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THE FRANCIS BACON SOCIETY

(INCORPORATED)

Among the Objects for which the Society is established, as expressed in the Memorandum of Association, are the following :

1. To encourage the study of the works of Francis Bacon as philosopher, statesman, and poet ; also his character, genius and life ; his influence on his own and succeeding times, and the tendencies and results of his writing.
2. To encourage the general study of the evidence in favour of Francis Bacon's authorship of the plays commonly ascribed to Shakespeare, and to investigate his connection with other works of the Elizabethan period.

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TO OUR SUPPORTERS IN THE U.S.A.

The subscription is exceptionally low, and has been maintained to date despite mounting overhead expenses which are now outside the control of the Council. Members would assist the Society greatly by forwarding additional donations when possible, and by recommending friends for election. Those members who wish to remit their subscriptions in American currency, are requested to send $3.25 to cover collection costs.

TITLE PAGE OF BACON'S ADVANCEMENT OF LEARNING IN THE FIRST CONTINENTAL EDITIONS OF 1645, 1652, 1654, 1662.

"*The Dionysian Procession must enter the Temple.*"

(*Delia Bacon.*)

BACONIANA

VOL. XLIII (74th Year) No. 160 MARCH, 1960

It should be clearly understood that BACONIANA *is a medium for the discussion of subjects connected with the Objects of the Society, but the Council does not necessarily endorse opinions expressed by contributors or correspondents.*

EDITORIAL

THIS issue of our Journal—delayed unfortunately by disruptions in the printing industry—is mainly concerned with the cipher question. In a recent book *The Shakespearean Ciphers Examined*, Colonel and Mrs. Friedman do not close the door finally on the possibility of a cipher being discovered ; but they claim that so far none has been found, and maintain that the prospect of any such discovery is not good.

In the introduction the authors affirm that they are not entering the Bacon-Shakespeare controversy as such, but confining themselves to a scientific examination of the cipher claims. This of course is perfectly fair, though it has not been the attitude of their reviewers in the national press. By the latter their book has been hailed as a complete and final rebuttal of the Baconian theory. It seems necessary, therefore, to re-state, very briefly, the attitude of our own Society as reflected in *Baconiana.*

All articles published in this journal, including a certain number of cipher articles, represent the individual views of their authors. The present Editors have always maintained that our theory rests securely on historical and literary facts, and on philosophical grounds which are in no way impaired by the proving or disproving of a particular decipherment. These historical and literary considerations have been countenanced by eminent men, and have led thoughtful people to regard the Baconian theory at least with respect. Some of the more extravagant cipher claims of the past can obviously be held up to ridicule ; but the interest which Bacon himself took in

cryptology establishes it as a legitimate Baconian study ; and if a cipher should ever be proved in connection with the Shakespearean authorship, it could be very effective in resolving the controversy one way or the other, certainly from the scientific if not from the academic angle.

So much for the editorial attitude ; what of our members ? Some do not countenance the ciphers at all ; others regard them as of potential value, while resting their belief on other grounds. Others again are convinced that a successful cipher demonstration will one day be achieved, and it is their enthusiastic contributions towards this end which we occasionally print.

The authors of *The Shakespearean Ciphers Examined*, while they do not find that a cipher has been used, are very far from taking the view that, if such a claim could be established, it would in no way affect the orthodox case. At the end of Chapter I which (with certain omissions) presents a fair and useful summary of the controversy, Colonel and Mrs. Friedman express themselves as follows :

> " To be convinced that the authenticity of a literary idol could never be impugned even by a genuine cipher is an arbitrary attitude, and we do not share it. The question is : has a genuine cipher been found ? "

With this we fully agree, and would add that the Friedman book has been a most useful contribution to our research. Quite apart from exposing some of the worst errors of the past (and how they seem to have concentrated on the worst !) it has stimulated many Baconians, who are deeply interested in ciphers, to re-double their efforts to " raise the controversy to a new level ". The writers of the following articles may perhaps be forgiven for taking the Friedmans to task for certain omissions. Perhaps in dealing with such a large *corpus* of literature these were inevitable ; but some of our members feel strongly that great play has been made with the most ludicrous " decipherments " of the past, many of which have been rejected by our members. Professor Henrion must be allowed a certain Gallic indignation at the rough treatment of his compatriot, General Cartier, with whom long ago he was personally acquainted. Commander Pares takes exception to

the disrespect shown to a valuable historical document, the Northumberland MS., which was made to look as though it was simply a "set of scribbled notes" with no important bearing on the controversy. He considers that the value of this 80-page manuscript resides mainly in its unique historical association of Bacon and Shakespeare ; and although the accidental scribble of the long word on its cover cannot by itself be considered as a cryptogram, it must clearly lend some significance to the elaborate context in which the long word is found in *Love's Labour's Lost.*

Probably the most interesting discovery from a cryptic point of view is that Ewen MacDuff, which is described in the article *The City and the Temple.* We believe that professional cryptographers will welcome this contribution.

The present series of articles, taken as a whole, shows that there are still unexplored possibilities in the cipher field ; and that, while an Elizabethan cipher may be considered invalid by modern standards of rigid cryptography, it may well have provided its institutors with a fairly safe method of recording historical facts, or personal opinions, which they could not openly express without grave risk. An Elizabethan cryptogram may be suggestive rather than conclusive ; and these suggestions may ultimately, by their very frequency, command assent.

* * * * * *

We have not yet been able to study *Défense de Will* by F. Bonac-Melvrau—whose pen-name arouses our suspicions—in sufficient detail to comment upon the Shakespearean seals which he discloses. But we were struck by his remarks on the subject of " Probabilism " in Chapter II. Anyone familiar with naval gunnery or with high level pattern bombing knows that the spread of a salvo in the target area is a zone of probabilities. And no one who has had the experience of being straddled, but not hit, by a falling salvo would obstinately maintain that the enemy had never really intended to hit him ! He would, if it were not a pure waste of time, judge the intention to hit from the number of explosions in the probability zone.

Now the very same principle applies, though perhaps in a less acute form, in studying the mediaeval indeterminate forms of cryptology, and the question is exquisitely posed by Melvrau. The particular chapter is headed " Qu'est-ce que la Vérité ? Les Leçons de la Science ", and it relates how, in a murder trial, incriminating evidence based on the famous Bertillon system was presented most " scientifically " by the Director of the Police laboratories.

— Monsieur le Directeur, qui a commis le crime ?
— Je n'en sais rien !
— L'accusé a-t-il touché l'arme du crime ?
— En mon âme et conscience, oui !
— En avez-vous la preuve absolue ?
— NON !
— Comment expliquez-vous ce non inattendu ?
— L'infinie variété des empreintes digitales est telle qu'on peut agir comme si deux individus ne pouvaient laisser la même empreinte. Une telle ressemblance ne s'est jamais présentée. Mais, pour le chercheur scientifique que je suis, il n'y aurait de preuve " absolue " de l'impossibilité d'une ressemblance que si l'on pouvait étudier les empreintes de tous les hommes qui ont jamais été et seront jamais. Je ne puis affirmer que demain, dans tel compartiment de tel train, ne monteront pas trois personnes ayant les mêmes empreintes. Mais *le nombre de chances* pour que cela arrive est si ridiculement faible que nous pouvons parier tous les trésors de l'Inde que cela n'arrivera pas. En tant que savant, je ne sais pas. En tant qu'homme, j'ai la certitude, la certitude par probabilisme, de gagner mon pari.

Now it seems quite clear to us that the real divergence of opinion between our own cipherists and Colonel and Mrs. Friedman arises from a different conception of " probabilities ". It is true that a modern system of cryptography may yield only one unique and unmistakable message. But our judges appear to require the same inflexible and rigid standard from the cautious and covert hints of Sir Francis Bacon, or indeed from any Shakespearean decipherment.

* * * * * *

Members of our Society who are unimpressed by cipher arguments usually consider that the long word in *Love's Labour's Lost* is not a " signal " but simply a piece of nonsense. There is evidence to sustain this point of view, and so we reprint a brief but important article by Mr. R. L. Eagle, *The Mystery of*

Honorificabilitudinitatibus, which appeared in *Baconiana* No. 125 in October, 1947.

An interesting fragment from the Latin Bible of 1497 (illustrated on page 29) was discovered by Mr. Eagle with the long word written out upon it in an early hand. It is, as he maintains, a clear case of scribbling, because the fragment upon which it was written was lying upside down, and must therefore have been a loose scrap of paper, or possibly an end-paper bound into a book of later date. The long word is spelt as it appears in *Love's Labour's Lost*, and not in one of its earlier forms, and the hand-writing is contemporary. The rare word " confection ", meaning in those days a compound, is written beside it. This also is curious because, like the word " consonant ", dragged into the dialogue in *Love's Labour's Lost*, it suggests the last syllable of the name Bacon. But this, too, may be simply a coincidence. The question remains : was the scribbler jesting, was he trying out a pen, or was he interested in the actual words he was scribbling ?

Mr. Eagle, although unimpressed by decipherments in general, has always been scrupulously fair in examining this question. In Chapter 3 of *New Views for Old*, when discussing the Northumberland Manuscript, he records an instance of a similar word appearing in Bacon's note book, *Promus*, which is in the British Museum. In Bacon's handwriting is the entry *Ministerium meum honorificabo*. We commend this chapter to those who are interested in acrostics. Mr. Eagle, while rejecting most Shakespearean decipherments, finds the acrostic seals in *The Rape of Lucrece* (1594) highly suggestive, particularly the 15th verse :

> But she that never cop't with straunger eies,
> Could picke no meaning from theirc parling lookes,
> Nor read the subtle shining secrecies,
> VVrit in the glassie margents of such bookes,
> Shee toucht no vnknown baits, nor feard no hooks,
> Nor could shee moralize his wanton sight,
> More then his eies were opend to the light.

As Mr. Eagle points out the first letters of each line, read vertically, are B, C, N, W, Sh, N, M, and by supplying vowels only these can become BACON W Sh NAME. The context

also fulfils one of the Friedman conditions for acrostic anagrams by its open reference to "subtle shining secrecies" in the *margin* of such books. Is it merely coincidence that the central letter of "Bacon"—the letter C—commences the 100th line of the poem, and 100 is the numerical equivalent for Francis Bacon? And again is it merely coincidence that the letters Sh commence the 103rd line of the poem, when 103 is the numerical equivalent of the name Shakespeare? This spelling of the author's name (or pseudonym) is only adopted in the Plays, and in no instance was the actor's family name spelt this way in the Stratford records. We do not press this possible acrostic seal on the reluctant reader as a valid and unmistakable signature. But, like Mr. Eagle, we find it significant, and more so in view of the monogram which stares us in the face in those first two memorable lines of this tragic and beautiful poem :

FRom the besieged Ardea all in post,
Borne by the trustlesse wings of false desire,

* * * * * *

In this issue we reprint the short and extremely interesting article by "Jacobite" entitled "Francis Bacon and the Electronic Computer". To those who are inclined to think that, in demonstrating the Biliteral Cipher, Bacon was wasting his time, and that this particular cipher never was and never could have been used, this article is a reminder of the care and precision with which this particular cipher was originally propounded, whether it was used or not. We are conclusively shown that the biliteral alphabet selected by Bacon provides a rigorous and accurate demonstration of the first 24 numbers in the Binary Scale (the system of counting used in modern electronic calculators) and, what is even more conclusive, that Bacon sets out these combinations of digits *in their right order*. Not only has he chosen 24 correct combinations of "a's" and "b's", out of 32 possible combinations, without a single deviation, but (as every football pool enthusiast knows) the order in which he gives them could have been subject to an almost infinite number of permutations, without in any way

affecting the operation of the Biliteral alphabet as he explains it. The odds against placing 24 out of 32 hats in a pre-determined prize-winning sequence are heavy ! Was this chance or design? The very question is idle ; the Binary Scale must clearly have been known to Francis Bacon.

* * * * * *

The Simple Cipher and the Kay Cipher, though mentioned by Bacon, have been almost laughed out of court by our orthodox opponents. It is therefore with some amusement that we print in this issue an exposition by W. E. Lovell of a variation of the Simple Cipher which is to be found in Tenison's *Baconiana* of 1679. The Simple Cipher is not so simple as it appears. So far from being a substitution cipher in the modern sense, its use in integrating and cross-connecting a network of mystic signs and seals probably requires a knowledge of systems like the Hebrew *Cabbala*. But of Bacon's familiarity with, and anxiety to preserve the Simple Cipher, there can be no question.

Mr. Lovell, who is retired and something of an invalid, is also one of the few persons who have had the necessary perseverance to carry out extensive experiments with the Biliteral Cipher, sometimes using the letter-forms used by Mrs. Gallup and Mrs. Fiske, but also evolving his own methods and forms. At present he does not think he can lay claim to more than 75 per cent. accuracy, which according to Colonel and Mrs. Friedman may be accepted in certain circumstances. We have watched him at work, and as far as we can judge, his first operation, that of assigning the italic letters to their correct founts " a " and " b " could not be influenced by wishful thinking. For he takes each letter in turn and runs through the passage selecting and assigning only that particular letter, as and when it occurs. At this stage he has no conception as to what the deciphered message will turn out to be. But he fully admits the danger of subjective practices in the later stages, when mistakes have to be corrected and an intelligible message made out. This is the danger point, and in our opinion Colonel Friedman has shown clearly how a very small amount of juggling can completely alter a biliteral decipherment.

We have had some difficulty in deciding whether to include one of Mr. Lovell's biliteral decipherments in this issue. Space in any case would not accommodate more than one, though probably all would be of interest to fellow-students of this cipher. Our hesitation as to whether one should be included simply as a matter of interest, was due to a feeling that, as regards the Biliteral Cipher, an impasse has now been reached. The disagreement is not over the validity of this cipher, which Colonel and Mrs. Friedman have endorsed, but over its practicability. They affirm that, although theoretically valid, it was not and could not have been used. Technical difficulties inherent in the old methods of printing would, they consider, have made it impossible either to encipher or decipher the message with the necessary degree of accuracy. They do not dispute that in the early printed books letters from different founts of type were freely interspersed in the italic passages, but they maintain that these have no cryptic significance ; they also think that many of the minute differences noted in lower case letters can be reasonably attributed to irregularities in printing, distortion of paper and smearing of ink. Their opinion is well backed by modern experts in early printing, though it is in controversion to the views expressed in a contemporary work on ciphers *Traicté des Chiffres* by Blaise de Vigenère (1586). Vigenère states that the minute differences in the shape and size of type letters were in fact used for cryptic purposes. We reprint an article on Vigenère by Miss Edith Durning-Lawrence, who was probably one of the few people who had the opportunity to examine an original copy of this rare and interesting French book.

It seems clear that the disagreement is not over the validity of the Biliteral Cipher as such, but over questions which are not so much cryptographical as physical : firstly as to whether the mediaeval printer could have undertaken so arduous and exacting a task as to insert the cipher message while setting up the type for the open text ; secondly as to whether, in the case of the decipherer, the human eyesight can be trusted to distinguish the lower case letters, and to assign them correctly. Both these objections are realistic and cogent, and to be respected. But it all seems to come to this ; that Bacon's

Biliteral Cipher is not so much a test of cryptological skill as endurance for the printer and the decipherer alike ! It therefore appears to us that the validity of any particular decipherment (though not of the system) will always be a debatable question, while the Shakespeare controversy lasts.

We would have liked to print Mr. Lovell's decipherment of a passage in Camden's *Remaines of Britaine* in the edition of 1657. There are several points in this decipherment which can serve to remove us, and perhaps our opponents too, from the Shakespeare controversy, and which would enable us to view the problem more objectively. For instance, the deciphered passage made no mention of either Bacon or Shakespeare ; secondly, there is a much higher proportion of capital italic letters, and fewer " lower case " letters than is usual. This makes less demands on the eyesight. However, Mr. Lovell himself feels more confident of his very short decipherment from *The Fame and Confession of the Fraternity of R : C :* 1652, using the Biliteral Cipher of Francis Bacon. Not only has he checked this, but he now finds to his surprise that the letter forms are the same as those given by Mrs. Gallup and Mrs. Fiske, although in many cases their significance is reversed. We offer this decipherment, not as proof, but simply as an example of painstaking work, and, as the reader will see, the message does not directly affect the Shakespeare controversy, nor does it appear to be of a kind to warrant security. On the other hand Mr. Lovell's demonstration of the Simple Cipher in Tenison's *Baconiana* of 1679 will be hard to refute.

We cannot leave the vexed question of the Biliteral Cipher without mentioning an interesting hypothesis by " Jacobite " who, after reading the Friedman book with interest, believes that, in quoting from the original texts of Bacon's *De Augmentis* but using the imperfect Spedding translation, the authors have succeeded in obscuring a clue to another form of this Biliteral Cipher which would require a key for its operation. In view, however, of Colonel Friedman's distinguished service with the American Defence Department, it occurs to " Jacobite " that any revelation of this method might be embarrassing to that body, and cannot therefore be

pursued. In this respect Colonel Friedman's delicate position would be fully understood. Suffice it to say that, in a recent experiment, a letter in this keyed Biliteral Cipher was sent to a senior European cryptologist and was returned undeciphered for clarification ; thus showing that the Biliteral Cipher, if used in this way, is a cipher of enormous security.

* * * * * *

It is illuminating to compare some recent results obtained by " squaring " the original Shakespearean Folio text with those which have been ridiculed by our critics. We do not think the latter have been quite fair to Mr. Edward Johnson, since his method, and to some extent his results, are confirmed by Ewen MacDuff. The Friedmans have rightly shown (pages 86-87) how easily a frivolous message can be extracted from a symmetrical pattern of hand-picked letters. But did they establish this pattern first ? Or did they look for any arrangement by which any amusing message could be juggled into any symmetrical pattern ?

Ewen MacDuff has discovered a pattern or " figure " of a cross—almost " a monument without a tombe "—formed by adjacent letters symmetrically arranged in a " squared " text from the first Shakespeare Folio. By " squaring " the opening passage of *Love's Labour's Lost* he found, again combined in the figure of a cross, the seal " Fr Bacon " and the word " Temple". By squaring another passage in the preliminaries to the Folio, in which the name " Shakespeare " is openly dedicated to " Temples ", he found another symmetrical pattern directly above the word " Shakespeare ", also combining the words " Bacon " and " Temples ". At the same time he adduced strong evidence that Ben Jonson, in his dedicatory poem, took occasion to re-inforce these keys.

To sum up, we still take our stand on the literary and historical evidence supporting the Baconian theory, but we do not think that the possibilities of proving a cipher have yet been exhausted. While deferring to scientific opinion on this point, we think that the probability of all these keyed patterns and figures occurring by chance in the same few lines of Folio text is remote indeed.

There is one last point upon which we must express a difference of opinion with Colonel and Mrs. Friedman. In regretfully drawing their negative conclusion as to the validity of all Shakespearean cipher claims, they confess that they themselves have not attempted to discover a cipher, and claim that this is in keeping with their " unwillingness to be partisan about it all ". In a book bearing the title *The Shakespearean Ciphers Examined* this reluctance to attempt a positive investigation can hardly be described as impartial. It confirms the impression that the authors' conclusions were always intended to be negative. But, as a disclaimer, it also bears another aspect ; it leaves the authors with an opening to reconsider their verdict in the event of a cipher being proved. In this sense we welcome it as an indication that, with new evidence, they might be prepared to assist us, and perhaps to modify or even reverse their attitude.

We have read and enjoyed the Friedman book more than once. While reserving their opinion on the literary and philosophical controversy, and confining themselves to existing decipherments, they do not conceal the fact that the Stratfordian tradition still makes the strongest appeal to them. But next to this we believe that the Baconian theory would interest them most. After all Francis Bacon was something of a cryptologist ; and at least they have done us the honour of regarding our theory as the one which, of all unorthodox claims, supports the oldest and most formidable rival candidature for the Shakespearean authorship.

FRANCIS BACON AND THE ELECTRONIC COMPUTER

by JACOBITE

FOR many ages we have counted, added, multiplied, and divided in the scale of ten, until we have grown so used to it that we do not admit the necessity, or the possibility, of any other mode of arithmetic.

The decimal system is certainly due to the fact that we have ten digits on our hands which serve as a "noiseless" portable computer, admirably suited to clandestine use if necessary, and meeting with the approbation of students of all ages for these very reasons. In the case of human beings it is easy to see why the scale was not extended to twenty ! Small wonder then that the system has insinuated itself into our minds to the exclusion of other scales, such as twelve for instance, which in some quarters is held to be more logical, since it has two, three, four, and six, as factors. Ten is nevertheless a very convenient scale when there are ten different conditions, classes or states to deal with.

But Nature is not always so accommodating, and a number of things exist in two states only, the most notable instance being of course male and female ; our knowledge of the human species of the latter gender being sadly deficient owing to the unreasonable inability of the male to comprehend a scale of infinite variation. Other instances are :

a statement is true or false,
a piece of material is a magnet or not a magnet,
an electrical switch is on or off,
a lamp is alight or not alight.

In the latter instances, since the device can be changed from one state to another in a few micro-seconds, it is possible and convenient to count at an enormous speed, provided we use the scale of TWO. All modern electronic computers use this scale, including ERNIE of premium bond fame.

Let us then consider this scale. The highest number will be one, that is one less than the radix of the scale, the position occupied by 9 in the scale of Ten, or Denary Scale as it is called today. When we move a digit one place to the left we multiply it by two, not by ten as in the Denary.

Thus 1 will indicate unity,
10 ,, ,, one x two, i.e. two,
100 ,, ,, one x two x two, i.e. four.
Adding one to four we will get 101, i.e. five, and so on, as set out below.

The writer is engaged in work utilising this scale, and, being a cryptographer of sorts, was searching for a mnemonic by which to remember Lord Bacon's Biliteral Alphabet, when he was astounded to find it identical with the Binary, as will be seen below.

The Binary Scale

0	1	2	3	4	5
00000	00001	00010	00011	00100	00101
6	7	8	9	10	11
00110	00111	01000	01001	01010	01011
12	13	14	15	16	17
01100	01101	01110	01111	10000	10001
18	19	20	21	22	23
10010	10011	10100	10101	10110	10111

Francis Bacon's Biliteral Alphabet

A	B	C	D	E	F
aaaaa	aaaab	aaaba	aaabb	aabaa	aabab
G	H	I	K	L	M
aabba	aabbb	abaaa	abaab	ababa	ababb
N	O	P	Q	R	S
abbaa	abbab	abbba	abbbb	baaaa	baaab
T	V	W	X	Y	Z
baaba	baabb	babaa	babab	babba	babbb

. . . . . .

A first reading of mathematical history on the subject of the antiquity of the scale gives the first positive date of its use as 1671, when Leibniz produced a calculating machine using binary digits, and demonstrating the superiority of the scale for this purpose. The literature on the subject is somewhat

vague and indefinite, which is surprising when it is considered that almost any history will give such things as the numerology of the Ancient Egyptians. It may be, however, that this article will stimulate some enquiry into the matter. It is known that Napier, who published the first paper on logarithms in 1614, was in collaboration with Briggs, who first published tables of logarithms to base ten in 1624. It is believed that evidence exists of collaboration between Napier and Bacon at about that time.

What is quite positive, and very gratifying, is the rigid accuracy of the Biliteral Alphabet. Bacon said, in effect, " let ' a ' equal nought, and ' b ' equal one ", and then wrote out the numbers zero to twenty-three *in the binary scale.* It is to be expected that his directions on the use of the Biliteral and other ciphers would be just as precise and accurate. Applying these directions to an enigmatic passage in the First Folio has yielded a surprising result to the writer, which it is hoped to communicate in the near future. Therein, Bacon gently demonstrates the danger of jumping to conclusions !

As a final thought let no one imagine that this odd count invalidates another which is even simpler !

THE CITY AND THE TEMPLE

By M.P.

[Cryptic Seals by E.M.]

"... And the City lieth Four Square"
(*Revelations*, xxi, 16.)

AN enquiry into the occasional and peculiar use of the word "Temple" in Bacon and Shakespeare has led to a rather interesting result. In recording this, the writing and literary research have fallen to me, while the cryptic seals are entirely the discovery of my collaborator, Ewen MacDuff. They are the forerunners of an interesting series which he has already frankly discussed with a few friends, including myself, but which he prefers not to publish until he has obtained the reactions of our readers to the ones which are here disclosed.

Among the rather strange pointers to the word "Temple" is one in Westminster Abbey. If you visit what is known as Poets' Corner, you will see before you the finely executed Shakespeare monument; finely executed, that is, in every particular except one—the lettering on the scroll. The Bard is pointing with his left forefinger to the word "Temples" in a passage from *The Tempest* which has been deliberately misquoted (page 32). The mistakes are glaring, the script is rough, the letters have no uniformity, and even the spelling does not correspond with that in any known edition of *The Tempest* from the First Folio of 1623 to the present day. For some obscure reason, the first three lines of the passage quoted are "halved", and inscribed in large letters falling into six lines, while the line which follows is a mistake, since it belongs to another part of the same context. This misplaced line is the only one inscribed in half-sized lettering, and instead of the correct line "And like this insubstantiall Pageant faded" it reads "And like the baseless Fabrick of a Vision". What is the reason for these manipulations, and why is the Bard pointing to the word "Temples"? We shall attempt to throw some light on the latter question.

Perhaps a brief word should be said here about this monument. It was erected in 1740, at the public charge, under the direction of the Earl of Burlington, Dr. Mead and Alexander Pope. It is very unlikely that any of these three people—particularly Pope—would have sanctioned a scroll bearing a passage from *The Tempest* with such flagrant mistakes and in such crude lettering, unless they particularly wished to have it executed in that fashion. Nor is it possible to believe that the designer, Kent, or the sculptor, Scheemaker, would have presumed to make such deviations unless expressly authorised to do so.

At about this period a good many changes to existing monuments occurred, usually under the pretext of renovating them. In 1778, the Spenser monument in the Abbey was restored by "private subscription", but although the original wording was retained, the inscribed dates of his birth and death were both altered. It is hard to understand why Spenser's contemporaries should not have had a better idea of these dates than persons living a century later—especially as regards his death, which had occurred only a short while before the monument was erected, apparently at the charge of Essex.

The Shakespeare monument at Stratford-on-Avon, as is well known, was completely altered and rebuilt in 1746, with the object of adorning it and making it more worthy of the Bard. Whether this has really been achieved is a debatable question; the present bust is so lifeless, heavy and expressionless, that good judges have declined to believe that it could resemble the author of the plays.* Thus, between 1740 and 1778, the original monuments to Spenser and Shakespeare were both renovated and changed, while a new monument to the latter was set up in Westminster Abbey.

The word "Temple", pointedly indicated in this monument, is seldom used in connection with places of worship in this country. It is, of course, used by Freemasons, but in ordinary parlance it takes us eastwards and back into the past, with its various connotations of the ancient Mysteries in Egypt and

(*continued on p.* 33)

* A stupider face I never beheld.—Gainsborough.

Illustrated Supplement

THE SHAKESPEARE MONUMENT IN WESTMINSTER ABBEY

(Erected in 1741 under the auspices of Dr. Richard Mead, Alexander Pope and the Third Earl of Burlington.)

TO THE MOST NOBLE AND INCOMPARABLE PAIRE OF BRETHREN.

WILLIAM
Earle of Pembroke, &c. Lord Chamberlaine to the *Kings most Excellent Maiesty.*

AND

PHILIP
Earle of Montgomery, &c. Gentleman of his Maiesties Bed-Chamber. Both Knights of the most Noble Order of the Garter, and our singular good LORDS.

Right Honourable,

WHilſt we ſtudie to be thankful in our particular, for the many fauors we haue receiued from your L.L we are falne vpon the ill fortune, to mingle two the moſt diuerſe things that can bee, feare, and raſhneſſe; raſhneſſe in the enterprize, and feare of the ſucceſſe. For, when we valew the places your H.H. ſuſtaine, we cannot but know their dignity greater, then to deſcend to the reading of theſe trifles: and, vvhile we name them trifles, we haue depriu'd our ſelues of the defence of our Dedication. But ſince your L.L. haue beene pleas'd to thinke theſe trifles ſome-thing, heeretofore; and haue proſequuted both them, and their Authour liuing, vvith ſo much fauour: we hope, that (they out-liuing him, and he not hauing the fate, common with ſome, to be exequutor to his owne vvritings) you will vſe the like indulgence toward them, you haue done

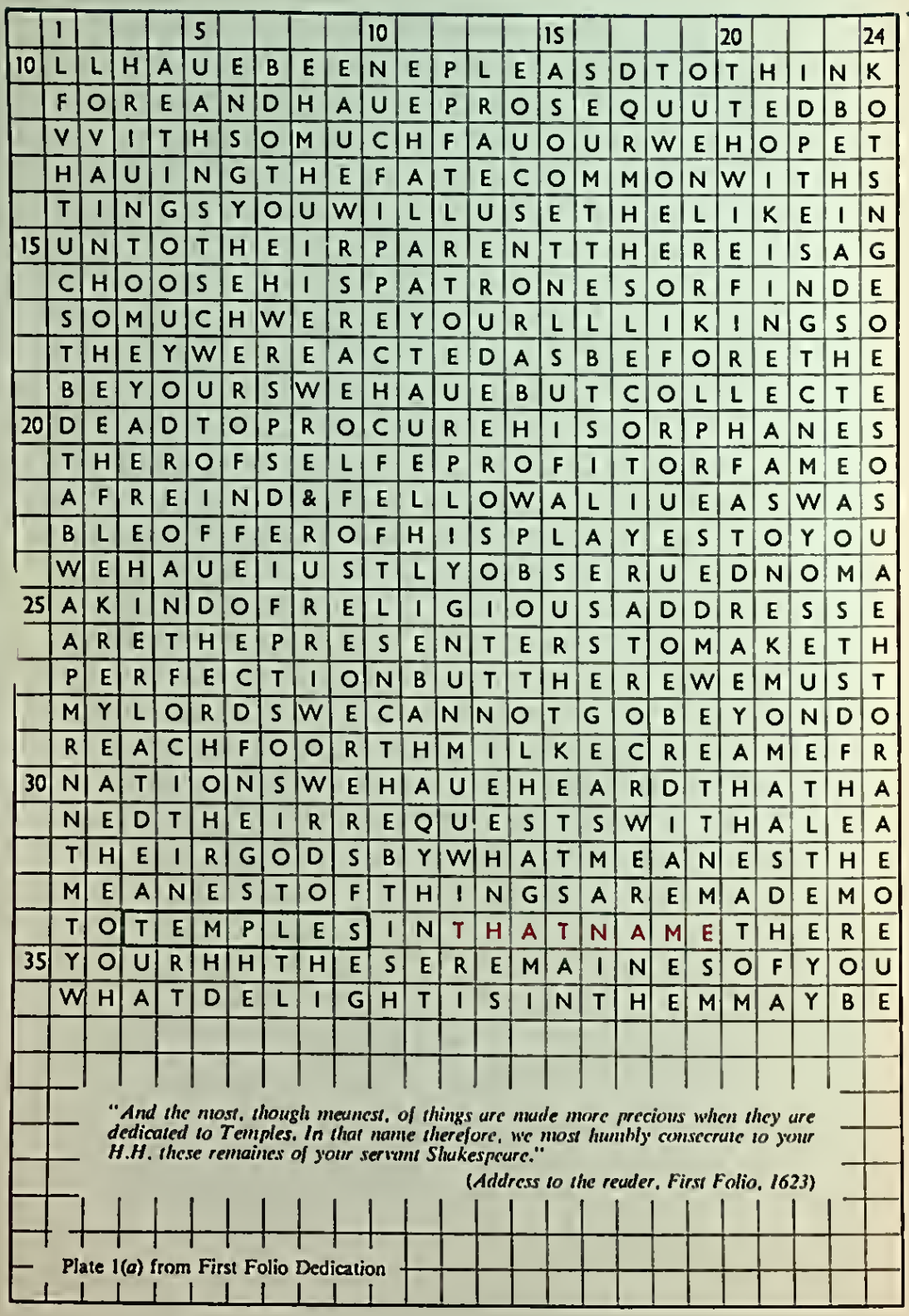
(*Facsimile from the First Shakespeare Folio 1623. See pages 20, 21 for "squared" passage.*)

vnto their parents. There is a great difference, whether any Booke choose his Patrones, or finde them: This hath done both. For, ſo much were your L L. likings of the ſeuerall parts, when they were acted, as before they were publiſhed, the Volume ask'd to be yours. We haue but collected them, and done an office to the dead, to procure his Orphanes, Guardians; without ambition either of ſelfe-profit, or fame: onely to keepe the memory of ſo worthy a Friend, & Fellow alive, as was our SHAKESPEARE, *by humble offer of his playes, to your moſt noble patronage. Wherein, as we haue iuſtly obſerued, no man to come neere your L.L. but with a kind of religious addreſſe; it hath bin the height of our care, who are the Preſenters, to make the preſent worthy of your H.H. by the perfection. But, there we muſt alſo craue our abilities to be conſiderd, my Lords. We cannot go beyond our owne powers. Country hands reach forth milke, creame, fruites, or what they haue: and many Nations (we haue heard) that had not gumnies & incenſe, obtained their requeſts with a leauened Cake. It was no fault to approch their Gods, by what meanes they could: And the moſt, though meaneſt, of things are made more precious, when they are dedicated to Temples. In that name therefore, we moſt humbly conſecrate to your H.H. theſe remaines of your ſeruant* Shakeſpeare; *that what delight is in them, may be euer your L.L. the reputation his, & the faults ours, if any be committed, by a payre ſo careſull to ſhew their gratitude both to the liuing, and the dead, as is*

Your Lordſhippes moſt bounden,

IOHN HEMINGE.
HENRY CONDELL.

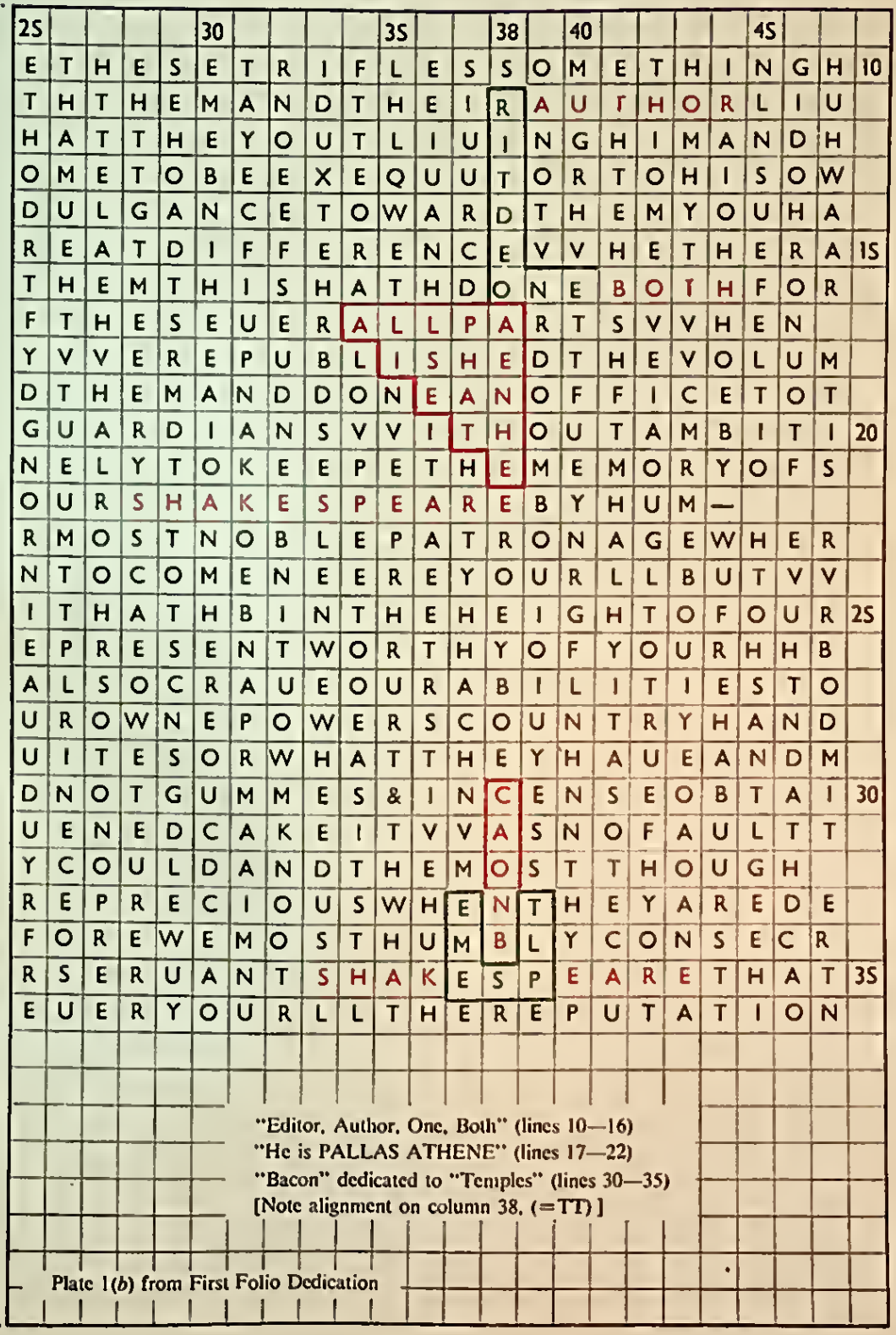
(Facsimile from the First Shakespeare Folio 1623. See pages 20, 21 for "squared" passage.)



"And the most, though meanest, of things are made more precious when they are dedicated to Temples. In that name therefore, we most humbly consecrate to your H.H. these remaines of your servant Shakespeare."

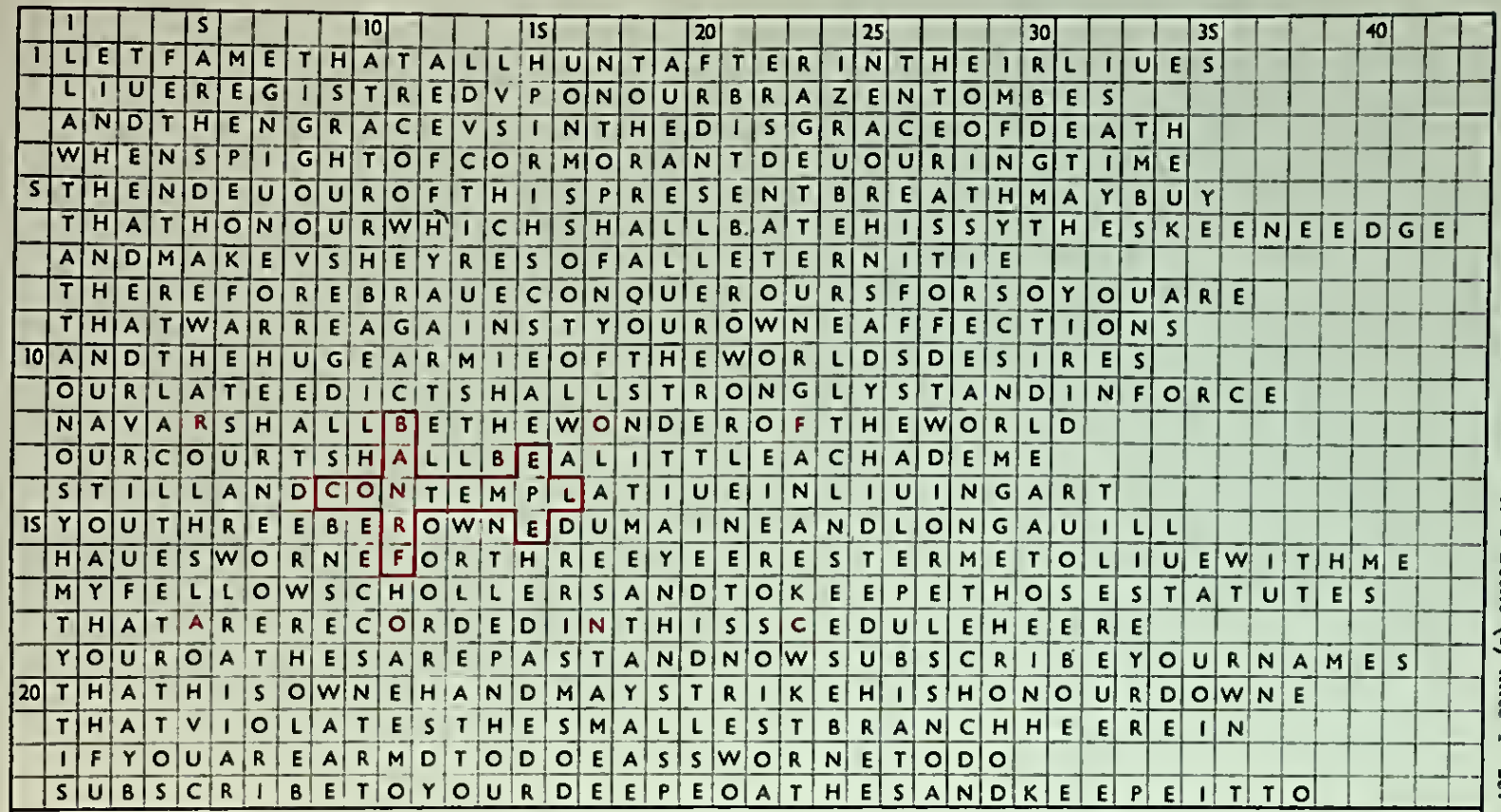
(Address to the reader, First Folio, 1623)

Plate 1(*a*) from First Folio Dedication



"Editor, Author, One, Both" (lines 10—16)
"He is PALLAS ATHENE" (lines 17—22)
"Bacon" dedicated to "Temples" (lines 30—35)
[Note alignment on column 38, (=TT)]

Plate 1(*b*) from First Folio Dedication



'This "seal" in Loves Labour's lost is in the opening speech in the 1598 Quarto and 1623 Folio. Although based on the word "Contemplative," the symmetry of the other six letters used appears to be intentional. The surrounding seal "Fr. Bacono" evenly spaced at six-letter intervals supports this view

ANAGRAM PATTERNS

In each of these diagrams an actual pattern of letters, preserved in their true relative position, is lifted *en bloc* from a "squared" passage in the First Folio. Adjacent letters forming perfect anagrams of key words are shown in colour, with their references. The context in which these figures occur, if not discovered by our readers, will be disclosed in due course. Here we show only a fraction of what this passage contains.

In figures 1, 2, 3, 4 and 7 (which refer to key words in Loves Labour's lost) these anagrams can be found by squaring either the Folio or the Quarto text of the passage concerned. But in figures 5 and 6, the anagrams relating to Ben Jonson's dedicatory poem "To my Beloved AUTHOR" (printed in the First Folio) are either absent or imperfect in the Quarto text, while in the Folio text the spelling seems to have been carefully manipulated to complete potential anagrams and introduce new ones.

This is a significant point, the inference being that Ben Jonson, in his editorial capacity, thought fit to provide additional keys in the Folio and also to place on record his own connivance in this device. It may sound incredible, but it seems almost as if Ben Jonson was looking for ways to improve the author's keys directing attention to this passage, when he supervised the Folio text and wrote his dedicatory poem. The idea that he wrote with his tongue in his cheek may be repugnant to some; it could mean that the urge to cryptic writing was just as compelling as the urge to sing the praises of the Bard!

We offer this hypothesis as a mathematical probability. The material is limited to the 1623 Folio; all anagrams reflect key words emphasized in the open text; their figures are symmetrical or follow a pattern of adjacent letters. For example figure (5) reveals anagrams of six out of the seven words in a single Jonsonian line, omitting only the word "sporting" which happens to suggest "hunter." Ben Jonson openly displays his interest in acrostics in his plays (1616). The practice of "doubling or rejecting a letter" is openly confirmed by Camden in his chapter on anagrams (1605), for the sake of "poetic liberty."

To the memory of my beloued, The AVTHOR Mr. William Shakespeare: And what he hath left vs.

*To draw no enuy (*Shakespeare*) on thy name,*
Am I thus ample to thy Booke and Fame:
While I confesse thy writings to be such,
As neither Man, *nor* Muse, *can praise too much.*
'Tis true, and all mens suffrage. But these wayes
Were not the paths I meant vnto thy praise:
For seelyest Ignorance on these may light,
Which, when it sounds at best, but eccho's right;
Or blinde Affection, which doth ne're advance
The truth, but gropes, and vrgeth all by chance;
Or crafty Malice, might pretend this praise,
And think to ruine, where it seem'd to raise.
These are, as some infamous Bawd, or Whore,
Should praise a Matron. What could hurt her more?
But thou art proofe against them, and indeed
Aboue the ill fortune of them, or the need.
I, therefore will begin. Soule of the Age!
The applause! delight! the wonder of our Stage!
My Shakespeare, *rise; I will not lodge thee by*
Chaucer, *or* Spenser, *or bid* Beaumont *lye*
A little further, to make thee a roome:
Thou art a Monument, without a tombe,
And art aliue still, while thy Booke doth liue,
And we haue wits to read, and praise to giue.
That I not mixe thee so, my braine excuses;
I meane with great, but disproportion'd Muses:
For, if I thought my iudgement were of yeeres,
I should commit thee surely with thy peeres,
And tell, how farre thou didst'st our Lily *out-shine,*
Or sporting Kid, *or* Marlowes *mighty line.*
And though thou hadst small Latine, *and lesse* Greeke,
From thence to honour thee, I would not seeke
For names; but call forth thund'ring Æschilus,
Euripides, *and* Sophocles *to vs*,
Pacuuius, Accius, *him of* Cordoua *dead,*
To life againe, to heare thy Buskin tread,
And shake a Stage: Or, when thy Socks were on,
Leaue thee alone, for the comparison

of

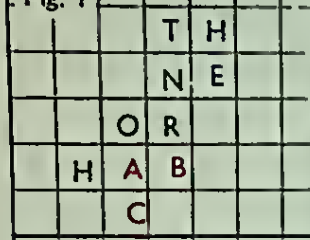
(*Reduced facsimile from the First Shakespeare Folio 1623*)

Of all, that insolent Greece, *or haughtie* Rome
sent forth, or since did from their ashes come.
Triumph, my Britaine, *thou hast one to showe,*
To whom all Scenes of Europe *homage owe.*
He was not of an age, but for all time!
And all the Muses *still were in their prime,*
When like Apollo *he came forth to warme*
Our eares, or like a Mercury *to charme!*
Nature her selfe was proud of his designes,
And joy'd to weare the dressing of his lines!
Which were so richly spun, and woven so fit,
As, since, she will vouchsafe no other Wit.
The merry Greeke, *tart* Aristophanes,
Neat Terence, *witty* Plautus, *now not please;*
But antiquated, and deserted lye
As they were not of Natures family.
Yet must I not give Nature all: Thy Art,
My gentle Shakespeare, *must enjoy a part.*
For though the Poets *matter, Nature be,*
His Art doth give the fashion. And, that he,
Who casts to write a living line, must sweat,
(such as thine are) and strike the second heat
Upon the Muses *anuile: turne the same,*
(And himselfe with it) that he thinkes to frame;
Or for the laurell, he may gaine a scorne,
For a good Poet's *made, as well as borne.*
And such wert thou. Looke how the fathers face
Liues in his issue, even so, the race
Of Shakespeares *minde, and manners brightly shines*
In his well torned, and true filed lines:
In each of which, he seemes to shake a Lance,
As brandish't at the eyes of Ignorance.
Sweet Swan of Avon! *what a sight it were*
To see thee in our waters yet appeare,
And make those flights upon the bankes of Thames,
That so did take Eliza, *and our* Iames!
But stay, I see thee in the Hemisphere
Advanc'd, and made a Constellation there!
Shine forth, thou Starre of Poets, *and with rage,*
Or influence, chide, or cheere the drooping Stage;
Which, since thy flight fr̄ hence, hath mourn'd like night,
And despaires day, but for thy Volumes light.

BEN: IONSON.

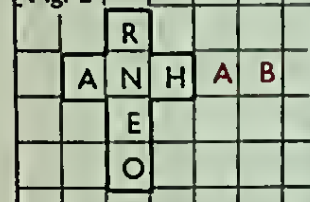
(Reduced facsimile from the First Shakespeare Folio 1623)

Fig. 1



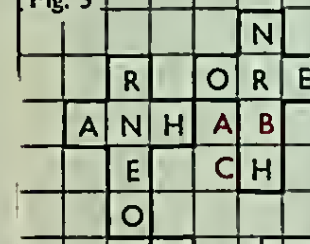
Page: What is Ab speld backward with the horn on his head?
(*Loves Labour's lost*, V(1))
(*Note spelling "The horn"*)

Fig. 2



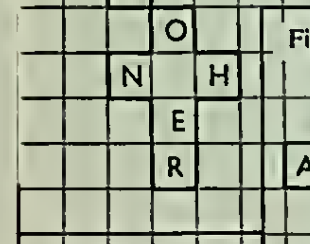
Peda: Ba, *puericia* with a horne added
(*Ibid*)
(*Note spelling "a horne"*)

Fig. 3



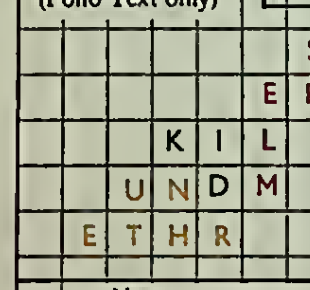
Peda: What is the figure? What is the figure?
Page: Hornes. (*Ibid*)

Fig. 4



(Note: The "figure" is a Cross, thrice indicated by the word "horne." Neatly fitting between the two vertical crosses is a horizontal cross—a monument without a tombe—containing the signature BACON.

Fig. 5
(Folio Text only)



"Or sporting Kid or Marlowes mighty line."
(*Ben Jonson*)

Note:—

(*a*) Author's keys in Figs. 1, 2, 3 and 4 (found in Quarto and Folio)

(*b*) Ben Jonson's keys in Fig. 5 and 6 (Folio text only)

(*c*) Wrong spelling of KYD, faithfully echoed by Ben Jonson, and possible paraphrase of HUNTER as SPORTING.

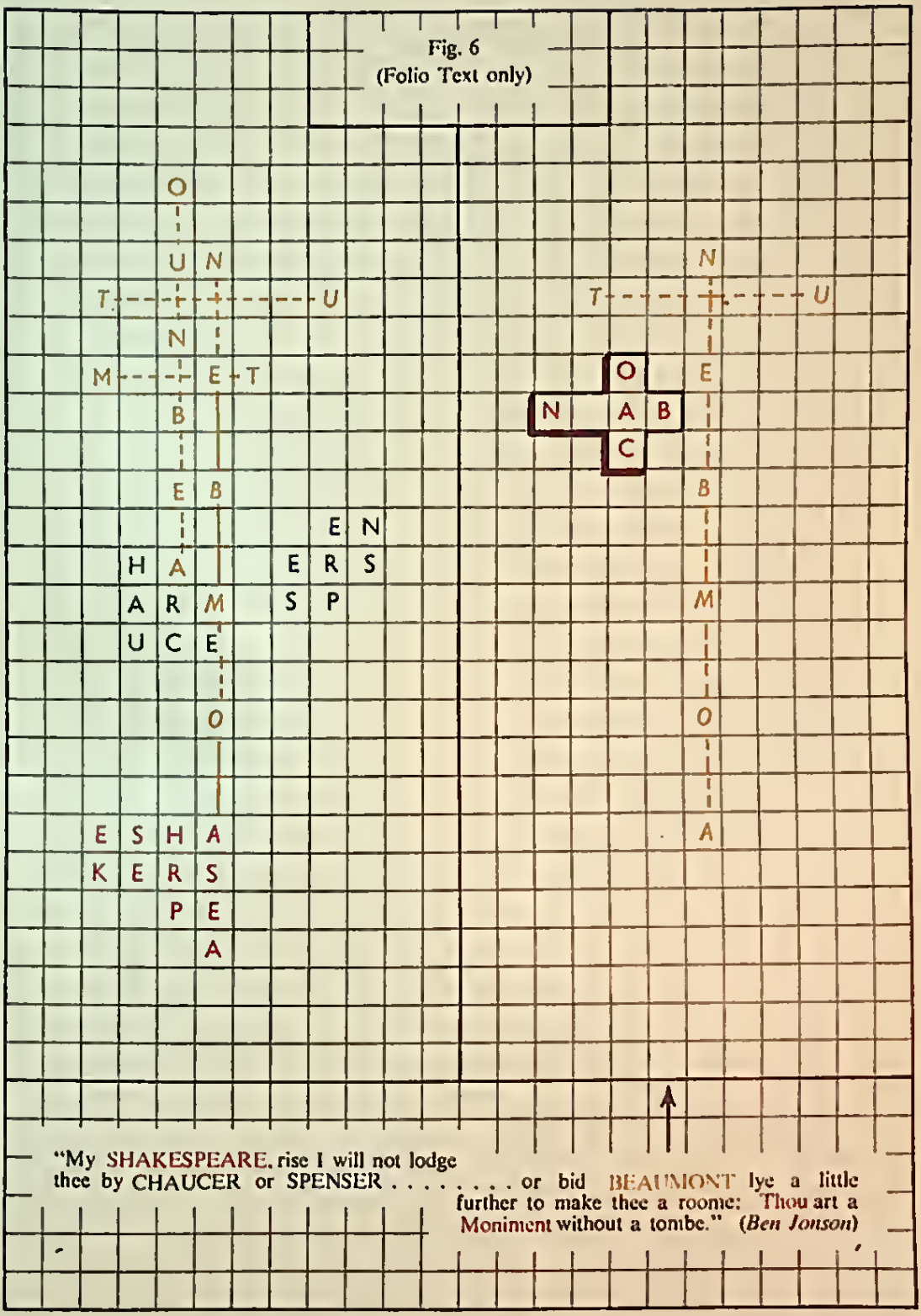
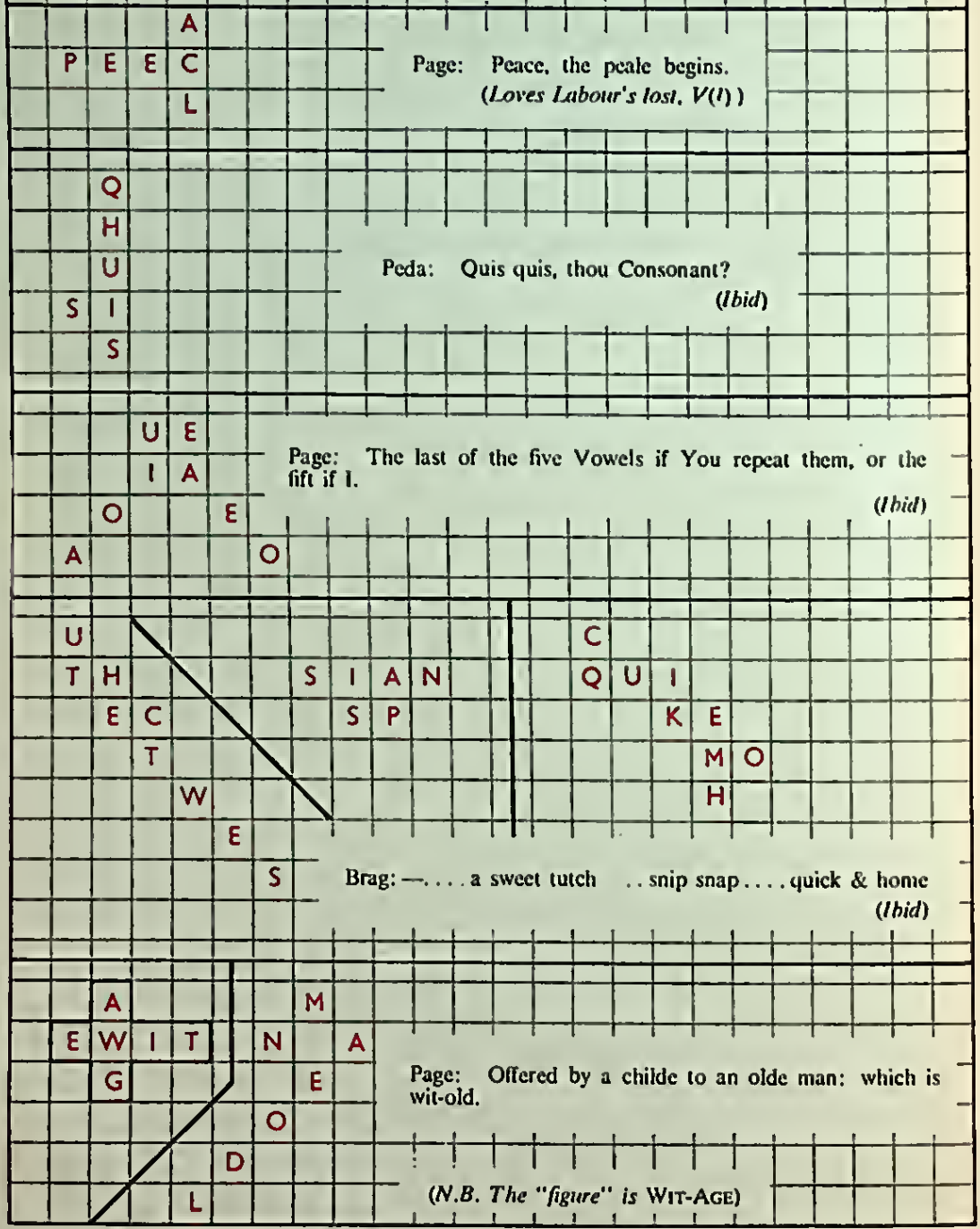


Fig. 6
(Folio Text only)
O
U N
T U
N
M E T
B
E B
E N
H A E R S
A R M S P
U C E
O
E S H A
K E R S
P E
A
N
T U
E
O
N A B
C
B
M
O
A
"My SHAKESPEARE, rise I will not lodge thee by CHAUCER or SPENSER . . . . . or bid BEAUMONT lye a little further to make thee a roome: Thou art a Moniment without a tombe." (*Ben Jonson*)

Fig. 7

PUZZLE

All these separate anagram patterns fit accurately into a "squared" passage from the First Folio. Find it.



Page: Peace, the peale begins.
(*Loves Labour's lost, V(1)*)

Peda: Quis quis, thou Consonant?
(*Ibid*)

Page: The last of the five Vowels if You repeat them, or the fift if I.
(*Ibid*)

Brag: —. . . . a sweet tutch . . snip snap . . . . quick & home
(*Ibid*)

Page: Offered by a childe to an olde man: which is wit-old.

(*N.B. The "figure" is* WIT-AGE)

C. PLEMPII.

EMBLEMATA.

EMBL. I.

En Fortuna : manu quos rupem ducit in altam,
Præcipites abigit : carnificina Dea eſt.
Firma globo imponi voluerunt fata caducam,
Ipſa quoquè ut poſſet riſus, & eſſe iocus.
Olim unctos Salij qui præſilière per utres,
Ridebant caderet ſi qua puella malè.
O quàm ſæpe ſales, plauſumque merente ruinâ,
Erubuit vitium fors inhoneſta ſuum!
Obſcœnùmque nimis crepuit, Fortuna Batavis
Appellanda; ſono, quo ſua curta vocant.
Quoque ſono veteres olim ſua furta Latini:
Vt nec, Homere, mali nomen odoris ames.

FORTUNA TAKES A HAND

(Plempius Emblems 1616, the year of Shakspere's death. Note acrostic anagram beginning on line 9.)

neither in regard of you it may preſent it ſelfe by way of Dedication, for that ſhould implie honour vnto you, which it cannot bring, and require patronage from you, which it needeth not, being by the pittifull fillineſſe thereof ſecured from enuie, onely reaching at eminencie. I heere ſende it vnto you in looſe leaues, as fit to be Ludibria venti: *and withall ſubmit it to your cenſure, not as he did* Siue legi, ſiue tegi iuſſeris. *For verily I aſſure my ſelfe that you in your learned iudgement cannot but ſentence it, as I haue done with this doome:*

Tineas paſcat taciturnus inertes.

From my Lodging xxx. Iunii. 1614.

Your Worſhips aſſured

M. N.

(*From Camden's "Remaines Concerning Britaine" Ed: 1614. Note covert "Signature" of WilliaM CamdeN*)

a candle, with, *SIC SPLENDIDIORA PETVNTVR.*

In another shield, (if I am not deceiued) droppes fell downe into a fire,& there-vnder was written, *TAMEN NON EXTINGVENDA.*

The sunne in another shield did seeme to cast his rayes vpon a starre, partly ouer-shadowed with a cloude, and thereby was set downe, *TANTVM QVANTVM.*

A letter folded and sealed vp, superscribed, *LEGE ET RELEGE*, was borne by another, and this last I referre to the Readers consideration.

Confident was he in the goodnes of his cause, and the Iustice of our Land, who onely pictured *Iustitia* with her Ballance and Sword, and this, beeing an Anagramme of his name, *DVM ILLA, EVINCAM.*

For whome also was deuised by his learned friend, *Pallas* defensiue Shield with *Gorgons* head thereon, in respect of his late Soueraignes most gracious patronage of him, with this Anagrammaticall word, *NIL MALVM CVI DEA.*

Argus lulled asleepe by Mercury playinge him a
scripte: the word: Eloquiū tot lumina clau
sit. vincula cresco: the deuise: a growth bound in a
a band: y
a palme tre much loaded but risinge against it the
word: Ponderibus virtus innata resistit:

(*From Camden's "Remaines Concerning Britaine" Ed: 1611. Note the two anagrams of "VVilliam Camden."*)

The ſame in *Engliſh* by the Publiſher.

A Fragment *of a Book written by the Lord* Verulam, *and Entituled,* The Alphabet of Nature.

SEeing ſo many things are produc'd by the *Earth*, and Waters; ſo many things paſs through the *Air*, and are received by it; ſo many things are chang'd and diſſolv'd by *Fire*; other Inquiſitions would be leſs perſpicuous, unleſs the Nature of thoſe *Maſſes* which ſo often occur, were well known and explain'd. To theſe we add Inquiſitions concerning *Celeſtial Bodies*, and *Meteors*, ſeeing they are ſome of greater *Maſſes*,& of the number of Catholic Bodies.*

* *See the diſtributio, in* l. 2. c. 3. de Augm. Scient. *p.* 234, 135, 136. Ed. Lugd. Bat. *l* 3. c. 4 *p.* 231. *And* c. 4. Globi Intellect. *p.* 82, 89.

Greater Maſſes.

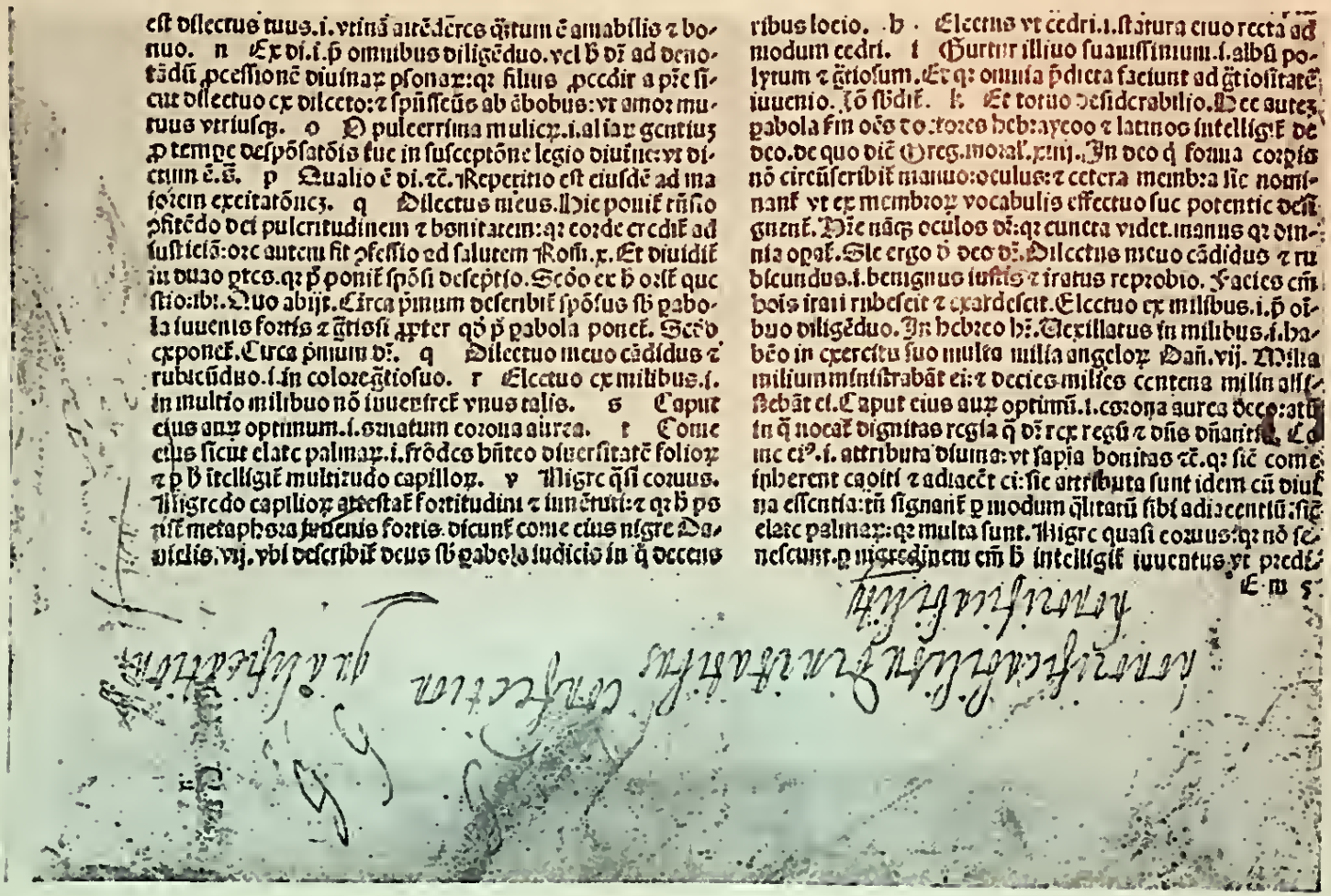
The 67*th* Inquiſition. The three-fold *Tau*, or concerning the *Earth*.

The 68*th* Inquiſition. The three-fold *Upſilon*, or concerning the *Water*.

The 69*th* Inquiſition. The three-fold *Phi*, or concerning the *Air*.

The 70*th* Inquiſition. The three-fold *Chi*, or concerning the *Fire*.

The



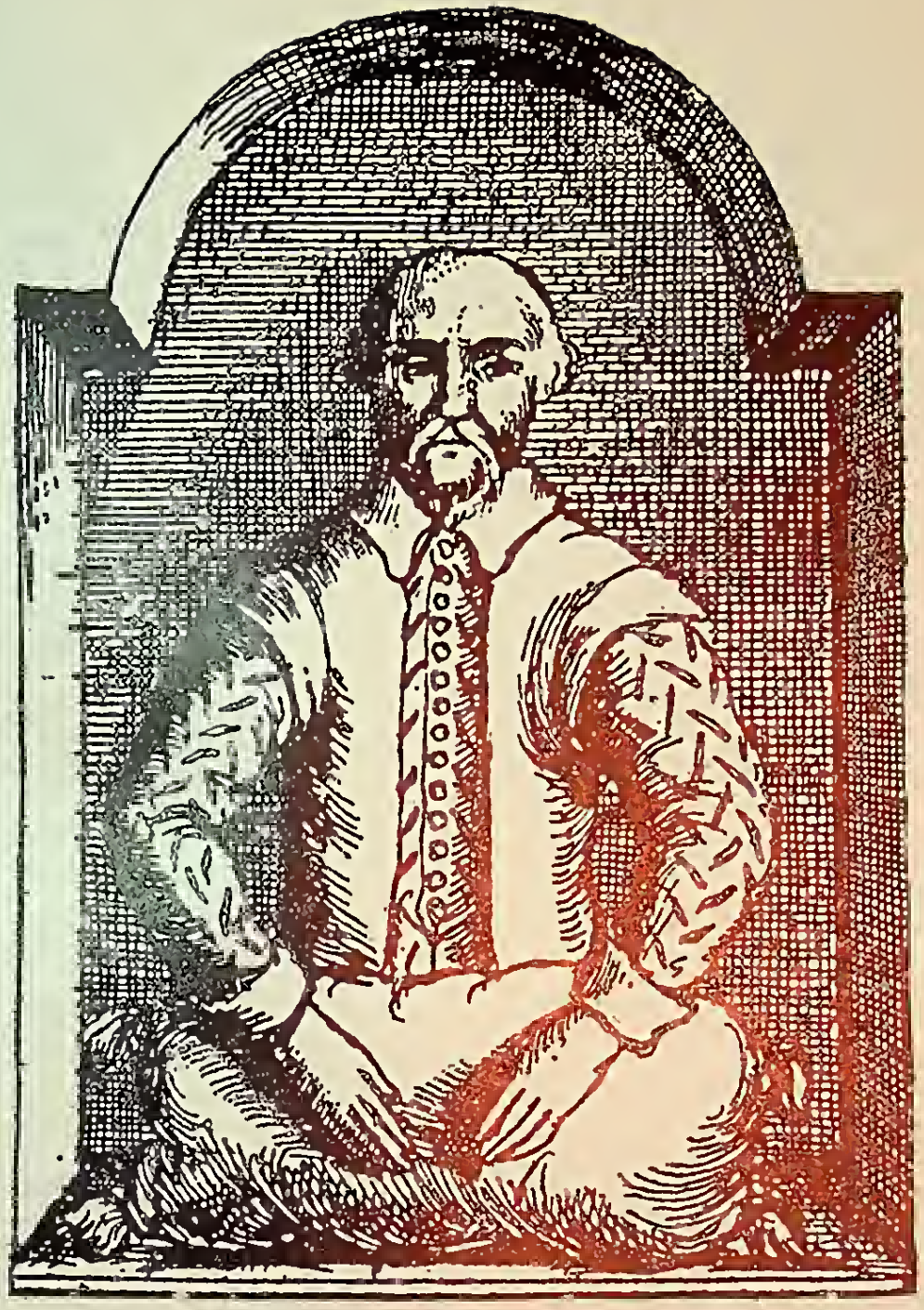
est dilectus tuus.i. vtiq; aut̄ dēcens q̄tum ē amabilis ⁊ bonuo. n Ex di.i. p̄ omnibus diligēduo. vel b dī ad denotādū p̄cessionē diuinaꝝ p̄sonaꝝ:q; filius p̄cedit a p̄e sicut dilectuo ex dilecto:⁊ spūsseūs ab ābobus:vt amor mutuus vtriusq;. o O pulcerrima mulicꝝ.i. aliaꝝ gentiuꝫ p̄ tempe despōsatōis tue in susceptōne legio diuīne:vt dictum ē.s. p Qualio ē di.tē. Repetito est eiusdē ad maiorem expitatōnez. q Dilectus meus. Hic ponit rūsio p̄fitēdo dei pulcritudinem ⁊ bonitatem:q; corde credit ad iustitiā:ore autem fit p̄fessio ad salutem Rom.x. Et diuidit in duo ptes.q; p̄ ponit spōsi desceptso. Scōo ex b ostē questio:ubi. Quo abijt. Circa p̄mum describit spōsus sū gabola iuuenis fortis ⁊ gīosi aꝝter qō p̄ gabola ponet. Scō exponet. Circa p̄mum dī. q Dilectuo meuo cādidus ⁊ rubicūdus.i. in coloregīosuo. r Electuo ex milibus.i. in multio milibuo nō inuenīet vnus talis. s Caput eius auꝝ optimum.i. ornatum corona aurea. t Come eius sicut elate palmaꝝ.i. frōdes būteo diuersitatē foliorꝝ ⁊ p b itelligit multitudo capillorꝝ. v Nigre q̄si coruus. Nigredo capilliorꝝ attestat fortitudini ⁊ iuuentuti:⁊ qr b possit metaphora iuuenis fortis. dicunt come eius nigre Daniclis.vij. vbi describit deus sū gabola iudicio in q̄ decens

ribus locio. b Electus vt cedri.i. statura eiuo recta ad modum cedri. t Guttur illiuo suauissimum.i. albū polytum ⁊ gīosum. Et qr omnia p̄dicta faciunt ad gīositatē iuuenio. Iō subdit. k Et totuo desiderabilis. Dece autez gabola fm oēs tres textores hebraycoo ⁊ latinos intelligit de deo. de quo dic̄ Greg. moral. xxij. In deo q forma corpis nō circūscribit manuo:oculus:⁊ cetera membra sic nominant vt ex membroꝝ vocabulis effectuo suc potentie designent. Dic nāq; oculos dī:qr cuncta videt. manus qr omnia opat. Sic ergo b deo dī. Dilectus meuo cādidus ⁊ rubicundus.i. benignus iustis ⁊ iratus reprobis. Facies cū bois irati rubescit ⁊ expallescit. Electuo ex milibus.i. p̄ obuo diligēduo. In hebreo hī. Vexillatus in milibus.i. habēo in exercitu suo multa milia angeloꝝ Dan. vij. Milia milium ministrabāt ei:⁊ decies milies centena milia assistebāt ei. Caput eius auꝝ optimū.i. corona aurea decoratū in q̄ nocat dignitas regia q dī rex regū ⁊ dūs dūantiū. Come ei⁹.i. attributa diuina:vt sapia bonitas ⁊c. q; sic come inherent capiti ⁊ adiacēt ei:sic attributa sunt idem cū diuina essentia:tū signant p modum q̄litatū sibi adiacentiū:sic elate palmaꝝ:qr multa sunt. Nigre quasi coruus:qr nō senescunt. p nigredinem cū b intelligit iuuentus vt predi-

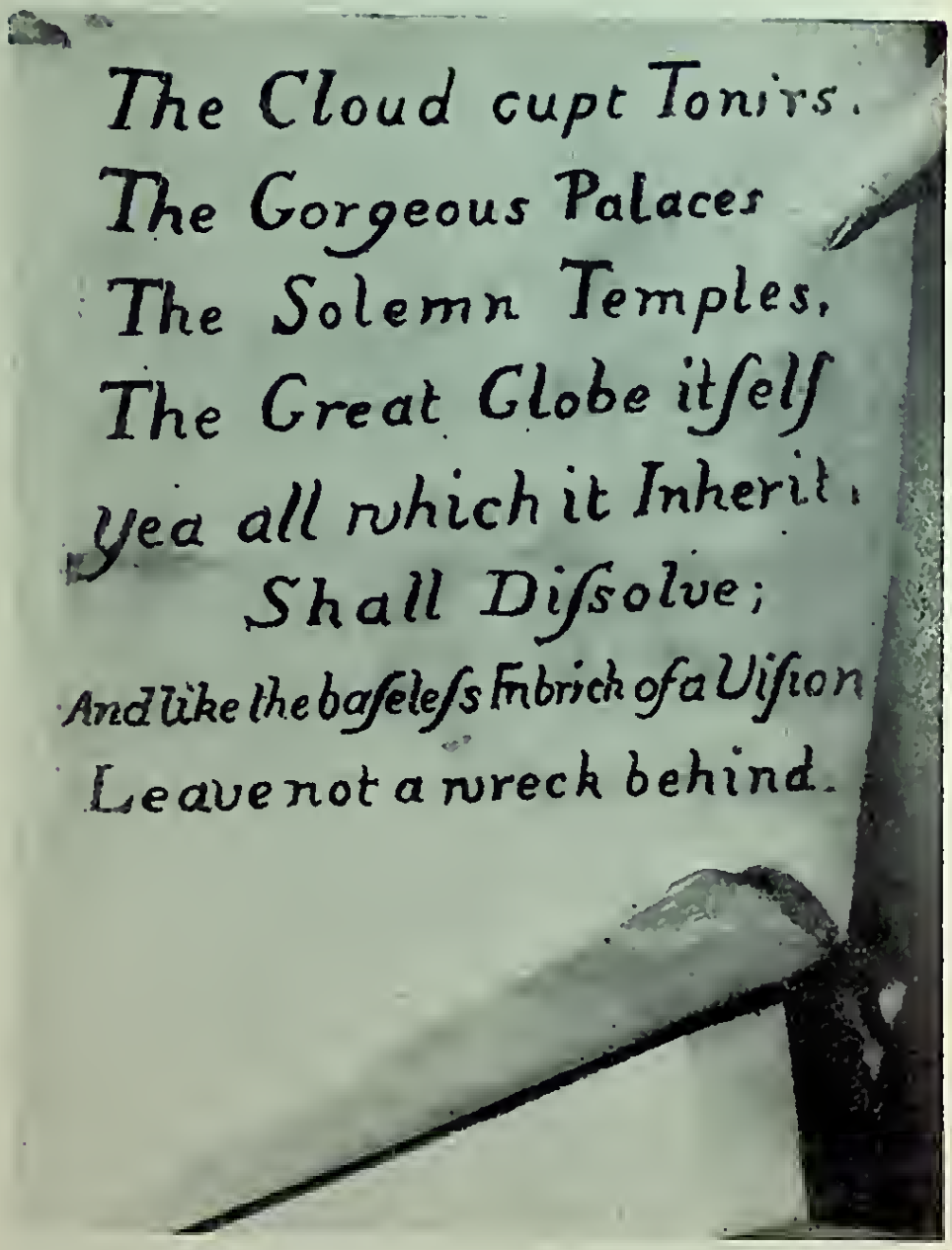
Em 5

Hic locus "C.C." echo wrote these words, upside down, on a leaf from a Latin Bible printed by Anton Koberger at Nuremberg in 1497?

THE STRATFORD BUST AS IT IS TO-DAY.
(*See pages 15—16.*)



THE STRATFORD BUST, FROM DUGDALE'S WARWICKSHIRE, PUBLISHED 1656.



The Inscription on the Shakespeare Monument in Poet's Corner, Westminster Abbey.

Greece : the Temple at Jerusalem, the Knights Templar, the " Temple not made with hands " and all the more figurative uses of the word in our own Bible.

In a letter to Lancelot Andrews, Bishop of Winchester, Francis Bacon used the word " Temple " in the accepted figurative sense, though, as it now appears, in rather a significant way. He had been comparing his own fate with that of other great writers of the past—notably Demosthenes, Seneca and Cicero—and in referring to his own writings he uses the following words :

> " But resolving with my selfe, my Writings, as well those I have published, as those which I had in hand, me thought they went all into the City and none into the Temple."

The question is whether this significant use of the word " Temple " is intended to convey anything more than a casual reference to ordinary religious writings. By itself it conveys nothing more, but when taken in conjunction with the Shakespeare monument, the engraved title page to Bacon's *De Augmentis* of 1645, and the cryptic discoveries which we shall presently describe, it assumes a greater significance.

In the engraved frontispiece to the first Continental edition of the *De Augmentis* (see Frontispiece) the Temple symbol appears again. Francis Bacon is shown with his right hand, in strong light, pointing to a passage in his open work, while, in the shadow, his left hand, as if in illustration of this very passage, is manipulating a human figure. The figure is male-female in form and dressed in goat skins (*tragedos*) ; it appears to represent the Tragic Muse. It is clasping a book with both hands and is offering it towards a classic temple, which seems to hover in the background overshadowing the group. On the book are the crossed, diagonal lines which are the esoteric symbol of the mirror, and which (for those who have forgotten their *Hamlet*) is a symbol for " stage plays ". To verify this, consult the frontispiece to the 1640 collected edition of Ben Jonson's plays, where you will find the same symbol ; it can hardly be contended that Ben Jonson was not a dramatist ! It seems that the mystery of Francis Bacon was vaguely understood by the Dutch artist of this remarkable engraving. Bacon

is clearly shown with his finger pointing to his *magnum opus*—a work which, as he says, seems to have gone into the City—but with his left hand surreptitiously manipulating a human figure which, in turn, is offering a book towards the precincts of a temple.

We now come to the curious cryptic discovery of Ewen MacDuff which, if it is a coincidence, is really quite remarkable. In the " Dedication " in the first Shakespeare Folio (1623)—signed by two players but usually accredited to Ben Jonson—there occurs the following rather obscure passage :

> " . . . and the most, though meanest of things, are made more precious when they are dedicated to Temples . . . In that name therefore, we most humbly consecrate to your H.H. these remaines of your Servant Shakespear."

Now if the whole of this is " squared " a remarkable configuration or pattern of letters will be found, all arranged symmetrically, in the form of a pillar, close above the word Shakespeare (page 21). This pattern purports to associate one of the " meanest " of things—Bacon—with " Temples ", and the question to be decided is whether this is deliberate or accidental. Here it should be noted that the word " meanest " always signified " humblest "—not only in Elizabethan times, but at least up to the time of Alexander Pope, who apparently only used the word in this sense, and never in the modern and debased sense.

Ewen MacDuff, however, was not content with one such instance of the " Bacon-Temple " association. Realising that our critics would not accept an anagram as valid proof if the letters were not all in proper sequence—unless, of course, several recurring examples of the same anagram could be demonstrated—he continued his search. He next " squared ". the opening passage of *Love's Labour's Lost* (page 22) with the following positive result. He found the signature " Fr Bacon " and the word "Temple " both worked into a double cross, which is, of course, the figure of the ground plan of a Christian church. This figure appears in the First Quarto of 1598, as well as in the First Folio of 1623, notwithstanding minor differences of spelling.

This second association of the two words " Bacon " and "Temple " certainly made the whole thing more significant, but further instances were considered desirable. Only at a stretch of the imagination could the first configuration of letters be compared to the elevation of an Eastern temple ; the second, however, was quite unmistakably the ground plan of a Christian church. The search was continued and the next find was again interesting. In a certain passage of Shakespeare, if the Folio text, as it is printed, is faithfully " squared ", it is found to reveal the signature BACON in the form of a single cross in which there is one superfluous letter—the letter " H " (Figs. 1 to 6). Now it is well known from the chapter on anagrams in Camden's *Remaines of Britaine* that the letter " H " is one of those which can either be taken into account or disregarded at the discretion of the decipherer ; Camden definitely states this. If this particular " H " is disregarded, we certainly have the letters BACON arranged in the form of a cross. However this did not seem to be so striking as the previous examples, so the search was continued. The laudatory poem in the First Folio addressed to the Author, written by Ben Jonson, was then re-examined and it was found to yield a running commentary on the results of " squaring " this particular Shakespearean passage. A number of configurations of adjacent letters were found to echo faithfully Ben Jonson's comments on his contemporaries, as expressed in his well-known poem and to lead straight to the above-mentioned seal BACON in the form of a cross or " monument without a tomb ". We illustrate these on pages 24 (b), (c) and (d) and, in each case, we give the line or couplet from Ben Jonson's poem which indicates the figure.

It is for the reader to decide whether to regard these clues as definitely intended by Ben Jonson, or simply as coincidences. Was Ben Jonson, while composing his laudatory poem, definitely looking at the " squared " passage and guiding the reader to the hidden seal of the real "Author ", or was all this pure chance ? Indeed we would like to have the reactions of professional cryptographers on this point. Can they, for instance, produce a similar series of clues, by using Ben Jonson's poem, which would lead them to some other discovery regarding his contemporaries ? Or can they, by squaring a single Shakespearean passage, discover a

similar number of patterns of adjacent letters which would lead them to an intelligible seal or signature and would this at the same time bear an intelligible relation to Ben Jonson's poem? The fact that Ben Jonson in his poem refers to Shakespeare, Chaucer, Spenser, Beaumont and Sporting Kid (spelt as in the Folio only) and to Marlowe's "Mighty Line", and that all these configurations are to be found in close conjunction, would seem to indicate a definite plan. Let those who question these "coincidences" be warned—it is only fair to say at this stage that Ewen MacDuff has discovered further evidence, and confidently awaits a professional challenge on these points.

These cryptic anomalies (we will not call them discoveries) led us to consider the problem of Ben Jonson's close association with Francis Bacon. At what stage did he become privy to the Shake-speare subterfuge? Was it, more or less, an open secret in the group of "good pens" which surrounded Francis Bacon? By many critics Ben Jonson is supposed to have drafted the preliminaries to the First Folio and the dedication addressed to the Earls of Pembroke and Montgomery (that "incomparable paire of brethren"). Now Ben Jonson also dedicated his "Epigrams" to the same Earl of Pembroke and, in the latter dedication, he goes out of his way to emphasise the fact that he has now no need to express himself in cipher. His words are as follows:

> "My Lord,—While you cannot change your merit, I dare not change your title; it was that made it, and not I. Under which name I here offer to your Lordship the ripest of my studies—my Epigrams, which, though they carry danger in the sound, do not therefore seek your shelter; for when I had made them I had nothing in my conscience to expressing of which I did need a cipher."

This odd disclaimer seems to imply that in another dedication, addressed to the said Earl of Pembroke, he DID need to use a cipher. Now we know that Ben Jonson received his early education at the hands of William Camden at the Westminster School, and William Camden is known to have written a good deal about ciphers and anagrams; so it is reasonable to suppose that Ben Jonson, too, was not ignorant of this kind of cryptic work.

It does seem, on the face of it, that Francis Bacon was the acknowledged leader of a talented group of writers and that Ben Jonson was his right-hand man. The latter's praise of Bacon not to be seen until after his death, is perhaps one of the finest compliments ever paid by one man of genius to a greater :

> " I have and do reverence him, for the greatness that was only proper to himself, in that he seemed to me ever, by his WORK, one of the greatest men, and most worthy of admiration, that had been in many ages."
>
> (*Discoveries*—1641.)

> " he who hath filled up all numbers, and performed that in our tongue, which may be compared or preferred either to INSOLENT GREECE, OR HAUGHTY ROME . . . so that he may be named and stand as the mark and ACME of our language ".
>
> (*Ibid.*)

This unexpected comparison with Homer and Virgil is in almost the same words that Jonson used in addressing Shakespeare in his laudatory poem in the First Folio (see page 24 (a)).

> " Leave thee alone for the comparison
> Of all, that insolent GREECE OR HAUGHTY ROME
> sent forth . . ."

Are we to suppose that Ben Jonson was so bankrupt of words and ideas that he needed to use exactly the same idiom (and a superlative in each case) for two different men ? He could have had no more doubts as to the authorship of the Shakespeare Folio than he had as to the *De Augmentis*, having personally taken a hand in the production of both books. Cryptic references to members of the nobility, well-known to Bacon and Jonson, may be discussed in a future article.

It seems possible that among the members of Bacon's literary group were the Earls of Oxford, Southampton, Derby, Pembroke, Montgomery, and Sir Walter Raleigh. Of Marlowe, Spenser and " Sporting Kid " we are not so sure ; although they were educated men, we know very little of their lives and, after their decease, their names may have been used to some extent as " good pens " upon which to father various anonymous works. Certainly there is a Marlowe mystery, for not one single play of his was credited to him during his lifetime.

Tamberlaine, the only play which was printed while he lived, was at first anonymous. His reputation, therefore, is entirely posthumous, while his death in 1593 is fully confirmed by a coroner's verdict.

Spenser presents another mystery. It is difficult to believe that the " sizar " or poor scholar from Cambridge, who obtained a position as Secretary in Ireland, could have spent the necessary time in England to write in such an intimate way about members of the Court circle. There is no contemporary evidence to this effect. The first suggestion that he had done so was made 80 years after his death, by the unknown editor of the fine Spenser Folio of 1679. *The Shepherd's Calendar* was originally anonymous, and was not credited to Spenser for many years, and then only by inference, from its inclusion in the first collected Spenser Folio, published 13 years after his death. But both *The Shepherd's Calendar* and *The Fairy Queen* show an intimate knowledge of affairs at the Court of Queen Elizabeth.

The dedication of *The Shepherd's Calendar*, if it is to be trusted as an indication of authorship, is signed " Immerito ". The very first lines of this dedication show the desire of " Immerito " to remain anonymous.

> " Goe, little Booke : thyselfe present,
> As Child whose parent is unkent . . .
> And when thou art past jeopardie
> Come tell me what was said of mee
> And I will send more after thee."

In *The Arte of English Poetry* (1589) the author is referred to as " the Gentleman who wrote the late Shepherd's Calendar ". In the Gabriel-Harvey correspondence he is referred to as the " Hertfordshire Gentleman ", " so true a gallant in the Court, so toward a lawyer, so witty a gentleman ", and he is finally apostrophised as " you, a gentleman, a courtier and a youth ". It is a debatable point whether a " sizar " or poor scholar and son of a journeyman tailor, would be referred to as a " gentleman " in those days ; in any case Spenser was neither a Hertfordshire man nor a courtier, nor a lawyer !

Mother Hubbard's Tale published in 1590 contains an introspective passage about the hard luck of being a suitor, which Granville C. Cuningham has aptly compared to a letter written

about that time by Francis Bacon to his friend, Sir Fulke Greville. These passages, which bear no relation to the circumstances of Spenser, who was then living in Ireland on an estate of 3,000 acres, will bear repeating here :

> " So pitiful a thing is Suters state,
> Most miserable man, whom wicked fate
> Hath brought to Court, to sue for had-ywist,
> That few have found, and many one hath mist ;
> Full little knowest thou that hast not tride
> What hell it is in suing long to bide ;
> To loose good days that might be better spent,
> To waste long nights in pensive discontent,
> To speed to-day, to be put back to-morrow,
> To feed on hope, to pine with fear and sorrow ;
> To have thy Princes grace, yet want her Peers ;
> To have thy asking, yet wait many years ;
> To fret thy soul with crosses and with cares ;
> To eat thy heart through comfortless despairs ;
> To fawn, to crouch, to wait, to ride, to run ;
> To spend, to give, to want, to be undone.
> Unhappy Wight, born to disastrous end,
> That doth his life in so long tendance spend."
>
> (*Mother Hubbard's Tale.*)

There is nothing in the recorded life of Edmund Spenser to suggest, even remotely, the chagrin, the heart-burnings and disappointments in maintaining a hopeless suit at Court. Nor is there in the private life of Will Shaksper, although in a famous soliloquy the author of *Hamlet* gives vent to similar feelings. He too had apparently suffered " the insolence of office ", " the law's delay ", and " the proud man's contumely ". In Bacon's private life, however, there was much to engender this introspective state of mind. As only one of many instances, we shall quote from his letter to an intimate friend, Fulke Greville, afterwards Lord Brooke :

> " Sir,—I understand of your paines to have visited me ; for which I thank you. My Matter is an endless Question . . . I dare go no farther. Her Majesty had by set speech, more than once, assured me of her intention, to call me to her service ; which I could not understand, but of the place, I had been named to. And now, whether Invidus Homo hoc fecit; or whether my Matter must be an Appendix to my Lo: of Essex sute ; or whether Her Majesty, pretending to prove my Ability, meaneth but to take advantage of some Errours, which, like enough, at one time or other I may commit ; or what

it is ; but Her Majesty is not ready to dispatch it. And what though the Mr. of the Rowles, and my Lo: of Essex, and yourself and others, think my case without doubt ; yet in the meantime I have a hard condition to stand so, that whatsoever service I do to Her Majesty, it shall be thought to be but servitium viscatum, timetwiggs, and Fetches, to place my self, and I shall have Envy, not thanks.

This is a course to quench all good spirits, and to corrupt every Man's Nature : which will I fear, much hurt, her Majesties Service in the end. I have been like a piece of stuff bespoken in the Shopp : And if Her Majesty will not take me, it may be the selling by parcels will be more gainful. For to be, as I told you, like a Child following A Bird, which when he is nearest flyeth away, and lighteth a little before, and then the Child after it again, and so in Infinitum. I am weary of it : As also of wearying my good friends : . . . And thus again I commend me to you."

(Francis Bacon.)

It is possible that Fulke Greville, to whom this letter was addressed, was a member of Bacon's group. But the real tower of strength behind this group—philosophically, legally, academically—was Francis Bacon, of this we feel reasonably assured. We have supported this view with new evidence and there is more to come. In a future article we hope to show how, among the patterns of letters spelling out the names of Bacon's friends and associates found by " squaring " another passage of the Folio, is one which spells out the name " Fulke Greville ".

Those who are in a position to compare the " Quarto " with the " Folio " spelling will, in some instances, discover how the text has been very slightly manipulated to yield an extra Baconian seal. This is noticeable in the passage upon which Ben Jonson was concentrating in his enigmatical poem. He was apparently working on the Folio text, although some of the seals exist in the Quarto text as well. But the Folio text had been made to yield a greater harvest by slight alterations to the spelling.

It is obvious that groups of adjacent letters in a " squared " text which can be made to spell intelligible words if not taken in strict sequence must be numerous. Moreover, unless the same patterns and words reoccur systematically, they may reasonably be put down to accident or chance. But when a great contemporary writer like Ben Jonson publishes a poem in which he openly indicates a number of words which are to be found spelt out in this way, and when most of them refer

to the contemporary poets whom he mentions in the poem, then it seems likely that some definite hint or suggestion was intended. To us there seems to be too much evidence of deliberate intention in Ben Jonson's poem for this to be ascribed to pure chance.

However this is a question upon which the discerning reader must make up his own mind. But first let him recall the universal nature of the Shakespearean drama, and the era in which it was introduced; perhaps the strange insistence on this word "Temples" may then become clear. In England the early Miracle and Morality Plays had given way before the pulpit. The drama, outcast from the religious sanctuaries, had found only a degraded play-house as its refuge. There it was subjected to a despotic censorship which, though not greatly concerned to suppress current bestiality, had interdicted from the performances all vital topics tending to general enlightenment, this being no part of Tudor despotism. Thus it came about that the inward and spiritual purpose behind the English Renaissance was to wear the outward badge of servitude, and to maintain an appearance of "playing to the gallery". It still depended for its life and vitality upon the patronage of the mighty, and on some concessions to the passions of the crowd. So between this Scylla of official disfavour and Charybdis of London's play-house vice, there was some need of a devout and religious approach.

The Shakespearean drama was the chosen field for Bacon's "hunting of Pan", a field for exercising his "Georgics of the Mind"—a deliberate extension of mental experience. In these days we are so conditioned by the great development of imaginative art, the novel, the theatre, the cinema and television, that it is hard to realize the importance of those 36 folio plays to the human mind in days gone by. They sang the song of our present civilization, as it was then known. From ancient Greece, republican and imperial Rome, Egypt, Roman Britain, ancient Scotland, Venetian Cyprus, Renaissance Italy, from the old Danish Court of the 10th century, and from many a battlefield in England and France, all these "examples" are most carefully culled. And behold, they are those very "examples in Civil affairs"* those very "*tableaux* of invention for anger, fear and

shame "* which Bacon had promised to provide, as an integral part of his method of teaching by "lively representation".† Truly this is a "hunting of Pan" which takes us to the verge of Prospero's cell.

The husbandry of the human mind belongs as much to the Temple as to the City. If human characterisation in Shakespeare is often carried to extreme, a *reductio ad absurdum*, it is because it is more than human ; a single cipher may be a walking principle. Here expanded into a gigantic image are those compressed statements of cosmic law in Bacon's essays—ambition, revenge, deformity, justice, faith, love and friendship. Here displayed before the eye is an anatomy of the human self-hood ;

> You go not, till I set you up a glass
> Where you may see the inmost part of you. ‡

The question is whether these plays were simply the business propositions of the bank-side player (who made usury the hobby of his retirement) or whether they were written, revised, twisted and altered from quarto to folio for nearly 30 years by a thwarted, frustrated, altruistic genius. With this in mind let the reader return to that scroll in Westminster Abbey where a finger is pointing to the word TEMPLES and let him then consider the almost religious sense in which the First Folio is dedicated. Unquestionably it is consecrated to something beyond the play-house, beyond pecuniary speculation. Let us therefore do what its Editors exhort us to do in their address to the reader :

> Reade him, therefore ; and againe and againe : And then if you do not like him, surely you are in some manifest danger not to understand him.

This immortal folio requires to be read "in depth" for mystical as well as cryptic reasons. And if we find it savours of Eastcheap or Windsor or Westminster Hall, and that it was offered not with incense but with daily bread, we may justly remember that it was made more precious by being dedicated to TEMPLES. For it was *in that name* that the meanest of things was most humbly consecrated.

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* *Novum Organum* I (127)
† *De Augmentis* II (13) and VI (3)
‡ *Hamlet* III, 4

SCIENTIFIC CRYPTOLOGY EXAMINED

by PIERRE HENRION

(Agregé de l'université)

THESE observations on *The Shakespearean Ciphers Examined* by W. F. and E. S. Friedman reflect only my private views and do not commit the Francis Bacon Society in any way. I hope, however, that they may be of profit to fellow Baconians who are as interested in this strange puzzle as I am. The " Friedman " case exceeds even the " Gallup " case in complexity ; for if we have before us a novel and intriguing work—one in which a great deal of purely destructive and pernicious criticism is always amusingly expressed—we have also, if I may say so, an extremely artful book

Now since it is destructive without being vituperative, and is couched in an easy and good-humoured style, it presents a most interesting psychological problem. To anyone with real cryptological experience it is hard to reconcile the impartiality claimed by the authors with the skill and *legerdemain* by which certain danger-points have been avoided. It is these unexpected manipulations which have led me at times to suspect a " command performance ". Let my readers, however, judge for themselves. My excuse for venturing these criticisms is that I have now been interested in the Bacon problem for 30 years ; for the first 15 in total isolation without reading one line by a Baconian. Then, after meeting another independent investigator, I joined the Society at last as a sort of surrender.

The word " cryptology ", in practice and by derivation, connotes a wider and more flexible science than " cryptography ", the latter being more concerned with technique. I believe a similar distinction is implied, in English, between " radiologist " and " radiographer ". Indeed cryptography, in its most rigid form, can be used as the Friedmans use it, to confound cryptology. The branch then controls the tree and

we find ourselves in a kind of *reductio ad absurdum* in which the intended implications of a symbol, a nod, or a wink, are declared to be invalid by the so-called " scientific " technician. One does not have to be a Freemason to appreciate that a symbol, by its very nature, implies a meaning.

Of course, the enfolded text of a *modern* message in code or cipher has to be precise. But the intended significance of an emblem, a hint, or a suggestion, has to be determined with an eye to theoretical probability. It is not enough, therefore, to declare other people's interpretations to be " invalid " or " subjective ", unless some parallel attempt is made to account for the continual recurrence of certain symbols and arrangements of letters beyond all mathematical probability.

The years spent on these studies, in war and peace, will justify me, I hope, in voicing a mild protest to these authors against what is admittedly a very clever " plant " ; clever not only technically but psychologically. For it will certainly hoodwink classical scholars not versed in cryptology, just as surely as it has already hoodwinked the reviewers of their amusing book. In short, I hope to give the authors acceptable grounds for revising, not their excellent demonstrations, but certain conclusions which appear to me to be unwarrantable. And if with equal good humour the Editors of *Baconiana* will agree to offer space to Colonel and Mrs. Friedman to discuss these points further, I shall be most grateful.

The book has many good points. It is extremely interesting to anyone with practical experience in cipher work. It recognises for instance that, in cases where the use of cryptography is suspected, recourse to cryptographical studies is legitimate and necessary. Those who discard all " cipher stuff " as fantasy and child's play must be content to live in blissful ignorance. Those who run after truth must not be choosers; she does the choosing. In fact she may choose cryptology—as the science of hiding *anything*, *anywhere*, *anyhow*—to hide herself, freely choosing her own brand and style of it. So in tackling a problem we have to accept, not only its technical aspects, but its style, context and the particular standards adopted by those who framed it.

The authors claim that the Biliteral Cipher framed and illustrated by Francis Bacon in his *magnum opus*, the *De Augmentis*, was never used in print, except in the books containing his demonstration. They concede, however, that the Biliteral Cipher is " a good and useful one ", and regret being unable to assert its existence in books of the period, although they once worked with Mrs. Gallup. This is a perfectly genuine opinion, and the upshot is that their book claims to " expose " the fabulous Colonel Fabyan who is said to have " fooled " the famous French expert, General Cartier. But why wait 40 years ? Even I, who knew General Cartier, tried to warn him that years of patient study and team work would be needed to get at the truth of the Gallup decipherments. But the General has long since passed on, and, since dead dogs cannot bite, perhaps I may be forgiven for resenting this retrospective ridicule of my countryman, once a leading cryptologist.

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The Friedmans provide very interesting information on the Gallup case. A good sense of critical discipline is of immense value to all who are inclined to let the imagination run riot—almost an occupational risk in tackling the Baconian mysteries. But let us be fair, and bear in mind that the Editors of *Baconiana* and most members of the Society have always reserved their opinion on the Gallup decipherments. We have to steer a middle course between " over-imagination " and " over-scientism". This arduous and noble struggle, commended as it was by Bacon himself, makes our study one of the most dangerously mind-whetting instruments that a student can find.

On the temptations of over-imagination or over-scientism none of us can boast of never erring. What we can do is to reduce our errors (either way) to so low a percentage that they cannot seriously affect the validity and convincing power of what we propose. The Friedman book certainly clears the ground of dubious systems and fantasies, many of which have long been rejected by most Baconians. It exposes the divagations of numerology ; but here again let us not lapse into " scientism." Silly or not, devoid or not of their

proverbial safety, *numbers have been used*, as even the Friedmans do not deny. And if we are wary enough, and study well enough the psychology and environment of their users, they can become guides to more satisfying treasure-troves. When a certain numerological trick, in a certain context of special circumstances, leads me almost invariably to another "trick"—more deeply hidden, and with enough practical probability—I may still despise numerology as much as do the Friedmans, but I must shamelessly avail myself of it. Predictability is the acid test of the experimental method.

An outstanding scholar, Professor Romaine Newbold, Dean of the graduate school of Pennsylvania University, spent his latter years in deciphering Roger Bacon's cipher in the Voynich MS. The Friedmans dismiss his solution, and also that of Professor Leonell Strong, of Yale University, as being purely "subjective". But, although the Voynich MS. is admitted to to be a cryptogram from beginning to end, an alternative solution is not apparently on offer. The resources of the Folger Library, the F.B.I., modern electronic computers, etc., apparently do not suffice.

Chapter II, "Cryptology as a Science", lays down excellent principles within the limited sphere defined. What it says has always been gospel and law to me when dealing with *modern* cryptography. The message must be obtained from the cryptogram unambiguously—thanks to the inflexibility of the rules of modern encipherment. The process must be such that several encipherers and decipherers, all in possession of the conventions, must obtain from the same cryptogram the same clear message. Otherwise the processes would be neither valid nor unique. To achieve this the staff is given a uniform training, using methods which have been evolved from the same general principles and rendered self-evident from habit, and which, of course, run considerable risks of becoming unconscious assumptions in the case of pure technicians. This means that even the ablest of them may become blind to a skilfully generalised cryptology. A good analogy would be that of a rigid Euclidean geometrician who, when confronted with a problem in relativity, declines to go beyond Euclid's gratuitous postulates.

Conventional geometry is quite good enough for current purposes (*i.e.* for engineering, surveying, terrestrial navigation, etc.) and in exactly the same way a rigid and codified modern cryptography is quite good enough for business or military purposes. It also requires great intelligence and patient training on the part of the cryptanalysts. The Friedmans are to be greatly congratulated on cracking the Japanese Purple Code ; but this achievement must not be allowed to confuse the issue or dull the critical sense of their readers. They probably did not crack it by pure cryptanalysis alone ; a judicious use of the imagination cannot be ruled out. Knowledge of the other party's previous systems and technical habits and of similar cryptographic machines must have helped enormously.

The professional status of a modern cryptographer does not necessarily fit him to pass final judgment on the subtle cryptology of a secret society of the past. A rigid belief in unambiguity and inflexibility (if he really does hold these beliefs, which is open to doubt), would make him practically speaking blind to the signposts and seals of a past age. In contrast, the day-to-day cryptographical requirements of a vast modern administration present a very different problem.

The men of the past were seldom so restricted as to be governed by inflexible rules. The idea of a " rigorous science " was then in its infancy. The scientific discussions of Bacon, Pascal and Descartes—men in the vanguard of progress—are now absurdly crude to us. And yet, their notions of cryptography could be rigorous when they chose ; remember Bacon and Vigenère, whose table, mechanically or electronically glorified, is still in favour ! Again the time factor often did not count for them ; for it was not necessary to reach an unambiguous solution within a few hours or minutes. They practised cryptology as a more leisurely *art*, as we practise cryptic cross-words. I have seen cryptic documents which represent days of ingenuity, perfect craftsmanship and a most decided artistic genius. Moreover, not being restricted to the use of phonetics or the dots and dashes of the Morse code, they resorted to all kinds of media for transmission—even gesture and intonation. Most important of all these men of the past knew the value of " partial

indetermination ". The upshot was that they escaped detection, in some cases for ever, and even in the event of detection nothing could be *proved* against them. If the message fell into the hands of the enemy, the bearer (after standing a reasonable dose of " grilling ") would allow an innocent or slightly incriminating piece of evidence, to be dragged out of him—something that an adroit use of " partial indetermination " will always allow a skilful artist to plant. I know of a hand-written message in which seven concealed messages run at the same time with various degrees of hermeticity. Validity of the rigid kind is here at a discount ! Remember Bacon's own words from the *De Augmentis* :

> " Now if the messenger be strictly examined concerning the Cipher, let him present the Alphabet of Non-significants for true letters, but the Alphabet of true letters for Non-significants : by this Art the Examiner, falling upon the exterior letter and finding it probable, shall suspect nothing of the interior letter." *

Are we to suppose that Francis Bacon did not profit by his own advice ? Could he not have sometimes presented " Non-significants " in his demonstrations ? I once knew a great exponent of cryptography, who came to the triumphant conclusion that " a cryptogram is a mathematical function ". Now, in respect of modern cryptography this is so true that the techniques have become far too vulnerable to crypto-analysis. To avoid this risk one must have recourse to " aleatory " elements (*i.e.* those obtained by pure chance) to baffle the mathematician and logician. Two clever children can sometimes exchange atrociously " invalid " messages under the very nose of a cryptologist who is absorbed in his mathematical functions !

If I had signed this article "Paul Hassa", some people (and maybe the Friedmans) would soon have known who I was. But purely scientific cryptanalysts would have been baffled. And in seeing that highly unscientific ghost of my former self printed under the title, I would have experienced a queer pleasure, silly

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* Quoted by Colonel Friedman on page 29, but in the *Spedding translation.*

but satisfying, childish, bordering on the mystic. At least I suppose so, since many distinguished V.I.P.s of the past have relished the same joke, *regardless of flexibility* !

* * * * * *

The Shakespearean plays are a labyrinth of indeterminate cryptology which, however " invalid " it may appear by modern standards, was deliberately moulded in this form. Even for the initiate, some of the " whispers " may now have become lost. But in a stream of " partial indetermination " the original Grand Chief, who was wise and far-sighted, has left banks and shoals of solid certainty for those who, even though laymen, have cultivated a good sense of practical probability. To the mathematical and scientific purist all these whispers will be " invalid " and will arouse no suspicion. And if one day the suspicions of less scientific folk are aroused, the scientific purist can be most usefully employed. He can be engaged to prove and demonstrate that there is no certainty anywhere !

The most irritating form of partial indetermination is the anagram. Scientific cryptographers simply hate them. Indeed the solutions are so apt to be flexible that one wonders how the Friedmans could propose so lightly, and with such assurance, a solution to an alleged anagram on page 163. Thoroughly unscientific. Where is the mathematical function ? But they are perfectly right ; anagrams have been used ; and far from denying this they give good specimens from Huygens and Galileo. The Friedmans are compelled to admit these because their authors confessed ; but they also very rightly show how ambiguous they are. Let me show, with equal justice, how excellent thay are in quite another way, being so completely adapted to the purpose. And this surely is as good a criterion as so-called cryptographical validity.

Galileo wants to be able to show with sufficient convincing power (*a*) that he has made a discovery at a certain date (*b*) to show it any time he chooses (*c*) only if he chooses. He writes his statement in flowery language, clear enough but avoiding tell-tale words (*e.g.* " mother of love " for the planet Venus, etc.). With some ingenuity he anagrams all this into an innocent

looking message and deposits it with a friend who can testify to the date of reception. History shows that Galileo wins on all scores. If he had subsequently found that he was mistaken in his discovery, nobody need ever have known of his blunder, not even the expert cryptanalysts of today ! If anyone had extracted the message at the time, Galileo could have pooh-poohed them and likened them to mere " Baconians " (if the species had then existed). In fact, Galileo chose to put his claim forward to posterity, and nobody can now doubt his thoroughly " unscientific " cryptogram. Of course, there is no " proof " except a good one—*the eating* of the pudding ! You simply have " context " and " adaptation to a purpose ", which make quite as palatable a pudding as " intrinsic validity ".

* * * * * *

Let us now look at another of these " foolish " anagrams, and compare it with the Galileo and Huygens specimens which are granted by the Friedmans. But first let me say a word on the general context.

There is plenty of documentary evidence on record to make the private life of the Virgin Queen an intriguing historical question. The gentleman in Norfolk who had his ears cut off for talking scandal, the woman in Kent who was burnt alive, together with that extraordinary change in the law of succession, combine to suggest that there is seldom smoke without fire. My own views on the Royal Birth Theory may not be acceptable to all Baconians, but they are supported by historical evidence which has been advanced in *Baconiana* Nos. 153, 154 and 155 (" Secret of State ", " Van den Werff's Portrait of Elizabeth ", and " The First Life of Bacon to be printed in Europe "). We need not depend on Mrs. Gallup's decipherments, since there is corroboration of a more convincing, if less determinate, kind. For instance, on page 54 of Orozco's *Emblemes Morales* (1610, if we believe the title page) there appears a she-wolf suckling her cub under a challenging motto

Dubio Genitore Creatus
(born of an uncertain father).

The Spanish verse speaks of a boy in despair, so anxious is he to recognise his own father. There are 36,691,730,529,322,176 possible permutations of the letters of the motto, an ocean of possibilities for the imaginative net-caster. But the number of perfect anagrams that will make sense in passable Latin is not great ; and the number that will answer the challenge and relieve the boy of the shame of doubtful parentage will be even smaller. One of these happens to be

Tudori Gentis Vere Baco
(Baco is really of the Tudor family).

Quite unscientific I agree, notwithstanding the internal qualities of an apt answer to the challenge in the cover text, disclosing a secret, etc., etc.. But now for the all-important context. On the margin appears a figure of Pallas, the spear-shaking goddess with helmet (of invisibility), complete with a " crown " and the serpent of ignorance. Possibly somewhat unconventional in design, the serpent in this case forming a dead, floppy girdle around her waist ; but there is more still. On her chest and face the three syllables VE RU LAM* are clearly distinguishable. She looks the other way, but her extended index finger points backward to the motto. Now is it really insane to interpret that the motto itself " kills ignorance "? There are other marginal Pallas's in this book, and always accompanied by secret seals which show a positional consistency and perseverance rarely associated with the notion of pure chance. Indeed the sum total of these manipulations is so strong a challenge to " chance " that the book could not be published in England. Thus we are brought back to the general context of the time, that curious hush-hush law of succession of Elizabeth I, which the poor old Privy Council were compelled to swallow at her command, crazily confirming in 1571 that the heir to the throne was henceforth to be the " natural issue " of her body (good gracious !) and changing the Act of 1559

* Let not the reader be fooled by the mention of Verulam in a 1610 book. Internal evidence confirms that the title-page was outrageously ante-dated. Indeed the Gorhambury man seems also to have been Verulam to his " brethren " long before he became a baron of that name.

which had recognized the succession (in the future tense too !) of " the heirs of your body lawfully to be begotten ". What can have possessed the Virgin Queen ?

And how would you, dear reader, interpret all these suspicious facts converging to one common conclusion, and otherwise unintelligible ? You can, of course, discreetly look the other way and ignore them : maybe that is wisest. But Orozco's emblem book, the law of succession, and the burning alive of a gossip can hardly be described as " subjective " ! A long experience of cryptograms leads me to grant to the *Dubio Genitore* anagram at least as much credence and convincing power as to the Galileo one, and much more " validity " than the Huygens specimen. Indeed I will go further : if the Bacon-Tudor-Shake-Speare identification (which in those days with minor qualifications must have been an open secret) is not yet recognized by the public, I contend that this is because of the powerful vested interests which are now engaged in " moulding public opinion ", to use the very words of our authors.

* * * * * *

The Stratford myth thrives on the very poor sense of practical probability which has now become a noticeable feature in cultured circles. This sense, in my opinion, is becoming deadened by a blind insistence on over-simplified scientific training, which suggests the answers when propounding the problems. Every year, in my work, I find more reason to deplore the poor all-round judgment exhibited by the naturally intelligent but too " scientifically " moulded students whom I examine in a far less rigidly scientific subject. I admire those naval officers whose superhuman responsibilities we sense and share when reading some of Forester's books. One false move and 1,000 lives pay for the wrong answer to the problem.

What is inflexible " validity " then ? The shortest way to a watery grave ? Trigonometry at lightning speed (for the naval combatant must also be a scientist) coupled with a mental integration of all possible context in all fields—perhaps even including those games of " poker "—and then he may foresee the moves of the other clever chap in the same treacherous gulf

of ocean. This is the sense of probability and predictability that only training can foster and mature. I had rather be in the ship of an old fox than in that of the trigonometry professor !

Total infallibility can never be reached ; but when you get into the 95 per cent. zone in any given line, you may rely on your own judgment, provided you are ready to revise that judgment whenever new data emerge. In the field of scientific cryptography the Friedmans are in that zone. If they reach it in generalised cryptology as well, they will have no doubt about the Shakespeare case. They will then enjoy the late Dr. W. S. Melsome's book—*The Bacon-Shakespeare Anatomy*—as it deserves. My own very practical training in detection of " cribbing " supports my conviction that a very sufficient proportion of what Dr. Melsome quotes comes from the same workshop, and most of it from the same brain.

* * * * * *

The Shakespeare case, in my opinion, is child's play to the Gallup case. Certainly in the present state of our knowledge the Gallup decipherment cannot be pronounced technically valid. But that does not do away with the problem. The lady was too well known to friends in England and America, who would vouch for her integrity as generously as do the Friedmans themselves. And what form of auto-suggestion could possibly have led her, against her own desire, to find the " argument " of the Odyssey enciphered in Burton's *Anatomy of Melancholy*, when she was really looking for something sensational about Bacon or Shakespeare ?

As soon as World War I was over, after consultation with friends, I tackled General Cartier, gave him sufficient grounds to show that he had been rushed into giving a premature opinion and offered to thrash the matter out with him. I submitted that some years of patient teamwork—at considerable expense—would be necessary to get at the truth, or at least to emerge from that irritating " case not proven " state. I proposed to him a number of working hypotheses (some of them now ruled out by the information given by the Friedmans). The General said that his papers had been destroyed at Royan and that he

wished to drop the matter. What I still cannot understand is how the Friedmans could have been in such close contact with Mrs. Gallup for so long without getting a more precise idea of her real or apparent auto-suggestiveness. She was evidently quite sincere and above-board, and not to be suspected of prestidigitation or illusionism ! She must have been a marvellous woman. The Biliteral Cipher is just as much a test of the powers of the eye as it is of cryptographical skill. You have to be able to distinguish minute differences in the forms of letters, differences which may be far more subtle and irregular than those which the modern printer recognises at a glance between the various type-faces, " garamond ", " times ", " caslon ", " jubilee ", etc.. Now Mrs. Gallup eventually sacrificed her eyesight in pursuing her work ; so the failure of purely cryptographic technicians to corroborate it does not prove that this will never be done, nor does it disprove the literary and historical evidence which has been so discreetly ignored. It is easy to avoid mentioning *Manes Verulamiani** under the pretence that one is interested only in cryptography—a very convenient disclaimer. But thanks to Bacon himself and to his contemporaries, the truth cannot escape the deadly close-meshed net which all these data constitute.

My own appearance in the Friedman pillory is apparently due to a portrait of Gustavus Selenus which I published in *Baconiana* No. 136 and which, to correct a mysterious erasure of the marks, had to be reprinted in *Baconiana* No. 137. I suggested that it was a Rosicrucian portrait of Bacon and showed many peculiarities, internal and external, in favour of this hypothesis. One of these was a positive orgy of 33 counts (Bacon in Simple Cipher) many being indicated by clear marks on the interjected " I's " (" myself " in the parlance of these mysteries). In rejecting the use of the Simple Cipher by Bacon and others, my judges should remember the clear indications given in Tennyson's *Baconiana* 1679 (pages 84 to 89), and also

* Thirty-two elegies to the memory of Francis Bacon, printed a few months after his death in 1626 by John Haviland. Bacon is lamented as a supreme poet, second to none. Reprinted in facsimile and edited by W. G. C. Gundry in 1950.

in the *Repertorie of Records* 1631—a rare and most interesting book. They should also remember such whispers as these:

> " Though in thy stores account *I one* must be."
> (Sonnet 136.)
>
> "Among a number *One* is reckoned *none*
> Then in the number let *ME* pass untold."
> (*Ibid.*).
>
> " Why write *I* still all *ONE* ever the same."
> (Sonnet 76.)
>
> " . . . . *mine* being *one*
> May stand in number though in reckoning none."
> (*Romeo and Juliet* I. (2)).
>
> " Canst thou hold up thy heavy *eyes* a-while."
> (*Julius Caesar* IV. (3)).
>
> (followed by ten consecutive lines beginning with the letter " I ").

There is an identification, recognised in cipher work, between the number " 1 ", the letter " I ", and sometimes the word " eye ". Other " tricks " about this particular portrait of Gustavus Selenus are shown in Melvrau's *Défense de Will.* For myself, having been suspected by members of the " Fraternity " of committing an indiscretion, I now solemnly declare that I found the portrait in the *Bibliothèque Nationale*, where anyone can still see it.

It is good practical politics, when you cannot denounce an hypothesis as false, to confound it with another which is more doubtful. This tactic is applied to my friend, the late Melvrau—who was a much more dangerous man than myself. He is quoted in the index as a " follower of Cuningham ". In the text he is presented as one of the " kindred spirits " and " imitators " of Cuningham. The poor Melvrau would hardly have been flattered, never having read a line of Cuningham ! He believed only in the study of original documents. The Friedmans declare that these supposed signatures appear in books " neither written by Bacon nor by Bacon-as-Shakespeare ". To me this is just another way of begging the question. The signatures exist, and since they were originally devised to give proof of authenticity (and are still considered to do so by the initiates of a certain Order) I must insist. In Melvrau's work, taken from

Shakespearian plays (title-pages of Folios and Quartos : beginnings and ends of plays, etc.), I note 11 groups of seals in the BACON-TUDOR-SHAKE-SPEAR category. They appear in 22 illustrations, while five others concern the preliminaries of the Folio. Let us now examine the Friedman tactics at this rather awkward pass. They cannot say that these seals are imaginary because some people know for certain (as part of the tradition of their craft) that they have actually been used, and were still used in the middle of the 20th century ! So they draw a red herring across the trail by dealing at length with the inventor of a silly system, and by declaring that Melvrau is his imitator ! By these means the unsuspicious reader is led to believe that the Melvrau system is equally valueless. And in case he remains too interested in these damning seals, the next move is to suggest that they do not concern the Bacon-Shakespeare controversy at all. And if the obstinate reader still persists another move is to give no references. Let me give them.

The book is *Défense de Will* Librarie Vincent-Freal, 4, rue des Beaux-Arts, Paris. I can lend copies to any reader of *Baconiana* who is interested (my address is : Lycée Hoche, Versailles). I was instructed by Melvrau to prepare an English adaptation, but this now seems to be out of the question. However, Melvrau left documents to friends, with permission to publish at their discretion. In one of those which I possess there is enough to convince a tribunal, for its probability can easily be measured. There is one signature which, in its particular circumstances has one chance out of 20 of being accidental. Poor probability, I agree, but things become interesting when the suspected phenomenon starts up a second, and the second starts up a third and so on, until " accident " has less than one chance in a billion and " voluntary human design " all the remainder. And in addition to all this there is a clear and challenging instruction in the Shakespearean outward text. Other signs of skilful manipulation in the Friedman book are as follows : we are conclusively shown that rough paper, bad ink, soft types and printing practices made the practical application of the Biliteral Cipher impossible. And we are expected to hold to this opinion even when the Friedmans disclose that

they themselves have used the biformed alphabet based on one designed by Francisco Lucas in 1577 l (see page 265). In this alphabet, the difference between a-forms and b-forms in many types (lower-case " o " for instance) are so small that the least smudging of ink would make a cryptogram hopeless. Lucas was perhaps a precursor, and prepared his alphabets against centuries to come when printing became better . . . But how did he manage to print his own alphabets with 16th century ink and paper ? And since he did so, why should not others do the same ?

* * * * * *

Surely it must be an empty triumph for the inflexible positivist to " prove " that a semi-acrostic system (b . . con . . a . . f . . or ac . . b . . of . ., etc., occurring at the beginning of successive lines) is scientifically invalid. Of course the validity or otherwise depends entirely on the ratio of these occurrences to the mathematical probability. We are told that Walter Conrad Arensberg became infatuated with this system, and it is quite possible that he over-stepped the mark in his decipherments. Now, if the object is simply to prove that semi-acrostics occur by chance, it would be a clever move to find one that had occurred by chance in Arensberg's book ; though it would have been quite possible for Arensberg to have demonstrated his system in the very lines in which he explained it, and quite consistent with the psychology of a man of his turn of mind. So another good counter-move by experts wanting to " prove " that the semi-acrostic signature is always due to chance and never premeditated would be to slip in one of these tricks in the very lines which explain their accidental nature. The deeply interested reader may then come across a very impressive example that such an " accident " may happen anywhere.

Now I notice that the Friedmans devote a whole chapter of 18 pages to Arensberg (too much honour, really—as we say in French!). But I notice, too, that a semi-acrostic " accident " takes place once only in the text of these 18 pages, at page 149, lines 9-11 (c. of, ab F. Baco), and this comes just when they say, " It is relatively easy to find his brand of signature in any book whatever, but this proves nothing about its authorship."

Congratulations ! All right ; I will agree with the Friedmans that the acrostic system is " inadequate " according to modern cipher requirements. But my long experience with generalised cryptology makes it clear to me that this is an intentional " plant " and therefore to my mind a little unfair.

The real method of investigation in the case of semi-acrostics is to select *beforehand* a test word composed of letters of similar global frequency, such as psoam (which makes no sense, so all the better) and see how many times the combination appeared accidentally as anagrammatic semi-acrostics in, say, 5,000 pages in connection with a given set of clues also *decided in advance.*

As an example of chance giving a double semi-acrostic, the Friedmans quote six lines of Matthew Arnold's *Merope* giving c,no, a.B,a,con (an almost symmetrical diptych). But was this pure chance ? Here are the lines :

> *C*laims ever hostile else, and set thy son—
> *NO* more an exile fed on empty hopes,
> *A*nd to an unsubstantial title heir,
> *B*ut prince adopted by the will of power,
> *A*nd future king—before this people's eyes.
> *CON* sider him ! Consider not old hates !

The authors conveniently ignore the obvious " clues " in the text : an exile fed on empty hopes—an unsubstantial title heir—prince adopted by the will of power—and future king in this people's eyes—consider him, consider not old hates . . . Who is the heir to an unsubstantial title ? What queenly mother fed him on empty hopes ? Who is the prince adopted by the " WILL of power " ? What is that WILL of power ? What mysterious tribe is " this people " whose eyes " consider " him ? What are these old hates to be forgotten ? Indeed, whatever solution we adopt, there are other things in those lines which make one stop suddenly to " CONsider him ! " and to reflect that chance plays no part in this excellent acrostic palindrome.

Probably our authors wanted a quiet laugh at their readers, otherwise their sense of practical probability would have made them flee this double acrostic like the plague ; for the possibility of this combination occurring by chance is remote indeed.

Brother Matthew (or shall I say Brother Merope?) after performing his little *pas de danse*, one step forward, five steps backwards—as some present day dancing-masters will still understand—was doing his little ritual observance, bowing low in the direction of Mecca ; and it is no wonder that he was able to work such wonders, since Oxford professors of poetry are sometimes among the happy few at the top of the "star-ypointed" pyramid. Silly if you wish, but the semi-acrostic system has been used.

Constantly reoccurring "whispers" of this peculiar kind are bound to influence one's assessment of the probabilities. May I give a rather sketchy demonstration. According to the Friedmans, the chances of finding initial B's + A's in successive lines in 100,000 lines of poetry are 633. Now there is one word beginning in CON for seven in C in a current English dictionary. If the frequency for initial C is accepted as 2.41 per cent., let us assume that for CON is one seventh or 0.34 per cent. So the chances of getting initial B + A + CON would be 0.34 per cent. of 633, or 2.1522 in 100,000 lines. If, in addition you are prepared to accept anagrams of this conjunction (six permutations possible), you can have six times more or 13 chances of finding the three elements B, A, CON in any order at the beginning of lines. Let us say 20 to be on the safe side.

Let us now take Melvrau's book. Among the 80 different documents reproduced, there are 11 title-pages of books not officially by Bacon but suspected to be by him. They total 132 lines of text. The text of Melvrau's book shows that obviously no illustration has been chosen to show semi-acrostics, but for very much more interesting reasons. However, three of these do appear. One, giving B A Q O, will be passed over. The two remaining, exactly of the type we discuss, are in title-pages reproduced for other reasons [*e.g.* the secret seals of "Fraternities" appearing in specially interesting title-pages, such as the *Richard II* quarto of 1597, and the 1611 Bible]. Thus the two appearances of semi-acrostics in 132 lines of non-poetical text correspond to 1,515 appearances in 100,000 lines. How does that compare with the 20 attributable to chance ? Must we conclude that chance has a special predilection for title-pages ?

We are still not dealing with numbers vast enough for a strict conclusion, at least on the ground of pure mathematical probability. But we could (if the job was congenial !) take all extant title-pages of books suspected by Baconians of belonging to the Shakespeare set-up. They are a goodly number if we include the successive contemporary editions. That would give a sufficient number of lines of text. We could then count the B + A + CON semi-acrostics and compare the result with that from a " test " combination H + I + DIS (one word in DIS– for seven in D–) for which the mathematical probability would be similar, if anyone feels like doing the job ! Getting at Truth requires patience and experiment, and the weak semi-acrostic " system " may not be worth the trouble. Global contextual study would be more profitable ; however the lesson stays. The frequency of these semi-acrostics can be shown mathematically to exceed by many times those which would occur " accidentally ".

If you ever feel the urge to check up on all this and to judge the frequency of " coincidences " in the world of unarranged facts, *i.e.* in your anthologies of poetry (as the Friedmans astutely suggest)—be careful ! Choose beforehand combinations of the PSOAM or HIDIS type. It will be safer. Much of the best English poetry together with some of the poorest has been written under the concealed patronage of the " Fraternity ", and you may find your old friend Free—Francis—Tudor—" W.H. " or " T.T. ", cropping up rather too often. Mind how you elbow your way through the crowd of coincidences !

* * * * * *

In conclusion I must regretfully expose a trick of intellectual " legerdemain " which is far-reaching. To cure Baconians of their " perverted " sense of " probability " the authors point out, that, every time you are dealt a hand at bridge you " see an arrangement which has a mathematical probability of four in 635,013,559,660 ; and this happens every time a hand is dealt ". You will be less inclined to believe in Baconian " coincidences " when you know that an afternoon at bridge is a succession of marvels ! (Of course, if we were dealt exactly

the same hand twice in succession, good " horse-sense " would enable us to recognise a marvel.)

The irrelevance of this argument may perhaps be appreciated by studying the parable of the ruthless Eastern Potentate and his captive, the famous scientist Sir Prymary Mynde. " Here are a dozen packs of cards " says the Potentate. " Each time I deal a hand you must tell me under penalty of death, whether or not I have packed the cards." The first pack immediately yields 13 cards of the same suit. Sir Prymary, suppressing a smile, decides the pack has been tricked. The Potentate nods and the ordeal continues. But as the hands follow each other, the " coincidences " are less and less apparent, such as 4, 3, and 2 of each suit and one ace to add up to 13. Now Sir Prymary begins to sweat. A curtain is drawn aside, disclosing an array of scimitars. Another hand makes one complete sequence from deuce to ace but of cards of various suits. With the perspicuity of the human mind at bay, Sir Prymary suddenly notices that 2, 3 and 4 are clubs ; 5, 6 and 7 are diamonds in the alphabetical order of the suits. Chance or design ? Unquestionably the combinations are beginning to show lower and lower probability of design. But at what point—and this is all-important to a cryptologist—will Sir Prymary have to say the words "pure chance " to save his precious neck ?

It is no wonder that Baconians are sometimes in need of a sedative, for that is the eternal problem which confronts them in the real relative meaning of the word " scientific ". This is the problem which, after years of relative scientific doubt, I now know for sure has been set by the Shake-speare people, except that they worked the other way round. First low probability tricks which require a lot of contextual study to find, confirm or reject. Then, in order to reach the high probability ones that can set your mind at rest, you have to go deeper (becoming more " subjective " our judges might say, but it is not so) to extremely " objective " systems which can be checked, and can only be checked by the genuine experimental method. And this is quite distinct, from those over-simplified methods (Friedman, page 286, lines 5-18) which are valid only in the yes-no, right-wrong systems of modern codified cryptography.

The authors of this most diverting book would seem to pretend ignorance of the tricking of the time factor or of the exploitation of real coincidence; but I am not deceived. The *shake . . . spear* in the 46th psalm (to be found already in the year 1539), the novel uses of the " long word " in *Love's Labour's Lost*, in the Northumberland MS., and in Bacon's private papers, etc.—notwithstanding its previous appearances in literature—are not to be dismissed so lightly. They are words to the wise, but not to the victims of " scientism ".

Our forebears were not so simple as to confide all their " subtle shining secrecies " to a top-secret, mathematically exact and unique book of codes and ciphers. A nod, a whisper, a wink or perhaps a few lines of verse in a treatise on mathematics would often be safer. In *Baconiana* No. 157 " Jacobite " has shown that Bacon's Biliteral Cipher provides a superb and rigidly accurate demonstration of the Binary Scale now used in modern electronic computers. In closing this article let me now remind you of those six lines of verse in passable Latin which are dragged in with superb irrelevance in the early editions of Napier's *Logarithms* (Edinburgh, 1614, and Lyons, 1620).

" Buchanane tibi Neperum adscisce sodalem,
Floreat et nostris SCOTIA nostra viris :
Nam velut ad Summum culmen perducta Poesis
In te stat, nec quo progrediatur habet :
Sic etiam ad summum est culmen perducta Mathesis,
Inque hoc stat, nec quo progrediatur habet."

The acrostic which appears in reverse in the initial letters above is not advanced as a " proof ". It is not even " unique ". But there are *only* six lines of verse and each initial is used only once, and without change of order ; very different in degree to the so-called " accidental " acrostics of Arensberg and Friedman. Partial indetermination, however, is an essential part of this method, and if the reader will turn to page 58 of Napier's book he will find the first Sine (0° 0′) is computed as 1. Or as Shakes-speare has it :

" . . . mine being *one*
May stand in number though in reckoning none."

" Why write I still all ONE ever the same
And keep invention in a noted weed."

Perhaps therefore this is as good a way as any of signing off this article—with a nod and a wink to the Fraternity—leaving those who will to calculate the probabilities . . .

"BF NISI"

or

"I SIN F.B."

THE MYSTERY OF "HONORIFICABILITUDINITATIBUS"

By R. L. Eagle

In my possession is a fragment from a very old black-letter Latin book which The British Museum has identified as being the lower portion of a leaf from a Latin Bible printed at Nuremberg by Anton Koberger in 1497. But of far greater interest are the manuscript jottings at the foot of this fragment. The fact that they are upside down compared with the printed matter shows that the fragment was not part of the Bible when they were written, for it is most improbable that a large book would be inverted on the penman's desk or table. A scrap of paper to which no value was attached would be used just as it presented itself. The fragment contains the commentary on the Song of Songs. On this, in a careful and clear hand, has been written :

honorificabilitudinitatibus
honorificability
confection
qualification
G.G.*

There is also a name which might be Goodman or Goodrich. In the margin on the right is "ffor if you" and the name "Mary" twice. As for the long word which, as is generally known, appears in *Love's Labour's Lost* (v-1) as a jest, it seems to have been a favourite for trying out new quills. In a slightly abbreviated form it was written on the cover of the Northumberland Manuscript about 1597 by a scrivener making several Bacon and Shakespeare memoranda. In his "Variorum" edition of *Love's Labour's Lost*, Furness says, "I have seen it in an Exchequer record, apparently in a hand of the reign of Henry VI, and it may be seen with some additional syllables,

* See page 29.

scribbled on one of the leaves of a MS. in the Harleian Library, No. 6,113."

It is found as early as 1286 in the *Catholicon* of Johannes de Janua (or Giovanni da Genova). The *Catholicon* was first printed in 1460. Next, we have it in Dante's *De Vulgari Eloquio*, written about the end of the 13th century. There are probably other works published on the Continent in which it appears. It is to be found in *A Complaynt of Scotland* (1548) ; Nashe's *Lenten Stuffe* (1599) which was a year after the publication of the Shakespeare play. Nashe uses it jestingly. So does Marston in his *Dutch Courtezan* (1605) and Beaumont and Fletcher in *The Mad Lover* (1619). It appears to have become a kind of " catch word " or " tongue-twister " among the intellectuals of the time. It is an abstract of honorificare, and meant, in the nominative, the state of being loaded with honours.

" Confection " and " qualification " were both rare words when they were written on the fragment in about 1600. Both only occur once in Shakespeare. The former is in *Cymbeline*, meaning a drug or compound, and the latter in *Othello*, in the sense of appeasement or abatement. " Confection " is derived from " confectionarius "—an apothecary. It is curious that " G.G. " (or whoever the writer may have been) should have been interested in these particular words. *Othello* was first printed in 1622, and *Cymbeline* in 1623.

The fragment is now reproduced in the hope that the handwriting may be identified. It has recently been submitted to and photographed by, The Folger Shakespeare Library, Washington.

THE NORTHUMBERLAND MS., THE PROMUS, AND THE LONG WORD

By M.P.

In the British Museum, seldom noticed, are two unique Elizabethan manuscripts; one is the "Northumberland" MS., which originally contained two Shakespearean plays and still contains works by Bacon; the other is the "Promus" which is in Bacon's handwriting, was once his notebook, and has been aptly referred to as Hamlet's notebook! Together they bring into strange conjunction the names and writings of "William Shakespeare" and Francis Bacon, neither of whom mentioned the other, and of whose personal association no record has come to light.

That Will Shakespere, the actor, does not once mention Bacon conforms with the astonishing fact that he mentions no one, not having written a single letter, so far as we know, that was thought worth preserving. But there must be a very different reason for Bacon's studied silence. The truth is—as Nietzche once put it—we don't know nearly enough about him; not even with that mass of carefully "edited" correspondence in the Lambeth Palace Library. One recalls those odd lines addressed to him in 1620 by Ben Jonson . . .

> The fire, the wine, the men! and in the midst,
> Thou stands't as if some Mysterie thou didst!

Was there some mystery about Francis Bacon? Was he perhaps a member of a secret society? Shelley, it must be remembered, regarded him as the greatest philosopher-poet since Plato.* And at Gray's Inn Bacon was a founder member of the Order of the Helmet, symbolizing "invisibility", and dedicated to Pallas-Athene, the Shaker of the Spear.† A coinci-

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* Translator's preface to *The Banquet;* Percy Bysshe Shelley.

† See *Francis Bacon and his Times* (Spedding, 1878) page 142; Gray's Inn Revels. Nichols' *Progresses of Queen Elizabeth.*

dence possibly, but a significant prelude to the curiously hyphenated version of the name " Shake-Speare " which was soon to appear on the title-pages of certain plays, and on every page of the first edition of the Sonnets.

Bacon was intensely interested in theatricals, and had *written* and produced dramatic entertainments at Gray's Inn. He was even scolded by his mother, Lady Anne, for " mumming and masking and sinfully revelling " ! How could he have helped knowing about " Shake-Speare " ? Our national drama was then in the making, and famous plays were being written and " released " at intervals throughout his adult life. Bacon, in fact, was almost called upon to refer to these in his remarks on the uses and abuses of " stage-plays ", yet he utters not a word about them. His silence is curious to say the least of it, and in the absence of a single Shakespearean manuscript or letter, the survival of two Baconian documents connected with the writings of the Bard, must surely be of value to the true historian.

It is idle to assume that the two foremost writers of the day, both interested in the theatre, could have lived in Elizabethan London in complete ignorance of each other. And it is amusing to note that whenever any evidence of mutual interest or association does come to light, it is usually " played down " or conveniently forgotten. However, the Northumberland MS. has not escaped the notice of Colonel and Mrs. Friedman, in their most interesting book, *The Shakespearean Ciphers Examined.* In fact, they have deemed its cover page worth reproducing in facsimile. As expert cryptographers, their principal concern here is to demonstrate the weakness of the anagrammatic method in extracting complete messages from the long word. With this we would entirely agree, but we see no reason why they should depreciate the value of the manuscript from the historical aspect. It is not, as Colonel Friedman calls it, a " set of scribbled notes ". Even in its present condition there are still 88 folio pages of careful copy-hand script, besides the cover and list of contents showing that once there was a good deal more, not only from Bacon's pen but from Shake-Speare's too.

Before going further we will now mention briefly the other manuscript. During the years prior to 1594 this was Francis

Bacon's notebook—in modern parlance his "gag-book". It is called *The Promus of Formularies and Elegancies*, and in it he made careful and methodical lists in his own hand of striking phrases and "gags", a considerable number of which appeared later in the Shakespeare Plays and a smaller number in his own acknowledged works. It seems, therefore, to have been chiefly compiled for dramatic use and speech-making. It records (*inter alia*) a rather peculiar phrase "numbering not weighing" which seems to have been turned rather pointedly in the address to the reader in the first Shakespeare Folio of 1623 :

> "From the most able to him that can but spell; there you are number'd. We had rather you were weighd."

This somewhat bizarre observation appears to have a cryptic aspect which will be the subject of an important new article in *Baconiana*. The parallel was recently brought to my notice by Ewen MacDuff, having apparently escaped previous editors of the *Promus* manuscript.

It is hardly possible to do adequate justice here to this document. It provides a most valuable commentary on Bacon's methods, the importance he attached to words and phrases, and the trouble he was prepared to take in coining new forms of expression. He was far ahead of his time in appreciating the ever growing power of slogans, and how the germ of an idea can be made to control great events. The platonic nature of both Bacon's and Shakespeare's writings is too well known to need further emphasis ; the *Promus* gives us, in concrete form, clear evidence that their thought and meditation were running in the same channel.

This unique manuscript was first edited by Mrs. Henry Pott, in a work of great erudition in which she endeavoured to deal with each of the 1,655 entries in Bacon's notebook, not just selecting the more obvious parallels with Shakespeare, but drawing attention to all the finer *nuances* and overtones of meaning which caught her imagination. It is a valuable and highly significant commentary. Realizing this, her principal critic, Mr. Grant White—whose unwarranted abuse of a fellow scholar we cannot forgive—deliberately avoided all reference

to the most convincing of Mrs. Pott's instances, and in those which he singled out for criticism, even went so far as to suppress her most illuminating quotations. It is hard to imagine a more dishonest form of criticism.

It is not enough to explain these identical thoughts airily as the " current coin " of the period. Those who face fact must find it deeply significant that Francis Bacon took pains to record them in his notebook, while Shake-Speare (whoever he was) took occasion, some years later, to use them in his plays. The following parallels speak for themselves. Some of them show a fundamental identity of thought and fancy, outwardly expressed in a slightly different arrangement of the same words. Others show complete identity of diction.

BACON	SHAKESPEARE
Thought is free (*Promus* 653)	Thought is free (*The Tempest*)
Clavum clavo pellere (*Promus* 889)	. . . one nail by strength drives out another (*Two Gentlemen of Verona*)
Qui dissimulat liber non est (*Promus* 72)	The dissembler is a slave (*Pericles*)
A fool's bolt is soon shot (*Promus* 106)	A fool's bolt is soon shot (*Henry V*)
Black will take no other hue (*Promus* 174)	" Coal black is better than another hue In that it scorns to take another hue. (*Titus Andronicus*)
Seldome cometh the better (*Promus* 472)	Seldome cometh the better (*Richard III*)
Mineral wits strong poisons (*Promus* 81)	The thought . . . Doth like a poisonous mineral gnaw my inwards. (*Othello*)
Golden Sleepe. Uprouse. (*Promus* 1207 & 1215)	. . . then golden sleep doth reign, Thou art uproused by . . . (*Romeo & Juliet*)
All is not gold that glisters (*Promus* 477)	All that glisters is not gold (*Merchant of Venice*)
Hail of pearl (*Promus* 872)	And hail rich pearls on thee (*Anthony & Cleopatra*)

The following three, from other writings of Bacon, illustrate the same identity of thought.

. . . love must creep where it cannot go. (Letter to King James)	. . . . . love Will creep in service where it cannot go. (*Two Gentlemen of Verona*)
. . . these fears and uncertainties were overblown. (*History of Britain*)	The ague-fit of fear is overblown. (*Richard II*)
	" at scapes and perils overblown (*Taming of the Shrew*)
the expense of spirits (*Sylva*)	The expense of spirit in a waste of shame (Sonnet 129)

* * * * * *

Let us now return to the Northumberland MS. which was discovered in 1867 in an old black box of papers at Northumberland House by a Mr. John Bruce. In 1870 it was edited and a few pages of it were printed by James Spedding ; in 1904 it was more fully examined and reproduced in facsimile with a transcription by Frank J. Burgoyne. It is written in the flowing calligraphy of more than one 16th century copyist, and parts of it have been attributed to a scrivener, John Davies, who was once in Bacon's employ. The very suggestive scribbling on the cover might be by him or by anyone of the period. Like all scribbling it is not easy to identify, and could even be by Bacon himself, since the document is headed with his name and was evidently at one time his property.

It is the fact that such a document has survived, and not simply the possibility of a cryptogram on the cover, that lends weight to the Baconian case. Colonel Friedman's amusing chapter disputing the validity of a number of anagrams of the long word, but ignoring the historical significance of the manuscript, is an example of the skilful advocate concealing the weak part of his case. Commenting on the peculiar recurrence of the long word in Bacon, Shakespeare and in this MS., he writes as follows:

> " These facts taken together are of course hardly conclusive. That a scrivener linked the names (both pretty well known to Londoners) of Bacon and Shakespeare on a page of rough notes, and also wrote out a long and unusual word found in the writings of both of them, by itself provides only a tenuous thread of reasoning to uphold a weighty conclusion."

This disclaimer is so brilliantly put that the more we read it, the more we are fascinated. It contrives to suggest that there is no other Baconian evidence than a few scribbles, and it does this in so nimble a fashion as to make one suspect that the critic knows much more than he cares to profess. For, as a highly skilled cryptographer, he could hardly be blind to the fact that the conjunction of Bacon's and "Shakespeare's" writings in manuscript form shortly before their first appearance in print, coupled with the complete absence of any Shakespearean MS. at all, has a certain significance ; as indeed has the more intimate association of their names in the jottings on the cover. If these two individuals were "both pretty well known to Londoners" why were they apparently unknown to each other ?

If the name and writings of "ffrauncis Bacon" had not been so much in evidence, or if the works originally listed (apart from those by Shakespeare) had been by any other writer than Bacon—*e.g.* those of Spenser, Marlowe, Peele, Nashe, Greene or Jonson —this manuscript might well have received the recognition it deserves. It might even now be reposing beside 79 copies of the First Folio in the Folger Library at Washington. As it is, the fact of its survival is so unwelcome to orthodox scholarship that comparatively few students are made aware of its existence.

Facsimiles of the Northumberland MS. are scarce. The fine edition of 1904 by Frank J. Burgoyne was limited to 250 copies ; each folio page was there reproduced in photo-facsimile on a full scale, and the cost of reprinting this would now be prohibitive. No Baconian theories are expounded, and the introductory chapter is entirely factual. Here are some of Burgoyne's notes on the original list of contents and the jottings on the cover.

revealing
day through
every crany
peepes and
see
Shak

This is practically line 1,086 of the *Rape of Lucrece*, the only difference being that the word "spies" is there employed instead of "peepes". It seems, therefore,

probable that "see Shak" was intended by the scribbler to refer to the poem of *Lucrece*, which was first published in 1594. It has already been stated that the date of the writing of the manuscript is probably 1597. If this be so, this quotation is interesting as an almost contemporary notice of the poem.

The name Shakespeare, or William Shakespeare, and the name Baco, Bacon, or Francis Bacon, have been written upon the page eight or nine times. The initial letters S, Wlm, B, Sh and Mr, also frequently occur. This association of the names and their conjunction on the title-page of a collection of manuscripts ascribed to each, must be of deep interest to all students of English literature. It should be remembered that no trace of an original manuscript of any play or poem ascribed to Shakespeare has ever been discovered. On the title-page of the collection of manuscripts here facsimiled however, mention is made of Shakespeare's plays of *Richard II* and *Richard III*, as having formed part of the original contents. And the fact that this title-page is scribbled over in a contemporary handwriting, with the names of "Bacon" and "Shakespeare" in close proximity, and seemingly of set purpose, has caused believers in the Baconian authorship of the Shakespeare plays to cite this page as confirmatory evidence of their theory.

Attention is more particularly called to the line written above the entry "Rychard the Second".

ffrauncis

By Mr. ffrauncis William Shakespeare.

The word "ffrauncis" has been twice written (the second entry being upside down and over the first) as if by this device it had been intended to emphasise the name. It is worthy of notice that the name of "Shakespeare" does not appear upon any of the plays printed prior to 1598. The writing upon folio 1 would seem therefore to be one of the earliest ascriptions of authorship, and it is especially remarkable that the author's name appears as "Mr. ffrauncis William Shakespeare". Where the name "William Shakespeare" is repeated lower down, another device is

employed to emphasise the entry, the word "Your" being twice written across the name, so that it is difficult to imagine that it was written without intelligent purpose.

Other suggestive jottings connect the document directly with Francis Bacon; as for instance "Anthony comfort and consorte", and, in particular, the long word "Honorificabiletudine" in which (like "Shakespeare" and Marlowe) he also seems to have been interested. Now let us briefly consider the main contents of the manuscript; and again we cannot do better than refer to Burgoyne, who wrote as follows:

"The date when the manuscript was written cannot be fixed with certainty. Mr. Spedding says that, while it is impossible to give an exact date, he could find nothing either in the scribbling upon the outside page, nor in what remains of the book itself, to indicate a date later than the reign of Queen Elizabeth.

The list of contents on the outside page shows that the manuscript originally contained a copy of Bacon's *Essays*. The first edition of these appeared in 1597, but they were circulated in manuscript several years prior to that date. Bacon in his "Epistle Dedicatorie" to the first edition, dated January 30, 1597, complaining of some piratical publisher who contemplated printing them without his consent, writes as follows:

I doe nowe like some that haue an Orcharde ill neighbored, that gather their fruit before it is ripe, to preuent stealing. These fragments of my conceites were going to print . . . Therefore I helde it best discreation to publish them my selfe as they passed long agoe from my pen.

This letter points to the extensive circulation of the essays in manuscript form, which would cease on their issue as a book. They were printed in January, 1597, and again in 1598, and so were easily to be procured in book form after February, 1597. This appears to fix the date of the manuscript as about that period, for it is not reasonable to suppose that the expensive and imperfect method of copying in manuscript would be continued after the printed editions had appeared. The same argument applies to the

plays of " Rychard II." and " Rychard III.," which are included in the list of contents. These also were first printed in 1597, and issued at a published price of sixpence each. It seems, therefore, reasonable to conclude that the manuscript was written not later than January, 1597, and it seems more probable that no part of the manuscript was written after 1596. Corroboration for this approximate date is obtained from the composition of the various parts of the manuscript. The first item, " Of Tribute ", was written by Bacon for a masque or device played in 1592. The " Controversies of the Church of England ", was written in 1589. The " Letter to a French gent." was written between 1589 and 1590. The " Speeches of the Hermit, the Soldier, the Secretary, and the Squire ", were spoken in a masque performed in 1595. The Earl of Sussex's speech was spoken " an. (15) 96 ". The " Letter of Sir Philip Sydney to Queen Elizabeth " was written about 1580. The stinging political pamphlet, " Leicester's Commonwealth ", part of which concludes the manuscript in its present state, was printed secretly on the Continent in 1584. We know that its circulation was forbidden, the copies seized and the printers prosecuted. This being so, there would be difficulty in obtaining the printed book in England, and it was therefore necessary to continue to produce manuscript copies of the pamphlet."

After reading what Mr. Burgoyne has to say in his introduction, I do not think any serious student of history could deny the literary and historical interest of this document. To dismiss it as " scribbling " suggests a certain reluctance to give its contents due consideration ; and this does not consort with the more candid and judicial references to Baconian evidence in Colonel Friedman's introductory chapter.

* * * * * *

We now come to our remarks on the long word. On the cover of the Northumberland MS. it appears as follows :

" Honorificabiletudine ".

In *Love's Labour's Lost* it appears as follows :

" Honorificabilitudinitatibus ".

In Bacon's papers preserved in the British Museum it is analysed diagrammatically as follows :

ho
hono
honori
honorifi
honorifica
honorificabi
honorificabili
honorificabilitu
honorificabilitudi
honorificabilitudini
honorificabilitudinita
honorificabilitudinitati
honorificabilitudinitatibus

For what purpose other than a cryptic one would anyone trouble himself to construct this diagram ? In these three examples alone we have ample evidence of Bacon's preoccupation with this word, coupled with " Shake-speare's " undoubted use of it. It is perfectly true that a form of the word had occurred in printed European literature at rare intervals during the preceding century and a half. Friedman mentions the following instances :

Catholicon, by Giovanni da Genova, 1460 :
and,
Table de l'ancien philosophe Cebes, natif de Thebes, 1529.

A further instance, even more likely to have attracted attention during the reign of Elizabeth, may be added :

" The Complaynt of Scotland ", published at St. Andrews in 1548.

Now all these instances have long been discovered and frequently discussed by Baconians. Yet in commenting upon them Colonel Friedman writes as follows :

> " It could scarcely be claimed that a writer some hundred years before either Bacon or Shakespeare was born invented the word specifically to conceal messages such as ' These plays, F. Bacon's offspring, are preserved for the world '."

Another most convenient and skilful disclaimer ! But no such claim is made; Dr. Platt's ingenious anagram, praiseworthy as a crossword puzzle solution, has long been rejected as a proof

of authorship. What is claimed, and conveniently ignored by our judges,* is that Bacon's reading was wide enough for him to have come across this word in European literature, and that his eagle eye, familiar as we know with cryptograms, noticed that the first eleven letters of this verbal monstrosity included the seven letters of his normal signature, FR. BACON. Indeed, his diagrammatic analysis of the first half of this word almost proclaims his recognition of this.

As a point of interest, the long word can also be manipulated to yield a possible signature of Roger Bacon who lived three centuries earlier, and it is tempting to wonder if he too had ever come across this word—though hardly in *Love's Labour's Lost* 1 However, Francis Bacon's interest in it is quite beyond dispute, as the sequel shows quite clearly . . .

(1) Bacon analysed this word in diagrammatic form in a paper which can still be seen in the British Museum (Friedman, page 102).

(2) A contemporary penman, not necessarily Bacon but quite possibly him, scribbles a version of this long word on the cover of the Northumberland Manuscript on the same page as the scribbled half-signatures of Bacon and Shakespeare.

(3) The word is dragged, with great creaking of the machinery, into Act 5 of *Love's Labour's Lost*, while the author takes care to include a series of instructions as to how a possible signature can be extracted from it.

Now this invites further enquiry, and instead of dismissing the word as rubbish, we must, if we examine the context, seriously consider the chances of a cryptic meaning or signal of some kind.

In Chapter 8 of *The Shakespearean Ciphers Examined* our judges appear to examine this possibility, but in fact they select the least substantiated solutions of the past, and even then omit all reference to the more cogent arguments. Dr. Platt is not given credit for using the lines in the text which clearly justify the reversal of the first half of the long word. Sir Edwin

* See *Baconiana*, Nos. 118 and 121.

Durning-Lawrence is not given credit for Chapter XI of his book, in which he reports an interesting substitution or transposition table which was printed in two contemporary cipher books (Vigenère and Selenus), and which appears to have a bearing on his case.

Why Sir Edwin attached more importance to his inconclusive anagram, than to the signature which he succeeded in extracting in Chapter XI of his book, is difficult to say. As Colonel Friedman rightly points out, the amateur decipherer, lacking professional training, is loth to apply a rigorous self-discipline, and is apt to go too fast, and find subjectively the very things he is looking for ! This, we believe, is where most amateurs play into the hands of a skilled professional, who is bent on disproving their claims and at the same time astute enough to avoid meeting their strongest arguments. It is by studying the occasional omissions that we are guided to the strongest Baconian evidence. Subjective influences are hard to eradicate !

* * * * * *

If a cryptogram is to be found in Shakespeare we can reasonably expect to find one in *Love's Labour's Lost*, since this appears to be the first Shakespearean play to have the author's name (or pseudonym !) on its title page. The following is the relevant part of the text of this play in the first column of page 136 of the Comedies in the First Folio.

Folio line

23 Boy. They have beene at a great feast of Languages,
24 and stolne the scraps.
25 Clow. O they have liv'd long on the almes-basket of
26 words. I marvell thy M. hath not eaten thee for a word,
27 for thou art not so long by the head as honorificabilitu-
28 dinitatibus : Thou art easier swallowed then a flapdra-
29 gon.
30 Page. Peace, the peale begins.
31 Brag. Mounsier, are you not lettered ?
32 Page. Yes, yes, he teaches boyes the Horne-booke :
33 What is Ab speld backward with the horn on his head ?
34 Peda. Ba, *puericia* with a horne added.
35 Pag. Ba most seely Sheepe, with a horne : you heare
36 his learning.

Folio line

37 Peda. *Quis quis*, thou Consonant ?
38 Pag. The last of the five Vowels if You repeat them,
39 or the fijt if I.
40 Peda. I will repeat them : a e I.
41 Pag. The Sheepe, the other two concludes it o u.
42 Brag. Now by the salt wave of the mediteranium, a
43 sweet tutch, a quicke vene we of wit, snip snap, quick &
44 home, it reioyceth my intellect, true wit.
45 Page. Offered by a childe to an olde man : which is
46 wit-old.
47 Peda. What is the figure ? What is the figure ?
48 Page. Hornes.
49 Peda. Thou disputes like an Infant : goe whip thy
50 Gigge.
51 Pag. Lend me your Horne to make one, and I will
52 whip about your Infamie vnum cita a gigge of a Cuck-
53 olds horne.

Before proceeding to examine the significance of the long word (in lines 27—28)—which is apparently in the nature of a signal—it may be pointed out that most of the gibberish spoken by Page, Pedant and Braggart in the above quoted passage now appears to have a cryptic meaning which is illustrated on pages 24 (b) and (d). Random phrases such as " a quicke vene we of wit " (*sic*) " snip snap " and " Peace, the peale begins ", and even the long word itself, all appear to have significance in relation to a particular passage exactly as it is printed in the first Shakespeare Folio.

* * * * * *

HONORIFICABILITUDINITATIBUS

The early anagrammists of this word obviously went too far in regarding their solutions as unique. Making use of some keys, while ignoring others, they appear to have completed their solutions in accordance with preconceived theories. The two best known and most ingenious of these were :

" Hi ludi, tuiti sibi, Fr Bacono, nati,"
by Dr. Isaac Hull Platt (Philadelphia 1897).

" Hi ludi F Baconis nati tuiti orbi ",
by Sir Edwin Durning-Lawrence (London 1910).

Sir Edwin justified his solution firstly on the grounds that it would scan perfectly as a spondaic hexameter, and secondly from the numerical values of the letters according to the Simple Cipher.

He offered a prize of 100 guineas to anyone who could construct an alternative anagram in Latin or English which would satisfy his conditions. The judges were the Editor of the *Pall Mall Gazette* and the Headmaster of Westminster School. While deciding against almost all the challenges, they considered that Sir Edwin ought to pay Mr. Beevor for one of his, *viz.*,

> "Abi. Inivit F. Bacon. Histrio ludit".
> " Begone. F. Bacon has entered. The actor is playing ".

Sir Edwin, like the sportsman he was, handed over the money, while standing by his own solution as the correct one.

In all these solutions the weakness of the anagrammatic method for concealing a message in cipher is apparent ; but it in no way rules out the possibility of a secret seal, signature, or " thumb-mark ". And here we come upon an important point. Mr. Beevor, in his only successful solution, did make use of the letters " F BACON " ; and this, in our opinion, *is precisely what the context would lead us to extract.*

Dr. Platt's anagram, considered as a solution to a puzzle requiring a Latin message about Bacon to be extracted from a nonsense word of 27 letters without application of more specific keys, is a praiseworthy effort. But as proof of the Baconian authorship it fails completely ; firstly because there are alternatives ; secondly because it implies that the word was originally invented, or subsequently altered, to conceal a definite message. And we know very well that, apart from minor alterations to its final syllables, the word had occurred in European literature three or four times at least in the preceding two centuries.

Nevertheless Dr. Platt and Sir Edwin both made a conscientious effort to interpret the odd remarks in Act V as cryptic directions, whereas Colonel Friedman ignores them. It seems that in commenting on their attempts he has over-stated his case. On page 105 he writes as follows :

> " . . . there is no good reason to write the first section of the word backwards if one is going to anagram it anyway . . ."

The critic here has overlooked the context, including the fact that one of the keys—" What is Ab speld backward with the horn on his head "—clearly suggests the reversal of the first section of the long word from the central letters "Ab ", thus giving BACIFIRONOH. This step, therefore, so far as it goes, is perfectly reasonable.

Now anyone accustomed to weighing evidence must surely admit that when a long and apparently meaningless word is dragged into a play and, when at considerable dramatic risk, elaborate directions are given to rearrange or reverse its letters, there is a fair chance of a cryptic meaning.

In our opinion the long word and rather prolonged discussion of vowels and consonants is intended as no more and no less than a very strong signal to look deeper into this play, and to look especially for more convincing proofs of Baconian seals. These hints are intentionally inconclusive ; they are intended to come as close to the point as possible, while still leaving a loophole for the author to evade the issue, if challenged.

Camden, in claiming the authorship of his anonymous book *Remaines concerning Britaine* by anagram, was prepared to go much further. His position in Court circles in the days of Elizabeth and James may not have been so delicate. But the cautious and farsighted Bacon buried his secrets more deeply.

* * * * * *

Returning to the long word, the most plausible solution of this riddle seems to have been advanced in 1946 by " Medio-Templarius " in *Baconiana* No. 118, and to have been improved upon by Mr. Edward Johnson in *Baconiana* No. 121. We do not claim the " Medio-Templarius " solution to be unique according to modern cipher methods, but we find it hard to explain away as pure chance. Let us, however, approach it from a different angle, namely Bacon's position at the time. His youthful visit to the Court of Navarre in the train of our Ambassador, Sir Amyas Paulet, is a matter of recorded history ; moreover the names of Huguenot courtiers known to Bacon are used as *dramatis personae* in *Love's Labour's Lost*. Not very long ago it was discovered that Anthony Bacon's passport (still in the British Museum) was actually signed by one of

them. *Love's Labour's Lost* is generally admitted to be the work of a young man, fresh from a university or college, precocious with the classical learning of the day, bored with Aristotle, poking fun at all forms of pedantry, and humanising philosophy with the delights of life and love in France.

Now, if Bacon had in fact "inspired" this play—as even some orthodox scholars are prepared to concede—he would be moved to leave some record of his connection with it, even if compelled to remain incognito. He could not risk giving too obvious a hint—like Camden, who signed the dedication of his anonymous book with the last letters instead of the initials of his names. Nor, like Camden, could he have risked inserting two complete and perfect anagrams of his full name.* But he could very well have chosen an existing word, rare enough to attract attention, whose letters could be manipulated by keys provided in the text to yield his own signature.

Strictly speaking this is not an anagram at all, but a fairly obvious signal or seal. It explains the oddities of the text which are otherwise unintelligible ; and it is in the nature of a very broad hint which can be taken or ignored. If the reader has retained a measure of his youthful intuition it may dawn upon him that Francis Bacon, Ben Jonson, and a few of their scribes have actually been "winking" at us for more than three centuries !

* * * * * *

Let us imagine, then, that Bacon contemplated using the long word, not as a cipher, but as a means of attracting attention to a seal, and possibly to a deeper cryptogram. That he considered this problem very methodically is proved by the diagrammatic analysis of the word found amongst his papers (see diagram on page 75). So he analyses the word in forward sequence and, perceiving that the five letters of his name, BACON, and the Fr (which was his normal abbreviation of Francis) all occur in *reverse* sequence in the last eleven letters of the word, he then writes out the word *backwards* on the next line as shown in Table I.

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* See pages 26 and 27.

which had recognized the succession (in the future tense too !) of "the heirs of your body lawfully to be begotten". What can have possessed the Virgin Queen?

And how would you, dear reader, interpret all these suspicious facts converging to one common conclusion, and otherwise unintelligible? You can, of course, discreetly look the other way and ignore them: maybe that is wisest. But Orozco's emblem book, the law of succession, and the burning alive of a gossip can hardly be described as "subjective"! A long experience of cryptograms leads me to grant to the *Dublo Genitore* anagram at least as much credence and convincing power as to the Galileo one, and much more "validity" than the Huygens specimen. Indeed I will go further: if the Bacon-Tudor-Shake-Speare identification (which in these days with minor qualifications must have been an open secret) is not yet recognized by the public, I contend that this is because of the powerful vested interests which are now engaged in "moulding public opinion", to use the very words of our authors.

This Stratford theory is indicated by the very poor display of practical probability which has now become a noticeable feature in cultured circles. This sense, in my opinion, is becoming deadened by a blind insistence on over-simplified scientific training, which suggests the answers when propounding the problems. Every year, in my work, I find more reason to deplore the poor all-round judgment exhibited by the naturally intelligent but too "scientifically" moulded students whom I examine in a far less rigidly scientific subject. I admire those naval officers whose superhuman responsibilities we sense and share when reading some of Forester's books. One false move and 1,000 lives pay for the wrong answer to the problem.

What is inflexible "validity" then? The shortest way to a watery grave? Trigonometry at lightning speed (for the naval combatant must also be a scientist) coupled with a mental integration of all possible context in all fields—perhaps even including those games of "poker",—and then he may foresee the moves of the other clever chap in the same treacherous gulf

TABLE I

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27
1	H	O	N	O	R	I	F	I	C	A	B	I	L	I	T	U	D	I	N	I	T	A	T	I	B	U	S
2	S	U	B	I	T	A	T	I	N	I	D	U	T	I	L	I	B	A	C	I	F	I	R	O	N	O	H

It now becomes clear to him that the seven letters which he will eventually require, together with two superfluous "i's", all fall on the upper line in columns 3—11, thus

NORIFICAB

and in the lower line in columns 17–25, thus

BACIFIRON.

He wishes the reader to examine this section of the word, and particularly in *reverse sequence*. So Page and Pedantry are made to suggest this quite clearly in lines 53–55 ("What is Ab spelt backwards?" "Ba, pueriola, with a horne added.")

Bacon also notices that the part of the word to which he wishes to draw attention is bounded by two vertical columns of vowels, "u i", and "o u" (columns 16–26). Accordingly these two columns are further indicated by the very first play on the letters "i" and "u"

"The last of the five vowels if you repeat them or the fifth if I"

and secondly by the even plainer statement,

"The other two concludes it o u."

TABLE II

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27
1		O	N	O	R	I	F	I	C	A	B	I				U									B	H	
2		U	B									U				I	B	A	C	I	F	I	R	O	N	O	

He now considers that further hints may be necessary to enable the reader to pick out the letters BACON, and to remove the two superfluous letters "i", leaving as residue the two letters "I I". Did the author of *Love's Labour's Lost* co-operate?

He certainly seems to have bordering on the parently nonsensical purpose "So, since many hosting added" suggests the past have crushed the same joke, regardless of flexibility "thou consonant" (half in Latin and strangely emphasising the syllable con). Then, faced with the problem of removing the surplus "i's" the author obligingly inserts something very odd into the text, of which modern commentators can make nothing. At line 52 Page is saddled with the apparently meaningless phrase "vnum cita", which modern editors, for want of something better, render as "circum circa".

It seems, however, that the author meant exactly what he wrote; for not only does the expression "vnum cita" appear both in the first quarto of 1598 and in the Folio of 1623 (i.e. the two sole authorities for the text of *Love's Labour's Lost*), but there is a slight difference in the spelling of "unum." This shows that the Folio rendering is not simply a letter-for-letter reprint. In the quarto we have "vnu cita" with a small abbreviation mark (called in those days a "horn") over the u. In the Folio version the word "vnum." is written without abbreviation. In view of this repetition of the phrase with a minor correction it is hardly likely that the author or editor was really trying to introduce the words "circum circa", as now substituted in modern editions. Now the word "cita" is either nonsense, a misprint, or else an abbreviation, and Mr. Edward Johnson considers it to be an abbreviation of the word "citatur" (*Baconiana* No. 121). If so, it could be a direction to "bring forth the one".

It is a simple matter to demonstrate that "one" and "I" are often deliberately identified in Shakespeare. Here are a few examples:

"Though in thy stores account *I one* must be"
(Sonnet 136)

Among a number *One* is reckoned *none*
(*Ibid.*)

"Why write *I* still all *ONE* ever the same"
(Sonnet 76)

. . . . . *mine* being *one*
May stand in number though in reckoning *none*
(*Romeo* [illegible])

Galileo wants to be able to show with sufficient convincing power (*a*) that he has made a discovery at a certain date (*b*) to show it any time he chooses (*c*) only if he chooses. He writes his statement in flowery language, clear enough but avoiding tell-tale words (*e.g.* "mother of love" for the planet Venus, etc.). With some ingenuity he anagrams all this into an innocent

These are some of the more obvious instances in Shake-Speare where the number " 1 " and the letter " I " are identified and equated with " none ". Taken together they justify suspicions of a cryptic intention, and incline us to regard Mr. Johnson's interpretation of " vnum cita " as credible, and in any case preferable to tampering with the text. To bring forth the " 1 " or the " I " would leave us with the letters " BACFRON " in which there is no difficulty in recognising the signature or seal Fr Bacon.

It is worthy of note that two contemporary works on ciphers, by Vigenère and Selenus, both printed the same table for substituting a single letter for certain combinations of the five vowels " a e i o u ", so laboriously dragged into Act V of *Love's Labour's Lost*. Vigenère (1586) was published at the time of the first writing of the play (*circa* 1588) while Selenus accompanied the First Shakespeare Folio of 1623. According to this table a e = f, i o = r, and o u = a, but this is hardly conclusive. On the whole, we prefer the " vnum cita " theory of Mr. Johnson to Sir Edwin Durning-Lawrence's application of this table. It is hard to believe that all this play on the letter " I ", the figure " 1 ", and the word " you ", is purely accidental.

* * * * * *

A discovery made recently by Ewen MacDuff confirms in a striking manner the significance of the long word, and of its peculiar context, in relation to a certain passage in the Shakespeare Folio of 1623. In our opinion this is more convincing than the Medio-Templarius solution, though we shall await with interest Colonel Friedman's comments on the probabilities involved.

This result is obtained by " squaring " a Shakespearean passage, which is examined further in " The City and the Temple ". If the reader will recall the conversation between Page and Moth about vowels and consonants and the quaint reference to " Hornes ", it may interest him to examine a series of patterns of adjacent letters (pages 24 (b) and (d)). The five vowels appear as shown ; the word " Hornes " is built up

anagrammatically in the form of a cross three times, and all these configurations are close to the name " BACON " which is also arranged in the form of a cross, with the word " Horne " lying, as it were, on its head. It seems possible, therefore, that the long word is in the nature of a flag or signal to look deeper into this text.

I am permitted by Ewen MacDuff to include this information in this article, though without revealing the co-ordinates of the letters, or the passage concerned. These will be revealed when his present investigations are completed. But perhaps in the meantime the discerning reader will find them for himself.

We look forward to hearing Colonel and Mrs. Friedman's views on these coincidences. Few people are better equipped to assess their significance—provided they are agreeable to impart what they discover. As skilled cryptanalysts, they must be just as capable of cracking this indeterminate code of nods and winks, as they are of pulling the wool over the eyes of those amateurs who rightly suspect, but cannot " prove ", a cipher. But they have not been in the F.B.I. for nothing, and we must recognise the possibility of a leg-pull !

Let us now sum up. The Baconian theory has no great need to depend on cipher support, being well grounded on authentic literary and historical evidence. To prove or disprove a cipher cannot alter proved historical facts ; it may support them, but does not remove them. The *Promus*, Francis Bacon's private notebook, is a valuable literary relic, and it is a pity that its unwelcome Shakespearean parallels should have led orthodox critics to depreciate its true literary value.

The Northumberland Manuscript lends great weight to the Baconian case ; for it is still unique as a contemporary document connecting Bacon and Shakespeare, not only by name, but by the association of their acknowledged writings. It is the deadly fact of its contents, and not the scribbled version of the long word on the cover, that has led so many orthodox scholars to suppress or soft-pedal its existence. The long word by itself, as scribbled, cannot be regarded as a cryptogram, apart from its reappearance in *Love's Labour's Lost*. In the latter case it can be considered as a kind of seal—not in isolation

[illegible] for certain (as part of the [illegible] they do not concern the Bacon-Shakespeare controversy at all. And if the obstinate reader still [illegible] weakest ciphers".

[illegible] was instructed by Melvrau to prepare an English adaptation, but this now seems to be out of the question. However, Melvrau left documents to friends, with permission to publish at their discretion. In one of those which I possess there is enough to convince a tribunal, for its probability can easily be measured. There is one signature which, in its particular circumstances has one chance out of 20 of being accidental. Poor probability, I agree, but things become interesting when the suspected phenomenon starts up a second, and the second starts up a third and so on, until "accident" has less than one chance in a billion and "voluntary human design" all the remainder. And in addition to all this there is a clear and challenging instruction in the Shakespearean outward text. Other signs of skilful manipulation in the Friedman book are as follows : we are conclusively shown that rough paper, bad ink, soft types and printing practices made the practical application of the Biliteral Cipher impossible. And we are expected to hold to this opinion even when the Friedmans disclose that

of ocean. This is the sense of probability and predictability that only training can foster and mature. I had rather be in the ship of an old fox than in that of the trigonometry professor !

Total infallibility can never be reached ; but when you get into the 95 per cent. zone in any given line, you may rely on your own judgment, provided you are ready to revise that judgment whenever new data emerge. In the field of scientific cryptography the Friedmans are in that zone. If they reach it in generalised cryptology as well, they will have, no doubt about the Shakespeare case. They will then enjoy the late Dr. W. S. Melsome's book—*The Bacon-Shakespeare Anatomy*—as it deserves. My own very practical training in detection of cribbing supports my conviction that a very sufficient proportion of what Dr. Melsome quotes comes from the same workshop, and most of it from the same brain.

The Shakespeare case, in my opinion, is child's play to the Gallup case. Certainly in the present state of our knowledge the Gallup decipherment cannot be pronounced technically valid. But that does not do away with the problem. The lady was too, well known to friends in England and America, who would vouch for her integrity as generously as do the Friedmans themselves. And what form of auto-suggestion could possibly have led her, against her own desire, to find the argument of the Odyssey enciphered in Burton's *Anatomy of Melancholy*, when she was really looking for something sensational about Bacon or Shakespeare ?

As soon as World War I was over, after consultation with friends, I tackled General Cartier, gave him sufficient grounds to show that he had been rushed into giving a premature opinion and offered to thrash the matter out with him. I submitted that some years of patient teamwork—at considerable expense—would be necessary to get at the truth, or at least to emerge from that irritating "case not proven," state. I proposed to him a number of working hypotheses (some of them now ruled out by the information given by the Friedmans). The General said that his papers had been destroyed at Royan and that he

A KEY TO THE SIMPLE CIPHER

By W. E. Lovell

I HAVE often thought that my copy of *Baconiana* (1679) was intended to reveal (to the discerning reader) more than appears on the surface, especially the "Alphabet of Nature," section on pages 77-91. Incidentally, Mrs. Gallup, (whose *bona fides*, I realise, are often challenged) found in her decipherment from "the Headings of the Comedies"* the following instruction purporting to come from Bacon :

"... proceed to his Alphabet of Nature. Learne well two portions, MASSES AND THE RULE, search this out."

While making due allowance for her inevitable mistakes, I am far from regarding Mrs. Gallup as a discredited witness ; but fortunately we do not need her help in this case. We need look no further than *Baconiana* (1679) where the author and editor, who signs himself "T. T."†, refers pointedly to this Alphabet of Nature. On page 94 of his *Account of Lord Bacon's Works* he writes as follows :

"A Fragment of his Lordship's Abecedarium Naturae. This is commonly held to be lost, and it is still well nigh so, the latter part of it only remaining. But where the whole is good, each part is of value. Antiquaries do not despise the ancient statues, though superstition hath broken off their Heads.

This work is said to be a metaphysical piece, but it is not so in the strictest sense . . ."

The "Antiquaries" would of course have reconstructed the statues, or at any rate envisaged them as a whole. Moreover, since we are plainly told that this piece is not "in the strictest sense" metaphysical, we may suppose that "T.T." wishes us to examine it in a technical sense. And certainly on pages 84 to 91 it does contain references to a "Rule or Form of the Alphabet" and also to "the Masses"

* *The Biliteral Cipher*, page 166.

† Generally accepted as being Archbishop Thomas Tenison.

Here we shall find a disjointed fragment of the latter, beginning, oddly enough, at the 67th inquisition and ending at the 72nd inquisition, and a further fragment beginning at the 73rd inquisition and ending at the 78th inquisition. At the foot of page 88 appears the caption

> " The Rule (or Form) of the Alphabet."

Then follow two pages of abstruse technical instructions which we will consider presently ; and (at the foot of page 91), comes a repetition of the caption in slightly different words :

> " This is the Form and Rule of our Alphabet."

The dissertation then closes with a short and beautiful prayer which, although for our present purpose it is a digression into the realms of metaphysics, cannot be left unnoticed :

> " May God, the Creator, Preserver, and Renewer of the Universe, protect and govern this Work, both in its ascent to his Glory, and in its descent to the Good of Mankind, for the sake of his Mercy and good Will to Men, through his only Son (Immanuel) God-with-us."

* * * * * *

Returning to our search for what is not " in the strictest sense " metaphysical, let us briefly consider the text on pages 88-90 between the two captions quoted above. It appears to be chiefly concerned with the building up of an inductive system on a basis of " Histories and Experiments ". But as " T.T. " observes on page 94 of his "Account " this was a design which had already been brought to greater perfection in Bacon's *Novum Organum* and *De Augmentis*. What then is " T.T.'s " motive in reprinting this incomplete fragment ? Apparently it is to draw our attention to something which was in danger of being overlooked, namely the tail-end of a series which he wishes us to reconstruct. I believe this will become sufficiently obvious when we come to the numerical tabulation of " The Masses ", but it is also vaguely suggested in the wording of that part of the text which purports to be " The Rule (or Form) of the Alphabet ", although the latter is ostensibly concerned with Histories and Experiments. In fact I believe that some of

these peculiar sentences were deliberately inserted by Bacon to serve as a guide or rule in completing a series of which only part is given, and that the idea of starting to count at " the 67th inquisition " was simply a ruse. A few of the sentences, when divorced from their context, seem to serve this ulterior purpose.

"After this manner we *compose* and *dispose* our Alphabet . . ."

" Likewise we lay down Canons (but *not* such as are fixed and *determined*) and Axioms which are, as it were, *in Embrio* . . ."

" Such Canons and Axioms are profitable, though they appear *not manifestly* . . ."

" Wherefore it is enough for us if we are not wanting to *the beginning* of things . . ."

" Now for the sake of Perspicuity and Order, we prepare our way by *Avenues* which are a kind of Prefaces to our Inquisitions. Likewise we interpose *bonds of connection*, that our Inquisitions may not seem . . . *disjointed*."

" We propose wishes of such things as are hitherto desired and not had, together with those things which border on them, for the *exciting the Industry of Man's Mind*."

" Neither are we ignorant that those Inquisitions are sometimes *mutually entangled ;* so that some things of which we inquire (even the same things) belong to several titles."

" But we will observe such *measure*, that (as far as may be) we may shun the nauseousness of Repetition, and the trouble of Rejection . . ."

" This is the *Form* and *Rule* of our Alphabet." (My italics.)

Much in the above can be considered as having a bearing on what follows although, as we have said, the context is ostensibly related to Experiments. Such is the " Rule " for what it is worth ; now let us consider The Masses. If we refer to page 84 we shall find the following heading supplied by " T.T. " :

"A Fragment of a Book written by the Lord Verulam and Entitled, The Alphabet of Nature."

Why only a Fragment ? Because, in my opinion, there is no need for more. By having this we have all that is necessary for " exciting the Industry of Man's Mind ".

We are still not dealing with numbers vast enough for a strict conclusion at least on the ground of pure mathematical probability. But we could (if the job was congenial !) take all extant title-pages of books suspected by Baconians of belonging to the Shakespeare set-up. They are a goodly number if we include the successive contemporary editions. That would give a sufficient number of lines of text. We could then count the B + CQN semi-acrostics and compare the result with that from a "test" combination H + I + DIS (one word in DIS- for seven in D-) for which the mathematical probability would be similar, if anyone feels like doing the job ! Getting at Truth requires patience and experiment, and the weak semi-acrostic "system" may not be worth the trouble. Global contextual study would be more profitable; however the lesson stays. The frequency of these semi-acrostics can be shown mathematically to exceed by many times those which would occur "accidentally".

If you ever feel the urge to check up on all this and to judge the frequency of "coincidences" in the world of unarranged facts, *i.e.* in your anthologies of poetry (as the Friedmans astutely suggest)—be careful ! Choose beforehand combinations of the PSOAM or HIDIS type. It will be safer. Much of the best English poetry together with some of the poorest has been written under the concealed patronage of the Fraternity, and you may find your old friend Fr—B—, Francis Tudor—to "W49I." or "FB", cropping up rather often. Mind how you elbow your way through the crowd of coincidences !

In conclusion I must regretfully expose a trick of intellectual "legerdemain" which is far-reaching. To cure Baconians of their "perverted" sense of "probability" the authors point out that every time you are dealt a hand at bridge you "see an arrangement which has a mathematical probability of four in 635,013,559,600 and this happens every time a hand is dealt." You will be less inclined to believe in Baconian "coincidences" when you know that an afternoon at bridge is a succession of marvels ! (Of course, if we were dealt exactly

A KEY TO THE SIMPLE CIPHER

Under the above quoted title appears the following tabulation of the "Greater Masses":

The 67th Inquisition.	The Three-fold Tau,	or concerning the Earth
68th	Three-fold Upsilon	Water
69th	Three-fold Phi	Air
70th	Three-fold Chi	Fire
71st	Three-fold Psi	Celestial Bodies
72nd	Three-fold Omega	Meteors

Why begin at 67 for "the Earth"? This has always struck me as being on the lines of the "Repertorie of Records," in which Mr. Clifton discovered a probable key to the "K" cipher. On examining it more closely it suddenly became clear to me that this was correct. The first thing we notice in the chart is that we are given the last six letters of the Greek Alphabet, corresponding to the last six letters of the Alphabet of Bacon's day (T, V, W, X, Y, Z), and that each of these letters has a number which corresponds to it. Thus:

T	V	W	X	Y	Z
67	68	69	70	71	72

From this it is easy to estimate the numbers for the remaining letters of the Alphabet. S must be 66, R 65, and so on back to A 49, the complete "Three-fold" Alphabet being as follows:

A	B	C	D	E	F	G	H	I	K	L	M	N	O	P	Q	R	S	T	V	W	X	Y	Z
49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72

* * * * * *

And since these are distinctly said to be "three-fold" letters, we can go backwards to the "Two-fold" alphabet in which Z will be 48 and A will be 25, and then to the original or "simple" alphabet in which Z will be 24 and A will be 1, and which we at once recognise as the Simple Cipher. Furthermore, if we have correctly estimated the numerical equivalents of the single, two-fold and three-fold alphabets, we should be able to estimate those of the four-fold alphabet, wherein A will be 73, B will be 74, C 75, D 76, E 77, and F 78. Now if we turn to Tenison's *Baconiana*, pages 80–88, we shall find precisely the

corroboration we require, confirming the first six letters of the *four-fold* alphabet, though in a different form (see page 265).

"That is the 72nd in order," and reckoned the Four-fold Alpha."

Of this 77th Inquisition consist, and be accounted the Four-fold Beta."

Of these let the 76th. Inquisition consist, and be accounted the Four-fold Gamma."

Of these let the 75th. Inquisition consist, and be accounted the Four-fold Delta."

Of these let the 74th. Inquisition consist, and be accounted the Four-fold Epsilon."

Surely it must be an empty triumph for the inflexible positivist to "prove" that a semi-acrostic system (b . . con . . a . . f . . or ac . . b . . of . ., etc., occurring at the beginning of successive lines) is scientifically invalid. Of course the validity or otherwise depends entirely on the ratio of these occurrences to the mathematical probability. We are told that Walter Conrad Arensberg became infatuated with this system, and it is quite possible that he overstepped the mark in his decipherments. Now, if the object is simply to prove that semi-acrostics occur by chance, it would be a clever move to find one that had occurred by chance in Arensberg's book; though it would have been quite possible for Arensberg to have demonstrated his system in the manner in which he explained the simple Two-fold, Three-fold and Four-fold Alphabets, shown underlined in the following equivalences which have been accurately provided as our key.

A B C D E F G H I K L M N O P Q R S T V W Y Z
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23
25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48
49 50 51 52 53 54 55 56 57 58 59 60 61 62 63 64 65 66 67 68 69 70 71 72
73 74 75 76 77 78 79 80 81 82 83 84 85 86 87 88 89 90 91 92 93 94 95 96

Now I notice that the Friedmans devote a whole chapter of 18 pages to approaching (to much the same conclusion as I have) the Simplex Cipher, but I noticed, too, that the semi-acrostic "accident" of taking place once only in the given letters of the alphabet, is necessarily general, and would probably be designed to attract attention in a cipher. It is difficult to find only one letter with its correct book or cipher equivalent in a word, let alone the whole, but us

acrostic signature is always due to chance and never premeditated would be to slip in one of these tricks in the very lines which explain their accidental nature. The deeply interested reader may then come across a very impressive example that such "accidents" may happen anywhere.

look then at the well-known introductory poem " To the Reader" in the first Shake-speare Folio of 1623, written by Ben Jonson :

TO THE READER

*T*his Figure, that thou here seest put,
It was for gentle Shakespeare cut ;
*W*herein the Graver had a strife
with Nature, to out-doo the life ;
O, could he but have drawne his wit
As well in Brasse as he hath hit
His face, the Print would then surpasse
All that was ever writ in brasse
*B*ut, since he cannot, reader, looke
Not on his Picture, but his Booke.

We have indicated in italic type the initial letters of alternate lines. Reading them vertically downwards (for which purpose the lines seem to have been most conveniently staggered) we get

" TWO H B or " TWO HIS B "

And if we accept William Camden's instruction that the letter " H " may be disregarded in cipher, we shall have either

" TWO B " or " TWO IS B "

From so small a hint as this it should be possible to reconstruct the Simple Cipher, and perhaps even to discover the entire "Alphabet of Nature ", whatever that may ultimately prove to be.

EXPERIMENTS IN THE BILITERAL CIPHER : No. I

THE FAME AND CONFESSION OF THE FRATERNITY OF R: C: 1652 AND THE BILITERAL CIPHER OF FRANCIS BACON

By W. E. Lovell

NOTE :

These experiments, if the Editors think fit to publish them, will represent my attempts at Biliteral Cipher work, sometimes original decipherments, and sometimes checking Mrs. Gallup's work. They are put forward simply in a search for truth and not as dogmatic assertions. They are set out in detail to assist others (whose time may be more limited) in overcoming the initial and very tedious work involved. I hope in this way that we may be able to provide a foundation upon which others may build, in order to settle the following problems :

1. *Was the Biliteral Cipher really used in 17th. century books ?*
2. *Did Mrs. Gallup decipher with a moderate degree of accuracy ?*
3. *Did Sir Francis Bacon insert cryptic messages in his work ?*

I realise that our opponents have answered each of these three questions in the negative. But those who, like myself, have experienced the pleasure of seeing an unexpected cipher message gradually take shape, will hardly be persuaded that all the painstaking results obtained by using the Biliteral Cipher are entirely subjective.

Perhaps it should be added that in all my experiments (and they extend to many thousands of letters ranging from an odd page or two to a whole Shakespeare play) I have never yet found any large portion of the text that will work out with 100 per cent. accuracy. On the other hand some parts of the text do achieve this, and we have to discover what degree of accuracy is required in order to ensure that we are not straying from the true solution by using wishful thinking.

* * * * *

A friend very kindly lent me a facsimile copy of the above book for the purpose of a test, to see if it contained the Biliteral Cipher. It did not take very long to form an opinion that the cipher *was* contained therein—at least in one section ! Two

types of italic letter can easily be distinguished in the section addressed "TO THE WISE AND UNDERSTANDING READER", which for some reason (very likely to draw attention to it as being important) is printed in a larger type than any other portion of the book! A footnote tells us that the Heading "To the Wise and Understanding Reader" is better translated (from the German) as "To the Reader Who Understands Wisdom".

One wonders what sort of a secret message would need to be concealed in this open letter to the English-speaking world. As we shall see, it is couched in the form of an invitation. But although in a sense it is contained in an open letter for anyone to read, the invitation can only extend to those who hold the key to the Biliteral Cipher, or who have discovered it on their own account. So I suppose only very few people could ever be expected to read this invitation. Does this imply that there might have been people who would understand the cipher, but were NOT members of this secret society? We will leave this and other problems to our readers, for we are here only concerned with reporting a possible decipherment of the concealed text.

The message, in this case, could only be a short one, for this Epistle to the Reader contains very few italic words—45 to be exact—and these together with the Roman type heading make up to 51 possible words. ALL the italic words appear to be used, except the first "I" in "To The Reader"; and the message, as I make it, begins on the second letter, *not* the first. There are 330 letters of the text used, which gives us a possible 66 letters of concealed message—perhaps rather significant numbers to Baconians. However, here is the message and it is addressed, as I have said, "To the Wise and Understanding Reader":

THE ROSI-CROSS EXTENDS A WELCOME.
LOYAL, GREAT, TRUE KINGSHIP MEANS
OFFERING ONESELF.*

The actual spelling of the message is as follows:

THE ROSI-CROSS EXTENDS A WELCOME.
LOYAL, GREAT, TRU KINGSHIP, MEANS
OFFERI'G ONESELF".

* See page 29.

THE MYSTERY OF "HONORIFICABILITUDINITATIBUS"

By R. L. EAGLE

IN my possession is a fragment from a very old black-letter Latin book which The British Museum has identified as being the lower portion of a leaf from a Latin Bible printed at Nuremberg by Anton Koberger in 1497. But of far greater interest are the manuscript jottings at the foot of this fragment. The fact that they are upside down compared with the printed matter shows that the fragment was not part of the Bible when they were written, for it is most improbable that a large book would be inverted on the penman's desk or table. A scrap of paper to which no value was attached would be used just as it presented itself. The fragment contains the commentary on the Song of Songs. On this, in a careful and clear hand, has been written:

honorificabilitudinitatibus
honorificability
confection
qualification
G.G.*

There is also a name which might be Goodman or Godrich. In the margin on the right is "for if you" and the name "Mary" twice. As for the long word which, as is generally known, appears in *Love's Labour's Lost* (v. 1) as a jest, it seems to have been a favourite for trying out new quills. In a slightly abbreviated form it was written on the cover of the Northumberland Manuscript about 1597 by a scrivener making several Bacon and Shakespeare memoranda. In his "Variorum" edition of *Love's Labour's Lost* Furness says, "I have seen it in an Exchequer record, apparently in a hand of the reign of Henry VI, and it may be seen, with some additional syllables,

As will be seen, there are three small abbreviations which appear to be common to these cipher writings—TH' for " the " TRU' for " True ", and the omission of the " N " in " offering".

I will now set out my interpretation of the message, again exactly as it was derived from the text, letter by letter, so that anyone possessing a copy of the facsimile of this book may be able to follow and check the cipher.

T QTHEW ISEAN DUNDE RSTAN DINGR EADER
baaba aabbb baaaa abbab baaab abaaa

SOLOM ONADA MWISD OMSOL OMONI AMAM&-
aaaba baaaa abbab baaab baaaS aaaba

OANFE SSION ACMFRA TURNI TYROS IECRO
baaba baaba abbab baaab abaaa baaba

SSCON PESSI ONINR ECESS UWISD OMSPH
aaaaa babaa aabaa ababa aaaba ??bab

ERICA LARTA DAMHA SELME YERNO TARIU
ababb aaba? ababa abbab babba aaaaa

SPUBL ICUSM AXMAX IMILI ANEXS I CRIPT
ababa aabba baaaa aabaa aaaaa baaba

ISTHE OLOGI CISTH EOPHR ASTIU ESUIT
baaba baaaa baabb abaab abaaa abbaa

ERIES USFAM AMFRA TERNI TYROS IECRO
aabba baaab aaabb abaaa abbab ababb

SSTHE HIGHL YILLU MINAT EDMEN ANDUN
aabaa aaaaa abbaa baaab abbab aabab

DECEI VINGJ ESUIT SCALL EISAU RORAS
aabab aabaa baaaa abaab aabba abbab

AFTURN WISBJ MPHBS OSRUB AOARB CNGLE
aabaa baaaa baaba abaaa baaaa baaab

(NOTE: Should KINNSHIP? I make it KINGSHIP.)

This irrelevance of this argument may perhaps be appreciated by studying the parable of the ruthless Eastern Potentate and his captive, the famous scientist Sir Prymary Mynds. " Here are a dozen packs of cards," says the Potentate. " Each time I deal a hand you must tell me under penalty of death, whether or not I have packed the cards." The first pack immediately yields 13 cards of the same suit. Sir Prymary, suppressing a smile, decides the pack has been tricked. The Potentate nods and the ordeal continues. But as the hands follow each other, the " coincidences " are less and less apparent, such as 4, 3, and 2 of one suit, one ace, two 7's, and 13 TYROS. Sir Prymary begins to sweat. A curtain is drawn aside, disclosing an array of scimitars. Another hand makes one complete sequence from deuce to ace but of cards of various suits. With the perspicuity of the human mind at bay, Sir Prymary suddenly notices that 2, 3 and 4 are clubs ; 5, 6 and 7 are diamonds in the alphabetical order of the suits. Chance or design ? Unquestionably the combinations are beginning to show lower and lower probability of design. But at what point—and this is all important to a cryptologist—will Sir Prymary have to say the words " pure chance " to save his precious neck ?

It is no wonder that Baconians are sometimes in need of a sedative, for that is the eternal problem which confronts them in the real relative meaning of the word " scientific ". This is the problem which, after years of relative scientific doubt, I now know for sure has been set by the Shake-speare people except that they worked the other way round. First low probability tricks which require a lot of contextual study to find, confirm or reject. Then, in order to reach the high probability ones that can set your mind at rest, you have to go deeper (becoming more " subjective " our judges might say, but it is not so) to extremely " objective " systems which can be checked and can only be checked by the genuine experimental method. And this is quite distinct from those over-simplified methods (Friedman, page 280, lines 5-18) which are valid only in the yes-no, right-wrong systems of modern codified cryptography.

Many of the italic letters are straightforward and require little concentration. The " e's " as usual are rather difficult at first, for there are two types of each fount. After experiment with a few, one begins to recognise some difference between the " a " and " b " types ; for example, if the tail is extended and touches the top part of the letter, it is " b " fount ; whereas, if the angle is more " open " and the extended line misses the top part and passes " outward ", it is " a " fount. See the word HAS*E*LM*EYE*R where the " e's " are " B, B, A ".

With regard to errors, I found few—very few ; maybe there are none, and the mistake is mine ! " WELCOME " was first deciphered as WELCXME, which could have been intended, as odd spelling is sometimes used to make decipherment more difficult. The fifth letter appeared to me to read " *ba*bab " in place of " abbab " which amounts to a reversal of the first pair of letters. There are also two or three " dotted " letters which *reverse* the assignment, as usual

When I had almost finished deciphering, I found that the alphabet used is illustrated by Mrs. Fiske and Mrs. Gallup in their useful book, *Studies in the Biliteral Cipher of Francis Bacon*, 1913, in Plates 8, 9, 10, and 19, 20, 21. It is given there as the form used in Digges' poem, and the Dedicatory Epistle of the Second Folio of the Shake-speare Plays. Many of the letters are exactly as illustrated, but REVERSED in significance !

On further examination of the passage headed " To The Wise and Understanding Reader " I found that the headings of the pages in that section are also printed in large italic form, and appear to be from two founts of type !

The text of the headings placed together reads as follows :

THE EPISTLE &C. THE EPISTLE TO THE READER. THE EPISTLE TO THE READER. THE EPISTLE TO THE READER. THE EPISTLE &C.

After carefully studying the individual letters of the italic printing of these headings, I believe the following to be the solution :

THEEP	ISTLE	&CTHE	EPIST	LETOT	HEREA
baaba	aabbb	abaaa	baaab	aaaba	aaaaa
T	H	I	S	- C	A

DERTH	EEPIS	TLETO	THERE	ADERT	HEEPI
ababa	ababa	abaaa	baaab	aaaab	babba
L	L - I		S	- B	Y -
STLET	OTHER	EADER	THEEP	ISTLE	&C . .
baaba	baaaa	abbab	aaaba	baaaa	ab . . .
T' -	R	O: -	C	R:	- . . .

As will be seen, the message I believe to be

"THIS CALL IS BY T' RO: CR:".

If the message concealed in the headings is read first (which is likely to be the rule) then the two complete messages would read as follows :

THIS CALL IS BY T' RO: CR:

TH' ROSI-CROSS EXTENDS A WELCOME ! LOYAL, GREAT, TRU' KINNSHIP, (OR KINGSHIP), MEANS OFFERI'G ONESELF.

As for the rest of the book, I have not so far been able to find any further Biliteral messages. If they exist, they are in a quite different alphabet ; except possibly the heading of the chapter on page 34 which *appears* to me to begin with the words ROSY CROS.

I worked out the above cipher in July, 1957. Just recently I have read on pages 53-4 of the "FAME AND CONFESSION" these words : "What think you loving people, and how seem you affected, seeing that you now understand and know, That we acknowledge ourselves truly and sincerely to profess Christ . . . AND DAYLY CALL, INTREAT AND INVITE MANY MORE UNTO OUR FRATERNITY, unto whom the same Light of God likewise appeareth ?" It would seem that, if my interpretation is correct, the subject of the message is in agreement with the above statement ! As to the time and trouble taken to include a cipher message of this kind, and as to whether its relative importance would justify this, I can offer no opinion.

[*Note: Biliteral decipherments, such as the above, may be printed occasionally in* Baconiana *without implying any official acceptance of their validity. In all forms of scientific research it is as important to record progress as it is to maintain strict impartiality.*—EDITORS.]

A FRENCH CIPHER BOOK

By Edith Durning-Lawrence

[*Reprinted from "Baconiana" No. 20, October*, 1907.]

In 1586 appeared in Paris *Traicté des Chiffres*, by Blaise de Vigenère, dedicated to Monsieur Antoine Seguier. From internal evidence we learn that Vigenère was in Rome in 1549 and 1551, and in Italy in 1568.

After a reference to the sacred writings of the Ancients who therein veiled the holy secrets of their theology, he continues (p. 4) that his book is of similar ciphers, but "rare and known to *few people*—learnt partly from others in our travels in different parts of Europe, but the greater part originated in our own thoughts, and not, so far as we know, touched upon by anyone until now." He acknowledges he learnt one cipher on his first visit to Rome, and he explains (p. 227) that some have treated of their philosophy by numbers and proportions, others by geometrical figures, others by the harmony and concords of music, others under the wrappings of fables, enigmas, and allegories. Previous works on ciphers, such as Trithemus, give as keys consecutive *words* (p. 48), such as verses of Virgil and of other poets ; others are content with the date of the month or day, or employ the last word preceding the hidden message. Vigenère claims to be the first to use the device of making *letters* depend upon each other and serve as keys by 1st, shape ; 2nd, size ; 3rd, quality or equivalence ; 4th, place.

Several ciphers depend on difference of type (p. 241), and he gives four types of each letter, saying (p. 245) the difference between them must be of the slightest—only sufficient to be discerned by the initiated, so that suspicion may be removed. On p. 200 he explains a cipher where each combination of three letters, three numbers, or of dots, dashes, or of long and short syllables in threes, equals *one* letter ; thus aaa or 444 = D, aab or 447 = E, eeb or 887 = A. This is worked on the same principle as Francis Bacon's Biliteral, only whereas

Bacon groups his letters in *fives*, Vigenère groups them in *threes*, but both depend on the shape, size, quality, and place of letters.

Francis Bacon's brilliancy of intellect was alrcady noted in Paris in 1578, when the words " *Si tabula daretur digna animum mallem*," were written round his portrait (see Lord Bacon's Life, by Spedding, p. 7). That his mind was at that time occupied with ciphers we know from *The Advancement of Learning*, VI., p. 265 : " We will annexe another invention, which in truth we devised in our youth, when *we were in Paris*, and is a thing that yet seemeth to us not worthy to be lost." He then explains the Biliteral Cipher.

As Bacon claims to have invented his cipher in Paris in 1576-9, and as Vigenère, whose book appcared in 1586, acknowledges that some ciphers he had learnt from people he had met, there is some reason to believe that Vigenère is the mouthpiece of Bacon. The Biliteral is more fully developed, but Vigenère ingenuously confesses that he has deliberately " cast some shadows over his work in order not to make the ciphers, together with several other artifices which depend thereon, equally comprehensible to the unworthy and the ignorant as to those who by knowlcdge, study, and worth deserve it " (p. 194). At that time Bacon would not be ready and willing to place in the hands of the world the key to his secrets.

Two quotations from Vigenère referring to other ciphers may be given. " I should have liked to have touched in passing on Anagrams, reversed words either for proper names or for other uses. It would have been easy to arrange tables which would greatly shorten the extreme labour of those who seek by this artifice, glory and renown and *not* in vain for this is in great favour at present " (p. 190). He gives as an example of hidden words the following, employed by Roger " Bacchon " (Bacon) (p. 147) : " I*n* V*erbis* P*ræsentibus* I*avenis* T*erminum* E*xquisitæ* R*ei*." The initials make Jupiter, whilst the last letters of the last words of each chapter make Stannum, which stands for Jupiter.

Bearing in mind the enigmatic frontispiccc of Montaigne's Essays, 1632, to be looked at with " a glancing eye," the following remark may interest the Baconian student : " Some ciphers consist in perspective, for on looking at thcm from the front one can neither discern nor rcad but by placing them obliquely in the position suitable to them that which was imperceptible appears " (p. 253). Vigenèrc mentions in this connection " an English painter callcd Oeillarde," whose work was so fine that it was impossible for the kecnest eyes to discern anything except with glasses, or in bright sunlight. Oeillarde (French for side-glance) is no English name. Can he mean Nicholas Hilliard (1547-1619), who painted a miniature of Bacon in 1578, and others of Mary, Queen of Scots, of Elizabeth, and of James I ? If he does, the name Oeillardc may be intentionally mis-spelt, as he has previously mentioned an Italian, " Spannochio," a name which savours of artifice.

Mrs. Gallup has been called to account for the mcthods of spelling in her rendering of the Biliteral Cipher ; but Vigenère says it is permissible in cipher to omit a letter, as " laudo " for " claudo," " Pais " for " Paris " ; or to substitute a letter, as "Alexantre " for "Alexandre," and " ollis " for " illis ". " There is no question of exact orthography ; on the contrary, there are some who pervert it purposely to add to the obscurity " (p. 237).

BOOK REVIEWS

By Bryan Bevan

The Second Cecil, by P. M. Handover (Eyre and Spottiswoode).

This book is a scholarly analysis of the rise to power of Robert Cecil, first Earl of Salisbury (1563-1604), son of the great Lord Burghley and his second wife Mildred Cooke. As might be expected of the author of *Arabella Stuart*, Miss Handover succeeds in giving a convincing picture of Tudor England and early Jacobean England.

However, despite her attempts to make Robert Cecil an attractive personality she is here less successful. As she mentions in the introduction : " he sees life in harsh colours : all men he has found, are sons of Adam, have neither honour nor chivalry, but will forget sooner the death of their father than the loss of their patrimony, as Machiavelli has it ". Surely this is hardly a creditable frame of mind ! Because of his deformity Robert Cecil was painfully self-conscious.

After the conclusion of the Lopez plot, Antonio Perez, renegade minister of Philip II of Spain, christened Cecil " Robertus Diavolus " or Robert the Devil. Certainly towards the end of the first Elizabethan era he was the best-hated man in the Kingdom.

The author has taken infinite trouble to show that he was rather a sad, misjudged man, a terrific worker, who continually suffered from ill-health. She discusses at some length the relations between Cecil and Essex, showing their difference of temperament and the mutual antagonism which lay between them. But somehow, despite the author's attempts to justify Cecil, one cannot escape the conclusion that he intended, and even plotted, to overthrow his rival. His trained mind was rightly contemptuous, for Essex's statesmanship was puerile.

As for Francis Bacon Miss Handover does at least make it clear that he warned Essex against assuming the post of Supreme Commander in Ireland. There is no reason to think Bacon was not absolutely sincere when he later wrote in his apologie (addressed to Lord Mountjoy, Earl of Devon) " I did as plainly see his overthrow chained as it were, by destiny to that journey ", etc. But her condemnation of Bacon for appearing in his minor role in the York House proceedings in June, 1600 (page 206), is as bigoted as it is unfair. It was most repugnant to Bacon to have to appear in this position but he was commanded, *nolens volens*, to do so.

Perhaps Cecil's most important achievement was to pave the way for the peaceful transition from the reign of Queen Elizabeth I to that of King James I. He was indeed the man of whom the Scottish monarch said in 1601, that in England " he is King there, in effect ".

Francis Bacon—The Peremptory Royalist, by Meyrick H. Carré.

This article, published in *History Today*, is on the whole an accurate, fair and objective exposition of the various reasons for and traits of Francis Bacon's character, which caused him to become a vehement upholder of absolute royal authority.

Born and bred in the precincts of the Court, he was nurtured on the edge of majesty, writes Mr. Carré. It was in his impressionable youth that his father, Sir Nicholas Bacon, taught him that love and reverence for the great Queen Elizabeth I, which was characteristic of him. Although the old queen on occasions treated Bacon harshly, he had a tremendous admiration and considerable affection for her. Five years after her death in 1603, he wrote a treatise (*in felicem memoriam Elizabethae*) in which he praised her many estimable qualities, when it no longer served any purpose to flatter her memory. On the other hand, in 1593, as a young man of 32, he came into conflict with her in Parliament concerning some proposed subsidies. It was an act of defiance requiring enormous courage, for which Bacon incurred the Queen's displeasure for many years. One of his reasons for resisting the subsidies in 1593 was because he resented the House of Commons being dictated to by the House of Lords.

With James I, although there was a certain intellectual sympathy between them, relations could never have been very happy. It is possible that with a sanguine nature Bacon expected too much from that monarch. Gradually he must have come to realise James's utterly worthless character, and, sadly musing on it, become disillusioned. Bacon's political acumen is never more clearly indicated than when he supported King James concerning the union of the Kingdoms of England and Scotland in 1606, not because Bacon wanted to flatter the King, but because he passionately believed in this measure. I am glad to see Mr. Carré mentions this when he says : " Bacon's writings and speeches on the question indicate how far in advance of the general opinion his own were ".

I must, however, take exception to the writer's comment . . . " It is hard to forgive Bacon for his pitiless prosecution of Essex, to whom he had avowed himself, a few months earlier, more beholden than to any human being. Yet treason was held to be a crime that severed all personal bonds, and in working the destruction of his friend and patron, he was

yielding to pressure from the Queen ". How much better if the writer had made it clear that Bacon in fact had no official position at Essex's trial (1601) ! He had no legal office at this period and Edward Coke, the Attorney-General, and Serjeant Yelverton were the official Counsel for the Crown. Bacon merely held what today might be termed a watching brief, having yielded to pressure by the Queen in appearing at the trial at all.

It is true that Bacon intervened on two occasions (see the *State Trials*) in a most pointed manner, but it is evident that he felt bound to do this when matters were getting out of hand, partly owing to Coke's aberrations and indulgence in abusive and sometimes irrelevant attacks on Essex and Southampton.

Again and again before Essex committed the desperate act of treason, which led him to Tower Green, Bacon had used all his endeavours to give the misguided nobleman (his own worst enemy) his sagacious advice. Bacon never betrayed Essex ; it was Essex who, by turning rebel, betrayed Bacon's confidence in him.

Let us go back five years to that memorable interview between Bacon and his patron at Twickenham in the autumn of 1595, when Essex had failed to get either the Attorney-Generalship or Solicitorship for Bacon, and offered him as compensation the gift of some land. Bacon then said words to this effect : " My Lord, I see I must be your homager and hold land of your gift ; but do you know the manner of doing homage in law ? Always it is with a saving of his faith to the King and his other lords : and therefore, my Lord, I can be no more yours than I was."

I do not think Mr. Carré stresses sufficiently that Bacon was a warm-hearted, lovable man, as is amply testified by such friends as Toby Matthew, Ben Jonson and others. He was very far from being the coldly calculating man of the Dean Church or Abbott legend.

Nevertheless Mr. Carré's article, despite its rather limited approach, is an able and thoughtful summary and is worthy of praise.

The Sovereign Flower, by Professor G. Wilson Knight.
(Methuen : 30*s*.)

The Kingdome of Heauen is compared, not to any great Kernell or Nut, but to a Graine of Mustard-seed; which is one of the least Graines, but hath in it a Propertie and Spirit, hastily to get vp and spread. So are there States, great and Territorie, and yet not apt to Enlarge, or Command; And some, that haue but a small Dimension of Stemme, and yet apt to be the Foundations of Great Monarchies.—FRANCIS BACON.

THIS book gives to the reader the accumulated results of the author's life-long devotion to Shakespearean interpretation, and should be read by all who seek to understand the principles governing the spiritual and mystical impulses inspiring the creative genius of the immortal poet. " His is a royal world," Professor Knight tells us, nor need this conception be limited to the destiny of any one people, for it is world-wide, and in the ultimate, macrocosmic. It is hardly possible to digest this thesis as here applied to the Shakespeare Plays, without remembering Francis Bacon's devotion to the *ideal* of kingship. William Blake wrote that " King James was Bacon's *primum mobile* ". How wrong he was ! Two of Bacon's longest Essays were on *Kingdomes and Estates*, and *Empire*, and his conception of royalty was as a divine office for the service as well as the government of the Commonweal, even though the incumbent did not himself measure up to this ideal. Hence the significant choice of two precepts to conclude the essay *Of Empire: Memento quod es Homo; memento quod es Deus*, or *Vice Dei*. Remember you are a man: remember you are Divine, or the Regent of God.

Now no student of Bacon could fail to notice the piety of the man. It is impossible to read his translation of certain Psalms, or his beautiful Prayers, without absorbing in some degree his reverence for the Christian faith and humility of spirit. These are exactly the characteristics that Professor Knight attributes with every justification to the author of the Shakespeare Plays. He says this " Shakespearean royalty was *conceived* in the reign of Elizabeth I ". He is right.

The royal theme runs like a " golden thread " through the Shakespearean drama, and in *Measure for Measure*, we are informed, " the whole play turns . . . on the serene but baffling teaching of Christ's gospel ". Later we have : " There are always cosmic powers waiting to shatter the brittle outside of over-confident and insubstantial appearance, and the rights Shakespeare ultimately believes in are only those which themselves derive sanction from this cosmic source, which becomes, at the limit, as with the English king in *Macbeth*, divine grace ". Food for thought indeed.

Caesar, or Kaiser, an absolute monarch, and Christ, the Supreme King, are three words with close etymological and spiritual affinities, and we would therefore expect Shakespeare's belief in absolute monarchy to be particularly vivid in *Julius Caesar*: and so it is.

> *O Julius Caesar ! thou art mighty yet !*
> *Thy spirit walks abroad, and turns our swords*
> *In our own proper entrails.*

These words remind us irresistibly of the Master's warning *I came not to send peace but a sword*, but in the Shakespearian play the spirit of Caesar emerges triumphant, in the end, over those who but killed the body. The New Testament era is the time of gospel, or good news, and the fulfilment of Christ's Kingdom on earth which is still to come. Rome must, as in *Cymbeline*, be married to, and replaced by, the Britain and later the England of Shakespeare.

In *Henry VIII* the saga of the English kings reaches an apotheosis, and Cranmer finally delivers his magnificent prophecy at Elizabeth I's christening. Many are the blessings this Queen is destined to bring to England, but anon she sleeps, and then shall come one who shall bring "peace, plenty, love, truth, terror" and

> *Wherever the bright sun of heaven shall shine*
> *His honour and the greatness of his name*
> *Shall be, and make new nations . . .*

Henry VIII is a play of peace *par excellence* and even Wolsey in his degradation can say to Thomas Cromwell:

> *Still in thy right hand carry gentle peace,*
> *To silence envious tongues: be just, and fear not.*

The King reigns supreme and the ecclesiastical power of Roma must be overturned so that *amor*, the protestant love, may take its rightful place in the kingdom. Thus the poet's preoccupation with kingly affairs is constantly revealed and,

according to Professor Knight in an essay on *All's Well That Ends Well*, most significantly entitled *The Third Eye*, in a style that handles the intricacies of the play " with the deft touches of a courtier's prose ".

The following essay, *What's in a Name ?* is, to our mind, less instructive. Any writer employing mystical themes should know the use of names as a means of power, and the Bible and Shakespeare's Plays are supreme examples of this. Some of the author's comments on Shakespeare's use of names are good, but others are obscure, or disappointing. Surely the name Caius, given to the French physician in the *Merry Wives of Windsor* may legitimately be regarded as a reference to the notorious eccentric Dr. John Caius (1510-73), physician to Edward VI and also Mary, who re-named, enlarged and later endowed with estates Gonville Hall, Cambridge University, now known as Gonville & Caius College? A famous anatomist and a graduate of Padua University, Dr. Caius was Master of his College from 1559 to 1573, and would be well-known by repute to University men. Francis Bacon was a Trinity man, and would be familiar with a tradition virtually exclusive to University and Court circles, but we have no proof that the man " Shakespeare " even attended his local grammar school, let alone Cambridge University !

Later the reader is asked if the change in names from Antonius in *Julius Caesar* to Anthony in *Antony and Cleopatra* has a reason. We might suggest that the introduction of the aspirate, as in the evolution of the Biblical name Abram to Abraham, might be compared to the development of the Divine " breath " in a spiritual personality. However, these points of criticism are not meant to detract from Professor Knight's lucid interpretations of the Plays, and we doff our cap to a man who points out that Shakespeare's Christianity may be closer to the Gospels themselves than to any Christian system, poetry or prose subtly teaching Divine law as occasion demands. We have no prosaic critic here, but a thinker worthy of attention.

To our own readers, the very name Shakespeare means more than Professor Knight admits—at least in print. Is it really too fanciful to believe that the poet-genius was hiding his own identity under a mystical pseudonym ? To ask the question is to hazard the answer. The Plays are saturated with Greek and Roman mythology, and must not the image of Pallas-Athene, the Greek goddess of Wisdom, shaking the spear of knowledge at ignorance, have been ever-present in the poet's mind ?

N. F.

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