

Division of Words eBook

Division of Words

The following sections of this BookRags Literature Study Guide is offprint from Gale's For Students Series: Presenting Analysis, Context, and Criticism on Commonly Studied Works: Introduction, Author Biography, Plot Summary, Characters, Themes, Style, Historical Context, Critical Overview, Criticism and Critical Essays, Media Adaptations, Topics for Further Study, Compare & Contrast, What Do I Read Next?, For Further Study, and Sources.

(c)1998-2002; (c)2002 by Gale. Gale is an imprint of The Gale Group, Inc., a division of Thomson Learning, Inc. Gale and Design and Thomson Learning are trademarks used herein under license.

The following sections, if they exist, are offprint from Beacham's Encyclopedia of Popular Fiction: "Social Concerns", "Thematic Overview", "Techniques", "Literary Precedents", "Key Questions", "Related Titles", "Adaptations", "Related Web Sites". (c)1994-2005, by Walton Beacham.

The following sections, if they exist, are offprint from Beacham's Guide to Literature for Young Adults: "About the Author", "Overview", "Setting", "Literary Qualities", "Social Sensitivity", "Topics for Discussion", "Ideas for Reports and Papers". (c)1994-2005, by Walton Beacham.

All other sections in this Literature Study Guide are owned and copyrighted by BookRags, Inc.



Contents

Division of Words eBook.....	1
Contents.....	2
Table of Contents.....	4
Page 1.....	5
Page 2.....	6
Page 3.....	7
Page 4.....	8
Page 5.....	10
Page 6.....	11
Page 7.....	13
Page 8.....	15
Page 9.....	17
Page 10.....	19
Page 11.....	21
Page 12.....	23
Page 13.....	25
Page 14.....	27
Page 15.....	29
Page 16.....	31
Page 17.....	33
Page 18.....	35
Page 19.....	37
Page 20.....	39
Page 21.....	41
Page 22.....	43



[Page 23.....45](#)
[Page 24.....47](#)
[Page 25.....49](#)



Table of Contents

Section	Table of Contents	Page
Start of eBook		1
DIVISION OF WORDS		1
SPELLING		1
I		4
II		4
III		4
IV		6
PRONUNCIATION		7
ACCENT		9
DIVISION OF WORDS		10
RULES FOR DIVISION OF WORDS		12
IMPORTANCE OF SPACING		13
DIVISION IN LINES OF DISPLAY		14
SUPPLEMENTARY READING		14
QUESTIONS		15
TYPOGRAPHIC TECHNICAL		16
SERIES FOR APPRENTICES		
PART I— <i>Types, Tools, Machines, and Materials</i>		17
PART II— <i>Hand and Machine Composition</i>		19
PART III— <i>Imposition and Stonework</i>		20
PART IV— <i>Presswork</i>		20
PART V— <i>Pamphlet and Book Binding</i>		20
PART VI— <i>Correct Literary Composition</i>		20
PART VII— <i>Design, Color, and Lettering</i>		21
PART VIII— <i>History of Printing</i>		22
PART IX— <i>Cost Finding and Accounting</i>		23
PART X— <i>Miscellaneous</i>		23
ACKNOWLEDGMENT		24
CONTRIBUTORS		24

Page 1

DIVISION OF WORDS

The division of words when the words do not exactly fit the register of the line has always been a source of trouble. In the days of the manuscript makers devices such as crowding letters, reducing their size, or omitting them altogether were freely used and words were arbitrarily divided when the scribes so desired. During the greater part of the time every scribe divided as he pleased, often in ways which seem very strange to us, like the Greek custom of dividing always after a vowel and even dividing words of one syllable. With the invention of printing, however, the number of these devices was greatly diminished. It became a matter of spacing out the line or dividing the word. Of course that meant frequent word division and called for a systematization of rules with regard to this division. These rules for division are necessarily based on spelling and syllabication.

SPELLING

The idea that there is one right way to combine the letters representing a certain sound or group of sounds, that is a word, and that all other ways are wrong and little short of shameful is a comparatively new idea among us. The English speaking folk held down to a comparatively recent time that any group of letters which approximately represented the sound was amply sufficient as a symbol of the word. This sort of phonetic spelling was commonly followed, and followed with great freedom. No obligation was recognized to be consistent. In ordinary writing, such as letters and the like, it is not unusual to find the same word spelled in a variety of ways in the same document.

The last century has brought about an attempt to standardize spelling into conventional forms any departure from which is regarded as highly derogatory to the writer. In many cases these forms are fixed arbitrarily, and in some there is even now disagreement among the highest authorities. These difficulties and disagreements have two reasons: First, English is a composite language, drawn from many sources and at many periods; hence purely philological and etymological influences intervene, sometimes with marked results, while there is a difference of opinion as to how far these influences ought to prevail. Second, the English language uses an alphabet which fits it very badly. Many letters have to do duty for the expression of several sounds, and sometimes several of them have nearly or quite the same sound. For example, there are a number of distinct sounds of *a*, *i*, and *o* while *g* is sometimes indistinguishable from *j* and *c* from *k*. This is not always a matter of modification of sounds by the sounds of other letters combined with them. One has to learn how to pronounce *cough*, *dough*, *enough*, and *plough*, the *ough* having four distinct sounds in these four words. Each

Page 2

one of these sounds, by the way, could be exactly as well represented by another combination of letters which would be unmistakable, *viz.*, *coff*, *doe*, *enuff*, and *plow*. It is impossible to tell except by the context either the pronunciation or the meaning of *bow*. If the *ow* is pronounced as in *low*, it means a weapon. If the *ow* is pronounced as in *cow* it may mean either an obeisance or the front end of a boat.

This standardization of spelling is unfortunately not quite complete, although nearly so. Concerning the vast majority of the words in the English language there is no difference of opinion. A few words are differently spelled by different authorities. There are seven of these authorities of the first rank, three English, Stormonth, the Imperial Dictionary, and the Oxford Dictionary; and four American, Webster's International, Worcester, the Century Dictionary, and the Standard Dictionary. American printers may ordinarily disregard the English authorities.

Any one of the four American authorities may be safely followed. In cases where two spellings are given in the dictionary consulted, take the first one. Ordinarily a printing office adopts one of the great authorities as a standard and conforms the office style to it. All office copy will follow it and all errors in copy from outside will be corrected by it. Spellings differing from it will be regarded as errors, even though supported by other authorities.

This rule, however, is subject to one very important exception. The author has an unquestionable right to choose his own dictionary or to use any spelling for which there is any authority, English or American. If he has his own ideas on the subject of spelling he should be very careful that his manuscript is correctly spelled according to his ideas, and clearly written or typed. He should also indicate on the manuscript the authority he wishes used in correcting the spelling in case of mistakes or illegible passages. Every care should be taken to make the manuscript copy as correct as possible and as legible as possible. Such care may be very troublesome at first, but it will result in great saving of expense.

In addition to the authorities named there are the rules and "reformed" spellings adopted by the American Philological Association and published by the United States Government. These are followed fully in some offices, partly in others, and in many not at all. This is a question of the office style and the author's wish. If copy is clear and spelled according to any authority, it is the compositor's duty to follow it. If it is misspelled or illegible he is to correct it according to the office style unless otherwise directed by the author in writing. If furnished with such a direction he is to follow it. This procedure will clear the compositor of all blame. Any questions which then arise lie between the author and the proofreader.

Page 3

In the case of the reformed spellings, however, the departure from the ordinary appearance of the words is so great that the author cannot be allowed full freedom to set aside the office style. If he is paying for the printing he may insist on his spelling. If he is contributing to a periodical and the printing is done at the publisher's expense it is for the publisher to determine the style of printing to be used.

Any full consideration of the question of reformed spelling is hardly in place in this book. The author may perhaps be permitted one observation. Innovation in the use of the English language would appear to be primarily the work of scholars, and the adoption of such innovations would seem to belong to the book printer rather than to the commercial printer. The public mind as a whole is conservative. It is not hospitable to changes and does not soon become aware of them, much less familiar with them. The commercial printer makes his appeal to the mind of the general public. He will do well to use a vehicle familiar, intelligible, and acceptable to it.

Correct spelling is mainly a matter of habit and observation. To a certain extent it is a matter of careful pronunciation, but this is not always a safe or even a possible guide. The vowels preceding or following the one on which the primary accent falls, sometimes called obscure vowels, are so slurringly pronounced that even a pedantic precision will hardly make it possible to indicate clearly which vowel is used. The writer remembers seeing an examination paper written by a fourth year medical student in which the word *fever* was spelled *fevor*. A moment's thought will show that so far as pronunciation is concerned the word might be spelled *fevar*, *fevir*, *fevor*, *fever*, or *fevur* without any appreciable difference. The correct spelling is merely a matter of observation.

The author has on his desk at the moment of writing these lines half a dozen good books, each containing a set of rules for spelling. From these it would be easy to compile a set of fairly good rules. Each of these rules, however, has exceptions, in some cases quite numerous. To remember these rules with their exceptions would be a considerable mental task and to apply them would be cumbrous and time consuming. The effort would probably resolve itself into an actual learning of the words which present difficulties. The best way to become a good speller is to form the habit of careful reading, observing the form of every word as it passes before the eye and so unconsciously fixing it in the memory. The dictionary should be consulted whenever there is any doubt.

If you are to write a word, call up a mental picture of it, and if the picture is not perfectly clear go to the dictionary and fix a correct image of it in your mind. Be careful to pronounce every word you use as correctly as possible and you will get all the aid pronunciation can give you. Careless speaking and careless reading are the two great sources of incorrect spelling.

Page 4

The following tables will be found useful in settling practice with regard to certain troublesome classes of words.

I

American usage tends to the termination *_ize_* where English usage often sanctions *_ise_*. Use the termination *_ise_* in

advertise advise appraise apprise (*to inform*) arise chastise circumcise comprise compromise demise devise disfranchise disguise emprise enfranchise enterprise exercise exorcise franchise improvise incise merchandise premise reprise revise rise supervise surmise surprise

Use the termination *_ize_* or *_yze_* in

aggrandize agonize analyze anatomize anglicize apologize apostrophize apprise (*to value*) authorize baptize brutalize canonize catechize catholicize cauterize centralize characterize christianize civilize colonize criticize crystallize demoralize dogmatize economize emphasize epitomize equalize eulogize evangelize extemporize familiarize fertilize fossilize fraternize galvanize generalize gormandize harmonize immortalize italicize jeopardize legalize liberalize localize magnetize memorialize mesmerize metamorphize methodize minimize modernize monopolize moralize nationalize naturalize neutralize organize ostracize paralyze particularize pasteurize patronize philosophize plagiarize pulverize realize recognize reorganize revolutionize satirize scandalize scrutinize signalize solemnize soliloquize specialize spiritualize standardize stigmatize subsidize summarize syllogize symbolize sympathize tantalize temporize tranquilize tyrannize universalize utilize vaporize vitalize vocalize vulcanize vulgarize

II

Use the termination *_ible_* in the following words:

accessible admissible appetible apprehensible audible cessible coercible compatible competent comprehensible compressible conceivable contemptible contractible controvertible convertible convincible corrigible corrosible corruptible credible decoctible deducible defeasible defensible descendible destructible digestible discernible distensible divisible docible edible effectible eligible eludible enforcible evincible expansible expressible extendible extensible fallible feasible fencible flexible forcible frangible fusible gullible horrible illegible immiscible impassible intelligible irascible legible miscible negligible partible passible (*susceptible*) perceptible permissible persuasible pervertible plausible possible producible reducible reflexible refrangible



remissible reprehensible resistible responsible reversible revertible risible seducible
sensible tangible terrible transmissible visible

In all other cases use -able.

III

The following nouns end in -er.



Page 5

abettor abstracter accepter adapter adviser affirmer aider almoner annoyer arbiter
assenterasserter bailer caster censer (vessel) concocter condenser conferrer conjurer
consulter continuer contradicter contriver convener conveyer corrupter covenanter
debater defender deliberater deserter desolater deviser discontinuer disturber entreater
exalter exasperater exciter executer (*except in law*) expecter frequenter granter idolater
imposer impugner incenser inflictter insultter interceder interpreter interrupter inviter jailer
lamentter mortgager (*except in law*) obliger obstructer obtruder perfecter perjurer
preventer probationer propeller protestter recognizer regrater relater respectter sailer
(*ship*) sorcerer suggestter supplanter upholder vender

The following nouns end in *_-or_*.

abbreviator abductor abettor (*law*) abominator abrogator accelerator acceptor
accommodator accumulator actor adjudicator adjutor administrator admonitor adulator
adulterator aggregator aggressor agitator amalgamator animator annotator antecessor
apparitor appreciator arbitrator assassinator assessor benefactor bettor calculator
calumniator captor castor (*oil*) censor coadjutor collector competitor compositor
conductor confessor conqueror conservator consignator conspirator constrictor
constructor contaminator contemplator continuator contractor contributor corrector
councillor counsellor covenantor (*law*) creator creditor cultivator cunctator debtor
decorator delator (*law*) denominator denunciator depredator depressor deteriorator
detractor dictator dilator director dissector disseizor disseminator distributor divisor
dominator donor effector elector elevator elucidator emulator enactor equivocator
escheator estimator exactor excavator exceptor executer (*law*) exhibitor explerator
expositor expostulator extensor extirpator extractor fabricator factor flexor fornicator
fumigator generator gladiator governor grantor (*law*) habitator imitator impostor
impropriator inaugurator inceptor incisor inheritor initiator innovator insinuator institutor
instructor interlocutor interpolator interrogator inventor investor juror lector legator
legislator lessor mediator modulator monitor mortgagor (*law*) multiplicator narrator
navigator negotiator nonjuror numerator objector obligor (*law*) observator operator
originator pacificator participator peculator percolator perforator perpetrator persecutor
perturbator possessor preceptor precursor predecessor predictor prevaricator
procrastinator procreator procurator professor progenitor projector prolocutor
promulgator propagator propitiator proprietor prosecutor protector protractor purveyor
recognizer (*law*) recriminator reflector regenerator regulator relator (*law*) rotator
sacrificator sailor (*seaman*) scrutator sculptor sectator selector senator separator
sequestrator servitor solicitor spectator spoliator sponsor successor suitor supervisor
suppressor surveyor survivor testator tormentor traitor transgressor translator valuator
vendor (*law*) venerator ventilator vindicator violator visitor



Page 6

IV

Words which in their shortest form end in *_-d_*, *_-de_*, *_-ge_*, *_-unit_*, *_-rt_*, *_-se_*, *_-sr_*, take the ending *_-sion_*; e.g., *abscind*, *abscission*; *include*, *inclusion*; *emerge*, *emersion*; *remit*, *remission*; *infuse*, *infusion*; *repress*, *repression*.

All others take the ending *_-tion_*.

The following are irregularities:

adhesion assertion attention coercion cohesion crucifixion declension dimension
dissension distortion divulsion expulsion impulsion insertion intention occasion
propulsion recursion repulsion revulsion scansion suspicion tension version

Words ending in *_-ance_*, *_-ence_*; *_-ancy_*, *_-ency_*; *_-ant_*, and *_-ent_*, often cause confusion when carelessly written.

The following is a list of the more common words with the *e* form.

abducent abhorrence, -ent abluent absent, -ence absorbent abstergent abstinence, -ent
adherence, -ent advertency, -ent affluence, -ent antecedence, -ent apparent appertinent
appetence, -ency ardent benevolence, -ent circumference coexistence coherence, -ent
coincidence, -ent competence, -ent concurrence, -ent condolence conference
confidence, -ent confluence, -ent consentient consequence consequent consistence,
-ent consistency constituent continence, -ent convenience, -ent corpulence, -ent
correspondence, -ent currency, -ent deference delinquency, -ent dependence, -ent
deponent descendent (*adj.*) despondency, -ent difference diffidence, -ent diffluent
efficiency, -ent eminence, -ency eminent excellence, -ency excellent existence, -ent
expediency feculence, -ent flocculence, -ent fluency, -ent fraudulence, -ent imminence,
-ent impatience, -ent impellent imprudence, -ent impudence, -ent incipience, -ent
incumbency, -ent independence, -ent indolence, -ent inference inherence, -ent
intermittent iridescence, -ent lambent latency, -ent leniency, -ent magniloquence, -ent
malevolence, -ent mellifluence, -ent mollient obedience, -ent occurrence, -ent
omniscience, -ent opulence, -ency opulent patience, -ent pendent (*adj.*) pendency
penitence, -ent permanence, -ent permanency pertinence, -ent pestilence, -ent poculent
portent potency, -ent precedence, -ent preference prescience, -ent presence, -ent
presidency, -ent proficiency, -ent prominence, -ent proponent providence, -ent
prudence, -ent purulence, -ent quintessence recurrence, -ent reference refludence, -ent
repellent residence, -ency resident resolvent resplendence, -ent respondent reverence,
-ent sentient solvency, -ent somnolency, -ent subserviency, -ent subsidence, -ency
subsistence, -ent succulent superintendence superintendency superintendent tendence,
-ency transcendence, -ent transcendency transference transient transparency, -ent
transplendency, -ent turbulence, -ent vicegerency, -ent virulence, -ent

Nearly all other words of this type take the *a* form.



Page 7

* * * * *

The instructor should drill the pupils in spelling not only these “catch” words, but a wide range of English words. These lessons may be taken to advantage from some of the books mentioned in the list for supplementary reading, from any other good spelling book, or even from the pages of any well printed book or magazine. The words should be given out orally and written down by the pupil. A good exercise is the reading of a paragraph from any good book, or some stanza of poetry, the passage read to be taken down by the pupil with care to spell, punctuate, and capitalize properly.

A number of topics sometimes treated under the head of spelling will be found discussed in the “Printer’s Manual of Style” (No. 41).

PRONUNCIATION

The English language is a difficult one to pronounce as well as to spell. This arises from two causes. The English language has some sounds not generally found in other languages, such as *w* and *th*. As has already been pointed out, the alphabet fits the language very badly. Careful lexicographers indicate no less than seven sounds of *a*, five of *e*, three of *i*, four of *o* and six of *u*, as shown in the following table:

[=a] as in [=a]le [la] as in sen[la]te [a] as in [a]m a as in ask [a:] as in [a:]ll ae as in faether (a) as in fin(a)

[=e] as in [=e]ve [e] as in [e]nd [le] as in ev[le]nt [e] as in ff[e]rn (e) as in prud(e)nce

[=i] as in [=i]ce [li] as in [li]dea [i] as in p[i]n

[=o] as in [=o]ld [lo] as in [lo]pen [o] as in [o]dd o as in orb

[=u] as in [=u]se [lu] as in [lu]nite [u] as in [u]p [u:] as in r[u:]de [u=] as in f[u=]ll u as in urn

In addition to these there are diphthongs, combinations of vowel sounds pronounced as one syllable, such as

ou as in *out* *oi* as in *oil*

There are also a number of digraphs or combinations of vowels or consonants which have but one sound, such as

ai as in *rain* *eo* as in *people* *ou* as in *soup* *ou* as in *soul* *ph* as in *phalanx* *ch* as in *chorus* or *chair*



C has two sounds, hard before *a*, *o*, and *u*, as in *cat*, *cot*, and *cut*, and soft before *e*, *i*, and *y*, as in *cell*, *city*, and *cycle*.

G has two sounds, hard before *a*, *o*, and *u*, as in *gate*, *gone*, and *gun*, soft before *e*, *i*, and *y*, as in *gem*, *gin*, and *gyve*, although it is sometimes hard before *i* as in *girl*.

Ch is sometimes soft as in *chair* and *arch*, and sometimes hard as in *choir*.



Page 8

Th has two sounds, soft, or surd, as in *thin* and *death*, and hard, or sonant, as in *then* and *smooth*.

S has two sounds, soft, or surd, as in *soft* and *this*, and hard, or sonant, as in *has* and *wise*.

We have, therefore, twenty-six letters with which to express fifty or more sounds, not counting the digraphs and diphthongs.

Correct pronunciation depends upon three things, correct sounding of the letters, correct division into syllables, and correct placing of the accent.

A syllable is the smallest separately articulated, or pronounced, element in speech, or one of the parts into which speech is broken. It consists of a vowel alone or accompanied by one or more consonants and separated by them, or by a pause, from a preceding or following vowel. This division of words into syllables is indicated in dictionaries by the use of the hyphen thus: *sub-trac-tion*, *co-or-din-ate*. It will be observed that in the first of these examples the vowels are all separated by consonants, while in the second two of them are separated by a pause only.

The English language has the further peculiarity of using *l* and *n* as vowels in syllabication, as in *middle* (*mid-dl*) and *reck-on* (*reck-n*).

The division of words into syllables for pronunciation is generally, but not always, the same as that which should be followed in case the word has to be divided typographically. As these text-books are intended to help the apprentice as a speaker and writer of English as well as a printer, it is worth while to give some attention to syllabication for pronunciation before proceeding to discuss typographical division.[The illustrations from this point to the end of this section on page 16 are not typographic divisions. They concern pronunciation only.]

Two letters forming a diphthong or digraph are not to be separated. *Coin-age* (*oi* diphthong) but *co-in-ci-dence* (*oi* not a diphthong). *Excess* (*ss* digraph, pronounced practically like a single *s*) gives *ex-cess-es*, *ex-cess-ive*, etc. Whether or not the letters thus occurring together form a diphthong or digraph will depend on the derivation of the word, thus in *cat-head* (verb), a nautical term, *th* is not a digraph but in *ca-the-dral* *th* is a digraph, as is usually the case with these two letters. You would not say *cat-hed-ral*.

Two vowels, or a vowel and a diphthong, coming together but sounded separately belong to separate syllables.

A-or-ta, *co-op-er-ate*, but *coop-er-age*, *moi-e-ty*.

Do not end a syllable with



(a) *c* or *g* when soft, *en-ti-cing*, but *dic-tion*, *wa-ges*
but *wag-on*.

(b) *t*, *s*, *z*, *c*, *sc*, *g*, and *d*, when followed by *i*
or *e* giving the sound of *sh*; *ra-tion-al*, *o-cean*, *re-gion*,
as-cen-sion.



Page 9

(c) *d, s, t,* and *z* when followed by *u* giving the sound of *ch, sh, zh,* or *j, cen-sure, sei-zure, na-ture, ver-dure.*

Do not begin a syllable with

(a) *x* with the sound of *ks* or *gs, anx-ious, ex-act-ly.*

(b) *r* preceded by *a* or *e; par-ent, av-er-age,* but by exception, *pa-rent-al.*

(c) Single *l, n,* or *v,* followed by *i* with the sound of *y* consonant; *fol-io (fol-yo), gen-ius (gen-yus), sav-ior (sav-yor).*

Prefixes and suffixes are generally separated, *yel-low-ish, eat-able, pre-lude.* This last word is sometimes pronounced *prel-ude* and this pronunciation has some dictionary support, but it is objectionable.

A consonant or digraph between two sounded vowels usually joins the following vowel, *rea-son, no-ti-fy, mo-ther.*

When two or three consonants capable of beginning a syllable come between two sounded vowels they may all be joined to the following vowel.

(a) When the preceding vowel is long and accented; *en-a-bling, He-brew, i-dler.*

(b) When the following vowel is an accented syllable; *o-blige, re-dress.*

When two or three consonants capable of beginning a syllable come between two sounded vowels one may be joined to the preceding vowel.

(a) When the vowel is short; *tab-let, res-cue, mus-ket.*

(b) When the consonants are *st, str,* or *sp,* if either the preceding or following vowel is accented; *mis-tress, aus-tere, oys-ter, sus-pect.*

When a consonant is doubled (not forming a digraph) the two are generally separated; *beg-gar, bril-liant, cun-ning.*



The old-fashioned method of oral spelling by syllables *m-a-s-mas-t-e-r-ter-master* will be found extremely useful in teaching correct syllabication. It is recommended that constant use be made of it in spelling drill.

ACCENT

When a word consists of two syllables one of them receives more stress of voice than the other. This stress of voice is called accent. If the word consists of three or more syllables there is usually another syllable stressed in somewhat less degree. This is called a secondary accent. In some cases there may even be a third accent if the word is very long; *In'-come*, *val-e-tu'-di-na'-ri-an*. This fact arises from the tendency natural to all human speech to take more or less musical forms.



Page 10

The monotony of a series of stressed or of unstressed sounds would be unbearable. The pronunciation of such a series would be a highly artificial and very difficult performance. Correct pronunciation is very greatly concerned with the proper placing of the accent. Indeed the meaning of a familiar word may be quite obscured by a misplaced accent. For example, *he-red'-it-ary* is a very familiar word, but when pronounced *he-red-it'-ary*, as it was habitually by a friend of the author, we have to stop and think before catching the meaning.

The placing of the accent in English is subject to two general rules.

I The accent clings to the syllable which gives the meaning to the word, or in technical terms, the root syllable, *re-call'*, *in-stall'*, *in-stal-la'-tion* (accent falling on the syllable which defines the word as a noun), *in-her'-it*.

II Where the root syllable is not known the accent falls on the first syllable, with secondary accents following at intervals to relieve the voice.

This last tendency not infrequently supersedes the other, partly from the natural habit of the language, and partly because the average man is not an etymologist and knows very little about the derivation of the words he uses. For example, in Shakespeare's time English people followed the first rule and said *re-ven'-ue*, but now we say *rev'-e-nue*.

These two rules will serve as a good general guide to accent. Attention should be paid to the pronunciation of good speakers, and care taken to follow it. In case of doubt the dictionary should be consulted and the proper accent carefully fixed in the mind.

DIVISION OF WORDS

When the words do not fit the line what shall we do? The early printers used only one kind of spaces. In setting a line of type they proceeded until there was no room in the line for the next complete word of the copy. Then they filled out the line with spaces and began the next word on the next line. The length of the register being known in advance and nothing but spaces being used in setting the line, the compositor was spared much that makes composition at once a hard labor and a fine art. The result was an irregular margin at the right such as we now see in typewritten letters.

With improvements in types and typography the squaring out of the page soon came into fashion. In many cases this can be done by the careful use of spaces so as to bring a certain number of words squarely out to the end of the line. There have been



printers who have insisted that this should always be done. Their efforts have not, however, been successful. They result in a freakish looking page with white spots in the lines where letters or words have been spaced out to fill the register. It would be better, on the whole, to resort to the practice of the old masters and leave the right-hand margin irregular.



Page 11

Ordinarily the difficulty has been met by dividing words and putting a part of a word on one line and the rest of it on another, indicating the break by a hyphen. The hyphen in such a case is always the closing character in the first line. Clearly this division must be so made as to assist the reader in his task. The primary purpose of all printing is to be read. Anything that adds to the legibility of the printing improves it; anything that detracts from its legibility harms it. How can we so divide words that the legibility and intelligibility of the text will be maintained, the line justified to register, and the beauty of the page enhanced? These ends—legibility, intelligibility, and beauty—are the aims of all the rules which have been devised for the division of words. These are the things the reader will see and by them he will judge the results. He will probably know nothing about the rules by which the compositor gains his results. The compositor needs to know the rules, but to remember always that they are only means by which to secure results.

There have been several attempts to devise systems of division, but no one of them is thoroughly consistent or universally adopted.

One system requires the division of a word when the pronunciation will permit on the vowel at the end of the syllable. It has the defect of making no provision for syllables that end in consonants. Moreover, if rigorously applied it would give us such divisions as *ca-pa-ci-ty*, *cata-stro-phe*, *lexi-co-gra-pher*, *pre-fe-rence*, *pro-gno-sti-cate*, and *re-co-gnize*.

Another system requires the division of consolidated words at the junction of their elements, for example:

magn-animous cata-clysm found-ation oceano-graphy theo-logy know-ledge lexi-co-grapher in-fer-ence pre-judice pro-gnos-ticate pro-position typo-graphy

In some cases this rule would lead to queer looking divisions. More serious objections are that the system does not provide for words that are long enough to be divided but are yet not consolidated words, and, most of all, that the average compositor is not an accomplished etymologist and knows very little about the derivation, make up, and compounding of the words he has to set up. He may be familiar, for example with the word *rheostat*, but it would puzzle him to tell from what language it is derived, while the word *enclave* would probably send him to the dictionary for meaning as well as derivation, unless he happened to be used to one particular kind of writing.

Another system, and probably on the whole the best one, requires the division of the word on the accented syllable.

theol-ogy catas-trophe geog-raphy lexi-cog-rapher pref-erence prog-nos-ticate

It will be noted that some of these examples show division in more than one place, that is on the syllables which bear either the primary or the secondary accent. This rule does not provide for the cases when the division must come on an unaccented syllable. The cases, however, when the division cannot be made to come on either the syllable bearing the primary accent or one bearing a secondary accent will be comparatively few.



Page 12

RULES FOR DIVISION OF WORDS

I The general rule, then, is to divide according to pronunciation, not according to etymology or any hard and fast rule.

As far as possible, consistently with pronunciation and good spacing, divide according to meaning and derivation, where known.

un-even, not *une-ven*, *auto-mobile*, not *automo-bile*,
en-abled, not *ena-bled*.

II Divide on a vowel wherever practicable. In case a vowel alone forms a syllable in the middle of a word it should be run into the first line.

busi-ness *sepa-rate* *criti-cism* *particu-lar* *colo-nies* *dou-ble* *pro-gress* *pro-duct* *noi-sy*
wo-man *pa-tron* *me-moir*

III When two consonants meet between vowels, and the syllable ends on one consonant, the division may properly be made between the consonants, the pronunciation determining the place of division.

advan-tage *plain-tiff* *Wil-liam* *exces-sive* *scur-rilous* *mas-ter* *gram-mar* *profes-sor* *moun-tain*

IV When three consonants come together between two vowels the first of which is short, the division comes after the first consonant.

han-dle *chil-dren* *frus-trate*

V A single consonant between two vowels should be joined to the first vowel, if it is short; if the first vowel is long the consonant goes with the second.

riv-er *ri-val*

VI Diphthongs should not be divided.

peo-ple *Cae-sar*

VII Words compounded with a prefix should preferably be divided on the prefix.

dis-avow *in-herit* *un-concern*

VIII The terminations *_-able_*, *_-ible_*, *_-tion_*, *_-cial_*, *_-tive_*, and *_-ive_* should go over to the next line.



read-able convert-ible inten-tion discuss-ion

The termination *_-sion_* ordinarily goes over as in

occa-sion apprehen-sion cis-sion declen-sion

Occasionally, however, the strong emphasis needed for the *s* will call for a different arrangement, as in *divis-ion*.

IX The terminations *_-ing_*, *_-en_*, *_-ed_*, *_-er_*, *_-est_*, and the plural *_-es_* go over to the next line except when the preceding consonant is doubled, or when they follow *c* or *g* soft.

lead-ing beat-en larg-er, but *lat-ter for-cing ran-ging*

X Do not end a line with *j* or with *c* or *g* soft.

pro-cess ne-cessary pre-judice prog-eny

XI Adjectives in *ical* divide on the *i*.

physi-cal inimi-cal



Page 13

XII In derivatives of words ending in *_t_*, the division follows the accent.

objec-tion, not *object-ion*, *defec-tion*, not *defect-ion*, but *respec-tively*, not *respect-ively* and *distinc-tion*, not *distinct-ion*.

XIII Never separate *c* and *g* from the vowels *e*, *i*, and *y* upon which their soft sound depends.

re-li-gion ca-pa-ci-ty

XIV Never separate *q* from *u*, *qu* is a single sound.

XV Do not divide *nothing*.

XVI Do not divide words of four letters.

XVII Do not divide words of five or six letters if it can be avoided. Good spacing, however, must be considered of first importance.

XVIII In wide measures (20 ems or more) do not divide so as to end or begin a line with a syllable of two letters. Here again, however, good spacing is the first consideration.

XIX Do not divide words of two syllables pronounced as one, including past participles of short words.

heaven power prayer beamed often

XX Avoid additional hyphens in hyphenated words if possible.

object-lesson fellow-being poverty-stricken

XXI Do not separate a divisional mark (*a*), (*1*) from the matter to which it pertains.

XXII Do not divide an amount stated in figures.

XXIII Do not divide proper names, especially those of persons, if it can be avoided.

XXIV Do not divide initials or such combinations as *a.m.*, *B.C.*

XXV Do not divide the last word on a page so as to carry a part of it to the next page.

XXVI Do not divide the last word of the last full line of a paragraph.

XXVII More than two divisions in successive lines should be avoided.

XXVIII Never divide at all if you can help it.



IMPORTANCE OF SPACING

It must always be remembered that good spacing is the first consideration. Nothing is more offensive to the eye of a good judge of printing than bad spacing. "Rivers" of white, dark spots, crowded black text, are very serious blemishes to a page. An ordinary book page is a study in color, the colors employed being black and white. Proper combination, balance, and proportion are as important here as in places where a variety of colors is employed. Many of the foregoing rules must be held subject to the exigencies of proper spacing. A rigid adherence, for example, to the rule that not more than two consecutive lines should end with divided words will not justify a badly spaced, unsightly line. There are many things that look worse than a hyphen at the end of the last full line in a paragraph. Avoidance of dividing the last word on a page, however, would justify even bad spacing, because of the gain to the reader. In the last resort, the interests of the reader must always have first consideration.

Page 14

Division is greatly affected by the length of the measure. A long measure, 18 or 20 ems or more, gives greater opportunity for arranging the spacing, but, on the other hand, makes division on short syllables conspicuous and out of proportion. Very short register, as in two-column Bibles or in cases where illustrations are inserted in the text, presents very great difficulties and often calls for division which would not be allowable elsewhere. Such cases often call for the exercise of the greatest care and ingenuity.

It often happens that the author can be of great assistance to the printer in making a handsome page. A change of a phrase, or even of a word will avoid a difficulty which cannot be avoided by a printer except at the cost of bad division or bad spacing. If the author is a sensible person he will gladly cooperate with the printer in giving his thoughts clothing appropriate to their intrinsic beauty and value. After the printer has exhausted his resources he should not hesitate to carry his troubles to the author.

DIVISION IN LINES OF DISPLAY

As a rule division is never used in lines of display. In these cases the display is the important thing. Every word long enough to be divided is important enough to be displayed and emphasized. Divided words are weakened words. Lines of irregular lengths are used of set purpose.

In title pages words of bold display must never be divided. In minor lines of display, such as subtitles and summaries, words are often divided. A subheading of two lines should never be divided in the first line when it is possible to turn the full word over on to the next line. The shortening of the first line is never a blemish, but a too short second line following a hyphenated first line is always a fault.

There is a school of ultra-artistic composition in book titles which affects a solid squaring up and hesitates at no means to secure its effects. It sets a definite measure and forces the lines into it, dividing words arbitrarily and using no hyphen. This is a passing fancy and will pass as eccentricities always pass. It should not be used unless the author insists upon it. The man who pays the bills has a right to have his work done as he pleases. The intelligent printer, however, will not allow the peculiarities of the individual customer to affect his general practice.

Note

The pupil is referred to the appendix to DeVinne's "Correct Composition" for rules for the division of French, German, and Spanish words. The same appendix contains also a very excellent list of words which are spelled differently by different authorities, together with divisions for them.

SUPPLEMENTARY READING

Correct Composition. By Theodore L. DeVinne. Oswald Publishing Co., New York.

The Writer's Desk Book. By William Dana Orcutt. Frederick A. Stokes Co., New York.



Page 15

A Manual for Writers. By John Matthews Manly and John Arthur Powell. The University of Chicago Press, Chicago.

Worcester's New Pronouncing Spelling Book. The American Book Company, New York.

The Art of Writing and Speaking the English Language: Dictionary of Errors. By Sherwin Cody. The Old Greek Press, Chicago.

(This is one of a series of six very excellent but inexpensive little books bearing the same general title and by the same author. They will be found very useful in connection with Part VI of the Typographic Technical Series generally.)

QUESTIONS

1. Is the spelling of English standardized?
2. How long have we considered correct spelling important?
3. What two causes exist for difficulties in spelling?
4. What are the principal English authorities?
5. What are the principal American authorities?
6. How are these authorities used in printing offices?
7. What are the rights and duties of the author in the matter of spelling?
8. What may be done in matter of "reformed" spelling?
9. What is a safe attitude for the commercial printer toward "reformed" spelling, and why?
10. On what does correct spelling mainly depend?
11. What is the best way to become a good speller?
12. Why is English difficult to pronounce?
13. What is a diphthong?
14. What is a digraph?
15. What are the two sounds each of *c*, *g*, *de*, *th*, and *s*? Give examples of each.



16. How many letters are there in the English alphabet and how many sounds do they express?
17. Upon what does correct pronunciation depend?
18. What is a syllable, and of what does it consist?
19. What peculiar use is made of *l* and *n* in English?
20. How do we treat the parts of a diphthong or digraph?
21. How do we know whether or not these compounds are diphthongs or digraphs?
22. What about vowel combinations?
23. With what should a syllable not end?
24. With what should a syllable not begin?
25. What is the rule regarding prefixes and suffixes?
26. How do we treat two or three consonants capable of beginning a syllable?
27. How do we treat two or three consonants capable of ending a syllable?
28. How do we treat doubled consonants?
29. What is accent?
30. Do words ever have more than one accent, and why?
31. What are the two general rules for the placing of accent?
32. What did the early printers do when the words did not fit the line, and why?
33. What practice came into use later?
34. What methods of doing this have been devised?



Page 16

35. What considerations govern practice in this regard?
36. Give two systems of division which have been proposed.
37. What is the general rule for division?
38. What is the rule about vowels?
39. What is the rule about two consonants?
40. What is the rule about three consonants?
41. What should you do with a single consonant between two vowels?
42. How should you treat diphthongs?
43. What is the rule for words compounded with a prefix?
44. What should be done with the terminations *_-able_*, *_-ible_*, *_-tion_*, *_-cial_*, *_-tive_*, *_-ive_*, and *_-sion_*?
45. What should be done with the terminations *_-ing_*, *_-en_*, *_-ed_*, *_-er_*, and *_-est_*, and the plural *_-es_*?
46. What letters should not end a line?
47. How are adjectives in *ical* treated?
48. How are derivatives of words ending in *_-t_* treated?
49. What is the special rule about *c* and *g*?
50. What is the rule about *qu*, and why?
51. What is the rule about *nothing*?
52. What is the rule about words of four letters?
53. How should you treat words of five or six letters?
54. What should be avoided in wide measures?
55. How should you treat words of two syllables pronounced as one?
56. How should hyphenated compounds be treated?



57. What should you do with divisional marks?
58. How should you treat amounts stated in figures?
59. How should you treat proper names?
60. How are initials and similar combinations treated?
61. What is the rule about the last word on a page?
62. What is the rule about the last word of the last full line of a paragraph?
63. What is the rule about divisions in successive lines?
64. What is the rule about division generally?
65. What effect has spacing on deciding about division?
66. What effect has length of measure on division?
67. What can you do when the text presents unusual difficulty as to spacing and division?
68. What is the rule about division in lines of display, and what is the reason for it?
69. What is the usage with regard to division on title pages?
70. What can you say about eccentricities in the author's or customer's ideas about division and lay-out?

* * * * *

As in the other volumes of this Part, the instructor should not content himself with having the student learn the rules. He should give drills in spelling and pronunciation and should give problems in composition involving the application of rules. Constant and prolonged practice is indispensable to proficiency in all these matters.

TYPOGRAPHIC TECHNICAL SERIES FOR APPRENTICES

Page 17

The following list of publications, comprising the **TYPOGRAPHIC TECHNICAL SERIES FOR APPRENTICES**, has been prepared under the supervision of the Committee on Education of the United Typothetae of America for use in trade classes, in course of printing instruction, and by individuals.

Each publication has been compiled by a competent author or group of authors, and carefully edited, the purpose being to provide the printers of the United States—employers, journeymen, and apprentices—with a comprehensive series of handy and inexpensive compendiums of reliable, up-to-date information upon the various branches and specialties of the printing craft, all arranged in orderly fashion for progressive study.

The publications of the series are of uniform size, 5x8 inches. Their general make-up, in typography, illustrations, *etc.*, has been, as far as practicable, kept in harmony throughout. A brief synopsis of the particular contents and other chief features of each volume will be found under each title in the following list.

Each topic is treated in a concise manner, the aim being to embody in each publication as completely as possible all the rudimentary information and essential facts necessary to an understanding of the subject. Care has been taken to make all statements accurate and clear, with the purpose of bringing essential information within the understanding of beginners in the different fields of study. Wherever practicable, simple and well-defined drawings and illustrations have been used to assist in giving additional clearness to the text.

In order that the pamphlets may be of the greatest possible help for use in trade-school classes and for self-instruction, each title is accompanied by a list of Review Questions covering essential items of the subject matter. A short Glossary of technical terms belonging to the subject or department treated is also added to many of the books.

These are the Official Text-books of the United Typothetae of America.

Address all orders and inquiries to COMMITTEE ON EDUCATION, UNITED TYPOTHETAE OF AMERICA, CHICAGO, ILLINOIS, U.S.A.

PART I—Types, Tools, Machines, and Materials

=1.= =Type: a Primer of Information= By A.A. Stewart

Relating to the mechanical features of printing types; their sizes, font schemes, *etc.*, with a brief description of their manufacture.
44 pp.; illustrated; 74 review questions; glossary.

=2.= =Compositors' Tools and Materials= By A.A. Stewart



A primer of information about composing sticks, galleys, leads, brass rules, cutting and mitering machines, *etc.* 47 pp.; illustrated; 50 review questions; glossary.

=3.= =Type Cases, Composing Room Furniture= By A.A. Stewart

A primer of information about type cases, work stands, cabinets, case racks, galley racks, standing galleys, *etc.* 43 pp.; illustrated; 33 review questions; glossary.

Page 18

=4.= =Imposing Tables and Lock-up Appliances= By A.A. Stewart

Describing the tools and materials used in locking up forms for the press, including some modern utilities for special purposes. 59 pp.; illustrated; 70 review questions; glossary.

=5.= =Proof Presses= By A.A. Stewart

A primer of information about the customary methods and machines for taking printers' proofs. 40 pp.; illustrated; 41 review questions; glossary.

=6.= =Platen Printing Presses= By Daniel Baker

A primer of information regarding the history and mechanical construction of platen printing presses, from the original hand press to the modern job press, to which is added a chapter on automatic presses of small size. 51 pp.; illustrated; 49 review questions; glossary.

=7.= =Cylinder Printing Presses= By Herbert L. Baker

Being a study of the mechanism and operation of the principal types of cylinder printing machines. 64 pp.; illustrated; 47 review questions; glossary.

=8.= =Mechanical Feeders and Folders= By William E. Spurrier

The history and operation of modern feeding and folding machines; with hints on their care and adjustments. Illustrated; review questions; glossary.

=9.= =Power for Machinery in Printing Houses= By Carl F. Scott

A treatise on the methods of applying power to printing presses and allied machinery with particular reference to electric drive. 53 pp.; illustrated; 69 review questions; glossary.

=10.= =Paper Cutting Machines= By Niel Gray, Jr.

A primer of information about paper and card trimmers, hand-lever cutters, power cutters, and other automatic machines for cutting paper, 70 pp.; illustrated; 115 review questions; glossary.

=11.= =Printers' Rollers= By A.A. Stewart



A primer of information about the composition, manufacture, and care of inking rollers. 46 pp.; illustrated; 61 review questions; glossary.

=12.= =Printing Inks= By Philip Ruxton

Their composition, properties and manufacture (reprinted by permission from Circular No. 53, United States Bureau of Standards); together with some helpful suggestions about the everyday use of printing inks by Philip Ruxton. 80 pp.; 100 review questions; glossary.

=13.= =How Paper is Made= By William Bond Wheelwright

A primer of information about the materials and processes of manufacturing paper for printing and writing. 68 pp.; illustrated; 62 review questions; glossary.



Page 19

=14.= =Relief Engravings= By Joseph P. Donovan

Brief history and non-technical description of modern methods of engraving; woodcut, zinc plate, halftone; kind of copy for reproduction; things to remember when ordering engravings. Illustrated; review questions; glossary.

=15.= =Electrotyping and Stereotyping=
By Harris B. Hatch and A.A. Stewart

A primer of information about the processes of electrotyping and stereotyping. 94 pp.; illustrated; 129 review questions; glossaries.

PART II—Hand and Machine Composition

=16.= =Typesetting= By A.A. Stewart

A handbook for beginners, giving information about justifying, spacing, correcting, and other matters relating to typesetting. Illustrated; review questions; glossary.

=17.= =Printers' Proofs= By A.A. Stewart

The methods by which they are made, marked, and corrected, with observations on proofreading. Illustrated; review questions; glossary.

=18.= =First Steps in Job Composition= By Camille DeVeze

Suggestions for the apprentice compositor in getting his first jobs, especially about the important little things which go to make good display in typography. 63 pp.; examples; 55 review questions; glossary.

=19.= =General Job Composition=

How the job compositor handles business stationery, programs and miscellaneous work. Illustrated; review questions; glossary.

=20.= =Book Composition= By J.W. Bothwell

Chapters from DeVinne's "Modern Methods of Book Composition," revised and arranged for this series of text-books by J.W. Bothwell of The DeVinne Press, New York. Part I: Composition of pages. Part II: Imposition of pages. 229 pp.; illustrated; 525 review questions; glossary.



=21.= =Tabular Composition= By Robert Seaver

A study of the elementary forms of table composition, with examples of more difficult composition. 36 pp.; examples; 45 review questions.

=22.= =Applied Arithmetic= By E.E. Sheldon

Elementary arithmetic applied to problems of the printing trade, calculation of materials, paper weights and sizes, with standard tables and rules for computation, each subject amplified with examples and exercises. 159 pp.

=23.= =Typecasting and Composing Machines= A.W. Finlay, Editor

Section I—The Linotype By L.A. Hornstein

Section II—The Monotype By Joseph Hays

Section III—The Intertype By Henry W. Cozzens

Section IV—Other Typecasting and Typesetting Machines

By Frank H. Smith



Page 20

A brief history of typesetting machines, with descriptions of their mechanical principles and operations. Illustrated; review questions; glossary.

PART III—Imposition and Stonework

=24.= =Locking Forms for the Job Press= By Frank S. Henry

Things the apprentice should know about locking up small forms, and about general work on the stone. Illustrated; review questions; glossary.

=25.= =Preparing Forms for the Cylinder Press= By Frank S. Henry

Pamphlet and catalog imposition; margins; fold marks, *etc.* Methods of handling type forms and electrotpe forms. Illustrated; review questions; glossary.

PART IV—Presswork

=26.= =Making Ready on Platen Presses= By T.G. McGrew

The essential parts of a press and their functions; distinctive features of commonly used machines. Preparing the tympan, regulating the impression, underlaying and overlaying, setting gauges, and other details explained. Illustrated; review questions; glossary.

=27.= =Cylinder Presswork= By T.G. McGrew

Preparing the press; adjustment of bed and cylinder, form rollers, ink fountain, grippers and delivery systems. Underlaying and overlaying; modern overlay methods. Illustrated; review questions; glossary.

=28.= =Pressroom Hints and Helps= By Charles L. Dunton

Describing some practical methods of pressroom work, with directions and useful information relating to a variety of printing-press problems. 87 pp.; 176 review questions.

=29.= =Reproductive Processes of the Graphic Arts= By A.W. Elson



A primer of information about the distinctive features of the relief, the intaglio, and the planographic processes of printing. 84 pp.; illustrated; 100 review questions; glossary.

PART V—Pamphlet and Book Binding

=30.= =Pamphlet Binding= By Bancroft L. Goodwin

A primer of information about the various operations employed in binding pamphlets and other work in the bindery. Illustrated; review questions; glossary.

=31.= =Book Binding= By John J. Pleger

Practical information about the usual operations in binding books; folding; gathering, collating, sewing, forwarding, finishing. Case making and cased-in books. Hand work and machine work. Job and blank-book binding. Illustrated; review questions; glossary.

PART VI—Correct Literary Composition



Page 21

=32.= =Word Study and English Grammar= By F.W. Hamilton

A primer of information about words, their relations, and their uses. 68 pp.; 84 review questions; glossary.

=33.= =Punctuation= By F.W. Hamilton

A primer of information about the marks of punctuation and their use, both grammatically and typographically. 56 pp.; 59 review questions; glossary.

=34.= =Capitals= By F.W. Hamilton

A primer of information about capitalization, with some practical typographic hints as to the use of capitals. 48 pp.; 92 review questions; glossary.

=35.= =Division of Words= By F.W. Hamilton

Rules for the division of words at the ends of lines, with remarks on spelling, syllabication and pronunciation. 42 pp.; 70 review questions.

=36.= =Compound Words= By F.W. Hamilton

A study of the principles of compounding, the components of compounds, and the use of the hyphen. 34 pp.; 62 review questions.

=37.= =Abbreviations and Signs= By F.W. Hamilton

A primer of information about abbreviations and signs, with classified lists of those in most common use. 58 pp.; 32 review questions.

=38.= =The Uses of Italic= By F.W. Hamilton

A primer of information about the history and uses of italic letters. 31 pp.; 37 review questions.

=39.= =Proofreading= By Arnold Levitas

The technical phases of the proofreader's work; reading, marking, revising, *etc.*; methods of handling proofs and copy. Illustrated by examples. 59 pp.; 69 review questions; glossary.



=40.= =Preparation of Printers' Copy= By F.W. Hamilton

Suggestions for authors, editors, and all who are engaged in preparing copy for the composing room. 36 pp.; 67 review questions.

=41.= =Printers' Manual of Style=

A reference compilation of approved rules, usages, and suggestions relating to uniformity in punctuation, capitalization, abbreviations, numerals, and kindred features of composition.

=42.= =The Printer's Dictionary= By A.A. Stewart

A handbook of definitions and miscellaneous information about various processes of printing, alphabetically arranged. Technical terms explained. Illustrated.

PART VII—Design, Color, and Lettering

=43.= =Applied Design for Printers= By Harry L. Gage



Page 22

A handbook of the principles of arrangement, with brief comment on the periods of design which have most influenced printing. Treats of harmony, balance, proportion, and rhythm; motion; symmetry and variety; ornament, esthetic and symbolic. 37 illustrations; 46 review questions; glossary; bibliography.

=44.= =Elements of Typographic Design= By Harry L. Gage

Applications of the principles of decorative design. Building material of typography paper, types, ink, decorations and illustrations. Handling of shapes. Design of complete book, treating each part. Design of commercial forms and single units. Illustrations; review questions, glossary; bibliography.

=45.= =Rudiments of Color in Printing= By Harry L. Gage

Use of color: for decoration of black and white, for broad poster effect, in combinations of two, three, or more printings with process engravings. Scientific nature of color, physical and chemical. Terms in which color may be discussed: hue, value, intensity. Diagrams in color, scales and combinations. Color theory of process engraving. Experiments with color. Illustrations in full color, and on various papers. Review questions; glossary; bibliography.

=46.= =Lettering in Typography= By Harry L. Gage

Printer's use of lettering: adaptability and decorative effect. Development of historic writing and lettering and its influence on type design. Classification of general forms in lettering. Application of design to lettering. Drawing for reproduction. Fully illustrated; review questions; glossary; bibliography.

=47.= =Typographic Design in Advertising= By Harry L. Gage

The printer's function in advertising. Precepts upon which advertising is based. Printer's analysis of his copy. Emphasis, legibility, attention, color. Method of studying advertising typography. Illustrations; review questions; glossary; bibliography.

=48.= =Making Dummies and Layouts= By Harry L. Gage

A layout: the architectural plan. A dummy: the imitation of a proposed final effect. Use of dummy in sales work. Use of layout. Function of layout man. Binding schemes for dummies. Dummy envelopes. Illustrations; review questions; glossary; bibliography.

PART VIII—History of Printing

=49.= =Books Before Typography= By F.W. Hamilton



A primer of information about the invention of the alphabet and the history of bookmaking up to the invention of movable types. 62 pp.; illustrated; 64 review questions.

=50.= =The Invention of Typography= By F.W. Hamilton

A brief sketch of the invention of printing and how it came about. 64 pp.; 62 review questions.



Page 23

=51.= =History of Printing—Part I= By F.W. Hamilton

A primer of information about the beginnings of printing, the development of the book, the development of printers' materials, and the work of the great pioneers. 63 pp.; 55 review questions.

=52.= =History of Printing—Part II= By F.W. Hamilton

A brief sketch of the economic conditions of the printing industry from 1450 to 1789, including government regulations, censorship, internal conditions and industrial relations. 94 pp.; 128 review questions.

=53.= =Printing in England= By F.W. Hamilton

A short history of printing in England from Caxton to the present time. 89 pp.; 65 review questions.

=54.= =Printing in America= By F.W. Hamilton

A brief sketch of the development of the newspaper, and some notes on publishers who have especially contributed to printing. 98 pp.; 84 review questions.

=55.= =Type and Presses in America= By F.W. Hamilton

A brief historical sketch of the development of type casting and press building in the United States. 52 pp.; 61 review questions.

PART IX—Cost Finding and Accounting

=56.= =Elements of Cost in Printing= By Henry P. Porter

The Standard Cost-Finding Forms and their uses. What they should show. How to utilize the information they give. Review questions. Glossary.

=57.= =Use of a Cost System= By Henry P. Porter

The Standard Cost-Finding Forms and their uses. What they should show. How to utilize the information they give. Review questions. Glossary.

=58.= =The Printer as a Merchant= By Henry P. Porter



The selection and purchase of materials and supplies for printing. The relation of the cost of raw material and the selling price of the finished product. Review questions. Glossary.

=59.= =Fundamental Principles of Estimating= By Henry P. Porter

The estimator and his work; forms to use; general rules for estimating. Review questions. Glossary.

=60.= =Estimating and Selling= By Henry P. Porter

An insight into the methods used in making estimates, and their relation to selling. Review questions. Glossary.

=61.= =Accounting for Printers= By Henry P. Porter

A brief outline of an accounting system for printers; necessary books and accessory records. Review questions. Glossary.

PART X—Miscellaneous



Page 24

=62.= =Health, Sanitation, and Safety= By Henry P. Porter

Hygiene in the printing trade; a study of conditions old and new; practical suggestions for improvement; protective appliances and rules for safety.

=63.= =Topical Index= By F.W. Hamilton

A book of reference covering the topics treated in the Typographic Technical Series, alphabetically arranged.

=64.= =Courses of Study= By F.W. Hamilton

A guidebook for teachers, with outlines and suggestions for classroom and shop work.

ACKNOWLEDGMENT

This series of Typographic Text-books is the result of the splendid co-operation of a large number of firms and individuals engaged in the printing business and its allied industries in the United States of America.

The Committee on Education of the United Typothetae of America, under whose auspices the books have been prepared and published, acknowledges its indebtedness for the generous assistance rendered by the many authors, printers, and others identified with this work.

While due acknowledgment is made on the title and copyright pages of those contributing to each book, the Committee nevertheless felt that a group list of co-operating firms would be of interest.

The following list is not complete, as it includes only those who have co-operated in the production of a portion of the volumes, constituting the first printing. As soon as the entire list of books comprising the Typographic Technical Series has been completed (which the Committee hopes will be at an early date), the full list will be printed in each volume.

The Committee also desires to acknowledge its indebtedness to the many subscribers to this Series who have patiently awaited its publication.

COMMITTEE ON EDUCATION,
UNITED TYPOTHETAE OF AMERICA.



HENRY P. PORTER, *Chairman*,
E. LAWRENCE FELL,
A.M. GLOSSBRENNER,
J. CLYDE OSWALD,
TOBY RUBOVITS.

FREDERICK W. HAMILTON, *Education Director*.

CONTRIBUTORS

=For Composition and Electrotypes=

ISAAC H. BLANCHARD COMPANY, New York, N.Y.
S.H. BURBANK & CO., Philadelphia, Pa.
J.S. CUSHING & CO., Norwood, Mass.
THE DEVINNE PRESS, New York, N.Y.
R.R. DONNELLEY & SONS CO., Chicago, Ill.
GEO. H. ELLIS CO., Boston, Mass.
EVANS-WINTER-HEBB, Detroit, Mich.
FRANKLIN PRINTING COMPANY, Philadelphia, Pa.
F.H. GILSON COMPANY, Boston, Mass.
STEPHEN GREENE & CO., Philadelphia, Pa.
W.F. HALL PRINTING CO., Chicago, Ill.
J.B. LIPPINCOTT CO., Philadelphia, Pa.
MCCALLA & CO. INC., Philadelphia, Pa.
THE PATTESON PRESS, New York, New York
THE PLIMPTON PRESS, Norwood, Mass.
POOLE BROS., Chicago, Ill.
EDWARD STERN & CO., Philadelphia, Pa.
THE STONE PRINTING & MFG. CO., Roanoke, Va.
C.D. TRAPHAGEN, Lincoln, Neb.
THE UNIVERSITY PRESS, Cambridge, Mass.



Page 25

=For Composition=

BOSTON TYPOTHETAE SCHOOL OF PRINTING, Boston, Mass.
WILLIAM F. FELL CO., Philadelphia, Pa.
THE KALKHOFF COMPANY, New York, N.Y.
OXFORD-PRINT, Boston, Mass.
TOBY RUBOVITS, Chicago, Ill.

=For Electrotypes=

BLOMGREN BROTHERS CO., Chicago, Ill.
FLOWER STEEL ELECTROTYPING CO., New York, N.Y.
C.J. PETERS & SON CO., Boston, Mass.
ROYAL ELECTROTYPE CO., Philadelphia, Pa.
H.C. WHITCOMB & CO., Boston, Mass.

=For Engravings=

AMERICAN TYPE FOUNDERS CO., Boston, Mass.
C.B. COTTRELL & SONS CO., Westerly, R.I.
GOLDING MANUFACTURING CO., Franklin, Mass.
HARVARD UNIVERSITY, Cambridge, Mass.
INLAND PRINTER CO., Chicago, Ill.
LANSTON MONOTYPE MACHINE COMPANY, Philadelphia, Pa.
MERGENTHALER LINOTYPE COMPANY, New York, N.Y.
GEO. H. MORRILL CO., Norwood, Mass.
OSWALD PUBLISHING CO., New York, N.Y.
THE PRINTING ART, Cambridge, Mass.
B.D. RISING PAPER COMPANY, Housatonic, Mass.
THE VANDERCOOK PRESS, Chicago, Ill.

=For Book Paper=

AMERICAN WRITING PAPER CO., Holyoke, Mass.
WEST VIRGINIA PULP & PAPER CO., Mechanicville, N.Y.