *December* 1739. in the ſame Method as formerly. But, believing it would be of good Uſe, both here and abroad, if the Mean Heights of the Barometer, Thermometer, and Quantity of Rain in every Month of the whole 14 Years, with the collateral Means, both of the Months and Years, were brought all into one View together, I have taken the Pains to range them accordingly in a Scheme, or Table, herewith ſent, which does not take

take up much above the Space of half a Sheet of Paper, and may be within Compaſs for inſerting in the *Tranſactions*, either in a Plate, or otherways, as ſhall be thought proper. The Meaning of the ſeveral Columns in that Scheme is, in a great meaſure, explained by the Titles of them; and by the loweſt Line you will find, that the Mean Height of the Barometer for the whole 14 Years is 29.58 Inches; the Mean Quantity of Rain annually, 23 Inches; and the Mean Altitude of the Thermometer $\left|\begin{smallmatrix}56|48\\52\end{smallmatrix}\right|$ that is, at the coldeſt time of the Day 56, at the hotteſt 48, and their Mean 52. In the middle Column, *viz.* that of Rain, the *Commas*, *Semicolons*, and *Colons*, over the Figures, denote, by their manner of placing, from the Left to the Right, what Time in the Month the Rain fell, whether at the Beginning, Middle or latter End; the *Comma* [,] denotes a ſmall Quantity, the *Semicolon* [;] a middling Quantity, and the *Colon* [:] a large Quantity; ſhewing the different Proportion that fell at thoſe Parts of the Months. The Thermometer made uſe of all along, is that of Mr. *Hauksby*, and kept conſtantly in the ſame Place, as mentioned by Mr. *Geo. Hadley* in the *Tranſactions*, N° 447. And the Altitudes of the Thermometer are taken but twice a Day, *viz.* at the coldeſt, which is at Sun-riſe, or ſometimes a little after; and at the hotteſt, *viz.* between Two and Four in the Afternoon: By which Method are gained the proportional Heats for every Month in the Year, and their Difference, as alſo between that of Day and Night, for 13 Years together; not reckoning in the Year 1726. which may be ſeen

by the Scheme to be in another Method, and not filled up.

Great Care has been taken, in caſting up and dividing, to get the exact Mediums and Sums; and I was not a little ſurpriſed to find, in caſting up the Column of the Mean Altitudes of the Thermometer collaterally, that as thoſe for *July*, being the hotteſt Month, are $\left|\begin{smallmatrix}41\\35\end{smallmatrix}\right|\frac{30}{\frac{1}{2}}$ ſo the Altitudes of *June* and *Auguſt*, on each Side of it, come out exactly equal to one another, and alſo thoſe of *May* and *September*; theſe laſt only differing in their Morning and Evening Heats or Altitudes, which does not alter their Medium of $44\frac{1}{2}$. Many other Obſervations may be made, both from the Scheme and Diaries at large, which, no doubt, will be taken notice of: But, having had ill Health of late, I am not able now to collect them, nor to form a Summary of the Winds, which I deſigned to have added ſome way or other in the ſame Scheme. As for any Judgment about the Weather, *&c.* it will be much better had from thoſe who have the Peruſal and Compariſon of the many Meteorological Accounts ſent to the ROYAL SOCIETY: I ſhall therefore only give a few curſory Notes of my own, as I find them, and ſo conclude this Letter.

When there is an Hazineſs in the Air, ſo that the Sun's Light quails by Degrees, and his Limb is ill defined, it is a pretty certain Sign of Rain, eſpecially if the *Mercury* falls. The like Hazineſs, at Night, is ſtill more a Sign of it.

It is obſervable, that though the *Mercury*, in the Summer Months, does not ſo much vary in its Altitude as at other times of the Year, yet in that Seaſon

ſon we have the moſt Rain: It ſhould ſeem therefore, that the different Warmths (and conſequently Rarefaction of Vapours) in the upper and lower Currents of the Air, and thoſe Currents mixing, and ſometimes wholly interchanging, are then the more immediate Cauſes of the Rains, if not alſo of Thunder and Lightning.

Black fleecy Clouds, formed upon a ſudden Flurry of the Wind, are generally ſucceeded by a Shower: And,

The ſhifting of the Wind in a little time almoſt round the Compaſs, in hot Weather, is often ſucceeded by a Thunder-ſhower.

Several times, when the *Mercury* has been a good while high, and ſo continues, there has fallen miſtling Rain; eſpecially about the New and Full Moon, with an Eaſterly Breeze, which the Borderers on the Coaſt of *Lincolnſhire* and *Norfolk* call *Tide-weather*, and may be occaſioned by the Vapours ariſing from the Tides, which then cover a vaſt Waſh of Sands in their Neighbourhood.

Thoſe Vapours ſometimes reach us here in *Northamptonſhire*, but I believe ſeldom further Weſt.

The Nights are for the moſt part calmer than the Days; and the Winds ſeldom ſettled in their Quarter, or at their Strength, till ſome Hours after Sun-riſe, and generally die away again before Sun-ſet.

I ſhall add no more, but that I am,

Yours and the SOCIETY's
moſt Obedient,
Humble Servant.

George Lynn.

Southwick,
April 21. 1740.

N. Lat. 52°—31′.

Sun-

Synoptical Tables of the Meteorological Obſervations *made by* George Lynn, *Eſq; at* Southwick, *near* Oundle *in* Northamptonſhire, *for the Years from* 1726 to 1739. *incluſively.*

The Barometer's Mean Altitude (above 29 Inches) in 100 Parts of an Inch, In the Years

	1726	1727	1728	1729	1730	1731	1732
January		.36	.28	.70	.79	.61	.54
February		.51	.86	.66	.39	.57	.65
March		.66	.48	.54	.34	.92	.57
April	.75	.72	.48	.60	.66	.51	.52
May	.74	.49	.64	.57	.55	.72	.50
June	.63	.58	.68	.69	.60	.66	.71
July	.68	.65	.64	.64	.61	.72	.65
Auguſt	.45	.77	.64	.72	.70	.65	.70
September	.44	.50	.59	.42	.34	.70	.63
October	.77	.44	.38	.52	.49	.67	.68
Novemb.	.74	.84	.53	.32	.55	.54	.75
Decemb.	.50	.33	.51	.52	.83	.61	.47
The Mean Altitudes in the ſeveral Years,		.57	.56	.57½	.57	.66	.61

The

	The Barometer's Mean Altitude (above 29 Inches) in 100 Parts of an Inch, In the Years							The Mean Altitudes collately.
	1733	1734	1735	1736	1737	1738	1739	
January	.68	.80	.47	.26	.86	.70	.45	.58
February	.55	.60	.63	.22	.58	.61	.60	.55
March	.43	.52	.36	.44	.45	.46	.48	.51
April	.65	.69	.49	.70	.67	.53	.34	.52
May	.70	.54	.60	.58	.70	.52	.60	.60
June	.67	.65	.56	.76	.73	.50	.56	.64
July	.67	.63	.50	.67	.59	.72	.67	.65
Auguſt	.56	.57	.72	.63	.55	.60	.61	.63
September	.62	.56	.69	.71	.46	.65	.49	.56
October	.72	.47	.69	.33	.60	.52	.71	.57
Novemb.	.75	.74	.45	.64	.68	.67	.32	.61
Decemb.	.53	.22	.59	.53	.70	.58	.65	.54
The Mean Altitudes in the ſeveral Years.	.63	.58	.56	.54	.63	.59	.54	.58

The Quantity of Rain in Inches and Decimals for every Month, In the Years

	1726	1727	1728	1729	1730	1731	1732
January	4.2	3.1	4.0	0.2	0.4	0.8	3.9
February	1.0	2.6	0.9	0.5	1.5	1.0	1.2
March	1.5	1.4	3.3	1.3	2.6	0.1 $\frac{1}{2}$	1.4
April	1.0	1.2	2.0	1.1	0.8	2.1	1.2
May	0.4	4.3	1.4	1.6	2.5	0.3	3.4
June	4.0	3.2	2.8	0.8	3.4	3.4	0.6
July	3.7	2.0	3.2	2.3	2.0	1.7	1.8
Auguſt	0.3	0.3	1.0	2.4	0.8 $\frac{1}{2}$	1.6	1.7
September	5.2	2.0	0.8 $\frac{1}{2}$	5.3	1.6	1.5	0.7
October	1.5	1.5	2.8	2.2	3.0	1.4	3.7
Novemb.	1.4	0.4	1.5	4.2	2.0	1.5	1.2
Decemb.	2.5	2.8	2.4	1.7	0.8	2.3	2.6
The Mean Quantity of Rain in the ſeveral Years.	26. $\frac{1}{2}$	25.	26.	23 $\frac{1}{2}$	21.	17. $\frac{1}{2}$	20. $\frac{1}{2}$

The

The Quantity of Rain in Inches and Decimals for every Month, In the Years

	1733	1734	1735	1736	1737	1738	1739	The Mean Quantity collaterally.
January	1.0	0.5	2.1	2.3	1.0	1.7	2.4	1.8
February	1.4	2.6	0.7	2.9	2.2	0.8	3.1	1.6
March	2.2	1.8	2.2	2.1	2.1	1.0	1.3	1.7
April	1.0	0.6	1.7	0.6	0.4	1.3	2.2	1.2
May	0.02	5.1	1.5	0.8	1.7	1.9	1.9	1.9
June	2.0	1.3	2.4	1.4	1.8	3.4	1.5	2.3
July	2.2	1.8	2.3	6.0	0.7	1.2	1.7	2.3
Auguſt	3.6	4.0	3.2	1.7	5.7	1.6	2.5	2.2
September	1.4	1.7	3.2	1.4	3.8	1.8	1.8	2.3
October	0.6	2.8	1.7	2.6	1.8	1.8	0.8	2.0
Novemb.	0.5	0.9	1.7	0.6	0.6	0.7	1.7	1.4
Decemb.	1.7	4.4	2.1	2.0	2.3	1.2	1.9	2.2
The Mean Quantity of the Rain in the ſeveral Years.	17 $\frac{1}{2}$	27. $\frac{1}{2}$	25.	24.	24.	18.	22. $\frac{1}{2}$	23.

The Thermometer's Mean Altitudes taken (from *April* 13th 1727.) at the coldeſt and hotteſt Time of the Day, and their Mean, In the Years

	1726	1727	1728	1729	1730
January		at 10 | at 3 65 |	68 | 65 66 1/2	70 | 66 68	69 | 64 66 1/2
February		at 10 | at 3 59 | 57 58	69 | 62 65 1/2	74 | 67 70 1/2	68 | 61 64 1/2
March		at 10 | at 3 62 | 58 60	59 | 53 56	69 | 60 64 1/2	62 | 54 58
April	at 10 | at 3 40 | 33 36 1/2	52 | 45 48 1/2	57 | 47 52	61 | 50 55 1/2	58 | 46 52
May	at 10 | at 3 25 | 20 22 1/2	45 | 39 42	47 | 36 41	53 | 42 47 1/2	49 | 38 43 1/2
June	at 10 at 3 36 | 31 33 1/2	42 | 32 37	41 | 30 35 1/2	43 | 30 36 1/2	46 | 35 40 1/2
July	at 10 | at 3 37 | 31 34	37 | 26 31 1/2	41 | 31 36	42 | 30 36	42 | 32 37
Auguſt	at 10 | at 3 40 | 31 35 1/2	43 | 27 35	43 | 34 38 1/2	43 | 31 37	44 | 32 38
September	at 10 | at 3 43 |	49 | 38 43 1/2	53 | 43 48	46 | 37 41 1/2	47 | 39 43
October	at 10 at 3 52 |	57 | 51 54	58 | 52 55	57 | 50 53 1/2	55 | 43 49
Novemb.	at 10 | at 3 62 |	66 | 60 63	67 | 61 64	60 | 57 59 1/2	59 | 52 55 1/2
December	at 10 | at 3 70 |	71 | 68 69 1/2	72 | 70 71	63 | 60 61 1/2	70 | 65 67 1/2
The Mean Altitudes of the Thermometer in the ſeveral Years.		54 | 46 50	56 | 49 52 1/2	57 | 48 52 1/2	56 | 47 51 1/2

The

The Thermometer's Mean Altitude taken at the coldeſt and hotteſt time of the Day only, and their Mean, In the Years

	1731	1732	1733	1734	1735
January	75|69 72	70|65 67½	65|58 61½	71|65 68	68|42 65
February	70|63 66½	61|53 57	64|56 60	61|54 57½	66|59 62½
March	63|52 57½	64|53 58½	64|55 59½	59|49 54	64|56 60
April	62|52 57	56|48 52	57|46 51½	56|44 50	55|46 50½
May	50|34 42	53|44 48½	54|40 47	52|42 47½	53|43 48
June	45|31 38	46|34 40	43|29 36	44|34 39	46|37 41½
July	43|29 36	42|31 36½	38|27 32½	40|31 35½	42|33 37½
Auguſt	42|32 37	47|33 40	45|34 39½	42|32 37	43|33 38
September	48|36 42	49|39 44	52|44 48	51|43 47	46|38 42
October	52|46 49	55|47 51	60|52 56	60|53 56½	60|52 56
Novemb.	62|57 59½	67|62 64½	61|55 58	66|62 64	59|54 56½
December	66|61 63½	68|64 66	58|53 55½	67|63 65	64|60 62
The Mean Altitudes of the Thermometer in the ſeveral Years.	56|47 52	57|48 52	55|46 50	56|48 52	56|48 52

The Thermometer's Mean Altitude taken at the coldeſt and hotteſt time of the Day only, and their Mean,
In the Years

	1736	1737	1738	1739	The Mean Altitudes collaterally.
January	64|60 62	63|59 61	63|57 60	63|58 60 1/2	67|62 64 1/2
February	71|67 69	65|59 62	66|61 63 1/2	60|53 56 1/2	66|59 62 1/2
March	63|54 58 1/2	65|58 61	62|54 58	65|57 61	63|55 59
April	57|46 51 1/2	56|47 51 1/2	58|49 53 1/2	60|52 56	57|48 52 1/2
May	54|44 49	49|35 42	48|36 42	49|37 43	50|39 44 1/2
June	42|30 36	47|35 41	46|37 41 1/2	44|33 31 1/2	44|33 38 1/2
July	41|31 36	41|29 35	42|30 36	42|32 37	41|30 35 1/2
Auguſt	42|32 37	47|39 43	45|37 41	46|36 41	44|33 38 1/2
September	49|38 43 1/2	47|40 43 1/2	51|43 47	48|41 44 1/2	49|40 44 1/2
October	53|47 50	60|55 57 1/2	57|50 53 1/2	60|53 56 1/2	57|50 53 1/2
Novemb.	62|57 59 1/2	62|56 59	63|57 60	68|63 65 1/2	63|58 60 1/2
December	63|60 61 1/2	67|65 66	65|62 63 1/2	70|66 68	66|63 64 1/2
The Mean Altitudes of the Thermometer in the ſeveral Years	55|47 51	56|48 52	55|48 51 1/2	56|48 52	56|48 52