

LIBRARY OF CONGRESS



00003380579







-FUNDAMENTAL-PRINCIPLES-

OF —————

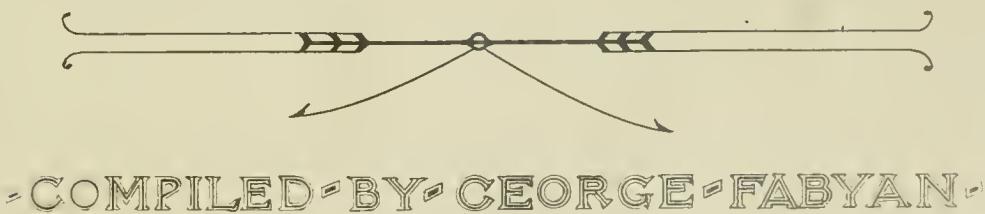
THE -BACONIAN -CIPHERS-

AND

-APPLICATION-TO-BOOKS-OF-THE-

-SIXTEENTH-AND-SEVENTEENTH-

-CENTURIES-



-COMPILED- BY- GEORGE- FABYAN-



-COPYRIGHT - 1916 -
BY - GEORGE - FABYAN -



Franciscus Bacon,

Etatis sue 18.

1578.

Engraved by W.H. Worthington, from a Miniature by Hillyard
in the possession of John Adair Hawkins, Esq.

London, Published by William Pickering, Grecian Lane, 1825.

172944

QDA 139 102

INTRODUCTION.

The various pages in this portfolio have been assembled with the object of presenting to the student or to the inquirer the basic principles involved in the Baconian Bi-literal Cipher.

The cornerstone of the foundation might well be Bacon's own examples. They were given first in De Augmentis Scientiarum and the letters were in italic script. When italic type was first used for this purpose we do not know, but we find it in a very pocket edition of De Augmentis published in 1662.

In 1640 Gilbert Wats issued the first English translation of De Augmentis. Many think it Bacon's original copy because we are told the work was written in English and translated into Latin 'by the help of some good pens.' In this the examples are in italic script like that in the early Latin editions.

(See pp. to)

A particularly fine and clear illustration is in James Spedding's translation of the work, and also in this Latin edition. These are shown in the second exhibit. (pp. to)

These six pages of introduction show comprehensively Bacon's own ideas of the method of using and the possibilities involved in the Bi-literal Cipher, and the inquiring student is recommended to read them carefully at the outset, with a view to informing himself of the general principles that Bacon himself has given us on the subject.

In printed matter the Bi-literal Cipher, which might more correctly be termed the Bi-formed Cipher, as its name implies, depends upon the use of two different, but closely similar forms or "fonts" of type. For convenience these are termed the "a" form and the "b" form. The first step involves an examination of each letter to determine whether it belongs to the "a" form or the "b" form, and of writing beneath it the a or the b as determined by such an examination.

An Example of a Bi-literarie Alphabet.

*A. B. C. D. E. F.
G. H. I. K. L. M.
aabb aahbb abaa. abab. aabb.
N. O. P. Q. R. S.
abaa. abbab. abbbba . abbbb. baaaa. baaaab.*

*T. V. W. X. Y. Z.
baaba. baabb. babaa. babab. babba. babb.*

Neither is it a small matter these Cypher-Characters have and may performe : For by this Art a way is opened, whereby a man may expresse and signifie the intentions of his minde, at any distance of place, by objects which may be presented to the eye, and accommodated to the eare : provided those objects be capable of a twofold difference only ; as by Bells, by Trumpets, by Lights and Torches, by the report of Muskets, and any instruments of like nature. But to pursue our enterprize, when you address your selfe to write, resolve your inward-infolded Letter into this Bi-literarie Alphabet. Say the intent for Letter be

Fugie.

Example of Solution.

*T. V. W. X. Y. Z.
babab. baabb. babaa. aabba.*

Together

PRINTED FROM GENTLEMAN'S EDITION OF
THE DIALOGUE "A PROPOSITION OF LEARNIN — 140

Together with this, you must have ready at hand a Bi-formed Alphabet, which may represent all the Letters of the common Alphabet, as well Capital Letters as the Smaller Characters in a double forme, as may fit every mans occasion,

An Example of a Bi-formed Alphabet.

{^{a.} b. a. b. a. b. a. b. a. b. a. b.
{^{A.} B. a. a. B. B. b. b. C. C. c. D. D. d. d.
{^{a.} b. a. b. a. b. a. b. a. b. a. b.
{^{E. F. G. G. g. H. H. h. H.}

{^{a.} b. a. b. a. b. a. b. a. b. a. b.
{^{I. J. i. j. K. K. k. L. L. l. M. m. m.}
{^{a.} b. a. b. a. b. a. b. a. b. a.
{^{N. n. n. O. O. O. P. P. P. Q. Q. q. q. R.}

{^{b. a. b. a. b. a. b. a. b. a. b.}
{^{R. x. x. S. S. s. T. T. t. V. V. v. b. u. u.}

{^{a. b. a. b. a. b. a. b. a. b. a. b.}
{^{W. W. w. X. X. x. Y. Y. y. Z. Z. z. C.}

Now to the interiour letter, which is Biliterate, you shall fit a bifformed exterior letter, which shall answer the other, letter for letter, and afterwards set it downe. Let the exterior example be,

Manere te vobis, donec tenebro.

An Example of Accommodation.

F D G F
a ab abb aa b baa baa baa.
Manere te vobis donec tenebro

We have annexed likewise a more ample example of the cypher of writing *omnia per omnia*: An interiour letter, which to express, we have made choice of a Spartan letter sent once in a Scale or round cypher'd staffe.

Dertine Res. Mindarus cecidit. Mittitis
esurint. Neque simus nos extricare neque
sic dimitius manere possumus.

An exterior letter, taken out of the first Epistle of Cicero, wherein a Spartan Letter is involved.

Ego

Ego omni officio, ac postius pietate erga te.
caeleris satisfacio omnibus: Mihī ipsenim
quām satisfacio. Tanta est enim magni-
tudo tuorum erga me meritorum, vt quoniam
am tu, nisi perfectā re, de me non conques-
ti; ego, quia non idem in tua causa efficio,
vitam mihi esse acerbum putem. In cau-
so haec sunt: Antonius Regis legatus
aperie pecunia nos oppugnat. Res agitur
per eosdem creditores, per quos, cūm suā ad-
mō, agebatur. Regis causa, si quis sunt,
qui destitūti, qui pauci sunt, omnes ad Domi-
cianū rem deferri volunt. Senatus Regi-
gionis calumniam, non resigione, sed mit-
tentia, et illius Regiae largitione
initiali comprehendit. Sic:

Ad Ciphras igitur venendum.¹ Varium genera haud pauc sunt: Ciphra simplices; Ciphrae non-significantibus characteribus intermixtae; Ciphrae duplices literas uno caractere complexae; Ciphrae Rotæ; Ciphrae Clavis; Ciphrae Verborum; aliae. Virtutes autem in Ciphris requirendas tres sunt; ut sint expeditæ, non nimis operosa ad scribendum; ut sint fide, et nullo modo patcent ad deceiptuadum; addo denique, ut, si fieri possit, suspicione videntur. Si enim epistola in manus eorum devenerit qui in eos qui scribunt, aut ad quos scribuntur, portent testatem habent, tametsi Ciphra ipsa sida sit et deciphratur

orthography does preserve it) up to the present time. For the future, pronunciation would still be free to change, and orthography would still follow; but the changes of orthography would be less rapid and capricious, and the corresponding changes of according to fashion or accident, but according to the laws of nature; and each change would be registered as it came in the printed records of the language. All this would surely be a great advantage, whether we regard language as a medium of communication for which it serves best when it is most uniform and constant, or as a record of the progress of human thought, for which it serves the better in proportion as capricious and accidental changes are excluded and natural changes marked and registered.

Bacon was probably thinking of some particular scheme proposed in his own day, in which the existing alphabet was to be used. Many such partial schemes of orthographical reform have been attempted from time to time, all of which may be justly condemned as "useless subtleties," not because the thing aimed at — *ut scilicet scriptio pronunciacioni consona sit* — would be useless if accomplished, but because, without such a reconstruction of the alphabet as should enable us to assign to each distinct sound a distinct character, the thing cannot be accomplished. With an alphabet of only twenty-six letters, it is impossible to make the spelling of English represent the pronunciation, because there are more than twenty-six distinct sounds used in English speech. It has recently been shown, however, that with an alphabet of only forty letters, every sound used in speaking good English may be represented accurately enough for all practical purposes; and a few more would probably include all the sounds of all the classical languages in Europe.

Two or three alphabets of this kind have been suggested within the last hundred years. There was one proposed by Benjamin Franklin, another by Dr. William Young, another by Sir John Herschell. But the first serious attempt to bring such an alphabet into general use, and fairly to meet and overcome all the practical as well as all the theoretical difficulties, was made by Mr. Alexander Ellis and Mr. Isaac Pitman in 1848. And there can be no doubt that by means of their alphabet every English word may now be so written that the spelling shall contain a sufficient direction for the pronunciation. Nor is there any reason to apprehend that it would ever be necessary to remodel it, since, however the fashion of pronunciation may change, it is not likely that any new elementary sounds will be developed; and therefore, though we might have to spell some of our words differently, we should still be able to spell them out of the same alphabet.

As for the fear that, if such a reformation were adopted, works composed previously would become unintelligible, it has been ascertained by many experiments that children who have learned to read books printed phonetically in the new alphabet easily teach themselves to read books printed in the ordinary way; and therefore, even if the new system should become universal for all new books, no one would have any difficulty in mastering the old ones.—J. S.]

¹ See, for an account of these ciphers, the appendix at the end of the volume, in a biliary cipher (see Infra p. 659.) seems, as I have there pointed out, to be connected with one which had been given by Porta, which also depends on the principle of which the Electric Telegraph is now a familiar illustration, that any number of things may be denoted by combinations of two signs, as in the binary scale.

impossibilis, tamen subjicitur haec res examini et questioni: nisi Ciphra sit ipsamodi, quia aut suspicione vacet aut examinationem eludat. Quod vero nō elusionem examini attinet, suspectit inventum ad hoc novum atque utile, quod cum in promptu habeamus, quorsum attinet illud inter Desiderata referre, sed potius id ipsum proponere? Ille hujusmodi est; ut habeat quis duo alphabeta, unum literarum verarum, alterum non-significantium; et simul duas epistolæ involvat, unam que secretum deferas, alteram qualen verisimile fuerit scribentem missurum fuisse, absque periculo tamen. Quod si quis de Ciphra severe interrogetur, porrigit ille alphabetum non-significantium pro veris literis, alphabetum autem verarum literarum pro non-significantibus. Ille modo inuidet examinatorem in epistolam illam exteriorem; quam eum probabilem inveniet, de interiori epistola nihil suspicabitur. Ut vero suspicio omnis absit, alius inventum subiectum, quod certe cum adolescenti essemus Parisii excoxitavimus; nec etiam adhuc viss nobis res digna est quae perent. Habet enim gradum Ciphrae altissimum: nimur ut *omnia per omnia significari possint*; ita tamen, ut scriptio que involvitur quintuplo minor sit quam ea enī involvatur: alia nulla omnino requiriunt conditio, aut restrictio. Id hoc modo fiet. Primo, universæ literæ alphabeti in duas fannmodo literis solvantur per transpositionem earum. Nam transpositio duarum literarum per locos quinque, differentiis triginta dualibus, multo magis viginti quatuor (qui est numerus alphabeti upud nos) sufficit.¹ Hujus alphabeti exemplum tale est.

Exemplum Alphabeti Biliterarii.²

A	B	C	D	E	F	G
.aaaa.	aaab.	aaab.	aaab.	aaab.	aaab.	aaab.
H	I	K	L	M	N	O
abbb.	abaa.	abaa.	abaaa.	ababb.	abbaa.	abbab.
P	Q	R	S	T	V	W
abbaa.	abbbb.	baaaa.	baaab.	baabb.	bauub.	habuu.
X	Y	Z.				
babab.	babba.					

¹ There is a simpler way of attaining the same end, viz. by using two sets of characters, the differences being, as in Bucō's method, intended to be imperceptible, ^{as} masking the length of the intervals at which those of one set recur significant of letters of the "interior scriptio." This is a system mentioned by writers on the subject; whether ever actually used, I do not know.

² For this and the following example, a special character is used in the original.

Necesse habet quidam obiter hoc modo perfectum est. Etenim ex esse raro patet modus, quo ad omniem loci distantiam, per olere et quæ vel visui vel auditui subjici possint, sensa animi proferre et significare licet; si modo objecta illa, duplicitam differentia capacia sunt; veluti per campanas, per bucinas, per flammes, per sonitus tormentorum, et alia quacunque. Verum ut incipit persequamur, cum ad scribendum accingeris, epistolam interiorem in Alphabetum hoc Biliterium solves. Sit epistola interior;

Fuge.

E exemplum Solutionis.

<i>F</i>	<i>V</i>	<i>G</i>	<i>E</i>
<i>Aabah.</i>	<i>baab.</i>	<i>aabaa.</i>	

Presto simul sit aliud Alphabetum Biforme; nimirum quod singulas Alphabeti Communis literas, tam capitales quam minores, duplici forma, prout enique commodum sit, exhibeat.

E exemplum Alphabeti Biformis.¹

<i>a</i>	<i>b</i>														
<i>A</i>	<i>A</i>	<i>a</i>	<i>a</i>	<i>B</i>	<i>B</i>	<i>b</i>	<i>b</i>	<i>C</i>	<i>C</i>	<i>c</i>	<i>c</i>	<i>D</i>	<i>D</i>	<i>d</i>	<i>d</i>
<i>D</i>	<i>D</i>	<i>d</i>	<i>d</i>	<i>E</i>	<i>E</i>	<i>e</i>	<i>e</i>	<i>F</i>	<i>F</i>	<i>f</i>	<i>f</i>	<i>G</i>	<i>G</i>	<i>g</i>	<i>g</i>
<i>G</i>	<i>G</i>	<i>g</i>	<i>g</i>	<i>H</i>	<i>H</i>	<i>h</i>	<i>h</i>	<i>I</i>	<i>I</i>	<i>i</i>	<i>i</i>	<i>J</i>	<i>J</i>	<i>j</i>	<i>j</i>
<i>K</i>	<i>K</i>	<i>k</i>	<i>k</i>	<i>L</i>	<i>L</i>	<i>l</i>	<i>l</i>	<i>M</i>	<i>M</i>	<i>m</i>	<i>m</i>	<i>N</i>	<i>N</i>	<i>n</i>	<i>n</i>
<i>N</i>	<i>N</i>	<i>n</i>	<i>n</i>	<i>O</i>	<i>O</i>	<i>o</i>	<i>o</i>	<i>P</i>	<i>P</i>	<i>p</i>	<i>p</i>	<i>Q</i>	<i>Q</i>	<i>q</i>	<i>q</i>
<i>Q</i>	<i>Q</i>	<i>q</i>	<i>q</i>	<i>R</i>	<i>R</i>	<i>r</i>	<i>r</i>	<i>S</i>	<i>S</i>	<i>s</i>	<i>s</i>	<i>T</i>	<i>T</i>	<i>t</i>	<i>t</i>
<i>T</i>	<i>T</i>	<i>t</i>	<i>t</i>	<i>U</i>	<i>U</i>	<i>u</i>	<i>u</i>	<i>V</i>	<i>V</i>	<i>v</i>	<i>v</i>	<i>X</i>	<i>X</i>	<i>x</i>	<i>x</i>
<i>W</i>	<i>W</i>	<i>w</i>	<i>w</i>	<i>Z</i>	<i>Z</i>	<i>z</i>	<i>z</i>								

Tunc denum epistola interiori, jam factu biliterata, epistolam exteriorem biformem literatum accommodabis, et postea describes. Sit epistola exterior;

Manere te volo dolce venero.

¹ This biform alphabet is set out somewhat differently in the original edition. The characters are cut to represent handwriting, the distinctions being made by loops or flourishes; and the (a) or (b) is repeated in every case. By keeping the columns distinct, I have avoided the necessity of this repetition; and I have obviated the requisite distinction between the two sets of characters by using types belonging to two different foundries. The particular forms of the letters are of course immaterial, so long as those which stand for *a* can be clearly distinguished from those which stand for *b*, and the table, as I have arranged it, will be found easier of reference.—J. S.

E exemplum Accommodationis.

<i>F</i>	<i>V</i>	<i>G</i>	<i>P</i>
<i>autub.b</i>	<i>uu</i>	<i>bbaaa</i>	<i>bbuaau</i>
<i>Manere</i>	<i>te</i>	<i>volo</i>	<i>uince</i>

Apposimus ethan exemplum aliud largius ejusdem cipheræ, scribendi omnia per omnia.

Epistola interior; ad quam delignimus epistolam spartanam, missam dum in scytale.

Perditæ res. Ministrus credidit. Utiles esuriant. Vixit hinc nos extricare, neque hic diutius manere possumus.

Epistola exterior, sumpta ex epistola prima Ciceronis; in qua epistola spartana involvitur.

*Fuge omni officio ac potius pietate erga te civitis satisfactio nostra ab his ipso auxiliari satisfacia. Tanta est enim magnitudine tu mea, ut me meritorum, ut quoniam tu, nisi perfecta redire me in re compres sis ego, quia non idem in tua causa eligio, cibum mihi esse aeternum pugnat: regnus tuus regius spiritu puerit: n*on* operatur: reg agitur per eosdem cretulos per quis cura processus signatur: regis causa si qui sunt qui velint, qui pacati sunt, regis ad Praeriam rem deferri restat: sedulas religionis cultuaria, non eligere sed malivolentia, et illius regiae largitionis inutilis: conquuit. Ne*

Doctrina autem de Ciphris altam secum traxit doctrinam erga ipsum relativam. Illa est de Decipheratione, sive rescriptione cipharam, sicut quis alphabeticam ciphram aut fractum dicat, latelra penitus ignorat. Res saec est illa laboriosa sicut et ingenuosa, et arcana principium, veluti et illa prior, dicitur. At tamen præcautione solerti fieri possit inutilis; et si quoniam res nunc se habent magis prorsus sit usus, Etiam si ciphra introplexatoris prorsus cluderent et excluderent; quia tamen sint satis commoda et expedita ad legendum aut scribendum. Verum imperitia et inservia secretariorum et administrantium in administratione principium tanta est, ut maxima plenaria negligencia ciphri et scilicet communiantur.

Interea fieri potest, ut suspectetur quispiam nos in cunctione et quasi consuetudine iugare, ut cunctarum cephæ veluti in alieno administratione autem et multiplicat e in e. In admiratione; cum tamen tunc in cunctum tunc e tenet. Non

*peak of -stries or metre) it is (as I said before) like a luxuriant plant, that comes of the last of the earth, without any formal seed. Wherefore it spreads everywhere and is scattered far and wide, so that it would be vain to take thought about the defects of it. With this therefore we need not trouble ourselves. And with regard to Accents of words, it is too small a matter to speak of; unless perhaps it be thought worth remarking, that while the accentuation of *seruus* has been explicitly observed, the accentuation of *sentences* has not been observed at all. And yet it is common to all mankind almost to drop the voice at the end of a period, to raise it in asking a question, and other things of the kind not a few. And so much for the part of Grammar which relates to Speech.*

As for Writing, it is performed either by the common alphabet (which is used by everybody) or by a secret and private one, agreed upon by particular persons; which they call *ciphers*. And with regard to the common orthography itself, a controversy and question has been raised among us,—namely, whether words ought to be written as they are pronounced, or in the usual way. But this apparently reformed style of writing (viz. in which the spelling should agree with the pronuncia-tion) belongs to the class of unprofitable subtleties. For the pronunciation itself is continually changing; it does not remain fixed; and the derivations of words, especially from foreign tongues, are thereby completely obscured. And as the spelling of words according to the fashion is no check at all upon the fashion of pronunciation, but leaves it free, to what purpose is this innovation?

Let us proceed then to Ciphers. Of these there are many kinds: simple ciphers; ciphers mixed with non-significant characters; ciphers containing two different letters in one character; wheel-ciphers; key-ciphers; word-ciphers; and the like. But the virtues required in them are three; that they be easy and not laborious to write; that they be safe, and impossible to be deciphered; and lastly that they be, if possible, such as not to raise suspicion. For if letters fall into the hands of those who have power either over the writers or over those to whom they are addressed, although the cipher itself may be safe and impossible to decipher, yet the matter comes under examination and question: unless the cipher be such as either to raise no suspicion or to elude inquiry. Now for this

elusion of inquiry, there is a new and useful contrivance for it, which as I have it by me, why should I set it down among the desiderata, instead of propounding the thing itself? It is this: let a man have two alphabets, one of true letters, the other of non-significants; and let him infold in them two letters at once; one carrying the secret, the other such a letter as the writer would have been likely to send, and yet without anything dangerous. Then if any one be strictly examined as to the cipher, let him offer the alphabet of non-significants for the true letters, and the alphabet of true letters for non-significants. Thus the examiner will fall upon the exterior letter; which finding probable, he will not suspect anything of another letter within. But for avoiding suspicion altogether, I will add another contrivance, which I devised myself when I was at Paris in my early youth, and which I still think worthy of preservation. For it has the perfection of a cipher, which is to make anything signify anything; subject however to this condition, that the infolding writing shall contain at least five times as many letters as the writing infolded: no other condition or restriction whatever is required. The way to do it is this: First let all the letters of the alphabet be resolved into transpositions of two letters only. For the transposition of two letters through five places will yield thirty-two differences; much more twenty-four, which is the number of letters in our alphabet. Here is an example of such an alphabet.

Example of an Alphabet in two letters,

A	B	C	D	E	F	G
<i>Aaaa.</i>	<i>aanab.</i>	<i>aanbu.</i>	<i>aabb.</i>	<i>aaana.</i>	<i>aabab.</i>	<i>aabba.</i>
<i>H</i>	<i>I</i>	<i>K</i>	<i>L</i>	<i>M</i>	<i>N</i>	<i>O</i>
<i>aabb.</i>	<i>abaan.</i>	<i>abaaab.</i>	<i>ababb.</i>	<i>abaaa.</i>	<i>ababb.</i>	<i>ababb.</i>
<i>P</i>	<i>Q</i>	<i>R</i>	<i>S</i>	<i>T</i>	<i>V</i>	<i>W</i>
<i>abbb.</i>	<i>baaaa.</i>	<i>baaab.</i>	<i>baabb.</i>	<i>baaba.</i>	<i>baabb.</i>	<i>babaa.</i>
<i>X</i>	<i>Y</i>			<i>Z.</i>		
<i>babab.</i>	<i>babba.</i>					

Nor is it a slight thing which is thus by the way effected. For hence we see how thoughts may be communicated at any distance of place by means of any objects perceptible either to the eye or ear, provided only that those objects are capable of two differences: as by bell, trumpet, torches, gunshot, and the

Hec. But to proceed with our business: when you prepare to write, you must reduce the interior epistle to this biliteral alphabet. Let the interior epistle be

Fly.

Example of reduction.

F *L* *Y.*

abab. *abab.* *babb.*

Have by you at the same time another alphabet in two forms; I mean one in which each of the letters of the common alphabet, both capital and small, is exhibited in two different forms,—any forms that you find convenient.

Example of an Alphabet in two forms.

<i>a</i>	<i>b</i>	<i>a</i>	<i>b</i>	<i>B</i>	<i>B</i>	<i>b</i>	<i>a</i>	<i>b</i>	<i>C</i>	<i>C</i>	<i>c</i>	<i>b</i>
<i>A</i>	<i>D</i>	<i>a</i>	<i>d</i>	<i>E</i>	<i>E</i>	<i>e</i>	<i>C</i>	<i>F</i>	<i>F</i>	<i>f</i>	<i>i</i>	
<i>D</i>	<i>G</i>	<i>g</i>	<i>k</i>	<i>H</i>	<i>H</i>	<i>h</i>	<i>F</i>	<i>I</i>	<i>J</i>	<i>j</i>		
<i>G</i>	<i>K</i>	<i>k</i>	<i>n</i>	<i>L</i>	<i>L</i>	<i>l</i>	<i>I</i>	<i>M</i>	<i>M</i>	<i>m</i>		
<i>K</i>	<i>N</i>	<i>n</i>	<i>n</i>	<i>O</i>	<i>O</i>	<i>o</i>	<i>J</i>	<i>P</i>	<i>P</i>	<i>p</i>		
<i>N</i>	<i>Q</i>	<i>q</i>	<i>q</i>	<i>R</i>	<i>R</i>	<i>r</i>	<i>M</i>	<i>S</i>	<i>S</i>	<i>s</i>		
<i>Q</i>	<i>T</i>	<i>t</i>	<i>t</i>	<i>U</i>	<i>U</i>	<i>u</i>	<i>P</i>	<i>V</i>	<i>V</i>	<i>v</i>		
<i>T</i>	<i>W</i>	<i>w</i>	<i>w</i>	<i>X</i>	<i>X</i>	<i>x</i>	<i>S</i>	<i>Z</i>	<i>Z</i>	<i>z</i>		

Then take your interior epistle, reduced to the biliteral shape, and adapt to it letter by letter your exterior epistle in the biform character; and then write it out. Let the exterior epistle be,

Do not go till I come.

Example of Adaptation.

F *L* *Y.*

aa *ab.* *ab* *abab.* *a* *bba.*

Do not *go* *till* *I* *come.*

I add another larger example of the same cipher,—of the writing of anything by anything.

The interior epistle; for which I have selected the Spartan despatch, formerly sent in the *Scytale*.

All is lost. Minotaur is killed. The soldiers want food. We can neither get home, nor stay longer here.

The exterior epistle, taken from Cicero's first letter, and containing the Spartan despatch within it.

In all duty or rather piety towards you I satisfy every body except myself. Myself I never satisfy. For so great are the services which you have rendered me, that seeing you did not rest in your cunctum on my behalf till the thing was done, I feel as if life had lost all its sweetnes, because I cannot do as much in this cause of yours. The occasions are these: Ammonius the King's ambassador openly besieges as with money: the business is carried on through the same creditors who were employed in it when you were here, &c.

The doctrine of Ciphers carries along with it another doctrine, which is its relative. This is the doctrine of deciphering, or of detecting ciphers, though one be quite ignorant of the alphabet used or the private understanding between the parties: a thing requiring both labour and ingenuity, and dedicated, as the other likewise is, to the secrets of Princes. By skillful precaution indeed it may be made useless; though as things are it is of very great use. For if good and safe ciphers were introduced, there are very many of them which altogether elude and exclude the decipherer, and yet are sufficiently convenient and ready to read and write. But such is the rawness and unskillfulness of secretaries and clerks in the courts of kings, that the greatest matters are commonly trusted to weak and subtle ciphers.

It may be suspected perhaps that in this enumeration and *census*, as I may call it, of arts, my object is to swell the ranks of the sciences thus drawn up on parade, that the numbers of them may raise admiration; whereas in so short a treatise, though the numbers may perhaps be displayed, the force and value of them can hardly be explained. But I am true to my design, and in framing this globe of knowledge I do not choose to omit even the smaller and more remote islands. And though my handling of these things be cursory, it is not (as I think) superficial; but out of a large mass of matter I pick out with a fine point the kernels and marrowes of them. Of this however I leave those to judge who are most skilful in such arts. For whereas most of those who desire to be thought multisipient are given to parade the terms and extremities of arts, thereby making themselves the admiration of those who do not understand those arts and the scorn of those who do; I hope that my labours will have the contrary fate, and arrest the judgment

Aaabbccdd eeffgg hh ii ll mm nn oo pp
pqqrsssssttssstvvvuuuxxyyzzz.þ:
A A B B C C D D E E F F G
G H H I J L L M M M N
N O O P P Q Q R R S S
T T V V X X Y Y Z Z ð
Letra del Grifo que screuia Fran^o, Lucas En-
Madrid. Año De. M. D. LXXVII.

57. ITALIC TYPE-LITTERS.

PHOTOGRAPHED FROM "ALPHABETS, A MANUAL OF LETTERING FOR THE USE OF STUDENTS, WITH HISTORICAL AND PRACTICAL DESCRIPTION," BY EDWARD F. STRANGE. 1907

The foregoing illustration of alphabets is presented at this point for the purpose of showing the differences in forms of letters resorted to in the sixteenth century (1577).

The following statement has been deciphered from Bacon's "De Augmentis" (1624) by means of the Bi-literal Cipher: "By slight alteration of the common italic letters, the alphabets of the Bi-literal Cipher, having the two forms, are readily obtained."

LORD BACON'S OWN EXAMPLE OF BI-LITERAL CIPHER
Spedding's Editions 1857

Manere te volo donec venero.

*Ego omni officio ac potius pietate erga te caeteris satisfacio omnibus :
Mihi ipse nunquam satisfacio. Tanta est enim magnitudo tuorum ergo
me meritorum, ut quoniam tu, nisi perfecta re, de me non conquiesci :
ego, quia non idem in tua causa officio, vitam mibi esse acerbari putem.
In causa bæc sunt : Ammonius regis legatus aperte pecunias nos op-
pugnat : res agitur per eosdem creditores per quos cum tu aderas ageba-
tur : regis causa si qui sunt qui velint, qui pauci sunt, omnes ad Pim-
peium rem deferri volunt : senatus religionis calumniari, non religiose
sed malevolentia, et illius regiae largitionis incidia comprebat, &c.*

Do not go till I come.

*In all duty or rather piety towards you I satisfy every body except
myself. Myself I never satisfy. For so great are the services which
you have rendered me, that seeing you did not rest in your endeavours
on my behalf till the thing was done, I feel as if life had lost all its
sweetness, because I cannot do as much in this cause of yours. The
occasions are these : Ammonius the King's ambassador openly besieges
us with money : the business is carried on through the same creditors
who were employed in it when you were here, &c.*

a	b	a	b	a	b	a	b	a	b	a	b	a	b
A	A	a	a	B	B	b	b	C	C	c	c		
D	D	d	d	E	E	e	e	F	F	f	f		
G	G	g	g	H	H	h	h	I	J	i	i		
K	K	k	k	L	L	l	l	M	M	m	m		
N	N	n	n	O	O	o	o	P	P	p	p		
Q	Q	q	q	R	R	r	r	S	S	s	s		
T	T	t	t	U	U	u	u	V	V	v	v		
W	W	w	w	X	X	x	x	Y	Y	y	y		
				Z	Z	z	z						

LORD BACON'S ORIGINAL EXAMPLE OF HIS BI-LITERAL CIPHER
Taken from
Gilbert Wats' Edition "Advancement of Learning" 1640

Ego omni officio, ac yotius prestate erga te.
caeteris satisfacio omnibus: Misi ipsenun-
quam satisfacio. Tanta est enim magni-
tudo tuorum erga me meritorum, ut quoni-
am su, nisi perfectâ re, de me non conguies-
ti; ego, guia non idem in tua causa efficio,
vitam misi esse acerbum putem. In cau-
sa haec sunt: Ammonius Regis Legatus
aperitè pecunia nos oppugnat. Res agitur
per eosdem creditores, per quos, cum su ade-
ras, agebatur. Regis causa, si qui sunt,
qui velint, qui pauci sunt, omnes ad Pompe-
ium rem deferri volunt. Senatus Reli-
gionis calumniam, non religione, sed ma-
lenientia, et illius Regiae Largitionis
inuidia comprobat. &c.

Manere te volo donec venero.

An Example of a Bi-formed Alphabet.

a. b.
A A a. a. B B b. b. C C c. c. D D d. d.
a. b.
E E e. e. F F f. f. G G g. g. H H h. h.
a. b.
I I i. i. K K k. k. L L l. L M M m. m.
a. b.
N N n. n. O O o. o. P P p. p. Q Q q. q. R
b. a. b. a. b. a. b. a. b. a. b. a. b.
R R r. S S s. s. T T t. t. V V v. v. u. u.
a. b.
W W w. w. X X x. x. Y Y y. y. Z Z z. z.

THE "I. M. POEM" GROUP.

The following group of illustrations has been assembled for the purpose of demonstrating the use of the two forms of type in enframing a hidden message in the printed page.

This series (pp. to) consists of various photographic facsimiles of the "I. M. Poem" — see a brief adulterary poem inserted in the preliminary pages of the 1623 Folio Edition of Shakespeare's works. Although another poem — by L. Digges — appears on the same page in the original, the "I.M. Poem" has been taken as the basis of the illustration of the cipher, not because it lends itself any more easily to the purpose, but because of its brevity, as compared to other passages. The message enfolded in the Poem is complete in itself, and is signed by its author. The illustrations are photographic copies taken from the 1623 Folio in the Hesberry Library collection, Chicago.

The first illustration in the group is the page containing the photographic reproduction of the "I.M. Poem" itself. (p.). Next follows (p.) an illustration of the alphabets of the a and b forms in use in the "I. M. Poem." Many of these may have "variants," but a comparison of them with the typical letter of the form to which they belong makes these variations easily distinguished and understood.

A reference to Bacon's own illustrations on pp. will disclose the fact that he deliberately prepared variants in his own type forms. The characteristic a and b form of letters offered by Bacon may be studied in the "Example of a Bi-formed Alphabet" given on p. . On the opposite half of this page will be found hybrid letters or variants, (such as in the case of the capital H, the left hand top of which has the characteristics of the b form, and the right hand top the characteristics of the a form.)

The next three illustrations of the series (pp.) present photographic

copies of the "I.M. Poem" with the lines so spaced as to permit of the typical form of the letter (illustrated in the alphabet on p.) being placed over each letter of the poem. For the purpose of clearness this has been done over every third letter, and three pages have therefore been required to complete this. These three pages show the typical form of the letter of the corresponding form, a or b. This facilitates the comparison between the two letters of the characteristics inherent in the form.

The three pages following (pp.) show the typical letter of the opposite form to that over which each is placed. This is done for the purpose of contrast, to enable the student easily to note the differences between the two forms.

To form the next page (p.) all the letters of the "I.M. Poem" have been classified according to their respective forms in alphabetical sequence, and in the order of their respective occurrence in the text. Those unmarked belong to the a form; those designated by / are of the b form.

P. of this group presents all the letters of the poem in alphabetical sequence and in the exact order of their occurrence, irrespective of the form to which they belong. Those belonging to the a form are unmarked; those in the b class have the / beneath.

The final illustration of this group (p.) presents a copy of the "I.M. Poem" with its letters marked to show whether it is of the a or b form in accordance with the preceding pages. Thus each letter shows to which class it belongs—either a or b. To facilitate the reading of the decipherment resulting from such marking, the letters of the poem have been divided into groups of five, with the result that each of such groups represents one of the combinations of a and b to be found in the Baconian Cipher Cedes already given on p.

To the memorie of M. W. Shake-speare.

V V E wondred (Shake-speare) that thou went'st so soone
From the Worlds-Stage, to the Graues-Tyring-roome.
Wee thought thee dead, but this thy printed worth,
Tels thy Spectators, that thou went'st but forth
To enter with applause! An Actors Art,
Can dye, and liue, to acte a second part.
That's but an Exit of Mortalitie;
This, a Re-entrance to a Plaudite.

ALPHABET

A-aaaaaa
B-aaaab
C-aaaba
D-aaabb
E-aabaa
F-aabab
G-aabba
H-aabbb
I-abaaa
K-abaab
L-ababa
M-ababb
N-abbaa
O-abbab
P-abbbb
Q-abbbb
R-baaaaa
S-baaaab
T-bauba
V-baabb
W-babaa
X-babab
Y-babba.
Z-bubbb

I. M.

To the memorie of M. W. Shake-speare.

V V E wondred (Shake-speare) that thou went'st so soone
From the Worlds-Stage, to the Graues-Tyring-roome.
Wee thought thee dead, but this thy printed worth,
Tels thy Spectators, that thou went'st but forth
To enter with applause! An Actors Art,
Can dye, and liue, to acte a second part.
That's but an Exit of Mortalitie;
This, a Re-entrance to a Plaudite.

I. M.

SHAKESPEARE FOLIO 1623—METHUEN CO.

I. M. POEM

To the memorie of M. W. Shak espe re HE wondr edaha keape areth atthe uwent stses esnef
banab aabaa aaaa banaa saaba abbbb aabab abbah baasa abaab abaa babba abaa baab
remth eorl deSta getet heGra uesty ringr come/s ecthe ughtt heede adbut thist hypri
baaba abbbb aabaa abbbb aaaaa aaabb abaa abba baab abbab abab baab
ntedw orthT elsthy Spec tator sthat thou entat butfe rthTe enter witha pplau seAni
anbbb abaa abab ababb aabaa aaabb abaa baab abbab aabab baab aaaa abaa
ctors ArtCa ndlyea ndliu etoac tease condp artTh atsbu tanNx itefM ortal itieT hisar
aaaba abaa baab aaaa banaa abbab abba abbab abab baabb aabaa banaa baab
centr unct earla udite IM
ababa aaaa ababb

erch. for keyes, the headin's of the Comedies.

FRANCIS FROBISHER OF VERULAM.

"I.M." POEM.

VV

M ²TT ee f³⁷ hh ii ¹⁸ mm oo fr tt³⁸

E ²² ss aa ee hh ii kk pp rr ff tt x³⁹

¹⁹ ss WW ⁴ aa ee ⁵ bb ²⁷ k p rr ²⁰ ff⁶

¹² AA ²¹ CC ³⁰ EE ²⁵ FF ¹⁵ GG MM PP ¹⁷ RR ³⁴ SS ⁹ TT ¹⁰ WW

¹³ aa bb cc dd ee ff gg ²⁶ hh ii ll mm nn

oo pp rr ss ff tt uu w w yy¹¹

³² et et et et ³¹ is is is is ¹⁶ st st st st ^{35 36 8}

— THE ALPHABETS.—

"I.M." POEM.

VV

M e e e f h i m m o o o r t T

E S a a e e e h i k p r s t x S W a a e e e b k p r s

A A A C E E F G M P R S S T T T T T W W

a a a a a a d a a a a a a a a a a a b b b c c d d d d d d d d

e f f g g g g h h h h h h h h h h h h h h h h h

i i i i i i l l l l l l l l l l l l n n n n n n n n n n n n 0

p p p p p r r r r r r r r r r r r s s s s s s s s s s s s

t t

u u u u u u u u u w w w w w w y y y y

E t t E t - i s i s s t s t

LETTERS ARRANGED ALPHABETICALLY AND IN PRINTED ORDER.

"I.M." POEM.

The r^o W a s a
To the memorie of M.W.Shake-speare.

VV w d d a f a t t o e ft s n
VV EEE wondred(Shake-speare) that thou went'st so soone
r t W l S g o e a s n g o.
From the Worlds-Stage, to the Graues-Tyring-roome.
W t u t e e b t t p n d n
Wee thought thee dead, but this thy printed worth,
T s y e t s a h w t u o h
Tels thy Spectators, that thou went'st but forth
e e i a l s n o A
To enter with applause: An Actors Art,
C d a l e a a a d r
Can dye, and liue, to acte a second part,
b s t E t M t l e
That's but an Exit of Mortalitie;
is e t n t P
This, a Re-entrance to a Plaudite.

I. M.

N^o1-COMPARISON WITH TYPICAL LETTER OF SAME FORM.

"I.M." POEM.

o e m i f s k p r
To the memorie of M.W.Shake-speare.

E o r S k p r h t u n s o e
VV E wondred(Shake-speare) that thou went'st so soone
o b o d t e t G u T i r m
From the Worlds=Stage,to the Graues-Tyring-roome.
e h g t e a u b h r t w t
Wee thought thee dead, but this thy printed worth,
e t S e t o t t o e ft t r
Tels thy Spectators,that thou went'st but forth
F n r t p a e A r r
To enter with applause! An Actors Art,
a y n i t et s o p t
Can dye, and liue, to acte a second part.
a b a x o o a t
That's but an Exit of Mortalitie;
T a e n c o l
This, a Re-entrance to a Plaudite.

I.M.

Nº2-COMPARISON WITH TYPICAL LETTER OF SAME FORM.

COPYRIGHT 1916
RIVERBANK COMPANY.

W.J. Pender

"I.M." POEM.

t m o e M b e e e
To the memorie of M.W.Shake-speare.

E n e h e e e a b w t a a
VV E E wondred (Shake-speare) that thou went'st so soone |
F m e r s a t h r e g n o e
From the Worlds-Stage, to the Graues-Tyring-roome |
e a b b d d t i s y l e o b
Wee thought thee dead, but this thy printed worth, |
l b p a r b t u n l f t
Tels thy Spectators, that thou went'st but forth |
o t w b p u A d l s t
To enter with applause! An Actors Art, |
n e d u o e e n a
Can dye, and liue, to acte a second part. |
T t u n i f r l i
That's but an Exit of Mortalitie; |
h R n a e a a
This, a Re-entrance to a Plaudite. |

Nº3-COMPARISON WITH TYPICAL LETTER OF SAME FORM.

COPYRIGHT 1916
RIVERBANK COMPANY.

W.J. Redway

"I.M." POEM.

VV

M eee f h i mm ooo r t T

E S aaceehikprstx S W aa eee h k prs

AAA CEE FG M P R SS TTTTT WW

aaaaa addaa aaaaaddaa aaaa bbb cc dddddd dd

eeeeeee eeeeeeee eeee f f gg g hhhhhh hh hhhh

iiiii i lll ll mmi nnnnnnn nnnnnnn 00000000000000 00000000

pppp p rrrrr rr rrrrrrrrrr sssss s sss s

tttttttt tttttttt tt tttttttttttt

uuuu uuuuu w w w w yyy

et et et is is st st

LETTERS ARRANGED ALPHABETICALLY, CLASSIFIED ACCORDING
TO FORM, AND IN PRINTED ORDER.

COPYRIGHT 1916
RIVERBANK COMPANY.

W.J. Anderson

"I.M." POEM.

2 Th e r o . 4 W a s f a
37 3 5 6 5
To the memorie of M.W.Shake-speare.

W o d d a f a t t o i e ⁸ st f n
VV E E wondred (Shake-speare) that thou went'st so soone

r i W l S g o e a s r g o

From the Worlds-Stage, to the Graues-Tyring-roome.

W t u t e e b t t p n d r
Wee thought thee dead, but this thy printed worth,

T s y e t s a h w t u o b
Tels thy Spectators, that thou went'st but forth

e e i a l f n o A
To enter with applause. An Actors Art,

C d a l e a a c d r
Can dye, and liue, to acte a second part.

h s t t M t i e

That's but an Exit of Mortalitie;

is e t n t P

This, a Re-entrance to a Plaudite.

I.M.

N^o4-CONTRAST WITH TYPICAL LETTER OF OPPOSITE FORM.

"I.M." POEM.

¹o e m¹⁸i ¹⁹S ²⁰r

To the memorie of M.W.Shake-speare.

²¹E o r ²²S ²³k ³⁹²⁴p r b t u n s o e
VV E wondred (Shake-speare) that thou went'st so soone

o b o d t e t ²⁵G u ¹⁰T i ²⁶r m

From the Worlds-Stage, to the Graues-Tyring-roome.

e h g t e a u h b r t w t
Wee thought thee dead, but this thy printed worth,

e t S Et o t t o e ft t r
Tels thy Spectators, that thou went'st but forth

¹⁰T n r t p a e A r r

To enter with applause: An Actors Art,

a u y n i t Et s o p t
Can dye, and liue, to acte a second part.

a b a o o a t

That's but an Exit of Mortalitie;

¹⁰T a e r c o l

This, a Re-entrance to a Plaudite.

I. M.

Nº5-CONTRAST WITH TYPICAL LETTER OF OPPOSITE FORM.

"I.M." POEM.

t m¹ o e b e. e e.
To the memorie of M.W.Shake-speare.

E n e. h e e e a h w t o o
VVEE wondred (Shake-speare) that thou went'st so soone

F m e r s a t h r e y n o e
From the Worlds=Stage, to the Graues-Tyring-roomie.

e o h b d d t is y i e o h
Wee thought thee dead, but this thy printed worth,

l b p a r b t u n b f t
Tels thy Spectators, that thou went'st but forth

o t w b p u A ct s t
To enter with applause. An Actors Art,

n e d u o e e n a
Can dye, and liue, to acte a second part.

T t u n i f r l i
That's but an Exit of Mortalitie;

b R n a e a a
This, a Re-entrance to a Plaudite.

I. M.

Nº6-CONTRAST WITH TYPICAL LETTER OF OPPOSITE FORM.

COPYRIGHT 1916
RIVERBANK COMPANY.

W. M. Freedman

ELIZABETH WELLS GALLUP TESTED AS A DECIPHERER

BY JAMES PHINNEY BAXTER

To the memorie of M.W.Shake-speare.

VVEE wondred (Shake-speare) that thou went'st so soone
From the Worlds-Stage, to the Graues-Tyring-roome.
Wee thought thee dead, but this thy printed worth,
Tels thy Spectators, that thou went'st but forth
To enter with applause. An Actors Art,
Can dye, and liue, to acte a second part.
That's but an Exit of Mortalitie;
This, a Re-entrance to a Plandite.

I. M.

ORIGINAL ARRANGEMENT, I.M. POEM
Shakespeare Folio, 1623
As deciphered by Elizabeth Wells Gallup

To the memor ieofM WShak espea reWEE wondr
baaab aabaa aaaaa baaaa aaaba aabbb aabab
edSha kespe areth attho uwent stsos ooneF
abbab baaaa abaab aabaa babba aabaa baaab
romth eWorl dsSta getot heGra uesTy ringr
baaba aabbb aabaa aabaa aaaaa aaabb
oomeW eetho ughtt heede adbut thist hypri
abaaa abbaa aabba baaab abbab aabab baaba
ntedw orthT elsth ySpec tator sthat thouw
aabbb aabaa aaaba abbab ababb aabaa aaabb
entst butfo rthTo enter witha pplau seAnA
abaaa aabaa baaab aabab baaaa aaaaa abbaa
ctors ArtCa ndyea ndliu etoac tease condp
aaaba abaaa baaab aaaab aaaaa baaaabb
artTh atsbu tanEx itofM ortal itieT hisaR
abbaa abbab aabab baabb aabaa baaaa baabb
eentr ancet oaPla udite
ababa aaaaa ababb

Search for keyes, the headings of the Com-
edies.

FRANCIS BARON OF VERULAM.

To the meinorie of M.W.Shake-speare.

VVEE wondred (Shake-speare) that thou went'st so soone
From the Worlds-Stage, to the Graues-Tyring-roome
Wee thought thee dead, but this thy printed worth,
Tels thy Spectators, that thou went'st but forth
To enter with applause. An Actors Art,
Can dye, and liue, to acte a second part.
That's but an Exit of Mortalitie;
This, a Re-entrance to a Plandite.

I. M.

TEST GIVEN ELIZABETH WELLS GALLUP
By Re-arrangement of Letters, I.M. Poem
Shakespeare Folio 1623

To the memor ieofM WShak espea reWEE wondr
baaab aabaa aaaaa baaaa aaaba aabbb abaab
edSha kespe areth attho uwent stsos ooneF
aaaaaa abaaa baaab aabaa baaaa abaab baabb
romth eWorl dsSta getot heGra uesTy ringr
ababa baabb baaaa abaab baaaa abaaa
oomeW eetho ughtt heede adbut thist hypri
abaaa aabba baabb abbaa aaabb baaab aaaba
ntedw orthT elsth ySpec tator sthat thouw
aabbb ababa aaaaa aaaba aabbb baaba aabaa
entst butfo rthTo enter witha pplau seAnA
abbaa ababb aaaaa aaaba aabbb baaba abaaa
ctors ArtCa ndyea ndliu etoac tease condp
baaab baaba baaaa aabaa aaaba aabbb baaba
artTh atsbu tanEx itofM ortal itieT hisaR
abbaa abbab aabab baabb aabaa baaaa baabb
eentr ancet oaPla udite
ababa aaaaa ababb

Search Kaiser Kultur Krieg und Schlachten
Macht ist Recht n of Verulam.



D E S C R I P T I O N S
of the characteristics
of the "a" and "b" form letters
in
"THE I.M. POEM"

The letters affixed by way of illustration have been photographed from the 1623 Folio in the Newberry Collection and have been enlarged to three and one-third the dimensions of the original, to facilitate the study of their characteristics.

For a description of the roman letters, which occur relatively infrequently, and of which there is often but one illustration on a page, the student is referred to the Appendix, where all the roman letters used in the I.M. and the Digges poems, the Prologue, the Catalogue, and the Names of the Principall Actors, have been assembled.

UPPER CASE ITALIC LETTERS IN
"I.M. POEM"

A Form

The typical letter is plain with high, straight bar. A kern or a dot in the letter changes it from a to b or vice versa.

A long letter extending below the line.

No example.

No example

No example.

No example

Has a nearly even curve in the top at the right.

No example

No example

Curved top.

A tall, well-made letter,

Large size type, narrow head and wide base.

No example

A



C



E



F



G



M



P



R



S



T



V



S



W



B Form

The typical letter is plain with a curved or slanting bar, as seen in the alphabet.

No example.

Top and bottom lines parallel; the kern on the base line slender and slanting.

Top heavy and slants parallel to seriph of base.

The short line slants toward the base.

Kern short, straight, and blunt at the right. Third line shaded from top. Seriphs at bottom level.

No example.

Top forms a segment of a circle at the left. Upright does not reach the top.

Erect; round curves.

No example.

The heavy, blunt letter with short connecting line is the b-form. It is accented and therefore marked a-form.

No example

Well-made letter in large size type; points sharp.

LOWER CASE ITALIC LETTERS IN
"THE I. M. POEM"

A Form

Typical a form is well-made; the oval usually shows angle or shoulder and rounds gradually to the line of writing, making the letter somewhat wider at the base than the corresponding letter in the b form; also the oval has the appearance of a complete o placed in such a way that a part of one side rests on the upright and often projects sufficiently to give the stem the appearance of bending outward near the center.

Oval pointed at top and narrow at base.

Roundness commences near top; curve at base usually wide.

Stem has no wave line, but sometimes turns slightly to the left at top; toe upturned; loop leaves stem and rejoins it at a somewhat obtuse angle.

A line drawn through the loop of this letter beginning at the left of the oval where it leaves the stem and running through the opposite point of the oval, intersects the line of the end of the curve of the base produced either above or below the line of writing.

Letter slanted; straight top, or, if curved, showing a small neck at left.

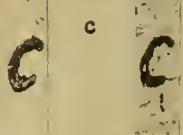
a



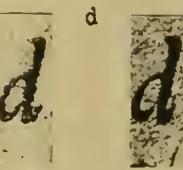
b



c



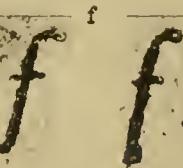
d



e



f



B Form

Somewhat narrower at base than the a form; oval pointed; upright is often either uniform or slightly heavier at top. Letter slanted.

Oval rounded at top; upright straight nearly to the base.

Roundness commences near center of back; curve at base usually narrow.

Wave line in stem, angle between stem and top of oval acute; point of jointure below, somewhat high on stem.

A line drawn through the loop of this letter beginning at the left of the oval where it leaves the stem and running through the opposite point of the oval, will run parallel to the line of the end of the curve of the base produced.

Letter stands nearly erect; top curved.

LARGE LOWER CASE ITALIC LETTERS I.
"THE I... POE!"

A. Form

Slanting, somewhat wide
at the base.



a

B. Form

No example.

If the end of the curve of
the base line were produced
it would not form a perfect o.



e



e

If the end of the curve of
the base line were produced it would
form a perfect o.

Somewhat slender; the loop
is narrow at the top and pointed.



b

No example.

Slender and delicate; the
queue not widely spread at base.



k

No example.

The loop is narrow in the
bottom part.



p

No example.

Somewhat broad at the top;
both kerns are rounded.



f

No example.

Long, well-made letter; the
stem is a wave line.



s

No example.

LOWER CASE ITALIC LETTERS IN
"THE I. M. POEM"

A Form

The lower loop is attached to the center of the oval; the connecting line usually heavy and angular.

The stem of this letter is not characteristic, unless perhaps slightly pointed at the base; a line drawn upward through the loop so as to intersect it at the middle of the upper part of the curve tends only slightly toward the right.

In the typical letter of this class the base is usually rounded; the kerns do not correspond, that is, one will be straight and the other curved.

The typical letter of this class usually shows a slight wave line in the stem. The angle made by the kern and the stem is large.

Double letters are governed by the law of digraphs, not by that of single letters.

The second loop shorter at top and turns slightly to the right; width of loops nearly equal at base; top kern inclined to sharpness; kern at base usually close.



g



h



i



l



m

B Form

The lower loop is attached a little to the left of the center of the oval; the connecting line is usually thin.



The stem of the letter is characteristic; a line drawn upward through the loop so as to intersect it at the middle of the upper part of the curve tends pronouncedly toward the right.

In the typical letter of this class the kerns at the ends, whether curved or straight show a correspondence with each other.

The typical letter of this class has the characteristic stem rounded into a small, close kern.

Nearly even at top; second loop wider at base than the first; top kern rounded, and corresponds to the kern at the base.

LOWER CASE ITALIC LETTERS IN
"THE I. M. POEM"

A Form

Letter slanting; top kern inclined to sharpness; kern at base usually clear. The loop tends toward the right at the top in the same manner as that of the second loop in the a form of m.

There are many varieties of small o, and it is difficult to assign them to their proper classes. The a form letters show the slant characteristic of that form and are best classified by comparing them with the capital letter, which is less symmetrical than the b form.

Stem of nearly uniform thickness throughout, or slightly shaded below the line of writing; loop shows only slight narrowing toward the base, but slants downward where joined to the upright.

The letter has the slant that is characteristic of the a form. The first kern is small and tends to sharpness; the second kern is rounder. There is usually a greater breadth at the top in the a form than in the b form.

There are long and short letters in both forms. The base in either case is nearly horizontal. The long s of the a form is more slanting than that of the b form.

n



o



p



r



s



B Form

Nearly erect; top kern usually rounded; the two kerns correspond. The letter shows a wideness at the base corresponding to that of the second loop in the b form of m.



r



If a line were drawn lightly along the inside of the capital O of the b form it would show almost perfect symmetry. This appears also in all the well-printed lower-case letters of this form.

Stem often thick at top; loop joins the upright almost at a right angle.

The left kern is usually distinct and strong; the two differ only slightly. The upward stroke of the letter is usually strong and distinct. The letter is usually somewhat narrow at the top.

The long s of the b form is usually upturned at the base and the slant of the letter is not marked. The short letter has the same characteristics.

LOWER CASE ITALIC LETTERS IN
"THE I. M. POEM"

A Form

The a-form letter has a base like the small l of this class; the stem has the same slant as the l.

The typical letter of this class has the slant of the a-form; the first kern straight; the second curved, or vice versa. The connecting line between the uprights is lower than in the b-form.

The rounded base is typical of both upper and lower-case letters of this form.

First point of base sharp, second point blunt. The letter is flat topped.

Narrow at top; second stroke bends toward the first.



t



u



v



y

B Form

The characteristic b-form letter is well-made; the kern at base free and clear.

Letter nearly erect; the kernels correspond with each other. The connecting line joins the second upright at a higher point in the b-form than in the a-form.

The angular letter, like the second half of the tall w, is the typical letter in the b-form.



Both points of base sharp; first and third stroke on the left extend in curves above the level of the body of the letter.

No example.

DESCRIPTION OF THE DIGRAPHS IN
"THE I. M. POEM".

The union of a slanting c that shows an angle in the base, with a t that comes well down to the line of writing with the slant of the a form, gives the combination "aa".



No example.

The union of a slanting c that shows an angle in the base, with a t that approaches the c at the base, and has a cross-bar that thickens toward the right gives the combination "ab".



The union of c well-rounded at the base with a t that comes well down to the line of writing with the slant of the a form, gives the combination "ba".

The union of a short, well-rounded i with an s narrow in the head and angular in the base gives the combination "aa".



No example.

No example.

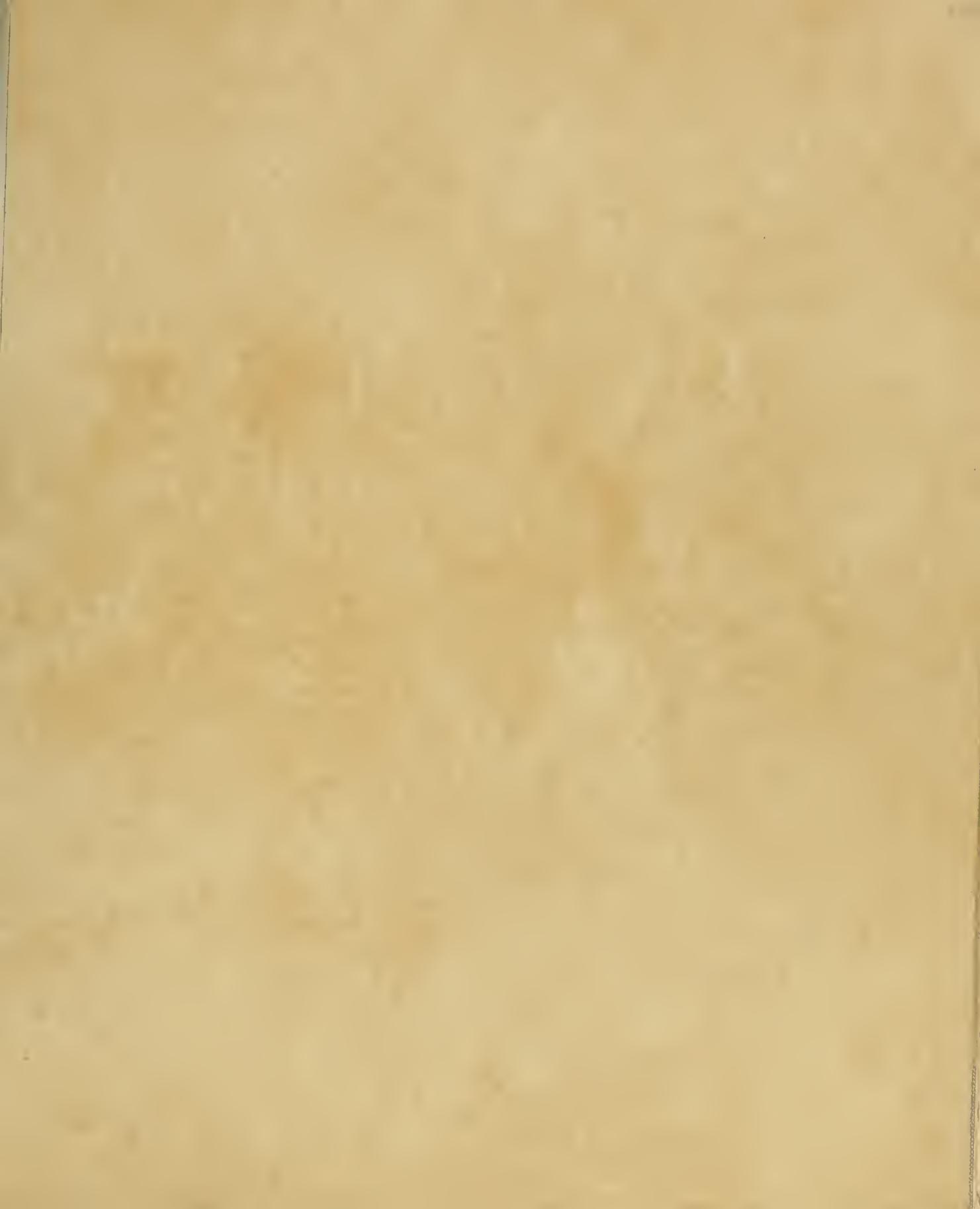


The union of a somewhat large i, the kern and base corresponding, with an s narrow in the head gives the combination "ba".

The union of a long s having a wide curve at the top, with a t having a slanting bar and somewhat wide angle between the foot and the stem gives the combination "aa".



No example.



To the memorie of M. W. Shake-speare.

V V E E wondred (Shake-speare) that thou went'st so soone
From the Worlds-Stage, to the Graues-Tyning-roome.
Wee thought thee dead, but this thy printed worth,
Tels thy Spectators, that thou went'st but forth
To enter with applause! An Actors Art,
Can dye, and liue, to acte a second part.
That's but an Exit of Mortalitie;
This, a Re-entrance to a Plaudite.

I. M.

To the memorie of M. W. Shake-speare.

V V E E wondred (Shake-speare) that thou went'st so soone
From the Worlds-Stage, to the Graues-Tyning-roome.
Wee thought thee dead, but this thy printed worth,
Tels thy Spectatqr's, that thou went'st but forth
To enter with applause! An Actors Art,
Can dye, and liue, to acte a second part.
That's but an Exit of Mortalitie;
This, a Re-entrance to a Plaudite.

I. M.

SHAKESPEARE FOLIO 1623—METHUEN CO.

I. M. POEM

To the memorie of M. W. Shak espeare I. E. wondr edsha kespe areth atthe uwent stoes eonef
banab abaa aaaa basaz aaabi aabb aabb abba abaa abaa babba aabaa baaab
remth ewrl deSta getet heGra useTy ringr comeJ ectho ughtt heede adbut thist hypri
baaba aabb aabb aabb aaaa anabb abaci abaa abba baaab abbab abab baabba
ntedw orthT elsth yöpec tater sthat theuw entst butfe rthTe enter witha pplau seAnA
aabbb abaa anba abbab abaa abaa abaa baaab abab baabba aaaa abba
ctors ArtCa ndyea ndliu etea tease condp art.h atebu tanEx itefi ortal itiel hisar
aaaba abaa baaab aaaa baraa abbab abba abab baabb abaa baaab baabb
centr unct cavla udite IM
-babba aaaa abab

THE DIGGES POEM GROUP.

The next group (pp.) has for its first illustration a photographic copy of the Digges poem (a reproduction is on p.) placed here to show the source of the two alphabets which are illustrated on p. following. Immediately following is found a decipherment of the poem in groups of five beneath which is the transcription resulting therefrom.

At the end of this group (pp.) will be found full descriptions of the characteristics of each typical letter of both forms, and also of their respective variants. Letters which occur but once are naturally omitted from this list. The student is recommended to refer to this description as a means of familiarizing himself with the alphabet and with the type form illustrated in the group. (pp.).

TO THE MEMORIE of the deceased Authour Maister W. SHAKESPEARE.

S Hake-speare, at length thy pious fellowes giue
The world thy Workes : thy Workes, by which, out-line
Thy Tombe, thy name must : when that stone is rent,
And Time dissolues thy Stratford Monument,
Here we aliue shall view thee still. This Booke,
When Brasse and Marble fade, shall make thee looke.
Fresh to all Ages: when Posteritie
Shall loath what's new, thinke all is prodegie
That is not Shake-speares; eu'ry Line, each Verse
Here shall reviue, redeeme thee from thy Herse.
Nor Fire, nor cankring Age, as Naso said,
Of his, thy wit-fraught Booke shall once imade.
Nor shall I e're beleue, or thinke thee dead
(Though mist) vntill our bankront Stage be sped
(Imposseble) with some new straine t' out-do
Passions of Juliet, and her Romeo;
Or till I heare a Scene more nobly take,
Then when thy half-Sword parlying Romans spake.
Till these, till any of thy Volumes rest
Shall with more fire, more feeling be exprest,
Be sure, our Shake-speare, thou canst neuer dye,
But crown'd with Lawrell, liue eternally.

L. Digges.

"L.DIGGES" POEM.

EE H I M M O R T T

A ¹ ² aa cc dd ee f hh ii oo rr ss tt u ²⁷ ²⁸ st M
/
D L SS WV gg ii

A E E H K P R S



H I N R SS

aa ⁹ dd ee ¹⁰ f hh ¹¹ ii ¹² kk ¹³ ll m n n o o pp rr ff ss tt uu
/
AA BB FF HH IJ LL MM
/
NN OO PP SS TT UV WW
/ /

aa bb cc dd ee ff gg bb ii kk ll mm

nn oo pp rr ss ff tt uu vv ww xx yy
/ /

²⁵ ²⁶ f i s i s i s i s u l l l l l l b h b h b h f f f f f t f t f t
/ /

— THE ALPHABETS.—

L. DIGG'S POMM

SONG. I. Eoft hedec eased Authe ur Mai sterw SHAKE SPEAR EShak espea reatl engh
 abab baaa aaaa abbaa aaaba baaab abbab aabab baabb aabaa baaa baabb ababa
 thypi ousfe llowe egies Thewo rldth y Werk esthy Werke sbywh icheu tliue ThyTe mbeth
 aaaa abbb abaaa banab aaaa baabb baaba aabbb abbab baana abbab aabab aaaa ababa
 yname mustw henth atsto neisr entAn dTime Dieso luest hyStr atfer dMeni ment!! crewe
 ababa baaba abbb abaa ababa aaaa babba baab abbb abaa baana abbaa ababa
 aliae shall vewt heest illTh isBoc kewhe nBrae ceand Marbl efade shall maket heelc
 abbab abab abhab baana abaa abbb baabb aaaa abaha abaa baab aabbb aabaa aabb
 okeFr eshto allAg eswhe nPost eriti cHal lloat hwhat smewt hinke allis prede gieTh
 aaaa abba abbb aaaa baan abba abbb baaba abba aabaa aabaa abba aabaa abba
 atian ettha keape arese uryLi neeac hVers eihre shall reuiu erede emeth eefre mthyH
 abaa abbb abaa abaa abba aaaa abbb aaaa abab aabab baaba aabbb aabaa baaba abba
 ersel orFir enorc ankri ngAge adNas osaid Ofhis thywi tfrau ghtBe ekesh allen ceinu
 aaaa baana abba aaaa abba abbb abbab aabab baaba aabbb aabaa baaba babaa abbab
 adeNo rshal llore bolee ueort hinke theed eadn eughm istvn tille urban krount Stage
 aaaa abba abbb baaba babaa abba abba abbb abba abba abba abba abba abba
 bespe dJmpo ssibl ewith semen ewatr ainet outde Passi onsef Julie tanch erRem eeOrt
 baaba abbat baabb baaba abbab abba aabbb aabaa abab aaaa baab aaaa baab
 illJh earea Scane moren oblyt akelh enwhe nthyh alfSw ordpa rlyin gRoma neepa ketil
 baaba baaba abaa abbb abba abbb abba abba abba abba abba abba abba
 lthes etill anyof thyVe lumes rest Hallw ithmo refir emore feeli ngbes xpres tBesu
 baaba abaa baaaa aabb baaba abbb abba abba abba abba abba abba
 recur shake spear ethou canst neuer dyeJu tcrow ndwit hLawr elli ueets rnall yLDig
 aabb abba abba abbb abba abba abba abba abba abba aaaa
 ges

Francis of Verulam is author of all the plays heretofore published
 by Marlowe, Greene, Peele, Shakespeare, and of the two-and-twenty now put out for the
 first time. Some are alter'd to continue his history.

F. ST. A.

D E S C R I P T I O N S
of the characteristics
of the "a" and "b" form letters
in
"THE L. DIGGES POEM"

The letters affixed by way of illustration have been photographed from the 1623 Folio in the Newberry Collection and have been enlarged to three and one-third the dimensions of the original, to facilitate the study of their characteristics.

For a description of the roman letters, which occur relatively infrequently, and of which there is often but one illustration on a page, the student is referred to the Appendix, where all the roman letters used in the I.M. and the Digges poems, the Prologue, the Catalogue, and the Names of the Principall Actors, have been assembled.

UPPER CASE ITALIC LETTERS IN
"THE L. DIGGES POEM"

A Form

The typical letter is plain with high, straight bar. A kern or a dot in the letter changes it from a to b or vice versa.

A



B Form

The typical letter is plain with a curved or slanting bar, as seen in the alphabet.

B



Base tends downward at left. Width of upper part greater than in the a-form.



Top line slender and only slightly slanting; not parallel to serif of base.

No example



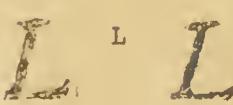
Resembles roman type; heavy and wide at the top with level serifs and level bar.

No example



Plain, resembling roman type.

Curved top and curved stem with kern at base and a cross-bar.



Somewhat heavier than the b-form. The base line is nearly uniform throughout; is not as well drawn as in the b-form.

Tall and slender. The base line thickens gradually toward the right.

UPPER CASE ITALIC LETTERS IN
"THE L. DIGGES POEM"

A Form

Curved kern at the right.
Third line light. Serihs
at top and bottom of first
line parallel; serif at
right slants downward.



B Form

No example.



No example.



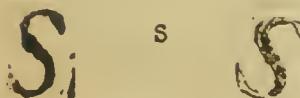
No example.



No example.

Has a nearly even curve
in the top at the right.

Erect; round curves.



Wide; slanting; flat curves.

Curved top.



Straight top; form resembles
roman type.

Curved; often described
as bowl-shaped.



Angular, like the roman
letter with the slant of the
italic.

A tall, well-made letter.



Erect; second and fourth
strokes light; first and third
heavy.

Notice that this form is changed
to a by a dot.

LOWER CASE ITALIC LETTERS IN
"THE DIGGES POEM."

A Form

The letter is well-made; the oval usually shows angle or shoulder and rounds gradually to the line of writing, making the letter somewhat wider at the base than the corresponding letter in the b-form; also the oval has the appearance of a complete o placed in such a way that a part of one side rests on the upright and often projects sufficiently to give the stem the appearance of bending outward near the center.

Oval rounded at top; upright straight nearly to the base.

Roundness commences near top; curve at base usually wide.

Stem has no wave line, but sometimes turns slightly to the left at top; toe upturned; loop leaves stem and rejoins it at somewhat obtuse angle.

A line drawn through the loop of this letter beginning at the left of the oval where it leaves the stem and running through the opposite point of the oval, intersects the line of the end of the curve of the base produced either above or below the line of writing.

Letter slanted; straight top, or, if curved, showing a small neck at left.

The lower loop is attached to the center of the oval; the connecting line usually heavy and angular.

a



B Form

The letter is somewhat narrower at the base than the a-form; oval pointed; upright is often either uniform or slightly heavier at top. Letter slanted.

b



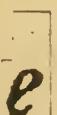
b



c



d



e



f

g



Oval pointed at top and narrow at base.

Roundness commences near center of back; curve at base usually narrow.

Wave line in stem, angls between stem and top of oval acute; point of jointure below, somewhat high on stem.

A line drawn through the loop of this letter beginning at the left of the oval where it leaves the stem and running through the opposite point of the oval, will run parallel to the line of the end of the curve of the base produced.

Letter stands nearly erect; top curved.

The lower loop is attached a little to the left of the center of the oval; the connecting line is usually thin.

LOWER CASE ITALIC LETTERS IN
"THE DIGGES POEM."

A Form

The stem of this letter is not characteristic, unless perhaps slightly pointed at the base; a line drawn upward through the loop so as to intersect it at the middle of the upper part of the curve tends only slightly toward the right.

In the typical letter of this class the base is usually rounded; the kerns do not correspond,--that is, one will be straight and the other curved.

The typical letter is somewhat light, narrow at base; the loop is slender and rounded; queue shows a wave line.

The typical letter usually shows a slight wave line in the stem. The angle made by the kern and the stem is large.

Double letters are governed by the law of digraphs, not by that of single letters.

The second loop is shorter at the top and turned slightly to the right; width of loops nearly equal at base; top kern inclined to sharpness; kern at base usually close.

Letter slanting; top kern inclined to sharpness; kern at base usually clear. The loop tends toward the right at the top in the same manner as that of the second loop in the a-form of m.

There are many varieties of small o and it is difficult to assign them to their proper classes. The a-form letters show the slant characteristic of that form and are best classified by comparing them with the capital letter, which is less symmetrical than the b-form.

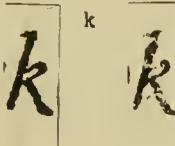
h



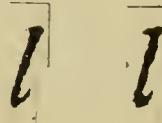
i



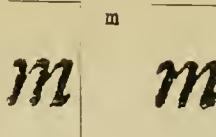
k



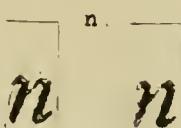
l



m



n



o



B Form

The stem of this letter is characteristic; a line drawn upward through the loop so as to intersect it at the middle of the upper part of the curve tends pronouncedly toward the right.

In the typical letter of this class the kerns at the ends, whether curved or straight, show a correspondence with each other.

The typical letter is broad and spreading at the base; the loop angular. The letter is usually broad and heavier than the a-form k.

The typical letter has the stem rounded into a small, close kern.

Nearly even at top; second loop wider at base than the first; top kern rounded and corresponds to the kern at the base.

Nearly erect; top kern usually rounded; the two kerns correspond. The letter shows a wideness at the base corresponding to that of the second loop in the b-form of m.

If a line were drawn lightly along the inside of the capital O of the b-form it would show almost perfect symmetry. This appears also in all the well-printed lower-case letters of this form.

LOWER CASE ITALIC LETTERS IN
"THE DIGGES POEM."

A Form

Stem of nearly uniform thickness throughout, or slightly shaded below the line of writing; loop shows only slight narrowing toward the base, but slants downward where joined to the upright.

Has the slant that is characteristic of the a-form. The first kern is small and tends to sharpness; the second kern is rounded. There is usually greater breadth in the a-form than in the b-form.

There are long and short letters in both forms. The base in either case is nearly horizontal. The long s of the a-form is more slanting than in the b-form.

Has a base like the small l of this class; the stem has the same slant as the l.

The typical letter of this class has the characteristic slant of the a-form; the first kern straight; the second curved, or vice versa. The connecting line between the uprights is lower than in the b-form. The rounded base is typical of both the upper and lower case letters of this form.

First point of base sharp; second point blunt. The letter is flat topped.

No example.

Narrow at top; second stroke bends toward the first.

B Form

Stem often thick at top; loop joins the upright almost at a right angle.

The left kern is usually distinct and strong; the two differ only slightly. The upward stroke of the letter is usually strong and distinct. The letter is usually somewhat narrow at the top.

The long s of the b-form is usually upturned at the base and the slant of the letter is not marked. The short letter has the same characteristics.

The characteristic b-form letter is well-made; the kern at base free and clear.

Letter nearly erect; the kerns correspond with each other. The connecting line joins the second upright at a higher point than in the a-form. The angular letter, like the second half of the tall w is the typical letter in the b-form.

Both points of base sharp; first and third strokes on the left extend in curves above the level of the body of the letter.

Narrower than the a-form; the left kern at the base is not thick and rounded as in the a-form, but leaves the line at a somewhat sharp angle.

Wide at top; a well-made letter.

ITALIC DIGRAPHS IN
"THE DIGGES POEM"

A Form

No example.

The union of a short, well-made i with an s that is very angular at the base gives the combination "aa".

The union of an i well-rounded at the base, with an s having a long top and narrow base gives the combination "ab".

The union of a delicate, well-made s that is well-rounded at the top with an h also delicate that has a narrow loop, gives the combination "aa".

The union of a delicate, long s well-rounded at the top with an h which shows a distinct widening of the loop at the middle point gives the combination "ab".

No example.

No example

The union of a delicate, long s having a wide curve at the top, with a t having a slanting bar and somewhat wide angle between the foot and the stem, gives the combination "aa".

The union of a delicate, long s having a wide curve at the top, with a t having a bar nearly horizontal and a foot somewhat closer than the one just described above, gives the combination "ab".

B Form

The union of an f having a curved top with an i having a rounded base and a sharp head, gives the combination "ba".

The union of a sharply pointed i with an s having a long top and narrow base, gives the combination "bb".

The union of a sharply pointed i with an s narrow at the base gives the combination "ba".

The union of an s having a flat top with an h that shows wideness at the middle of the loop, gives the combination "bb".

The union of an s showing somewhat more strength than the preceding, and having a flat top with an h that has a narrow loop, gives the combination "ba".

The union of two long s's each having an upturned foot gives the combination "bb".

The union of the long s having a foot turning upward with one having an horizontal foot gives the combination "ba".

The union of a long s having a narrow, curved head with a t having a nearly horizontal bar gives the combination "bb".

The union of a somewhat strong letter s having a comparatively narrow, curved top, with a t having an angular base, gives the combination "ba".

THE PROLOGUE GROUP

The following group (pp.) consists of a photographic copy of the Prologue, chosen because the play of "Troilus and Cressida" was not enumerated in the Catalogue. In the same manner as in the preceding group, this group is arranged in the order of (1) The Prologue, (2) the alphabet, (3) the decipherment and its transcription.

At the end of this group (pp.) will be found a full description of the characteristics of each typical letter of both forms, and also of their respective variants. Letters which occur but once are naturally omitted from this list. The student is recommended to refer to this description as a means of familiarizing himself with the alphabet and with the type form illustrated in the group. (pp. ,)

The Prologue.

IN Troy there lyes the Scene : From Iles of Greece
The Princes Orgillous, their high blood chaf'd
Hau to the Port of Athens sent their shippes
Fraught with the ministers and instruments
Of cruell Warre : Sixiy and nine that wore
Their Crownets Regall, from th' Athenian bay
Put forth toward Phrygia, and their vow is made
To ransacke Troy, within whose strong emures
The rauish'd Helen, Menelaus Queene,
With wanton Paris sleepes, and that's the Quarrell.
To Tenedos they come,
And the deepe-drawing Barke do there disgorge
Their warlike frautage : now on Dardan Plaines
The fresh and yet unbruised Greekes do pitch
Their braue Pauillions. Priams six-gated City,
Dardan and Timbria, Helias, Chetas, Troien,
And Antenoridias with massie Staples
And correspondiue and fulfilling Bolts
Stirre up the Sonnes of Troy.
Now Expectation tickling skittish spirits,
On one and other side, Troian and Greeke,
Sets all on hazard. And bither am I come,
A Prologue arm'd, but not in confidence
Of Authors pen, or Actors voyce ; but suited
In like conditions, as our Argument ;
To tell you (faire Beholders) that our Play
Leapes ore the vaunt and firstlings of those broyles,
Beginning in the middle : starting thence away,
To what may be digested in a Play :
Like, or finde fault, do as your pleasures are,
Now good, or bad, 'tis but the chance of Warre.

"THE PROLOGUE."

AA BB CC DD EE FF GG HH IJ LL
 / / / / / / / / / / / / /

NN OO PP QQ RR SS TT WW
 / / / / / / / / / / / /

aa bb cc dd ee ff gg hh ii kk ll mm nn
 / / / / / / / / / / / /

oo pp rr ss tt uu vvv wwww xx yy z
 / / / / / / / / / / / /

as et et et et fififi is is is is sh sh sh sh
 / / / / / / / / / / / /

fi sp sp st st st us us us
 / / / / / / / / / /

A C D H M P T T

/ / / / / / / / / / /

aa b dd ee hh ii ll m nn oo rr ss tt uu
 / / / / / / / / / / / /

I P T ee g hh l oo rr u
 / / / / / / / / / /

EXAMPLES OF LETTERS CHANGED BY DOTS.

a e e e n o p h y a e

— THE ALPHABETS.—

ThePr ologu eIINTr oyThe relye stheS ceneF romll esofG reece ThePr inces Orgil loust
 aabab baaaa aaaaa abbaa aaaba abaaa baaab baaba aaaaa ababa aaaaab aaaaa abbaa
 heirh ighbl oodch aidHa uetot hePor tofAt henss entth eirsh ippes Fraug htwit hthem
 aaabb aabaa baaab aaaba abbaa aaabb anbaa aaabb aabab baana ahhab ababb baaba
 inist ersen dinst rumen tsOfc ruell Warre Sixty andni netha twore Their Crown etsRe
 aabbb aabaa ababb abaaa aabba aabbb baaba babba aabbb aabaa banna abbab aabaa baaab
 gallf romth Athen ianba yPutf ortht oward Phryg iaand their vowis madeT orans acket
 abbab aabab baaba baaaa abbab babba ababa abbab baaaa abbaa aabba aaaaa abbaa
 roysi thinw hoses trong emure sTher auish dHele nmene lausQ ueene Withw anton Paris
 aaabb baaaa aabaa baabb aabaa baaaa abaa abbaa aabba baaba aabbb aabaa baaab aabaa
 sleep esand thats theQu arrel lToTe nedos theyc emeAn dthed eeped rawin gBark edoth
 abbaa abbab aaaab ababa aabaa aaaaa abbaa aabaa baaab baaba abbab baaaa baaab
 eredi sgorg eThei rwarl ikefr autag enowc nDard anPla inesT hefre shand yetvn bruise
 aabbb abaaa aabb abaa ababb abaaa baaab babaa baaaa abaaa baaba abaaa abaa abbaa
 edCre eked opitc hThei rbrau ePaui llion sPria mssix gated CityD arden andTi mbria
 aabba banab aabb ababb ababb abaaa baaab abaa ababa abaaa aaaaa aabb
 Helia eChet astro ienAn dAnte nonid uswit hmass ieSta pleA ndcor respo nsive andfu
 baab baaaa abbaa aabb abbab aaabb babba baaab baaab abaaa abbaa abaa
 lfill ingBo ltsSt irrev ptheS onnes ofTro yNowE xpect ation tickl ingsk ittis hspir
 abaaa abbb aabaa baaaa baaab abaa baaba aabbb baaba aabbb aabaa aaaaa aabaa
 itsOn onean dothe rside Troia nandG reeke Setsa llonh azard Andhi thera mJcom eAPro
 abbaa abaa abaa aabb abbab abab baaba aabbb abaa abbab aabab ababa abaa
 logue armdb utnot incon fidem ceOfA uthor speno rActo rsvoy cebut suite dJnli kecon
 baabb abaaa baaaa aabba abaa ababa abbb baaaa abaa abbaa aabaa abbab aabab
 ditio nsaso urArg ument Totel lyouf aireB ehold ersth atour PlayL eapes oreth evaun
 ababa aana baaba abaaa abbaa abbb aabba baaba baaab abaa abbaa baaab aabba
 tandf irstl ingso fthos ebroy leaBe ginni ngint hemid dlest artin gthen ceawa yTown
 baaaa abaaa aaaaab abaa abbaa abbaa baaba aabbb aabaa ababa aabaa baaba baaba
 atmay bedig ested inaPl ayLik eorfi ndefa ultdo asyou rplen sures areNo wgood orbad
 baaaa baaab baaba abbaa abaa abbaa babbb aaaaa aaaaab aabaa baaba aabbb baaaa
 tisbu tthec hance ofWar re
 aabab baaab baaba aaaaa

Deciphered Message

Francis St. Alban, descended from the mighty heroes of Troy, loving and
 revering these noble ancestors, hid in his writings Homer's Illiads and Odyssey
 (in cipher), with the Aeneid of the noble Virgil, prince of Latin poets, inscribing
 the letters to Elizabeth, R.

D E S C R I P T I O N S
of the characteristics
of the "a" and "b" form letters
in
"THE PROLOGUE"

The letters affixed by way of illustration have been photographed from the 1623 Folio in the Newberry Collection and have been enlarged to three and one-third the dimensions of the original, to facilitate the study of their characteristics.

For a description of the roman letters, which occur relatively infrequently, and of which there is often but one illustration on a page, the student is referred to the Appendix, where all the roman letters used in the I.M. and the Digges poems, the Prologue, the Catalogue, and the Names of the Principall Actors, have been assembled.

UPPER CASE ITALIC LETTERS IN
"THE PROLOGUE"

A Form

The typical letter is plain with high, straight bar. A kern or a dot in the letter changes it from a to b or vice versa.

Base tends slightly upward at left or is level. Width in the upper part less than in the b-form..

A long letter extending below the line.

Curved top and level base.

The line at the top horizontal and not parallel to the base. The kern nearly vertical and heavy.

Top line slender and only slightly slanting; not parallel to the serif of the base.

The short upright line is nearly vertical.

No example.

Plain, resembling roman type.

Tall and slender. The base line thickens gradually toward the right.

B Form

The typical letter is plain with a curved or slanting bar, as seen in the alphabet.

Base tends downward at left, width of upper part greater than in the a-form.

No example

No example

No example.

Top heavy and slants parallel to the serif of the base.

The short line slants toward the base.

Slants and is light at left side. Left upper serif slants upward slightly, the right serif a little downward.

Curved top and curved stem with kern at base and a cross-bar.

Somewhat heavier than the a-form. The base line is nearly uniform throughout; is not as well drawn as in the a-form.



C



D



E



F



G



H



I



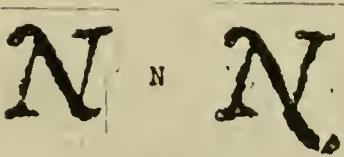
L



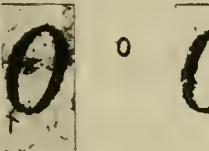
UPPER CASE ITALIC LETTERS IN
"THE PROLOGUE"

A Form

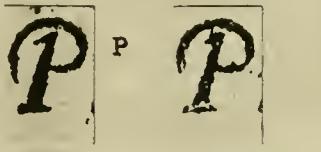
Connecting line short.
The letter differs from the
roman letter by the slant, and
by rounded kerns on the heavy line.



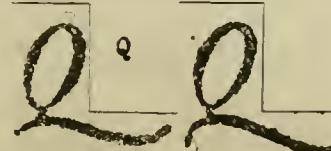
Letter slanting, oval
distinctly pointed at the base.



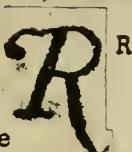
Slightly narrower than the
b-form; has a nearly even curve
in the top at the right.



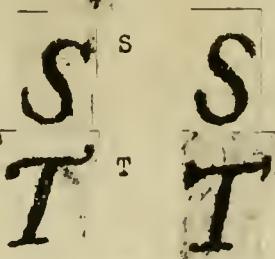
Top oval pointed; long queue
turns upward and is more grace-
ful than in the b-form.



Level top, extending well
to the left, ending in a round-
ed kern. Upright reaches to the
top of the letter.



Wide; slanting; flat curves.



Curved top.

Erect; second and fourth
strokes light; first and third
heavy.



B Form

Connecting line long and
extends below the line of
writing. This is the distinct-
ive difference between the two
forms.

Oval top and bottom only
slightly pointed. Letter
well-made and nearly erect.

Near the middle of the loop
the b-form is wider than the
a-form, but the curve at the
right flattens near the top.

Top oval broad; long queue
somewhat awkwardly attached
and turns downward at the left.

No example.

Erect; round curves.

Straight top; form resembles
roman type.

A tall, well-made letter.

LOWER CASE ITALIC LETTERS IN
"THE PROLOGUE TO TROILUS AND CRESSIDA"

A Form

Typical a-form is well-made; the oval usually shows an angle or shoulder, and rounds gradually to the line of writing, making the letter somewhat wider at the base than the corresponding letter in the b-form; also the oval has the appearance of a complete o placed in such a way that a part of one side rests on the upright, and often projects sufficiently to give the stem the appearance of bending outward near the center.

Oval rounded at top; upright straight nearly to the base.

Roundness commences near top; curve at base usually wide.

Stem has no wave line, but sometimes turns slightly to the left at the top; foot upturned; loop leaves stem and rejoins it at a somewhat obtuse angle.

A line drawn through the loop of this letter beginning at the left of the oval where it leaves the stem and running through the opposite point of the oval, intersects the line of the end of the curve of the base produced either above or below the line of writing.

Letter slanted; straight top, or, if curved, showing a small neck at left.

a

b

c

d

e

f

B Form

Somewhat narrower at base than the a-form; oval pointed; upright is often either uniform or slightly heavier at top. Letter slanted.

Note: The classification of the a in "six-gated" (line 15) has to be decided by the context.

Oval pointed at top and narrow at base.

Roundness commences near center of back; curve at base usually narrow.

Wave line in stem; angle between stem and top of oval acute; point of jointure below somewhat high on stem.

A line drawn through the loop of this letter beginning at the left of the oval where it leaves the stem and running through the opposite point of the oval, will run parallel to the line of the end of the curve of the base produced.

Letter stands nearly erect; top curved.

LOWER CASE ITALIC LETTERS IN
"THE PROLOGUE TO TROILUS AND CRESSIDA"

A Form

The lower loop is attached to the center of the oval; the connecting line usually heavy and angular.

The stem of this letter is characteristic; a line drawn upward through the loop so as to intersect it at the middle of the upper part of the curve tends pronouncedly toward the right.

In the typical letter of this class the base is usually rounded; the kerns do not correspond, that is, one will be straight and the other curved;

The typical letter of this class has the characteristic stem of the a-form, is broad and spreading at the base; the loop angular. The letter is usually broad and heavier than the b-form of k.

The typical letter of this class has the characteristic a-form stem rounded into a small, close kern.

The second loop shorter at top and turns slightly to the right; width of loops nearly equal at base; top kern inclined to sharpness; kern at base usually close.

B Form

The lower loop is attached a little to the left of the center of the oval; the connecting line is usually thin.

The stem of this letter is not characteristic, unless, perhaps, slightly pointed at the base; a line drawn upward through the loop so as to intersect it at the middle of the upper part of the curve tends only slightly toward the right.

In the typical letter of this class, the kerns at the ends, unlike those of the a-form, whether curved or straight, show a correspondence with each other.

The typical letter of the b-form is somewhat light, narrow at base; the loop is slender and rounded; queue shows a wave line.

The typical letter of this class usually shows a slight wave line in the stem. The angle made by the kern and the stem is large.

Double letters are governed by the law of digraphs, not by that of single letters.

Nearly even at top; second loop wider at base than the first; top kern rounded, and corresponds to the kern at the base.

LOWER CASE ITALIC LETTERS IN
"THE PROLOGUE TO TROILUS AND CRESSIDA"

A Form

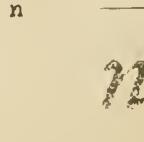
Letter slanting; top kern inclined to sharpness; kern at base usually clear. The loop tends toward the right at the top in the same manner as that of the second letter in the a-form of m.

There are many varieties of small e and it is difficult to assign them to their proper classes. The a-form letters show the slant characteristic of that form and are best classified by comparing them with the capital letter, which is less symmetrical than the b-form.

Stem of nearly uniform thickness throughout, or slightly shaded below the line of writing; loop shows only slight narrowing toward the base, but slants downward where joined to the upright.

Letter has the slant that is characteristic of the a-form. The first kern is small and tends to sharpness; the second kern is rounded. There is usually greater breadth at the top in the a-form than in the b-form. The two forms may be compared in "warre", (line 5).

There are long and short letters in both forms. The base in either case is nearly horizontal. The long s of the a-form is more slanting than in the b-form.



B Form

Nearly erect; top kern usually rounded; the two kerns correspond. The letter shows a wideness at the base corresponding to that of the second loop in the b-form of m.

If a line were drawn lightly along the inside of the capital e of the b-form it would show almost perfect symmetry. This appears also in all the well-printed lower-case letters of this form.

Stem often thick at top; loop joins the upright almost at a right angle.

The left is usually distinct and strong; the two differ only slightly. The upward strokes of the letter is usually strong and distinct. The letter is usually somewhat narrow at the top.

The long s of the b-form is usually upturned at the base and the slant of the letter is not marked. The short letter has the same characteristics.

LOWER CASE ITALIC LETTERS IN
"THE PROLOGUE TO TROILUS AND CRESSIDA"

A Form

The a-form letter has a base like the small l of this class; the stem has the same slant as the l.

The typical letter of this class has the slant of the a-form; the first kern straight; the second curved, or vice versa. The connecting line between the uprights is lower than in the b-form.

The rounded base is typical of both upper and lower-case letters of this form.

First point of base sharp, second point blunt. The letter is flat topped.

Wide; the kerns at the top and bottom of the light stroke are rounded.

Wide at top; a well-made letter in this form.

No example

B Form

The characteristic b-form letter is well-made; the kern at the base is free and clear.

Letter nearly erect; the kerns correspond with each other. The connecting line joins the second upright at a higher point in the b-form than in the a.

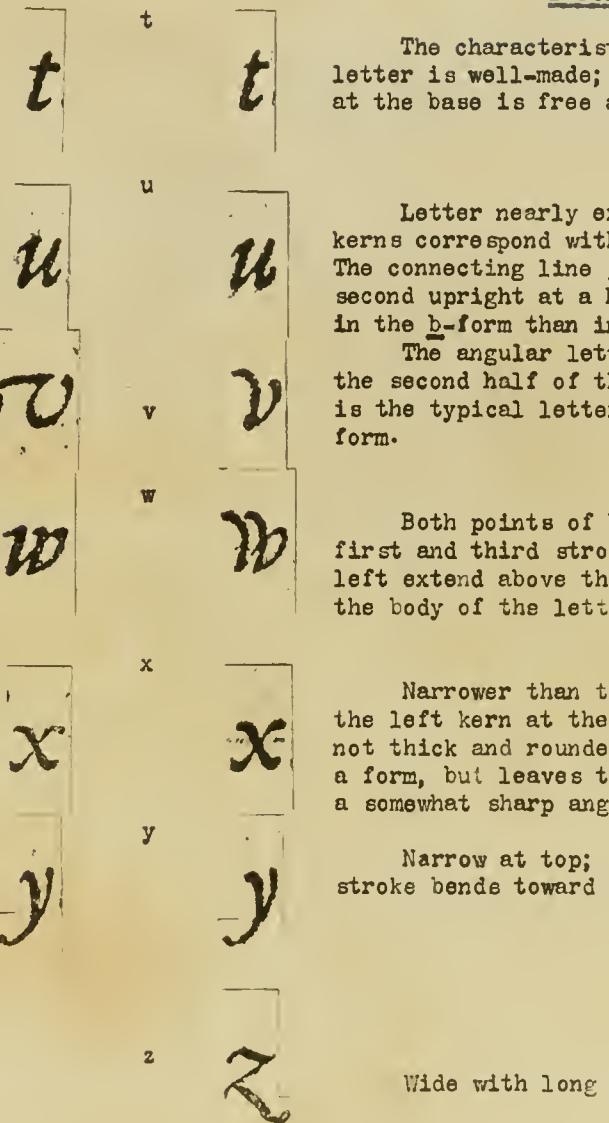
The angular letter, like the second half of the tall w, is the typical letter in the b-form.

Both points of base sharp; first and third strokes on the left extend above the line of the body of the letter.

Narrower than the a form; the left kern at the base is not thick and rounded like the a form, but leaves the line at a somewhat sharp angle.

Narrow at top; second stroke bends toward the first.

Wide with long queue.



ITALIC DIGRAPHS IN
"THE PROLOGUE"

The union of a having a sharp base with s having a narrow top, gives the combination "aa".



as

No example

The union of a round backed c having a somewhat angular base, with a t that comes well down to the line with the slant characteristic of the a-form, gives the combination "aa".

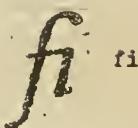


ct



The union of a narrow c rounded at base; with t that bends slightly, gives the combination "bb".

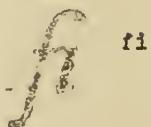
A well-made f having the slant of an a-form letter, joined at the bar with an i that is thick at the base, gives the combination "aa".



fi

No example

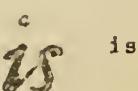
A well-formed f having the slant of the letter just described above, joined with a tall, angular i, gives the combination "ab".



fi



The union of a well-made i rounded at base, with an s having a narrow top gives the combination "aa".



is

The union of an f more erect than the foregoing, having a head that bends well downward, with an i that is thick at the base, gives the combination "ba".



No example

The union of an i rounded at base with an s having a long top, gives the combination "ab".



is

No example

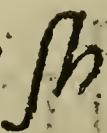
ITALIC DIGRAPHS IN
"THE PROLOGUE"

The union of a delicate well-made s that is well rounded at the top with an h also delicate that has a narrow loop gives the combination "aa".



No example

The union of a delicate long s well-rounded at the top with an h that shows a distinct widening of the loop at the middle point, gives the combination "ab".

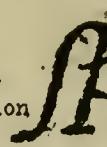


The union of a long s reaching well out at the top, with an l of nearly uniform thickness throughout and a free foot, gives the combination "ab".



No example

The union of a long s having the slant of the a-form and a wide top, with a p having a well-rounded loop, gives the combination aa.



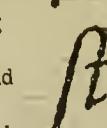
No example.

The union of a long s having a wide top with p that has a loop very narrow at its base, gives the combination "ab".

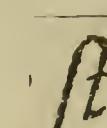


No example.

The union of a delicate long s having a wide curve at the top with a t having a slanting bar and somewhat wide angle between the foot and the stem, gives the combination "aa".



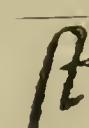
The union of a delicate long s having a wide curve at the top, with a t having a bar nearly horizontal and a foot somewhat closer than the one described above, gives the combination "ab".



The union of a long s having a narrow, curved head, with a t having a nearly horizontal bar gives the combination "bb".



The union of a somewhat strong letter s having a comparatively narrow curved top, with a t having an angular base, gives the combination "ba".



The union of a u having blunt kernels with an s well-rounded at top and flat at base.

THE CATALOGUE GROUP

In this group (pp.) is given a photographic copy of The Catalogue, placed at this particular point because of the information derived from the decipherment of the message enfolded. The motive actuating Francis Bacon in resorting to the use of a cipher is described in his own words. It is not difficult to understand how a youth of eighteen, burning with a sense of the injustice of a denial of the rights to which his royal extraction entitled him, would resort to the invention and use of a Cipher for conveying the claims which he feared to assert publicly. Such a proceeding might not be likely to occur to a man of mature age, even in Bacon's time, when ciphers were so much used. To a youth as he then was, the method of bequeathing to a literary executor such claims, would not be likely to suggest itself. Thus imagination plays no part here.

This group is completed by the addition of the alphabet, the decipherment, and the transcription.

At the end of this group (pp.) will be found full descriptions of the characteristics of each typical letter of both forms, and also of their respective variants. Letters which occur but once are naturally omitted from this list. The student is recommended to refer to this description as a means of familiarizing himself with the alphabet and with the type form illustrated in the group (pp.).

A CATALOGUE

of the severall Comedies, Histories, and Tragedies contained in this Volume.

COMEDIES.

<i>The Tempest.</i>	Folio 1.	<i>The First part of King Henry the fourth.</i>	46
<i>The two Gentlemen of Verona.</i>	20	<i>The Second part of K. Henry the fourth.</i>	74
<i>The Merry Wiues of Windsor.</i>	38	<i>The Life of King Henry the Fift.</i>	69
<i>Measure for Measure.</i>	61	<i>The First part of King Henry the Sixt.</i>	96
<i>The Comedy of Errours.</i>	85	<i>The Second part of King Hen. the Sixt.</i>	120
<i>Much adoo about Nothing.</i>	101	<i>The Third part of King Henry the Sixt.</i>	147
<i>Loues Labour lost.</i>	122	<i>The Life & Death of Richard the Third.</i>	173
<i>Midsommer Nights Dreame.</i>	145	<i>The Life of King Henry the Eight.</i>	205
<i>The Merchant of Venice.</i>	163		
<i>As you Like it.</i>	185		
<i>The Taming of the Shrew.</i>	208		
<i>All is well, that Ends well.</i>	230		
<i>Twelfe-Night, or what you will.</i>	255		
<i>The Winters Tale.</i>	304		

HISTORIES.

<i>The Life and Death of King Iohn.</i>	Fol. 1.	<i>The Tragedy of Coriolanus.</i>	Fol. 1.
<i>The Life & death of Richard the second.</i>	23	<i>Titus Andronicus.</i>	31

TRAGEDIES.

<i>Romeo and Juliet.</i>	53
<i>Timon of Athens.</i>	80
<i>The Life and death of Julius Caesar.</i>	109
<i>The Tragedy of Macbeth.</i>	131
<i>The Tragedy of Hamlet.</i>	153
<i>King Lear.</i>	283
<i>Othello, the Moore of Venice.</i>	310
<i>Anthony and Cleopater.</i>	346
<i>Cymbeline King of Britaine.</i>	369

"A CATALOGUE."

A A C E G
L O T V

T C H T

aa dd ee f hh ii ll mm nn oo rr ss tt u st

A C D E E G H I M O O R R S S T V

a cc dd ee gghhii ll mm nn oo ss tt u

AA BB CC DD EE FF GG HH IJ KK

LL MM NN OO RR SS TT UV WW &

aa bb cc dd ee ff gg hh ii kk ll mm

nn oo pp rr ss ff tt uu vv xx yy

& stststst st ususus

—THE ALPHABETS.—

COPYRIGHT 1916
RIVERBANK COMPANY.

W. B. Dudson

CATALOGUE OF THE SHAKESPEARE PLAYS

FOLIO 1623

ACATA LOGVE ofthe seuer allCo medie shist ories andTr agedi escon taine dinth isVol
 abbbb baabb aabaa abbaa abbaa abbaa abaaa babb aaaaa aaaab aabaa baaba
 umeCO MEDIE STHet empes tFoli oThet woGen tleme nofVe ronaT heMer ryWiu esofW indso
 aabbb abaaa baab ababb babba baaba baabb aabaa ababb abbab baaba aabbb aabaa
 rMeas urefo rMeas ureTh eCome dyoFE rrour shuch adooa boutN othin gloue slabo urlos
 baaaa aaaaa abbaa aaabb abaaa aaaaa ababb baaba aabbb aabaa ababa aaaaa babaa aabab
 tMids ommer Night sDrea meThe Merch antof Venic eAsyo uLike itThe Tamin gsth eShre
 baabb ababa ababa aabbb aabaa abaaa aabaa baaba abbab baaba aabbb aabaa baaba
 wAlli swell thatE ndsWe llTwe lfeNi ghtor whaty ouwil lTheW inter sTale HISTO RIEST
 aabbb baaaa abbab abbaa aabab abaaa abbaa aaabb aabaa baaba aabbb aabaa aaaba
 heLif eandD eatho fKing JohnF olThe lifed death ofRic hardt hesec ondTh eFirs tpart
 babba abbba aabbb aabaa baana baaab baaba abbab baaaa abaa aabaa ababb babba aaaaab
 ofKin gHenr ythef ourth TheSe condp artof KHenr ythef ourth TheLi feofK ingHe nryth
 abbab abbab abaab aabaa baab abbab abbaa aaaaa abana abbaa aabaa abaaa
 eFift TheFi rstpa rtosK ingHe nryth eSixt TheSe condp artof KingH enthe SixtT heThi
 baaba baaba aabaa ababa baaab aabba baaaa aabaa aaaa baaba baaab aabaa aaaba
 rdpar tofKi ngHen rythe SixtT heLif e&Dea thosR ichar dtheT hirdT heLif eofKi ngHen
 baaaa aabaa baaba baaab aabaa baabb aabaa baaaa babba abbab abbaa aabaa abbab aabab
 rythe Eight TRAGE DIEST heTra gedyo fCori olanu sFolt itusA ndron icusR omeca ndJul
 babaa aabbb abaaa aaba aabbb abaaa aabab abbaa ababb abbaa aaaaa baana baaba aabaa
 iotTi monof Athen sTheL ifean ddeat hofJu liusC nesar TheTr agedy ofMac bethT heTra
 aaabb abbab abbba aabaa abbaa ababa babaa abbab baabb ababa aaabb aabab abbab
 gedyo fHamL etKin gLear Othel lothe Moore ofVen iceAn thony andCl eopat erCym belin
 baaaa aabab aabaa abaaa baaba ababb babba ababa abaaa aabab aabab aaaaan
 eKing ofBri taine
 aaaba abbab abbaa

Deciphered Message

Queen Elizabeth is my true mother, and I am the lawfull heire to the throne.

Finde the Cypher storie my booke containe; it tells great secrets, every one of
 which (if imparted openly) would forfeit y life.

F. BACON.

D E S C R I P T I O N S
of the characteristics
of the "a" and "b" form letters
in
"THE CATALOGUE"

The letters affixed by way of illustration have been photographed from the 1623 Folio in the Newberry Collection and have been enlarged to three and one-third the dimensions of the original, to facilitate the study of their characteristics.

For a description of the roman letters, which occur relatively infrequently, and of which there is often but one illustration on a page, the student is referred to the Appendix, where all the roman letters used in the I.W. and the Riggs poems, the Prologue, the Catalogue, and the Names of the Principall Actors, have been assembled.

UPPER CASE ITALIC LETTERS
"A CATALOGUE"

A Form

First stroke longer than second, with slanting serif; cross-bar straight.

No example

Long letter with straight top and long, curved base extending below line of writing.

Kern at top of stem slants outward; base nearly level; kern at base slants downward.

The line at the top is horizontal and not parallel with the base.

Top slanting and not parallel with serif of base.

The short upright line is nearly vertical.

Resembles roman type; serifs and cross-bar level.

No example

A



B



C



D



E



F



G



H



I



B Form

No example

Kern at top of stem slants downward; top narrow and loop slightly rounding. Base level, or turns slightly upward.

Short letter with short, curved top. The letter gradually rounds toward base, ending in short curve on the level of the line.

Kern at top of stem slants downward; base narrow and slanting; kern at base nearly straight.

Top and base lines parallel; the kern on the base line slender and slanting outward.

Top heavy and slants parallel with the serif of the base.

No example

Slants more than the a form and is somewhat taller. Serifs not level.

Curved top and curved stem with kern at base and a cross-bar.

UPPER CASE ITALIC LETTERS
"A CATALOGUE"

A Form

The queue gradually thickens and curves as it leaves the stem, ending in a sharp kern turning slightly upward.

The letter is tall and heavy, with stem more slanting than the b form. The base is somewhat narrow near the stem, and slants slightly upward.

Curved kern at the right; third line light; seriphs at top and bottom of first stroke not parallel.

Connecting line short. The letter differs from a roman letter by the slant, and by rounded kerns on the heavy line.

No example

Level top, ending in a rounded kern. Upright reaches to the top of the letter.

Wide; slanting; flat curves.

Top and base not parallel.

K



L



M



N



O



R



S



T



B Form

The queue is of nearly uniform thickness ending in a blunt and nearly level kern.

Tall and light; the base line thickens gradually toward the right, with lower edge level.

Kern short, straight, and blunt at the right. Seriphs at top and base of first stroke parallel.

No example.

Slants; top and base nearly uniformly curved.

No example.

No example.

Top and base are parallel; rounded kern at right of top is either raised upright on a small stem or lies flat.

UPPER CASE ITALIC LETTERS
"A CATALOGUE."

A Form

Curved; often described
as bowl shaped.



U

B Form

No example

Slightly slanting; second
and fourth strokes light; fourth
stroke slightly curved and
ending in heavy slanting seriph.
First and third heavy. Second
stroke joins heavy strokes at
a point higher than in the b
form.



W

Letter erect; second and
fourth strokes light; fourth
stroke straight, ending in straight
seriph.

Small and bowl-shaped, with
straight bar at the left and curved
at the right.



&

No example

LOWER CASE ITALIC LETTERS
"A CATALOGUE"

A Form

Well-made; the oval usually shows an angle or shoulder and rounds gradually to the line of writing, making the letter somewhat wider at the base than the corresponding letter in the b-form; also the oval has the appearance of a complete o placed in such a way that a part of one side rests on the upright and often projects sufficiently to give the stem the appearance of bending outward near the center.

Oval pointed at top and narrow at base.

Roundness commences near center of back; curve at base usually narrow.

Stem has no wave line but sometimes turns slightly to the left at top; toe upturned; loop leaves stem and rejoins it at somewhat obtuse angle.

If the end of the curve of the base were prolonged, it would pass inside or outside the loop.

Letter slanted; straight top, or, if curved, showing a small neck at left.



a



b



c



d



e



f

B Form

The b-form is somewhat narrower at base than the a-form; oval pointed; upright is often either of uniform thickness or slightly heavier at top. Letter slanted.

No example



Roundness commences near top; curve at base usually wide.



Wave line in stem; angle between stem and top of oval acute; point of jointure below, somewhat high on stem.



If the end of the curve of the base were prolonged it would form a perfect oval.



The letter stands nearly erect; top curved.

LOWER CASE ITALIC LETTERS
"A CATALOGUE"

A Form

The lower loop is attached a little to the left of the center of the oval; the connecting line is usually thin.



g

The stem of this letter is characteristic; a line drawn upward through the loop, so as to intersect it at the middle of the upper part of the curve, tends pronouncedly toward the right.



h

Has the characteristic a-form stem rounded into a small, close kern.



k

Has the characteristic stem of the a-form; loop angular. It is broad, spreading at the base, and heavier than the b-form.



l

Usually shows a slight wave line in the stem. The angle made by the kern and the stem is large.



m

The second loop short at top and turns slightly to the right; width between the downward strokes nearly equal at base; top kern inclined to sharpness; kern at base usually close.



n

Slanting; top kern inclined to sharpness; kern at base usually clear; loop tends to the right at the top in same manner as that of the second loop in a-form m.

B Form

The lower loop is attached to the center of the oval; the connecting line is usually heavy and angular.



g

The stem of this letter is not characteristic, unless perhaps slightly pointed at the base; a line drawn upward through the loop, so as to intersect it at the middle of the upper part of the curve, tends only slightly toward the right.



h

The kerns at the ends, whether curved or straight, show a correspondence with each other.



i

No example.



l

The typical letter of this class has the characteristic stem rounded into a small, close kern.



m

Nearly even at top; second space between the downward strokes wider at base than the first; top kern rounded, and corresponds to the kern at base.



n

Nearly erect; top kern usually rounded; the two kerns correspond. The letter shows a wideness at the base corresponding to that of the second loop in b-form m.

LOWER CASE ITALIC LETTERS
"A CATALOGUE"

A Form

There are many varieties of small o, hence difficult to classify. The slant is characteristic of the a form letters. Best classified by comparison with the capital letter, which is less symmetrical than the b-form.

Stem often thick at top; loop joins the upright nearly at right angle.

The slant is characteristic of the a-form; the first kern is small and tends to sharpness; the second kern rounded. There is usually greater breadth in the a-form than in the b-form.

There are long and short letters in both forms. The base in either case is nearly horizontal. The long s of the a-form is more slanting than the b-form.

Has a base like the small l of this class, and stem of the same slant.

Has the slant of the a-form; first kern straight, second curved, or vice versa; connecting line between the uprights lower than in the b-form. The rounded base is typical of both upper and lower case letters.

Flat top; first point of base sharp, second blunt.

No example.

A well made letter, wide at top.

B Form

If a line were drawn lightly along the inside of the capital O of the b-form, it would show almost perfect symmetry. This is the case also in all the well-printed lower case letters of this form.

Stem of uniform thickness throughout, or slightly shaded below the line of writing; loop becomes narrower, as it slants to join the upright. Dotted.

The letter is somewhat narrow at the top. The kerns differ slightly; both are usually strong and distinct.

The long s of the b-form is usually upturned at the base and the slant of the letter is not marked. The short letter has the same characteristics.

Well made; kern at base free and clear.

Letter nearly erect; kerns correspond. Connecting line joins the second upright at a higher point than in the a-form.

The angular letter is like the second half of the tall w.

Both points of base sharp; first and third strokes long and extend well to left.

Narrow; the left kern at base is not thick and rounded as in the a-form, but somewhat sharp.

Narrow; second stroke curves.

ITALIC DIGRAPHS IN
"A CATALOGUE"

The union of a small but prominent loop of an a with a well-formed e, gives the combination "ab".

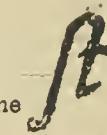


No example.

The union of a well-made long s with the slant of the a form letters and a t following a line parallel to the body of this letter and having a sharp foot, gives the combination "aa".



The union of a long s having the slant of a form letters and t that is somewhat heavy at top and is more nearly erect than the s gives the combination "ab".



No example

The union of a wide topped u with a somewhat narrow s, gives the combination "aa".



No example

The union of a long s perceptibly thickened in the lower half and a t likewise shaded, gives the combination "bb".



There is also the union of a short s very narrow at top and with a well-shaded and well-rounded t that also gives the combination "bb".



The union of the tall and narrow u with an s somewhat broad at the top and rounded, gives the combination "bb".



A somewhat narrow u joined with an s having the same characteristic, gives the combination "ba".



THE NAMES OF THE PRINCIPAL ACTORS GROUP.

P. , containing the Names of the Principal Actors is presented because of the fact that it is printed in type of a size different from that shown on the pages preceding. The type here is larger and cleaner cut, and the assignment of the letters to their respective groups is therefore an easier task.

In this group, unlike those which precede, no decipherment is given. The student is recommended to make use of p. , which is arranged for such decipherment, and to employ the accompanying alphabet in performing the work. The hidden message enfolded will be found sufficiently interesting to warrant and justify the labor involved in its decipherment.

At the end of this group (pp.) will be found a full description of the characteristics of each typical letter of both forms, and also of their respective variants. Letters which occur but once are naturally omitted from this list. The student is recommended to refer to this description as a means of familiarising himself with the alphabet and with the type form illustrated in the group (pp.).

The Workes of William Shakespeare,
containing all his Comedies, Histories, and
Tragedies: Truely set forth; according to their first
O R J G J N A L L.

The Names of the Principall Actors
in all these Playes.



William Shakespeare.	Samuel Gilburne.
Richard Burbadge.	Robert Armin.
John Hemmings.	William Ostler.
Augustine Phillips.	Nathan Field.
William Kemp.	John Underwood.
Thomas Poope.	Nicholas Tocley.
George Bryan.	William Ecclestone.
Henry Condell.	Joseph Taylor.
William Slye.	Robert Benfield.
Richard Cowly.	Robert Gouge.
John Lowine.	Richard Robinson.
Samuell Crosse.	John Shancke.
Alexander Cooke.	John Rice.

"PRINCIPALL ACTORS."

S T V W V

a a e e f h h i i k k l m o o p r r s s

A C H & R



I I I N P T

a a c c d d e e f g h h i i m m n n o o p r r s s t t
P a c c d d e e f g g h h i i l l T

n n o o r r s s t t u y f s t l l

A B B C C E F G H H J I K L

N O P R R S S T T V W W

a a b b c c d d e e g g b b i i k k l l m m n n o o p p r r s

f f t t u u w w x y y a a s s f i l l l l l l l l l f p f f f f f

A A G G J I L L N N O O R R

— THE ALPHABETS.—

SHAKESPEARE FOLIO 1623

"THE NAMES OF THE PRINCIPALL ACTORS"

The Wo rkeso fWill iamSh akesp earec ontai ninga llhis Comed iesHi stori
aaaaaa baaab abaaa baaab abbab aabaa baaba abaaa ababb aabaa baaab
esand Trage diesT ruely setfo rthac cordi ngtot heirf irstO RJGJN ALLTh
abbba ababa aaaaa aaaba aabaa baabb ababa aabaa baaab aaaaa abbaa
eName softh ePrin cipal lActo rsina llthe sePla yesWI lliam Shake spear
aaabb aaabb abaaa baaaa aabaa aaaba baaba abaaa abbab abbaa baaab abaaa
eRich ardBu rbadg eJohn Hemmi ngsAu gusti nePhi llips Willi amKem ptTho
abbaa abbab baaba aabbb aabaa aaaba abaaa abbb aabba aabaa baaaa
masPo opeGe orgeB ryanH enryC cndel lWill iamSl yeRic hardC ewlyJ ohnLo
baaab babba abbab baabb baabb baaba baaab aabaa aabaa abaab
wineS amuel lCros seAle xande rCook eSamu elGil burne Rober tArmi nWill
aabaa aabab abbab baaaa baaba aabbb aabab baaba aabbb aabaa baaaa
iamOs tlerN athan Field JohnU nderw oodli chola sTool eyWil liamE ccles
baaab baaab abbab abbaa aabaa baaba abbab aaaaa abaaa aaabb aabaa
toneJ oseph Taylo rRobe rtBen field Rober tGoug heRic hardR obins onIch
abaaa abbaa babaa baaaa abaaa baaba abaaa abba aabab baaaa abbab
nShan ckeIo hnRic e
aabab baabb aabaa

As I sometimes place rules and directions in other ciphers
you must seeke for the others soone to aide in writing.

Fr, of Ve.

D E S C R I P T I O N S
of the characteristics
of the "a" and "b" form letters
in
"THE NAMES OF THE PRINCIPALL ACTORS"

The letters affixed by way of illustration have been photographed from the 1623 Folio in the Newberry Collection and have been enlarged to three and one-third the dimensions of the original, to facilitate the study of their characteristics.

For a description of the roman letters, which occur relatively infrequently, and of which there is often but one illustration on a page, the student is referred to the Appendix, where all the roman letters used in the I.M. and the Digges poems, the Prologue, the Catalogue, and the Names of the Principall Actors, have been assembled.

UPPER CASE ITALIC LETTERS IN
"THE NAMES OF THE PRINCIPALL ACTORS."

A Form

The left stroke is long and curved, ending in a dot; the right stroke plain and finished with a straight serifh.



Has a rounded top which gives a flatness to the upper loop.



Large, and extends below the line of writing.

No example

The thin top and the serif at the base are parallel; the cross-bar is very long

No example

Has slanting seriph; higher in the middle of the letter.



Curved, with top and bar also curved.

No example



Well made, with horizontal seriph.

Plain, resembling the roman letter except that it is slanting.

Well made and somewhat delicate. The queue starts from the right upper stroke, at a point near but not touching the upright.

B Form

No example

Has a nearly horizontal top and well-rounded loops.

Short, and does not extend below the line of writing.

Resembles a script letter.

No example

Well made, and has a stroke extending below the line of writing.

Well made, with horizontal seriph.

Plain, resembling the roman letter except that it is slanting.

Well made and somewhat delicate. The queue starts from the right upper stroke, at a point near but not touching the upright.

UPPER CASE ITALIC LETTERS IN
"THE NAMES OF THE PRINCIPALL ACTORS."

A Form

L

L

Well made, with the base and
seriph parallel.

No example

O

O

A very regular oval, shaded
more heavily on the left side.

P

P

The top is curved, and the
letter reseembls the upper
part of capital B of this form.

R

R

Has the characteristic top
of E and P. The queue is short-
er than the b form and not
sharply upturned.

S

S

Narrower at the top than the
b form.

T

T

Broad and very flat at the
top.

V

V

Bowl shaped.

W

W

Well made and sharply
pointed.

B Form

No example

N

N

A very graceful letter, with a
long upturned queue.

O

O

No example

P

P

No example

R

R

Has a flat line at the top; the
queue is long and turned upward.

S

S

Has a wider and more angular top
than the a form.

T

T

Not so wide as the a form,
and a more delicate letter.

V

V

No example

W

W

No example

SMALL UPPER CASE ITALIC LETTERS IN
"THE NAMES OF THE PRINCIPALL ACTORS."

A Form

The left side of the letter commences in a small, curved kern and ends in an upturned foot; bar slightly slanting.

The top is long and only slightly curved; the base narrow; the serif on the short upright extends well beyond the line.

The long form extending below the line of writing, and having a cross-bar and a curved top.

No example

This is the short form of the letter. The connecting line between the uprights ends in short, curved kerns.

No example

The top commences in a rounded kern and is nearly horizontal. The stem extends to the top of the letter; the queue ends in a short foot, some distance below the line of writing.



A



G

No example



J

No example

No example



L

A delicate letter, wide at the base, the serif and base not parallel.



N

No example



O

The letter is a perfect oval, and has the slant characteristic of the b form.



R

No example

B Form

No example

No example

No example

No example

LOWER CASE ITALIC LETTERS IN
"THE NAMES OF THE PRINCIPALL ACTORS."

A Form

Slanting, somewhat wide at the base.

a

Has the slant of the a form letters; the oval is rounded at the top.

b

Well-rounded; if the lower line were produced to meet the top it would form a perfect o.

c

Well-made. The lower part of the stem and the oval make a somewhat sharp angle, the foot close. The stem is usually straight until it reaches the line of writing.

d

If the end of the curve of the base line were produced it would not form a perfect o.

e

Has a well-made o at the top and a large kern. The lower part is attached at the middle point of this oval.

f

Somewhat slender; the loop is narrow at the top and pointed.

g

The kerns at top and base correspond.

h

i

B Form

Shows a distinct shoulder at the top, and the oval makes an acute angle where it joins the stem.

a

Stands more nearly erect than the a form; the oval has a somewhat pointed top.

b

Stands more nearly erect than in the a form and is narrow at the bottom.

c

Has a wide loop and the angle between the loop and the stem is greater than in the a form. The stem turns slightly to the right at the base, and the foot is free.

d

If the end of the curve of the base line were produced it would form a perfect o.

e

Shorter and wider than the a form, and less regular.

f

Less delicate; the loop is somewhat wide at the top.

g

The kerns at top and base do not correspond.

h

i

LOWER CASE ITALIC LETTERS IN
"THE NAMES OF THE PRINCIPALL ACTORS."

A Form

Slender and delicate; the queue not widely spread at base.

Shows a thickness in the stem extending to the kern at the base.

Usually a delicate letter; the right loop is not quite so high as the other.

Somewhat wide; the kern at the base free.

Usually well-made, shaded slightly more on the left than on the right.

The loop is narrow in the bottom part.

Somewhat broad at the top; both kerns are rounded.

There are long and short forms of this letter. The long form is not well made; the stem is a wave line. The short form is curved at the top and nearly straight at the bottom.

k

k

l

l

m

m

n

n

o

o

p

p

r

r

s

s

k

l

m

n

o

p

r

s

B Form

Shaded from the top and in the queue. It is a somewhat heavy letter.

The stem becomes quite narrow before rounding into the kern at the base.

Has level loops; the kern at the base close.

Well-made; the kern at the base close.

Less regular, the top and base usually differing.

The stem is narrow at the top and widens slightly toward the base; the loop is broad at the top.

Not wide, and the kerns do not correspond.

The long form has a wide head and distinct foot. The letter is slanted.

No example of the short form.

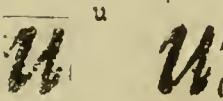
LOWER CASE ITALIC LETTERS IN
"THE NAMES OF THE PRINCIPALL ACTORS."

A Form

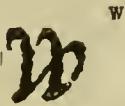
The stem is a wave line,
the foot free.



Has corresponding kerns.
The base of the letter is wide.



Has the first point narrow,
the second wide at the base.



No example.



Has an open top.



B Form

The stem is shaded from the
top. The letter stands nearly
erect.

The loop is rounded. The
letter is somewhat narrow at the
base.

No example

A narrow letter with heavy
kerns at the base.

Has the second stroke curved
toward the first.

ITALIC DIGRAPHS IN
"THE NAMES OF THE PRINCIPALL ACTORS."

The union of a narrow a, pointed at base, with an s having a round head and nearly horizontal base, gives the combination "aa".



aa

No example.

No example.

ab



The union of a rounded a not sharp at base, with an s having a round head and flat base, gives the combination "ba".

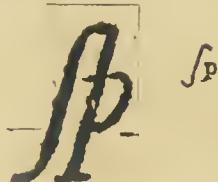
No example.

fi



A well-formed f slanting very little, the greater part of its length joined with a delicate i with pointed base, gives the combination "ba".

The union of a delicate, well-formed long s with a somewhat heavier p with a rounded loop gives the combination "ab".



sp

No example.

No example.



The union of two long s's slanting very little the greater part of their length and ending in distinct marks gives the combination "bb".

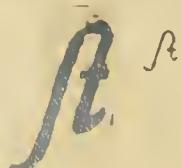
The union of a delicate long s having the slant of the a form letter and a slender pointed t slanting in the same direction, gives the combination "aa".



st

The union of a somewhat heavy s having a distinct foot, with a t rounded and wide at base, gives the combination "bb".

The union of a long s like the one just described, and a well-rounded t gives the combination "aa".



No example.

"THE NAMES OF THE PRINCIPALL ACTORS"

Arranged for Application of the
Bi-literal Cipher

The Wo rkeso fWill iamSh akesp earec ontai ninga llhis Comed ieshi stori
esand Trage diesT ruely setfo rthac cordi ngtot heirf irstO RJJGJN ALLTh
eName softh ePrin cipal lActo rsina llthe sePla yesWI lliam Shake spear
eRich ardBu rbadg eJohn Hemmi ngsAu gusti nePhi llips Willi amKem ptTho
masPo opeGe orgeB ryanH enryC ondel lWill iamSl yeRic hardC owlyJ ohnLo
wineS amuel lCros seAle xande rCook eSamu elGil burne Rober tArmi nWill
iamOs tlerN athan Field JohnU nderw oodNi chola sTool eyWil liamE ccles
toneJ oseph Taylo rRobe rtBen field Rober tGeug heRic hardR obins onIoh
nShan ckeIo hnRic e

CONCLUSION

It is hoped that the presentation of the Bi-literal Cipher in the preceding pages, showing its existence in the pages of the 1623 Folio Edition, and of the manner of its decipherment will not be confused with the discredited "discovery" by Ignatius Donnelly. Ignatius Donnelly professed to follow the directions laid down by Bacon in applying a Cipher, but he failed to carry out the very principles he gathered --- and hence his failure. The strength of the Bi-literal Cipher lies in the fact that it is Bacon's own. The "discovery" of the application consists only in the skill and patience which carrying out his directions necessitates.

WHERE IGNATIUS DONNELLEY FELL DOWN ON THE CIPHER.
He failed to note the difference in the bi-form
character of type, and missed the application.

Then take your interior epistle, reduced to the biliteral shape, and adapt to it letter by letter your exterior epistle in the biform character; and then write it out. Let the exterior epistle be:

DO NOT GO TILL I COME.
Example of adaptation.
F L Y
aa bab ab abab a bba
Do not go till I come.

I add another large example of the same cipher—of the writing of anything by anything.

The interior epistle, for which I have selected the Spartan dispatch, formerly sent in the *Scytale*:

All is lost. Mindarus is killed. The soldiers want food. We can neither get hence nor stay longer here.

The exterior epistle, taken from Cicero's first letter and containing the Spartan dispatch within it:

In all duty or rather piety towards you I satisfy everybody except myself. Myself I never satisfy. For so great are the services which you have rendered me, that, seeing you did not rest in your endeavors on my behalf till the thing was done, I feel as if my life had lost ALL its sweetness, because I cannot do as much in this cause of yours. The occasions are these: Ammonius the king's ambassador openly besieges us with money, the business is carried on through the same creditors who were employed in it when you were here, etc.

I have here capitalized the words *all* and *is*, supposing them to be part of the sentence, "All is lost," but I am not sure that I am right in doing so. The sentence ends as above and leaves us in the dark. Bacon continues:

This doctrine of ciphers carries along with it another doctrine which is its relative. This is the doctrine of deciphering, or of detecting ciphers, though one be quite ignorant of the alphabet used or the private understanding between the parties: a thing requiring both labor and ingenuity, and dedicated, as the other likewise is, to the secrets of princes. By skillful precaution indeed it may be made useless; though, as things are, it is of very great use. For if good and safe ciphers were introduced, there are very many of them which altogether elude and exclude the decipherer, and yet are sufficiently convenient and ready to read and write. But such is the rawness and unskillfulness of secretaries and clerks in the courts of kings, that the greatest matters are commonly trusted to weak and futile ciphers.

I said to myself: What is there unreasonable in the thought that this man, who dwelt with such interest upon the subject of ciphers, who had invented ciphers, even ciphers within ciphers—that this subtle and most laborious intellect might have injected a cipher narrative, an "interior epistle," into the Shakespeare Plays, in which he would assert his authorship of the same, and reclaim for all time those "children of his brain" who had been placed, for good and sufficient reasons, under the fosterage of another?

CODE FOR THE BACONIAN BILITERAL CIPHER

AN ALPHABET IN TWO LETTERS.

1	□	□	□	□	□	---	A	---	a	a	a	a	a	a
2	□	□	□	□	■	---	B	---	a	a	a	a	a	b
3	□	□	□	■	□	---	C	---	a	a	a	b	a	a
4	□	□	□	■	■	---	D	---	a	a	a	b	a	b
5	□	□	■	□	□	---	E	---	a	a	b	a	a	b
6	□	□	■	□	■	---	F	---	a	a	b	a	b	a
7	□	□	■	■	□	---	G	---	a	a	b	b	a	b
8	□	□	■	■	■	---	H	---	a	a	b	b	b	a
9	□	■	□	□	□	---	I - J	---	a	b	a	a	b	a
10	□	■	□	□	■	---	K	---	a	b	a	a	b	a
11	□	■	□	■	□	---	L	---	a	b	a	a	b	a
12	□	■	□	■	■	---	M	---	a	b	a	b	a	b
13	□	■	■	□	□	---	N	---	a	b	b	a	b	a
14	□	■	■	□	■	---	O	---	a	b	b	a	b	a
15	□	■	■	■	□	---	P	---	a	b	b	b	a	b
16	□	■	■	■	■	---	Q	---	a	b	b	b	b	a
17	■	□	□	□	□	---	R	---	b	a	a	a	a	b
18	■	□	□	□	■	---	S	---	b	a	a	a	b	a
19	■	□	□	■	□	---	T	---	b	a	a	a	b	a
20	■	□	□	■	■	---	U - V	---	b	a	a	a	b	b
21	■	□	■	□	□	---	W	---	b	a	b	a	b	a
22	■	□	■	□	■	---	X	---	b	a	b	a	b	a
23	■	□	■	■	□	---	Y	---	b	a	b	b	b	a
24	■	□	■	■	■	---	Z	---	b	a	b	b	b	b

ORIGINAL AND PHOTOGRAPHIC FACSIMILE EDITIONS

from which

The Bi-literal Cipher has been Deciphered

By ELIZABETH WELLS GALLUP assisted by KATE E. WELLS

Arranged Chronologically under Names in which Books were Published

EDMUND SPENSER:

Shepherd's Calendar.....	1579
(The first work in which the Bi-literal Cipher was used.)	
Published anonymously but later in Edmund Spenser's name)	
Complaints.....	1591
Celin Clout.....	1595
Fairy Queen.....	1596
Fairy Queen (Second Part).....	1596
Shepherd's Calendar.....	1611
Fairy Queen.....	1613

ROBERT GREENE:

The Mirror of Modesty.....	1584
Planetomachia.....	1585
Euphues—Morando.....	1587
Perizedes—Pandosto.....	1588
The Spanish Masquerado.....	1589
The Spanish Masquerado (Second Ed.)	1589
A Quip For an Upstart Courtier....	1620

WILLIAM SHAKESPEARE:

Richard The Second.....	1598
Midsomer Night's Dream, (Roberts Ed.).....	1600
Midsomer Night's Dream (Fisher Ed.).....	1600
Much Ado About Nothing.....	1600
Sir John Oldcastle.....	1600
The Merchant of Venice (Roberts Ed.).....	1600
Richard, Duke of York.....	1600
The London Prodigal.....	1605
Quartos King Lear.....	1608
King Henry the Fifth.....	1608
Pericles.....	1609
Hamlet.....	1611
Titus Andronicus.....	1611
Richard the Second.....	1615
Merry Wives of Windsor.....	1619
Contention of the Houses of York and Lancaster.....	1619
Pericles.....	1619
Yorkshire Tragedy.....	1619
Romeo and Juliet, no date....	

The First Folio..... 1623

GEORGE HERKELE:

The Arraignment of Paris.....	1584
David and Bethsabe.....	1599
Sir Clymen and Sir Clamydes.....	1599

TIMOTHY BRIGHT:

A Treatise of Melancholy.....	1586
A Treatise of Melancholy (Second Ed.).	1586

BEN JONSON:

Plays in Folio.....	1616
---------------------	------

CHRISTOPHER MARLOWE:

Edward The Second.....	1622
------------------------	------

FRANCIS BACON:

A Declaration of the Treasons of Essex.....	1601
Advancement of Learning.....	1605
Novum Organum.....	1620
The Parascave.....	1620
Henry The Seventh.....	1622
Historia Ventorum.....	1622
Historia Vitae et Mortis.....	1623
Dalugentis Scientiarum (London Ed.)	1623
De Augmentis Scientiarum (Paris Ed.)	1624
The Essays.....	1625
The Apophthegmes.....	1625
The Miscellany Works.....	1629
Cipher Message by W. Rawley	
The New Atlantis.....	1635
Sylva Sylvarum (Preface by W. Rawley)	1635
The Felicity of Queen Elizabeth.....	1651
Cipher Message by W. Rawley	
Resuscitatio.....	1657
Cipher Message by W. Rawley	
List of the Lord Chancellors-- Resuscitatio.....	1671
Cipher Message by W. Dugdale	

ROBERT BURTON:

Anatomy of Melancholy.....	1628
----------------------------	------

CIPHER WRITINGS

Thirteen Plays as follows:

Five Histories:

The Life of Elizabeth
The Life of the Earl of Essex
The White Rose of Britain
The Life and Death of Edward Third
The Life of Henry the Seventh

Five Tragedies:

Mary Queen of Scots
Robert The Earl of Essex (my late brother)
Robert the Earl of Leicester (my late father)
The Life and Death of Christopher Marlowe
Anne Bullen

Three Comedies:

Seven Wise Men of the West
Solomon the Second
The Mouse Trap

History, in prose commixt with verse, of England and a few Englishmen.

Story in verse of the Spanish Armada.

Bacon's own story of his life in which Marguerite Valois figures.

A number of short poems in French, written for Marguerite, form a part of the story of Bacon's life in France.

Life of Robert Greene

Two Secret Epistles, expressly teaching a cipher.

Completion of the New Atlantis

A Pastoral of the Christ

Bacchantes, a fantasy

Three Notable Translations:

The Iliad	(Homer)
The Odyssey	(Homer)
The Aeneid	(Virgil)
The Eclogues and a few short poems	(Virgil)

Deciphered from
THE PLAY OF SEJANUS, Edition of 1616,
by the Bi-Literal Cipher
by
Mrs. Elizabeth Wells Gallup.

....

Question, or some other form or manner of inquiry, and answer are your word-signs by which you may worke out my secret story herein co'sealed. This story concerns some of the chief personages of th' realme, first of all, our late despised parent, th' cause and th' renewer o' th' ills that we endured. My sole object deth appear in this later work--the play of Sejanus.

None know half so well as I, th' underplay carried along in court in order t' secure my withdrawall from an unexampled field, wherein a mother strove against a sonne whose right to th' succession to th' throne she did ignore and co'stantly avoid. Her unbending sterne temper, strong in death, set the seal upon my future as on my past life, since her will was th' law governing both. My owne spirit alone doth atteste how potent for good or for ill the dicta of such a woman may bee.

Here alone is that long epistle to my to-bee decypherer that must be most observed in this worke. Seeke it out. Take my keies and unlocke my inner chamber. There will my hidden secrets be revealed fully, that he that shal willinglie lift the heavy vaille, should now ope th' treasure-casket which contains th' story of my life, as well as my late brother, his death. It is ev'n with wrought-ores thickly covered: gems rare and costive shine upon its sides: in the small room within you will find uncounted treasure, riches beyond your dreames of earthlie acquisition. The whole shall be the reward of my decypherer and will repay most generoueslie his entire devotion to this labour.

As I have said, our news designe shall give much pleasure, while it so amplie rewardeth the true worker. Seeking after any learning is a pleasure; seeking after what is hidden, a delight,--none soe pure--forever springing up in fresh joy, as th' water of a meadowe spring gusheth forth to th' light.

My next work is not begun here; much of it shall bee found in the playes of Shakespeare which have not yet come out. We having put forth a numbe' of plays i' his theatre, shall continue see doing since we doe make him th' thrall to our will. Our name never accompanieth anie play, but it frequently appeareth plainly in Cypher for witty minds to translat' from Latin and Greeke. As this is never seen, the secret still remained inside its treasure-house unsought of every one. This is yet hidden as in dim shadowy mists, but soone shall you have the whole of th' most worthy parts of this cypher-writing, wrought much more finely than gold.

FRANCIS BACON

SELECTIONS FRO' THE TRANSLATION OF HOMER'S ILI'D.

In Book I., where the priest Chryses "was evilly dismissed by Agamemnon," the bi-literal gives the scene thus:

"And the Priest, in silence, walked along the shore of the resounding sea. After a while with many a prayer and tear the old man cried aloud unto Apollo, and his voice was heard."

In the fuller, word-cipher translation this reads:

"The wretched man, at his imperious speech,
Was all abashed, and there he sudden stay'd,
While in his eyes stood tears of bitterness.
The resounding of the sea upon the shore
Beats with an echo to the unseen grief
That swells with silence in the tortur'd soul.
Apart upon his knees that aged sire
Pray'd much unto Latona's lordly son:

"Hear, hear, O hear, god of the silver bow!
Who'rt wont Chrysa and Cilla to protect,
And reignest in this Island Tenedos,
If ever I did honour thee aright,
Thy graceful temple aiding to adorn,
Or if, moreover, I at any time
Have burn'd to thee fat thighs of bulls and goats,
Do one thing for me that I shall entreat--
O Phoebus, with thy shafts avenge these tears."

A little farther on, after Achilles had summoned a council and charged Calchas to declare the cause of the pestilence, there is a hot altercation between Agamemnon and Achilles that even Nestor could not quell. A part of it is rendered thus:

To whom Atrides did this answer frame:
"Full true thou speak'st and like thyself, yet, though
Thou speakesst truth, methinks thou speak'st not well.
It is because no one should sway but he
He's angry with the gods that any man
Goeth before him; he would be above the clouds,
His fortune's master and the king of men,
And here is none, methinks, disposed to yield:
For though the gods do chance him to appoint
To be a warriour and command a camp,
Inserting courage in his noble heart,
Do they give right to utter insults here?"

There interruptin him, noble Achilles
Answer'd the king in few words: "Ay forsooth!
I should be thought a coward, Agamemnon,
A man of no estimation in the world,
If what you will I humbly yield unto,
And when you say, 'Do this,' it is perform'd.
I, for my part--let others as they list--
I will not thus be fasc'd and overpeer'd.
Do not think so, you will not find it so:
Some other seek that my wit, patience strive
With thee, Atrides; thou sh'l rule no more
O'er me."

Photograph from AN INTRODUCTION TO SHAKESPEARE
by H. H. MacCrackon, Ph. D.

F. F. Pierce, Ph. D.

W. H. Durham, Ph. D.

Published by THE MACMILLAN CO., Dec. 1915.

THE PLAYS OF THE THIRD PERIOD 173

the love of the Greek commander Diomed and promises to become his mistress. Troilus learns of this, consigns her to oblivion, and attempts, but unsuccessfully, to take revenge on Diomed.

While this love story is progressing, meetings are going on between the Greek and Trojan warriors; a vivid picture is given of conditions in the Greek camp during the truce, and particularly of the insolent pride of Achilles. The story ends with the resumption of hostilities, the slaying of Hector by Achilles, and the resolution of Troilus to revenge his brother's death.

It is very difficult to understand what Shakespeare meant by this play. If it is a tragedy, why do the hero and heroine meet with no special disaster at the end, and why do we feel so little sympathy for the misfortunes of any one in the play? If it is a comedy, why is its sarcastic mirth made more bitter than tears, and why does it end with the death of its noblest minor character and with the violation of all poetic justice? From beginning to end it is the story of disillusion, for it sorts all humanity into two great classes, fools who are cheated and knaves who cheat. Some people think that Shakespeare wrote it in a gloomy, pessimistic mood, with the sardonic laughter of a disappointed, world-wearyed man. Others, on rather doubtful grounds, believe it a covert satire on some of Shakespeare's fellow dramatists.

Authorship.—It is generally agreed that a small part of this play is by another author. The Prologue and most of the Fifth Act are usually considered non-Shakespearian. They differ from the rest of the play in many details of vocabulary, meter, and style.

CHAPTER XII

THE PLAYS OF THE THIRD PERIOD—TRAGEDY

THE Second and Third periods slightly overlap; for *Julius Caesar*, the first play of the later group, was probably written before *Twelfth Night* and *As You Like It*. But the change in the character of the plays in these two periods is sharp and decisive, like the change from day to night. Shakespeare has studied the sunlight of human cheerfulness and found it a most interesting problem; now in the mysterious starlight and shadow of human suffering he finds a problem more interesting still.

The three comedies of this period, partly on account of their bitter and sarcastic tone, are not widely read nor usually very much admired; but the great tragedies are the poet's finest work and scarcely equaled in the history of the world.

Troilus and Cressida.—Here the story centers around the siege of ancient Troy by the Greeks. Its hero, Troilus, is a young son of Priam, high-spirited and enthusiastic, who is in love with Cressida, daughter of a Trojan priest. Pandarus, Cressida's uncle, acts as go-between for the lovers. Just as the suit of Troilus is crowned with success, Cressida, from motives of policy, is forced to join her father Calchas, who is in the camp of the besieging Greeks. Here her fickle and sensuous nature reveals itself rapidly. She yields to

Date. — *Troilus and Cressida* must have been written before 1603, for in the spring of that year an entry in regard to it was made in the Stationers' Register. It must have been written after 1601, for it alludes (Prologue, ll. 23-25) to the Prologue of Jonson's *Poetaster*, a play published in that year. Hence the date of composition would fall during or slightly before 1602. The First Quarto was not published until 1609.

Sources. — The main source of this drama was the narrative poem *Troilus and Criseyde* by Chaucer. Contrary to his custom, Shakespeare has degraded the characters of his original, instead of ennobling them. The camp scenes are adapted from Caxton's *Recuyell of the Histories of Troye*; and the challenge of Hector was taken from some translation of Homer, probably that by Chapman. An earlier lost play on this subject by Dekker and Chettle is mentioned in contemporary reference. We do not know whether Shakespeare drew anything from it or not. Scattered hints were probably taken from other sources, as the story of Troy was very popular in the Middle Ages.

All's Well That Ends Well. — When a beautiful and noble-minded young woman falls in love with a contemptible scoundrel, forgives his rebuffs, compromises her own dignity to win his affection, and finally persuades him to let her throw herself away on him,— is the result a romance or a tragedy? This is a nice question; and by the answer to it we must determine whether *All's Well That Ends Well* is a romantic comedy like *Twelfth Night* or a satirical comedy bitter as tragedy, like *Troilus and Cressida*.

Helena, a poor orphan girl, has been brought up by the kindly old Countess of Rousillon, and cherishes a deep affection for the Countess's son Bertram, though he neither suspects it nor returns it. She saves the life of the French king, and he in gratitude allows her

to choose her husband from among the noblest young lords of France. Her choice falls on Bertram. Being too politic to offend the king, he reluctantly marries her, but forsakes her on their wedding day to go to the wars. At parting he tells her that he will never accept her as a wife until she can show him his ring on her finger and has a child by him. By disguising herself as a young woman whom Bertram is attempting to seduce, Helena subsequently fulfills the terms of his hard condition. Later, before the king of France she reminds him of his promise, shows his ring in her possession, and states that she is with child by him. The count, outwitted, and in fear of the king's wrath, repentantly accepts her as his wife; and at the end Helena is expected to live happily forever after.

Disagreeable as the plot is when told in outline, it is redeemed in the actual play by the beautiful character given to the heroine. But this, while it vastly tones down the disgusting side of the story, only increases the bitter pathos which is latent there. The more lovely and admirable Helena is, the more she is unfitted for the unworthy part which she is forced to act and the man with whom she is doomed to end her days. A modern thinker could easily read into this "comedy" the world-old bitterness of pearls before swine.

Date. — No quarto of this comedy exists, nor is there any mention of such a play as *All's Well That Ends Well* before the publication of the First Folio in 1623. A play of Shakespeare's called *Love's Labour's Won* is mentioned by Francis Meres in 1598; and many think that this was the present comedy under another name. However, the meter, style, and mood of most of the play seem to indicate a later date. The

THE CHALLENGE OF HECTOR

A Portion of the Translation of Homer's ILIAD

Deciphered by Elizabeth Wells Gallup

by means of Sir Francis Bacon's WORD CIPHER

The rules for which were obtained

Through his

BI-LITERAL CIPHER

and embracing the passages from the play of

TROILUS AND CRESSIDA

referred to by Professor F.E. Pierce in "An Introduction to Shakespeare" (1915) as
having been "cribbed" from some translation of Homer, probably that of Chapman.



"Hearken to me! my words come from my breast,
I speak what's in my heart -- Trojans and Greeks --
For these known evils are indeed nought else,
To the expecters of our Trojan part,
Whose vow is made, and to each Lord of Greece,
But the protractive trials of King Jove,
Who in this dull and long-continued truce
Would find persistive constancy in men,
Till Troy be taken or yourselves be vanquish'd.

If there be one amongst the fairst of Greece,
That holds his honor higher than his ease,
That seeks his praise more than he fears his peril,
That knows his valor and knows not his fear,
To him this challenge—Jove bear witness to't.

If any come, and by my mortal sword
His blood be drain'd, Hector shall honor him.

His armor—I'll unlock the rivets all,
And crush it, but I will be master of it,
And bear't to Ilium, to Apollo's temple,
Yet shall his corse be sent unto the Greeks
(They who are wont in large-spread hair t' exceed)
That they erect on Hellespont a barrow,
In view o' th' sea for men to gaze upon,
A tomb wherein his corpse shall be interr'd,
And that hereafter ages may behold
Where lies the champion Hector's hand did slay.

My honor and the greatness of my name
Shall be eternal, for this shall be told.

If to my sword his fate be not the glory,
If he slay me, mine armor riveted
He to the hollow vessels shall but bring,
And triumph in the spoils of Priam's son.

But that I shall not lose the dues of greatness—
Of burning in my death—give back my body,
That Trojans and the dames of Troy may bring
Hector with triumph home unto his house.

A P P E N D I X

D E S C R I P T I O N S
of the
C H A R A C T E R I S T I C S
of the "a" and "b" forms
Of Roman Letters and Digraphs of all Sizes

INITIAL LETTERS.

The ornamental skeleton initial S of the "L. Digges" poem, initial T of "A Catalogue" and initial W of "The Names of the Principall Actors" are all of the a-form. The initial double V of the "I. M." poem is a single character of the b-form, and the solid initial I of "The Prologue" is c-form.

In each of these cases the significance of the letter was determined by the context.



Pro.

P.A.



I. M.



Cat.



Dig.



ROMAN TYPE IN TITLES

The roman type used in the titles, and in the poems themselves for the names of persons and places, is in five sizes. The largest was used in "A CATALOGUE."

UPPER CASE

A Form

Has a heavier line at the left than the b-form, and the width at the bar is greater.
—Cat.

No example

No example

The letter is much broader at the top than the C which is b-form.—Cat.

No example

B Form

Is well-made. The right seriph at the base is curved. —Cat.

Is a clean-cut, well-made letter, in height corresponding to the other b-form letters.
—Cat.

The upper and lower lines not parallel; both kerns slant outward.
—Cat.

No example

L

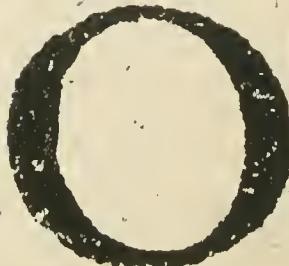


The seriph and base are not parallel. The kern corresponds to the upper kern of E of the b-form. —Cat.

ROMAN TYPE IN TITLES
UPPER CASE

A Form

Has the breadth of
the G in the "g" form
and is shaded at the
left in the same manner.
In Cat.



B Form

No example



The stem of the letter
is the same as the L of
this form, and the kerne
have the same character.
In Cat.

No example



V Has the characteristics
of the A of this form, and
has curved kerne at top.
In Cat.

No example

ROMAN TYPE IN TITLES

The second size has both upper and lower-case letters and is used in the first line of the "Digges" poem, "The Prologue", and "The Names of the Principall Actors".

A Form

Has a wave line at top and base.---
Dig.

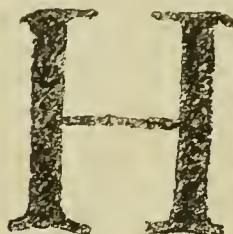


E



B Form

Has straight lines at both top and base.
The letter is well-formed.
--- Dig.



H

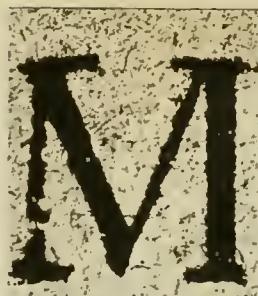
Has curved serifs at base; at the top the serifs are slanted, making the letter higher near the middle.--- Dig.



I

No example.

The letter has the height and thickness of the stem of the E of this form.---
Dig.

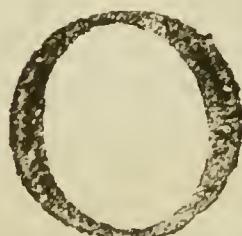


M



O

The serifs at the top resemble those of the H of this form. The second upright is slender; the third line of uniform thickness throughout.---Dig.

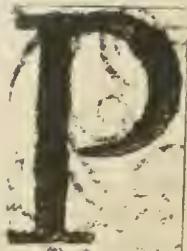


Is well-made;
slightly pointed at the base.--- Big.

The serifs at top and base at the right are horizontal and parallel. The second upright is somewhat heavy; the third line is shaded at the top
--- Dig.

No example.

ROMAN TYPE IN TITLES



P

Somewhat heavy.
The top resembles
that of the R of
this form.— Pro.

No example.



R

Wave line shows
in top. Lower part
wide, and queue thick
at the end.— Dig.

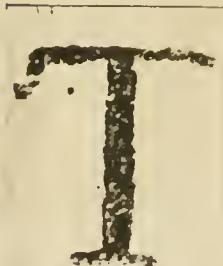
No example.



S

Is well-formed,
somewhat delicate.
Curves at top and base;
base nearly equal.— P.A.

No example.

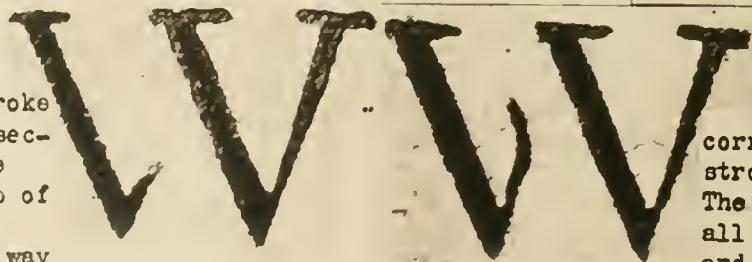


T

Kerns at the top
do not correspond.
The letter marked b
has an accent across
the right kern.— Dig. &
Pro.



No example. The letter
marked b is so marked
because, although the
kerns do not correspond,
it has an accent across
the right kern.— Dig.



The first stroke
is not wide; the sec-
ond is short. The
serihs at the top of
the second V are
slanted in such a way
that the greatest
height is near the
middle.— P.A.

The two heavy strokes
correspond; the second
stroke turns to the left.
The serifhs at the top
all slant downward tow-
ard the right.— P.A.

ROMAN TYPE IN TITLES
Second Size—Lower Case

A Form

Is well-made, and wide at top. The lower part of the loop turns upward, making an acute angle with the stem at the base.—P.A.

a



A Form

A narrow letter not so well-made. The lower part of the loop runs parallel to the upper part, and makes a larger angle with the stem than the a form.—P.A.

e



Narrow. The top turns downward, giving the letter the appearance of falling toward the right.—Pro. & P.A.

f



No example.

g



No example.

h



Delicate. The serifs at base differ in form and direction.—P.A.

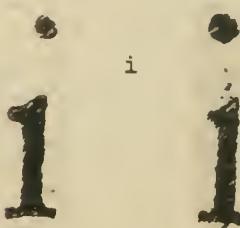
Slender and delicate. The top has a wide curve and resembles the long s.—P.A.

The kern at the top is nearly in line with the upper part of the oval. The lower part is joined to the upper by an angular line at the extreme left.—Pro.

Somewhat heavy but very clear.—P.A. & Pro.

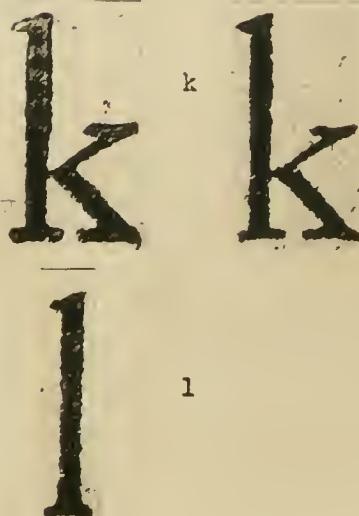
ROMAN TYPE IN TITLES
Second Size--Lower Case

Wide at top, but becomes more slender toward the base. The dot is small and placed well toward the right.--P.A.



Slender and delicate. The dot is large and placed toward the left.--P.A.

Has the characteristics of the h in this form-- heavy yet clear. The stem lessens in thickness toward the base.
--P.A.



The single letter is somewhat heavy at the top, growing smaller at the base.-- Pro. & P.A.



No example.

Wide, but very clean-cut and well-made.-- P.A.



No example.

Shows a point at the top a little toward the left side.-- P.A. & Pro.

Somewhat flat at top and base.-- P.A. & Pro.

ROMAN TYPE IN TITLES

Second Size—Lower-Case

A Form

No example.

Narrow, with the right kern tending abruptly downward. The r of Prologue is accented.—P.A.

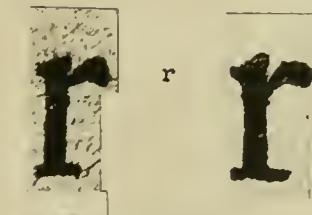
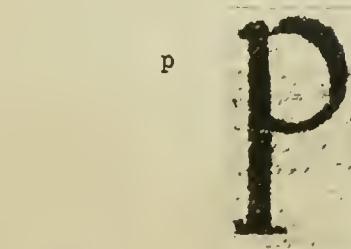
There are long and short forms. The long s is like the f of this form without the extension of the bar at the right. The short s has the curve at the base broader than that at the top.— P.A.

Somewhat heavy, but very well-made. Its kerns do not correspond in size.— Pro.

B Form

A well-rounded loop attached to a slender stem.—P.A.

Top of stem angular at left; kern at right rounding and drooping. P.A.



No example.

No example.

ROMAN TYPE IN TITLES
Third Size — Upper Case.

A Form

A broad letter, the bar not heavy. —P.A. & Dig.



A

B Form

No example.

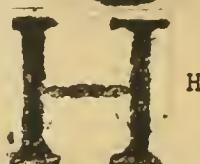
A well-made letter, large and well-rounded. —P.A. & Cat.



C

No example

A broad well-made letter with horizontal serifs. — P.A. & Cat.



H

No example

Has a very heavy second stroke and a more slender upright. —Dig.



M

No example

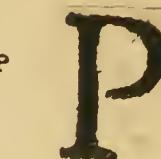
Well-made and clean-cut.
—P.A.



N

No example

No example



Somewhat narrow; not clean-cut. —P.A.

Clean-cut. The kernels do not correspond in shape or direction. — P.A. & Cat.



T

No example

Third Size -- Lower Case

Well-made. The lower line of the loop tends upward and makes a sharp angle with the stem. —Dig., P.A. & Cat.



a



c

Somewhat narrower and flatter at the base of the loop. The stem extends below the loop at the right. — P.A.

Large and clean-cut, with good curves. —Dig.



The top reaches well over the curve at the base. The letter is not so wide as the a-form. — P.A.

ROMAN TYPE IN TITLE
Third Size — Lower Case

A Form

The stem runs straight to the line of writing and terminates in a distinct, nearly horizontal foot. The loop joins the stem at a low point at the base. — Dig. & Cat. & P.A.

The bar nearly level; the base curves wide. In the Comedies the forms were exchanged, the single letter used as a b-form having a level bar and widely-curved base. — Dig., P.A. & Cat.

Well-made and clean-cut. The bar extends well to the right. — P.A., Cat. & Dig.

No example

Clean-cut. The seriph horizontal; the right seriph somewhat shorter than the left. —

Dig., P.A. & Cat.

Not remarkable in any way and appearing to be classed with similar letters of the a-form, such as l, the stem of the r etc. — P.A. & Cat.

Tall and slender; the stem sometimes tapers slightly toward the base but is often of uniform thickness throughout. — P.A. & Cat.

Clean-cut, symmetrical with wide curves. — P.A. & Cat.

d

e

f

g

h

i

l

m

B Form

The stem turns slightly to the right at the base, and terminates in a short, close foot. The loop rounds into the stem and makes an acute angle with the stem. — Dig. & Cat. & P.A.

The bar tends slightly downward; the curve at the base somewhat narrow. —

Dig. & P.A.

No example

The top is evenly shaded on the sides; the lower loop attached well toward the left side. — P.A.

A somewhat heavier letter than that of the a-form; the second seriph tends downward making the letter appear long on the right side. — P.A. & Cat.

Well-made; somewhat slender and delicate, slightly taller than the a-form letter. —

Dig., P.A. & Cat.

Somewhat heavier than the a-form; the stem narrows slightly half way between the top and the base. — P.A. & Cat.

The left curve leaves the stem at a high point giving the first curve a flat appearance. The last seriph tends slightly downward at the right. — P.A.

ROMAN TYPE IN TITLES
Third Size -- Lower Case.

A Form

Well-made, but somewhat heavy. The stem is like the letter i of this form--P.A.

The letter is slightly pointed at the left side at the top. -- Dig., P.A. & Cat.

Somewhat wide and flat appearing at the top; the stem is like the i of this form.
Dig., P.A. & Cat.

In the single letters there are both long and short forms--the long resembling the f of the same class without the projection at the right which forms the bar of that letter. The short form has narrower curves at the top than the b-form.--P.A. & Cat.

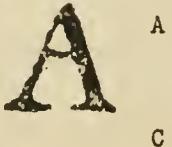
The most striking characteristic is the curve of the base.--
Dig. . .

No example

Broad, with cross-bar placed high.--Cat.

No example

Fourth Size--Upper Case.



A
C

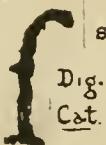


B Form

Slightly taller than the a-form. The stem has the characteristics of the b-form i. The second serif tends downward at the right.--P.A. & Cat.

A very symmetrical letter, large and well-rounded.-- P.A.

Slender and well-made; the top turns downward at the right. -- Cat.



The long form occurs only in the digraph "st". The wide curve that would characterize the single letter is retained, the point where the t commences being plainly seen. The short form has wide curves, and is a well-formed letter. -- P.A.

The letter is somewhat heavy; the base a curve on one side only, finishing in a short straight line.--P.A. & Cat.

A wide letter; the top seriphs slant upward at the left.--Dig. & Cat.

No example

Very light at the right, well shaded at the left.--Cat.

10

ROMAN TYPE IN TITLES
Fourth Size--Upper Case.

A Form

Broad, slightly irregular.--
Dig. & Cat.

The lines at the top and base are not parallel; the kerns do not correspond--Cat.

The curve at the top is somewhat flattened; the upright noticeably long. --Cat.

Broad; the serips at the top slant upward in such a way that the letter is highest near the middle--Cat.

Simple and plain like the uprights of the H--Cat.

The letter is not wide at the base, but the slanting toe being long gives it a wide appearance. --Dig.

Large and heavy. There is no kern at the top of the second upright. -- I.M. & Cat.

Slightly pointed at left of top.-- Cat.



D



E



G



H



I



L



M



O



B Form

No example

The lines at the top and base run parallel; the kerns are both shaded. ---Cat.

No example

No example

No example

No example

No example

Top a regular curve; a point shows at the base.
In Cat.

ROMAN TYPE IN TITLES
Fourth Size--Upper Case.

A Form

The top is somewhat narrow; the queue broad where it joins the loop. --Cat.

Well-formed; somewhat broad near the base; both kerns vertical. -- Dig.

A plain, simple letter, with the top and the serif parallel, the former usually a thin line. -- P.A. & Cat.

Clean-cut and well-made; the left serif is curved. --Cat.

No example.

B Form

Slightly broader than the a-form at the top; the queue narrower at the point of attachment. Both letters are accentuated and respectively change forms. --Cat.

A little smaller than the a form; the upper kern slanting. -- Cat.

Usually heavier than the a form. The top shades somewhat heavily into the kerns, and is not parallel to the serif at the base. -- I.M.

No example

This letter is a union of two V's, the first losing a serif by the union. The first stroke is heavier than the third. -- Dig.

ROMAN TYPE IN TITLES
Fourth Size--Upper Case--Small Caps.

A Form

No example

A



The top and base are not parallel. -- Dig.



E



Plain, not well-made.--Dig.

A well-made letter; seriphs parallel. -- Dig.



H

The letter is somewhat narrow. The second serif placed far toward the left at base. -- Dig.



K

The top tends downward at the right. -- Dig.



P

No example

R



No example

No example.

No example

Level at top unlike the a-form P with which it may be contrasted; the queue short and blunt. -- Dig.

S



The letter is so slanted that it has the appearance of an Italic letter. The top is narrow. ---Dig.

Fourth Size -- Lower Case

a

Broad, well-made; the loop curves upward at the base, making an acute angle with the stem. --P.A. & Cat.



No example

ROMAN TYPE IN TITLES
Fourth Size-- Lower Case.

A Form

The top is a regular curve. The letter is taller than the corresponding letter of the b-form. --P.A. & Cat.

Somewhat slender and delicate. The loop is not so well rounded toward the base as the b-form letter. --P.A. & Cat.

The letter is wide, slender, the bar horizontal. --I.M., P.A. & Cat.

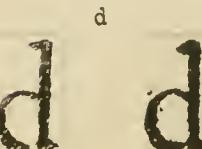
A well-made letter, the curve at the top somewhat wide. --I.M. & P.A.

The most marked feature is prominence at the left of the connecting line between the loops. -- Dig. & Cat.

The letter is somewhat heavy, and is wide at the top of the loop. --I.M., P.A. & Cat.

The kern is sharp and prominent, giving the letter an unnatural appearance. --I.M., Dig., P.A. & Cat.

Small at the top and widening at the base. --P.A. & Cat.



B Form

The top and base are somewhat shallow curves. --P.A.

The stem is of uniform thickness throughout; the foot short and straight. The loop joins the stem at a low point. -- Dig., P.A. & Cat.

Somewhat heavier than the a-form usually; well-rounded; the bar slightly slanting. -- I.M., P.A. & Cat.

No example.

The lower loop is connected by a curved line. --P.A.

The letter is somewhat more delicate than the a-form and is wide at the base. -- P.A.

Well-made and regular, but somewhat heavy. --P.A. & Cat.

Shaded from the top; quite narrow at the base. --P.A.

ROMAN TYPE IN TITLES
Fourth Size—Lower Case

A Form

The first curve at the top leaves the stem at a high point.
I.M. & Cat.

A somewhat irregular letter the uprights not corresponding in height or in length of seriphs.—
P.A.

Slightly irregular in outline. — I.M., P.A. & Cat.

Wide at the top; well-made.
—I.M., P.A. & Cat.

The letter has long and short forms. The long form has a wide curve at the top and a slender stem. The short form has narrow curves, ending simply. —P.A. & Cat.

There are several variants but all curve upward at base and are somewhat narrow. —I.M.,
P.A. & Cat.

The letter is usually heavy; the curve at base runs into the stem at a low point; left serif shorter than the right. —
P.A. & Cat.

Top broad; stem short with no curl at foot; stem ends at top in slanting serif. — P.A.

m m

n n

o o

r r

f f P.A.

s s

t t

t t

u u

y y

B Form

The curves are regular; the seriphs at the base slant downward in a regular succession. — I.M.

Well-made; a regular curve at the top, and horizontal seriphs. — P.A. & Cat.

The letter is tall and somewhat heavy, but well made.
—P.A.

Narrow; not particularly well-formed. — P.A. & Cat.

No long form of this class is used. The short letter has shallow curves at top and base, and shows distinct markings at the ends of the letter. — P.A.

The letter is very wide and flat at the base. — P.A.

No example

ROMAN TYPE IN FORMS
Fifth Size—Upper Case.

A Form

No example

Plain and heavy, kern
at the top vertical—Pro.

A heavy letter showing
no light lines—Pro.

Top and base not
horizontal. —I.M.

No example

Plain; well-made.—

Dig.

A very heavy letter;
there are no light lines; the
seriphs unlike.—Pro.

Not at all well-made,
the fourth line being curved
outward.—Dig.

Somewhat narrow at the top;
not otherwise marked. —Pro.

Like the P of this form
somewhat narrow at the top. —
Dig.

A



B Form

Clean-cut, narrow, bar
slightly slanting. —Pro.

No example

C



D



No example

E



No example

H



Somewhat tall and also
wide between the uprights;
well-made. —Dig. & Pro.

I



No example.

M



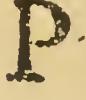
No example.

N



No example.

P



No example.

R



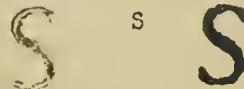
No example.

ROMAN TYPE IN POEMS
Fifth Size--Upper Case.

A Form

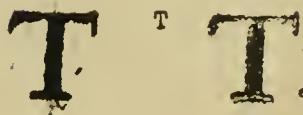
The curves of nearly equal width. --Dig.

A heavy letter but well made; the top and base are parallel -- Pro.



B Form

The curves are somewhat wide; the top narrower than the base; the letter symmetrical. --I.M. & Dig.



The top is a thin bar with kerns of nearly equal length; the top and base are not parallel. -- Pro.

Fifth Size--Lower Case

A Form

A broad, well-made letter; the stem rounds into a free foot. --I.M. & Dig.

The stem is somewhat wide at the top and narrow toward the base; the loop is narrow at the top and rounds low at the base. -- Pro.

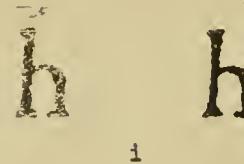
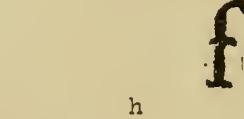
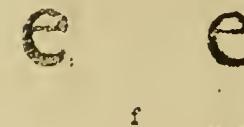
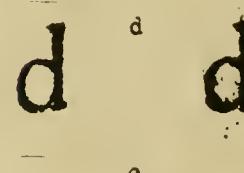
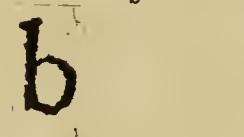
The loop rounds into the stem at both point of juncture. -- Pro.

Somewhat irregular; the lower part is often narrow. -- I.M., Dig. & Pro.

No example

The loop has a shallow curve at the top, slightly wider than the b-form. -- I.M. & Pro.

Somewhat delicate and well-made; the stem is narrow at the top and widens slightly at the base. -- I.M., Dig. & Pro.



B Form

The stem bends slightly to the left at the base and the foot turns sharply upward. -- I.M., Dig. & Pro.

No example

The loop shows a slanting line where it joins the stem. -- Pro. & Dig.

A well-made letter with a light bar. -- Pro.

A well-rounded top and heavy cross-bar characterizes the letter in the b-form. -- Dig.

The loop leaves the stem with a clear curve; the right serif is low at the base. -- Dig.

Heavy; of nearly uniform thickness throughout; the upper kern prominent. -- Pro.

ROMAN TYPE IN POEMS
Fifth Size--Lower Case

A Form

Broad and well-made
although somewhat heavy--
Dig.

The stem is somewhat
heavy and of nearly uniform
thickness throughout. --Pro.

The first curve is wider
than the second--Dig. & Pro.

Tall and somewhat heavy
but well-made. -- Pro. & Dig.

Usually well-rounded and
well placed. --- Dig. & Pro.

Broad; the loop is some-
what flat at the top. --I.M. & Dig.

The top shows a line at
the right turning somewhat
abruptly downwards. --Dig. & Pro.

There are the usual long
and short forms. The first shows
a wide top; the curve shallow.
The short form also has
a wide top; the base is narrow.--
Dig. & Pro.



k



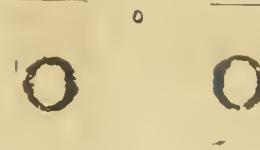
l



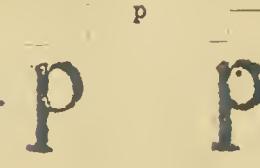
m



n



o



p



r



f



s

B Form

Somewhat slender and deli-
cate; seriphs carefully placed--
I.M.

The letter is often wider
at the top and narrows gradually
towards the base. -- Dig.

No example

The letter is often irregular
having either a narrow top or
uprights of different lengths.--
Pro.

The two sides are not
symmetrical near the top of the
letter. -- Dig.

A delicate letter with the
loop well rounded top and bottom.
The letter occurs in the Digges'
poem, line 1. It is changed by
the dot to the a-form. -- Dig.

The upward stroke at the
right and its downward curve
correspond in slope and direction
as would the two sides of an
isosceles triangle. --I.M., Dig.
& Pro.

The long s has a short curve
at the top and somewhat slender
stem--Dig.

The short form has the line
at the top long, and appearing
to follow the curve of the body
of the letter. --Pro.

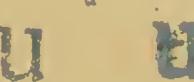
ROMAN TYPE IN TITLES
Fifth Size--Lower Case

A Form

The letter has a wide top and a wide base that becomes nearly horizontal.
I.M., Dig. & Pro.

Well-made; slender and somewhat delicate. -- Dig. & Pro.

No example.



The base of this form turns soon after leaving the stem. -- Dig.

The letter is somewhat heavy and slightly narrower than that of the a form. -- Pro.

A tall, somewhat awkward letter, wider at top than at the base. -- I.M.

Digraphs--Third and Fourth Sizes

No example



The union of a c having a wide curve at the base with a t showing almost no head above the bar and well curved at the base is the combination ba. -- P.A.

The union of f having the curve of the a form prolonged into the dot of the i and a slender i with the top a continuation of the bar of the f is the combination ab. This is found in the fourth size. -- P.A.



No example.

The union of a long slender s having a thin top that rounds into a well curved t is the combination aa. -- P.A.



No example.

The union of a long, slender s having a thin top that joins a long, narrow based t is the combination ab. -- Dig.



The union of a strong well-made s with a somewhat wide based t is the combination ba. -- P.A.

The following list contains examples of the various sizes of type to which arbitrary case numbers have been assigned for convenience.

	Name	Source	Letter	Line
1.	Italic small	L. Digges Poem	at	1
2.	" capitals	" " "	The	2
3.	" small	"Principall Actors."	Richard	2 L
4.	" capitals	" "	Richard	2 L
5.	Roman small	L. Digges Poem	Stratford	4
6.	" capitals	" " "	Stratford	4
7.	Roman small	"Principall Actors."	Tragedies Title	3
8.	capitals	" "	Tragedies	" 3 (same as Case 12)
9.	small	" "	Comedies	" 2
10.	capitals	" "	Comedies	" 2
11.	small	L. Digges Poem	SHAKESPEARE	" 3
12.	capitals	" " "	SHAKESPEARE	" 3 (Same as Case 8)
13.	small	"Principall Actors"	Shakespeare	" 1
14.	capitals	" "	Shakespeare	" 1

TYPICAL LETTERS IN "I. M." POEM.

Italic (Case 2)

Letter	<u>a form</u>		Letter	<u>b form</u>		Word
	Line	Word		Line	Word	
A	5	<u>Art</u>	A	5	An	
C	6	<u>Can</u>	C	5	<u>Comedy</u>	
E Pro.	20	<u>Expectation</u>	E	1	<u>WEE</u>	
F Dig.	7	<u>Fresh</u>	F	2	<u>From</u>	
G Pro.	1	<u>Greece</u>	G	2	<u>Graves</u>	
M Dig.	4	<u>Moniment</u>	M	7	<u>Mortalitie</u>	
P	8	<u>Plaudite</u>	P Pro.	7	<u>Put</u>	
R Pro.	6	<u>Regall</u>	R	8	<u>Re-extrance</u>	
S Dig.	18	<u>Sword</u>	S	4	<u>Spectators</u>	
T	2	<u>Tyring</u>	T Pro.	15	<u>Their</u>	
W	3	<u>Woe</u>	W	2	<u>Worlds</u> (dotted to make "A")	

Italic (Case 1)

Letter	<u>a form</u>		Letter	<u>b form</u>		Word
	Line	Word		Line	Word	
a	5	<u>applause</u>	a	4	<u>Specttors</u>	
b	4	<u>but</u>	b	3	<u>but</u>	
c	8	<u>Re-entrance</u>	c	2	<u>which</u>	
d	6	<u>second</u>	d	3	<u>printed</u>	
e	1	<u>wondred</u>	e	1	<u>went' st</u>	
f	4	<u>forth</u>	f	7	<u>of</u>	
g	2	<u>Stage</u>	g	2	<u>Tyring</u>	
h	5	<u>with</u>	h	3	<u>thy</u>	
i	3	<u>printed</u>	i	7	<u>Mortalitie</u>	
l	6	<u>liue</u>	l	2	<u>Worlds</u>	
m	2	<u>Frem</u>	m	3	<u>must</u>	
n	5	<u>exter</u>	n	7	<u>an</u>	
o	3	<u>worth</u>	o	2	<u>Worlds</u>	
p	3	<u>printed</u>	p	4	<u>Specttors</u>	
r	2	<u>Graues</u>	r	4	<u>forth</u>	
s	6	<u>/second</u>	s	1	<u>/o</u>	
t	2	<u>Worldg</u>	t	7	<u>That's</u>	
u	1	<u>that</u>	u	4	<u>thy</u>	
v	3	<u>but</u>	v	1	<u>thou</u>	
w	1	<u>wondred</u>	w	5	<u>with</u>	
y	4	<u>thy</u>	y	2	<u>thy</u> (2nd)	

Italic (Case 3)

	<u>a form</u>			<u>b form</u>	
Letter	Line	Word	Letter	Line	Word
a	Title	Sh <u>akespear<u>e</u></u>	a	P. A.	1 R
e	"	Sh <u>akespear<u>e</u></u>	e		Title
h	"	Sh <u>akespear<u>e</u></u>	h	P. A.	6 R
k	"	Sh <u>akespear<u>e</u></u>	k		-----
p	"	Sh <u>akespear<u>e</u></u>	p		-----
r	"	Sh <u>akespear<u>e</u></u>	r	P. A.	2 L
/	"	Sh <u>ak<u>s</u>pear<u>e</u></u>	/	P. A.	8 R

Italic (Case 4)

	<u>a form</u>			<u>b form</u>	
Letter	Line	Word	Letter	Line	Word
S	Title	Sh <u>akespear<u>e</u></u>	S	P. A.	1 L
W P. A.	5 L	Will <u>iam</u>	W	Title	W

Large Roman (Case 7)

	<u>a form</u>			<u>b form</u>	
Letter	Line	Word	Letter	Line	Word
e	Title	memori <u>e</u>	e	Title	the
f	"	of	f		---
h	"	the	h	P. A.	Tit. 6
i	"	memori <u>e</u>	i	P. A.	" 3
m	"	memori <u>e</u>	m	Title	Tragedies
e	"	To	o	Cat.	Tit. 3
r	"	memori <u>e</u>	r	P. A.	" 3
t	"	the	t	P. A.	" 3

Large Roman (Case 8)

	<u>a form</u>			<u>b form</u>	
Letter	Line	Word	Letter	Line	Word
M	Title	M	M		----
T Cat. Sub. tit.	HISTORIES	HISTORIES	T	Title	To

"Z. M." POEM.

Reference numbers to letters taken from other places.

No.	Letter.	Case.	Form	From	Line	Word.
1	o	7	b	Cat.	Tit. 3	Volume
2	T	8	a	Cat.	Sub-Title	HISTORIES
3	R	7	b	P. A.	tit. 3	Tragedies
4	W	4	a	P. AA	5 L	William
5	a	3	b	P. A.	1 R	Samuel
6	/	3	b	P. A.	8 R	Joseph
7	/	5	b	Dig.	9	Shakespeares
8	/	1	bb	Dig.	14	mist
9	s	2	a	Pro	1	Scene
10	T	2	b	Pro.	15	Their
11	y	1	b	Dig.	2	thy (2nd)
12	C	2	b	Cat.	5	Comedy
13	c	1	b	Dig.	2	which
14	t	5	b	Dig.	4	Stratford
15	M	2	a	Dig.	4	Moniment
16	i	1	bb	Dig.	3	is
17	P	2	b	Pro.	7	Put
18	i	7	b	P. A.	Tit. 3	according
19	S	4	bb	P. A.	1L	Shakespeare
20	r	3	b	P. A.	2L	Richard
21	E	2	a	Pro.	20	Expectation
22	S	6	a	Dig.	21	Shakespeare
23	k	5	a	Dig.	3	SHakespeare
24	r	5	a	Dig.	9	Shakespeares
25	G	2	a	Pro.	1	Greece
26	m	1	b	Dig.	3	must
27	n	3	b	P. A.	6R	Nicholas
28	h	5	d	Dig.	9	Shakespeares
29	h	5	b	Dig.	16	Iuliet
30	h	2	a	Dig.	7	Fresh
31	e	1	ab	Dig.	5	This
32	r	1	bb	Pro.	20	Expectation
33	i	5	a	Dig.	16	Iuliet
34	c	2	a	Pro.	6	Regall
35	t	1	ab	Dig.	3	must
36	/	1	ba	Dig.	3	stone
37	t	7	b	P. A.	Tit 6	these
38	h	7	b	P. A.	3	set
39	p	5	b	Dig.	1	Shakespeare (dotted)

Samll Roman(Case 5)

<u>a form</u>			<u>b form</u>		
Letter	Line	Word	Letter	Line	Word
a	1	Shakespeare	a	1	Shakespeare
e	1	Shakespear <u>e</u>	e Dig.	16	Iuliet
h	1	Shakespear <u>e</u>	h Dig.	9	Shakespeares
i	Dig. 16	Iuliet	i	7	Exit
k	Dig. 1	SHakespeare	k	1	Shakespeare
p	1	Shakespear <u>e</u>	p Dig.	1	SHakespeare
r	Dig. 9	Shakespeares	r	1	Shakespeare
s	1	Shakespear <u>e</u>	s Dig.	9	Shak/peares
t	7	Exit	t Dig.	4	Stratford
x		-----	x	7	Exit

Small Roman (Case 6)

<u>a form</u>			<u>b form</u>		
Letter	Line	Word	Letter	Line	Word
E	7	Exit	E		-----
S Dig.	21	Shakespeare	S	1	Shakespeare

Initial Large Roman (Case 10) W---b form.

Italic (Case 1)

Digraphs

Digraph	Line	Word	Digraph	Line	Word
ct	5	Act <u>ors</u>	is	Dig. 3	is
ct	6	act <u>s</u>	/t	1	went /t
ct	4	Spect <u>ators</u>	-		-
ct	Pro 20	Expectation	/t	Dig. 3	mu <u>t</u>
is	8	This	/t	Dig. 3	/stone
is	Dig. 5	This	/t	Dig. 14	mis/t
is	8	this	/t		

DOTTED LETTERS

Letters which are changed to the opposite form because of the presence of one or three dots are indicated in the photographs of the alphabets by a large dot above the letter.

"I. M." POEM

<u>line</u>	<u>word</u>	<u>letter</u>	<u>form</u>	<u>changed to</u>
1	soone	e	b	a
2	the(1st)	h	b	a
2	Worlds	w	b	a
3	thought	u	b	a
3	thee	e	b	a
3	printed	e	a	b
4	thou	o	b	a
4	forth	h	b	a
5	<u>enter</u>	e	b	a
5	applause	u	b	a
6	and	n	b	a
6	liue	u	a	b
6	part	p	a	b
8	a (1st)	a	a	a
8	a (2nd)	a	a	b
Title	of	o	b	a

TYPICAL LETTERS IN L. DIGGES POEM
Italic (Case 1)

Letter	a form		Letter	b form		Word
	Line	Word		Line	Word	
a	1	at	a	6	shall	
b	2	By	b	3-	tembe	
c	9	oach	c	2	which	
d	6	fage	d	4	dissolues	
e	11	Firg	e	6	Marbla	
f	6	Jade	f	1	fellowes	
g	1	length	g	11	cenkring	
h	1	length	h	9	each	
i	10	reuiue	i	2	out-live	
k	2	Worke(s)	k	5	Booke	
l	6	Marble	l	5	alive	
m	10	redouqe	m	3	must	
n	11	nor	n	4	moniment	
o	2	wrld	o	6	locke	
p	1	pious	p	14	sped	
r	6	Marble	r	7	Posteritie	
s	13	Spake	s	9	Verſe	
t	1	piong	t	1	fellowen	
u	1	thy	u	1	length	
v	5	aline	v.	24	pions	
w	5	view	w	5	voynce	
x Pro.	13	view	x	20	we	
y	1	six-gated	y	2	exprest	
		thy			thy(2nd)	

Digraphs Italic (Case 1)

Digraph	Line	Word	Digraph	Line	Word
fi Pro.	27	firstlings	ſh	12	ſhall
fi Pro.	23	confidence	ſh	13	ſhall
ſh	20	ſire	ſh	13	ſhall
is	8	ie	ſſ	6	Præſſe
is	5	This,	ſſ	4	diſſolues
is	9	is	ſſ	5	ſtill
is	3	is	ſſ	3	uft
ſſ	10	ſhall	ſt	3	ſtone
ſſ	5	ſhall	ſt	14	riſt
ſſ	7	ſhall	ſt		
ſh	6	ſhall	ſt		
ſh	7	fresh	ſt		

ITALIC (Case 2)

a form

b form

Letter	Line	Word	Letter	Line	Word
A	7	Ages	A	11	Age
B	21	Be	B	22	But
F	7	Fresh	F Pro	1	From
H	10	Here	H Pro	3	Haue
I	13	I	I	17	I
L	22	Lawrell	L	9	Line
M	4	Moniment	M I. M.	7	Mortalitie
N	11	Nor	N Pro.	31	Now
O	12	Of	O Pro.	5	Of
P	7	Posterite	P Pro.	7	Put
S	18	Sword	S	20	Shall
T	3	Thy	T	14	Though
V	9	Verse	V	19	Volumes
W	2	Workes (1st)	W	3	Workos (2nd)

Roman (Case 5)

a form

b form

Letter	Line	Word	Letter	Line	Word
a	1	SHakespeare	a	11	Naso
d	Pro.	Dardan	d	4	Stratford
e	16	Shakespear	e	1	Shakespear
f	9	Shakespeares	f	4	Stratford
h	I. M.	Shakespear	h	9	Shakespeares
i	16	Iuliet	i	I. M.	Exit
k	1	Shakespear	k	I. M.	Shakespear
l	Pro.	Nelias	l	16	Iuliet
m	16	Romans	m	-----	-----
n	18	Romans	n	Pro.	Menelaus
o	18	Romeo	o	18	Romans
p	9	Shakespear	p	1	Shakespear (dotted)
r	9	Shakespear	r	1	Shakespear
s	1	Shakepear	/	9	Shakepear
t	18	Romans	s Pro.	16	Chetay
u	4	Stratford	t	4	Stratford
	16	Iuliet	u Pro	17	Antanenidys

Large Roman (Case 14) initial S --- a form

TYPICAL LETTERS IN L. DIGGES POEM
Roman (Case 9)

Page 3.

a form		b form		
Letters	Line	Letters	Line	Word
a	Tit 2	deceased	a	Cat
c	" 2	deceased	c	P. A.
d	" 2	deceased	d	
e	" 2	deceased	e	
f	" 2	of	f	
h	" 2	the	h	P. A.
i	Cat	Comedies	i	
o	" 2	of	o	P. A.
r	" 2	Author	r	Cat.
/	" 2	deceased	/	
t	" 2	the	t	Cat.
u		-----	u	
/t	" 2	Maister		

Roman (Case 10)

A	Tit 2	Author	A	-----
M	" 2	Maister	M	-----

Roman (Case 7)

a form			b form		
Letter	Line	Word	Letter	Line	Word
g	signature	Diggs	g	P. A. Tit 3	Tragedies
i	"	Diggs	i	Cat. " 3	this

Roman (Case 8)

D	signature	Diggs	D	-----
L	"	L. Digges	L	-----
S	Tit 3	SHAKESPEARE	S	Cat. Sub. Tit.
W		-----	W	" 3

Roman (Case 6)

a form			b form		
Letter	Line	Word	Letter	Line	Word
H	-	-----	H	1	Shakespeare
I	16	Juliet	I		-----
N	11	Naso	N		-----
R	18	Romans	R		-----
S	21	Shakespeare	S	4	Stratford

Roman (Case 11)

a form

Letter	Line	Word	Letter	Line	Word
E	Tit 3	SHAKESPEARE	A	Tit 3	SHAKESPEARE
H	" 3	SHAKESPEARE	E	" 3	SHAKESPEARE
K	" 3	SHAKESPEARE	H	-	
P	" 3	SHAKESPEARE	K	-	
R	-----		R	" 3	SHAKESPEARE
S	-----		S	" 3	SHAKESPEARE

Roman (Case 14)

a form

Letter	Line	Word	Letter	Line	Word
E	Tit 1	MEMORIE	E	Tit 1	THE
H	" 1	THE	H	-	---
I	" 1	MEMORIE	I	-	---
M	" 1	MEMORIE	M	" 1	MEMORIE
O	" 1	TO	C	-	----
R	" 1	MEMORIE	R	-	----
T	" 1	TO	T	" 1	THE

L. DIGGES POEM

Reference numbers to letters taken from other places

No.	Letter	Case	Form	From	Line	Word
1	a	9	b	Cat Tit	2	Tragedies
2	c	9	b	P. A. "	2	containing
3	h	9	b	P. A. "	5	the
4	i	9	a	Cat	2	Comedies
5	e	9	b	P. A. "	3	Comedies
6	s	8	b	Cat Sub tit		HISTORIES
7	g	7	b	P. A.	3	Tragedies
8	i	7	b	Cat "	3	this
9	d	5	a	Pro	16	Dardan
10	h	5	a	I. M.	1	Shakespeare
11	i	5	b	I. M.	7	Exit
12	k	5	b	I. M.	1	Shakospeare
13	l	5	a	Pro	16	Hielias
14	n	5	b	Pro	9	Menelcus
15	s	5	b	Pro	16	Chetas
16	u	5	b	Pro	17	Antenoridus
17	p	3	b	Pro	1	From
18	H	2	b	Pro	3	Haue
19	M	2	b	I. M.	7	Mortalitie
20	N	2	b	Pro	31	How
21	O	2	b	Pro	5	Of
22	P	2	b	Pro	7	Put
23	V	1	b	Pro	24	voyce
24	x	1	a	Pro	15	sixgated
25	fi	1	aa	Pro	27	firstlings
26	fi	1	ab	Pro	23	confidence
27	r	9	b	Cat	2	Histories
28	t	9	b	Cat	2	the

TYPICAL LETTERS IN "The Prologue."
Small Italic. (Case 1)

a form

Letter	Line
a	12
b	24
c	2
d	9
e	25
f	3
g	2
h	4
i	20
k	14
l	26
m	4
n	10
o	8
p	30
r	12
s	14
t	6
u	3
v	13
w	14
x	4
y	15
z	24

b form

Word	Letter	Line	Word
Barks	a	6	Regall
but	b	15	braus
Princos	c	23	confidence
raunish'd	d	10	and
like	e	14	yet
of	f	6	from
Orgillous	g	28	Beginning
the	h	4	with
tickling	i	4	with
Greeches	k	8	ransacke
Reholders	l	23	Prologue
ministers	m	6	from
wanton	n	13	now
whose	o	6	Crownets
pleasures	p	19	up
there	q	6	their
vnbruised	r	8	who/e
Crownets	s	22	sets
the	t	24	Authors
Trautage	u	24	but
vnbruised	v	24	voyce
with	w	12	deep-drawing
six-gated	x	5	Sixty
voyce	y	11	they
-----	z	22	Hazard

Digraphs. (Case 1)

Digraph	Line	Word	Digraph	Line	Word
ss	30	ss	sp	18	Correſponſius
ss	24	Actors	sp	20	ſpirits
L. M.	6	Age	ſt	27	ſixſlings
L. M.	4	Specſtators	ſt	8	ſtrong
ct	20	Repeſtation	ſt	33	ſtarting
ſſ	27	firſtlings	ſt	4	inſtruments
ſſ	23	confidence	ſt	"	"
ſſ	30	ſinde	ſt	23	Coriolanus
ſſ	7	ſſ	ſt	2	Orgillous
is	31	'tis	ſt	26	Titus
is	9	is	ſt	"	"
is	3	is	ſt	"	"
ſh	20	ſkittiſh	ſt	"	"
ſh	3	ſhippes	ſt	"	"
ſh	14	ſrehſ	ſt	"	"
ſh	13	ſhall	ſt	"	"
Digges	13	ſleebes	ſt	"	"

Italic capitals. (Case 2)

Letter	a form Line	Word	Letter	b form Line	Word.
A	22	And	A	17	And
B	12	Barke	B	26	Beholders
C	6	Grownets	C	5	Comedy
D	13	Dardan	D	23	Death
E	20	Expectation	E	1	WEE
F	4	Fraught	F	1	From
G	1	Greece	G	21	Greeke
H	Digges	Here	H	3	Hnue
I	1	Iles	I	25	In
L	27	Leapes	L	30	Like
M	20	Now	M	31	Now
N	3	Orgilleus	N	5	Of
O	7	Phrygia	O	7	Put
P	9	Queene	P	10	Quarrell
Q	6	Regall	Q	8	Re-entrance
R	1	Scene	R	5	Sixty
S	2	The	S	15	Their
T	10	With	T	5	Warre

Small Roman small (Case 5)

Letter	a form Line	Word	Letter	b form Line	Word
a	16	Chetas	a	16	Helias
b	16	Timbria	b	--	-----
d	16	Dardan	d	17	Antenonidus
e	16	Troien	e	11	Tengdes
h	16	Chetas	h	Digges 9	Shakespeares
i	16	Helias	i	16	Timbria
l	16	Helias	l	26 9	Menelaus
m	16	Timbria	m	--	-----
n	9	Helen	n	9	Menelaus
r	16	Troien	o	Digges 18	Romans
s	15	Priams	r	10	Paris
t	10	Paris	s	16	Ghetas
y	16	Chetas	t	Digges 4	Stratford
	9	Menelaus	u	17	Antenonidus

TYPICAL LETTERS IN "The Prologue."

page 3,

Small Roman Capitals (Case 6).

a form

b form

Letter	Line	Word	Letter	Line	Word.
A	--	-----	A	17	Artemonidus
C	16	Ghetas	C	--	-----
D	16	Dardan	D	--	-----
H	--	-----	H	16	Helias
M	9	Menelaus	M	--	-----
P	10	Paris	P	--	-----
T	16	Zimbra	T	16	Troien

Large Roman Letters. (In Title)

(Case 13)

a form

b form

Letter	Line	Word	Letter	Line	Word
e	Title	Prologue	e	Title	The
g	"	Prologue	g	-----	---
h	"	The	h	P. A. Title 1	Shakespeare
i	"	Prologue	i	-----	-----
e	"	Prologue	o	Title	Prologue
r P. A. Title 1	Shakespeare	r	"	Prologue	Prologue
u	Title	Prologue	u	-----	-----

Large Roman Capitals (In Title) (Case 14)

a form

b form

Letter	Line	Word	Letter	Line	Word
P	Title	Prologue	P	---	---
T	"	The	T	---	---

Large Roman Initial I line 1--- a form

"THE PROLOGUE."

Reference numbers to letters taken from other places.

<u>No.</u>	<u>Letter</u>	<u>Case.</u>	<u>Form</u>	<u>From</u>	<u>Line</u>	<u>Word.</u>
1	C	2	b	Cat	5	Comedy
2	D	2	b	Cat.	23	Death
3	E	2	b	I. M.	1	<u>WEE</u>
4	H	2	a	Dig.	10	Here
5	R	2	b	E. M.	8	Re-entrance
6	ct	1	ab	I. M.	6	Acto
7	ct	1	ba	I. M.	4	Spectators
8	is	1	ba	Dig.	9	is
9	is	1	bb	Dig.	3	is
10	/h	1	bb	Dig.	13	/hall
11	us	1	aa	Cat.	25	<u>Coriolanus</u>
12	us	1	bb	Cat.	26	Titus
14	h	5	b	Dig.	9	Shakespeares
16	e	5	b	Dig.	18	Romane
17	t	5	b	Dig.	4	Stratford
18	h	13	b	P. A. Tit.	1	<u>Shakespeare</u>
19	r	13	a	P. A. "	1	Shakespeare

TYPICAL LETTERS IN "A CATALOGUE"

Italic Capitals (Case 2)

	a form	b form			
Letter	Line	Word	Letter	Line	Word
A	26	Andronicus	A Pro	17	And
B Pre	12	Barke	B	35	Britaine
C	29	Caesar	C	5	Comedy
D	15	Death	D	23	Death
E	5	Errours	E	12	Ends
F	17	Fir ^t	F	20	Fir ^t
G	2	Gentlemen	G Pro	21	Greeks
H	10	Henry	H	24	Henry
I	Pre	Iles	I	27	Juliet
K	15	King	K	32	King
L	29	Nife	L	32	Lear
M	9	Merchant	M	38	Moore
N	13	Night	N Pro	31	Now
O	Pre	Orgillous	O	33	Othelle
R	16	Richard	R I.M.	8	Re-entrance
S	11	Shrew	S Pre	5	Sixty
T	11	Taming	T	17	The
V	33	Venice	V Dig	19	Volumes
W	3	Wiues	W	3	Windsor
&	16	&	&		-----

ITALIC SMALL (Case 1)

	a form	b form			
Letter	Line	Word	Letter	Line	Word
a	32	Lear	a	18	what
b	30	Macbeth	b Pro.	15	braue
c	18	Second	c	33	Venice
d	31	Tragedy	d	12	Ends
e	30	Macbeth	e	28	Athens
f	21	of	f	18	of
g	11	Taming	g	19	King
h	33	Othello	h	13	night
i	19	Life	i	35	Britaine
k	10	Like	k Pro	8	ransacke
l	33	Othello	l	14	Tale
m	28	Timon	m	11	Taming
n	21	Henry	n	21	Second
o	35	of	o	16	of
p	22	part	p	34	Cleopater
r	34	Cleopater	r	33	Moore
s	3	Bind'er	s	29	Caezar
t	10	Ag	t	12	Ends
u	11	the	u	28	Athens
v	29	Julius	w	5	Errours
w	13	what	x	2	two
Pro	15	six-gated	y	22	Sixt
y	17	Henry		34	Anthony

Medium Roman Small (Case 9)

Letter	a form	b form			
	Line	Word	Letter	Line	Word
a	Tit. 2	<u>seuall</u>	a	Tit 2	Tragedies
d	" 2	and	d	" 2	Comedies
e	" 2	the	e	" 2	Histories
f	" 2	of	f	" "	—
h	" 2	the	h P. A.	" 5	the
i	" 2	Comedies	i	" 2	Histories
l P. A.	" 5	all	l	" 2	<u>seuall</u>
m	" 2	Comedies	m P. A.	" 2	Comedies
n P. A.	" 5	Principall	n	" 2	and
o	" 2	Comedies	o P. A.	" 2	Comedies
r	" 2	<u>seuall</u>	r	" 2	Histories
s	" 2	Comedies	s P. A.	" 2	—
t Dig	" 2	the	t	" 2	the
u	" "	—	u	" 2	<u>seuall</u>

Medium Roman Capitals (Case 10)

Letter	a form	b form			
	Line	Word	Letter	Line	Word
C	Tit.2	Comedies	C	--	--
H	" 2	Histories	H	--	--
T	" 2	Tragedies	T	--	--

Small Roman Small (Case 7)

Letter	a form	b form			
	Line	Word	Letter	Line	Word
a	Tit 3	contained	a	--	--
c	" 3	contained	c	P. A. Tit 3	according
d	" 3	contained	d	" 3	Tragedies
e	" 3	Tragedies	e	" 3	contained
g	" 3	Tragedies	g	P. A. " 3	Tragedies
h	" 3	this	h	P. A. " 3	these
i	" 3	in	i	" 3	this
l	" 3	Volume	l	P. A. " 3	truely
m	" 3	Volume	m	I. M. " 1	memorie
n	" 3	contained	n	" 3	in
o	" 3	contained	o	" 3	Volume
s	" 3	this	P. A. " 3	Tragedies	
t	" 3	this	t	P. A. " 3	set
u	" 3	Volume	u	--	--

a form			b form		
letter	Line	Word	Letter	Line	Word
A	Sub-title	<u>TRAGEDIES</u>	A		---
C	"	-----	C	Sub-title	<u>COMEDIES</u>
D	"	<u>TRAGEDIES</u>	D		----
E	"	<u>COMEDIES</u>	E	"	<u>COMEDIES</u>
G	"	<u>TRAGEDIES</u>	G		-----
H	"	<u>HISTORIES</u>	H		-----
I	"	<u>COMEDIES</u>	I		-----
M	"	<u>COMEDIES</u>	M		-----
O	"	<u>HISTORIES</u>	O	"	<u>SORDIES</u>
R	"	<u>HISTORIES</u>	R	"	<u>TRAGEDIES</u>
S	Dig. Title 3	<u>SHAKESPEARE</u>	S		<u>HISTORIES</u>
T	Sub-title	<u>HISTORIES</u>	T		-----
V	Title 3	<u>Volume</u>	V		-----

Large Roman Capitals. (Case 15)

a form			b form		
Letter	Line	Word	Letter	Line	Word
A	Title 1	A	A	Title 1	<u>CATALOGUE</u>
C	--	--	C	" 1	<u>CATALOGUE</u>
E	--	--	E	" 1	<u>CATALOGUE</u>
G	" 1	<u>CATALOGUE</u>	G		---
L	--	--	L	" 1	<u>CATALOGUE</u>
O	" 1	<u>CATALOGUE</u>	O		---
T	--	--	T	" 1	<u>CATALOGUE</u>
V	--	--	V	" 1	<u>CATALOGUE</u>

Small Italic (Case 1)

di-graph	Line	Word
<u>ſt</u>	17	<u>Firſt</u>
<u>ſt</u>	20	<u>Firſt</u>
<u>ſt</u>	Pro. 28	<u>ſtarting</u>
<u>ſt</u>	1	<u>Tempeſt</u>
<u>us</u>	25	<u>Coriolanus</u>
<u>us</u>	29	<u>Julius</u>
<u>us</u>	26	<u>Titus</u>
<u>ſt</u>	?	<u>Lost</u>

Digraphs

di-graph	Line	Word
<u>ſt</u>	Title 2	<u>Hiſtories</u>
		Large Roman initial <u>T</u> - a form
		no b form
		Diphthong
		as in Caesar Line 29

"2 CATALOGUE"

Reference numbers to letters taken from other places.

No.	Letter	Case	Form	From	Line	Word
1	h	9	b	P. A.	Tit. 5	the
2	l	9	a	P. A.	" 5	<u>all</u>
3	m	9	h	P. A.	" 2	Comedies
4	n	9	aa	P. A.	" 5	Principall
5	s	8	ab	Dig.	" 3	SHAKESPEARE
6	c	7	b	P. A.	" 3	according
7	g	7	b	P. A.	" 3	Tragedies
8	l	7	b	P. A.	" 3	Truely
9	m	7	b	I. M.	" 1	memorie
10	A	2	b	Pro	17	And
11	B	2	ba	Pro	12	Barke
12	G	2	ba	Pro	21	Greeke
13	I	2	bab	Pro	1	Iles
14	N	2	bab	Pro	31	Now
15	O	2	bab	Pro	2	Crgillous
16	R	2	bab	I. M.	8	Re-entrance
17	S	2	bab	Pro.	5	Sixty
18	V	2	bbb	Dig.	19	Volumes
19	b	1	bbb	Pro.	15	braue
20	k	1	bbb	Pro	8	ransacke
21	x	1	ba	Pro	15	six-gated
22	f	1	ba	Pro	28	Starting
23	o	9	bb	P. A.	Tit 2	Comedies
24	s	9	bb	P. A.	" 2	Comedies
25	t	9	bab	Dig	Tit 2	the
26	h	7	bab	P. A.	Tit 6	these
27	s	7	bb	P. A.	" 3	Playes
28	t	7	b	P. A.	" 3	set

TYPICAL LETTERS IN "PRINCIPALL ACTORS."

Italic (Case 3)

Letter	a form Line	Word	Letter	b form Line	Word
a	12R	Shancke	a	1R	Samuel
b	2L	Burbdage	b	2R	Robert
c	11R	Richard	c	12R	Shancke
d	9R	Benfield	d	2L	Richard
e	12L	Samuel	e	5R	Underwood
g	2L	Burbadge	g	7L	George
h	10L	Richard	h	5R	John
i	10L	Richard	i	2L	Richard
k	1L	Shakespeare	k	13L	Cooke
l	6R	Nicholas	l	10 L	Cowly
m	1L	William	m	7R	William
n	4L	Augustine	n	4R	Nathan
o	9R	Robert	o	6R	Nicholas
p	8R	Joseph	p	5L	Kempt
r	9R	Robert	r	2L	Burbdage
s	11R	Robinſon	s	8R	Joſeph
t	3L	Hemings	t	4R	-----
u	5L	Kempt	u	2L	Nathan
v	1R	Samuel	x	13L	Burbdage
w	11L	Loyne	y	9L	Alexander
y	7L	Bryan			Slye

Digraphs Italic (Case 3)

Digraph	Line	Word	Digraph	Line	Word
sh	6L	Thomas	ſp	1L	Shakespear
ch	6R	Nicholas	ſſ	12L	Creſſe
ſt	9R	Benfield	ſt	7R	Eccleſtone
ll	3R	William	ſt	4L	Auguſtine
ll	9L	William	ſt	2R	Qſtler
ll	12L	Samuell			Roman (case 7)
ll	8L	Condell	ſi	Tit. 3	ſirst
"		"	ſſ	" 6	all
"		"	ſt	" 3	firſt

	a form			b form	
Letter	Line	Word	Letter	Line	Word
a	Tit. 6	Playes	a		-----
c	" 3	according	c	Tit. 3	according
d	" 3	Tragedies	d	" 3	according
e	" 3	Truely	e	" 6	these
f	" 3	forth	f		-----
g	" 3	-gedies	g	" 3	according
h	" 3	forth	h	" 6	these
i	" 3	Tragedies	i	" 3	according
l	" 6	Playes	l	" 3	Truely
n	" 3	according	n	" 6	in
e	" 3	according	o	" 3	to
r	" 3	first	r	" 3	Tragedies
s	" 3	/et	s	" 3	Playes
t	" 3	Tragedies	t	" 3	set
u	" 3	their	u		-----
y	" 3	Truely	y		-----
	" 6	Playes			-----

Small Roman (Case 8)

	a form			b form	
Letter	Line	Word	Letter	Line	Word
P	Tit 6	Playes	P		-----
T	" 3	Truely	T		-----

Italic (Case 4)

	a form			b form	
Letter	Line	Word	Letter	Line	Word
A	2R	Armin	A		-----
B	2L	Burbadge	B	7L	Bryan
C	10L	Gowly	C	8L	Condell
E		-----	E	7R	Ecclestone
F	4R	Field	F		-----
G		-----	G	10L	Cough
H	3L	Hemming	H	8L	Henry
I	3L	John	I	1L	William
K		-----	K	5L	Kempt
L	11L	Lowine	L	4R	Nathan
N		-----	N		

Italic (Case 4) Continued.

a form

Letter	Line	Word	Letter	Line	Word
O	3R	Ostler	O		-----
P	6L	Poope	P		-----
R	2R	Robert	R	2L	Richard
S	12R	Shancke	S	1L	Shakespeare
T	6R	Tooley	T	9R	Taylor
U	5R	Underwood	U		-----
W	9L	William	W I. M.	Tit 1	W

Italic (Case 2)

a form

Letter	Line	Word	Letter	Line	Word
A	Tit. 4	ORIGINALL	A	11	Age
G	" 4	ORIGINALL	G	21	Greeke
I	" 4	ORIGINALL	I	1	Iles (reversed) *
L Pro	30	Like(reversed)*L		Tit 4	ORIGINALL
M	" 4	ORIGINALL	M	31	Now
O Pro	2	Orgillous	O	Tit 4	ORIGINALL
R	" 4	ORIGINALL	R	8	Re-entrance

Large Roman (Case 13)

a form

Letter	Line	Word	^ Letter	Line	Word
a	Titl	Shakespeare	a	Tit. 1	Shakespeare
e	" 1	The	e	" 1	Shakespeare
f	" 1	of	f		-----
h	" 1	The	h	" 1	Shakespeare
i	" 1	William	i	" 1	William
k	" 1	Workes	k	" 1	Shakespeare
l	" 1	William	l		-----
m	" 1	William	m		-----
o	" 1	Workes	o	" 1	of
p		-----	p	" 1	Shakespeare
r	" 1	Shakespeare	r	" 1	Workes
s	" 1	Shakespeare	s		-----

Initial Roman W, Line 1L---a form

* word(reversed) indicated that in the source from which letter was taken it is of the opposite class.

TYPICAL LETTERS IN "PRINCIPALL ACTORES."
Large Roman (Case 14)

Page 4

Letter	a form		Letter	b form	
	Line	Word		Line	Word
S	Titl	Shakespeare	S		---
T	" 1	The	T		-----
W	" 1	Workes	W	Tit. 1	William

Medium Roman (Case 9)

Letter	a form		Letter	b form	
	Line	Word		Line	Word
a	Tit. 2	All	a	Tit. 2	and
c	Dig.	deceased	c	" 2	containing
d	" 2	and	d	" 2	Comedies
e	" 2	Histories	e	" 3	Names
f	" 5	of	f		-----
g		----	g	" 2	containing
h	" 2	his	h	" 5	the
i	" 2	his	i	" 2	Histories
m	" 2	Comedies	m	" 5	Names
n	" 5	Principall	n	" 2	and
s	" 2	containing	o	" 2	Comedies
p	" 5	Principall	p		-----
r	" 2	Histories	r	Cat.	Histories
s	" 5	Actors	s	" 2	Histories
t	Dig	the	t	" 3	the

Digraphs Medium Roman (Case 9)

Digraph	Line	Word	Digraph	Line	Word
al	Tit 5	Actors	ll	Tit. 2	all
ll	" 5	Principall	/t	" 2	Histories

Medium Roman (case 10)

Letter	a form		Letter	b form	
	Line	Word		Line	Word
A	Tit 5	Actors	A		-----
C	" 2	Comedies	C		-----
H	" 2	Histories	H		-----
N	" 5	Names	N		-----
P		-----	P	Tit. 5	Principall
T	" 5	The	T		-----

"PRINCIPALL ACTORS."

Reference numbers to letters taken from other places.

No.	Letter	Case	Form	From	Line	Word.
1	r	g	b	Cat. Tit.	2	Histories
2	t	g	a	Dig. "	2	the
3	s	g	a	Cat "	3	-gedies
4	w	g	b	I. W.	Title	W
5	A	2	b	Dig.	11	Age
6	G	2	b	Pro.	21	Greece (reversed) *
7	I	2	b	Pro.	1	Iles
8	L	2	a	Pro.	30	Like
9	N	2	b	Pro.	31	Now
10	O	2	a	Pro.	2	Orgillons
11	R	2	b	W. W.	6	Re-entrance
12	e	g	a	Dig. Tit.	2	deceased

* Word(reversed) indicates that in the source from which the letter was taken it is of the opposite class.







C 49 89 4





