

Digitized by the Internet Archive in 2007 with funding from Microsoft Corporation

http://www.archive.org/details/pleaforphonotypy00elliiala



FOR

PHONOTYPY

AND

PHONOGRAPHY;

OR,

SPEECH-PRINTING AND SPEECH-WRITING.

BY

ALEXANDER JOHN ELLIS, B.A.,

FELLOW OF THE CAMBRIDGE PHILOSOPHICAL SOCIETY, AND FORMERLY SCHOLAR OF TRINITY COLLEGE, CAMBRIDGE;

HONORARY MEMBER OF THE PHONOGRAPHIC CORRESPONDING SOCIETY; AUTHOR OF THE "ALPHABET OF NATURE," ETC.

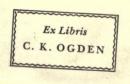
BATH :

PUBLISHED BY ISAAC PITMAN, AT THE PHONOGRAPHIC INSTITUTION, 5, NELSON PLACE.

LONDON:

S. BAGSTER AND SONS, 15, PATERNOSTER ROW. SOLD BY ALL BOOKSELLERS, PHONOGRAPHIC LECTURERS, AND TEACHERS.

1845.



BATH : PRINTED BY JOHN AND JAMES KEENE, KINGSMEAD STREET.

Stack Annex 1845

A PLEA,

&c.

WHILE we are still children, and have to thumb the spelling book, and perhaps, with many tears, to learn the orthography of every word in the language out of Entick's Dictionary, or some such well-known school manual, we feel all the horrors of our present heterotypy; but when we have mastered the art of spelling so far as to be able to read fluently at sight, and to write without making any very great mistakes of orthography, we forget the intense labour with which we acquired two arts, which are nearly as necessary to us as speaking and hearing. And because we feel no trouble in reading words, with which we are familiar by having seen them thousands of times in our lives, we overlook the fact that every one who sees them for the first time will have the greatest difficulty in discovering what sounds they represent. But, take the foreigner-we shall learn more from him than from a boy, because when we see a man in full power of intellect, desirous of learning, and unsparing in his efforts to gain knowledge, yet fail to acquire a facility in reading our language, even when the mere pronunciation of any word offers no difficulties to him, we can no longer put ourselves off with paltry excuses; we must own that there is a why, and a very serious one, although we do not now feel it ourselves. We don't feel it? Nay, let us be sincere ; let us take up a scientific work containing many new words, technical words, derived from languages with which we are unacquainted, and Englished after the usual disguising fashion, 9 do we never stumble-never falsely accentuate-never blunder in the sounds given to the vowels? Nav, take the very name of the art we are now treating of, PHONOTYPY; present it thus written, and see whether every one pronounces it nearly in the same way; ? will you not hear "fonotipi, fonotipi, fonotipi,"(1) and such like? We have heard these pronunciations given. But without travelling to unknown languages, let us take technical words of common life; the printers have types called primer, pica, bourgeois, and paper called demy. ? Well, my friend, how do you pronounce these words? If you have spent your time at a public school and at a university, if you have learned French and Italian, we imagine that you will stumble upon very many pronunciations before you arrive at the true, " primur, picu, burjos, dimi." The first, perhaps, you may utter, though it will be only a guess, but, if you are like ourselves, your first ideas of the three last will be "pica," "burjwa," and "demi;" sounds very remote indeed from the usual ones. Thus it is with all words in common life.

(1.) The meaning of these symbols, called "phonotypes," will be sufficiently explained in the first of the following tables, pp. 5-8.

? What landsman guesses that boatswain spells "bosun," coxswain, "cocsun," studdingsail, "stunsul," &c., &c. ? These you will say are extreme cases ; but ? why so ? Only because your particular avocations have not led you to utter these words, or hear them uttered. Recollect that the foreigner is in the same predicament with respect to all the words in the language ; and for this reason-the letters in our alphabet have no fixed sounds attached to them, nor is the same sound invariably represented by the same combination of letters. Now what we plead for is, some system of printing and writing, in which the same sound has always the same symbol, and the same symbol has always the same sound ; and this we call, when printed, PHONOTYPY, from "foni," voice, and "tipos," type; while, the now common, or other style of printing, is termed heterotypy, from "heturos" other, and "tipos" type. When written, we call such a system PHONOGRAPHY, from "foni," and "grafi" writing; the other style of writing being of course heterography. We ground this plea upon the extraordinary diversity of spellings to be found in the English language representing the same sound, and vice versd. We do not make any assertions at hazard; we are now prepared to prove the crime of "lèse orthografie," high treason against correct spelling, to a most alarming and unprecedented extent, against our language, as the two following tables will show. In the first table, headed "Heterotypic Representation of English Sounds," we have taken the sounds in English as we propose to represent them in Phonotypy,⁽²⁾ and to the right of each symbol we give the symbols, which are heterographically used in different words and on different occasions to represent these sounds, followed by the words themselves in which these symbols are employed. The letters by which the sound appears to be indicated or misrepresented, are printed in italic. This table will serve then to show the meaning of our phonotypes; but in order to make the distinction between heterotypy and phonotypy more apparent, we shall give the phonotypic representation of each word chosen

(2.) In the Phonographic Journal, No. 3, for March, 1842, the question of Phonotypy was first mooted by Mr. Isaac Pitman. In August, 1843, he became acquainted with the author of this pamphlet, since which time, both have worked together at the alphabet, with some little assistance from others. Printing was com-menced in January, 1844; the alphabet was perfected in April, and published in June, 1845. During the whole of that time, unremitting attention was paid to the working of the alphabet, and a great number of experiments tried. We mention this, to show that we are not offering a crude or unconsidered scheme to the public. We do not here give any explanation of Phonography, for which reference must be made to Mr. Pitman's Manual. It is sufficient to state that, independently of its advantage as a system of phonetic writing, it forms when applied to the English lan-guage, the most effective short hand yet invented. We have the satisfaction of adding that it is generally appreciated, as upwards of 150,000 phonographic publica-tions have been sold, and the *Manual* itself has now a steady sale of 2,000 copies a month; and the Phonographic Correspondent, written entirely in the phonographic character, numbers 2000 monthly subscribers. For information concerning the progress of Phonography, reference must be made to the "Intelligence" portion of the Phonotypic Journal. In this pamphlet, we only recommend Phonography upon the score of its giving a correct phonetical representation of the English language, and, therefore, what applies to Phonotypy in this respect applies equally to Phonography. The reader will find a reason given for the great difference in the construction of the pho-notypic and phonographic alphabets, in the "Alphabet of Nature," part 3, p. 184. As a matter of curiosity, it may be mentioned that the printer has set up this pamphlet from phonographic short hand copy.

to illustrate the mode of spelling, immediately after the words themselves, in such a manner that the eye can glance without trouble from one to the other. Finally, in a third column, we place figures to show the number of representations of this sound which we have found in English, in order that the number of orthographical expedients may be properly appreciated. The second table we term "Values of English Heterotypes." The 26 letters of the heterotypic alphabet do not by any means represent the true number of letters in our language ; we must take into consideration certain combinations of vowels and consonants which supply the place of simple letters, and we have therefore included all, or almost all, those combinations of letters which in any particular word represent simple sounds, or such sounds as we have deemed it best to represent by simple characters in the phonotypical alphabet, such as c, j, i, o, v, w. In the first column stands the combination of letters under consideration ; in the next the phonotypical representation of the sounds which it generally denotes, followed by the words in which these sounds occur under the given symbols ; together with the phonetical representation of the exemplificative word. The third column contains the number of such values.

*** The various notes, referred to in the following Tables, are placed at the end of Table II, pp. 14, 15.

TABLE I.—HETEROTYPIC REPRESENTATION OF ENGLISH SOUNDS.

 I i=a, a-e, ai, e, ee, ei, eig, i, i-e, ia-e, ie, ie-e, igh, o, u, ui, y, wi-e 18 imaging, image, captain, pretty, breeches, forfeit, foreign, sin, captive, imijin, imij, captin, priti, brigiz, forfit, forin, sin, captiv, marriage, pitied, sieve, sevennight, women, busy, build, physic, marij, pitid siv, senit, wimin, bizi, bild, fizic, housewife—huzif

Carried forward . . 61

Brought forward 61
4. $E e = a$, æ, ai, e, e-e, ea, eb, ei, eg, eo, eve, ie, æ, u, ue 15
many, Pæstum, (8) said, let, ledge, peasant, debt, heifer, phlegm,
meni Pestum, sed, let, lei, pezunt, det, hefur, flem,
leopard, sevennight, friend, fatid, (9) bury, guess
lepurd, senit, frend, fetid, beri, ges
5. $\mathbb{E} = a$, a-e, ai, ave, avo, e-e, e'e, ea, ei, ey, ey-e, hei
paring, pare, pair, prayer, mayor, there, ne'er, pear, their, eyry,
pærin, pær, pær, prær, mær, dær, nær, pær, dær, æri,
eyre, heir—ær, ær
6. $A = a$, ah , al , au , e , ea , ua ,
father, ah, psalm, aunt, clerk, heart, guard
fadur, a, sam, ant, clarc, hart, gard
7. A $\alpha = a$, a-e, ai, al, au,
sat, have, plaid, salmon, gauntlet, (10)
sat, hav plad, samun, gantlet
8. $\Theta = a$, al, ao, au, augh, augha, aw, awe, co-e, o, oa, oo, ou, ough 14
fall, walk, extraordinary, caul, naughty, Vaughan, awful, awe, fel, wec, ecstrerdinuri, cel, neti, Ven, eful, e,
George, nor, broad, door,(¹¹) cough, sought
Jerj, ner, bred, der, cef, set
9. $0 = a, au, e, ho, o, ou, ow$
want, laurel, rendezvous, ⁽⁷⁾ honour, on, trough, knowledge
wont, lorul, rondevuı, onur, on, trof, nolij.
10. U u=a, ae, aw, e, ea, eo, eu, i, ia, ie, io, o, oa, oi, ou, u, ua,
we, v
again, Michael, awry, her, earth, dungeon, grandeur, stir, physician,
ngen, Micul, uri, hur, urt duniun, graniur, stur, fizifun,
soldier, motion, work, cupboard, Beauvoir, journey, cur, victuals,
soldier, motion, work, cupboard, Beauvoir, journey, cur, victuals, soljur, mojun, wurc, cuburd, Bivur, jurni, cur, vitulz,
answer, myrrh—ansur, mur
11. U u=hu, iou, o, o-e, oe, oi-e, oo, ou, ow, u 10
humble, conscious, son, done, does, tortoise, blood, couple, bellows, rub
umbul, consus, sun, dun, duz, tortus, blud, cupul, belus, rub
12. O a=au, eau, eaux, eo, ew, o, o-e, oa, oe, oh, ol, oo, ou, ough,
ow, owe, wo hauteur, (4) beau, (4) Bordeaux, (4) yeoman, sew, go, cove, coal, doe,
hauteur, (*) beau, (*) Bordeaux, (*) yeoman, sew, go, cove, coal, doe,
hotur, bo, Burdo, yomun, so, go, cov, col, do, oh, yolk, brooch, soul, though, know, owe, sword(¹¹)
o, yoc, brog, sol, đo, no, o, sord
13. W u=eo, eu, ew, o, o-e, oe, oeu, oo, ooe, ou, ough, ougha, ous,
oux, u, u-e, ue, ui, ui-e, wo
galleon, rheumatism, brew, do, move, shoe, manoeuvre, too, wooed,
gulun, rumutizum, bru, du, muv, fu, munuvur, tu, wud,
soup, through, Brougham, rendezvous, billet-doux, unruly, rule, true,
sup, tru, Brum, rondevu, bilidu, unruli, rul, tru,
bruising, bruise, two— bruizin, bruiz, tu
14. U u=o, oo, oul, u-woman, wood, would, full 4
wumun, wud, wud, ful
Carried forward 191

Brought forward 191	
15. # i=ais-e, ei, eigh, ey, eye, i, i-e, ic, ie, ig, igh, is-e, ui, uy, y, ye 16	
aisle, neither, (12) height, eying, eye, bind, mine, indict, lie, sign, high,	
il, niđur, hit, iin, i, bind, min, indit, li, sin, hi,	
ide beguiling Com fly day it bights C: ft' 1'	
isle, beguiling, Guy, fly, dye-il, bigilin, Gi, fli, di	
16. Ai ai=aye, ai-e-aye, naive-ai, naiv	
17. Φ d=oi, oi-e, oig, oig-e, oy, uoy 6	
noisy, noise, poignant, coigne, boy, buoy	
ndzi, ndz, ponunt, con, bo, bo	
18. 8 x=eo, ho, o, ou, oub, ough, ow, owe 8	
Macleod, hour, compter, noun, doubt, bough, cow, allowed	
Muclsd, sur, centur, nen, det, be, ce, ulsd	
19. Ψ y=eau, eo, eu, ew, ewe, hu, ieu, iew, iewe, u, u-e, ue, ug, ugh,	
ui, yew, you	
beauty, feod, feud, few, ewe, (13) humour, lieu, view, viewed, usage,	
buti fud fud for my manual la mad and	
byti, fyd, fyd, fy, y, ymur, ly, vy, vyd, yzij	
use, ague, impugn, Hugh, suit, yew, you	
ys, egy, impyn, Hy, syt, y, y	
20. Yy=e, i, j, y-courteous, onion, hallelujah, yard 4	
cortyus, unyun, haliluuyu, yard	
21. W w=u, w, , -persuade, war, one-purswed, wor, wun . 3	
22. H h=h, lquh—hat, Colquhoun—hat, Cohun 2	
23. P p=gh, p, pe, ph, pp-hiccough, (14) pay, ape, diphthong, flapper 5	
hicup, pe, ep, diptoŋ, flapur	
24. B b=b, be, bb, pb-be, babe, abbot, cupbboard 4	
bi, beb, abut cuburd	
25. $T t = bt$, ct, ed, ght, phth, pt, t, te, th, tt, tw, z 12.	
	1
debt, indict, sucked, sought, phthisical, ptarmigan, toe, mete, Thomas,	
det, indit, suct, sot, tizicul, tarmigun, to, mit, Tomus,	
hatter, two, mezzotint, (15)—hatur, tu, metsotint	
26. D d=d, dd, de, ed-deep, add, trade, loved-dip, ad, tred, luvd 4	
27. C g=ch, che, jori, t, tch	
chain, arched, Marjoribanks, question, match	
çen, arçt, Marçbaycs, cwesçun, maç	
28. J j=ch, d, dge, g, ge, gh, j	
Greenwich, (16) soldier, fudge, gem, age, Bellingham, just	
Grinij, soljur, fuj, jem, ej, Belinjum, just	
29. C c=c, ch, che, ck, gh, k, ke, lk, q, qu, que, x \dots 12	
can, chasm, ache, back, hough, kill, bake, walk, quack, quay, antique,	
can, cazum, ec, bac, hoc, cil, bec, woc, cwac, ci, antic,	
exception—ecsepfun	
30. G g=g, gg, gue-go, egg, plague-go, eg, pleg 3	
31. F f=f, fe, ff, gh, ph, pph, u 7	
foe, fife, stiff, laugh, philosophy, sapphire, lieutenant	
fo, fif, stif, laf, filosofi, safir, leftenunt	
32. V v=f, ph, v, ve-of, nephew, view, have-ov, nevy, vy, hav 4	
33. Γ t=phth, th, tth—apophthegm, thigh, Matthew 3	
apotem, ti, Maty	
Carried forward 315	

Brought forward	315
34. at a=th, the-thy, breathe-di, brid	2
35. S s=c, ce, ps, s, sc, sch, se, ss, z	9
cell, ace, psalm, see, scene, schism, case, hiss, mezzotint	
sel, ɛs, sam, si, sin, sizum, cɛs, his, metsotint 36. Z z=c, ce, s, se, ss, x, z, ze, zz	9
36. Z z=c, ce, s, se, ss, x, z, ze, zz sacrificing, sacrifice,(¹⁷) as, ease, scissors, Xenophon, zeal, freeze	
sacrifizin, sacrifiz, az, iz, sizurz, Zenufun, zil, friz,	1 .
whizzing—hwizin	
37. $\Sigma = c, ch, s, sc, sh, t$	6
special, chaise, sure, conscious, shine, motion	
speful, fez, fur, confus, fin, mofun	5
38. X 3=j, g, ge, s, z—jambeux, ⁽¹⁸⁾ rouging, rouge, pleasure, azure zambu, ruzin, ruz, plezur azur	
39. $L l=l$, le, ll, sle—lace, ale, all, isle—les, el, θ l, il .	4
40. R r=lo, r, re, rh, rr, rrh, wr	7
colonel, ray, spare, rheumatism, burr, myrrh, write	
curnul, re, spær, rumutizum, bur, mur, rit	2
41. M m=chm, gm, lm, lmonde, m, mb, me, mm, mn, mp	10
drachm, phlegm, psalm, Cholmondeley, am, lamb, lame, hammer,	
dram, flem, sam, Cumli, am, lam, lam, hamur hymn, Beauchamp—him, Bigum	
42. N $n=kn$, gn, mn, mp, n, ne, nn, pn	
know, gnaw, mnemonics, compter, can, cane, fanner, pneumatics	8
no, no, nimonics, contur, can, cen, fanur, nymatics	
43. U ŋ=n, nd, ng, ngue-finger, handkerchief, singer, tongue	4
fingur, hancurçif, sinur, tun	379
	519
TABLE IIVALUES OF ENGLISH HETEROTYPES.	
TABLE IIVALUES OF ENGLISH HEIEROITTES.	
the second s	-
1. $A = i, \epsilon, e, w, a, a, \theta, 0, u$	9
imaging, mating, many, paring, father, fat, fall, want, dollar imijin, metin, meni, pærin, faður, fat, føl, wont, dolur	
2. a-e=i, ε , ε , a-image, mate, mare, have—imij, met, mær, hav	4
3. $a-ue=\varepsilon$; $\varepsilon-y$ —plague; ague—pleg; εgy	2
4. ae=u; si etsMichael; aerial etcMicul; siriul ets.	2
5. æ=i, e-Cæsar, Pæstum-Sizur, Pestum	2
6. $ah = \varepsilon$, a —dahlia, ah —dɛlyu, a	2
7. ai=i, ɛ, e, æ, a; ɛi-captain, pain, said, pair, plaid; dais .	6
captin, pen, sed, pær, plad; deis 8. ai-e=ai—naive—naiv	1
9. $aigh = \varepsilon$ -straight-stret	i
10. ais- $e=i$ -aisle- i l	i
11. $al=a, a, \theta$; $\epsilon l, al, \theta l, ul etseturu$	7
psalm, salmon, walk; paling, alkali, all, principal etcetera	
sam, samun, wec; pelin, alculi, el, prinsipul etseturu	
Carried forward	37

Brought forward	37
12. $ao = \varepsilon$, xe , Θ ; $\varepsilon\Theta$, εo , εo etseturu	6
gaol, aorist, ecstraordinary; aorta, chaos, Aonian	
jel, ærist, ecstrørdinuri; sørtu, ceos, Ewnyun	
13. $au = \varepsilon$, a, a, θ , o, o ; εu	7
gauging, aunt, gauntlet, caul, laurel, hauteur; Menelaus	
gejin, ant, gantlet, cel, lorul, hotur; Menileus	
14. au- $e = \varepsilon$ -gauge-gej	1
15. augh=o-naughty-neti	1
16. $augha, = \theta - Vaughan - V \theta n$	1
17. aw=0, u; uw-awful, awry; awake-oful, uri; uwec .	3
18. $awe=0$; $uw-awe$; $aweary-0$; $uwiri$	2
19. ay=ε; ai-pray; ay-pre; ai	2
20. aye=ɛ, æ; ai-prayed, prayer; aye-prɛd, prær; ai	.3
21. ayo=æ; ɛo-mayor; Mayo-mær; Mɛo	2
22. B =b, <i>mute</i> —babe, lamb—bɛb, lam	2
23. be final=b-babe-beb	
24. bt=t; bt-debt; obtrude;-det; obtrud	2
25. C =c. s. z. f: mute	5
can, cell, sacrificing, special; indict	
can, sel, sacrifizin, speful; indit	
26. cc=c; cs-account; accident-ucsnt; acsidunt	2
27. ce final=s, z—ice, sacrifice (1^7) —is, sacrifiz	2
28. $ch=c$ i c (: cw mute	6
28. $ch=q, j, c, f; cw, mute$	
çen, Grinij, cazum, ∫ez, cwiur, dram	14 100
29. che=q, c—arched, ache—argt, cc	2
$30. ck = c - back - bac. \qquad . \qquad$	1
31. ct=t; ct, cf ets.—indict; interdict, indiction	3
indit; inturdict, indicfun	
32. D =d, i, mute-dver, soldier, handkerchief	3
32. D =d, j, <i>mute</i> —dyer, soldier, handkerchief diur, soljur, hancurgif	
33. dd=d-add-ad	1
33. dd=d-add-ad	1
35. dge=j—wedge—wej	ī
36. E =i, i, e, a, o, u, <i>mute</i>	7
be, pretty, let, clerk, rendezvous, burden, tame	
bi, priti, let, clarc, rondevu, burdun, tem	
37. e-e=i, e, æ—these, ledge, there—điz, lej, đær	3
$38. ea=i, \epsilon, e, a, u; ia, iu, iu$	9
each, great, peasant, pear, heart, earth; react, idea, area	19. 19.
iç, gret, pezunt, pær, hart, urt; riact, idiu, æriu	
39. ea-e=i; ie-breathe; create-brid; crist	2
40. eau=i, o, y—Beauchamp, beau, beauty—Bigum, bo, byti .	
41. eaux= ω -Bordeaux-Burd ω	1
42. eb=e; ib-debt; ebriety-det; ibrieti	2
43. ed=t, d; ed-plucked, loved; tempted-pluct, luvd; temted	
44. ee=i, i, æ; ie—feet, breeches, ne'er; preexist	
fit, brigiz, nær priegzist	
Carried forward .	. 131

Brought forward	181
45. eg=i,e; eg-impregn,phlegm; phlegmatic-imprin,flem; flegm	atic 3
45. eg=i,e; eg-impregu, pinegin; pineginatie-impren, itegin	7
46. ei=i, i, z, e, æ, i; ii conceit, forfeit, veil, heifer, their, Leipsig, reimburse	
cunsit, forfit, vel, hefur, åær, Lipsic, rümburs	
cunsu, iornit, ver, neitur, dar, inpote, reiniours	1
47. ei-e=i-conceive-cunsiv 48. eig=i, ɛ-sovereign, feign-sovrin, fɛn	2
48. elg=1, E-sovereigh, leigh-sovini, leit	2
49. eigh= ϵ , i=weigh, height—we, hit	in a
50. eighe = ε -weighed - wed	9
51. co=i, e, u, ω, u, y, s; iω, io	
pipul, lepurd, dunjun, yomun, gulum, fyd, Muclyd;	
pipui, iepuru, uunjui, yoman, guiun, iyu, muorou,	Mar del
aureola, theology—oriolu, tioloji	1
52. eo-e=o-George-Jorj	4.
53. eu=u, uu, y; iy-grandeur, rheumatism, feud; reunion .	NF 20
granjur, rumutizum, fyd; riynyun	4
54. eve=e; iv, ivu, evu ets.—sevennight; eve, even, seven .	25 8.89
senit; iv, ivun, sevun	3
55. ew=o, u, y,-shew, brew, new-fo, bru, ny	
56. ewe=y; yu, ui-ewe; ewer, jewel-y; yur, juil .	3
57. ey=i, ɛ, æ, i-key, they, eyry, eying-ci, đɛ, æri, iŋ	4
58. $ey-e=$ æ— $eyre$ —ær	. 1
59. eye=i, ɛ, i; iu-keyed, conveyed, eye; eyer	4
cid, cunved, i; jur	1
$60. eyo = \varepsilon - eyot - \varepsilon t $. 1
61. ez=e-rendezvous-rondevu	1
62. F =f, v, mute-foe, of, stiff-fo, ov, stif	. 3
63. fe=f-fife-fif	1
64. ff = f - staff - staff 1
65. G =j, g, z, <i>mute</i> —gem, gag, rouging, impugn	4
jem, gag, ruziŋ, impyn	Q. 49
66. ge=j, z-age,-rouge-ej, ruz	. 2
$67. gg=g-egg-eg \qquad . \qquad $	1
68. gh=p, j, c, g, f, mute	. 6
hiccough, Bellingham, hough, ghost, laugh, though	
hicup, Belinjum, hoc, gost, laf, đo	
69. ght = t - ought - ot 	1
70. gm=m; gm-phlegm, phlegmatic-flem, flegmatic .	. 2
71. gn=n; gn-impugn; pugnacious-impyn; pugnafus .	2
72. gue=g; gy-plague; ague-pleg; egy	. 2
73. $\mathbf{H} = h$, $mute(19)$ —hat, honour—hat, onur	2
74. ha=u; ha, he, etsBirmingham, ham, hall, etc.	. 3
Burminum; ham, hol, ets.	
75. hei=æ; he-heir; heinous-ær; henus	. 2
76. ho=0, ϑ ; hu, ho, ets.—honour, hour; honey, honing.	4
onur, sur; huni, honin	
77. hu=u; hu, ets.—humble; hum—umbul; hum	2
78. I=i, i, u, i, mute-admiration, sin, stir, bind, business	. 5
admirejun, sin, stur, bind, biznes	
Carried forward .	. 225

 79. i-e=i, i, i; iu—magazine, captive, mine; fire		Brought forward	225
$\begin{tabular}{ c c c c c c c c c c c c c c c c c c c$	79		
 80. ia=i, u; ik, je, ja, ju, ya, yu parlament, special; mediator, hiatus, iambie, trial, maniae, mania parliament, special; mediator, hiatus, iambie, trial, maniae, mania parliament, special; mediator, hiatus, jambie, trial, menyae, menyu 81. ia-e=i-marriage-marij 1 82. ice=i; icindict; interdictindit; inturdict 2 83. ic=i, i, e, u, i; ik, ice, je, ju, yi, yu 11 grief, pitied, friend, soljur, li; mediival, conscientious, pieti, crier, species, courier-criur, spilyiz, caryur 84. ice=i, i-grieve, sieve-griv, siv 2 85. icu=y; ef-licu; licutenant-ly; lefterunt 2 86. icw=y-view-vy 1 87. iewe=y; ye, yu-viewed; vieweth, viewer-vyd; vyet, vyur 3 88. ig=i; ig etssign; signet-sin; signet 2 89. igh=i, i-might, sevennight-mit, senit 2 90. io==u; io, io, io, io, yu 6 motion; mediocrity, mediocre, fonic, violence, million mofun; midiocrit, midiocur, fonic, violuns, milyun 3 91. iou==u; yu-vicious; bilious-vifus; bilyus 2 92. is-e=i-isle-dl 1 93. i-ue=i-antique-antic 1 94. J=y, j, 3-hallelujah, just, jambeux-haliluyu, just, 3ambu 3 95. jori=q-Marjoribanks-Marchages 1 97. ke final=c-wake-wave 1 98. kn=n-know-no 2 97. ke final=c-wake-wave 1 98. kn=n-Cholmondeley-Equali 1 99. L=l, mute-lace, pslm-les, sam 2 100. le final=l; ul-bale, able-bel; zbul 1 111 112. lm=m; lm-pslm, (29) psalmody-sam, salmodi 2 120. lm=m, n; mn-pslm, iseme-lam; ambur 2 121. mb=m, n; mn-hymn, mnemonics; Memnon 3 122. mam-rammer-ramur 1 133. in mam-rammer-ramur 1 144. ng=n, p, mate-sun, finger, hymn-sun, fingur, him 3 114. ng=n, j, mg, nj-singer; finger, hymn-sun, fingur, him jin 		maguzin, captiv, min, fiur	
parliament, special; mediator, hiatus, iambie, trial, maniae, mania parliament, speful; midietar, histus, iambie, trial, manyae, manya 11. ia-e=i-marriage-marij	80). ia=i, u; iɛ, iɛ, iɑ, iu, yɑ, yu	
81. in-e=i-matriage-marij 1.1. interdict interdict 1.2. interdict interdict interdict 1.2. interdint 1.2. interdint 1.2. interdint 1.2. inte		parliament, special; mediator, hiatus, iambic, trial, maniac, mar	nia
82. ic=1; ic—indict; interdict—indit; inturdict		parlimunt, speful; midietur, histus, jambie, triul, menyac, men	yu
 83. ie=i, i, e, u, i; ii, ie, ie, ju, yi, yu		. ia-e=i-marriage-marij	
grief, pitied, friend, soldier, lie; medieval, conscientious, piety, grif, pitid, frend, soljur, li; medieval, conscientious, piety, crier, species, courier—criur, spifyiz, caryur 84. ic-e=i, i—grieve, sieve—griv, siv			2
grief, pitied, friend, soldier, lie; medieval, conscientious, piety, grif, pitid, frend, soljur, li; medieval, conscientious, piety, crier, species, courier—criur, spifyiz, caryur 84. ic-e=i, i—grieve, sieve—griv, siv	83	3. ie=i, i, e, u, i; it, ie, ie, iu, yi, yu	
 grif, pitid, frend, soljur, li; meditvul, confienfus, pieti, crier, species, courier—criur, spijviz, caryur 84. ic-e=i, i—grieve, sieve— griv, siv		grief, pitied, friend, soldier, lie; medieval, conscientious, piety,	
erier, species, courier—criur, spifyiz, caryur 84. ic-e=i, i—grieve, sieve—griv, siv		grif, pitid, frend, soljur, li; meditvul, confienfus, pieti,	
85. ieu=y; cf—lieu; lieutenant—ly; leftenunt		crier, species, courier-criur, spifyiz, curyur	
86. iew=y-view-vy			2
87. iewe=y; ye, yu-viewed; vieweth, viewer-vyd; vyet, vyur 88. ig=i; ig ets.—sign; signet—sin; signet	81	i. ieu=y; ef-lieu; lieutenant-ly; leftenunt.	
88. ig=i; ig ets.—sign; signet—sin; signet	86	iew = y - view - vy	
 89. igh=i, i—night, sevennight—nit, senit. 90. io=u; io, io, jo, jo, yu motion; mediocrity, medioere, Ionic, violence, million mofun; midioeriti, midiocur, fonic, violuns, milyun 91. iou=u; yu—vicious; bilious—vifus; bilyus 22. is-e=i—isle—il 13. i-ue=i-antique—antic 14. J=y, j, z—hallelujah, just, jambeux—haliluyu, just, zambuu 95. jori=ç—Marjoribanks—Marçbayes 16. K=c, mute—keep, know—cip, no 29. is hand=c—wake—wee 19. ke final=c—wake—wee 10. le final=l; ul—bale, able—bel; sbul 21. mute—lace, psalm—les, sam 22. im=m; lm—psalm,(²⁰) psalmody—sam, salmodi 23. loe=r; lo ets.—colonel; colonial—curnul; colonyul 24. lo=r; lo ets.—colonel; colonial—curnul; colonyul 25. lquh=h—Colquhoun—Cohum 20. immem, n; mp—Beauchamp, compter; lamp 21. mamm, n; mp—Beauchamp, compter; lamp 22. mamm, n; mp—Beauchamp, compter; lamp 23. monte—sun, finger, hymm—sun, fingur, him 24. mamp; ng, nj—singer; finger, hinging—singur; fingur, himjin 			3
 90. io=u; io, io, jo, yu			
motion; mediocrity, medioere, Ionic, violence, million mofun; midiocriti, midiocur, fonic, violuns, milyun 91. iou=u; yu-vicious; bilious-vifus; bilyus			2
mofun; midiocriti, midiocur, fonie, violuns, milyun 91. iou=u; yu-vicious; bilious-vifus; bilyus	90). io=u; io, io, io, jo, yu	6
91. iou=u; yu-vicious; bilious-vifus; bilyus292. is-e=i-isle-il193. i-ue=i-antique-antic194. $J=y, j, z$ -hallelujah, just, jambeux-haliluyu, just, zambu395. jori=q-Marjoribanks-Margbanes196. $K=c, mute$ -keep, know- cip, no297. ke final=c-wake-wee198. kn=n-know-no199. $L=l, mute$ -lace, psalm-les, sam2100. le final=1; ul-bale, able-bal; sbul2101. ll=l-ball-bel1102. lm=m; lm-psalm,(20) psalmody-sam, salmodi2103. lmonde=m-Cholmondeley-Cumli1104. lo=r; lo etscolonel; colonial-curnul; colonyul2105. lquh=h-Colquhoun-Cohun1106. $M=m, mute$ -mace, mnemonics-mes, nimonics2107. mb=m; mb-lamb; amber-lam; ambur2108. mm=m-rammer-ramur1109. mn=m, n; mp-Beauchamp, compter; lamp3110. mp=m, n; mp-Beauchamp, compter; lamp3111. $N=n, n, mute$ -sun, finger, hymn-sun, fingur, him3112. nd=n; nd-handkerchief; hand-hangeurgif; hand2113. ne final=n-pine-pin1114. ng=n; ng, nj-singer; finger, hinging-singur; fingur, hinjin3		motion; mediocrity, mediocre, Ionic, violence, million	
92. is-e=i—isle—il193. i-ue=i—antique—antic194. \mathbf{J} =y, j, g—hallelujah, just, jambeux—haliluyu, just, gambu395. jori=q—Marjoribanks—Margbanes196. \mathbf{K} =c, mute—keep, know— cip, no297. ke final=c—wake—wee198. kn=n—know—no199. \mathbf{L} =l, mute—lace, psalm—les, sam2100. le final=l; ul—bale, able—bal; sbul2101. ll=1—ball—bel1102. lm=m; lm—psalm,(20) psalmody—sam, salmodi2103. lmonde=m—Cholmondeley—Cumli1104. lo=r; lo ets.—colonel; colonial—curnul; colonyul2105. lquh=h—Colquhoun—Cohum1106. \mathbf{M} =m, mute—mace, mnemonics—mes, nimonics2107. mb=m; mb—lamb; amber—lam; ambur2108. mm=m—rammer—ramur1109. mn=m, n; mp—Beauchamp, compter; lamp3110. mp=m, n; mp—Beauchamp, compter; lamp3111. \mathbf{N} =n, η , mute—sun, finger, hymn—sun, fingur, him3112. nd=y; nd—handkerchief; hand—hangeurgif; hand2			
93. i-ue=i-antique-antic194. \mathbf{J} =y, j, z-hallelujah, just, jambeux-haliluyu, just, zambu395. jori=q-Marjoribanks-Margbanes196. \mathbf{K} =c, mute-keep, know- cip, no297. ke final=c-wake-wee198. kn=n-know-no199. \mathbf{L} =l, mute-lace, psalm-les, sam2100. le final=l; ul-bale, able-bal; sbul2101. ll=1-ball-bel1102. lm=m; lm-psalm,(20) psalmody-sam, salmodi2103. lmonde=m-Cholmondeley-Cumli1104. lo=r; lo etscolonel; colonial-curnul; colonyul2105. lquh=h-Colquhoun-Cohum1106. \mathbf{M} =m, mute-mace, mnemonics-mes, nimonics2107. mb=m; mb-lamb; amber-lam; ambur2108. mm=m-rammer-ramur1109. mn=m, n; mn-hymn, mnemonics; Memnon3him, nimonics, Memnun3110. mp=m, n; mp-Beauchamp, compter; lamp3111. \mathbf{N} =n, η , mute-sun, finger, hymn-sun, fingur, him3112. nd=y; nd-handkerchief; hand-hangeurgif; hand2114. ng=y; η g, η -mine-pin1	9]	. iou=u; yu-vicious; bilious-vijus; bilyus	
94. $\mathbf{J} = \mathbf{y}, \mathbf{j}, \mathbf{z}$ —hallelujah, just, jambeux—haliluyu, just, zambu395.jori= \mathbf{q} —Marjoribanks—Margbanges196. $\mathbf{K} = \mathbf{c}, mute$ —keep, know— cip, no297.ke final= \mathbf{c} —wake—wec198.kn=n—know—no199. $\mathbf{L} = \mathbf{l}, mute$ —lace, psalm—les, sam2100.le final=1; ul—bale, able—bel; ebul2101.ll=1—ball—bel1102.lm=m; lm—psalm,(2°) psalmody—sam, salmodi2103.lmonde=m—Cholmondele y—Cumli1104.lo=r; lo ets.—colonel; colonial—curnul; colonyul2105.lquh=h—Colquhoun—Cohum1106. $\mathbf{M} = m, mute$ —mace, mnemonics—mes, nimonics2107.mb=m; mb—lamb; amber—lam; ambur2108.mm=m-rammer—ramur1109.mn=m, n; mn—hymn, mnemonics; Memnon3110.mp=m, n; mp—Beauchamp, compter; lamp3111. $\mathbf{N} = n, \eta, mute$ —sun, finger, hymm—sun, fingur, him3112.nd=ŋ; nd—handkerchief; hand—haŋcurçif; hand2113.ne final=n—pine—pin1114.ng=ŋ; ng, nj—singer; finger, hinging—singur; fingur, hinjin3			
95. jori=ç-Marjoribanks-Margbanes196. \mathbf{K} =c, mute-keep, know- cip, no297. ke final=c-wake-wec198. kn=n-know-no199. \mathbf{L} =l, mute-lace, psalm-les, sam2100. le final=l; ul-bale, able-bel; sbul2101. ll=l-ball-bel1102. lm=m; lm-psalm,(20) psalmody-sam, salmodi2103. lmonde=m-Cholmondeley-Cumli1104. lo=r; lo etscolonel; colonial-curnul; colonyul2105. lquh=h-Colquhoun-Cohum1106. \mathbf{M} =m, mute-mace, mnemonics-mes, nimonics2107. mb=m; mb-lamb; amber-lam; ambur2108. mm=m-rammer-ramur1109. mn=m, n; mp-Beauchamp, compter; lamp3110. mp=m, n; mp-Beauchamp, compter; lamp3111. \mathbf{N} =n, η , mute-sun, finger, hym-sun, fingur, him3112. nd=y; nd-handkerchief; hand-hangeurgif; hand2			
96. $\mathbf{K} = c$, mute—keep, know— cip, no	94	. J =y, j, <u>z</u> —hallelujah, just, jambeux—haliluyu, just, zambu	
97. ke final=c-wake-wee	95	. jori=g-Marjoribanks-Marchances	
98.kn=n-know-no199. L =l, mute-lace, psalm-les, sam2100.le final=l; ul-bale, able-bel; ebul2101.ll=l-ball-bel1102.lm=m; lm-psalm,(20) psalmody-sam, salmodi2103.lmonde=m-Cholmondeley-Eumli1104.lo=r; lo etscolonel; colonial-curnul; colonyul2105.lquh=h-Colquhoun-Cohun1106. M =m, mute-mace, mnemonics-mes, nimonics2107.mb=m; mb-lamb; amber-lam; ambur2108.mm=m-rammer-ramur1109.mn=m, n; mn-hymn, mnemonics; Memnon3110.mp=m, n; mp-Beauchamp, compter; lamp3111. N =n, ŋ, mute-sun, finger, hymn-sun, fingur, him3112.nd=ŋ; nd-handkerchief; hand-hageurgif; hand2113.ne final=n-pine-pin1114.ng=ŋ; ng, nj-singer; finger, hinging-singur; fingur, hinjin3	90	$\mathbf{K} = \mathbf{c}, mute - \text{keep}, \text{know} - \text{cip}, n\omega$.	2
99. L =l, mute—lace, psalm—les, sam	97	$ke final = c - wake - wec \cdot \cdot$	
100. le final=1; ul—bale, able—bal; ebul2101. ll=1-ball—bal1102. lm=m; lm—psalm,(20) psalmody—sam, salmodi1103. lmonde=m—Cholmondeley—Eumli1104. lo=r; lo ets.—colonel; colonial—curnul; colonyul2105. lquh=h—Colquhoun—Cohun1106. \mathbf{M} =m, mute—mace, mnemonics—mes, nimonics2107. mb=m; mb—lamb; amber—lam; ambur2108. mm=m—rammer—ramur1109. mn=m, n; mn—hymn, mnemonics; Memnon3him, nimonics, Memnun3110. mp=m, n; mp—Beauchamp, compter; lamp3111. \mathbf{N} =n, η , mute—sun, finger, hymn—sun, fingur, him3112. nd= η ; nd—handkerchief; hand—hageurgif; hand2113. ne final=n—pine—pin11114. ng= η ; η g, nj—singer; finger, hinging—singur; fingur, hinjin3			
101. $ll=l-ball-bel$ 1102. $lm=m$; $lm-psalm,(2^0)$ psalmody-sam, salmodi2103. $lmonde=m-Cholmondeley-Cumli$ 1104. $lo=r$; lo etscolonel; colonial-curnul; colonyul2105. $lquh=h-Colquhoun-Cohun$ 1106. $\mathbf{M}=m, mute-mace, mnemonics-mes, nimonics$ 2107. $mb=m$; $mb-lamb$; $amber-lam$; $ambur$ 2108. $mm=m-rammer-ramur$ 1109. $mn=m, n; mn-hymn, mnemonics; Memnon$ 3 $him, nimonics, Memnun$ 3110. $mp=m, n; mp-Beauchamp, compter; lamp$ 3111. $\mathbf{N}=n, \eta, mute-sun, finger, hymn-sun, fingur, him$ 3112. $nd=\eta; nd-handkerchief; hand-hageurgif; hand$ 2113. $ne final=n-pine-pin$ 1114. $ng=\eta; \etag, nj-singer; finger, hinging-singur; fingur, hinjing$ 3	99	$\mathbf{L} = 1, mute - lace, psalm - les, sam \cdot \cdot$	2
102. $lm=m$; $lm-psalm,(2^0)$ psalmody-sam, salmodi2103. $lmonde=m-Cholmondeley-Cumli$ 1104. $lo=r$; lo etscolonel; colonial-curnul; colonyul2105. $lquh=h-Colquhoun-Cohum$ 1106. $\mathbf{M}=m$, mute-mace, mnemonics-mes, nimonics2107. $mb=m$; $mb-lamb$; $amber-lam$; $ambur$ 2108. $mm=m-rammer-ramur$ 1109. $mn=m$, n ; $mn-hymn$, mnemonics; Memnon3 him , $nimonics$, Memnun3110. $mp=m$, n ; $mp-Beauchamp, compter; lamp$ 3 $Biqum, csntur; lamp$ 3111. $\mathbf{N}=n, n, mute-sun, finger, hymn-sun, fingur, him3112. nd=y; nd-handkerchief; hand-hageurgif; hand2113. ne final=n-pine-pin1114. ng=y; ng, nj-singer; finger, hinging-singur; fingur, hinjin3$			
103. $lmonde=m$ —Cholmondeley—Cumli1104. $lo=r$; lo ets.—colonel; colonial—curnul; colonyul2105. $lquh=h$ —Colquhoun—Cohun1106. $\mathbf{M}=m$, mute—mace, mnemonics—mes, nimonics2107. $mb=m$; mb —lamb; amber—lam; ambur2108. $mm=m$ —rammer—ramur1109. $mn=m$, n; mn —hymn, mnemonics; Memnon3him, nimonics, Memnun3110. $mp=m$, n; mp —Beauchamp, compter; lamp3111. $\mathbf{N}=n$, n , mute—sun, finger, hymn—sun, fingur, him3112. $nd=n$; nd—handkerchief; hand—hangeurgif; hand2113. ne final=n—pine—pin1114. $ng=n$; ng , nj —singer; finger, hinging—singur, fingur, hinjin3			
104. lo=r; lo ets.—colonel; colonial—curnul; colonyul2105. lquh=h—Colquhoun—Cohum1106. $\mathbf{M} = m$, mute—mace, mnemonics—mes, nimonics1107. mb=m; mb—lamb; amber—lam; ambur2108. mm=m—rammer—ramur2109. mn=m, n; mn—hymn, mnemonics; Memnon3him, nimonics, Memnun3110. mp=m, n; mp—Beauchamp, compter; lamp3Biqum, esntur; lamp3111. $\mathbf{N} = n, n, mute$ —sun, finger, hymn—sun, fingur, him3112. nd=y; nd—handkerchief; hand—hangeurgif; hand2113. ne final=n—pine—pin1114. ng=y; ng, nj—singer; finger, hinging—singur; fingur, hinjin3	10:	2. $Im=m$; $Im-psalm$, (20) psalmody-sam, salmodi	
105. lquh=hColquhounCohun1106. $\mathbf{M} = m$, mute-mace, mnemonicsmes, nimonics2107. mb=m; mblamb; amberlam; ambur2108. mm=mrammerramur1109. mn=m, n; mnhymn, mnemonics; Memnon3him, nimonics, Memnun3110. mp=m, n; mpBeauchamp, compter; lamp3Biqum, csntur; lamp3111. $\mathbf{N} = n, n, mute$ sun, finger, hymnsun, fingur, him3112. nd=n; ndhandkerchief; handhangeurgif; hand2113. ne final=npinepin1114. ng=n; ng, njsinger; finger, hingingsingur; fingur, hinjin3	10:	. Imonde=m-Cholmondeley-Eumli	
106. $\mathbf{M} = m$, mute—mace, mnemonics—mes, nimonics2107. mb=m; mb—lamb; amber—lam; ambur2108. mm=m—rammer—ramur1109. mn=m, n; mn—hymn, mnemonics; Memnon3him, nimonics, Memnun3110. mp=m, n; mp—Beauchamp, compter; lamp3Biqum, csntur; lamp3111. $\mathbf{N} = n, n, mute$ —sun, finger, hymn—sun, fingur, him3112. nd=n; nd—handkerchief; hand—hangurgif; hand2113. ne final=n—pine—pin1114. ng=n; ng, nj—singer; finger, hinging—sinjur; fingur, hinjin3	104	. lo=r; lo ets.—colonel; colonial—curnul; colonyul .	
107. mb=m; mb—lamb; amber—lam; ambur2108. mm=m—rammer—rammer—ramur1109. mn=m, n; mn—hymn, mnemonics; Memnon3him, nimonics, Memnun3110. mp=m, n; mp—Beauchamp, compter; lamp3Biçum, csntur; lamp3111. \mathbf{N} =n, n, mute—sun, finger, hymn—sun, fingur, him3112. nd=n; nd—handkerchief; hand—hangeurçif; hand2113. ne final=n—pine—pin1114. ng=n; ng, nj—singer; finger, hinging—sinjur; fingur, hinjin3			
108. $mm = m$ —rammer—ramur 1 109. $mn = m$, n; mn —hymn, mnemonics; Memnon 3 him, nimonics, Memnun 3 110. $mp = m$, n; mp —Beauchamp, compter; lamp 3 Bigum, csntur; lamp 3 111. $\mathbf{N} = n$, η , mute—sun, finger, hymn—sun, fingur, him 3 112. $nd = \eta$; nd—handkerchief; hand—hangeurgif; hand 2 113. $ne final = n$ —pine—pin 1 114. $ng = \eta$; ηg , nj —singer; finger, hinging—sinjur; fingur, hinjin 3			
 109. mn=m, n; mn—hymn, mnemonics; Memnon	-		
him, nimonics,Memnun110. mp=m, n;mp—Beauchamp, compter;lamp3Biçum,csntur;lamp111. \mathbf{N} =n, \mathfrak{y} , mute—sun, finger, hymn—sun, fingur, him3112. nd= \mathfrak{y} ;nd—handkerchief;hand—hangcurgif;handhandmerchief;hand—hangcurgif;113. nefinal=n—pine—pin114. ng= \mathfrak{y} ; \mathfrak{y} , \mathfrak{n} j—singer;finger, hinging—singur;fingur, hinjin3		5. mm=m—rammer—ramur	
 110. mp=m, n; mp—Beauchamp, compter; lamp	108	J. mn=m, n; mn—hymn, mnemonics; Memnon	3
Biqum,csntur;lamp111. $\mathbf{N} = n, \eta, mute$ —sun, finger, hymn—sun, fingur, him3112. $nd = \eta;$ nd —handkerchief;hand—hangeurçif;113.ne final=n—pine—pin114. $ng = \eta;$ $\etag,$ nj—singer;finger,hinging—singur;fingur, hinjin3	11		0
111. $\mathbf{N} = n, \eta, mute$ —sun, finger, hymn—sun, fingur, him3112. $nd = \eta;$ nd—handkerchief; hand—hangeurçif; hand2113. $ne final = n$ —pine—pin1114. $ng = \eta;$ $\etag,$ nj —singer; finger, hinging—singur; fingur, hinjin3	110		3
112. nd=ŋ; nd—handkerchief; hand—haŋcurçif; hand 2 113. ne final=n—pine—pin 1 114. ng=ŋ; ŋg, nj—singer; finger, hinging—siŋur; fingur, hinjin 3	111		9
113. ne final=n—pine—pin			
114. ng=ŋ; ŋg, nj-singer; finger, hinging-siŋur; fingur, hinjin 3			
	110	b. ne $jinai = n - pine - pin$	
$115. \text{ ngue} = \text{i} - \text{congue} - \text{cut} \text{i} \qquad . \qquad . \qquad . \qquad . \qquad 1$			0
	11:	$f_{\rm ngue} = f_{\rm ngue} = f_{\rm ngue} = f_{\rm ngue} + f_{$	

Carried forward . . 313

	Brought forward	313
116.	nn = n—tanner—tanur	1
	Ο=i, θ, ο, u, u, ω, u, u, δ	9
	women, nor, hop, work, son, go, do, woman, compter	
	wimin, nør, hop, wurc, sun, gø, du, wumun, contur	23.2
118.	0-e=0, u, o, u; wu-more, ⁽¹¹⁾ love, cove, move; one	5
	mer, luv, cov, muv; wun	-
119.	oa=0, o ; oc , oa , ou —broad, coal; oasis, coagulate, coalesce	5
Maria	bred, col; orsis, coagylet, coules	- Alton
120.	ae=e=coarse(11)-cors	1
		27
122.	oe=u, a, u; ai, ai, ae, au does, doe, shoe; coeval, poet, poetical, coercion	
	does, doe, shoe; coeval, poet, poetical, coercion	
109	duz, do, su; colvul, poit, poeticul, coursun	1
120.	oeu=u-manoeuvre-munuivur	i
195	oh=o-oh!-o!	8
120.	Beavoir, noisy; Zoilus, stoic, doing, chamois, memoir, choir	
	Bivur, nożi; Zoilus, stoic, duin, famwa(21), memwer, cwiur	
126	oi-e=u, ô-tortoise, noise-tortus, nóz	2
127	oig=0—poignant—ponunt	ĩ
128.	oig-e=òcoignecôn	ī
129.	ol=o; ol, ets.—yolk; olfactory—yoc; olfacturi	12
130.	00=0, u, o, u, u; 00, 00	7
	door, blood, brooch, brood, wood ; zoology, zoophyte	
	der(11), blud, broç, brud, wud; zooloji, zoofit	
131.	ooe=u-wooed-wud	. 1
132.	ou=θ, u, u, o, u, v; ou	7
	cough, journey, couple, soul, soup, foul; Antinous	
	cof, jurni, cupul, sol, sup, fsl; Antinous	
133.	oub = s - doubt - dst	1
134.	$ough = \theta$, ω , w , ϑ ; θ ; θ , oc , of , up , uf ,	. 9
	sought, though, through, plough; cough, hough, trough,	
	set, đo, tru, pls; cef, hoc, trof,	
2.04	hiccough(14), tough—hicup, tuf	-191
135.	ougha=u; ofu-Brougham; Hougham-Bruum(22); Hofum	2
136.	oul=u; sl, etswould; foul, etswad; fsl ets	2
137.	ous=u; vs-rendezvous; nous-rondevu; nvs	2
138.	oux=u; uz-billetdoux; billetsdoux-bilidu; biliduz	2
139.	ow=o, u, o, s-knowledge, bellows, know, now .	4
140	nolij, belus, no, nv	7
140.	owe=0, 5; 0e, ou, si, se, su	
	o, ulsd; loest, mour, vsil, vset, psur	
141	oy $=\hat{o}$; ω ; ω , ω -boy; oyer, ω -bo; ω ; ω , ω -bo; ω ; ω -bo; ω ; ω , ω -bo; ω ; ω -bo; ω ; ω -bo; ω ; ω -bo; ω	3
142	P =p, <i>mute</i> —pen, pneumatics—pen, nymatics	2
143	pb=b-cupboard-cuburd	ĩ
	pe final=p-ape-ep.	i
ant.	Carried forward	410

Brought forward	410
145. ph=p, f, v, mute; ph	5
diphthong, philosopher, nephew, apophthegm, haphazard	
dipton, filosofur, nevy, apotem haphazurd	
146. phth=t, t-phthisical, apophthegm-tizical, apotem .	2
147. pn=n-pneumatics-nymatics	1
148. pp=p-happy-hapi	1
149. pph=f-Sapphire-Safir	1
150. $ps=s$; $ps-psalm$; lapse-sam; laps	2
151. pt=t; pt-ptarmigan; apt-tarmigun; apt	2
152. \mathbf{Q} =has no meaning by itself	0
153. $qu=c$; $cw-quay$; $quack-ci$; $cwac$	2
154. $que = c$ antique antic	1
155. $\mathbf{R} = r$, mute—ray; burr (second r)—re; bur	2
156. re final=r-rare-rær . 157. rh=r; rh-Rhine; perhaps-Rin; purhaps .	1
157. rh=r; rh-Rhine; perhaps-Rin; purhaps	2
158. $rr=r-burr-bur$	1
159. rrh=r-myrrh-mur	1
160. $S = s, z, f, z, mute = gas, as, sure, pleasure, isle$	5
gas, az, fur, plezur, il	115.
161. sc=s, ∫; sc—science, conscience; sceptic	3
siuns, conjuns; sceptic	
162. sch=s; sc-schism; scheme-sizum; scim	2
163. se final=s, z-case, ease-ces, iz	. 2
164. $sh=f$; sh —shine; mishap—fin; mishap	2
165. sle final=1—isle—il	1
165. $sle final=1$ — sle — il	2
167. T=t, ç, ſ, mute-take, question, motion, bustle	4
tec, cwesgun, mojun, busul	
168. te final=t-mate-met	1
168. th=t, t, d; th-Thomas, thigh, thy; pothouse	4
Tomus ti, đi; pothys	
170. the final=d-breathe-brid	1
171. tt=t-butt-but	1
171. tt=t—butt—but	1
173. tw=t; tw-two; twain-tu; twen	2
174. U =i, e, u, u, u, u, y, w	8
busy, bury, cur, but, unruly, pull, usage, persuade	
bizi, beri, cur, but, unruli, pul, yzij, purswed	
175. u-e=u, y-rule, use-rul, ys	2
176. ua=a, u; wɛ, wa, wa, wə, wo, wu	8
guard, victuals; persuasion, guano, suavity, squall, squabble,	
gard, vitulz; purswegun, gwano, swaviti, scwel, scwobul,	
equal—icwul	
177. uay=i-quay-ci	1
178. ue=e, u, u, w; wi, wi, we, mute	8
guess, masquerade, true, ague ; duel, query, querulous, plague	
ges, mascured, tru, egy; dyil, cwiri, cwerylus, pleg	1
Carried forward .	492

	Brought forward	492
100		2
179.	ug=y; ug-impugn; pugnacious-impyn; pugnafus .	ĩ
180.	ugh=y-Hugh-Hy	9
181.	ui=i, i, u, i, y; wi, wi, wu, wiu .	
	mosquito, build, bruising, beguiling, suit; quinine, quill,	
	moscito, bild, bruzin, bigilin, syt; cwinin cwil,	
100	quirk, acquiring—ewurc, uewiurin	4
182.	ui-e-i, ui; wi, wiu-guile, bruise; suite, quire	.t.
100	gil, bruz; swit, cwiur	4
183.	uo=o; yo, wo, wo-quotha; duo, quorum,(11) quondam	4
	cota'; dyo, cworum, cwondum	0
184.	uoy=o; oy-buoy; buoyant-bo; boyunt	2
185.	uy,=i-Guy-Gi	1
	$\mathbf{V} = \mathbf{v}, mute$ —vine, sevennight—vin, senit	2 1
187.	ve final=v—eve—iv	1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1
188.	$\mathbf{W} = w$, $mute(^{23})$ —way, write—we, rit	2
189.	we=u; wi, we, mute-answer; we, wet, owe	4
Der la	ansur; wi, wet, o	
	wo=0, ut; wu-sword, two; word-sord(11), tu; wird .	3
	wr=r-write-rit	1
192.	X =c, z; cs, cf, gz-except, Xenophon, vex, axiom, exert	5
Je se se	ecsept, Zenufun; vecs, acjyum, egzürt	
	xe final = cs - axe - acs	1
194.	$\mathbf{Y} = \mathbf{i}, \mathbf{i}, \mathbf{u}, \mathbf{i}, \mathbf{y} - \mathbf{pity}, \mathbf{physic, myrrh, fly, yard}$	5
	piti, fizic, mur, fli, yard	185
	yew=y-yew-y	1
196.	you=y; yu-youth; young-yt; yun	2
197.	ye=i; yi, iu-dye; ye, dyer-di; yi, diur	3
198.	Z=t, s, z, z, mute-mezzotint (first z,) mezzotint (second z,) (1	5) 5
	metsotint, metsotint,	
	zeal, azure, rendezvous—zil, azur, rondevu	
	ze final=z-freeze-friz	1
200.	zz=z; ts-whizzing; mezzotint-hwizin; metsotint.	2
		Sec. 2

NOTES TO THE PRECEDING TABLES.

(3.) We admit English family names into this list, as they are true specimens of the irregularity of English pronunciation. Considered as a French name, "Beauchamp" would be pronounced very differently.

(4.) Foreign words, which, from being thoroughly adopted into the language, have received an English pronunciation, should be included in such a list as thus.

(5.) Sometimes spelt jail; an orthography coming now into common use.

(6.) Sometimes spelt aite, or ait; a small island in a river.

(7.) The pronunciation given to this word is strictly English without a nasal tone; hence, the word must be cited as a specimen of English pronunciation.

(8.) The more general pronunciation at Eton. Some consider it more correct to say 'Pistum.' The Italian Pesto, would seem to give some colour to the pronunciation in the text.

(9.) Sometimes spelt fetid.

(10.) The pronunciation of this word is not fixed; as a participle, *gauntleted* always has this vowel, we believe; but the substantive has sometimes No. 6, or No. 8, as well as No. 7.

(11.) These words belong to a class, and should evidently have No. 12, which all orthoepists give them; it is, however, very common in the neighbourhood of London, and we believe other parts of England, to use No. 8 instead.

(12.) "? Doctur Jonsun, du y se 'nidur,' or 'nidur'?" "Nedur,' Sur." 'Nedur' is now quite out of fashion; but 'nidur' and 'nidur' are used indiscriminately. Similarly for either.

(13.) The following words are very instructive : ewe, you, yew, use, ewes, yews, hew, Hugh, hews, Hughes.

(14.) People are now beginning, in spite of all etymology, (!) to spell this word phonetically, thus, "hiccup." ? Why not follow out this happy thought in the orthography of the remaining o-u-ge-aitches ?"

(15.) The Italian word is *mezzotinto*, and the Italian pronunciation is 'meddzotintro,' so that we are quite justified in citing this as an instance of English anomaly, in which there is not even the excuse of the original foreign sound.

(16.) "Pronounced Grinitche," says Viscount D'Arlincourt ; he should have said "Grinidge," at any rate. He adds, as a note, "We know that English words are not pronounced as they are written. 'Thus,' said a wag, 'in London, when they set down Solomon, they pronounce it Nebuchadnezzar." We cite from Chambers's Journal, the editor of which adds to this remark, "This jest comes with an ill grace from a Frenchman. In no language are words pronounced so unlike their orthography as in his own." We are sorry that there is an ambiguity in the expression "unlike their orthography." If the editor means "unlike the orthographical or alphabet names of the letters," the remark is, perhaps, just; but in no language is the same sound more regularly and consistently given to the same combination of letters, whenever it occurs, than in French, although this combination may be passing strange. Hence there is hardly any language in which a foreigner may be more sure of the pronunciation from a mere inspection of the word; while there is none in which he will be so uncertain as the English.

(17.) Mr. Smart, in his Pronouncing Dictionary, makes the substantive 'socrifis,' and the verb 'socrifiz,' and, similarly, distinguishes *rise*, into 'ris,' 'riz.' We do not recollect ever having heard these distinctions made in conversation by persons of education, however agreeable it may be to the fancied *analogy*. But, in fact, it will be found that English orthoepy sets all observations of *analogy* at defiance. As "none but itself can be its parallel," we sincerely hope that "we ne'er shall look upon its like again."

(18.) Used by Dryden and Chaucer. As it is not to be found in French dictionaries, although manifestly of French origin, we presume it must be French, "after the scole of Stratford atte Bowe." We follow Smart in giving a thorough English pronunciation of French.

(19.) To this we may add the part which h plays in the combinations ch, sh, th.

(20.) As we cite *psalm* for an example of *al* representing a, it may seem incorrect to cite it for *lm* meaning m, as *both cannot be right*. But when we look at the word, and are told it is pronounced "sam," it is clear that we may either suppose p mute, or ps to be a means of representing s; 1 to be mute, or lm a means of representing m; or al a means of representing a. In fact, as *psam* would be pronounced 'sam,' and not 'sam,' the latter is, perhaps, as we should afterwards find, the most correct supposition; but it is clear that all the others are, at first sight, as good. We have, therefore, cited this word for all these cases, and have treated many other combinations in a similar manner, and for a similar reason, although we have not notifed the fact at length, except in this place.

(21.) Also called "fami."

(22.) Strum, Broum, Brufum? All three pronunciations may be heard, and Bruum most commonly. We have not the advantage of knowing his Lordship's own pronunciation.

(23.) To which we may add the use of w in the combinations ow, ew, aw, &c.

The results of these Tables are some of the most extraordinary in literature. The first table shows the elements of the English language, being 36 in number (considering æ as distinct from ε), to which, for the sake of convenience in printing, we have added 7 others, properly compounds, namely, i, ai, ò, v, y, ç, j; making a total of 43, or rather 42 letters and one combination-ai, which are all that are necessary for the correct printing of every sound in the English language. The table then shows that these 43 phonetic characters have no less than 379 heterotypic equivalents, being on an average $8\frac{s}{10}$ for each letter. When we recollect that the sounds only strike the ear, and that these sounds are readily discriminated into the 43 different simple and compound elements of the phonotypic alphabet, it is appalling to think that we are left to choose out of very nearly 9 different heterotypic modes of noting any one of these sounds! Thus, if a word contain only 6 elements, as "sizurz," we may expect to have $(8\frac{s}{10})^6$, or 464,404 different ways of spelling this simple word; it so happens, however, that the sounds in the word we have chosen, admit of being spelt in more than the average number of ways each ; thus the table gives s=9, i=18, z=9, u=19, r=7, z=9, and the number of possible modes of spelling is, therefore, $9 \times 18 \times 9 \times 19 \times 7 \times 9 = 1,745,226!!$ Of these, of course, only one is "RIGHT," that is CUSTOMARY, namely, the somewhat singular and complex form-"scissors." In point of fact, the real number would not be quite so large as that just mentioned, because there are certain recondite laws, such as that c should not represent s when it occurs after a, o, u, &c., which will interfere; the absolutely feasible number, however, is very great.⁽²⁴⁾ Some of these combinations are amusingly extravagant, as

schiesourrhce [(25) justified by schism, sieve, as, honour, myrrh, sacrifice.

We subjoin a few heterotypic enormities which might be committed and justified by those learned in the quips and cranks of our "just method of spelling words." The ignorant would naturally be more phonetic in his vagaries.

gnuitheierrh (nidur); sureties—gnaw, mosquito, breathe, soldier, myrrh. phaighpheawraibt (fevurit); sureties—physic, straight, nephew, earth,

write, captain, debt.

psourrphuakntw (survunt); sureties—psalm, journey, burr, Stephen, victuals, know, two.

eolotthowghrhoighuay (ortogrufi); sureties—George, colonel, Matthew, knowledge, ghost, rheumatic, Beauvoir, laugh, quay.

But the subject is too serious to jest over. It is really a lamentable fact, which must be a subject of the greatest regret to every one who wishes for the advancement of general enlightenment and learning in this country. The average above given does not place the amount of evil in the true light. There is not one single sound in our language which is on all occasions represented by one uniform letter or combination of letters. Of the 14 vowel sounds, 4 only, namely, a, a, o, u, are represented

(24.) In the *Phonographic Correspondent* for 1845, page 11, in which only a few of the most common representatives of the letters are taken, the number of modes of spelling are computed at 34,560.

(25.) Note of laughter.

in a less number of modes than 10 each; of the remaining 10 vowels, only 3, namely, α , θ , u, have less than 15 different representatives, and the remaining 7, which are the very frequently occurring vowels i, i, ε , e, u, ω , u, have from 15 to 23 equivalents each !!! The following analysis of the 43 letters of the speech-alphabet will serve to show the extraordinarily stupid and perverse plan adopted in heterotypic spelling :—

3 letters have 2 heterotypic equivalents each, making in the whole 6 different forms,

3	1.	3				9	
7		4	all the star	Sec the second	- un netri	28	20
4		5		Maria + LE		20	
2		6	Constant 1				
4						12	•
5		7				35	
2		8				16	
2		9	1	1 1 2 1 2 1 2 1		18	
23	1	10				20	
3		12				36	
1	••	14	** ·· /				:
1		15			••	15	
1		16				16	
2		17				34	•
1		18				18	
1		19				19	
2		20				10	
ĩ	••						•
1	••	23				23	-

43

379

A mere inspection of this Table would be enough to make any one shudder who had to learn English heterography. Fortunately for the young child, such a Table is not presented to him. The teacher never thinks of placing before him a list of the sounds of the language, and their heterotypic representatives, because it would be impossible for the strongest memory to recollect all the rules which such a method would require. The child is simply set to learn by heart the mode of spelling every single word in the language, column after column, as given in a school dictionary !! Most amazing caricature of a written language! \$ And what is the result ? No one spells correctly; many spell wretchedly; but no one is at all times certain of the proper mode of spelling any given word. For there is not even method in this madness. Words of precisely the same sound are spelt in the same manner. Of these two cases, the following examples occur to us immediately. We give the phonetic representative of the sound, followed by =, and the heterotypic spellings :—

I.—No=no, know; tu=to,⁽²⁶⁾ too, two; tru=threw, through; rit= right, rite, wright, write; mit=meet, meat, mete; do=doe, dough; vel=veil, vail, vale; dær=there, their; pær=pair, pare, pear; stær =stair, stare; pir=pier, peer; bir=bier, bær; bær=bear, bare; prinsipul=principle, principal; gest=guessed, guest; west=waist, waste; hit=hight, height; stret=strait, straight; gret=great, grate;

(26.) There is this difference between this word and the two following, it is *unac-cented*, so that there is a real discrimination in speaking, which may be represented in writing by placing the accent to the other words; thus: tu, tuv.

B

riq=reach, retch; signet=signet, cygnet; ro=roe, row; hart=hart, heart; sit=sit, cit; et=ought, aught; gilt=guilt, gilt; men=main, mane; si=see, sea; silin=sealing, ceiling; sir=sere, cere; hoc =hock, hough; sol=soul, sole; cel=call, caul; so=sew, so, sow; idul=idol, idle; ær=e'er, ere, heir, air, eyre; &c.

II.— \u03c4 s, yz=use; refys, rifyz=refuse; absunt, absent=absent; atribyt, utribyt=attribute; ogmunt, ogment=augment; compond, cumpond=compound; afics, ufics=affix; prifics, prifics=prefix (and some fifty or sixty other words thus differing in accent only); prezunt, prizent=present; wind, wind=wind; wund, wond=wound; clos, cloz =close; so, sy=sow, &c.

We are aware that it is considered a beauty in the language, by some people, that we do make a difference in the heterography, on certain occasions, corresponding to a change of meaning in the word, although we make no difference in speaking. We grant to the full that it might be a great advantage to the *language* if a different sound were employed for the conveyance of a different idea; but this principle is *not* by any means acted upon in English. Independently of those words which have a difference in heterography corresponding to a difference in meaning, there is an immense number of words which have totally different meanings, but are the same in orthography and in pronunciation; thus,

III.—Hop=hop, a plant, to dance, a dance, jump upon one leg; form= form, shape, ceremony, bench; biscit=biscuit, a kind of bread, a kind of porcelain; Ginu=China, the name of a country, the name of a particular species of earthenware; pan=palm, a tree, the inside of the hand; cær=care, verb and substantive; cupasiti=capacity, size, intelligence; carij=carriage, vehicle, mode of walking, price of conveyance; close_close, shut, avaricious, near, compact, secretive; clot =cloth, a woollen fabric, a linen fabric, a cotton fabric; clsd=cloud, nebulous vapour, darkness; demunstrejun=demonstration, proof, large public meeting; idul=idle, averse from labour, vain; mes=mess, a dinner of officers, &c., a medley of dirt; fed=shade, darkness, ghost; let=let, permit, prevent; fond=fond, affectionate, silly; &c., &c.

By the help of a dictionary, this list may be extended almost infinitely, as nearly every word in our language has one or two meanings, some being clearly derived from an original one, others barely traceable to obscure analogies, and others apparently derived from perfectly different roots.

To those, then, who object to phonotypy on the ground of its confusing words which are discriminated in the present heterography, the answer is, first, the error lies in the language itself; second, the error is, however, not found to be (generally) productive of confusion in speaking,⁽²⁷⁾ and no more care would be required in writing than in speaking; third, there

(27.) The punster makes it productive of much *amusement*. The context can hardly fail to determine which of the meanings of a word is intended; and if the context does not suffice, it is the fault of the speaker or writer, and shows that he is not sufficiently master of the language in which he is endeavouring to deliver his ideas.

is an immense number of words in which the senses are different, but the present heterography is the same, and only comparatively very few in which the heterography alters with the signification; fourth, there is a great number of words in the present heterography which have the same spelling but are pronounced differently; or, more properly speaking, there is a great number of different words (different not merely in sense, as in the former case, but in sound, which is the proper characteristic of a word) which are now spelt in the same manner, and these will be discriminated in the new phonotypy in precisely the same manner as they are now distinguished in speaking; fifth, but supposing, even, that every different meaning were distinguished by a different symbolization (which is very, very far, indeed, from being the case, but which must be very nearly the case, in order that the argument to be derived from it should have any weight), this advantage to the eye, when not accompanied by a corresponding advantage to the ear, would be purchased at too dear a rate, as it would so very much increase the difficulty of communicating ideas by writing, on account of the great additional effort of memory which would be required in order to recollect such a large number of different symbolizations of the same sound. Language is a collection of sounds representing ideas; alphabetical writing, a mode of symbolizing the sounds of language. The latter is not responsible for the errors of the former, any more than a mirror is responsible for reflecting disagreeable objects when placed before it. If we wish to have pleasant objects reflected, pleasant objects must be presented; if we wish to have an alphabetically written language, which shall admit of no ambiguities, we must have a spoken one which attains the same object.

We have seen how miserably deficient our present alphabetical system is in the means of representing sounds, and the consequent difficulty of expressing our ideas upon paper; but we must turn to the reverse of the picture. It does not follow, that because a given sound may be expressed in any of 9 or of 20 modes, in the same manner a given combination of letters should represent more than one sound. In fact, we have an instance to the contrary in the French language, in which the difficulty of spelling is, to the full, as great as, or even greater than in English, but the difficulty of reading is very slight; for although each sound is represented by very numerous combinations, each combination represents only one sound, or so very nearly so as to occasion but little trouble to the learner. The second Table, just given, illustrates this inquiry, and the results are nearly equally startling with the former.

We are accustomed to think that the English heterotypic alphabet consists of only 26 letters. True there are only 26 separate different characters, but these are so far from constituting the alphabet of the language, that there are many sounds which cannot be represented by the letters, if we suppose them to have only the values indicated by their alphabetical names. We must, therefore, admit at least, that some or all of the letters should have more than one meaning. But this is not enough; we must allow very frequently that they have *no* meaning, and also that several when taken together have but a single meaning. Hence in constructing the second table we have taken any combination of the 26 letters to constitute an *effective* letter of the alphabet, which is on any occasion the representative of one of those sounds expressed by a single character in the phonotypic alphabet. Viewed in this light we find that the present English alphabet effectively consists of the enormous number of 200 letters !! Surely we might have expected that, with such very numerous means at our disposal, we should have had but one meaning attached to each effective letter. But no; nothing can serve to show in a more striking manner the hap-hazard mode in which our spelling is come about, than that only about one in three of these effective letters, and those of the rarest occurrence, have each a single meaning, while some have as many as 9, and one has 11 meanings, as the following analysis shows:—

	alphabetic letter has 0					0
63	effective letters have 1	meaning	each, ma	king a total	or meanin	gs-05 126
22	We be in the second		A Section	1	and the second	66
15 9	1 - 10 - ++ + 10 km/s	toran ad			an er int	60 45
95		, alter a	1.00	stated in		40 30
8	7	ana sana				56
5	••	3				40 54
1	II					11
 200	ning and the moder."	1. 59.9		••	5. ·· /	553

Thus our 200 effective letters have 553 meanings between them, giving an average of $2\frac{3}{4}$ meanings to each letter. And in this case, as well as in the preceding table, we are convinced that the truth is rather understated, for we cannot hope to have gathered together all the anomalies of our most anomalously written language, although we have been at some pains to hunt them down. Indeed the Tables upon which these calculations were founded, lay by us for many months, that they might be made tolerably perfect; and we have to acknowledge the assistance of some members of the "Phonetic Council," to whom they were submitted in their original form, and who have supplied us with several words which had escaped our own observation. Yet, the following words have been suggested, or have occurred to us, while these pages were passing through the press, but we did not esteem it necessary to alter our calculations in consequence, and we therefore merely subjoin them :—

Halfpenny, hepni; twopence, tupuns; threepence, tripuns; fivepence, fipuns; Wednesday, Wenzde; kiln, cil; towards, tordz, or tordz; liquor, licur; Meerschaum, Mirfum (in German, "Merfsm"); masquerade, mascured; queue, cy.

The rich mine of proper names, whether of places or of persons, is scarcely opened in the Tables, although a few very glaring instances will be found there. We subjoin the following, whose irregularities are so great as scarcely to admit of classification :---

Magdalene College, Modlin Colij; Alnwick, Anic (on the river Alne, On); Covent Garden, Covun Gardun (originally "Convunt Gardun"); Wednesbury, Wejburi; Towcester, Tostur; Cirencester, Sizistur; Worcester, Wustur; Gloucester, Glostur; Hertford, Harfurd; Aylesbury, Elzburi; Birmingham, Burmiyum; Pontefract, Pomfret (in which man-

ner it is sometimes spelt; some persons, however, insist upon calling it "Pontifract," in courtesy to the spelling, but this is not the general practice of the inhabitants) ; Mary-le-Bone, Maribun ; Windsor, Winzur ; Holborn, Hoburn ; Malmesbury, Mamzburi ; Cambridge, Cembrij (compare "Cam," the name of the river, from which that of the town is derived); Grosvenor, Grovnur; Guildford, Gilfurd (compare Guildhall, Gildhel); Holywell-street, Holiwel-strit (which would have been the pronunciation had its named been spelt Hollywell, and leads, of course, to a false etymology); Salisbury, Selzburi; Thaives, or Thavies Inn, Taviz In; Theobald's-road, Tibuldz-rod; Cadogan-place, Cudugun-ples; Warwick, Woric; Bridlington, Burlintun; Keighley, Citli; Colnbrook, Conbrue; Exmouth, Ecsmut; Lincoln, Lincun; Wandsworth, Wonzwurt; Blenheim Park, Blenim, or Blenim Parc (the original German name, from which it is derived, is pronounced "Blenhim" in German;) Wycombe and Wickham, Wicum; Wolverton, Wulvurtun; Southampton, Ssthamtun (this use of th for thh, i. e. for "th," instead of "t," or "t," or "th" simply, occurs in a few other names, as Northampton; but in Northumberland, Nortymburlund, it has not this value, although the river Humber. Humbur, does not drop the aspirate); Marlborough, Melburu; Woodderowffe, (spelt "double w, double a, double d, i; r, a, double y, double f, i") Wudruf; Shakespeare, Shakspear, Shakespear, Shakspere (for we find the poet's name spelt in all these fashions by different writers), Eccspir ; Howley, Huli; Hodgson, Hodsun; St. John, Sinjun (the family name of the Bolingbrokes, Bulinbrucs); Leveson Gower, Lysun Gor; Tottenham, Totnum; Abergavenny, Aburgeni; Cowper, Cupur; Denbigh, Denbi; Leicester, Lestur; Somers, Sumurz; Bosanquet, Bosanici, or Borzuncet (there are two branches of the family, one of which uses the first pronunciation, and the other the second) ; Wemyss, Wimz, or Wimz ; Knowles and Knollis, Nolz; Bayley, Bailey, and Baillie, Beli; Fitzmaurice, Fitsmoris; Jocelyn, Joslin; Lee, Lea, Legh, Leigh, Li; Mahon, Muhum; Napier, Nepvir; Pole, Pul; Vivian, Vyvyan, Vivyun; Wallace, Wallas, Wolys, &c., &c., &c.(28)

(28.) We have given examples enough to show how greatly the Tables might have been extended had it been considered necessary, and fully enough to prove that we have been far from exaggerating the irregularities of our heterography. Some changes of spelling, which have arisen from these anomalies of pronunciation, are amusing, as Bull and Mouth, the sign of a well-known Inn in London, from Boulogne Mouth (or harbour), which must have been pronounced "Bulun Mst," which is, then, hardly separable from the colloquial pronunciation of "Bul un' Mst." Similarly, God encompasses us, was, in process of time, converted into "Got un' cumpusiz;" The Bacchanals became " Hi bag u' nelz." The names of families themselves, although apparently preserved with such jealous care, have been often changed. "If every name of a person or place were to be restored to original spellings," says Pegge, Anecdotes of the English Language, 3rd ed., p. 246, "we should not discover who was meant; nay, the simplest names have been so mutilated, that the learned editor of the Northumberland House Book assures us that he has seen the plain dissyllabic name of *Percy*, in various documents which have come before him, written in *fifteen* different ways. The family name of the Earl of *Dysart* has so long been spelt Talmash, that one stares at the first view of the present mode of writing it, Tollemache. The Peerage of Scotland, Crawfurd, Douglas, &c., and the heraldic writers, Sir George Montague, and Mr. Nisbett, give it as Tallmash." "The family of the Duke of Somerset," says Mr. Christian, in a note on this passage, "have disIf we confine ourselves to the actual letters of the alphabet, as shown by the capital letters in the second table, instead of including the effective, the result of the analysis is as follows :---

1 actual letter has no meaning; (this is q, which, when used without the following u, has no signification.) 9 actual letters have 2 meanings each, making a total of 18 meanings

9	actual	letters	have 2	meanings	each,	making	a total of		meanin
4			3	Real and Party in				12	
2			4	Barry 13	•			8	
6	See 15		5	San and	•			30	
1			0	a suite	•			0	
1 2	tot to the		0		•			18	
2	1	••	9		•	••	1212	10	
26								101	
20									

This gives an average of 3.88 or very nearly 4 meanings to each letter, and rather more than 4 meanings to each of the 25 letters which have any meaning at all.

From this analysis, then, it appears that it is easier to guess the meaning to be assigned to a given heterotypic symbol, or combination, than to guess the symbol or combination to be assigned to a given sound, in the proportion of $2\frac{3}{4}$ to $8\frac{\pi}{10}$, or 1 to $3\frac{2}{10}$. Hence, if we have six symbols or combinations to guess the meaning of, and six sounds for which to guess the symbols, while in each case only one set of results will be right out of the very many which could be selected, the difficulty of finding the true one in the first case would be to that in the second as $1^6: (3\frac{2}{10})^6$, or 1:1074, very nearly. Thus it would be 1074 times more difficult to spell a word with six sounds in it, than to read a word consisting of six effective letters; and similar for any other numbers.⁽²⁹⁾ It is therefore not surprising that we should find a great number of persons who read with fluency and correctness, while we find so very few who spell well, we mean who spell well on all subjects; for almost every one who writes much, learns to spell correctly the one or two thousand words which he is constantly in

carded their *historical* name, Seymour, and reassumed that which they brought from Normandy,-St. Maur."

There is a degree of aristocracy in these faulty spellings; the owners of a name with an e at the end of it, look down upon those who have it not; and $y^{2}s$ disdain simple i's. Strange that the true cause of this diversity of spelling names is not felt as something to be ashamed of, namely, the great and prevailing ignorance of their first possessors. With this pride of false spelling is also a tenaciousness of the true pronunciation, which their owners seem to expect every one to know intuitively; as in the story of Lord *Cholmondeley*, who, when asked by a person who had never seen him before, whether "Lord Colmondeli'" were at home, is said to have replied, "No, but sum ov hiz piopul (pipul) ar." We must own that, in our ignorance, we are content to suppose that a person's name is what he *tells* us it is, and that, if we write it in such a manner that any one who sees it will pronounce, were very well in the days when persons could not write or read, but sealed a deed, instead of signing it, and painted a monster on their shields by way of an address card.

(29.) Generally for *n* effective letters and *n* sounds the proportion is $1:(3\cdot2)^*$. It may assist the reader to know that $(3\cdot2)^2=10\cdot24$; $(3\cdot2)^3=32\cdot768$; $(3\cdot2)^4=104\cdot86$ nearly; $(3\cdot2)^3=335\cdot54$ nearly; $(3\cdot2)^6=1073\cdot74$ nearly; $(3\cdot2)^7=3435\cdot97$ nearly; $(3\cdot2)^8=11004\cdot01$ nearly; $(3\cdot2)^9=35190\cdot8$ nearly; $(3\cdot2)^{10}=112560$ nearly. the habit of using, but which only constitute about the 50th or 25th part of the language itself.

Still, learning to read is a very difficult affair-a very tedious, troublesome, wearing, mind-afflicting business; disheartening to the master, repulsive to the pupil; occupying years of toil, years that give many a distaste for books, and are consumed in a kind of drudgery, which makes the boy sigh for holidays.(30) For not only have the effective letters of our alphabet a variety of meanings, but they are used in such a capricious manner, so utterly disregardful of all analogy-all expectation, that it is, as we have seen, totally impossible for even a practised English reader to guess, with any approach to certainty, what may be meant for the pronunciation of any word which he has not previously seen, or how to write any word which he has only heard, and never seen written. We will give a very few examples of this capriciousness, which, were it not for its really hurtful nature, would be only a source of mirth, and which, as we hope to substitute a rational system of spelling that will put the present heterography among the curiosities of literature-its only proper place-we can afford to make merry with. Observe how the meaning of the same combination, not of vowel characters simply, but of vowels and consonants, varies in different words :---

ear, earth, pear, heart=ir, urt, pær, hart; hoe, shoe=ho, fu; now, know, knowledge=ns, no, nolij; beseech, breeches=bisiq, briqiz; ague, plague=egy, pleg; impregn, impregnate=imprin, impregnet; fætus, fætid=fitus, fetid; woman, women=wumun, wimin; mould, should=mold, fud; hood, flood=hud, flud; ice, sacrifice=is, sacrifiz; love, move, drove=luv, muv, drov;

and so on in many, many other instances, with which we will not detain the reader, as he may easily discover them for his own amusement.

The names of the letters in the heterotypic alphabet are, of course, supposed to indicate their sound; and there is a *primd facie* appearance of this being the case, which it is impossible to deny. Now in the case of the consonants, vowels have been added, and, in one instance (zed), a vowel and a consonant, in order to make up a pronounceable word, these vowels, of course, being only auxiliaries, which are to be rejected when the letter is used in composition. Let us see, then, what the values of the English letters are when thus determined :—

(30.) What a mistaken notion it is to make *holydays* or relaxations of study a *pleasure* much to be desired, to be granted as a favour, asked as something delightful, and made, perhaps, the mark of even royal good-will (as is frequently the case at Eton). Verily, our teachers have put a pitifully small margin of honey round the bitter wornwood of study. There is a way to make study pleasing; it is simply to suit the subject of study to the disposition and talent of the boy, to make him feel an interest in what he is taught, till the punishment would be to take his books from him, and he would only grudgingly admit of holydays for the relief of his master's mind. At present, we teach boys a barbarous and absurd heterography and two dead languages, and then feel surprised that they do not feel an interest in them. We all know that neither Scott, nor Liebig, nor Byron, nor Porson, nor many others that might be named, were brilliant at school; though the latter subsequently shone in school studies. ? When will the voice of warning be listened to ?

Form. Name.	a,	b,	с,	d,	e,	f,	g,	h, i,	j,	k,	1,	m,	n,	0,	
Name.	ε,	bi,	si,	di,	i,	ef,	ji,	eg, i,	je,	се,	el,	em,	en,	ω,	
Value.	ε,	b,	s,	d,	i,	f,	j,	g, i,	. j,	c,	1,	m,	n,	0,	
Form.	р,	q,	r,	s,	t,	u,	v,	w,	x	,	у,	z.			
Name.	pi,	cy,	ar,	es,	ti,	y,	vi,	dubul	y, ec	з,	wi,	zed.			
Value.	р,	с,	r,	s,	t,	y,	v,	yy,	CS	,	wi,	z.			

Taking these as the values, let us endeavour to pronounce an English sentence. We give the following to our readers, written in phonotypy, premising that it is a real English sentence, in which, having first spelt it in the ordinary method, we have substituted for each heterotypic letter a corresponding phonotype, as shown by the above comparison; we leave the reader to pronounce and guess the meaning of the sentence :---

"Tçi Injlişç lenjyeji yyoyld, if sposin prisisilwi es it is spilt, iesç littir risijvinj its elpçebitisel velyi, bi totellwi ynintillijibli, biseysi its ortçojrepçwi is e redisellwi ebsyrd oni."

The precision of the phonotypic alphabet in representing sounds of "unknown tongues" is very well exemplified in the above passage, which, though very uncouth, is perfectly pronounceable.

But we are told by some "learned Theban," that "we have been making a great fuss about nothing; that all the difficulties of which we complain are due to our own gross ignorance, and that nothing could be more barbarous than the letters which we propose; that if we change the *orthography* of the language, we shall lose its etymology; and that if we had only learnt a little Latin and Greek, we should have found no difficulty either in reading or writing English, as far as its spelling is concerned, while our sense of propriety would have been irrevocably shocked by the mere proposal of the slightest change."

It is worth while answering this argument, not from any merit of its own, but because it is advanced by people who, *upon other matters*, possess real knowledge, and who stand high in the world's esteem.

First, let the argument hold to the full;—let us suppose that the knowledge of Latin and Greek, such a knowledge as is acquired at a public school, is sufficient to do all that is ascribed to it, while the parties who advance this argument necessarily admit that, without such a knowledge, it is not possible to acquire the spelling of the English language easily, or to see its beauties. How monstrous and preposterous the idea !! In order to learn to write and read our own modern living language, which we have spoken from childhood—in order to appreciate the system employed in representing it upon paper, we are to acquire a considerable knowledge of two foreign ancient dead languages, the pronunciation of which no one knows, and all dispute about !! By what means the boy is to acquire Latin and Greek, is not generally mentioned, but it must be assumed to be entirely by oral instruction; for, as in order to read and write English, the boy must have already known Latin and Greek, there are no books which could be put into his hand §

Now the population of England only, in 1844, was 15 millions. Of these, a certain number had independent means, some were employed in miscellaneous pursuits, others in commerce, agriculture, labour, servitude,

&c., with a large residue unaccounted for. If we take the two first classes, amounting in the whole to 754,325 and add ten per cent. for the residue and persons engaged in other pursuits, thus taking 829,757 or in round numbers one million of persons, we have the very utmost number of those who can be supposed to acquire a knowledge of Latin and Greek ; namely, not quite one in every 15 persons in England only, exclusive of Wales and Scotland. The argument, therefore, if perfectly true, and carried out to the furthest possible extent, and with every facility of oral instruction. is entirely inapplicable to 14-15ths of the population of England. And if it be said, that it is only the manual labour class who will thus be excluded, we have to reply, without entering into further particulars, that the number of females exceeds the number of males by 348,364, and that of the whole number of females, whatever be their station in life, not 1,000 can be supposed at any time to have been taught Latin and Greek, and of these, of course, a very large proportion, fully as large as that among the males, do not belong to the manual labour class. The argument is, therefore, not merely absurd, but absolutely inapplicable, if correct.

But we deny the correctness of the argument. We assert most advisedly and deliberately, that the most consummate knowledge of not only Latin and Greek, but of Anglo-Saxon, German, Danish, Swedish, Norman French, Modern French, Arabic, or any other language from which the English has borrowed words, would never assist the possessor of them to the knowledge of how a single English word was spelt or pronounced. That no one could tell à priori, from knowing a Latin or Greek word, for example, how a word derived from that word would be spelled⁽³¹⁾ or pronounced in English, or even how the word itself would be pronounced by every one who saw it. We cannot enter upon the proof of this assertion as it would occupy too much space, it is sufficient to say that it depends upon the following propositions, which we have never seen any attempt to disprove.

First. The heterography of the English language was not the result of design or rule.

Second. It has altered from time to time.

Third. The heterography of many words is still a matter of dispute; as honour, honor; expense; enquire, inquire; judgment, judgement; &c.

Fourth. Words derived from the same root are not uniformly spelled in the same manner; as succeed, concede, &c.

Fifth. In words derived from different roots, similar letters, whether vowels or consonants, are not expressed by similar letters in English.

As to the etymological value of the present heterography, we will, as before, admit at first the entire truth of the assertion to its greatest extent, namely, that by such knowledge as can at the present time be acquired of the languages from which we know English to be derived, joined with the heterography of the English language as now written, the

(31.) We speak of words which already form a part of our language. New words, derived from Greek and Latin, are spelt after a certain rule, derived from the method in which the Latins transcribed Greek words which they introduced into their own language. The pronunciation of such words is somewhat reduceable to rules, but not entirely so, and they form but a very insignificant portion of our tongue.

history of every word may be clearly traced. It is self-evident that those who know no language but English, can derive no benefit from this etymology and by far the greater number of those who speak English are in this predicament. But even among those who know some of the languages from which the English has borrowed words, 9 how many are there who take a pleasure in general etymology? And of these again, how few derive instruction in the right use of words from a knowledge of their history? ? Have we not changed the original meaning so thoroughly that it frequently requires great critical and metaphysical acumen to trace the secondary from the primary meaning,(32) and is not this research often unproductive of results? Again 9 is it of importance to the great mass of mankind that they should know the history of the symbols which they employ to impart their thoughts to others, or is it not rather a matter of antiquarian curiosity, pleasant indeed, and highly gratifying to some intellects, and of great value in the prosecution of some particular studies, in which, however, the world at large takes but little interest? "It should take more," you answer. This is doubtful. Let a few take an interest in them, and pursue them till they arrive at results, (such as the important ethnological facts which have been lately established,) and the world will take an interest in these results, although it cares not for the process of discovery; and of all people, those who prosecute scientific studies should be the last to exclude light from others. Additional millions will become able to learn the thoughts of others by the introduction of a system of spelling which (apparently) sets etymology at nought; only a few hundreds will derive any pleasure from the prosecution of etymological studies, and those few may take upon themselves the trouble of learning the old as well as the new alphabet; while, if they have already learnt the old, ten minutes' study will be sufficient for them to acquire the new.

Assuming the argument to hold universally then, we assert it to be worthless, because of the very limited number to whom it could apply; but we utterly and entirely deny its universality; nay, we deny, in toto, that the present heterography of the English language is sufficient to lead us to its etymology, and that, if a phonetical orthography were substituted, the etymology would be obscured. We justify this denial by the fact, well known to etymologists, that the etymology of a very great number of the

(32.) The English word understand is derived from under and stand, as every Englishman sees; the German unterstehen comes from unter, meaning under, and stehen, meaning stand; the English subsist from the Latin subsisto, and this from sub, meaning under, and sisto, meaning stand. Here, then, we have three words derived from roots whose meaning is precisely similar. Suppose the reader to be informed of this for the first time, ? what idea will he have of the meaning of these words? ? Will he have any notion that understand means to comprehend; sich unterstehen, to presume or venture; and subsist, to be, exist, consist, &c.? When English words, taken from a foreign language, have passed into common use, they have generally acquired meanings very far removed, indeed, from the original; and it would not only be affectation to use them in the original sense, but the speaker or writer who did so, would be simply unintelligible to the generality of the community. It is one thing—given the primary and secondary meanings of a word, to tell how the latter were derived from the former; and another—given the primary only, to guess what secondary meanings might be employed. The former is difficult; the latter impossible. But the whole argument depends upon the latter being easy and generally done.

commonest words in our language, is a matter of dispute among the learned, that many of the so-called etymologists have been guilty of the grossest blunders in attributing words to certain roots, and that others have substituted merely fanciful derivations, due to some preconceived idea of what was the primitive language. The majority of the so-called etymologists have contented themselves with merely assigning the language from which the English borrowed a word, but very few, and those only in very late times, and principally among our hard-working neighbours, the Germans, have raised themselves above this word-grubbing, which is, both in practice and result, tedious and worthless, and have looked at etymology in a new and more scientific light; considering not languages but language, and tracing a word not merely as bandied about from one idiom to another, but as forming a part of the original endowment of the power to articulate significant sounds. These men do not want a dead heterography, they want a means of representing living speech. They do not deal with manuscripts which no one can read with certainty, clothed in cabalistic characters, which

" Show the eyes, and grieve the heart; Come like shadows, so depart,"

and "leave not a rack behind,"-these cannot help them to a comparison of articulate sounds, they can only tend to confuse them. They seize an English book, but, lo ! they grasp a phantom. It contains not the English language, but what somebody thought, at some time or other, would be a possible representative of what he considered to be the English language, by symbols which he knew to be inefficient. The English language -the true, existing, spoken English language, is as yet an unwritten language, and has, therefore, not yet become the subject of etymological investigation ; it is reserved to later times, to etymologists who have the advantage of a phonetic alphabet, to inquire seriously and truly into the etymology of our spoken language. We grant, our present heterography may be useful in tracing the history of our language, but so is the heterography of Chaucer and of Shakspere, and so is the Scotch heterography, so is the gradual change of heterography from the coming in of the Normans, nay, from the first writing of Anglo-Saxon until the present day; but ? does any one advocate their present daily use? No; they lie in old volumes upon the shelves of public libraries-very useful to those who are studying the history of the English language, very useless to every body else. Thus, let us hope, in a few years, will lie upon the shelves of our libraries the works now printed in heterotypy, useful to the student of the history of literature and language, but unopened by those who study ideas in place of words.

This thought adds new hope to our opponent,—who is not an imaginary one, for such opponents we have had, and shall have for some time to come; we see him preparing to raise his mighty double-handled sword of error wherewith to smite us to the earth. "? What," he asks, triumphantly, "do you recklessly doom to dust and neglect those numberless tomes which the industry of the modern press has given to the world? Would you seal up, against future generations, the knowledge of their forefathers, or condemn them to acquire it at an enormous expenditure of capital? The thing cannot be done; you must give up your scheme, for it will not pay." This is the "money argument," the argument which will weigh the most and heaviest with the majority; but, like the others, it fails from its want of generality.

The futility of this argument may be first shown by our admitting it . to the fullest extent. ? What does it assume? First, that a sufficient supply of books is already in the market for those who do, and will read ; and, secondly, that the number of readers should not be increased. That the first is false, is proved by the immense sale of new and cheap books, such as Knight's Weekly Volume, Chambers's Tracts and Journal, Murray's Home and Colonial Library, and numberless other libraries and cheap publications. There are not books enough in existence for the number of readers; and there are not copies enough of the books already written for the number of those who now read. We do not consider the second assumption, that the number of readers has already reached its proper amount, worthy of a serious refutation. Even if we were disposed to allow (what we most emphatically refuse to admit) that the proportion of readers to non-readers is sufficient, yet, as the population steadily increases, both here and in America, the number of readers must steadily increase also, the same proportion being preserved. But we believe that the introduction of Phonotypy will, in twenty years, increase the number of readers three-fold, and, in a century, increase it tenfold. If, however, it only doubles the number in that time, there is a sufficient market for Phonotypy, without trenching, in any respect, upon heterotypic publications. If just double the number of persons read, just double the number of books must be produced, whether heterotypic or phonotypic; and if the accession be entirely phonotypic, there will be no waste of capital in the production of books in the phonotypic character, in preference to the heterotypic, for the books must be produced, at any rate. The books now printed in heterotypy will have served their purpose when read by the present generation. We can then afford to put them by, and supply the rising generation with new, or with new copies of these, printed in a new character. Undoubtedly, the progress of Phonotypy, as that of all reforms, will be gradual; and, for some time, we shall have heterotypy and phonotypy proceeding together. At first, there will be thousands of heterotypers to tens of phonotypers; in time, the proportion will change, until it becomes one of equality, and then the doom of heterotypy is sealed, and, in a hundred years, it will be only known by name. Still, during this interval, the heterotyper will have the advantage of being able to acquire a facility of reading phonotypy by less than an hour's study; while the phonotyper will find, that, having acquired a habit of reading phonotypy, he will soon be able to read heterotypy with ease, much sooner than he could acquire the art upon the old system, and he will be saved for ever from the still greater and more terrible task of learning to spell. Thus our public libraries will still be useful depositories. After two generations, should Phonotypy succeed at all, the number of those who study heterotypy will be few; while there will always be, from the commencement of the success of Phonotypy, an immense number of persons who will never trouble their heads about heterotypy at all, and who would never have learned to read at all but for Phonotypy.

But there is another, and even a better, way of meeting this money . argument. To the Englishman, time is money, and the balance should be made out thus: debtor, to the reprinting of all those copies of books which have been printed up to this time, and would have been consulted if the alphabet had not been changed (this by no means amounts even to 50 per cent. of those which now exist, and all fresh copies are, of course, excluded, as costing as much one way as another) ;(33) creditor, the whole of the time to each individual to be hereafter born, necessary for learning to read and spell, less one fortnight each (a mere nominal time). Say that, in thirty years, this would amount to saving only one year on an average in the life of five millions (assuming only 1-3rd of the population of England to learn to read), we should thus have the mental labour of five millions of years to apply elsewhere, and it needs no great political economist to prove that these five millions of years must be inconceivably more valuable than the cost of reprinting such of the books now existing as would ever be re-read.

Let us shortly sum up the consequences of heterotypy and phonotypy being general.

At present, heterotypy being in general use,

1. It takes years for a child to learn to read with tolerable accuracy.

2. It takes many more years before he is able to spell.

3. No one ever knows, with certainty, how to spell a word which he has only heard, and has not yet seen written.

4. No one ever knows, with certainty, how to pronounce a word which he has only seen, and never heard.

5. Very few can, or do, at all times, spell every word with which they are familiar, both in speaking and writing, correctly.

6. Foreigners are continually committing the most ludicrous mistakes of pronunciation, from being misled by the spelling.

 $\overline{7}$. The irregularities of spelling are the great cause of the difficulty experienced in learning our language.

8. Missionaries to foreign countries find the greatest difficulty in reducing to writing the dialects of the barbarous tribes which they are endeavouring to civilize; and travellers and geographers seem quite at a loss for a means of conveying the names of places which they have visited or described, the strange medleys of letters which they furnish being in general ludicrously unintelligible.

(33.) This is not absolutely true, but the difference is entirely in favour of Phonotypy. If the reader will cast his eyes over the Tables so often referred to, he will find that, in almost every instance, the phonetic spelling of any given word occupies less space than the heterotypic. Some few words occupy the same space, and a very few, indeed (see under X, in the second table), more. This saving we may safely calculate at one-fifth; so that phonotypic works would necessarily cost 20 per cent. less than heterotypic for the same number of words. This is really an important discount. It would not be difficult to invent a "phonotypic short hand," similar to the "phonographic short hand," in which about 100 of the commonest words would be reduced to one or two letters at most, and about one-third of the number of letters would be saved in this manner. Such works would be very easily read by any one who had learned to read for a single year (or even less), and the saving in them over heterotypic works would be $\frac{4}{5} + \frac{4}{3}$, or $\frac{8}{5}$, being rather more than half. Attention will be hereafter paid to this important point of abbreviated printing.

If phonotypy be generally used,

1. Children, of six or eight years old, will be able to learn to read in a week.

2. Those who can now read heterotypy will learn to read in ten minutes.

3. No difficulty will be experienced in spelling any word which can be pronounced with accuracy.

4. No doubt will be experienced as to the proper pronunciation of any word which meets the eye.

5. Every one will be able to spell as correctly as he pronounces.

6. Foreigners will never be led into any errors of pronunciation by the orthography of words.

7, Our language, which is about the simplest, in its grammatical construction, of any in the world, will be rendered accessible to the whole of mankind, and will be much more extensively read and spoken.

8. Missionaries will be able to reduce the languages of any tribes to an alphabetical form, and to print it off with ease; no language need be unwritten, no difficulty experienced in giving the names of places, &c. All the immense variety of existing alphabets may be merged into one, and thus one great stumblingblock to the student of languages (especially of Oriential languages) immediately removed.

9. Reading and writing will no longer be thought feats, their attainment being the end and aim which the parents of most poor children have in sending them to school; they will take their proper places as subsidiary arts, without which we can learn nothing, but which contain no learning in themselves;—they will be universally esteemed the beginnings, and not the ends, of education.⁽³⁴⁾

To conclude. Suppose we had not this "monkish orthography," but a better system, and some one were to propose the former, and show its beauties by the tables just given, ? would he not be scouted at for daring to propose what is so self-evidently absurd? And, ? are generations yet unborn to undergo the labour of wading through this mass of blunders merely because we now have a bad system of spelling? ? Is this one argument, it is so, and must, therefore, remain so, to supersede all reason? Forbid it, common sense!

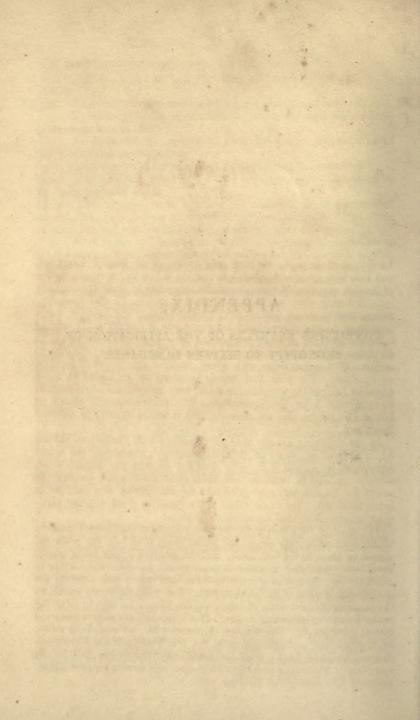
17 April, 1845.

(34.) These are advantages and disadvantages entirely due to the method of spelling, the subject to which we have confined ourselves in this tract. But we cannot help drawing attention here to the great difference, in point of mere quill-driving, between the heterographic long hand, which is necessary for the perfect expression of the present heterography, and the beautiful system of phonographic short hand, which corresponds to Phonotypy letter by letter, so that, although a phonographic long hand is furnished, the short may, in almost every conceivable case, supply its place. When we recollect that, without hurrying, phonographic short hand enables us to write at least three times as many words in the same time as heterographic long hand, at much less than half the bodily fatigue, the saving of labour in mere writing may be thus, at a very moderate calculation, estimated at *five-sixths*. Those who know, from practical experience, the pains and labour of much writing under the present system, will properly appreciate this boon; but no one can avoid being struck with the immense economy of the plan here recommended in writing, as well as reading.

APPENDIX,

CONTAINING EXAMPLES OF THE APPLICATION OF PHONOTYPY TO SIXTEEN LANGUAGES.

1.19



APPENDIX.

In the preceding pages we have only spoken of the English Language, and have only given such an alphabet as will suffice for the representation of English sounds. Hence, it would be impossible to print French, German, and many other languages with these characters, because those languages contain sounds unfamiliar to English organs. As, however, words from those languages are of frequent occurrence in English works, and as a knowledge of the mode of pronouncing those languages is important to Englishmen, we have temporarily extended the Phonetic alphabet to embrace all the languages with whose pronunciation we could form an acquaintance. We think that it may be useful to the reader to see a complete Table of the Phonetic Alphabet, with exemplificative words, such as would suit it for the representation of all European and almost all Oriental languages, and we annex it with a few specimens in different languages.

In the following list we have placed against each Phonotypic character, a number of words in different languages, containing the sound represented by it; and if its value does not occur in any English word, we have enclosed in brackets that Phonotypic letter which denotes the sound an Englishman may substitute for the correct one until he is better informed. The Italic letters in the examples point out the particular sounds which they are meant to illustrate.

The order of the letters in the following Alphabet has been chosen to facilitate reference; the unaccented letters being placed in the order assigned to them in the first Table, and the accented letters being placed immediately after their unaccented prototypes. In order still farther to assist the eye, the letters of a similar form, and which only differ by the accents placed upon them, are grouped. For what the writer considers the theoretically best mode of arranging the letters, he begs to refer the reader to the "Alphabet of Nature," Part 1, in which the subject is entered into at great length. The English Alphabet will, however, in practice, be kept distinct, and arranged as in the first Table, and the *Phonotypic Journal* for June, 1845; while the Additional Symbols required for the extension of Phonotypy to foreign languages, will form a separate Table, as in the July *Journal* for the same year.

COMPLETE PHONOTYPIC ALPHABET.

G. German; F. French; I. Italian; P. Portuguese; W. Welsh.

1. Li= . . feet, puffy; ihnen, G; vie, F. 2. I i = . . fit; inne, G; imiter, F. 3. 'I'i=[i] The Polish y in open syllables. 4. 'Iì=[i] close . 5. I = [an] fin, F.6. Ii = [i] fim, P. 7. $\varepsilon \varepsilon = ...$ date, Sunday; heer, G; imiter, F. 8. Ee=. . debt; wenn, G; exister, F. 9. Æ æ = . dare; wer, G; läben, G; chéne, F.10. 'E è=[e] ben; Italian e aperto in close syllables. 11. Aa = ... father; vater, G; fracas, F.12. A a= . . fat. This vowel is only found in English. 13. 'A a=[a] pate, F. [shire and in Scotland. 14. 'A à= [a] patte, F; mann, G. This sound may be heard in York-15. A â=[oŋ]an, F. 16. $A\bar{a}=[a] v\bar{a}a, P.$ 17. $\Theta \Theta = ...$ nought, austere; Swedish å. 18. Oo=... not; von, G. Some pronounce o instead of o in German. 19. 'O $\phi = [\theta]$ Italian o aperto in open syllables. Some say this is the 20. $O \circ = [o]$ Italian o aperto in close sylbls. [Swedish & and Danish aa. 21. 'O ô= [on] on, F. 22. O o=[en] nao, P. 23. Oo=[on] Camoes, P. 24. "O ö= [u, or ɛ in German] höken, G; peu, F. 25. $O \circ = [u, or e in German]$ böcke, G; jeune, F. 26. U u= . . cur, ochre, able, open; liebe, lieben, G; le, F. 27. $U_{u} = ...$ but. This sound is not found in any European language but 28. "U ü= [y, or i in German] kühnste, G; vú, F. [English and Dutch. 29. U u= [u, or i in German] künste, G; suffit, F. 30. Uû=[uŋ] un, F. 31. $\Omega \circ = ...$ bone; bohne, G; cause, F. 32. $O \circ = [\circ]$ bonne, F. In some parts of Germany instead of \circ . 33. W m=. . fool, into; buhle, G; toute, F. 34. W u = ... full; bulle, G.35. #i = ... eye; ein, G.36. Ai ai= . aye; naive, F; guai, I. 37. $\Phi \delta = ... oyster; neu, G.$ 38. $\delta x = ... cow$; bau, G.

- 39. Au au=[s] laude, I.
- 40. $\Psi y = ... few$; Jude, G.
- 41. Y y = ... yea; German j.
- 42. Y'y'=[y] fille, F.=fily'. Some say fiy', and others fi.
- 43. W = ... way.
- 44. Hh = ... hay; hoch, G; haut, F.
- 45. X x = [h] Spanish j; Florentine c in cosa; Arabic xa.
- 46. Do=[omit, or n after, and gn before a vowel in Hebrew] Arabic oin
- 47. Pp = ... peep; puppe, G; pois, F.
- 48. Bb = ... babe; bube, G; bois, F.
- 49. Tt = ... teat; tute, G; toi, F.
- 50. 'T T=[t] Arabic, Ta.
- 51. D d = ... deed; du, G; dois, F.
- 52. 'D D = [d] Arabic, Dad.
- 53. Eg= . . chest; Deutsch, G; cena, I; often mispronounced as f in

Italian

- 54. Jj = ... jest; giro, I.
- 55. Cc = ... cock; kein, G; cause, F.
- 56. Gg = ... gag; gab, G; gage, F.
- 57. 'G G=[g] Arabic, Gin; Provençal r; Newcastle burr.
- 58. K k=[c] ich, ach, G. The vowels of the i and ε class when prece-
- 59. 'K $\kappa = [c]$ Arabic, kaf. [ding this letter and q, give them a softer sound.
- 60. Qq=[g] einig, general, G. See remark on k.
- 61. Ff= . . fife; fisch, G; foi, F. [this sound, but scarcely appreciable.
- 62. Vv = ... valve; wenn, G. The German w is really a variation of
- 63. $\Gamma t = ... thigh;$ Spanish z; Modern Greek θ .
- 64. If $\mathfrak{A} = \ldots$ thy; Spanish d final; Modern Greek S.
- 65. S = ... cease; dass, G; soi, F.
- 66. 'S c=[s] Arabic, cad.
- 67. Z z= . . zeal; so, G; plaise, F.
- 68. Z = [z] Arabic, za.
- 69. $\Sigma f = ...$ vicious, shine; schiff, G; champ, F.
- 70. $X_3 = ...$ vision, pleasure; gage, F; juste, F.
- 71. Ll= . . lull; lallen, G; loi, F.
- 72. 'L L = [1] Polish 1 with a bar. [abl', some say ab, and in poetry ablu.
- 73. L' l'=[tl, or 1 in French] Llangollen, W. able, F.=abl'. Instead of
- 74. Rr= . . rare; When r is not followed by a vowel, it is very indis-
- 75. R' r'=[r] rh, W. [tinct in English; reissen, G; rare, F.
- 76. Mm = ... sum; mann, G; moi, F.
- 77. M' m' = [m] mh, W.
- 78. Nn = ... sun; nun, G; nonne, F.
- 79. N' n' = [n] nh, W.
- 80. $V_{\eta} = ... sung$; singen, G.
- 81. U' ŋ'=[ŋ] ngh, W.
- 82. 'N N=[n] Sanscrit cerebral n.

It would of course be a work of very considerable time to acquire a correct pronunciation of all these 82 elements, nor can we suppose that any one person will accomplish the task perfectly; yet, when once able to pronounce them, there is scarcely a language to be named (except perhaps Chinese, with its many nasals) which he could not immediately write in this alphabet.

For English, as we have seen, 43 elements only are necessary; for German, we should want seven in addition, namely à, ö o, ü u, k q, making a total of 50 for English and German. French adds six more, on account of its great richness in vowels. These six additional letters are, î, á, â, ô, û, and o, making 56 letters for English, German, and French. Italian only requires the addition of è, ó, ò, so that 59 letters would be enough for the 4 principal European languages. If these languages then were printed in accordance with this alphabet, the pupil by only learning the values of 59 letters would be able to read them off with facility. If we had extended our second Table to embrace all the anomalies of these 4 languages, instead of confining it to the English alone, we should of course have very much increased it; and the difference would have been still more strikingly exhibited between a correct phonetic representation founded upon analysis, and a haphazard application of the Latin alphabet, with the powers of which the writers seem to have been unacquainted, and which, consisting only of 23 letters, (as j, v, w, do not form a part of it) was of course totally inadequate to perform the office of an alphabet of 59 elements.

The following examples are the same as those given in the "Appendix to the First Style of Phonography," in the 7th Edition of Mr. Pitman's "Manual of Phonography," where the heterotypic representation and translation of the same passages will be found. The accent is upon the last syllable but one when not otherwise marked, except in English where it is not marked at all; in Sanscrit, where we are not acquainted with its correct place; and, in French, in which there is no accent.

The Author craves indulgence if he have in any case misrepresented the pronunciation; such errors are due, not to the alphabet itself, but to his own ignorance, arising from want of memory, and want of due power to appreciate the multifarious sounds of so many languages.

1. SANSCRIT. Sir W. Jones, Works, vol. 3 p. 295.

Mudhu juhihi dhunagumutrifnàm kuru tenubuddhimunuh suvitrifnàm yullubhuse nijukurmopattum vittum tena vinoduyu çittum.

2. ANCIENT GREEK. Etonian Pronunciation. Hom. II., 1, 43-49.

Hoz efut ycominos; tsd eelui Fôbos Upolon: Bi di cat Slumpõo curinon coominos cir, Tocs omôsin econ, amfireficti furetrin, Eclaysan dar oistô ep omon coominõo, Øts cinitentos; ho diii nycti iôcos: Hezet epit apinyti nion, metu dion hiici; Dini di claygi genet argyriõo biôo.

3. MODERN GREEK PRONUNCIATION of the same Passage, accented as if it were prose.

Os efàt evkomenos; tud eclie Fivos 'Apollon; Vi de càt Wlimbio carinon koomenos cir, Tocs omisin ekon, àmfirefea te faretrin, Eclàysàn dar oistl ep omon koomenio 'Aftu cinitendos: o diie nicti eicos: Ezet epit àpanefte neon meta dion eice; Hint de clàygi yenet aryireio viio.

4. LATIN. German Pronunciation. Mart., 1, 40.

Si ewis crit raros intær numeràndus amicos, Cwalez prisca fidez, famacwe novit anus;

- Si ewis Tsecropiæ màdidus Làtsiæewe Minærvæ Artibus, et væra simplitsitate bonus ;
- Si cwis crit recti custos, mirater onesti, Et niil arcano cwi roget ore Deos :

Si cwis crit màgnæ subnicsus roborc mentis, Dispercâm, si non hic Detsianus crit.

5. ITALIAN. Filangieri, Introduzione alla Scienza della Legislazione.

Cwali sóno i soli odjetti ce ànno fino a cwesti ultimi tèmpi occupati i sovrani di Europa? Un arsenale fórmidabile, un artilyeria numeróza, una truppa bène àggwerrita. Tutti i càlcoli ce si sóno ezaminati àlla prezentsa dæ principi, non sóno stati diretti ce àlla solutsione dun solo problema: Trovar la màniæra di utçidere p w ómini nel minor tèmpo possibile. La pærfetsione del arte la py funesta àl umànitá çi fa vedære sentsa dubbyo un vitsyo nel sistæma univærsale dæ goværni.

6. SPANISH. Ortographia de la lengua Castellana; Prologo.

Si las lengwas se formasen de una vet i tuviesen en su printipio toda la àbundàntya i pærfection de ce son capates, cada nation pudiæra con fatilidad aver àreglado su ortografia particular por medyo de un sistema univærsal, fixo i pærfecto; pero casi todas las lengwas con el tyempo se àn aumentado de muças votes tomadas de distintas idiomas. De estas votes, unas se àn màntenido con los caràcteres proprios de sus orixenes, i otras dexaron estos i tomaron los de la lengwa ce las àdoptor. Las votes àntigwas ecsperimentaron tàmbyen su mudànta, per aværse àlterado su pronuntiation i escritura.

7. PORTUGESE. Pr. Francisco Dias. Analyse e Combinações filosoficas sobre a Elocução.

E o talâto da palavra a mais nobre fàculdáde do âte rasional como istrumâto, cô ce no so espoe as suas ideas, màs ate pita os mais occultos sâtimâtos do espirito cô ràsgos to vivos, e sublimes, ce os fàs pàssar aos corasoes mais izâtos de îtæresse. Acella filosofia inata as coraso do omâ, ce preside a todas as àcsoes, ce mais o elevo, foi câ formu os sinaes represâtativos das suas ideas siplises e côpostas.

8. FRENCH. Volney. L'Alfabet Europeen appliqué aux langues Asiatique. Ch. 4.

Ll æ clær cu set diværsite (dez àlfabe oriâtal) æt û obstacl' màteriel a la comünicasiô dez espri, par côsecâ a la difüziô de conæsâs, o progre du la sivilizaziô : dailyör el subsist sâs ocû motif ræzonabl', car si, com il æ du fæ, lu mecanism' du la pàròl æ lu mæm pur tut se nasiô ? cel ütilite, cel ræzô i a t il du lu figüre par de sistæm si diferâ ? Cel imâs àvâtaz pur lespæs ümæn, si du pöpl a pöpl', tu lez îdividü pavæ su comünice par û mæm lâgaz ! Ør, lu premye pa vær su büt elve, æt û söl e mæm àlfabe.

9. GERMAN. Klopstock. Von der Schreibung des Ungehörten.

In blumunfticun, værdun blumun, und vitur nikts gumalt. Dem cinstlur fil es zelbur nikt in trym in, di gurúku mitmalun tsu volun. Und glikvol zind es gumaltu gurúku vàs dær fon dær ortogråft furlånt dær sk dås unguhörtu gufribun zeun vil. Dær fribundur zol àlzo dótlikur alz dær redundur zin. Den nur hirsf càn zik di zondurbaru fodurun grindun. S Abur varum den dótlikur? S Etva desvæqun, vil, vær list, zo oft ær vil, tsuriclæzun càn; dær hörundur hingsqun nur zer zeltun fraqun darf?

10. DUTCH. Lennop. Opkomst, bloei en verval der Letteren.

Ràmpzaliq het folc, dàt, dor en tufàbiqun zámunlop fàn omstàndiqhedun, erdur met de veldu, dàn met de leturun, becend vird; ant velc bruizundu hartsoqtun qretiq het færqift dedun inzvelqun, zondur dàt het tequnqift noq dar vàs. Fluc ovur dær Öropeurz, di an zu felu folcurun dær ondurskidundu færulddelun de nod lotiqu fortbreyzulun hunur veldu turdindun, er zi hen dor beskafin tot cenis, tot het rektu gubruic hunur qestfurmoqunz hàdun opqulid.

11. ENGLISH.⁽¹⁾ Craik. Literature and Learning in England, 1, 198.

For đi last fifti yirz ov đi fortint sengyri, đi Frenf langwij had bin rapidli luzin đi usendunsi it had held umun us from đi midul ov đi tent, and bicumin umun el clasiz in Inglund ε forin tun. In đi Prolog tu Gosurz "Testumunt ov Luv," ε proz wurc, hwig simz tu hav bin far advanst, if not finift, in 1392, đi gret fađur ov sur Inglif poitri, spicin ov đoz ov hiz cuntrimen, hu stil pursisted in ritin Frenf vurs, ecspresiz himself đus ;—"Surtiz, đær bi sum đat spic đær poizi matur in Frenf, ov hwig spig đi Frenf men hav az gud ε fansi az wi hav in hirin ov Frenf menz Inglif." And afturwurdz hi adz ; "Let đen clares indit in Latin, for đe hav đi propurti in siuns, and đi noin in đat faculti, and let Frenfmen in dær Frenf elso indit dær event túrmz, for it iz cindli tu dær msdz ; and let us fo sur fansiz in sug wurdz az wi lúrnt ov sur damz tun."(2)

(1.) Instead of giving the examples of English, which will be found in the Manual of Phonography, we have preferred taking an entirely new passage.

(2.) We give these two passages in the spelling of Chaucer, that it may be compared with the Phonetic representation, and with modern heterotypy.

"Certes there ben some that speke thyr poysy mater in Frenche, of whyche speche the Frenche men have as good a fantasye as we have in hearing of French mennes Englyshe." "Let then elerkes endyten in Latyn, for they have the propertye in science and the knowinge in that facultye, and lette Frenchmen in theyr Frenche also endyte theyr querynt termes, for it is kyndly to theyr mouthes; and let us shewe our fantasyes in suche wordes as we learneden of our dames tonge." Frenf, it iz evidunt from dis, eldo it mit stil bi ε comun ucwiurmunt umuy di hiur clasiz, had sist tu bi di mudur tuŋ ov eni clas ov Iŋgliſmen, and woz onli non tu doz tu hum it woz tet bi ε mastur. So, it wil bi rimemburd, dat di Priures in di Canturberi Telz, eldo fi cud spic Frenf "ful fær and fitisli," or fluuntli, spoc it onli

> "Aftur đi scul ov Stratfurd atu Bo, Før Frens ov Paris woz tu húr unno."

From dis, az from meni udur pasijiz in old riturz wi lurn, dat di Frens tet and spocun in England had, az woz indid inevitubul, bicum & curupt diulect ov di langwij, or at list veri difurunt from di Frens ov Paris. But az di Ferin tun lest its hold and diclind in pyriti, di old Tytonic spig ov di netiv popylesun, fevurd bi di sem surcumstunsiz and cors ov ivents, hwig geet and diprest its rivul, and havin at last, aftur goin tru ε proses elmost ov disolujun and pytrifacjun, bigun tu usym ε ny organizejun, grajyuli ricuvurd its usendunsi. So lon az di Inglij woz di langwij ov onli e part ov di nefun, and di Frenf, az it wær, struguld wid it før di masturi, it rimend unudultureted ;-hwen it bicem di spiç ov di hal pipul, ov di hiur clasiz az wel az ov di laur, den it lost its ald Tytonic pyriti, and risivd & larj elyun admicsgur from di elyun lips tru hwig it past. Hwedur dis woz ɛ forgynet surcumstuns, or di rivurs, iz unudur cwesqun. Ai Sacsun, hyevur, in pasin intu Inglif, had olredi lost sum ov its orijinul caructuristics; and, if left tu its on spontenyus and unusisted divelupmunt, it wud probubli hav usymd ɛ caructur rizembliŋ radur dat ov di Duç er Flemif, dan dat ov di Jurmun ov di prezunt de.

12. POLISH.

Tovarfistvo Pomotsí Naucovei guvayonts ile mu syrodki yego pozvalayo nàd víkovanyem dzitsi Emigràntuv Polscik, i mayonts pfedevfistkyem na tselu sczenye ik od zupelnego stsudzozyemcenya sye, ne tso spolozenya svoyego sâ nàrazone,—zvazifí pozítec yacibí mogla ftei myærze pſínyestsy' stosovna i dobra csiâzca elementarna,—oglafa concurs do nàpisanya tacovei csiâzci, pod tírtulem : Zcola Domova.

13. RUSSIAN. Evangelia of Luki. Glava Shest'.

Tàc bud'ytye milosærdí càc i atyets vàf milosærd yesty'. Nye surditye, i nye budyetye sudimí; nye osuzdaitye i nye budyetye osuzdení; profgaitye i profgení budyetye. Davaitye, i dàstsya vàm; myeroy, dobroy, utryasennow nagnyetennow i perepolnennow otsytlyt vàm fpazuku; ibo cacoy myæroy myærite ví, tacoy ze otmyæritsya i vàm.

14. PERSIAN. Ode of Xafiz.

Ugur án turci firazi budust árud dili mara Bukali hinduvif bukfum Sumurkundo Bukarara Bidih saki mat baki kih dur junnut nukvahi yaft Cunari ábi rucnabado gulgufti muqàlara.

15. ARABIC. Koran; Opening Lesson. Learned pronunciation.

`Alkuránu; suratu-lfatixati (3); màcciyatun, sàbou áyatin. Bismillahi -rraxmani -rraximi. `Alxàmdu lillahi ràbbi -loalamina -rraxmani -rraximi, málici ysmi -ddini; iyaca naobudu waiyaca nàstaoinu, ihdina -ççirara -lmustakima, çirara -lladina ànoàmta oalaihim Gairi -lmàcpubi oalaihim walá -ppallina.

HEBREW. Zeph., 3, 8. Conjectural pronunciation on the model of the learned Arabic, with the Masoretic punctuation.⁽⁴⁾

²Sufànya. Lacen xàccui-li nuumi-yuhova luyomi Kumi luoàdi, ci mifparti lessofi goyim, lukovçi màmlakoti, lifpoki oaleihem raomi, kol xaroni àppi, ci busji kinati leakeli col haareç.

Imperfect as may be the execution of these specimens, they are yet enough to show that it is not impossible to invent a universal alphabet, which shall present no great mechanical difficulty to the printer. If, as the Author is inspirited by the great success of Phonography to hope, the introduction of so much of this alphabet as suffices to represent the English language, can be effected, the day on which the rest of the scheme will be adopted is not far distant. There is no country in which the necessity of a Phonetic alphabet is more felt than in England, and we may therefore hope that the speakers of the English language, in whatever part of the world they may be found; whether in England, America, Asia, or Australia, will be the first to raise this railway for the advance of knowledge.

(3.) Words connected by a hyphen are really distinct, but are pronounced almost as one; hence if a word begins with two consonants, the first ends the last syllable of the preceding word. It was thought that it would be best to separate the words, instead of running them all into one. In making this use of the hyphen, the Arabic heterotypy has been followed.

(4.) It is usual to substitute 'k, ts, c, t' for 'x, c, k, t' respectively, and omit a.

Bath : Printed by John and James Keene, 7, Kingsmead-street.

NIV. OF CALIF. LIBRARY. LOS ANGELES





A TITTLETE THE UNIVERS/ N-LOS-ANGELES

University of California Library Los Angeles

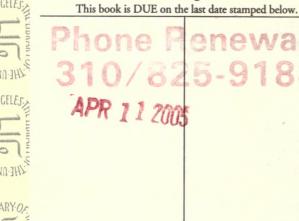


IS

8













CELES CHE·DN



J.OF.CALIFORM



J.OF.CALIFORM.



A-LOS-ANCELEC



