

IV. *Remarks upon an Antient Date, over a Gate-way, near the Cathedral, at Worcester.* By John Ward, *Rhet. Prof. Gresh.* and F. R. S.

UPON the 27th of *February* last, I had the Honour to lay before this Society a Paper, containing some Remarks upon an antient Date, carved in Wood, that was found at *Widgel Hall* near *Buntingford* in *Hertfordshire*, with the Characters $\text{M}16$; which had been read 1016, supposed to be mixed Numbers, the M *Roman*, and the two others *Arabian* or *Indian*, as they are indifferently called. This led me to consider two other Dates of the like Kind, formerly published in the *Philosophical Transactions*; one found at *Helmdon* in *Northamptonshire*, in mixed Characters expressing, as was thought, $\text{M}133$; and the other at *Colchester*, said to denote the Year 1090, wholly in *Arabian* Figures. But upon searching into the Origin of those Figures, and the Time when they were first brought into these Parts of the World, I could meet with no Examples of them in any Manuscripts, before some Copies of *Johannes de Sacro Bosco* (mentioned by *Dr. Wallis*) who died in the Year 1256, which was 123 Years after the latest of the three Dates above-mentioned. As it could not therefore but seem very strange, that Workmen should have made Use of those Figures for such common Purposes, so long before they appear in the Writings of the Learned; so upon

a closer Examination, and further Inquiry, I found there was no Reason from any of these Dates to suppose, it was really true in Fact. For the *Helmdon* Date instead of $\text{M} 133$, should, as I then shewed, be read $\text{M} 233$; the *Colchester* Date 1490, instead of 1090; and that at *Widgel Hall* has no *Arabian* Figures in it, the Characters 1 and 6 not being Numbers, but the initial Letters of two proper Names I G, in the usual Form of those Letters in that Age.

But there has been very lately read before this Society, an Account of a Date at *Worcester*, more antient than any of the three former; namely CCLXX , or 97v, in which the Unite is a *Roman* Numeral, and the other two are taken for *Indian* Figures. I observed in my former Paper, that such Mixtures were sometimes found in antient Numbers; tho' in what Manner they were so used; I did not then explain, but for Brevity contented myself with referring to the *Algebra* of Dr. *Wallis*, a Book so very well known. The Doctor thought it necessary to take Notice of this, in Order to account for his Way of reading the *Helmdon* Date, in which the M only is a *Roman* Numeral. And I had myself met with a few Instances of it in Dr. *Mead's* Manuscript of *Boethius*, as $\text{ccc}29$ and $\text{dccc}68$, where the Hundreds are numeral Letters, and both the Decimals and Unites *Arabian* Figures^a. But 'tis observable, this is not done promiscuously, but the largest Numbers are always Letters, and the lesser, Figures; as in the *Helmdon* Date. And *Mabillon* has observed, that in a curious manuscript Copy of *Thomas a Kem-*

^a De Arith. Lib. II.

pis, written in the fifteenth Century, some of the Pages are so numbered ^a. Which Method, so far as appears, was always attended to, and never in any one Instance inverted. So that this *Worcester* Date, which has a *Roman* Numeral in the Place of Unites, and the two preceding Characters are supposed to be *Indian* Figures, is not only without Example, but directly contrary to all other Instances of such mixed Numbers. Which Consideration alone might be a sufficient Ground to think, there must be some Mistake in the Reading.

But the middle Figure, taken for a Seven, is as remarkable; which turning towards the left Hand, forms two obtuse Angles, one above, and the other below. This Shape of the Seven, I believe, was never seen before, and seems by no means to suit that Age. In the Specimen of the Figures taken from *Johannes de Sacro Bosco*, by Dr. *Wallis*, which may be seen in the Table annexed to my former Paper [See TAB. II. Fig. 1.] the Figure Seven is made in this Form Δ , like the two Legs of an isosceles Triangle. And in *Roger Bacon's Calendar*, dated 1292, there is only this Variation; that the Leg to the left Hand is somewhat shortened, as will appear likewise by the same Table. And this Form continued till Printing was introduced among us; as is evident from *Caxton's Polychronicon*, and other Books printed about that Time. Nor do I find it till later Times in any other Shape; unless that in Bishop *Beverege's* Table of *Indian* Figures, the two Legs of our antient Seven are drawn parallel, and arched at the Top, in this

^a De Re Diplom. Tab. XV.

manner \cap , instead of meeting in an Angle^a; and *Planudes*, a *Greek* Writer, has kept the true *Arabian* Form ∇ , like the *Roman* Five, which the *Europeans* inverted. [See *TAB. II. Fig. 1*] The last Alteration this Figure received among us, was by raising the shorter Leg horizontally. But no Instance of it parallel to this in the *Worcester* Date, or any Thing like it, has before appeared. As there seems therefore no Reason to suppose it a Seven; so I think a probable Conjecture may be offered, what it was designed for, and that is, the *Roman* Numeral Ten, which was made in this Form, like an X; to which Character, in our old square Hand, this supposed Seven ∇ would very well agree, by supplying only the two extreme Parts to the right Hand, in this Manner χ , which may easily be thought to have been decayed, and worn away by length of Time.

As there is no Reason to take the middle Character for a Seven, so neither is there any to suppose the first was intended for a Nine, being thus placed before two *Roman* Numerals, as I take them both to be. It has indeed some Similitude with that Figure; but that is nothing more, than what was antiently, and still is, common to the Letter O in that Hand, which resembles a double O , with an oblique Stroke turned inwards from the Bottom of that to the right Hand; so that if the other to the left be taken away, that which remains will appear in this Form O , like what is here called a Nine. And every one knows, who has any Acquaintance with antient Inscriptions, that Letters frequently perish in this Manner, one Part before another.

^a Arith. Chron. Lib. I. Cap. 4.

Upon these Suppositions the true Reading would be MXV. But since the old Date is now destroyed, and modern Figures put in its Place, this must remain uncertain. And I can't but think, the former Characters must have been very dark and obscure, for the following Reasons. There is, as I am informed, a Tower over this Gate, of which a curious and learned Gentleman, who lives very near it ^a, has lately given some Account, in a Treatise entitled, *A Survey of the Cathedral Church of Worcester*. He saith, it is "commonly called King *John's* Tower, and said by some to be built by him; but it was much more antient, having in the Front of it the Statues of King *Edgar*, and his two Queens, *Ethelfleda* and *Ethelfrida*; and the Street it leads into, is called in several Writings "*Edgar-street*"^b. Could there be any Room for its being ever supposed to have been built by King *John*, while this Date was plain and clear? Or would the Author of the *Survey* have contented himself with only saying, *it was much more antient*; when he could so easily have given us the Year, had he been satisfied with the Reading? King *Edgar* had been a great Benefactor to the cathedral Church at *Worcester*, and is said to have given to it 300 Hides of Land ^c; which some compute at so many 100 Acres, but my Lord *Coke* saith, an Hide contains no certain Number. *Edgar* died in 975, but his Queen *Ethelfrida* survived him several Years. And as it is not unusual, in Order to perpetuate the Memory

^a Dr. William Thomas. ^b Pag. 7. See likewise Hearne's Preface to Heming's Chartularium, in the Frontispiece of which Treatise is a Draught of those three Figures. ^c Account of the Bishops of Worcester. By Dr. William Thomas.

of public Benefactors, to erect Statues and other Monuments of them, after they are dead ; it might be so in this Case, and the Street receive its Name (for some Time at least) from this Building, like our *Ludgate-street*. But tho the precise Year of this Date can't, I fear, now be determined with certainty ; it is sufficient to have shewn, that neither the Order of the Characters, their Shape, nor the oldest Examples of *Arabian* or *Indian* Figures, any where found, do in the least countenance the Reading given to it ; but, on the contrary, all of them afford the highest Probability, that it can't be genuine.

I beg leave only to add, that two learned and ingenious Gentlemen of this Society, *Roger Gale* and *James West* Esquires, to whose Judgment I would pay a due Regard, were pleased to tell me, they thought the two first Characters, taken for a Nine and a Seven, might probably have been nothing but an ∞ ; which will bring the Date to 1005, ten Years nearer the Time of *Edgar*. My only Difficulty as to that Reading is, that the ∞ would then have two oblique Strokes prolonged from the Bottom, one in the Middle, besides the other usual one towards the right Hand, which I do not remember ever to have met with. But as this Inaccuracy might arise from the Obscurity of the Character, or the Imagination of its being two *Arabian* Figures ; I leave it to the Curious to judge either way, as they please, both Sentiments equally supposing the original Characters of this Date must have been *Roman* Numerals.

I should

I should not have enquired farther into this Subject upon the present Occasion, but that I apprehend it to be a Matter of some Consequence, especially with Relation to Manuscripts. A Copy, for Instance, of some antient Author, written in the Year 1375, and dated in *Arabian* Figures, by changing only the 3 into a Cypher, may be carried back three hundred Years; or by making it a Nine, and taking out the 1, may be raised still a Century higher, to 975, the supposed Year of the *Worcester* Date. And those, who are conversant with Manuscripts, are sensible, that the Age of them can't always be determined barely by the Hand. Since therefore *Arabian* Figures are in most Cases much more easily falsified, than *Roman* Numerals; I humbly presume, too great Caution cannot be used, in admitting any Instances of them more early, than have been yet discovered, but upon very clear and sufficient Evidence.

A TABLE OF CHARACTERS.

<i>Fig. 1.</i>	<table border="0"> <tr> <td>unus</td><td>duo</td><td>tres</td><td>quatuor</td><td>quinque</td><td>sex</td><td>septem</td><td>octo</td><td>novem</td><td>decem</td> </tr> <tr> <td>en^o</td><td>ſ</td><td>Ƨ</td><td>q^o</td><td>q^e</td><td>ſ</td><td>ſ</td><td>o</td><td>ſ</td><td>ſ</td> </tr> <tr> <td>primus</td><td>secundus</td><td>tertius</td><td>quartus</td><td>quintus</td><td>sextus</td><td>septimus</td><td>octavus</td><td>nonus</td><td>decimus</td> </tr> <tr> <td>ı</td><td>ſ</td><td>Ƨ</td><td>q^o</td><td>q^e</td><td>ſ</td><td>ſ</td><td>o</td><td>ſ</td><td>ſ</td> </tr> <tr> <td>semel</td><td>bis</td><td>ter</td><td>quater</td><td>quinquies</td><td>sexies</td><td>septies</td><td>octies</td><td>nonies</td><td>decies</td> </tr> <tr> <td>ſ</td><td>ſ</td><td>Ƨ</td><td>q^o</td><td>q^e</td><td>ſ</td><td>ſ</td><td>o</td><td>ſ</td><td>ſ</td> </tr> </table>	unus	duo	tres	quatuor	quinque	sex	septem	octo	novem	decem	en ^o	ſ	Ƨ	q ^o	q ^e	ſ	ſ	o	ſ	ſ	primus	secundus	tertius	quartus	quintus	sextus	septimus	octavus	nonus	decimus	ı	ſ	Ƨ	q ^o	q ^e	ſ	ſ	o	ſ	ſ	semel	bis	ter	quater	quinquies	sexies	septies	octies	nonies	decies	ſ	ſ	Ƨ	q ^o	q ^e	ſ	ſ	o	ſ	ſ	<p>From, Gruter's Antiquitat. Vol. II. in fin.</p>
unus	duo	tres	quatuor	quinque	sex	septem	octo	novem	decem																																																					
en ^o	ſ	Ƨ	q ^o	q ^e	ſ	ſ	o	ſ	ſ																																																					
primus	secundus	tertius	quartus	quintus	sextus	septimus	octavus	nonus	decimus																																																					
ı	ſ	Ƨ	q ^o	q ^e	ſ	ſ	o	ſ	ſ																																																					
semel	bis	ter	quater	quinquies	sexies	septies	octies	nonies	decies																																																					
ſ	ſ	Ƨ	q ^o	q ^e	ſ	ſ	o	ſ	ſ																																																					
<i>Boethius's apices.</i>	<table border="0"> <tr> <td>I</td><td>Ƨ</td><td>ſ^a</td><td>q^b</td><td>Ƨ</td><td>ſ</td><td>Λ</td><td>8</td><td>9^a</td><td>ſ^b</td><td>ſ</td> </tr> </table>	I	Ƨ	ſ ^a	q ^b	Ƨ	ſ	Λ	8	9 ^a	ſ ^b	ſ	<p>Doctor Mead's Manuscript.</p>																																																	
I	Ƨ	ſ ^a	q ^b	Ƨ	ſ	Λ	8	9 ^a	ſ ^b	ſ																																																				
<i>Small Greek letters.</i>	<table border="0"> <tr> <td>α</td><td>β</td><td>γ</td><td>δ</td><td>ε</td><td>ς</td><td>ζ</td><td>η</td><td>θ</td><td>ι</td> </tr> </table>	α	β	γ	δ	ε	ς	ζ	η	θ	ι																																																			
α	β	γ	δ	ε	ς	ζ	η	θ	ι																																																					
<i>Modern Indian figures.</i>	<table border="0"> <tr> <td>q</td><td>Ƨ</td><td>ſ</td><td>Ƨ</td><td>Ƨ</td><td>3</td><td>9</td><td>Ƨ</td><td>Ƨ</td><td>q</td> </tr> </table>	q	Ƨ	ſ	Ƨ	Ƨ	3	9	Ƨ	Ƨ	q	<p>Tavernier Liv. 1. chap. 2</p>																																																		
q	Ƨ	ſ	Ƨ	Ƨ	3	9	Ƨ	Ƨ	q																																																					
<i>Arabic figures.</i>	<table border="0"> <tr> <td>1</td><td>u</td><td>w</td><td>f</td><td>o</td><td>y</td><td>v</td><td>λ</td><td>q</td><td>l.</td> </tr> </table>	1	u	w	f	o	y	v	λ	q	l.	<p>Manuscripts</p>																																																		
1	u	w	f	o	y	v	λ	q	l.																																																					
<i>Figures of Jo. de sacro Bosco.</i>	<table border="0"> <tr> <td>1</td><td>Ƨ</td><td>3</td><td>Ƨ</td><td>Ƨ</td><td>6</td><td>λ</td><td>8</td><td>9</td><td>10</td> </tr> </table>	1	Ƨ	3	Ƨ	Ƨ	6	λ	8	9	10	<p>Doctor Wallis.</p>																																																		
1	Ƨ	3	Ƨ	Ƨ	6	λ	8	9	10																																																					
<i>Figures of Max. Planudes.</i>	<table border="0"> <tr> <td>1</td><td>Ƨ</td><td>Ƨ</td><td>Ƨ</td><td>Ƨ</td><td>Ƨ</td><td>Ƨ</td><td>λ</td><td>q</td><td>10</td> </tr> </table>	1	Ƨ	Ƨ	Ƨ	Ƨ	Ƨ	Ƨ	λ	q	10																																																			
1	Ƨ	Ƨ	Ƨ	Ƨ	Ƨ	Ƨ	λ	q	10																																																					
<i>Figures in Reg. Bacon's Calendar</i>	<table border="0"> <tr> <td>1</td><td>Ƨ</td><td>3</td><td>Ƨ</td><td>Ƨ</td><td>6</td><td>λ</td><td>8</td><td>9</td><td>10</td> </tr> </table>	1	Ƨ	3	Ƨ	Ƨ	6	λ	8	9	10	<p>The Cotton. Library.</p>																																																		
1	Ƨ	3	Ƨ	Ƨ	6	λ	8	9	10																																																					
<i>Modern fig.</i>	<table border="0"> <tr> <td>1</td><td>2</td><td>3</td><td>4</td><td>5</td><td>6</td><td>7</td><td>8</td><td>9</td><td>10</td> </tr> </table>	1	2	3	4	5	6	7	8	9	10																																																			
1	2	3	4	5	6	7	8	9	10																																																					

THE HELMDON DATE.

Fig. 2.

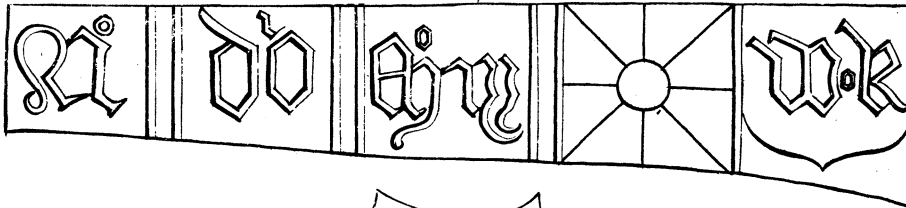


Fig. 3.

THE COL-  CHESTER DATE