



ENCYCLOPEDIA AMERICANA

VOLUME 30

T H E E N C Y C L O P E D I A
AMERICANA
I N T E R N A T I O N A L E D I T I O N

COMPLETE IN THIRTY VOLUMES

FIRST PUBLISHED IN 1829



GROLIER INCORPORATED

International Headquarters: Danbury, Connecticut 06816

COPYRIGHT © 1985 BY GROLIER INCORPORATED

COPYRIGHT © BY GROLIER INCORPORATED:
1984, 1983, 1982, 1981

COPYRIGHT © BY AMERICANA CORPORATION:

1980, 1979, 1978, 1977, 1976, 1975, 1974, 1973,
1972, 1971, 1970, 1969, 1968, 1967, 1966, 1965,
1964, 1963, 1962, 1961, 1960, 1959, 1958, 1957,
1956, 1955, 1954, 1953, 1952, 1951, 1950, 1949,
1948, 1947, 1946, 1945, 1944, 1943, 1942, 1941,
1940, 1939, 1938, 1937, 1936, 1932, 1931, 1929,
1927

COPYRIGHT BY ENCYCLOPEDIA AMERICANA CORPORATION:
1924, 1922, 1920, 1918

COPYRIGHT PHILIPPINES: 1972, 1979, 1980, 1984, 1985 BY
GROLIER INTERNATIONAL, INC.

COPYRIGHT UNDER INTERNATIONAL COPYRIGHT CONVENTIONS AND UNDER
PAN AMERICAN COPYRIGHT CONVENTIONS

ALL RIGHTS RESERVED UNDER INTER-AMERICAN COPYRIGHT UNION

Library of Congress Cataloging in Publication Data

Main entry under title:

THE ENCYCLOPEDIA AMERICANA.

Includes bibliographies and index.

1. Encyclopedias and dictionaries.
AE5.E333 1985 031 84-22553
ISBN 0-7172-0116-3 (set)

PRINTED AND MANUFACTURED IN THE U.S.A.

GUIDE TO THE USE OF THE ENCYCLOPEDIA AMERICANA INDEX

Proper use of this Index is essential if the reader is to find the information he is seeking. A few minutes spent in reading this guide will save time and trouble in locating the desired information.

BASIC PRINCIPLES

The *entry* is the basic unit of the Index. It includes a heading, and it may include subheads and *see also* cross references. The *heading* stands at the beginning of the entry and determines its alphabetical position. It is followed by the volume and page number that will lead the searcher to the best general information on the subject. *Subheads*, which lead to more particular information, are listed in alphabetical order below the heading. *See also* cross references are used to direct the searcher to other entries that are related to the heading.

The Index has three types of entries: (1) Article title entries. The headings of these entries are set in boldface capital letters and are followed by volume and page numbers indicating where the article appears in the encyclopedia.

Examples:

BASKET 3-319
CROMWELL, Oliver 8-237

(2) Entries on subjects for which there are no articles, but which are covered in other articles. The headings of these entries are set in boldface capital and lowercase letters.

Examples:

Basque language 3-332
Bass drum 9-422

(3) *See* cross references, which refer the reader from one Index entry to another. They are used for synonyms, pseudonyms, and abbreviations; for inverted headings; and for alternative spellings or forms.

Examples:

Isle of Man, Ir. Sea: *see* Man,
Isle of
NASA: *see* National Aeronautics
and Space Administration
Petrograd, USSR: *see* Leningrad

See also cross references direct the reader to related entries or to specific subdivisions of long entries.

Examples:

CALVIN, John (Fr. ref.) 5-237
See also Calvinism
TAXONOMY (sci.) 26-324
See also Animal—Classification; Plant—Classification
TRANSPORTATION 27-19
See also Carriages; Motor transportation; Railroads; Roads and Highways

Many subjects are organized in the Index in the form of extensive outlines or study guides. To avoid a cumbersome listing of many subheads in a single alphabetical sequence, the general subject is broken down into subdivisions. Under each subdivision all pertinent references are listed. The reader is thus presented with an overall view of the coverage of the subject and at the same time can limit his search for specific information to the subdivision under which it may be found. Examples of such outlines or study guides are the listings for all continents and most countries of the world, and for such topics as American Revolution, Architecture, Chemistry, and Black Americans.

• ALPHABETIZATION AND ARRANGEMENT OF ENTRIES

The headings of the entries are arranged in alphabetical order by word, not by letter. Thus any heading beginning with "New" as

GUIDE TO THE USE OF THE AMERICANA INDEX

a separate word (such as New Canaan or New York) is placed before any heading beginning with "New—" (such as Newark or Newburgh).

When headings of more than one word have the same first word, alphabetical order is determined by the second word; if the first two words are identical, alphabetical order is determined by the third word, and so on. Inverted headings are alphabetized down to the punctuation mark. Then alphabetization is determined by the word or words following the punctuation mark.

Examples:

EAST AFRICA
EAST RIVER

ESSAY ON CRITICISM
ESSAY ON MAN

FILTER, Electric
FILTER, Mechanical
FILTER, Photographic

Headings consisting of the same words are arranged in the order of persons, places, and things.

Examples:

ADAMS, William Taylor
ADAMS, Mass.
ADAMS, Mount, N.H.
Adams Act

BONE, Henry
BONE, Alg.
BONE (anat.)

Hyphenated words are treated as two separate words unless the first part of the word is a prefix.

Examples:

ANTIPoPE
Anti-poverty program
Antiproton

BLUE BABY
BLUE-BACKED SPELLER
Blue beech

Abbreviations and abbreviated forms are treated as one word.

Examples:

ABBREVIATIONS
ABC POWERS
ABD AL-AZIZ IV

Uffizi Gallery
UFO
UGANDA

Headings such as titles of books, works of art, and films are alphabetized under the second word if the first word is an article ("a," "an," "the").

Examples:

American Dream, The
AMERICAN TRAGEDY, An

Red Room, The
Red Snowball Tree, The

However, a preposition at the beginning of a title is treated as the first word and is not inverted.

Examples:

In Cold Blood
IN MEMORIAM
Inbreeding
INCA

Oestrus
OF HUMAN BONDAGE
OF MICE AND MEN
OMUTA
On Borrowed Time
One

When foreign phrases (but not proper names) begin with a preposition such as "Da" or "De," the preposition is treated as a separate word.

Examples:

Da capo
Daba

De bello gallico
De vulgari eloquentia
DEACÓN

Proper names beginning with "De," "Du," "El," "La," "Van," and other such particles are treated as if they were one word.

Examples:

DEFOLIANT
DE FOREST, Lee
Deforestation

DUBLINERS
DUBOIS, Paul
DU BOIS, W. E. B.
DUBOS, René Jules

ELAINE
EL ALAMEIN, Battle of
ELAM
Laveran, Charles Louis Alphonse
LA VERENDRYE, Sieur de
Lavinia

GUIDE TO THE USE OF THE AMERICANA INDEX

VANADIUM
VAN ALLEN RADIATION
Van Cortland Manor
VANCOUVER

Non-English personal surnames are generally alphabetized with the connective inverted.

Examples:

BEETHOVEN, Ludwig van
CUNHA, Euclides da
MAUPASSANT, Guy de

Names beginning with "M," "Mac," and "Mc" are alphabetized as they are spelled.

Examples:

MABINOGION
MACAULAY, Thomas Babington
MacDIARMID, Hugh
MADISON, Ind.
MARMOT
Mbuti
McHENRY, James
McWILLIAMS, Carey
MEDICI, Lorenzo de

Saints are generally listed under their first names.

Examples:

FRANCIS OF ASSISI, Saint
GENEVIEVE, Saint
VINCENT DE PAUL, Saint

However, if saints are commonly referred to by a surname, they are alphabetized under that name.

Examples:

BOSCO, Saint John
FISHER, Saint John

Numerals at the beginning of a heading are treated as though spelled out.

Examples:

Twentieth Century Views
24-hour system
Twenty-one

Titled persons best known by family name are entered under that name, followed by title. In this case the title does not affect the alphabetical order.

Examples:

STEWART, James (Amer. act.)
Stewart, Matthew (4th Earl of
Lennox) (Scot. noble.)
Stewart, Nellie (Austr. act.)

But persons best known by title are listed accordingly. In this case the part of the title indicating rank is ignored in alphabetizing.

Examples:

YORK, Dukes of
YORK, Alvin Cullum

Literary characters are entered under their last names.

Examples:

Dooley, Mr.
EULENSPIEGEL, Till

But titles of literary works are entered under the first word even when the first word is a given name or a title.

Examples:

Mrs. Dalloway, nov. (Woolf)
Sir Charles Grandison, nov.
(Richardson)
TOM SAWYER, nov. (Twain)

The abbreviations "Mr." and "Mrs." are alphabetized as though they were spelled "Mister" and "Mistress."

Examples:

Mist
Mr. Midshipman Easy
Mrs. Dalloway
MISTRAL

Persons with the same surname and given name are alphabetized by nationality. If the nationality is also the same, they are listed in order of birth and death dates.

Examples:

DUMMER, Jeremiah (Amer. sil-
versmith; 1645-1718)
DUMMER, Jeremiah (Amer. col.
agent; 1679-1739)

Saints and rulers of the same name are listed in the following order: saints, popes, secular rulers (by realm).

GUIDE TO THE USE OF THE AMERICANA INDEX

Examples:

ALEXANDER, Saint
ALEXANDER I, Saint (pope)
ALEXANDER II (pope)
ALEXANDER I (Bulg. pr.)
ALEXANDER (Gr. k.)
Alexander (Pol. k.)
ALEXANDER I (Russ. emp.)
ALEXANDER II (Russ. emp.)
ALEXANDER I (Scot. k.)
ALEXANDER II (Scot. k.)

JAMES, Saint
JAMES I (k. Aragon)
JAMES II (k. Aragon)
JAMES I (Eng. k.)
JAMES II (Eng. k.)
JAMES III (Eng. pretender)
JAMES I (Scot. k.)
JAMES II (Scot. k.)

Political units of the same name are listed in order of importance (country, province or state, county, city or town), and the city is not identified as such.

Examples:

NEW YORK, state, U.S.
New York, co., N.Y.
NEW YORK, N.Y.

WASHINGTON, state, U.S.
Washington, co., Md.
WASHINGTON, D.C.

Cities and towns of the same name are alphabetized according to country, except for those in the United States and Canada, which are alphabetized by state or province.

Examples:

ALEXANDRIA, Egy.
ALEXANDRIA, La.
ALEXANDRIA, Ont., Can.
ALEXANDRIA, Va.

BATHURST, Austr.
Bathurst, Gambia
BATHURST, N.B., Can.

• ILLUSTRATIONS AND MAPS

Illustrations and maps on numbered pages are referred to by volume and page number. Color illustrations and maps on unnumbered pages are located by reference to the volume numbers and the titles of the articles in which they appear.

Examples:

AMAZON RIVER, S.Amer. 1-657,
673; 17-11, 36

Illus.: houseboats 17-13

Maps 1-657; 4-457; 25-

SOUTH AMERICA

BERN, Switz. 3-603; 26-146

Illus. 26-SWITZERLAND

• SPECIAL PAGING PRACTICES

Sometimes when extra pages have been added to the encyclopedia, a letter of the alphabet has been added to the page number both on the page itself and in the Index reference to it. For example, the reader will find pages in volume 29 numbered in order: 741, 741a, 741b, 741c 742. This will be shown in the Index references to those pages as: 29-741, 741a, 741b, 741c 742. In several places in the encyclopedia, there are "telescoped" pages. In volume 7, for example, pages are numbered consecutively: 545, 546, 547-559, 560, 561. However, in the Index, the reference to page 547-559 appears as 7-547, only the first number being given.

TYPOGRAPHY OF THE INDEX

<i>Example</i>	<i>Use</i>	<i>Style</i>
19-376	<i>Volume and page number</i>	Volume number in boldface (heavy) type, followed by page number in lightface type
HINDUISM 14-207	<i>Article title entry</i>	Boldface type, all capital letters
BASKET 3-319 Africa 1-273 Osier 21-20 Weaving 28-543	<i>Article title entry, followed by subheads for additional information.</i>	Subheads in lightface type
Basque language 3-332	<i>Entry on subject for which there is no article</i>	Boldface type; initial letter only is capitalized
Duenna, The , comic opera (Sheridan) 24-704	<i>Entry (by name) for book, periodical, work of art or music, ship, and others; not an article title entry</i>	Boldface italic type
Illus. 28-VERMONT or Map 17-LIBRARY	<i>Reference to illustration or map on unnumbered page, giving volume number and name of article in which illustration or map can be found</i>	Lightface capital and small capitals
--: CULTURAL LIFE --: GOVERNMENT --: HISTORY	<i>Subdivisions under long entry; for complete example, see "Study outline" on page viii</i>	Boldface capitals and small capitals, preceded by a dash and a colon

Guide word → COLLISION RADIATION

- Collision radiation (phys.); see
Bremstrahlung
- Collision theory (astron.) 2-551
Earth 9-541
- COLLODI, Carlo (It. au.) 7-259
Pinocchio 22-118
- COLLODION (chem.) 7-260
Hyatt, J. W. 14-628
Photography 22-11
- Pyroxylon 23-44
- Collodian process (phot.) 21-
798e
Film, Photographic 11-206
- Collograph (print.) 22-600
- COLLOID (chem.) 7-260
Brownian Movement 4-636
Electrophoresis 10-195
- Graham, T. 13-147
Suspension 26-77
- Ultramicroscope 27-352
- X-Rays 29-617
- Zsigmondy, R. 29-817
See also Emulsion
- Colloidal carbon (chem.) 7-261
- Collophanite (min.) 2-88
- COLLOQUIALMS (ling.) 7-262;
25-16
- COLLOQUIES OF ERASMUS, satire (Erasmus) 7-262
- Colloquy, bk. (Aelfric) 1-214
- Colloquy of Caen (Fr. sci meeting)
11-843
- Collot, Jacques (Fr. etcher);
Illus.: Miseries of War 10-
465
- COLLOT D'HERBOIS, Jean
Marie (Fr. rev.) 7-262
- Collotype (print.);
Lithography 17-588
Woodburytype Printing 29-
139
- COLLUSION (law) 7-262
- COLMAN, George (Eng. dram.,
theat. mgr.; 1732-1794) 7-
263; 10-443
- Colman, George (Eng. theat.
mgr.; 1762-1836) 7-263
- Colman, Norman Jay (Amer.
agronomist) 1-359
- COLMAN, Ronald (Brit.-Amer.
act.) 7-263
- COLMAR, Fr. 7-263
World War II 29-410, 412,
413
- COLNE, Eng. 7-263
- Colnett, James (Brit. nav. off.) 12-
227
- Coloane, Isl., Macao 18-4
- COLOBUS MONKEY (zool.) 7-
263
- COLOCYNTH (fruit) 7-263
- Cologhli (Libyan people) 17-400
- Tripolitania 27-124
- COLOGNE, Ger. 7-264
art and architecture 12-544
Enamel 10-325
history 12-664
Newspaper 20-291
university 7-265
- World War II 29-413
Illus.: cathedral 10-674, Sev-
erin Bridge 4-532
- Cologne, Archbishop of 7-265,
821
- Cologne, Cathedral of, Ger. 7-
264; 12-545
Bell 3-509
Gothic Art 13-109; 2-228
Stained Glass 25-565
Illus. 7-264
- Cologne, Eau de (perfume); see
Eau de Cologne
- COLOGNE, University of, Ger. 7-
265
- Cologne Bible 29-132
- Cologne Confederation (Ger.
hist.) 13-778
- Coloma, Calif. 5-211
- Coloman (Hung. k.); see Kolo-
man
- COOMB, Philip Howard (Brit.
adm.) 7-265
- COOMB-BECHAR, Alg. 7-265
- COOMBA, nov. (Mérimee) 7-
265; 18-726
- Colomban (Frank. abbot. comp.)
3-496
- COLOMBE, Michel (Fr. sculp.) 7-
265
- COLOMBIA, rep., S.Amer. 7-266;
17-1 fol. 34; 25-295
- Decorations 8-601
- defense 17-33
- earthquakes 9-161
- Flag 11-356; *illus.* 11-FLAG
- forest 25-291
- government 7-273; 17-32, 44
- Holiday 14-291
- homicide rate 8-198
- national flower 11-460
- savanna 25-291
- Yellow Fever 29-661
- :ECONOMY: 7-269
agriculture 7-269; 1-357; 17-
14, 15, 43
- Coca 7-160
- Coffee 7-191
- Cotton 8-80
- Emerald 10-303
- Gem 12-368
- Hydroelectric Power 14-649
- manufacturing 17-17
- minerals 17-13, 15, 16; 25-
292
- Palms 21-216
- petroleum 1-813
- Wheat 28-690
- :EDUCATION AND CULTURAL LIFE:
7-272
- Academy 1-71
- art 7-272
- Colombia, National University
of 7-277
- Extension Education 10-796
- Garcia Marquez, G. 12-289
- Goldwork and Silverwork 13-
48
- Indian arts 15-44; 17-26
- Library 17-333 fol.
- literature 7-272
- mass media 17-30
- music 7-272
- Silva, J. A. 24-825
- :HISTORY: 7-274; 17-40; 1-
673
- Bogotá 4-139
- Bolívar, S. 4-161, 162
- Cannibalism 5-544
- Chibcha Organization 15-35
- Comunero Revolt 25-165
- Gomez, L. 13-65
- Herran, P. A. 14-152
- Jiménez de Quesada 16-146
- Lleras Camargo, A. 17-627
- Lleras Restrepo, C. 17-627
- Lopez Pumarejo, A. 17-738
- New Granada 20-167
- Núñez, R. 20-544
- Organization of American
States 20-847
- Panama Canal 21-228, 234
- Peru 21-650
- Reyes, Rafael 23-460
- Santander, F. de P. 24-243
- United Nations 27-467
- United States 27-745k, 753
- Woman Suffrage 29-106, 107
- World War I 29-335
- :PHYSICAL FEATURES: 7-268;
25-285 fol.
- Andes 1-811
- Caquetá River 5-613
- Cauca River 6-84
- climate 1-814; 25-290
- Darién, Gulf of 8-499
- Llanos 17-626
- :POPULATION AND RELIGION: 7-
267
- Chibcha 6-420
- Indians, American 15-34, 35,
43
- mestizo 17-7
- :TRANSPORTATION AND
COMMUNICATIONS: 7-270,
273; 17-18
- Newspaper 20-291
- radio and television 23-121m
- Telephone 26-401
- Waterways 28-491
- :MAPS: 7-271; 25-SOUTH AMERI-
CA

Cross reference for
additional material

Same last name,
arranged by
first name

Illustrations on
numbered pages

Main cross
reference

Book entry

Illustration on
unnumbered
page

Study outline

Maps

ABBREVIATIONS USED IN THE INDEX

A

abbr. abbreviation
abol. abolitionist
Aby. Abyssinia; Abyssinian
acad. academy; academic
act. actor; actress
A.D. Anno Domini
adm. admiral
admin. administrator; administration; administrative
adven. adventurer
advtg. advertising
AEF American Expeditionary Force
Aeg.S. Aegean Sea
aero. aeronaut; aeronautics; aeronautical
Afg. Afghanistan
Afr. Africa; African
agr. agriculture; agricultural; agriculturalist
Ala. Alabama
Alas. Alaska
Alban. Albania; Albanian
Alg. Algeria; Algerian
Alta. Alberta
Amer. America; American
Amerind American Indian
anat. anatomy; anatomist
anc. ancient
Ang. Angola; Angoilese
Ang.-Sax. Anglo-Saxon
Angl. Anglican
Antarc. Antarctica
anthro. anthropology; anthropologist
antiq. antiquities; antiquarian
Arab. Arabia; Arabian; Arabic
arch. architecture; architect; architectural
archaeo. archaeology; archaeological; archaeologist
archbp. archbishop
archip. archipelago
Arct. Arctic
Arg. Argentina; Argentine
arith. arithmetic
Ariz. Arizona
Ark. Arkansas
Arm. Armenia; Armenian
art. artist
Asia M. Asia Minor
assn. association
ASSR Autonomous Soviet Socialist Republic
Assyr. Assyria; Assyrian
astro. astronaut; aeronautics; aeronautical
astrol. astrology; astrologer
astron. astronomy; astronomer; astronomical
astrophys. astrophysics; astrophysicist
Ath. Athenian
athl. athlete; athletics
Atl.O. Atlantic Ocean
au. author
Aus. Austria; Austrian
Austr. Australia; Australian

aut. autonomous
auto. automobile
autobiog. autobiography
Az. Azores

B

b. born
Babyl. Babylonia; Babylonian
bact. bacteriology; bacteriologist
Bah. Bahamas; Bahamian
Bal. Isls. Balearic Islands
bank. banker; banking
Bav. Bavaria; Bavarian
b.c. Before Christ
B.C. British Columbia
Belg. Belgium; Belgian
Ber. Bermudas
bev. beverage
Bhu. Bhutan; Bhutanese
Bib. Bible; Biblical
bibliog. bibliography; bibliographer
biochem. biochemistry; biochemist
biog. biography; biographer
biol. biology; biologist
bk. book
bdg. building
Bohem. Bohemia; Bohemian
Bol. Bolivia; Bolivian
Bor. Borneo
boro. borough
bot. botany; botanist
bp. bishop
Braz. Brazil; Brazilian
Brit. British
bro. brother
bsman. businessman
Bulg. Bulgaria; Bulgarian
Bur. Burma; Burmese
B.W.I. British West Indies
Byz. Byzantine

C

c. about (circa)
C.Afr. Central Africa
C.Afr.Rep. Central African Republic
Calif. California
Camb. Cambodia
C.Amer. Central America; Central American
Camer. Cameroon
Can. Canada; Canadian
Can.Isls. Canary Islands
capit. capitalist
capt. captain
card. cardinal
Carib. Caribbean
caric. caricature; caricaturist
cartog. cartography; cartographer
C.Asia Central Asia
cath. cathedral
Cauc. Caucasus; Caucasus
Celt. Celtic

cent. century
Cey. Ceylon; Ceylonese
champ. champion
chan. channel
Chan.Isls. Channel Islands
char. character
chem. chemistry; chemist
Chil. Chilean
Chin. Chinese
choreog. choreography; choreographer
Chr. Christian
chron. chronology
class. classical
cler. clergyman
co. company; county
Co. Company
col. colonel; colonial; colonist; colony
coll. college
colloq. colloquial
Colo. Colorado
Colom. Colombia; Colombian
com. commerce; commercial
Com. Communist
comdt. commandant
comm. commander; commission; committee
commun. communications
comp. composer; composition
conch. conchology; conchologist
cond. conductor
Confed. Confederate
congr. congressman; congresswoman
Cong. Congolese
Conn. Connecticut
conspir. conspirator
Corp. Corporation
Cors. Corsica; Corsican
Costa R. Costa Rica; Costa Rican
crim. criminal
criminol. criminology; criminologist
crit. critic; critical work; criticism
Croat. Croatia; Croatian
crystall. crystallography
C.Verd.Isls. Cape Verde Islands
Czech. Czechoslovakia; Czechoslovakian

D

d. died
Dah. Dahomey; Dahomean
Dan. Danish
dau. daughter
D.C. District of Columbia
dec. decoration
Del. Delaware
Den. Denmark
dent. dentist; dentistry
depend. dependency
dept. department
dermatol. dermatology; dermatologist

ABBREVIATIONS USED IN THE INDEX

des. desert
diag. diagram
dial. dialect
dict. dictator; dictionary
dipl. diplomat; diplomacy
dir. director
dist. district
div. division
doc. document; documentary
Dom.Rep. Dominican Republic
dram. drama; dramatist
Du. Dutch
dyn. dynasty

E

E. East; Eastern
E.Afr. East Africa; East African
eccl. ecclesiastic; ecclesiastical
econ. economics; economist
Ecuua. Ecuador; Ecuadorian
ed. editor; edition
educ. education; educational; educator
E.Ger. East Germany
Egy. Egypt; Egyptian
Egyptol. Egyptologist
E.Ind. East Indies
elec. electrical; electricity
electrochem. electrochemistry; electrochemical
electron. electronic; electronics
El Salv. El Salvador
embryol. embryology; embryologist
emp. emperor; empire; empress
ency. encyclopedia; encyclopedist
Eng. England; English
eng. engineering; engineer
engr. engraving; engraver
entom. entomology; entomologist
E.Orth. Eastern Orthodox
Equat. Guin. Equatorial Guinea
Erit. Eritrea
Est. Estonia; Estonian
est. established; estuary
Eth. Ethiopia; Ethiopian
ethnol. ethnology; ethnologist
etymol. etymology; etymologist
Eur. Europe; European
evang. evangelical; evangelist
exec. executive
expl. explorer
ext. extinct

F

f. father
Falk.Isls. Falkland Islands
fam. family
fed. federal; federation
fig. figure
Fin. Finland
fin. finance; financial; financier
Finn. Finnish
fl. flourished
Fla. Florida

Flem. Flemish
fol. following
for. forestry
fort. fortification; fortified
Fr. France; French
Fr.Gui. French Guinea
Fr.W.Afr. French West Africa
Frank. Frankish
ft. fort
furn. furniture
F.W.I. French West Indies

inst. institute; institution
instru. instrument
internat. international
inv. inventor
Ir. Irish
Iran. Iranian
Ire. Ireland
isl., Isls. island; islands
Isr. Israel; Israeli
isth. isthmus
It. Italian; Italy
Iv.Cst. Ivory Coast

G

Ga. Georgia
gen. general
geneal. genealogy; genealogist
geod. geodesy; geodetic
geog. geography; geographer
geol. geology; geologist
geom. geometry
geophys. geophysical; geophysicist; geophysics
Ger. Germany; German
Gib. Gibraltar
Goth. Gothic
gov. governor
govt. government
Gr. Greece; Greek
gram. grammar; grammarian
Green. Greenland
Gt.Brit. Great Britain
Guat. Guatemala; Guatemalan
gynecol. gynecology; gynecologist

H

h. husband
Hait. Haitian
Haw. Hawaii; Hawaiian
Heb. Hebrew
her. heraldry
herp. herpetology; herpetologist
hiero. hieroglyphics
Hind. Hindustan
hist. history; historian; historical
Holl. Holland
Hond. Honduras; Honduran
hort. horticulture; horticulturist
hum. humanist
human. humanitarian
Hung. Hungary; Hungarian
hydrog. hydrography

I

Ice. Iceland; Icelandic
ichth. ichthyology; ichthyologist
Ill. Illinois
illus. illustration; illustrator
inc. incorporated
Ind. Indiana
Indo-Eur. Indo-European
Ind.O. Indian Ocean
Indon. Indonesia; Indonesian
indus. industry; industrialist
ins. insurance
inscr. inscription

Jam. Jamaica; Jamaican
Jap. Japan; Japanese
Jav. Java; Javanese
Jew. Jewish
Jor. Jordan; Jordanian
jour. journal; journalist; journalism
jr. junior
jur. jurist
jurisp. jurisprudence

K

k. king or kings
Kans. Kansas
king. kingdom
Kor. Korea; Korean
Ky. Kentucky

L

La. Louisiana
Lab. Labrador; Labradorean
lang. language
Lao. Laotian
Lap. Lapland
Lat. Latin
latv. Latvia; Latvian
law. lawyer
Leb. Lebanon; Lebanese
leg. legislature; legislator; legislation; legislative
legd. legend; legendary
lexicog. lexicographer
L.I. Long Island
Lib. Liberia; Liberian
lib. library; librarian
Liecht. Liechtenstein
lieut. lieutenant
ling. linguist; linguistics
lit. literary; literature
Lith. Lithuania; Lithuanian
lith. lithograph; lithography; lithographer
Lond. London
Ltd. Limited
Luxem. Luxembourg; Luxembourger

M

m. mother
Maced. Macedonia; Macedonian
mach. machine
Mad. Madagascar
Mad.Isls. Madeira Islands
mag. magazine
Malag.Rep. Malagasy Republic

ABBREVIATIONS USED IN THE INDEX

Malay. Malaya; Malaysia; Malaysian
Mald.Isls. Maldives Islands
Man. Manitoba
Manch. Manchuria
mar. maritime
Mass. Massachusetts
math. mathematics; mathematician
Maur. Mauritius
Maurit. Mauritania; Mauritanian
Md. Maryland
Me. Maine
meas. measure; measurement
mech. mechanics; mechanic; mechanical
med. medicine; medical
Medit. Mediterranean
mer. merchant
Mesop. Mesopotamia; Mesopotamian
met. metaphysics; metaphysicist
metal. metallurgy; metallurgist
metallo. metallography
meteorol. meteorology; meteorologist
Mex. Mexico; Mexican
mfr. manufacture; manufacturer
mgr. manager
Mich. Michigan
mil. military
mil.p. military post
min. mineral; mineralogy; mineralogist; mining
minis. minister
Minn. Minnesota
Miss. Mississippi
miss. missionary
mo. month
Mo. Missouri
Moham. Mohammedan
Mong. Mongolia; Mongolian
Mont. Montana
Monten. Montenegro; Montenegrin
Moor. Moorish
Mor. Morocco; Moroccan
Moz. Mozambique
MS.; ms. manuscript
mt.; mts. mount; mountain; mountains
mun. municipal; municipality
mus. music; musician; musical; musicologist
Mus. Muslim
myth. mythology; mythological

N

N. North; Northern
N.Afr. North Africa; North African
N.Amer. North America
nat. naturalist
nat. hist. natural history
natl. national
NATO North Atlantic Treaty Organization
naut. nautical
nav. naval
navig. navigator; navigation
N.B. New Brunswick

N.C. North Carolina
N.Dak. North Dakota
Nebr. Nebraska
N.Eng. New England
Neth. Netherlands
Neth.Ant. Netherlands Antilles
neurol. neurology; neurologist; neurological
Nev. Nevada
Newf. Newfoundland
news. newspaper
N.Guin. New Guinea
N.H. New Hampshire
Nicar. Nicaragua; Nicaraguan
nick. nickname
Nig. Nigeria; Nigerian
N.Ire. Northern Ireland
N.J. New Jersey
N.Mex. New Mexico
noble. nobleman; noblewoman
Nor. Norway; Norwegian
nov. novel; novelist
N.S. Nova Scotia
N.S.W. New South Wales
N.T. New Testament
N.Terr. Northern Territory
numis. numismatics; numismatist
N.W.Terr. Northwest Territories
N.Y. New York State
N.Y.C. New York City
N.Z. New Zealand

O

O. Ocean
OAS Organization of American States
oceanoog. oceanography; oceanographer; oceanographic
off. officer
offi. official
Oklahoma. Oklahoma
Ont. Ontario
ophthal. ophthalmology; ophthalmologist
orat. oration; orator; oratorio
ord. order
Oreg. Oregon
organ. organization
orient. orientalist
ornith. ornithology; ornithologist
O.T. Old Testament

P

Pa. Pennsylvania
Pac.O. Pacific Ocean
paint. painting; painter
Pak. Pakistan; Pakistani
Pal. Palestine; Palestinian
paleoog. paleography; paleographer
paleon. paleontology; paleontologist
pam. pamphlet
Pan. Panama; Panamanian
Para. Paraguay; Paraguayan
parl. parliament; parliamentary
path. pathology; pathologist
P.E.I. Prince Edward Island

penin. peninsula
penol. penology; penologist
period. periodical
Pers. Persia; Persian
Peruv. Peruvian
petrol. petrology
pharm. pharmacology; pharmacologist
Phila. Philadelphia
philan. philanthropy; philanthropist; philanthropic
philat. philately; philatelist
Philipp. Philippines; Philippine
philol. philology; philologist
philos. philosophy; philosopher; philosophic
Phoen. Phoenicia; Phoenician
phot. photography; photographer
phy. physician
phys. physics; physicist
physiog. physiography
physiol. physiology; physiologist
pion. pioneer
plat. plateau
Pol. Poland; Polish
pol. politics; politician; political
pol.sci. political science; political scientist
Port. Portugal; Portuguese
port. portrait
poss. possession
P.Q. Province of Quebec
P.R. Puerto Rico; Puerto Rican
pr. prince; princess
preft. prefecture
pres. president
Presb. Presbyterian
prim. primitive
print. printer; printing
prod. producer; production
prof. professor
prom. promontory
prot. protectorate
Prot. Protestant
prov. province
Prus. Prussia; Prussian
pseud. pseudonym
psych. psychology; psychologist
pt. point
pub. public
publ. publication; publisher; publishing
public. publicist

Q

q. queen
Que. Quebec (city)
Queens. Queensland

R

r. ruler or rulers; ruled
R.C. Roman Catholic
rd. road
ref. reformer
reg. region
rel. religion; religious
rep. republic
res. reservoir

ABBREVIATIONS USED IN THE INDEX

reserv. reservation
resid. residency
rev. revolution; revolutionary
rhet. rhetoric; rhetorician
Rhod. Rhodesia; Rhodesian
R.I. Rhode Island
riv. river
Rom. Roman
roy. royalty; royal
R.R. railroad
RSFSR Russian Soviet Socialist Republic
Russ. Russia; Russian
ry. railway

S

s. son
S. San; South; Southern
S.Afr. South Africa; South African
Sah. Sahara
Salv. Salvadoran
S.Amer. South America; South American
Sand.Isls. Sandwich Islands
Sard. Sardinia; Sardinian
Sask. Saskatchewan
Saudi Ar. Saudi Arabia
S.Austr. South Australia
Sax. Saxony; Saxon
S.C. South Carolina
Scand. Scandinavia; Scandinavian
schol. scholar
sci. science; scientist
Scot. Scotland; Scottish
Script. Scriptures
sculp. sculpture; sculptor
S.Dak. South Dakota
SEATO Southeast Asia Treaty Organization
sec. secretary
seismol. seismology; seismologist
sen. senator
Seneg. Senegal; Senegalese
Serb. Serbia; Serbian
ship. shipping
Sib. Siberia
Sic. Sicily; Sicilian
Slav. Slavonia; Slavic
Slov. Slovenia; Slovenian
soc. social; society
sociol. sociology; sociologist; sociological
sol. soldier
sov. sovereign
Sov. Soviet
Sp. Spain; Spanish
Spar. Spartan
sr. senior
SSR Soviet Socialist Republic

st. street
St. Saint
Sta. Santa
states. statesman
statis. statistician
ste. Sainte
str. strait
Sud. Sudan; Sudanese
Sum. Sumatra
surg. surgery; surgeon; surgical
surv. surveying; surveyor
Swaz. Swaziland
Swed. Sweden; Swedish
Switz. Switzerland
sym. symbol
symp. symphony
Syr. Syria; Syrian

T

Tanz. Tanzania; Tanzanian
Tas. Tasmania; Tasmanian
tech. technical; technology; technique
tel. telephone
teleg. telegraphy
Tenn. Tennessee
terr. territory; territorial
Teut. Teutonic
Tex. Texas
Thai. Thailand
theat. theater; theatrical
theol. theology; theologian
theos. theosophy; theosophist
thermodyn. thermodynamics
Tib. Tibet; Tibetan
Togo. Togolese
topog. topography; topographer
trag. tragedy
trans. translation; translator
Transyl. Transylvania
trav. travel; traveler
trig. trigonometry
Trin.-Tob. Trinidad and Tobago
Trip. Tripoli
trop. tropical
Tun. Tunisia; Tunisian
Turk. Turkey; Turkish
Turkest. Turkestan
TV television
typog. typography; typographer

U

u. uncle
UAE United Arab Emirates
UAR United Arab Republic
Ugan. Uganda; Ugandan
U.K. United Kingdom
Ukr. Ukraine; Ukrainian
U.N. United Nations
Unit. Unitarian
univ. university
Uru. Uruguay; Uruguayan
U.S. United States
USSR Union of Soviet Socialist Republics
U. Volta Upper Volta

V

v. versus
Va. Virginia
val. valley
veg. vegetable
Venez. Venezuela; Venezuelan
vet. veterinarian; veterinary
Vict. Victoria
Viet. Vietnam; Vietnamese
vil. village
Virg.Isls. Virgin Islands
volc. volcano; volcanic
Vt. Vermont

W

w. wife
W. West; Western
W.Afr. West Africa
Wash. Washington
W.Austr. Western Australia
W.Ger. West Germany
W.I. West Indies
Wis. Wisconsin
writ. writer
W.Va. West Virginia
Wyo. Wyoming

Y

Yem. Yemen; Yemenite
Yuc. Yucatan
Yugos. Yugoslavia; Yugoslav

Z

Zanz. Zanzibar
Zim. Zimbabwe; Zimbabwean
zoogeog. zoogeography
zool. zoology; zoologist

A

A (letter) 1–1
Illus. 1–623
A (term) 1–2
A (unit of meas.); see Ampere
A-4 (rocket); see V-2
A-11 (airplane) 2–873
A-17 (airplane) 20–458b
A & P: see Atlantic & Pacific Tea Co., The Great
A-pillar (auto.) 2–842g
A rebours, nov. (Huysmans) 8–582
A-series (rockets) 23–612
AA (Eur. rivers) 1–2
Aa (geol.) 28–218
AAA: see Agricultural Adjustment Administration; American Automobile Association
AAAS: see American Association for the Advancement of Science
AACHEN (Aix-la-Chapelle), Ger. 1–2
 Art 2–386
 Baths 3–349
 chapel and palace 2–386; 5–94; 6–4
 Charlemagne 11–748
 Coronation 7–821
 history 12–652
 illuminated Manuscripts 14–780
 World War II 29–409, 410
ACCOBS: see Australian Advisory Council on Bibliographical Services
AAGESEN, Svend (Dan. hist.) 1–3; 8–720
Aahmas I (Egy. k.); see Ahmose
Aahmes (Egy. scribe); see Ahmose
AAKJAER, Jeppe (Dan. au.) 1–3; 8–724
AALBORG (Aalborg), Den. 1–3
Illus. 8–716
Aalesund, Nor.; see Alesund
Aalsmeer, Neth. 20–122
AALST, Belg. 1–3
AALTO, Alvar Henrik (Finn. arch.) 1–3; 19–307
 Finland 11–235
 Helsinki 14–78
Illus. 11–233; 19–307
Aanklong (Indon. mus.) 15–84
Aar River, Switz.; see Aare River
AAARAU, Switz. 1–3
AARDVARK (zool.) 1–4; 27–366
AARDWOLF (zool.) 1–4; 5–689
AARE RIVER, Switz. 1–4
 Bern 3–603
 Map 26–147
AARGAU, canton, Switz. 1–4; 26–156
 Map 26–147
AARHUS (Aarhus), Den. 1–4
Aarhus, University of, Den. 8–713
 library 8–714
Illus. 8–713
Arne, Antti (Finn. folklorist) 11–498t
Arne-Thompson number (folk-tale classification) 11–498t
AARON (Bib. char.) 1–4
 Esse 10–593
 Golden Calf 13–28
 Moses 19–493
AARON, Henry Louis (Amer. athl.) 1–5; 3–299
Illus. 3–303
Aarschot, Belg.; see Aerschot
Aasen, Ivar Andreas (Nor. philol.) 20–466c
AASL: see American Association of School Librarians
AAU: see Amateur Athletic Union of the United States
AAUP: see American Association of University Professors
AAUW: see American Association of University Women
Ab (Jew. month); see Av

Ab-i-Istada, Lake, Afq. 1–247
ABA: see American Bankers Association
ABA: see American Basketball Association
Aba (garment) 9–391
ABABDA (Afr. people) 1–5
 Arabian Desert 2–164
 Sudan 25–839
Abaca (bot.); see Manila hemp
ABACO AND CAYS, dist., Bah.
 1–5
Abacus (arch.) 5–594; 7–353
ABACUS (math.) 1–5; 2–294
Abad, Antonio (Philipp. wrt.) 21–906
ABADAN, Iran 1–6; 15–371.
 375, 376, 399
 Petroleum 21–836
Abadilla, A. G. (Philipp. poet) 21–906
Abailard, Pierre (Fr. philos.); see Abelard, Peter
Abakan, USSR 16–415
Abakan Tatars (Turkic people) 27–278
ABAKO (Zaire pol. party); see Alliance des Bakongo
ABALONE (mollusk) 1–7
ABANDONMENT (law) 1–7; 15–238
 Deserion 9–12
 Divorce 9–210
ABARIS (Gr. legd. sage) 1–7
ABASCAL, José Fernando (Sp. sol.) 1–7
Abate, Nicolo dell' (It. paint.); see Abbate, Nicolo dell'
ABATEMENT (law) 1–7
ABAUTZIT, Firmin (Fr. schol.) 1–8
Abax (Gr. furn.) 12–186
Abay, riv., Eth.; see Blue Nile
Abayah (Saudi Ar. garment) 24–302
Abaza (Caucasian people) 16–318
ABBA MARI (Fr. rabbi) 1–8
ABBADID (Arab dyn.) 1–8
Abbal, riv., Eth.; see Blue Nile
ABBAS (uncle of Mohammed) 1–8
ABBAS I (Egy. pasha) 1–8; 10–15
ABBAS II (Egy. khedive) 1–8
 World War I 29–297
ABBAS I (Pers. shah) 1–9; 15–382; 24–605, 862
 Georgian SSR 12–537
 Isfahan 15–488
 Middle East 19–78
 Persian Art and Architecture 21–750
 Throne 26–707
 Turkey 27–264
Illus.: Isfahan's Royal Pavilion 15–507
Abbas, Abu'l- (Abbasid caliph); see Abu'l-Abbas al-Saffah
Abbas, Ferhat (Alg. pol.) 1–569, 571
Abbas Effendi (Iranian rel. leader); see Abdul-Baha
Abbas Mahmud al-Aggad (Arab wrt.); see Aqqad, Abbas Mahmud al-
Abbas the Great (Pers. shah); see Abbas I
ABBASID (Arab dyn.) 1–9; 2–146, 149, 156; 19–77, 78
 Abu'l-Abbas al-Saffah 1–58
 Arabia 2–162
 Asia 2–495
 Baghdad 3–50
 Barmecid 3–245
 Caliphate 5–218
 Carmathian 5–674
 Crusades 8–265
 Egypt 10–12
 Eighth Century 10–88
 Fatimids 11–51
 Harun al-Rashid 13–833
 Hashemites 13–843

Iran 15–380
Iraq 15–396
Islam 15–498
Jerusalem 16–31
Mamluks 18–188
Mamun, al- 18–211
Mansur, al- 18–265
Mesopotamia 18–740
Mongolia 19–362
Ninth Century 20–373
Persian Art and Architecture 21–743
Pottery 22–487
Tenth Century 26–505
ABBATE, Nicolo dell' (It. paint.) 1–10
 Fontainebleau 11–507, 809
Abbattini, Antonio Maria (It. comp.) 20–763
Abbaye-aux-Dames, church, Caen, Fr.; see Trinité, La
Abbaye-aux-Hommes, church, Caen, Fr.; see Saint-Etienne
ABBE, Cleveland (Amer. meteorol.) 1–10
ABBE, Ernst (Ger. phys.) 1–11
 Anatomy 1–781
 Lens 17–213
 Zeiss, C. 29–759
ABBE, Robert (Amer. surg.) 1–11
ABBE (rel. title) 1–11
Abbe condenser (optics) 19–52
ABBESS (rel. title) 1–11
ABBEVILLE, Fr. 1–11
ABBEVILLE, La. 1–11
ABBEVILLE, S.C. 1–11
ABBEVILLIAN (Chellean) (archaeo.) 1–11; 2–207
 Acheulian 1–103
 Stone Age 25–745, 748
ABBEY, Edwin Austin (Amer. art.) 1–12
ABBEY, Henry Eugene (Amer. operatic mgr.) 1–12; 18–799, 800
ABBEY (rel.) 1–12
Abbe nullius (R.C. community) 6–45
ABBEY THEATRE, Dublin, Ire. 1–13; 15–422
 Fay, W. G. and F. J. 11–60
 Gregory, Lady A. 13–475
 Little Theater 17–601
 O'Casey, S. 20–605
 Repertory Theater 23–409
 Robinson, L. 23–580
 Yeats, W. B. 29–659
ABBOTT, Benjamin (Amer. educ.) 1–13
 house 1–819
ABBOTT, Charles Greeley (Amer. astrophys.) 1–13; 25–68
ABBOTT, George (Eng. archbp.) 1–14; 13–311
ABBOTT (rel. title) 1–14
 Abbey 1–12
 Benedictines 3–542
 Celtic Church 6–143
 Ring 23–531
Abbott Academy, Mass. 1–819
Abbott of Unreason (title) 19–226
ABBOTSFORD HOUSE, Roxburghshire, Scot. 1–14; 24–431
Illus. 24–425
Abbott, Austin (Amer. law.) 1–14
ABBOTT, Benjamin Vaughan (Amer. law.) 1–14
ABBOTT, Douglas Charles (Can. pol.) 1–14
ABBOTT, George Francis (Amer. theat. prod.) 1–15
ABBOTT, Grace (Amer. sociol.) 1–15
ABBOTT, Jacob (Amer. au.) 1–15
ABBOTT, Sir John Joseph Caldwell (Can. states.) 1–15
ABBOTT, Lyman (Amer. cler.) 1–15

ABBOTT, Wilbur Cortez (Amer. educ.) 1–15
Abbott and Costello (Amer. comedians) 19–527
ABBREVIATIONS 1–16
 Acronym 1–120
 Paleography 21–296
 Shorthand 24–758
See also Symbol
Abbud (Aboud), Ibrahim (Sud. gen.) 25–842
ABC: see American Broadcasting Company
ABC art: see Minimal Art
ABC islands, Neth. Ant. 20–128e, 128f
ABC-1 (Brit.-U.S. conversations, 1941) 29–395
ABC POWERS (Arg., Braz., Chile) 1–25
ABD (Arab term) 1–25
ABD AL-AZIZ IV (Mor. sultan) 1–25; 19–471
Abd al-Aziz al-Mansur (Muslim r.) 27–858
Abd al-Hafiz (Mor. r.) 1–25; 19–469
Abd al-Karim (Arab leader); see Abd el-Krim
Abd Allah (Sud. rel. leader); see Khalifa, The
Abd Allah ibn Yasin (Mus. leader); see Ibn Yasin, Abd Allah
ABD AL-MALIK (Umayyad caliph) 1–25; 2–146
 Abdallah ibn Zubair 1–26
 Umayyad 27–353e
ABD AL-MUMIN (Arab leader) 1–25; 19–468
 Almohad 1–614
Abd al-Mutalib (grandfather of Mohammed) 19–315
Abd al-Qadir al-Jilani (Islamic leader); see Jilani, al-
ABD AL-RAHAMAN (Arab-Islamic name) 1–25
See also Abd ar-Rahman; Abdur Rahman Khan
Abd al-Rahman (Sud. rel. leader) 18–118
ABD AR-RAHMAN (Mus. emir of Andalucia) 1–26
ABD AR-RAHMAN I (Mus. emir of Córdoba) 1–25
 Abbasid 1–9
 Spain 25–410
ABD AR-RAHMAN III (Mus. caliph of Cordoba) 1–26; 2–149; 7–788
 Spain 25–410
ABD EL-KADER (Arab leader) 1–26
 Algeria 1–568
 France 11–778
Abd el-Krim (Abd al-Karim) (Arab leader) 19–469
 Spain 25–420
Abdali (Pathan tribe) 10–500
ABDALLAH (f. of Mohammed) 1–26; 19–315
Abdallah (Timurid r.) 26–767
Abdallah, Ahmed (Comoros pres.) 7–454
ABDALLAH IBN ZUBAIR (Mus. caliph) 1–26
ABDALLATIF (Iraqi phy.) 1–27
ABDALWADID (Mus. dyn.) 1–27
ABDERA, anc. city, Gr. 1–27
ABDICTION (law) 1–27
Abdimilkuti (Assyr. k.) 21–951
ABDOMEN (anat.) 1–27; 14–547b
 Colic 7–232
 Hernia 14–143
 Insect 15–197, 199
 Intestine 15–323
 Kidneys 16–429
 Peritoneum 21–712
 Peritonitis 21–712
 Stomach 25–739
 Stomachache 25–741

- Abdominal thrust** (first aid): see Heimlich maneuver
- Abducens nerve** (anat.) 20–109
- ABDUCTION** (law) 1–28
See also Kidnapping
- ABDUCTION FROM THE SERAGLIO** (*Entführung aus dem Serail*, opera (Mozart) 1–28, 20–766)
- ABDUL AZIZ** (Turk. sultan) 1–29
- ABDUL-BAHA** (Iranian rel. leader) 1–29
Babism 3–7
Bahai Faith 3–54
Bahaullah 3–57
- Abdul Gaffar Khan** (Mus. leader) 14–955
- ABDUL-HAMID I** (Turk. sultan) 1–29
- ABDUL-HAMID II** (Turk. sultan) 1–29; 27–267, 268
Armenia 2–333
Istanbul, University of 15–550
Pan-Islamism 21–360
- ABDUL-JABBAR, Kareem** (Amer. athl.) 1–30
- Abdul Kerim Pasha** (Turk. sol.) 29–294, 300
- Abdul-Malik II** (Samandir r.) 24–175
- ABDUL MEJID I** (Turk. sultan) 1–30
- Abdul-Mejid II** (Turk. caliph) 27–270
- Abdul Rahman, Sheikh Moham-**
med (Zanz. pol.) 29–749
- ABDUL RAHMAN, Tunku** (Malay. states.) 1–30; 18–165, 166
- Abdul Wahhab** (Arab. rel. leader) 20–85
- Abdullah, Amir** (Iraqi regent) 15–397
- Abdullah:** see Abdallah, except for those below
- ABDULLAH, Sheikh Mohammed** (Kashmiri pol.) 1–31; 16–330
- ABDULLAH IBN HUSEIN** (k. of Jor.) 1–31; 16–170, 173
World War I 29–300
- ABDUR RAHMAN KHAN** (Afg. amir) 1–31
Afghanistan 1–254
India 14–952
- Abé** (Afr. people) 15–628
- ABE LINCOLN IN ILLINOIS**, play (Sherwood) 1–31
- Abéché, Chad** 28–252
- A BECKETT** (Eng. lit. fam.) 1–31
- A Beckett, Arthur William** (Eng. wrt.) 1–31
- A Beckett, Gilbert Abbott** (Eng. au.) 1–31
- A Beckett, Gilbert Arthur** (Eng. dram.) 1–31
- A Becket, Saint Thomas** (Eng. eccl.): see Becket, Saint Thomas à
- Abednego** (Bib. char.) 8–482
Song of the Three Young Men 25–222
- ABEL** (Bib. char.) 1–32; 5–143
Adam and Eve 1–134
- Abel, Sir Frederick Augustus** (Eng. chem.) 7–787
- ABEL, John Jacob** (Amer. phy.) 1–32
Pharmacology 21–850
- ABEL, Karl Friedrich** (Ger. mus.) 1–32
- ABEL, Niels Henrik** (Nor. math.) 1–32
Binomial Theorem 3–757
Equation 10–529
- Abel, Rudolf I.** (Soviet spy) 10–585
- Abel Sánchez, nov.** (Unamuno) 20–508
- ABELARD, Peter** (Fr. philos.) 1–33; 21–934
Atonement 2–652
Autobiography 2–803
Champeaux, W. 6–264
Latin 16–798
Scholasticism 24–368
Universals 27–776
- Abele** (tree): see White poplar
- Abelian groups** (math.) 13–515, 516
- ABEL, Kjeld** (Dan.-dram.) 1–34; 8–725
- Abelson, Philip Hauge** (Amer. phys.) 27–28
- Abenaki** (Amerind.): see Abnaki Indians
- Abenteuerliche Simplissimus, Der**, nov. (Grimmelshausen): see *Simplicissimus*
- Abeokuta**, city-state, Afr. 20–338, 339
- Aber Tawe, Wales:** see Swansea
- Aberconway, Wales:** see Conway
- ABERCRUMBIE, Lascelles** (Eng. poet, crit.) 1–34
- Abercrombie, Michael** (Eng. biol.) 8–391
- ABERCRUMBIE, Sir Patrick** (Brit. town planner) 1–34
- Abercrombie, Robert** (Brit. sol.) 29–689
- ABERCROMBY, James** (Brit. sol.) 1–34; 5–467
- ABERCROMBY, Sir Ralph** (Brit. sol.) 1–34
- Aberdare National Park**, Kenya 19–774
- Aberdare Range**, mts., Kenya 16–394
- ABERDEEN, 4th Earl of (George Hamilton Gordon)** (Brit. states.) 1–35
Crimean War 28–205
Victoria 28–87
- ABERDEEN**, Md. 1–35
- ABERDEEN, Miss** 1–35
- ABERDEEN**, co., Scot. 1–35
Balmoral Castle 3–122
- ABERDEEN**, Scot. 1–36
- ABERDEEN**, S.Dak. 1–37
- ABERDEEN**, Wash. 1–37
- ABERDEEN, University of**, Scot. 1–37; 9–687
- ABERDEEN AND TEMAIR, 1st Marquess of (John Campbell Gordon)** (Brit. states.) 1–37
- Aberdeen and Temair, Marchioness of** (Brit. social.) 1–37
- Aberdeen-Angus cattle** 6–68
Illus. 2–725, 6–66, 74: 26–479
- ABERDEEN PROVING GROUND**, Md. 1–37
Ballistics 3–111
Map 18–408
- Aberdeen terrier** (dog): see Scottish Terrier
- Aberfan, Wales** 9–163
- Abergeldie Castle**, Scot. 3–122
- ABERHART, William** (Can. pol.) 1–37; 5–500
Social Credit Party 25–127
- Aberli, Johann Ludwig** (Swiss art.) 28–436
- Abernathy, Ralph D.** (Amer. civil rights leader) 6–779
Southern Christian Leadership Conference 25–342
- ABERRATION, Optical** 1–38
Achromatic Lens 1–105
Eyeglasses 10–818
Lens 17–215
Microscope 19–51
Telescope 26–414
See also Chromatic aberrations
- ABERRATION OF LIGHT** (astron.) 1–38; 2–571, 584; 17–452
Bradley, J. 4–403
- Abertawe, Wales:** see Swansea
- ABERYSTWYTH**, Wales 1–39
Cardiganshire 5–634
- Abha**, Saudi Ar. 2–512
- Abhidharma** (Buddhist canon) 4–693
- Abhijñānaśākuntala**, drama (Kālidāsa): see *Sakuntalā*
- ABHORRENS** (Eng. hist.): 1–39
Tory 26–870
- Abia (Abiam)** (Bib.): see Abijah
- Abib** (Jew. month): see Aviv
- ABIDJAN**, Iv.Cst. 1–39, 306; 15–630
Illus. 15–628: cathedral 1–269; Housing 14–491; market 15–629; newsstands 1–294; port 15–631
- Abidjan, University of**, Iv.Cst. 15–629
- Abies** (bot.): see Fir
- ABIE'S IRISH ROSE**, play (Nichols) 1–39
- Abietic acid** (chem.) 25–117
- Abigail** (sister of King David) 1–39
- ABIGAIL** (w. of King David) 1–39
- ABIAH** (Bib.) 1–39
- ABILA** (one of Pillars of Hercules) 1–39
Ceuta 6–207
- ABILENE**, Kans. 1–39
Chisholm Trail 6–608
- McCoy, J. G.** 18–563
Illus. 16–302, 304
- ABILENE**, Tex. 1–40
- ABILENE CHRISTIAN COLLEGE**, Tex. 1–40
- ABILITY** (psych.) 1–40
Child Development 6–454 fol.
Education 9–709, 717
Intelligence 15–241
tests 9–721, 722
- Ability-to-pay principle** (taxation) 26–318
Collective Bargaining 7–236
Public Finance 22–756
- ABIMELECH** (Bib.) 1–40
- ABINGTON**, Mass. 1–40
- ABINGTON, Pa.** 1–40
- Abiogenesis**: see Spontaneous Generation
- ABITIBI, Lake**, Ont., Can. 1–40
Map 5–319
- Abitibi region**, P.Q., Can. 23–64
- Abitibi River**, Can. 1–40
Map 20–748
- Abitur** (Ger. educ.) 12–628
- ABJURATION** (law) 1–41
- Abjuration, Act of** (Neth. 1581) 25–553
- Abkhaz** (Eur. people) 1–41
Caucasus 6–87
- Abkhaz-Adige group of languages** 6–84
- ABKHAZ AUTONOMOUS SOVIET SOCIALIST REPUBLIC** 1–41
Georgian SSR 12–553
Maps 27–410, 412
- ABLATIVE** (gram.) 1–41; 5–756
Greek 13–437
Latin 16–789, 790
- Ablativ absolute** (gram.) 1–41
- ABLAUT** (ling.) 1–41; 10–647, 648
- ABLEGATE** (papal envoy) 1–41
- Ableman v. Booth** (U.S. case) 26–256
- Ablesimov, Aleksander O.** (Russ. au.) 24–30c
- ABLUTION** (ceremony) 1–41; 23–20
- Ablution** (hydrotherapy) 14–667
- ABM system** (mif.): see Antibalistic missile systems
- ABNAKI INDIANS** 1–42, 574
Maine 18–141
Passamaquoddy Indians 21–509
- Pennacook Indians** 21–637
Penobscot Indians 21–668
- ABNER** (Bib.) 1–42
David 8–526
Joab 16–95
- ABNEY, Sir William de Wiveleslie** (Eng. phys.) 1–42
- Abo, Fin.:** see Turku
- ABO system** (med.) 4–94
- Abohm** (elec. unit) 20–673
- Abolition Grove**, park, Abington, Mass. 1–40
- ABOLITIONISTS** 1–42; 4–28c; 27–731
- Andrew, J. A.** 1–825
- Ashley, J. M.** 2–437
- Bailey, G.** 3–61
- Beecher, H. W.** 3–450
- Benezet, A.** 3–546
- Birney, J. G.** 4–3
- Brown, J.** 4–628
- Civil War** 6–784
- Coles, E.** 7–229
- Dana, R. H., Jr.** 8–463
- Douglass, F.** 9–313
- Fee, John G.** 11–82
- Foster, Abigail K.** 11–642
- Foster, Stephen S.** 11–643
- Free Soil Party** 12–45
- Fugitive Slave Laws** 12–150
- Gag Rules** 12–223
- Garnet, H. H.** 12–310
- Garrett, T.** 12–313
- Garrison, W. L.** 12–314
- Gibbons, A. H.** 12–731
- Gibbons, J. S.** 12–732
- Giddings, J. R.** 12–737
- Goodell, W.** 13–77
- Green, B.** 13–444
- Grimke sisters** 13–495
- Grinnell, J.** 13–499
- Julian, G. W.** 16–214
- Liberator, The** 17–297
- Liberty Party** 17–305
- Loring, E. G.** 17–746
- Lovejoy, E. P.** 17–809
- Lundy, B.** 17–852
- Massachusetts** 18–472
- Mott, L.** 19–563
- New England Emigrant Aid Company** 20–166
- Phillips, W.** 21–922
- Protestantism** 22–691
- Quakers** 12–93
- Sanborn, F. B.** 24–216
- Sharp, G.** 24–673
- Smith, G.** 25–57
- Stanton, H. B.** 25–593
- Summer, C.** 26–8
- Tappan, A.** 26–290
- Tappan, L.** 26–290
- Torrey, C. T.** 26–864
- Tubman, H.** 27–203
- Underground Railroad** 27–359
- Whittier, J. G.** 28–738
- Woolman, J.** 29–164
- Abomasum** (anat.) 6–79
- Abomey**, Benin 3–550a, 550c
- ABOMINABLE SNOWMAN** (monster) 1–43
- ABORIGINES** (anthro.) 1–43
Aetas 21–897
- Ainu** 1–368
- Australian:** see Australia—Population (Aborigines)
- Bushman** 5–41
- Jomo of Japan** 15–814
Illus. 2–710, 711
- ABORTION** (med., law) 1–44
Birth Control 4–4, 5
chromosome abnormalities 12–410
- Civil Rights and Liberties** 6–774
- Eugenics** 10–657
- Great Britain** 13–225
- Legal Medicine** 17–167
- Mental Retardation** 18–706
- miscarriage** 22–541
- Population Control** 22–411
- Privacy** 22–626
- Puerperal Fever** 22–776
- Radiation Injury** 23–145, 194
- Roe v. Wade** and Doe v. Bolton 23–632
- Rubella** 23–835
- Supreme Court** 26–48
- Turkey** 27–250d
- USSR** 27–395
- Women's Rights Movement** 29–110, 111
- Abortion, Infectious** (vet. med.): see Brucellosis
- Aboukir, Egy.:** see Abukir
- Abovian, Khachatur** (Arm. nov.) 2–336
- ABRACADABRA** (magic) 1–45
- ABRAHAM** (Bib. patriarch) 1–46; 3–682; 12–391, 392; 18–601
- Arabia** 2–159
- Isaac** 15–481
- Ishmael** 15–489
- Lot** 17–758
- Melchizedek** 18–667.
- Abraham, Karl** (Aus. psych.) 12–86
- Abraham, Plains of:** see Plains of Abraham
- Abraham, Testament of** 2–97
- Abraham a Sancta Clara** (Aus. cleric) 2–800
- Abraham ben David** (Jew. schol.) 5–108
- ABRAHAM IBN DAUD HA-LEVI** (Jew. hist., philos.) 1–47
- Abraham Lincoln**, play (Drinkwater) 9–398
- Abraham Lincoln: A History**, bk. (Hay and Nicolay) 13–889
- Abraham Lincoln Birthplace National Historic Site**, Ky. 16–388; 19–778
Illus. 16–391
Map 16–380
- Abraham of Antioch** (Syr. theol.) 1–47
- ABRAHAMITES** (rel. sects) 1–47
- Abrahams, Charles** (Austr. sculp.) 2–754
- Abrahams, Peter** (S.Afr. au.) 1–275
- Abrahams, Roger** (Amer. folklorist) 11–498t, 499
- Abram** (Bib. patriarch): see Abraham
- Abramov, Fyodor** (Russ. wrt.) 24–30m
- Abrams, Creighton W.** (Amer. gen.) 28–112f
- Abrams v. United States** (U.S. case) 6–162
Holmes, O. W., Jr. 14–300
- Abrantes, Duc d'** (Fr. gen.): see Junot, Andoche
- Abrasion** (med.): First Aid 11–268
- ABRASIVES** 1–47

- Alumina 1–641
Carborundum 5–630
Corundum 8–30
Drill 9–397
Emery 10–306
Garnet 12–311
Grinding 13–497, 498
industrial diamond 9–59
Metal Finishing 18–762
Metalworking 18–769, 35 fol.
Polishing 22–335
Pumice 22–798
Sandpaper 24–224
ABRAXAS (rel. term) 1–49
Abreaction (psych.) 14–681
ABREU, Casimiro de (Braz. poet.) 1–49
ABREU, João Capistrane de (Braz. hist.) 1–49
Abrittus, Battle of (251 A.D.) 23–732
ABROGATION (law) 1–49
Abron (Afr. people) 15–628
ABRUZZI, Duke of (It. nav. off., expl.) 1–50; 2–246
ABRUZZI, reg. It. 1–50; 2–91
economy 15–562, 563
Map 15–ITALY
Abruzzo, Ben (Amer. balloonist) 3–116
ABS plastics: see Acrylonitrile-butadiene-styrene plastics
ABSALOM (Bib.) 1–50
David 8–527
Joab 16–95
ABSALOM, ABSALOM!, nov. (Faulkner) 1–50; 11–53
ABSALOM AND ACHITOPHEL, poem (Dryden) 1–50; 9–430, 432; 10–440
Tate, N. 26–311
ABSALEN (Dan. bp.) 1–51; 8–716, 720
Canute VI 5–539
Valdemar I 27–857
Absaroka Range, mts., Mont.-Wyo. 23–619; 29–577, 666
Illus. 19–393; 23–618
Maps 19–398; 29–WYOMING
ABSCESS (med.) 1–51
Boil 4–147
Carbuncle 5–630
Fistula 11–336
Gum 13–602
Pneumonia 22–269
Quinsy 23–102
Abscisic acid (biochem.) 22–207
Abscisins (biochem.) 22–59
Abscissa (geom.) 12–475, 483
Illus. 12–475
Abscission (bot.) 17–108
ABSD (advanced base sectional docks) 29–503
ABSENTEE OWNERSHIP 1–52
Italy 15–568
Absentee Shawnee Indians 24–678
ABSENTEE VOTING 1–52; 10–120
Ballot 3–118
ABSLIS, Jean (Belg. mus.) 1–52; 3–497
ABSINTHE (liqueur) 1–52
Wormwood 29–535
Absinthe Drinker, The, paint. (Manet) 18–228
ABSOLUTE, Sir Anthony (lit. char.) 1–52
ABSOLUTE (philos.) 1–53
Bosanquet, B. 4–292
See also Ultimate
Absolute CGS-emu system (meas.) 18–592
Absolute dating (sci.): see Chronometric dating
Absolute idealism (philos.) 14–741
Pantheism 21–363
Royce, J. 23–822
Russell, B. A. W. 23–874
Absolute magnitude (astron.) 2–579; 18–109; 25–597, 599, 600
Illus. 25–600
Absolute monarchy (govt.) 19–342
King 16–453
ABSOLUTE MUSIC 1–54; 19–657
Absolute pitch (mus.) 13–918; 22–145
Absolute pragmatism (philos.) 23–822
Absolute scale (phys.): see Kelvin scale; Rankine scale
ABSOLUTE ZERO 1–54
comparison of scales 14–15
Cryogenics 8–274
Heat 14–17
Temperature 26–454, 455
Thermodynamics 26–651, 652
Zero 29–770
Zero-Point Energy 29–771
ABSOLUTION (eccl.) 1–54; 21–621
Confession 7–534
Indulgence 15–102
ABSOLUTISM (pol. sci.) 1–54
Augustus 2–690
Autocracy 2–804
Bodin, J. 4–130
Dictatorship 9–82
Divine Right of Kings 9–200
First Century 11–179
Norway 20–476
Prince, The 22–592
Russia 24–5, 15, 35
Tyranny 27–330
Absorbed dose (radiation) 23–142
Absorbent 23–331, 332
Absorbent papers 21–382
ABSORPTION (chem., phys.) 1–55
Astrophysics 2–590
Atmosphere 2–629
Dye 9–508, 509
Electromagnetic Radiation 10–158, 159
Laser 16–773
Light 17–441
Magnetic Resonance 18–105
Maser 18–422
neutron radiation 23–140
Polarized Light 22–323
Refrigeration 23–330, 331, 334
Ultraviolet Radiation 27–353c
X-Rays 29–605, 610, 621
Absorption (physiol.) 9–115
Drug 9–408, 409
Metabolism 18–749
Absorption lines (phys.) 2–576, 582, 584
Quasar 23–61
Absorption spectroscopy 6–366; 25–468, 472
Abstinence (rel.) 11–42, 43
Abstinence, Sexual:
Birth Control 4–4
Celibacy 6–130
Abstract algebra (math.) 18–489
ABSTRACT ART 1–55; 19–301, 305
Abstract Expressionism 1–56
Austria 2–799
Cubism 8–307
Folk Art 11–491
Indian, American 15–21
Landscape 16–707
Mobile 19–284
Op Art 20–757
Orphism 21–87
Painting 21–255
Sculpture 24–458 fol.
suprematism 18–170
USSR 27–430c
United States 27–587
Water-Color Painting 28–437
ABSTRACT EXPRESSIONISM
(art) 1–56; 19–305
Cubism 8–308
De Kooning, W. 8–646
Gorky, A. 13–92
Israel 15–526
Johns, J. 16–123
Kline, F. 16–500
Motherwell, R. B. 19–502
Painting 21–258
Pollock, J. 22–358
Romanticism 23–678
Rothko, M. 23–804
United States 27–591; 2–389
Abstract impressionism (art) 27–591
ABSTRACT OF TITLE (law) 1–57
Abstract spaces, Theory of (geom.) 12–479
Abstract typefaces 4–236
ABSTRACTION (philos.) 1–57
Bergson, H. 3–581
Concept 7–500
Concrete 7–516
Hegel, G. W. F. 14–50
Mathematics 18–494
Nominalism 20–404
Symbol 26–166
Abstracts (bibligr.) 3–723
ABSURD (philos.) 1–57
Paradox 21–399
See also Theater of the Absurd
Absyrtos (myth) 2–279
Abt Vogler (Ger. mus.): see Vogler, Georg Joseph
Academia Sinica, China 6–560
Abt Vogler, poem (Browning) 28–212
Abu Abdallah Mohammed (Mus. sultan): see Boabdil
Abu al-Hasan Ali ibn Husayn al-Masudi (Arab hist., geog.): see Masudi, al-
Abu Ali al-Husayn Ibn Abdallah Ibn Sina (Arab philos.): see Avicenna
ABU BAKR (Islamic caliph) 1–58; 2–145; 21–305
Asia 2–495
Caliphate 5–218
Hegira 14–52
Mohammed 19–315
Umar I 27–353e
Abu Bakr (Mus. phy., philos.): see Ibn Tufayl
ABU DHABI, emirate, UAE 1–58; 2–159, 161; 27–435
Petroleum 21–832, 837
Abu Habba, Iraq: see Sippar
Abu-Hanifa (Mus. theol.) 15–500
Anan ben David 1–776
Karata 16–308
Abu Lahab (Mohammed's uncle) 15–493
Abu Mashar Jaafar ibn Muhammad (Arab. astron.): see Al-buzmazir
Abu Muslim al-Khurasani (Pers. gen.) 1–9; 2–146; 10–88; 18–265
Abu Nuwas (Arab poet) 2–154
Abu Said (Timurid r.) 26–767
ABU SIMBEL, Egy. 1–58; 23–247
Temple 26–460, 463; 10–28, 56, 64
Illus. 10–29, 64
Abu Sulayman al-Sijistani (Arab. philos.): 2–157
Abu Talib (uncle of Mohammed) 15–492; 19–315
Abu-Tammar (Arab poet) 2–154
Hamasa 13–733
Abu Yusuf Ya'qub al-Kindi (Arab. philos., sci.): see Kindi, Abu Yusuf Ya'qub al-
Abubacer (Mus. phy., philos.): see Ibn Tufayl
Abuja, Nig. 20–341
ABUKIR, Egy. 1–58
Canopus 5–567
Napoleon I 19–730
Nelson, H. 20–86
ABU'L-ABBA'S AL-SAFFAH (Abbasid caliph) 1–58; 9; 2–146; 10–88
Abu'l-Faraj (Pers. au.): see Isfahani, al-
Abu'l-Faraj ibn al-libri (Syr. schol.): see Bar-Hébraeus, Gregorius
Abul Kasim al-Zahravi (Arab. phy.) 8–733
Abu'l-Khair (Uzbek r.) 27–849
Abundance (econ.) 9–596
Twentieth Century 27–297
United States 27–481, 541
Aburé (Afr. people) 15–628
Abusir, Egy. 10–23; 23–35, 38
Abutilon (bot.): see Flowering Maple
ABYDOS, Asia M. 1–65
ABYDOS, anc. city, Egy. 1–65; 20–21, 27, 44; 23–35
Osiris 21–106
temple 10–56
Map 10–EGYPT
Abyla (one of Pillars of Hercules): see Abila
ABYSSAL ANIMALS (biol.) 1–65
Abyssal deposits (Pelagic deposits) (geol.) 8–615, 622
Continental Shelf 7–695
Oceanography 20–619
Ooze 20–757
Abyssinia: see Ethiopia
Abyssinian cats 5–803; 21–795
Illus. 5–CAT: 5–801, 805
Abyssinian Church: see Ethiopia, Orthodox Church of
Abyssinian wild ass 2–520
A.C.: see Alternating current
Ac (chem.): see Actinium
ACACIA (bot.) 1–65; 2–718
betel nut habit 21–320
Gum Arabic 13–602
Tropical Agriculture 27–142
Acacian Schism (church hist.) 11–87
Gelasius I, St. 12–364
Acacius (patriarch of Constantinople) 11–87
Hormisdas, St. 14–379
Academia Sinica, China 6–560
Academie (French) 1–226
Academic Art 1–66; 19–295
Besnard, P. A. 3–623
Painting 21–248
Academic costume: see Costume, Academic
Academic degrees: see Degree (educ.)
Academic Festival Overture, comp. (Brahms) 4–416
ACADEMIC FREEDOM 1–66
Colleges 7–254e
higher education 9–692
United States 27–549
Academic Philosophy Circle, Zurich, Switz. 2–856
Académie de France à Rome (Academy of France at Rome) 15–226; 22–629
Académie des beaux-arts (Fr.) 15–226
Academic Art 1–66
American artists 27–579
Académie des inscriptions et belles-lettres (Fr.) 15–226
Académie des jeux floraux (Fr.) 1–69
Académie des Sciences (Fr.) 15–226
Académie des Sciences Morales et Politiques (Fr.) 15–226
Académie Française (French Academy) 15–225, 226
Dictionary 9–88
French literature 11–821
Académie Goncourt (Fr.) 13–67, 68
Académie Royale de Dance, Fr. 8–467, 472, 477
Académie Royale de Musique, Paris, Fr. 21–452, 453
Académie Royale des Sciences (Fr.): see Académie des Sciences
ACADEMY (learned societies) 1–69; 24–387
Africa 1–302
Italy 15–606
United States 27–545; 9–679
See also individual names and entries beginning with
Academy—: Académie—: Accademia—: Akademie—
Academy, philos. school, Athens, Gr. 1–69; 13–399, 401 fol., 421
Aristotle 2–288
Carneades 5–679
Hellenistic Age 14–73
Plato 22–226, 230
Xenocrates 29–592
Academy, French: see Académie Française
ACADEMY AWARD (motion pictures) 1–71a
Academy in Rome, American: see American Academy in Rome
Academy of Arts, The Royal, London, Eng.: see Royal Academy of Arts
Academy of Arts and Sciences, American: see American Academy of Arts and Sciences
Academy of Arts at Rome: see Académie de France à Rome
Academy of Medical Sciences, USSR 27–419
Academy of Motion Picture Arts and Sciences 1–71a
Academy of Music, Philadelphia, Pa. 21–866
Academy of Natural Sciences of Philadelphia 1–70; 21–866
Academy of Political and Social Science, American: see American Academy of Political and Social Science
Academy of Science (Austr.): Illus. 5–527
Academy of Science (Pol.) 22–311
Academy of Science of Saint Louis, Mo. 1–70
Academy of Sciences (China) 17–326
Academy of Sciences (Cuba) 8–301
Academy of Sciences (Fr.): see Académie des Sciences
Academy of Sciences (Ger.) 3–596
Academy of Sciences (USSR) 1–70; 24–13; 27–419, 420

- Academy of Sciences, National**, Washington, D.C.; see National Academy of Sciences
Academy of Sciences, New York; see New York Academy of Sciences
Academy of Television Arts and Sciences; see National Academy of Television Arts and Sciences
Academy of the Socialist Republic of Romania 23–664
ACADIA, former Fr. terr., N.Amer. 1–72; 20–159, 499
 exploration 5–459
 geography 5–340
 history 5–458, 462, 463, 466, 467
 La Tour, C. de S.-E. de 17–52
 people 5–466, 470
 Protestant Church 5–416
 See also Nova Scotia
ACADIA NATIONAL PARK, Me. 1–73
 Bar Harbor 3–214
 Mount Desert Island 19–566
Map 18–134
Acadian Forest, Can. 5–340
Acadian orogeny (geol.) 12–461
Acadian refugees 1–73; 20–501
 Cajuns 5–149
 Lafayette, La. 16–661
 Louisiana 17–788
Acadiana, area, La. 16–661
Acadie, former Fr. terr., N.Amer.; see Acadia
Acajutla, El Salvador 10–261
Acala (cotton) 8–74
Acalculia (med.) 2–92
Acamapichtl (Aztec k.) 2–894
ACANTHOCEPHALA (zool.) 1–73, 866
 Embryology 10–285
 Nemathelminthes 20–90
Illus. 1–867
Acanthodii (fish) 11–290, 306
ACANTHUS (bot.) 1–73
A CAPPELLA (mus.) 1–74
ACAPULCO, Mex. 1–74; 18–841
Illus. 18–821
ACARINA (zool.) 1–74
ACARINIA, reg., Gr. 1–74; 13–365
Accad (northern Babylonia); see Akkad
Accademia dei Lincei (It.); see Lincei, Accademia dei
Accademia della Crusca (It. acad.) 1–69; 15–612
 Dictionary 9–88
Accademia Museum, Florence, It. 11–419
Accademia Platonica (It. acad.) 1–69
Accademia Pontaniana (It. acad.) 1–69; 15–606
Accadian (ang.); see Akkadian
Acceleration (educ.) 9–695
ACCELERATION (phys.) 1–75; 22–51, 52
 Accelerometer 1–75
 astronauts 25–365
 Automobile 2–841, 842f
 Centrifuge 6–190
 Force 11–558 fol.
 Galileo 12–242
 Gravitation 13–208
 Hydrodynamics 14–644
 Inertia 15–136
 Measures and Measuring Systems 18–590
 Mechanics 18–604, 605
 meter per meter per second 18–586
 Motion 19–502 fol.
 Space Exploration 25–355
 X-Rays 29–601
 See also Velocity
Accelerator (auto.) 2–835, 842g
Accelerator (sci. device); see Particle Accelerator
Accelerator pump (auto.) 2–835
Accelerograph (instru.) 1–75
ACCELEROMETER 1–75
 Airplane 1–426
 Automatic Pilot 2–806
 Guidance Systems 13–566
ACCENT 1–76; 17–528
 Diacritical Marks, 9–53
 English Language 10–418, 420
Accent (period.) 17–599
Accentors (birds); see Hedge Sparrow
Acceptance (fin.) 3–202, 170, 171
Acceptance houses (fin.) 3–193
ACCESSION (internat. law) 1–76
Accessional teeth (dent.) 26–380
ACCESSORY (law) 1–76; 17–74
Accessory cells (bot.) 22–182
Accessory drive (aero.) 1–426
Accessory fruit (bot.) 12–132
Accessory nerve (anat.) 20–109
Accessory pigment (bot.) 22–38
Accho, Pal.; see Acra
Acci, Sp.; see Guadix
Acciaiuoli (It. fam.) 3–173
ACCIDENT (law) 1–76
 Legal Medicine 17–166, 167
 tort 17–78
Accident (philos.);
 Invention 15–327
 Transubstantiation 27–27
Accident insurance:
 Fringe Benefits 12–98
 Health Insurance 13–913
 industrial injuries 13–252
 Legal Medicine 17–167
 Liability and Property Insurance 17–287
 Social Security 25–136
Accidents (mus.);
 Chromaticism 6–672
ACCIDENTS 1–77
 airplane 1–395; 2–875; 9–163
 Alcoholism 1–516, 517
 Automobile 2–825, 847
 Coal 7–139
 Criminal Investigation 8–207
 Death 8–564
 Disease 9–172
 Drowning 9–403
 First Aid 11–266
 Lightning 17–475
 Mining 19–174
 nuclear reactor 20–511t
 poisoning 22–292
 railroad 9–165
 Tort 26–865
 Tunnel 27–226, 231, 232
 See also Disasters
Acción Democrática (AD) (Venez. pol. party) 27–954, 957, 958
ACCIPITER (bird) 1–81
 Falconry 10–852
 Hawks 13–882
ACCIO, Lucius (Rom. dram.) 1–81
ACCLAMATION (pol.) 1–81
Acclimation (biol.) 9–593
ACCLIMATIZATION (biol.) 1–81
 Desert 9–8
 Ecology, Human 9–593
Acco; see Ace, Isr.
ACCOLTI, Benedetto (It. eccl.) 1–82
ACCOLTI, Benedetto (It. jur.) 1–82
ACCOLTI, Bernardo (It. poet) 1–82
ACCOLTI, Francesco (It. jur.) 1–82
ACCOLTI, Pietro (It. card.) 1–82
Accommodation (biol.) 1–82
 See also Adaptation
ACCOMMODATION (com.) 1–82
Accommodation (ophthal.) 10–813; 1–82
 Gullstrand, A. 13–601
Illus. 10–816
Accommodation (sociol., psych.) 1–82
 Child Development 6–454
Accommodation (theol.) 1–82
ACCOMPANIMENT (mus.) 1–82
ACCOMPlice (law) 1–83
ACCORAMBONI, Vittoria (It. lady) 1–83
ACCORD AND SATISFACTION (law) 1–83
Accordion (card game) 25–201
ACCORDION (mus.) 1–83
 Concertina 7–502
Accountant of the navy (U.S.) 20–33
ACCOUNTING AND BOOKKEEPING 1–84
 Amortization 1–752
 Auditor 2–676
 Babylonia 3–11
 Book Value 4–248
 Business Careers 5–43
 Business Education 5–49, 50
 Calculating Machine 5–162
 Career Planning 5–643; 1–92
 Cash Flow 5–760
 Data Processing 8–517, 518
 Depreciation 8–746
 Goodwill 13–79
 Income 14–846
Accounts, Bureau of (U.S.) 27–49
Accounts payable (fin.) 8–517
Accounts receivable (fin.) 8–167
 Data Processing 8–517
 Factoring 10–827
ACCRA, Ghana 1–98; 12–715, 716
 Library 17–323
Illus. 17–LIBRARY
Accreditation (dipl.) 9–143, 149
Accreditation (hospitals) 14–438
ACCREDITATION OF SCHOOLS AND COLLEGES 1–98; 7–247; 9–690
 Business Education 5–50, 51
 Curriculum 8–342
 Junior and Community Colleges 16–225
 Medical Education 18–613
Accrediting Commission for Business Schools 5–52
Accrual accounting 1–90
Accrued interest (fin.) 3–202
Acculturation (sociol.) 8–317
 Folklore 11–498r
ACCUMULATOR (mech.) 1–99
Accuracy (meas.) 18–584
Accusation (law) 15–66
ACCUSATIVE (gram.) 1–99; 5–756
 Greek 13–437
 Inflection 15–158
 Latin 16–789, 790
Accusatory criminal procedure (law) 17–71
Accutron; see Electronic clocks and watches
ACD solution (anticoagulant) 4–96
Ace, paint. (Rauschenberg):
Illus. 21–258
Ach, Indon.; see Atjeh
Achene (Asian people); see Achinese
Acephala (mollusk); see Pelecypoda
Acer (bot.); see Maple
ACESTES (Gr. myth.) 1–39
Acetabulum (anat.) 14–215; 21–617; 24–887
Acetal resin 22–216, 219
ACETALDEHYDE (chem.) 1–99, 521; 21–411
Acetamide (chem.) 1–741
Acetaminophen (drug) 1–775
 Phenacetin 21–858
ACETANILIDE (drug) 1–99
ACETATES (chem.) 1–99
 See also Cellulose Acetate
ACETIC ACID 1–100, 107
 Acetates 1–99
 Bloch, K. E. 4–83
 Fermentation 11–111
 Photography 22–25
 Vinegar 28–134
ACETIN (chem.) 1–100
ACETOACETIC ESTER (chem.) 1–100; 6–384
 Tautomerism 26–315
Acetoin (chem.) 11–111
ACETONE (chem.) 1–100
 Alcohol 1–515
 Ketone 16–410
 Phenol 21–858
 Solution 25–210
Acetophenetidin (drug); see Phenacetin
Acetosellic acid (chem.) 21–156
Acetyl coenzyme A (biochem.) 3–760; 10–493
 Glycolysis 12–820
ACETYLCHOLINE (biochem.) 1–101
 Alzheimer's Disease 1–649
 Atropine 2–655
 Bronk, D. W. 4–595
 Dale, Sir H. H. 8–435
 Drug 9–407
 Hives 14–253
 Muscle 19–632
 Myasthenia Gravis 19–683
 Nervous System 20–107, 110
 Parkinson's Disease 21–463
ACETYLENE 1–101
 Calcium Carbide 5–159
 Carbide 5–620
 Carbon 5–623
 Gas 12–323
 Nieuwland, J. A. 20–328
Acetylene black (chem.) 5–624
Acetylides (chem.) 5–620
ACETYLMETHADOL (drug) 1–101
Acetylsalicylic acid (chem.); see Aspirin
ACEVEDO DIAZ, Eduardo (Uru. nov., pol.) 1–101
Acley deucey (game) 3–21
- Acha** (q. of Northumbria) 20–458c
Achad Ha-Am (Jew. philos.); see Ahad Ha-Am
ACHAEA, anc. reg., Gr. 1–101, 102; 13–365, 402
 Rome, Ancient 23–710
Achaea, Principality of (Gr. hist.) 1–101; 13–372
 Feudalism 11–141
Achaeans (lang.) 1–212
ACHAEAN LEAGUE (Gr. hist.) 1–102; 13–400, 402
 Argos 2–279
 Cleomenes 7–50
 Corinth 7–793
 Hellenistic Age 14–72
 Philopoemen 21–924
 Rome, Ancient 23–710
ACHEANS (Gr. people) 1–102
 Aegean Civilization 1–209, 212
 Asia Minor 2–511
 Greek Language 13–434
ACHAEMENIDS (Pers. dyn.) 1–102; 14–940; 15–377
 Afghanistan 1–253
 Armenia 2–332
 Artaxerxes 2–398
 Bactria 3–40
 Cambyses 5–260
 Cuneiform 8–325
 Cyrus the Great 8–387
 Darius 8–500
 Elam 10–109
 Pasargadae 21–502
 Persepolis 21–727
 Persia, Ancient 21–733
 Persian Art and Architecture 21–743
 Persian Language 21–752
 Russia 24–1
 Satrap 24–295
Map 21–733
ACHAN (Bib.) 1–102
Achard, Franz Karl (Ger. chem.) 25–850
Acharnians, The, play (Aristophanes) 2–286
ACHATES (Gr. legd. hero) 1–102
Achaz (k. of Judah); see Ahaz
Achdut Ha'avoda (Isr. pol. party) 15–534
Acheampong, Ignatius (Ghanaian sol. pol.) 12–719
Achebe, Chinua (Nig. nov.) 1–275; 20–337; 510g
ACHELOUS (Acheloos), riv., Gr. 1–102
 Ateloria 1–240
 Dam 8–449
Achelous (Gr. myth.) 1–102
Achene (fruit) 12–133
 Seed 24–516
ACHENWALL, Gottfried (Ger. econ.) 1–103
Achnerar (astron.) 10–547; 25–596
Acheron, riv., Gr. 1–103
ACHERON (myth. riv.) 1–103
Acheson, Archibald (Brit. col. gov.); see Gosford, 2d Earl of
ACHESON, Dean Gooderham (Amer. states.) 1–103; 9–145; 25–618
ACHESON, Edward Goodrich (Amer. inv.) 1–103
ACHEULIAN (archaeo.) 1–103; 2–207
 Africa 1–313
 Cave Dwellers 6–106
 Human Being 14–5451
 Stone Age 25–745, 746, 748
 Technology 26–358
Achievement (her.) 14–118
Illus. 14–116
Achievement behavior (psych.) 6–459
ACHIEVEMENT TEST (psych.) 1–104; 9–716, 717, 723
 Aptitude Test 2–130
 Colleges 7–252
 Curriculum 8–342
 educational tests 9–722
 Intelligence 15–245
 Reading 23–285
 Testing 26–529, 534
Illus.: examples 9–719
ACHILL, isl., Ire. 1–104
 Map 15–407
ACHILLES (Gr. legd. hero) 1–104; 13–419
 Agamemnon 1–328
 Ajax 1–433
 Hector 14–44
Iliad 14–756
 Patroclus 21–537