

Blakiston's
NEW GOULD
MEDICAL DICTIONARY

A modern comprehensive dictionary of the terms used in all branches of medicine and allied sciences, including medical physics and chemistry, dentistry, pharmacy, nursing, veterinary medicine, zoology and botany, as well as medicolegal terms; with illustrations and tables

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252 ILLUSTRATIONS ON 45 PLATES, 129 IN COLOR

SECOND EDITION

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Preface

The first edition of *Blakiston's New Gould Medical Dictionary* in 1949 was a major step in an evolutionary process that began with the publication of *A New Medical Dictionary* in 1890; its immediate predecessor was the fifth edition of *Gould's Medical Dictionary*. The present work carries on the scholarly tradition of its forerunners.

Careful selection of vocabulary entries has continued in this second edition. Professional literature has been studied for new words to be defined, and each entry in the first edition has been reconsidered and, if necessary, redefined or expanded to conform with today's usage. In particular the rapidly growing fields of chest surgery and psychiatry have been surveyed thoroughly in order that dictionary users may find definitions of new words. Oncology terms have been increased by several hundred; in microbiology the names of genera have been modernized to agree with latest terminology; new entries in infectious diseases, hematology, and cardiology can be mentioned as examples of the completeness of revision.

In the fields allied to medicine, extended coverage has been given to terms in dentistry and veterinary medicine, in addition to the inclusion of many new words in biochemistry, organic medicinal chemistry, and nuclear science that will increasingly become a part of the vocabulary of medical scientists. A useful new table, *Radioactive and Other Isotopes Commonly Used in Medicine*, has been added to the Appendix.

In pharmacology, drugs described in *The Pharmacopeia of the United States of America (United States Pharmacopeia)*, *Fifteenth Revision* (1955), in *The National Formulary, Tenth Edition* (1955), and in *New and Nonofficial Remedies* (1955) have been defined; other drugs in *The Dispensatory of the United States of America (United States Dispensatory)*, *Twenty-fifth Edition* (1955), and in various listings of medicinals bearing trade-marked, proprietary, or other trade names have been included. In so far as possible, drugs in various stages of animal and clinical investigation have also been defined, but no attempt has been made to establish their individual merit. Drug names known to be trade-marks have been thus indicated, while certain others have been designated as *trade names* or *proprietary names*. In applying such designations, it is understood that the use of a more general designation does not exclude the possibility that a more specific designation may properly apply.

In anatomy it has been possible to include not only the BNA (Basle Nomina Anatomica) terms with modifications and those BR (British Revision) terms that differ significantly from them, but also to retain that part of the old terminology (OT) still in current clinical usage and to include recent modifications suggested by the International Nomenclature Commission.

An explanation of the system of pronunciation used will be found on page xxiii, while Explanatory Notes on page xxi gives details of the arrangement of material.

The illustrative material has been treated as a functional part of the dictionary and, by a system of keyed cross-references, integrated with it; the terminology

used in labeling conforms to the primary definitions in the text. The systematic arrangement of the illustrations and the advantages of presenting units large enough to indicate interrelationships will be readily evident.

The wide range of coverage in *Blakiston's New Gould Medical Dictionary* was far beyond the capabilities of the Editorial Board alone. As a consequence, ever-increasing demands were made upon the time and knowledge of their associates in many divergent fields. In this second edition will be found the work of a distinguished staff of 88 contributing editors in addition to the Editorial Board.

It is to be regretted that time and circumstance prevented the participation of Colonel Harold W. Jones, Dr. Robert M. Stecher, Dr. Max H. Fisch, and Mr. Thomas E. Keys as members of the Editorial Board. Their contribution to the first edition was outstanding and is gratefully acknowledged. Acknowledgment is also made to the Consulting Editor, Dr. Morris Fishbein, and to those contributing editors who worked on the first edition. It is because of space limitation only that the list of contributing editors appearing elsewhere in this book is confined to those who worked on this second edition. The Editors want to express here their deep appreciation for the constant and invaluable assistance they have received from many others in the medical and scientific world who are not specifically mentioned elsewhere.

THE EDITORS

Abbreviations Used in Definitions

Abbreviations with medical significance appear in their proper alphabetical sequence in the dictionary

adj.	adjective	LL.	Late Latin
adv.	adverb	MD.	Middle Dutch
AF.	Anglo-French	ME.	Middle English
Amer.	American	mEq./l.	milliequivalents per liter
Ar.	Arabic	ML.	Middle Latin
AS.	Anglo-Saxon	MLG.	Middle Low German
at. wt.	atomic weight	n.	noun
b.	born	N.F.	<i>The National Formulary</i>
BNA	Basle Nomina Anatomica	NL.	New Latin
BR	<i>In anatomy</i> , British Revision of BNA	NNR	<i>New and Nonofficial Remedies</i>
ca.	[<i>L. circa</i>]. About	obs.	obsolete
ChIn.	Chinese	OF.	Old French
D.	Dutch	ON.	Old Norse
d.	died	ONF.	Old North French
dial.	dialect	OT	<i>In anatomy</i> , Old Terminology
E.	English	Per.	Persian
e.g.	[<i>L. exempli gratia</i>]. For example	Pg.	Portuguese
F.	French	pl.	plural
fl.	flourished	S. Afr. D.	South African Dutch
G.	Greek	Scand.	Scandinavian
Gael.	Gaelic	Skr.	Sanskrit
Ger.	German	Sp.	Spanish
Heb.	Hebrew	Swed.	Swedish
Hind.	Hindustani	syn.	synonym
Hung.	Hungarian	Teut.	Teutonic
Icel.	Icelandic	U.S.D.	<i>United States Dispensatory</i>
i.e.	[<i>L. id est</i>]. That is	U.S.P.	<i>United States Pharmacopeia</i>
It.	Italian	v.	verb
Jap.	Japanese	v.l.	intransitive verb
L.	Latin	VL.	Vulgar Latin
LG.	Low German	v.t.	transitive verb

Transliterations from the Greek

GREEK LETTER	NAME	TRANSLITERATION	GREEK LETTER	NAME	TRANSLITERATION
A α	alpha	a	N ν	nu	n
B β	beta	b	Ξ ξ	xi	x
Γ γ	gamma	g	Ο ο	omicron	o
Δ δ	delta	d	Π π	pi	p
E ε	epsilon	e	Ρ ρ	rho	r, rh
Z ζ	zeta	z	Σ σ	sigma	s
H η	eta	ē	Τ τ	tau	t
Θ θ	theta	th	Υ υ	upsilon	y
I ι	iota	i	Φ φ	phi	ph
K κ	kappa	k	Χ χ	chi	ch
Λ λ	lambda	l	Ψ ψ	psi	ps
M μ	mu	m	Ω ω	omega	ō

Explanatory Notes

Vocabulary Entries

The word or term to be defined is set in **boldface** type and extends slightly to the left of the definition.

In polysyllabic words, the separation of the syllables is indicated either by a raised dot (·) or by a primary (') or secondary (") accent. Syllabification and pronunciation are not indicated for trade-marks, trade names, proprietaries, or eponymic entries.

Words spelled identically but derived from different roots appear as separate entries.

Definitions

The definitions of a term are numbered when there is more than one distinct meaning or use. The most inclusive definition is presented first, followed by the more restricted meanings.

Definitions restricted to specialized fields are preceded by field labels or glosses, such as *In psychiatry*, *In bacteriology*, *In dentistry*, etc. All definitions following a field label are in use in that field.

Etymology

The etymology appears in square brackets immediately following the vocabulary entry or the phonetic respelling. The root term, its language, and its meaning are given. The languages are indicated by abbreviations, a key to which appears on page xix.

Greek terms are transliterated into the Roman alphabet. A table of transliterations appears on page xix.

When the same root is carried down through an uninterrupted series of entries, its meaning and the abbreviation indicating its language are given only on its first occurrence. If, however, such a series is interrupted at any time by words of a different origin or an eponymic entry, the information about the root is repeated in full when the series is resumed. Derivations have been omitted in entries of a chemical nature as well as in trade names and compound or hyphenated words.

Abbreviations

Abbreviations with medical significance appear in their proper alphabetical sequence in the dictionary.

Abbreviations used in the dictionary—lexicographic and etymologic terms, etc.—are listed and defined on page xix.

Pronunciation

For a detailed explanation of pronunciation, see Notes on Pronunciation beginning on page xxiii. A Key to Pronunciation is printed facing page 1 of the vocabulary.

Chemical and Pharmaceutical Terms

Formulas: Definitions for chemical substances include the chemical formula of the substance

when this is known. In an organic compound, this formula is of the type which shows the conventional structural arrangement.

Synonyms: The definition of a medicinal substance includes the synonyms applied to that substance.

Latin Names: Entries for older official drugs—those recognized in *The Pharmacopœia of the United States of America, Fifteenth Revision*, or *The National Formulary, Tenth Edition*—are followed by the Latin name in *italics* enclosed in parentheses.

Medicinal Plants: The definition for a drug representing a structural part of a plant includes its botanical origin, this being distinguished by the use of italicized type. The definition also includes a statement of the active constituents, if any, of the plant, and their approximate proportions. In the case of official drugs representing parts of plants, the quantitative limits of active constituents, such as alkaloids, are those established by *The Pharmacopœia of the United States of America, Fifteenth Revision*, or *The National Formulary, Tenth Edition*.

Dosage: The limits of dosage of medicinals are indicated in those cases where such limits have been established. The dose statement is given first in the metric system, this being followed by the approximate apothecary system equivalents. Unless otherwise stated, the limits are for a single adult dose. Where the dosage of a drug has not been definitely established, or in cases where there is marked variation in dosage according to different authorities, no statement of limits of dosage has been provided in the definition.

Run-ons

Derivative forms of a vocabulary entry are entered as run-ons following the definition or, when there is more than one definition for the main entry, the definition to which they are most closely related.

In general, the pronunciation of a run-on entry can be inferred from that of the main entry. Syllabification is, therefore, not indicated, but a primary accent is used when necessary to show that the position of the main stress in the run-on differs from that of the heading.

Tables and Lists

Lists, statistics, and other material most conveniently handled in tabular form are presented in the Appendix at the back of the book. An index of these and other tables and lists appears on page xv.

Groups or classes of definitions related by a common root term appear under that term: disease, method, operation, stain, etc. The series is slightly indented and each subentry to be defined is set in **boldface**.

Biographic Entries

Proper names, biographic entries, and eponymic terms appear in their proper alphabetical sequence. In those cases in which the eponymic term is fully defined elsewhere under another entry—as a disease described more fully in the *disease* list, for example—the user is directed to the proper entry by a cross-reference.

Names with prefixes have been alphabetized according to the customs of their languages. In general, in American and English names of foreign origin, prefix and name are treated as a unit, while in other languages the article or preposition is often ignored in alphabetizing. Names with two or more parts have been

treated as single units. Biographic entries have been made under pen names when those names are more commonly used in medical literature than the true names. In all cases where confusion seemed possible, cross-references have been inserted.

Cross-references

Whenever it is desirable, the user is directed to additional or fuller information by such cross-reference terms as *see*, *see under*, *syn*. The entry to which the user is directed is italicized; in the case of compound terms, only the word or part of the term under which the information is entered is italicized.

THE EDITORS

Notes on Pronunciation

§1 The principle followed for pronunciation in this dictionary has been to record pronunciation in actual, current use, and not to presume to dictate standards of alleged correctness. The objective has been to show what usage is, not what somebody supposes it ought to be. Where more than one pronunciation is given for a word, the intention has been to give the most widely used variant first. Sometimes it has been possible to do this with a high degree of confidence. More often, the division of usage is not clear-cut, or the facts not readily ascertainable; so that the order in which variant pronunciations are given is more likely to be arbitrary than to be of any real significance. In any case, there is no implication of editorial preference intended.

§2 The manner of indicating pronunciation is such that the users of the dictionary can fit medical terminology into their own natural, everyday speech habits. The basis is the syllable. In whatever way a person may pronounce the syllable **car**, for instance, whether as the word **car** itself or as a syllable in a longer word like **reincarnation**, that is the way for him to pronounce it when it appears as one of the syllables in a medical word, such as **cardiogram** or **metacarpal**. The syllables in the phonetic respellings (see §§14-36, below) are to be treated the same way. For example, in the system used here, **merry** would be respelled (merr'ee) and **Mary** (mair'ee), similarly **ferry** (ferr'ee) and **fairy** (fair'ee). But if you pronounce **merry** and **Mary** the same, and likewise **ferry** and **fairy**, then you can consider pairs of syllables in the respellings like (merr) and (mair) or (ferr) and (fair) as meaning the same thing and as representing your own sounds in those words.

§3 The respellings for pronunciation are put in parentheses immediately following the entry term whose pronunciation is to be shown; but in the majority of instances no respellings have been needed. The pronunciation is clearly indicated by syllabification of the heading itself and by marking the accents. In all such cases each syllable is simply pronounced according to the most common values of the letters and letter sequences that make it up, with due regard to the preceding and following syllables and to the positions of the accents.

§4 The accent marks used are a single accent (´), denoting main stress, that is, the emphasis put on the most heavily pronounced syllable in a word, and a double accent (˝) for secondary stress, that is, some degree of emphasis as found on syllables more strongly accented than neighboring "unstressed" syllables, but less prominently than the syllable that carries the main stress: **car**˝˝˝di-ol'og-y, **car**˝˝˝di-o-gram˝, **met**˝˝˝a-car˝pal, **su**˝˝˝per-al˝i-men-ta˝tion.

§5 In the following paragraphs, lists of illustrative examples are given, showing how the various letters are to be interpreted in different groupings and with varying accentual conditions. Pronunciations according to these examples apply only to headings that have no respelling for pro-

nunciation. It will also be noted that the pronunciation of a given letter often depends on what other letters immediately precede or follow.

§6 The vowels, if immediately followed by an accent, either the primary accent (´) or the secondary accent (˝), have the following values: **a** as in **fla**'vor, **ca**˝˝˝pa-bil'i-ty, **fa**'cial, **Ma**'bel; **e** as in **ce**'dar, **he**'ro, **se**'ri-ous; **i** and **y** as in **ti**'ger, **ny**'lon, **Hi**'ram, **ty**'rant; **o** as in **no**'tice, **no**˝˝˝to-ri'e-ty, **sto**'ry, **mo**˝˝˝bi-li-za˝tion, **mo**'lar; **u** as in **mu**'sic, **du**'ty, **stu**'di-o, **Lu**'cy, **li**-lu'sion, **su**'per-vise, **ru**'mor, **fu**'ry, **tu**'lip.

§7 The same pronunciations are found in monosyllable words and accented syllables with final silent **e**, as in: **game**, **a-bate**'ment, **base**'ment, **gene**, **se-rene**'ly, **sin-cere**'ly, **nice**, **po-lite**'ness, **rhyme**'ster, **tire**'less, **lyre**'bird, **spoke**, **re-mote**'ly, **fore**'man, **cute**, **huge**'ly, **in-duce**'ment, **par**'a-chute˝, **pro-cure**'ment, **al-lure**'ment, **ma-ture**'ness.

§8 Otherwise, if a vowel is followed immediately by a consonant in the same syllable, and that syllable is accented, then the vowel is pronounced as follows: **a** as in **bag**, **mag**'ni-tude, **car**'ol, **com**'par-i-son; **e** as in **led**, **let**'ter, **mer**'it, **her**'ald; **i** and **y** as in **glim**'mer, **sys**'tem, **spir**'it, **lyr**'ic; **o** as in **cop**'er, or before a single **r** as in **bor**'ing, before **rr** as in **bor**'row; **u** as in **num**'ber, **cur**'rent.

§9 If a vowel in an accented syllable is followed by **r** and the next letter is another consonant, but not **r**, then the vowel is pronounced as follows: **a** as in **bar**'ber; **e**, **i**, **y**, and **u** as in **cer**'tain, **skir**'mish, **myr**'tle, **cur**'tain; **o** can be as in **for**'tune, **bor**'der, or **por**'trait.

§10 Unaccented syllables will give little difficulty. Their pronunciation ordinarily will be evident. It should be noted, however, that in the case of medical and other scientific words, much more than in the case of ordinary, everyday words, something like full vowel value is frequently heard in unaccented syllables. Thus the **o** in **biochemical** is more likely to have a clear **o** sound than is the **o** in **biographic**.

§11 Final syllables, accented or unaccented, follow the customary pronunciation of such syllables, for example: **re**-late˝, **cor**'re-late˝, **bro**'mate, **syn**'di-cate, **pro**-sage˝, **darn**'age, **py**-rene, **re**-plete˝, **con**-fine˝, **de**-cide˝, **con**-spire˝, **an**'o-dyne, **re**-mote˝, **re**-morse˝, **al**-lude˝, **al**-lure˝, **fail**'ure, **na**'ture, **par**-tic-u-lar, **sa**'ber, **la**'bor, **le**'mur, **de**-mur˝, **Al**'ken, **ba**'con, **ca**-reen˝, **ca**-reer˝, **re**-la˝tion, **con**-fu˝sion, **fab**-u-lous, **far**'i-na-ceous, **con**-ta˝gious, **re**-lent˝, **ma**-lev'o-lent. Some final groups can be pronounced as one syllable or as two, for example: **-gia** in **neu**-ral'gi-a, **-tia** in **or**'tho-don'ti-a, etc.

§12 A combination of two vowels, or of a vowel with **y** or **w**, will be understood as having its most common English pronunciation, thus: **ai** and **ay** as in **paid** or **pair**, **pray** or **prayer**; **au** and **aw** as in **faun**, **lawn**; **ea** as in **clean** or **clear**; **eu** as in **neuter** or **neural**; **ew** as in **few**, **new**, **dew**, **flew**.

chew; **oa** as in **boat** or **boar**; **oi** and **oy** as in **ancient**, **annoy**; **ou** as in **flout** or **flour**.

§13 The consonants are to be pronounced with their usual English values, whether singly, or in combinations like **sh** or **th**, or in syllable groups like **tion**, as the case may be; **c** before **e**, **i**, or **y** is like **s**: **Cecil**, **Cyril**, **cent**, **acid**, **cypress**, otherwise like **k**: **cab**, **cub**, **clay**; **g** before **e**, **i**, or **y** as in **ginger**, **gyrate**, **gem**, **agile**, otherwise as in **gargoyle**, **gun**, **glue**, **lignite**; **ch** ordinarily represents the sound in **chin**, **rich**, but before **l** or **r** it is pronounced like **k**, for example in **chloroform**, **chronic**, **achromatic**.

§14 When the pronunciation of a word is not apparent from its spelling, syllabification, and accentuation, in accordance with the examples given above, then a respelling for pronunciation is put in parentheses immediately after the vocabulary entry. These phonetic transcriptions are also based on the syllable as a unit and on ordinary values of letters. The syllables are designed for easy recognition. Often, in fact, a syllable is respelled; not arbitrarily, but in the form of some well-known English monosyllable, such as **buy**, **coal**, **cue**, **juice**, **view**. And syllables with a final silent **e** are used a great deal, whether they represent actual English words or not: **sole**, **tole**, **daze**, **dace**, **mate**, **nate**, **dyne**, **byne**, **style**.

§15 There are some convenient combinations of letters that are used in the respellings more extensively than they actually occur in the writing of English syllables. Thus **igh**, representing "long **i**" in such words as **high**, **thigh**, **sigh**, **sight**, **flight**, is used for the same sound in other syllables, for example: **kigh**, **thrigh**, **smigh**; similarly **ye**, as found in **dye**, **lye**, **rye**, is also used for this sound elsewhere, for example: **pye**, **tye**, **chye**, **kye**. On the same principle, **ew**, as in **few**, **pew**, **dew**, **new**, **flew**, **chew**, is extended to other syllables, such as **bew**, **thew**, **tew**, **lew**.

§16 The following points are to be particularly noted:

§17 In the phonetic respellings, as in the entry headings themselves, a single accent (') marks the most strongly stressed syllable and double accent marks (") are used for the secondary accents.

§18 An **s** always represents the sound in **dose** and **loose**, never the sound in **rose**, **choose**, and **lose**. Similarly, **f** always stands for the sound in **loaf**, never as in **of**. At the end of a syllable, again on the principle of clarity and ready recognition, **ss** is sometimes used for **s**, and **ff** for **f**.

§19 A **g** in the respellings always stands for the "hard **g**" sound, as in **gun** and **get**, never for the sound in **gem**, **gym**, **na'si-um** (jim-nay'-zi-um), and **reg'i-men-ta'tion** (redj'i-men-tay'-shun). To avoid possible ambiguity in certain syllables, **gh** is sometimes used instead of **g** for the "hard **g**" sound, for example, **ghel'ding** (gheld'ing). An **ng** stands for the simple **ng** sound in **sing'er**. When used in combination with **g** or **k**, it is so transcribed: **flin'ger** (fling'gur), **link'age** (ling'kidj).

§20 A **ch** is as in **church**; **th** always as in **thin** and **both**. For the sound in **then** and **writhe** the symbol **th** is used; so the syllable respelled **thee** as in **ap'a-thy** (ap'uh-thee) or **the-ol'o-gy** (thee-ol'o-jee) is not the same as the English word **thee**, which would have to be respelled (thee).

§21 For the sound of **s** in **pleasure** and **usual**, **z** in **azure**, the symbol **zh** is used: **meas'ure** (mez'ur), **vi'sion** (vizh'un), **clo'sure** (klo'zhur).

§22 Unless followed by a consonant in the same syllable, **ar** is to be pronounced as in **parish**, **charity**, **marathon**, **farinaceous**, and **tariff**, but, with a following consonant, as in **hard** and **garter**; and **ah** is used for the **a** in **fa'ther** (fah'-

thur), **psalm**, and **balmy**, also **tar** (tahr) and **quar'an-tine** (kwahr'un-teen).

§23 The combinations **err** and **irr** are used as in **error**, **terror**, **merrily**, and **irrigate**, **cirrus**, **mirror**, respectively, and **orr** as in **borrow**, **horrible**, **tomorrow**.

§24 The **oo** in **boot** is represented by **ōō**: **ru'mi-na'tion** (rōō'mi-nay'shun), but for the sound in **foot** **ōō** is used: **sug'ar** (shōōg'ur); while **oo** without any mark is used before **r**, as in **poor**, **Eu'rope** (yoor'up), and is also used in unaccented syllables unless the sound is clearly **ōō**: **ma-nip'u-late** (ma-nip'yoo-late), but **a'gue** (ayg'yōō). **e-val'u-ate** (i-val'yōō-ate').

§25 In many unaccented syllables the somewhat obscure sound of **a** in **about**, **sofa**, **Manila**, **logarithm**, **organize**, **pentagon**, is represented in the respellings by **uh** or, before consonants, just by **u**: **pri'va-teer** (pry'vuh-teer'), **Tex'as** (teck'sus).

§26 This sound is, of course, also commonly heard for the **e** of **enough**, **system**, **category**, the **i** of **directory**, **dilapidated**, **manifest**, and the **o** of **molasses**, **hypocrite**, **hammock**. A great many speakers of English do, however, use a vowel like the **i** of **bit** in many or most unaccented syllables spelled with **e**, **i**, or **y**; and a fairly clear, even though unstressed, **o** is not uncommon in syllables spelled with **o**, especially in scientific and other technical words. Therefore, the respellings for pronunciation in this dictionary regularly show **i** and **o**, and sometimes **e**, where sounds ordinarily represented by these letters can occur as well as the more obscure vowel here represented by **uh** or **u**. This does not mean that the Editors recommend such pronunciations, but merely that they recognize their occurrence, as no better and no worse than pronunciations of the **uh** variety.

§27 Similarly, in the first syllable of a word again especially a scientific word, an **a** is often not pronounced **uh**, as in **about**, but may have some other **a** sound such as the **a** in **cat** or the **a** in **sardonic**. This is reflected in the respellings by the use of **a** instead of **uh** in initial syllables. Thus **fa-ri'na** would be transcribed (fa-ree'nuh) rather than (fuh-ree'nuh), it being understood that the latter is implied as one of the commonly heard variants.

§28 When **a** appears as the first letter in certain classes of words, it may often have the sound of **ay** in **pay**, and this is generally shown in the dictionary: **A-cho-ri-on** (a-kor'ee-on, ay-kor'ee-on), **a-dip'sa** (ay-dip'suh, a-dip'suh).

§29 In general, where there are variant pronunciations the variations are shown by additional respellings of those portions of a word affected by the variations in question. Thus **chel'e-ryth'rline** (kel'i-rith'reen, -rin, kel-err'ith-) indicates four different pronunciations in current use for this word: **kel'i-rith'reen**, **kel'i-rith'rin**, **kel-err'ith'reen**, **kel-err'ith-rin**, as well as variants with **kel'uh** instead of **kel'i**, and **-err'uth** instead of **-err'ith** (see §26, above).

§30 An indication like **-shuh**, **-see-uh**, or **-zhuh**, **-zee-uh**, for an ending is meant to cover a whole gradation of possibilities between the two extremes; for example: **am-nee'si-a** (am-nee'zhuh, -zee-uh) is intended to include such intermediate forms as **am-nee'zee-zuh**, **am-nee'zyuh**, etc.

§31 Inasmuch as the termination **-ide**, common in chemical words, can be pronounced **-id** as well as **-ide**, this general rule is taken for granted and no respellings are inserted merely to show this variation. The variants are shown, however, when a word that has the **-ide** ending is respelled for some other reason. Similarly, the chemical

ending **-ol** can be pronounced *-ole*, *-ol*, or *-awl*; also, **-yl** is *-il* or *-eel*; and names of enzymes in **-ase** are pronounced *-ace* or *-aze*.

§32 Names of diseases ending in **-itis** are always shown only with the *-eye'tis* pronunciation, which is used much more widely than *-ee'tis*. In every case, the latter is to be understood as also occurring and in no way less correct than the other.

§33 Very often the pronunciation of the beginning of a word is apparent from that of neighboring entries in the dictionary and, if the rest of the word is clear, no respelling is needed. Thus, the first syllable of **cy·tot'ro·phy** is seen to be *sigh-*, and not *si-*, from the respelling of **cy·tot'ro·pism** (*sigh·tot'ro·piz·um*), the pronunciation of **mi·ot'ic** is clear from that of **mi·o'sis** (*migh·o'sis*), etc.

§34 Many long compounds are not respelled, especially when there are variant pronunciations

for each of several elements in the compound. And often, when a compound is respelled, a relatively uncommon variant pronunciation may be omitted. Such variants can be found under the individual elements themselves.

§35 Foreign words and phrases, and words recently taken into English from foreign languages, are pronounced in a great variety of ways, ranging from the original, native pronunciation to complete Anglicization. In this dictionary, a compromise Anglicization is frequently indicated in the respelling of such expressions.

§36. The pronunciation of Latin is usually given in the traditional Anglicization, but exceptions are made in cases where a given term is most commonly pronounced in some other way. And it is to be understood that other pronunciations of Latin—in particular the Roman pronunciation as taught in schools—are also used for Latin medical terms.

JOHN KEPKE

Key to Pronunciation

(Also see Notes on Pronunciation, page xxiii)

A single accent (') marks the strongest accent, the most heavily stressed syllable in a word. A double accent (") marks syllables with secondary stress, lighter accent than the primary.

When there is no respelling for pronunciation, the spelling of the entry itself gives the pronunciation. A vowel has its long sound if it is followed immediately by an accent mark. Consonants are pronounced according to the usual rules. For example, **c** followed by **e**, **i**, or **y** is pronounced as in **cent**, **de-cide'**, **cy'press**; otherwise as in **cab**, **cob**, **cub**, **clay**, **screw**; **ch** followed by **i** or **r** as in **chlo'ro-form**, **chron'ic**; otherwise as in **chin**, **rich**, **church**; **g** followed by **e**, **i**, or **y** as in **gin'ger**, **gy'rate**, **ag'ile**, **a-gil'i-ty**; otherwise as in **gag**, **gar'goyle**, **gun**, **glue**, **gray**, **lig'nite**.

When the ordinary rules do not apply, respellings are given in parentheses immediately after the bold-face entries, using the common values of letters, like **aw** in **paw**, **ay** in **pay**, etc., and observing the conventions shown in the following table.

In the Respellings

ah	calm , fa'ther (fah'thur), Ja'va (jah'vuh), Na'ga (nah'guh)
abr	hard , farm , smart , Dart'mouth (dahrt'muth), Scars'dale (skahrz'dale)
ar	par'ish , tar'iff , mar'a-thon , phar"yn-gec'to-my (far"i-n-jeck'to-mee)
err	mer'ry , ter'ror , dic'tion-ar"y (dick'shuh-nerr'ee), pal"a-to-pter'y-goid (pal"uh-to-terr'i-goyd)
ew	few , pew , Bu-chan'an (bew-kan'un), mu"co-hem"or-rhag'ic (mew"ko-hem"o-radj'ick), dew , new , du-plic'i-ty (dew-plis'i-tee), tu"me-fa'cient (tew"mi-fay'shunt)
i	bit , fas'ci-nate , ag"i-ta'tion (adj"i-tay'shun), my"ce-tog'e-nous (migh"si-to-dj'i-nus)
igh	high , sigh , flight , chi'ro-prac'tor (kigh"ro-prack'tur), chei"ma-pho'bi-a (kigh"muh-fo'bee-uh)
ye	dye , rye , lye , ty-phoi'dal (tye-foy'dul), pi-lo'sis (pye-lo'sis)
irr	lr'ri-gate , mlr'ror , con-spir'a-cy (kon-spirr'uh-see), myr'in-gec'to-my (mirr"i-n-jeck'to-mee)
orr	bor'row , hor'rid , Hor'ace (horr'is), cor'o-nar'y (korr'o-nerr'ee)
ōō	boot (bōōt), Hoo'ver (hōō'vur), u"ku-le'le (yōō"kuh-lay'lee), u'ni-tar'y (yōō'ni-terr'ee)
ōō	foot (fōōt), Hook'er (hōōk'ur), pul'ley (pōōl'ee), kous'so (kōōs'o)
oo	poor , doc'u-men-ta'tion (dock"yoo-men-tay'shun), pleu'rae (ploor'ee), kie'sel-guhr" (kee'zul-go-or"), fas-cic'u-lus (fa-sick'yoo-lus)
uh	so'fa (so'fuh), con"tra-vene' (kon"truh-veen'), plas'ma-cyte (plaz'muh-sight), hap"a-lo-nych'i-a (hap"uh-lo-nick'ee-uh)
g	gag , glg , ugly , gre-ga'ri-ous , ex-haus'tion (eg-zaws'chun)
ng	sing'er , link'age (ling'kidj), con'cha (kong'kuh)
s	sense , crease , con-tri'vance (kon-try'vuns), oc-cip'i-tal (ock-sip'i-tul)
th	thick , thin , path
th	then (then), thee (thee), weath'er (weth'ur)
zh	meas'ure (mez'ur), con-fu'sion (kon-few'zhun), in-cl'sion (in-siz'hun)

Syllables respelled as common words (e.g., **buy**, **coal**, **view**) are pronounced like those words: **vu"e-rom'-e-ter** (view"i-rom'i-tur)

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39	Inguinal Hernia and Hydrocele
40	Surgical Sutures; Spreading and Healing Ulceration
41	Female Genitalia and the Reproductive Cycle
42	Mechanism of Childbirth
43	Female Urogenital Tract and Mammary Gland
44	Male Urogenital Tract
45	Endocrine Glands: Thyroid, Parathyroid, Pituitary, Adrenal (Suprarenal), Pancreas, and Gonads