



ENCYCLOPEDIA AMERICANA

VOLUME 30

Index

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 © 1991 BY GROLIER INCORPORATED

COPYRIGHT © BY GROLIER INCORPORATED:

1990, 1989, 1988, 1987, 1986, 1985, 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 BY GROLIER INTERNATIONAL, INC.:

1991, 1990, 1989, 1988, 1987, 1986, 1985, 1984, 1983, 1982,
1981, 1980, 1979, 1978, 1977, 1976, 1975, 1974, 1973, 1972

COPYRIGHT © REPUBLIC OF CHINA BY GROLIER INTERNATIONAL, INC.:

1991, 1990, 1989, 1988, 1987, 1986, 1985, 1984, 1983, 1982,
1981, 1980, 1979, 1978, 1977, 1976, 1975, 1974, 1973, 1972

All rights reserved. No part of this book may be reproduced or transmitted in any form by any means electronic, mechanical, or otherwise, whether now or hereafter devised, including photocopying, recording, or by any information storage and retrieval system without express written prior permission from the publisher.

Library of Congress Cataloging in Publication Data

Main entry under title:

The Encyclopedia Americana—International Edition

p. cm.

“First published in 1829.”

Includes bibliographical references and index.

ISBN 0-7172-0122-8

1. Encyclopedias and dictionaries. I. Grolier Incorporated.

AE5.E333

1991

90-23041

031—dc20

CIP

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 sub-heads 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 (biol.) 26:324. *See also* Animal—Classification; Plant—Classification
TRANSPORTATION 27:20. *See also* Carriages; Motor transportation; Railroads; Roads and Highways

• ALPHABETIZATION AND ARRANGEMENT OF ENTRIES

The headings of the entries are arranged in alphabetical order by letter. Thus headings beginning with “New” as a separate word (such as New Canaan or New York) are interfiled with headings beginning with “New-” (such as Newark or Newburgh).

Inverted headings are alphabetized down to the punctuation mark. Then alphabetization is determined by the word or words following the punctuation mark.

Examples:

FILTER, Electric
FILTER, Mechanical
FILTER, Photographic

Abbreviations and abbreviated forms are treated as one word.

Examples:

ABBREVIATIONS
ABC POWERS
ABD AL-AZIZ IV

UFFIZI
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:

Inbreeding
INCA
In Cold Blood
IN MEMORIAM

Oestrus
OF HUMAN BONDAGE
OF MICE AND MEN
OMUTA
Ona
On First Principles

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:

MABINOIGION
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

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
MISTRIAL

Persons with the same surname and given name are alphabetized by nationality. If the nationality is also the same, they are alphabetized by occupation; if the occupation 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)

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 (The 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:

AMUNDSEN, Roald (Nor. expl.)
 1:768; 10:787
Illus. 2:33
 dirigible 10:787
Map(s)
 routes 2:ANTARCTICA; 2:ARC-
 TIC; 10:775

JET ENGINE (aero.) 16:47;
 23:602, 604
Illus. 10:ENGINE; 15:INTERNAL-
 COMBUSTION ENGINE

• 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

Example	Use	Style
19:376	Volume and page number	Volume number in boldface (heavy) type, followed by page number in lightface type
HINDUISM 14:207	Article title entry	Boldface type, all capital letters
BASKET 3:310 Africa 1:287 Pomo Indians 22:377 Weaving 28:553	Article title entry, followed by sub-heads for additional information.	Subheads in lightface type
Basque language 3:332	Entry on subject for which there is no article	Boldface type; initial letter only is capitalized
Duenna, The (comic opera, Sheridan) 24:704	Entry (by name) for book, periodical, work of art or music, ship, and others; not an article title entry	Boldface italic type
Illus. 28:VERMONT or Map(s) 17:LIBRARY	Reference to illustration or map on unnumbered page, giving volume number and name of article in which illustration or map can be found	Lightface capital and small capitals

Guide word → COLLISION RADIATION

Cross reference for additional material →

Illustrations on numbered pages →

Same last name, arranged by first name →

- Collision radiation (phys.). See Bremsstrahlung
Collision theory (astron.) 2:551
Earth 9:541
COLLODI, Carlo (It. au.) 7:259
Pinocchio 22:118
COLLODION (chem.) 7:260
Film, Photographic 11:206
Hyatt, J.W. 14:628
Photography 22:11
Pyroxylin 23:44
Collograph (print.) 22:600
COLLOID (chem.) 7:260. See also Emulsion
Brownian Movement 4:636
Electrophoresis 10:195
Graham, T. 13:147
Suspension 26:77
Ultramicroscope 27:352
X-Rays 29:617
Colloidal carbon (chem.) 7:261
Collophanite (min.) 2:88
COLLOQUIALISMS (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.
Miserables 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) 7:262; 10:443
Colman, George (Eng. dram., 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; 29:412; 29:413
COLNE (Eng.) 7:263
Colnett, James (Brit. nav. off.) 12:227
Coloane (isl., Macao) 18:4
COLOBUS MONKEY (zool.) 7:263
COLOGNE (Ger.) 7:264
art and architecture 12:544
Enamel 10:325
history 12:664
Newspaper 20:291
Illus.
cathedral 12:GERMANY
Severin Bridge 4:532
Cologne, Archbishop of 7:265; 7:821
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
COLOMB, Philip Howard (Brit. adm.) 7:265
COLOMBA (nov., Mérimée) 7:265; 18:726
COLOMB-BECHAR (Alg.) 7:265
Colorado River Aqueduct (Calif.) 2:140; 5:200; 7:332
Illus. 2:138
Map(s) 5:207

← Illustration on unnumbered page

← Main cross reference

← 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; Angolese
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; astronautics; astronomical
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
bldg. 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. Caucasasia; 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
cong. 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
Ecu. 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; empire
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

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
hier. 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
Ind.-Eur. Indo-European
Ind.O. Indian Ocean
Indon. Indonesia; Indonesian
indus. industry; industrialist
ins. insurance
inscr. inscription

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

J

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; Luxembourg

M

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

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
neurolog. 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
oceanog. oceanography; oceanographer; oceanographic
off. officer
offi. official
Okla. 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
paleog. 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

reserva. 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
symph. 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;
 Angstrom Unit
A-4 (rocket). *See* V-2
A-11 (airplane) 2:873
A-17 (airplane) 20:458b
AA (Eur. rivers) 1:2
Aa (geol.) 28:218
AAA. *See* Agricultural Adjust-
 ment Administration;
 American Automobile Asso-
 ciation
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 29:409-10
AACOBIS. *See* Australian Advso-
 ry Council on Bibliographi-
 cal Services
AAGESEN, Svend (Dan. hist.)
 1:3
Aahmas I (Egy. k.). *See* Ahmose
Aahmes (Egy. scribe). *See*
 Ahmes
AAKJAER, Jeppe (Dan. au.) 1:3
AALBORG (Alborg) (Den.) 1:3;
 8:708; 716
Aalesund (Nor.). *See* Alesund
AALST (Belg.) 1:3
AALTO, Alvar Henrik (Finn.
 arch.) 1:3; 19:307
 Finland 11:235
 Helsinki 14:78
Illus. 11:233; 19:307
A & P. *See* Atlantic & Pacific Tea
 Co., The Great
Aanklong (Indon. mus.) 15:84
AARAU (Switz.) 1:3
AARDVARK (zool.) 1:4; 27:366
AARDWOLF (zool.) 1:4; 5:689
AARE RIVER (Switz.) 1:4
 Bern 3:603
Map(s) 26:147
AARGAU (canton, Switz.) 1:4;
 26:156
Map(s) 26:147
AARHUS (Arhus) (Den.) 1:4;
 8:708; 716
Aarhus, University of (Den.)
 8:712
Aarne, Antti (Finn. folklorist)
 11:498t
Aarne-Thompson number (folk-
 tale classification) 11:498t
AARON (Bib. char.) 1:4
 Essene 10:593
 Golden Calf 13:28
 Moses 19:493
AARON, Henry Louis (Amer.
 athl.) 1:5; 3:299
Illus. 3:303
AARP. *See* American Associa-
 tion of Retired Persons
Aar River (Switz.). *See* Aare Riv-
 er
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 Associa-
 tion of University Profes-
 sors
AAUW. *See* American Associa-
 tion of University Women
Ab (Jew. mo.). *See* Av
- ABA**. *See* American Bankers As-
 sociation; American Bas-
 ketball 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.) 1:5-6; 2:294;
 5:161
Abad, Antonio (Philipp. writ.)
 21:906
ABADAN (Iran) 1:6; 15:371; 375-
 76; 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* Al-
 liance des Bakongo
ABALONE (mollusk) 1:7
ABANDONMENT (law) 1:7;
 15:238
 Desertion 9:12
 Divorce 9:210
ABARIS (Gr. legd. sage) 1:7
ABASCAL, José Fernando (Sp.
 sol.) 1:7
Abate, Nicolò dell' (It. paint.).
See Abbate, Nicolò dell'
ABATEMENT (law) 1:7
ABAUZIT, Firmin (Fr. schol.) 1:8
Abax (Gr. furn.) 12:186
Abay (riv., Eth.). *See* Blue Nile
Abaza (Caucasian people) 16:318
ABBADID (Arab dyn.) 1:8
Abbai (riv., Eth.). *See* Blue Nile
ABBA MARI (Fr. rabbi) 1:8
ABBAS (uncle of Mohammed)
 1:8
Abbas, Abu'l- (Abbasid caliph).
See Abu'l-Abbas al-Saffah
Abbas, Ferhat (Alg. pol.) 1:569;
 571
ABBAS I (Egy. pasha) 1:8; 10:15
ABBAS II (Pers. shah) 1:9-10;
 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 II (Egy. khedive) 1:8-9
 World War I 29:297
Abbas Effendi (Iranian rel. lead-
 er). *See* Abdul-Baha
ABBASID (Arab dyn.) 1:9; 2:146;
 149; 156; 19:77-78
 Abu'l-Abbas al-Saffah 1:58
 Arabia 2:162
 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 13:833-34
 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
Abbas Mahmud al-Aggad (Arab
 writ.). *See* Aqqad, Abbas
 Mahmud al-
Abbas the Great (Pers. shah).
See Abbas I
ABBATE, Nicolò dell' (It. paint.)
 1:10
 Fontainebleau 11:507; 809
Abbatini, 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 (rel. title) 1:11
ABBE, Cleveland (Amer. mete-
 orol.) 1:10
ABBE, Ernst (Ger. phys.) 1:11
 Anatomy 1:781
 Lens 17:213
 Zeiss, Carl 29:759
ABBE, Robert (Amer. surg.) 1:11
Abbe condenser (optics) 19:52
Abbedale (horse) 14:416
ABBESS (rel. title) 1:11
ABBEVILLE (Fr.) 1:11
ABBEVILLE (La.) 1:11
ABBEVILLE (S.C.) 1:11
ABBEVILLIAN (Chellean) (ar-
 chaeol.) 1:11; 2:207
 Acheulian 1:102
 Stone Age 25:745; 748
ABBEY (rel.) 1:12
ABBEY, Edwin Austin (Amer.
 art.) 1:12
ABBEY, Henry Eugene (Amer.
 operatic mgr.) 1:12;
 18:799-800
Abbey nullius (R.C. community)
 6:45
ABBEY THEATRE (Dublin, Ire.)
 1:13; 15:422
 Fay, William George and
 Frank J. 11:60
 Gregory, Lady 13:475
 Little Theater 17:601
 O'Casey, Sean 20:605
 Repertory Theater 23:409
 Robinson, Lennox 23:580
 Yeats, William Butler 29:659
ABBOT (rel. title) 1:14
 Abbey 1:12
 Benedictines 3:542
 Celtic Church 6:143
 Ring 23:531
ABBOT, Benjamin (Amer. educ.)
 1:13
ABBOT, Charles Greeley (Amer.
 astrophys.) 1:13
ABBOT, George (Eng. archbp.)
 1:14; 13:311
Abbot Academy (Mass.) 1:819
Abbot of Unreason (title) 19:226
ABBOTSFORD HOUSE (Rox-
 burghshire, 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 Cald-
 well (Can. states.) 1:15
ABBOTT, Lyman (Amer. cler.)
 1:15
ABBOTT, Wilbur Cortez (Amer.
 educ.) 1:15
Abbott and Costello (Amer. co-
 medians) 19:527
ABBREVIATIONS 1:16. *See also*
 Symbol
- Acronym 1:120
 Paleography 21:296
 Shorthand 24:758
Abbud (Abbound), Ibrahim (Sud.
 gen.) 25:842
ABC. *See* American Broadcast-
 ing Company
ABC-1 (Brit.-U.S. conversations,
 1941) 29:395
ABC art. *See* Minimal Art
ABC islands (Neth.Ant.) 20:128f
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
Abdali (Pathan tribe) 10:500
Abd al-Karim (Arab leader). *See*
 Abd el-Krim
ABDALLAH (f. of Mohammed)
 1:26; 19:315
Abdallah (Timurid r.) 26:767
Abdallah, Ahmed (Comoros
 pres.) 7:454
Abd Allah (Sud. rel. leader). *See*
 Khalifa, The
Abd Allah Ibn Yasin (Mus. lead-
 er). *See* Ibn Yasin, Abd Allah
ABDALLAH IBN ZUBAIR (Mus.
 caliph) 1:26
ABDALLAH (Iraqi phy.) 1:27
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-Muttalib (grandfather of
 Mohammed) 19:315
Abd al-Quadir al-Jilani (Islamic
 leader). *See* Jilani, al-
ABD AL-RAHMAN (Arab-Islamic
 name) 1:25. *See also* Abd
 ar-Rahman; Abdur Rah-
 man Khan
Abd al-Rahman (Sud. rel. leader)
 18:118
ABDALWADID (Mus. dyn.) 1:27
ABD AR-RAHMAN (Mus. emir of
 Andalusia) 1:26
ABD AR-RAHMAN I (Mus. emir
 of Córdoba) 1:25
 Abbasid 1:9
 Spain 25:410
ABD AR-RAHMAN III (Mus. ca-
 liph of Córdoba) 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
ABDERA (anc. city, Gr.) 1:27
ABDICATION (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) 1:27-28. *See*
also Kidnapping
**ABDUCTION FROM THE SERA-
 GLIO** (*Entführung aus dem
 Serail*) (opera, Mozart) 1:28;
 20:766

ABDUL-AZIZ (Turk. sultan) 1:28
ABDUL-BAHA (Iranian rel. leader) 1:28
 Babism 3:7
 Bahai Faith 3:54
 Bahá'u'lláh 3:57
Abdul Gaffar Khan (Mus. leader) 14:955
ABDUL-HAMID I (Turk. sultan) 1:28
ABDUL-HAMID II (Turk. sultan) 1:28-29; 27:267-68
 Armenia 2:333
 Istanbul, University of 15:550
 Pan-Islamism 21:360
Abdullah, Amir (Iraqi regent) 15:397
ABDUL-JABBAR, Kareem (Amer. athl.) 1:29-30; 3:328
 Giant 12:727
Illus. 3:328
Abdul Kerim Pasha (Turk. sol.) 29:294, 300
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
Abdul-Malik II (Samanid r.) 24:175
ABDUL-MEJID I (Turk. sultan) 1:30
Abdul-Mejid II (Turk. caliph) 27:270
Abdul Rahman, Sheikh Mohammed (Zanz. pol.) 29:749
ABDUL RAHMAN, Tunku (Malay. states.) 1:30; 18:165
Abdul Wahhab (Arab. rel. leader) 20:85
ABDUR RAHMAN KHAN (Afg. amir) 1:31
 Afghanistan 1:254
 India 14:952
Abé (Afr. people) 15:628
Abéché (Chad) 6:214; 28:252
A Becket, Saint Thomas (Eng. ecccl.). See Becket, Saint Thomas a
A BECKETT (Eng. lit. fam.) 1:31
A Beckett, Arthur William (Eng. writ.) 1:31
A Beckett, Gilbert Abbott (Eng. au.) 1:31
A Beckett, Gilbert Arthur (Eng. dram.) 1:31
Abednego (Bib. char.) 8:482
Song of the Three Young Men 25:222
Abe Kobo (Jap. au.) 15:800
ABEL (Bib. char.) 1:32; 5:143
 Adam and Eve 1:134
Abel, Sir Frederick Augustus (Eng. chem.) 7:787
ABEL, John Jacob (Amer. phys., chem.) 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
ABELARD, Peter (Fr. philos.) 1:33; 21:934
 Atonement 2:652
 Autobiography 2:803
 Champeaux, William of 6:264
 Latin 16:798
 Scholasticism 24:368
 Universals 27:776
Abele (tree). See White poplar
Abelian groups (math.) 13:515-16
ABE LINCOLN IN ILLINOIS (play. Sherwood) 1:31
ABELL, Kjeld (Dan. dram.) 1:34
Abelson, Philip Hauge (Amer. phys.) 27:28
Abenaki (Amerind). See Abnaki Indians
Abenteuerliche Simplicissimus, Der (nov., Grimmelshausen). See *Simplicissimus*
Abeokuta (city-state, Afr.) 20:338-39
Aberconway (Wales). See Conway
Abercrombie (N.Dak.) *Illus.*

Norwegian folk dancing 20:442
ABERCROMBIE, Lascelles (Eng. poet, crit.) 1:34
Abercrombie, Michael (Eng. biol.) 8:391
ABERCROMBIE, 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 (co., Scot.) 1:35
 Balmoral Castle 3:122
ABERDEEN (Md.) 1:35
ABERDEEN (Miss.) 1:35
ABERDEEN (Scott.) 1:36
ABERDEEN (S.Dak.) 1:37
ABERDEEN (Wash.) 1:37
ABERDEEN, 4th Earl of (George Hamilton Gordon) (Brit. states.) 1:35
 Crimean War 8:205
 Victoria 28:87
ABERDEEN, University of (Scot.) 1:37
Aberdeen and Temair, Marchioness of (Brit. sociol.) 1:37
ABERDEEN AND TEMAIR, 1st Marquess of (John Campbell Gordon) (Brit. states.) 1:37
Aberdeen-Angus cattle 6:68
Illus. 6:66, 74; 26:479
ABERDEEN PROVING GROUND (Md.) 1:37
 Ballistics 3:111
Map(s) 18:408
Aberdeen terrier (dog). See Scottish Terrier
Aberfan (Wales) 9:163
Abergeldie Castle (Scot.) 3:122
ABERHART, William (Can. pol.) 1:37, 501; 5:500
 Social Credit Party 25:127
Abernathy, Ralph D. (Amer. civil rights leader) 6:779
 Southern Christian Leadership Conference 25:343
ABERRATION, Optical 1:38. See also Chromatic aberrations
 Eyeglasses 10:818
 Lens 17:215
 Microscope 19:51
 Telescope 26:414
ABERRATION OF LIGHT (astron.) 1:38; 2:571, 584; 17:452
 Bradley, James 4:403
Aber Tawe (Wales). See Swansea
ABERYSTWYTH (Wales) 1:39
 Cardiganshire 5:634
Abhidharma (Buddhist canon) 4:693
Abhijñāśakuntala (drama, Kālidāsa). See *Sakuntalā*
ABHORRERS (Eng. hist.) 1:39
 Tory 26:870
Abia (Abiam) (Bib.). See Abijah
Abib (Jew. month). See Aviv
ABIDJAN (Iv.Cst.) 1:39; 15:630
Illus. 15:628
 housing 14:491
 market 15:629
 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
Ab-i-Istada, Lake (Afg.) 1:247
ABIJAH (Bib.) 1:39
ABILA (one of Pillars of Hercules) 1:39
 Ceuta 6:207
ABILENE (Kans.) 1:39
 Chisholm Trail 6:608
 McCoy, Joseph Geating 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 9:721-22
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(s) 5:319
Abitibi region (P.Q., Can.) 23:64
Abitibi River (Ont., Can.) 1:40
Map(s) 5:319; 20:748
Abitur (Ger. educ.) 12:628
Abjuration, Act of (Neth. 1581) 25:553
Abkhaz (Eur. people) 1:41
 Caucasus 6:87
Abkhaz-Adigeh group of languages 6:84
ABKHAZ AUTONOMOUS SOVIET SOCIALIST REPUBLIC 1:41
 Georgian SSR 12:553
Map(s) 27:410, 412
ABLAUTIVE (gram.) 1:41; 5:756
 Greek 13:437
 Latin 16:789-90
Abiulative absolute (gram.) 1:41
ABLAUT (ling.) 1:41; 10:647-48
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 (mil.). See Antibalistic missile systems
ABNAKI INDIANS 1:41, 574
 Maine 18:141
 New Hampshire 20:184-85
 Passamaquoddy Indians 21:509
 Pennacook Indians 21:637
 Penobscot Indians 21:668
Abner (Bib.)
 David 8:526
 Joab 16:95
ABNEY, Sir William de Wiveleslie (Eng. phys.) 1:42
Abo (Fin.). See Turku
Abom (elec. unit) 20:673
Abolition Grove (park, Abington, Mass.) 1:40
ABOLITIONISTS 1:42; 4:28c; 27:731
 Andrew, John Albion 1:825
 Ashley, James Mitchell 2:437
 Bailey, Gamaliel 3:61
 Beecher, Henry Ward 3:450
 Benezet, Anthony 3:546
 Birney, James Gillespie 4:3
 Brown, John 4:628
 Civil War 6:784
 Coles, Edward 7:229
 Dana, Richard Henry, Jr. 8:463
 Douglass, Frederick 9:313
 Fee, John Gregg 11:82
 Foster, Abigail Kelley 11:642
 Foster, Stephen Symonds 11:643
 Free Soil Party 12:45
 Fugitive Slave Laws 12:150
 Gag Rules 12:223
 Garnet, Henry Highland 12:310
 Garrett, Thomas 12:313
 Garrison, William Lloyd 12:314
 Gibbons, Abigail Hopper 12:731
 Gibbons, James Sloan 12:732
 Giddings, Joshua Reed 12:737
 Green, Beriah 13:444
 Grimké sisters 13:495
 Grinnell, Josiah Bushnell 13:499
 Julian, George Washington 16:214
Liberator, The 17:297
 Liberty Party 17:305
 Loring, Ellis Gray 17:746
 Lovejoy, Elijah Parish 17:809
 Lovejoy, Owen 17:809
 Lundy, Benjamin 17:852
 Massachusetts 18:472
 Mott, Lucretia 19:563
 Phillips, Wendell 21:922
 Protestantism 22:691
 Quakers 12:93
 Sanborn, Franklin Benjamin 24:216

Sharp, Granville 24:673
 Smith, Gerrit 25:57
 Stanton, Henry Brewster 25:593
 Sumner, Charles 26:8
 Tappan, Arthur 26:290
 Tappan, Lewis 26:290
 Torrey, Charles Turner 26:864
 Tubman, Harriet 27:203
 Underground Railroad 27:359
 Walker, David 28:285
 Whittier, John Greenleaf 27:738
 Woolman, John 29:164
Abomasum (anat.) 6:79
Abomey (Benin) 3:550a, 550c
ABOMINABLE SNOWMAN (monster) 1:43
Aboriginal Land Rights Act (Aust., 1976) 2:756
ABORIGINES (anthro.) 1:43
 Aetas 21:897
 Ainu 1:368
 Australian. See Australian Aborigines
 Bushman 5:43
 Jomo of Japan 15:814
 Kaoshan 26:233
ABORTION (med., law) 1:43
 Birth Control 4:4-5
 chromosomal abnormalities 12:410
 Czechoslovakia 8:401
 Eugenics 10:657
 Great Britain 13:225
 Legal Medicine 17:167
 Mental Retardation 18:706
 miscarriage 22:541
 Poland 22:308
 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 29:110-11
Abortion, Infectious (vet. med.). See Brucellosis
ABO system (med.) 4:94
Aboukir (Egy.). See Abukir
Abovian, Khachatur (Arm. nov.) 2:336
ABRAHAM (Bib. patriarch) 1:46; 3:682; 12:391-92; 18:601
 Arabia 2:159
 Isaac 15:481
 Ishmael 15:489
 Lot 17:758
 Melchizedek 18:667
Abraham, Edward P. (Brit. biochem.) 2:54
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
ABRAHAMITES (rel. sects) 1:47
Abraham Lincoln (play, Drinkwater) 9:398
Abraham Lincoln: A History (bk., Hay and Nicolai) 13:889
Abraham Lincoln Birthplace National Historic Site (Ky.) 16:388; 19:778
Illus. 16:391
Map(s) 16:380
Abraham of Antioch (Syr. theol.) 1:47
Abrahams, Peter (S.Afr. au.) 1:294
Abrahams, Roger (Amer. folklorist) 11:498t, 499
Abram (Bib. patriarch). See Abraham
Abramov, Fyodor (Russ. writ.) 24:30m
Abrams, Creighton W. (Amer. gen.) 28:112f
Abrams v. United States (U.S. case) 6:162
 Holmes, Oliver Wendell, 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 13:497-98
 industrial diamond 9:59
 Metal Finishing 18:762
 Metalworking 18:35 fol., 769
 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 Capistrano de (Braz. hist.) 1:49
Abrikosov, A. A. (Russ. phys.) 26:31
Abrittus, Battle of (251 A.D.) 23:732
ABROGATION (law) 1:49
Abron (Afr. people) 15:628
ABRUZZI (reg., It.) 1:50; 2:91
Map(s) 15:ITALY
ABRUZZI, Duke of the (It. nav. off., expl.) 1:50; 2:246
Abruzzo, Ben (Amer. balloonist) 3:116
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
ABSALON (Dan. bp.) 1:51; 8:722
Canute VI 5:539
Valdemar I 27:857
Absaroka Range (mts., Mont.-Wyo.) 23:619; 29:577, 666
Illus. 19:393; 23:618
Map(s) 19:398; 29:WYOMING
ABSCISS (med.) 1:51
 Boil 4:147
 Carbuncle 5:630
 Fistula 11:336
 Gum 13:602
 Pneumonia 22:269
 Quinsy 23:102
Abscissic acid (biochem.) 22:207
Abscisin (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
Absentee Shawnee Indians 24:678
ABSENTEE VOTING 1:52; 10:120
 Ballot 3:118
ABSIL, Jean (Belg. mus.) 1:52; 3:497
ABSINTHE (liquor) 1:52
 Wormwood 29:535
Absinthe Drinker, The (paint., Manet) 18:228
ABSOLUTE (philos.), 1:53. *See also* Ultimate
 Bosanquet, B. 4:292
ABSOLUTE, Sir Anthony (lit. char.) 1:52
Absolute CGS-emu system (meas.) 18:592
Absolute dating (sci.). *See* Chronometric dating
Absolute idealism (philos.) 14:741
 Pantheism 21:363
 Royce, Josiah 23:822
 Russell, Bertrand Arthur Wil-
 lam 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;
 22:146
Absolute pragmatism (philos.) 23:822
Absolute scale (phys.). *See* Kel-
 vin scale; Rankine scale
ABSOLUTE ZERO 1:54
 comparison of scales 14:15
 Cryogenics 8:274
 Heat 14:17
 Temperature 26:454-55
 Thermodynamics 26:651-52

Zero 29:770
 Zero-Point Energy 29:771
ABSOLUTION (ecc.) 1:54; 21:621
 Confession 7:534
 Indulgence 15:102
ABSOLUTISM (pol. sci.) 1:54
 Augustus 2:690
 Autocracy 2:804
 Bodin, Jean 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 23:331-32
Absorbent papers 21:382
ABSORPTION (chem., phys.) 1:55
 Astrophysics 2:590
 Atmosphere 2:629
 Dye 9:508-9
 Electromagnetic Radiation 10:158-59
 Laser 16:773
 Light 17:441
 Magnetic Resonance 18:105
 Maser 18:422
 neutron radiation 23:140
 Polarized Light 22:326
 Refrigeration 23:330-31, 334
 Ultraviolet Radiation 27:353c
 X-Rays 29:605, 610, 621
Absorption (physiol.) 9:115
 Drug 9:408-9
 Metabolism 18:749
Absorption lines (phys.) 2:576,
 582, 584
 Quasar 23:60-61
Absorption spectroscopy 6:366;
 25:468, 472
ABS plastics. *See* Acrylonitrile-
 butadiene-styrene plastics
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
 United States 27:587
 USSR 27:430c
ABSTRACT EXPRESSIONISM
 (art) 1:56; 19:305
 Cubism 8:308
 De Kooning, Willem 8:646
 Gorky, Arshile 13:92
 Israel 15:526
 Johns, Jasper 16:123
 Kline, Franz 16:500
 Motherwell, Robert 19:502
 Painting 21:258
 Pollock, Jackson 22:358
 Romanticism 23:678
 Rothko, Mark 23:804
 United States 23:89; 27:591
Abstract impressionism (art) 27:591
ABSTRACTION (philos.) 1:57
 Bergson, Henri 3:581
 Concept 7:500
 Concrete 7:516
 Hegel, Georg Wilhelm Fried-
 rich 14:50
 Mathematics 18:494
 Nominalism 20:404
 Symbol 26:166
ABSTRACT OF TITLE (law) 1:57
Abstracts (biblog.) 3:723
Abstract spaces, Theory of
 (geom.) 12:479
Abstract typefaces 4:236
ABSDUR (philos.) 1:57. *See also*
 Theater of the Absurd
 Paradox 21:399
Absyrtus (myth) 2:279
Abt Vogler (Ger. mus.). *See* Vo-
 gler, Georg Joseph
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
Abubacer (Mus. phys., philos.).
See Ibn Tufayl
ABU BAKR (Islamic caliph) 1:58;
 2:145; 21:305
 Caliphate 5:218
 Hegira 14:52
 Mohammed 19:315
 Umar I 27:353c
Abu Bakr (Mus. phys., philos.).
See Ibn Tufayl
ABU DHABI (emirate, UAE) 1:58;
 2:159, 161; 27:439
 Petroleum 21:832, 837
Abu Habba (Iraq). *See* Sippar
Abu Hanifa (Mus. theol.) 15:500
 Anan ben David 1:776
Abuja (Nig.) 20:341
ABUKIR (Egy.) 1:58
 Canopus 5:567
 Napoleon I 19:730
 Nelson, Horatio 20:86
ABU'L-ABBAS AL-SAFFAH (Ab-
 basid caliph) 1:9, 58;
 2:146; 10:88
Abu Lahab (u. of Mohammed) 15:493
Abu'l-Faraj (Pers. au.). *See* Isfa-
 hani, al-
Abu'l-Faraj Ibn al-Ibri (Syr.
 schol.). *See* Bar-Hebraeus,
 Gregorius
Abul Kasim al-Zahravi (Arab
 phys.) 8:733
Abu'l-Khair (Uzbek r.) 27:849
**Abu Mashar Jafar Ibn Muham-
 mad** (Arab. astron.). *See*
 Albumazar
Abu Muslim al-Khurasani (Pers.
 gen.) 1:9; 2:146; 10:88;
 18:265
Abundance (econ.) 9:596
 United States 27:481, 541
Abū Nuwās (Arab poet) 2:154
Aburē (Afr. people) 15:628
Abu Said (Timurid r.) 26:767
ABU SIMBEL (Egy.) 1:58; 23:247
 Temple 10:28, 54b, 64;
 26:460, 463
Illus. 10:29, 64
Abusir (Egy.) 10:23; 23:35, 38
Abu Sulayman al-Sijistani (Arab
 philos.) 2:157
Abu Talib (u. of Mohammed) 15:492; 19:315
Abu-Tammam (Arab poet) 2:154
 Hamasa 13:733
Abutilon (bot.). *See* Flowering
 Maple
Abu Yusuf Yaqub al-Kindi (Arab.
 philos., sci.). *See* Kindi,
 Abu Yusuf Yaqub al-
ABYDOS (Asia M.) 1:65
ABYDOS (anc. city, Egy.) 1:65;
 10:21, 27, 44, 54b; 23:35
 Osiris 21:106
Map(s) 10:EGYPT
Abyla (one of Pillars of Hercules).
See Abila
ABYSSAL ANIMALS (biol.) 1:65
Abyssal deposits (Pelagic depos-
 its) (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, 801, 805
Abyssinian Church. *See* Ethio-
 pia, Orthodox Church of
Abyssinian wild ass (zool.) 2:520
A.C. *See* Alternating current
Ac (chem.). *See* Actinium
ACACIA (bot.) 1:65; 2:709
 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 Constanti-
 nople) 11:87
 Hormisdas, St. 14:379
**Academic American Encyclope-
 dia** 10:333
ACADEMIC ART 1:66; 19:295
 Besnard, Paul Albert 3:623
 Painting 21:248
Academic costume. *See* Cos-
 tume, Academic
Academic degrees. *See* Degree
 (educ.)

Academic Festival Overture
 (comp., Brahms) 4:416
ACADEMIC FREEDOM 1:66
 higher education 9:692
 United States 27:549
Academic Philosophy Circle (Zu-
 rich, 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) 15:225-26
 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.) 21:452-53
Académie Royale des Sciences
 (Fr.). *See* Académie des
 Sciences
Academy (educ.) 9:737
ACADEMY (learned societies)
 1:69; 24:387. *See also*
 Académie—; Academia—;
 Akademie; individual
 names and entries begin-
 ning with Academy—
 Italy 15:606
 United States 9:679; 27:545
Academy (philos. school, Ath-
 ens, 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 pic-
 tures) 1:71-73
Academy of Arts, The Royal
 (London, Eng.). *See* Royal
 Academy of Arts
Academy of Arts and Sciences,
American. *See* American
 Academy of Arts and Sci-
 ences
Academy of France at Rome.
See Académie de France à
 Rome
Academy of Medical Sciences
 (USSR) 27:419
**Academy of Motion Picture Arts
 and Sciences** 1:71
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 Poli-
 tical and Social Science
Academy of Science (Austri.)
Illus. 5:527
**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; 27:419-20
Academy of Sciences, National
 (Washington, D.C.). *See*
 National Academy of Sci-
 ences
**Academy of Television Arts and
 Sciences.** *See* National
 Academy of Television Arts
 and Sciences
ACADIA (former Fr. terr.,
 N.Amer.) 1:74; 20:155,
 499-500. *See also* Nova
 Scotia
 exploration 5:459
 geography 5:340
 history 5:458, 462-63, 466-67

ACADIA (cont.)

La Tour, Charles de Saint-Etienne de 1752
people 5:466, 470
Protestant Church 5:416
Acadiana (area, La.) 16:661
ACADIA NATIONAL PARK (Me.) 1:75
Bar Harbor 3:214
Mount Desert Island 19:566
Map(s) 1:76; 18:134
Acadian Forest (Can.) 5:340
Acadian Oology (geol.) 9:39
Acadian refugees 1:74; 20:500
Cajuns 5:149
Lafayette, La. 16:661
Louisiana 17:788
Acadie (former Fr. terr., N.Amer.). See **Acadia**
Acajutla (El Salv.) 10:261
Acala (cotton) 8:74
Alcalulla (med.) 2:92
Acamapichtil (Aztec k.) 2:894
ACANTHOCEPHALA (zool.) 1:77, 866
Embryology 10:285
Nematelminthes 20:90
Illus. 1:867
Acanthodil (fish) 11:290, 306
ACANTHUS (bot.) 1:77
A CAPPELLA (mus.) 1:77
ACAPULCO (Mex.) 1:77; 18:841
fire 9:162
Illus. 18:821
ACARINA (zool.) 1:78
ACARNANIA (reg., Gr.) 1:78; 13:365
Accad (reg., Mesop.). See **Akkad**
Accademia dei Lincei (It.). See **Lincei**
Accademia della Crusca (It. acad.) 1:69; 15:612
Dictionary 9:88
Accademia Museum (Florence, It.) 1:1419
Accademia Platonica (It. acad.) 1:69
Accademia Pontaniana (It. acad.) 1:69; 15:606
Accadian (lang.). See **Akkadian**
Acceleration (educ.) 9:695
ACCELERATION (phys.) 1:79; 22:51-52. See also **Velocity**
Accelerometer 1:79
astronauts 25:365
Automobile 2:841-42f
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 18:604-5
meter per meter per second 18:586
Motion 19:502 fol.
Space Exploration 25:355
X-Rays 29:601
Accelerator (auto.) 2:835, 842g
Accelerator (sci. device). See **Particle Accelerator**
Accelerator pump (auto.) 2:835
Accelerograph (instru.) 1:79
ACCELEROMETER (instru.) 1:79
Airplane 1:426
Automatic Pilot 2:806
Guidance Systems 13:566
Accent (period.) 17:599
ACCENT (phonetics, ling.) 1:80; 17:528
Diacritical Marks 9:53
English Language 10:418, 420
Accentors (birds). See **Hedge Sparrow**
Acceptance (fin.) 3:170-71, 202
Acceptance houses (fin.) 3:193
ACCESSION (internat. law) 1:80
Accessional teeth (dent.) 26:380
ACCESSORY (law) 1:80; 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 **Acre**
Accl (Sp.). See **Guadix**
Acciajuoli (It. fam.) 3:173
ACCIDENT (law) 1:80
Legal Medicine 17:166-67
tort 17:78
Accident (philos.)

Invention 15:327
Transubstantiation 27:27
Accidentals (mus.)
Chromaticism 6:672
Accident insurance
Fringe Benefits 12:98
Health Insurance 13:912
Industrial Injuries 13:252
Legal Medicine 17:167
Liability and Property Insurance 17:287
Social Security 25:136
Accidents. See also **Disasters**
airplane 1:395; 2:875; 9:163
Alcoholism 1:516-17
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 reactors 20:511s, 511u
poisoning 22:292
railroad 9:165
Smoking and Health 25:72
Tort 26:865
Tunnel 27:226, 231-32
Acción Democrática (AD) (Venez. pol. party) 27:954, 957-58
ACCIPITER (bird) 1:81
Falconry 10:852
Hawks 13:882
ACCIUS, 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 **Acre** (hist. city, 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.) 1:82; 10:813
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 Education 5:49-50
Career Planning 1:92; 5:643
Cash Flow 5:760
Depreciation 8:746
Goodwill 13:79
Income 14:846
Spreadsheet 25:532
Accounts, Bureau of (U.S.) 27:49
Accounts receivable (fin.) 8:167
Factoring 10:827
ACCRA (Ghana) 1:98; 12:714-15
Library 17:323
Illus. 12:718; 17:LIBRARY
Accreditation (dipl.) 9:143, 149
Accreditation (hospitals) 14:438
ACCREDITATION OF SCHOOLS AND COLLEGES 1:98; 7:246; 9:690
Business Education 5:50-51
Curriculum 8:342
Junior and Community Colleges 16:225
Medical Education 18:612
Accrediting Commission for Business Schools 5:52
Accrual accounting 1:90
Accrued interest (fin.) 3:202

Acculturation (sociol.) 8:317
Folklore 11:498r
Accuracy (meas.) 18:584
Accusation (law) 15:66
ACCUSATIVE CASE (gram.) 1:98; 5:756
Greek 13:437
Inflection 15:158
Latin 16:789-90
Accusatory criminal procedure (law) 17:71
Accutron. See **Electronic clocks and watches**
ACD solution (anticoagulant) 4:96
Ace (paint., Rauschenberg) *Illus.* 21:258
Aceh (Atjeh) (Indon.) 15:84, 90; 25:337
Acehnese (Achinese) (Asian people) 15:79; 26:1-2
Acephala (mollusk). See **Pelecypoda**
Acer (bot.). See **Maple**
ACEROLA (bot.) 1:98
Acetoflame K (chem.) 26:125
Acetabulum (anat.) 14:215; 21:617; 24:887
ACETALDEHYDE (chem.) 1:99, 521; 21:411
ACETAL RESIN (chem.) 1:99; 22:216, 219
Acetamide (chem.) 1:741
ACETAMINOPHEN (drug) 1:99, 775
Arthritis 2:404
Phenacetin 21:858
ACETATE (chem.) 1:99. See also **Cellulose Acetate**
ACETIC ACID (chem.) 1:99
Acetaldehyde 1:99
Acetate 1:99
Bloch, Konrad Emil 4:83
Fermentation 11:111
Photography 22:25
Vinegar 28:134
Acetoacetic ester (chem.) 6:384
Tautomerism 26:315
Acetoin (chem.) 11:111
ACETONE (chem.) 1:99
Acetylene 1:101
Alcohol 1:515
Ketone 16:410
Phenol 21:858
Solution 25:210
Acetophenetidin (drug). See **Phenacetin**
Acetosellic acid (chem.) 21:156
ACETYLCHOLINE (biochem.) 1:100
Alzheimer's Disease 1:649
Atropine 2:655
Bronk, D. W. 4:595
Dale, Sir H. H. 8:435
Drug 9:407
Hives 14:252
Muscle 19:632
Myasthenia Gravis 19:683
Nervous System 20:107, 110
Parkinson's Disease 21:463
Acetyl coenzyme A (biochem.) 3:760; 10:493
Glycolysis 12:820
ACETYLENE (chem.) 1:100
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
Acetylsalicylic acid (chem.). See **Aspirin**
Acey 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; 13:365, 402
Achaeae League 1:101
Rome, Ancient 23:710
Achaea, Principality of (Gr. hist.) 1:101; 13:372
Feudalism 11:141
ACHAEMENIDS (Pers. dyn.) 1:101; 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(s) 21:733
Achaean Greek (lang.) 1:212
ACHAEAN LEAGUE (Gr. hist.) 1:101; 13:400, 402
Argos 2:279
Cleomenes 7:50
Corinth 7:793
Hellenistic Age 14:72
Philopoemen 21:924
Rome, Ancient 23:710
ACHAEANS (Gr. people) 1:101
Aegean Civilization 1:209, 212
Asia Minor 2:511
Greek Language 13:434
Achard, Franz Karl (Ger. chem.) 25:850
Acharnians, *The* (play, Aristophanes) 2:286
Achaz (k. of Judah). See **Ahaz**
Achdud ha-Avoda (Isr. pol. party) 15:534
Acheampong, Ignatius (Ghanaian sol., pol.) 12:718
ACHEBE, Chinua (Nig. nov.) 1:102, 293; 20:337d, 510g
Acheloo River (Gr.). See **Akhe-loos River**
Achene (fruit) 12:133
Seed 24:516
Achernar (astron.) 10:547; 25:596
ACHERON (myth. riv.) 1:102
Acheron River (Gr.) 1:102
Acheson, Archibald (Brit. col. gov.). See **Gosford, 2d Earl of**
ACHESON, Dean Gooderham (Amer. dipl., pub. off.) 1:102; 9:145; 25:618
ACHEULIAN (archaeol.) 1:102; 2:207
Africa 1:296
Cave Dwellers 6:106
Human Being 14:5451
Stone Age 25:745-46, 748
Technology 26:358
Achievement (her.) 14:118
Illus. 14:116
Achievement behavior (psych.) 6:459
ACHIEVEMENT TEST (educ.) 1:103; 9:716-17, 723
Aptitude Test 2:130
Curriculum 8:342
educational tests 9:722
Intelligence 15:245
Reading 23:285
Testing 26:529, 534
Illus.
examples 9:719
Achille Lauro (ship) 23:289d
Achilles (astron.) 2:550; 25:195
ACHILLES (Gr. legd. hero) 1:103; 13:419
Agamemnon 1:328
Ajax 1:433
Hector 14:44
IlIad 14:756
Patroclus 21:537
Peleus 21:610
Trojan War 27:134
Xanthus and Balisus 29:590
Achilles and the tortoise (philos.) 29:765
Achilles Painter (Gr. art.) 13:414; 21:227
ACHILLES TENDON (anat.) 1:104
Achin (prov., Indon.). See **Aech**
Achinese (Asian people). See **Achehnese**
Achkan (Indian garment) 9:391; 14:880
Acholi (Afr. people) 27:339
Achondrite (meteorite) 18:787
Achondroplasia (med.) 9:172, 506
Achroite (min.) 26:879
Achromatic color 7:311
Achromatic doublet (telescope) 26:414
Achromatic lens (optics) 17:213
Anatomy 1:781
Dolland, J. 9:260
Microscope 19:49
Observatory 20:601
Achromatic spindle (cytology) 11:131
Achromycin (drug) 26:538; 27:363
Acid leaching process (metal.)

Gold 13:17
Tin 26:769
Acid-mine drainage 19:176-77
ACIDOSIS AND ALKALOSIS (med.) 1:104
Diabetes Mellitus 9:53
Kidneys 16:431
Acid process (steel mfg.) 25:651, 663
ACID RAIN (meteorol.) 1:104, 392; 23:235; 28:536
Lake 16:676
marble corrosion 18:297
Acid rock (mus.) 23:597
Acid salt (chem.) 24:162
ACIDS AND BASES (chem.) 1:105; 3:289; 6:380
Acetic Acid 1:99
Alcohol 1:514
Amino Acids 1:742
Amphoteric Compounds 1:762
Anhydride 1:853
Aqua Regia 2:131
Boric Acid 4:275
Buffer 4:719
Carboxylic Acid 5:630
Citric Acid 6:747
Disinfectant 9:178
Dye 9:510-11
Ester 10:599
First Aid 11:270
Formic Acid 11:602
Glass 12:785
Hydrobromic Acid 14:639
Hydrochloric Acid 14:642
Hydrocyanic Acid 14:642
Hydronium Ion 14:661
Indicator 15:66
Kidneys 16:431
Lactic Acid 16:653
Lewis Acids and Bases 17:274
Nitrogen Compounds 20:382
Oxalic Acid 21:156
pH 21:844
Phenolphthalein 21:859
Phosphoric Acid 21:965
Phosphorus Compounds 21:967
Picric Acid 22:75
Poisonous Plants 22:295
Salicylic Acid 24:150
Salt 24:161
Soil 12:293; 25:179-80, 184, 186
Solution 25:208
Stearic Acid 25:648
Sulfuric Acid 25:870
Tannic Acid 26:266
Tartaric Acid 26:303
Wastewater 28:425
Water 28:433
Water Pollution 28:441c
Acinar cell (anat.) 1:354
Ackerman, Rudolph (Eng. publ.) 12:198
Ackermann aus Böhmen, Der (dialogue, von Tepl) 12:558
ACKNOWLEDGMENT (law) 1:109
Ackroyd-Stuart, Herbert (Eng. inv.) 15:281
Aclea, Battle of (851) 10:374
Acmeist literary movement (Russ.)
Akhmatova, A. 1:434
Gumilev, N. S. 13:603
Mandelstam, O. E. 18:225
Poetry 22:284
Acmite (min.) 23:43
ACNE (med.) 1:109; 22:105
Acne rosacea (med.). *See* Rosacea
Acoelomata (zool.) 1:860, 865
Illus. 29:533
Acoka (Indian r.). *See* Asoka
Acolyte (rel.) 14:312
ACOMA (pueblo, N.Mex.) 1:110
church 27:574
Acoma Indians 1:110
ACONCAGUA (mt., Arg.) 1:111, 811; 17:10; 25:286h
Mountaineering 19:587
Map(s) 2:ARGENTINA; 25:286e
ACONITE (bot.) 1:111
Delphinium 8:687
Aconite (drug) 1:111
Aconitic acid (chem.) 25:856
Aconitin (chem.) 1:111
Açores (Isls., Atl.O.). *See* Azores
Acorn (bot.) 20:580
Indian, American 15:8
Live Oak 17:606
Acorn barnacle (zool.) 3:249
Acorn worm (zool.) 14:81
Illus. 1:872
Acoustical board 21:383
Acoustical labyrinth enclosure (loudspeaker) 17:765

Acoustical recording (sound) 25:244, 252
Acoustic nerve. *See* Auditory Nerve
Acoustic phonetics 21:957
ACOUSTICS (phys.) 1:111-17.
See also Sound
Auditory Nerve 2:676
Decibel 8:587
Electroacoustics 10:150
Greek theater 26:607
Harmonics 13:802
Hearing 13:915
mammal communication 18:203
Noise Control 20:400
Sabine, W. C. 24:70
Sound 25:237
Soundproofing 25:259
Sound Recording and Reproduction 25:251
Voice 28:212
Whispering Gallery 28:712
White Noise 28:723
Acoustic suspension system (loudspeaker) 17:765; 25:251
Acqua Felice (Rom. aqueduct) 2:139
Acqua Marcia-Pia (Rom. aqueduct) 2:139
Acquarossa (anc. city, It.) 10:645
ACQUI (It.) 1:118
Acquired Immune Deficiency Syndrome (med.). *See* AIDS
Acquired ventricular septal defect (med.) 14:10
ACQUISITION (law) 1:118
ACQUITTAL (law) 1:118
ACRAEINAE (entom.) 1:118
Acragas (It.). *See* Agrigento
ACRANIA (zool.) 1:118
ACRE (hist. city, Isr.) 1:118
Arab Civilization 2:149
Bahai Faith 3:54
Crusades 8:266, 268
ACRE (meas.) 1:119
ACRE (state, Braz.) 1:118
history 4:172
Map(s) 4:456d
ACRE RIVER (Braz.-Peru) 1:119
Map(s) 4:457; 21:772
ACRIDINE (chem.) 1:120
Acridiflavine (drug) 1:120
Acrisus (Gr. myth.)
Perseus 21:728
Acrobat 26:926
Chinese theater 26:613
Acrocorinth (citadel, Gr.) 7:793
ACROLEIN (chem.) 1:120
ACROMEGALY (med.) 1:120
Giantism 12:728-29
Growth Hormone 13:527
Pituitary Gland 12:159
Tumor 27:216
ACRONYM 1:120
English Language 10:424
Acrophobia (psych.) 21:944
ACROPOLIS (fort. elevation, anc. Gr.) 1:121; 2:221; 13:392
archaeology 13:406
Athens 2:606-7; 13:371, 413
Castles 5:787
Cecrops 6:119
Dionysian theater 26:606
Erechtheum 10:544
Parthenon 21:480
Pergamum 21:701
Phidias 21:861
Propylaea 22:667
Illus. 2:221, 608; 13:360
Acrosome (embryol.) 10:281; 11:130
Across the River and into the Trees (nov., Hemingway) 14:82
ACROSTIC (lit. pattern) 1:121
Acrylic fibers (chem.) 11:152; 26:579
Dye 9:509, 511
Orlon 21:83
Acrylic resins 22:219
Acrylonitrile (chem.) 14:642
Cyanide 8:362
Orlon 21:83
Acrylonitrile-butadiene-styrene plastics 22:217, 219
ACS. *See* Chemical Society, American
ACT (educ.). *See* American College Testing Program
ACTA DIURNA (Rom. news.) 1:122; 16:183
ACTAEON (myth.) 1:122
Acta Sanctorum (hagiography, Bollandists) 4:175

Act Concerning Aliens (U.S., 1798) 1:579
Act for the Punishment of Certain Crimes (U.S., 1798). *See* Alien and Sedition Acts
ACTH (hormone) 1:122; 14:381
fol.
Adrenal Glands 1:181
Cushing's Syndrome 8:353
Epilepsy 10:509
Pituitary Gland 22:159
Actin (biochem.) 14:623
Cell 6:134, 136
Muscle 19:632-33
ACTING (dram.) 1:123; 9:333
fol., 342-43
career planning 1:126
China 6:585; 9:354-55
Clown 7:122
Commedia dell'arte 7:377
Costume, Theatrical 8:63
Directing 9:153
English drama 13:295
Ireland 15:422
Japanese theater 9:356; 15:787
Makeup 18:149
Method Acting 18:792
Mime 19:143
Motion Picture 19:51, 507
Stanislavsky 25:589
Theater 26:601, 604, 609 fol.
ACTINIDE SERIES (chem.) 1:127
Americium 1:736
Berkelium 3:588
Californium 5:217
Einsteinium 10:98
Mendelevium 18:687
Neptunium 20:102
Nobelium 20:396
Periodic Law 21:707
Plutonium 22:261
Protactinium 22:671
Transition Elements 27:12
Transuranic Elements 27:29
ACTINIUM (chem.) 1:127; 23:183
Atomic Nucleus 2:645
Protactinium 22:671
Actinolite (min.) 2:427
ACTINOMETER (chem., phot.) 1:127
Light Meter 17:458
ACTINOMYCETES (Actinomycetales) (bot.) 1:127; 3:31, 35
Antibiotics 2:54
ACTINOMYCETIN (antibiotic) 1:128
Actinomycin (antibiotic) 2:54
Tishler, M. 26:781
ACTINOMYCOSIS (disease) 1:127-28
Fungal Infection 12:177
Sulfonamide 25:864
Actinon (element) 1:369
Actinopoda (zool.) 22:698
Actinopterygii (ichth.) 11:290, 302, 306
Illus. 11:305
Actinozoa (zool.). *See* Anthozoa
ACTION (law) 1:128
Abatement 1:7
Defendant 8:627
Defense 8:627
Ex Parte 10:751
Summons 26:8
ACTION (U.S. agency) 21:567
Action and reaction, Law of (phys.) 19:504
Jet Engine 16:47
Action Committee for a United Europe 19:372
ACTION FRANCAISE (Fr. pol.) 1:129; 11:788, 792
Action painting (art) 1:56; 2:389; 21:258
Criticism 8:221
United States 27:591
ACTIUM, Battle of (31 B.C.) 1:129; 10:31
Antony, M. 2:81
Augustus 2:689
Cleopatra 7:52
Rome, Ancient 23:717
Activated charcoal 6:292
Activated-sludge process (wastewater treatment) 28:427
Activation analysis (phys.) 20:139
Activator (phosphor) 21:964
Active (Amer. sloop) 8:113
Active layer (permafrost) 21:715
Active voice (gram.) 28:212
Activity program (educ.) 8:344; 9:670-71
Act of—. *See* under the latter part of the name except for those listed below

ACT OF GOD 1:122
Act of Settlement (Eng., 1701) 27:631
Sophia 25:228
ACTON (Mass.) 1:130
ACTON (Ont., Can.) 1:130
ACTON, Sir John Francis Edward (Eng. advn.) 1:129
ACTON, 1st Baron (Eng. hist.) 1:129
ACTON VALE (P.Q., Can.) 1:130
Actors Equity of Canada 5:436
ACTORS STUDIO (theater workshop) 1:130
Method Acting 18:792
Strasberg, L. 25:770
Act Respecting Alien Enemies (U.S., 1798) 1:579
Acts of—. *See* under the latter part of name except for those below
ACTS OF THE APOSTLES (Bib.) 1:130; 3:702, 705-6, 709-11
Luke, Gospel According to Saint 17:842
Luke, Saint 17:841
Paul, Saint 21:542
Peter, Saint 21:801
Resurrection 23:447
Acts of the Apostles (tapestry, Raphael) 26:286b
Acts of Trade and Navigation (Gt. Brit.). *See* Navigation Acts
Actuary (ins.) 15:233, 237
Pension 21:672
ACUPUNCTURE (med.) 1:132
China 6:560
Dentistry 8:733
Folk Medicine 11:4981
Pain 21:202
Acutance (phot.) 11:207
Acute angle 9:53
Acute accent (geom.) 1:841; 12:480
Trigonometry 27:104
ACV. *See* Air Cushion Vehicle
Acyclovir (drug) 14:152
AD (Venez. pol. party). *See* Acción Democrática
ADA. *See* Americans for Democratic Action
ADA (Okla.) 1:132
ADA (storage ring) 21:494
Ada, or Ardor (nov., Nabokov) 20:511a
Adachi, Hatazo (Jap. gen.) 29:475
Adad (Babyl. god) 13:670
Adadnirari I (Assyr. k.) 2:536
Adadnirari II (Assyr. k.) 2:537
Adadnirari III (Assyr. k.) 2:538
Bible 3:675
ADAK (Isl., Alas.) 1:133, 528-29
Map(s) 1:ALASKA
ADALBERT (Ger. archbp.) 1:133
Baths 3:349
ADALBERT, Saint (Bohem. miss.) 1:133
Adalya (Turk.). *See* Antalya
Adam (Bib.). *See* Adam and Eve
ADAM (drug). *See* MDMA
ADAM, Adolphe Charles (Fr. comp.) 1:133
Giselle 12:766
Adam, Robert (Scot. arch.) 1:135; 10:410
Decorative Art 8:609
Goldwork and Silverwork 13:46
Regency Style 23:338
Adam, William (Scot. arch.) (1689-1748) 1:135
ADAM AND EVE (Bib.) 1:133
Calvinism 5:240
Lilith 17:478
Original Sin 21:75
Paradise Lost 21:398
Tree of Life 27:61
Adam-and-Eve (bot.). *See* Putty-root
Adam and Eve (engr., Durer) 9:490
Illus. 9:491
Adamaoua (Adamawa) (reg., Camer.-Nig.) 5:282; 20:335
Map(s) 5:283
Adamawa-Eastern languages 16:735
ADAM BEDE (nov., Eliot) 1:134; 10:237-38; 20:510h
ADAM DE LA HALLE (Fr. dram., poet) 1:135; 11:819; 27:161
music 11:830
ADAMIC, Louis (Yugos.-Amer. au.) 1:135

- ADAMITES** (rel. sects) 1:136
Adam le Roi (Fr. bard). See *Adenet le Roi*
- ADAMNAN, Saint** (Ir. monk) 1:136
Adam of Bremen (Ger. hist.) 24:333
- ADAMOV, Arthur** (Russ.-Fr. dram.) 1:136; 9:351
- ADAMS** (Amer. fam.) 1:136
 Quincy, Mass. 23:100
- ADAMS** (Mass.) 1:150
- ADAMS, Abigail** (wife of pres. John Adams) 1:137, 142
- ADAMS, Alvin** (Amer. indus.) 1:137
- Adams, Andy** (Amer. writ.) 26:555
- ADAMS, Ansel** (Amer. phot.) 1:138
 Landscape 16:711
Illus. 22:1
Winterstorm 1:138
- ADAMS, Brooks** (Amer. hist.) 1:138
- Adams, Charles Baker** (Amer. nat.) 1:137
- ADAMS, Charles Follen** (Amer. poet) 1:138
- ADAMS, Charles Francis** (Amer. dipl.) 1:136, 139
Trent Affair 27:86
- ADAMS, Charles Francis** (Amer. law., hist.) 1:139
Credit Mobilier of America 8:168
- ADAMS, Charles Kendall** (Amer. hist., educ.) 1:139
- ADAMS, Franklin Pierce** (Amer. jour.) 1:139
- ADAMS, George Burton** (Amer. hist.) 1:140
- Adams, Sir Grantley** (Barbados pol.) 3:219
- ADAMS, Hannah** (Amer. au.) 1:140
- ADAMS, Henry** (Amer. hist.) 1:140, 704; 14:235
Education of Henry Adams 9:741
- ADAMS, Henry Carter** (Amer. econ.) 1:141
- ADAMS, Herbert** (Amer. sculp.) 1:141
- ADAMS, Herbert Baxter** (Amer. hist.) 1:141
- ADAMS, Isaac** (Amer. inv.) 1:141; 22:604
- Adams, James** (Amer. showman) 24:765
- ADAMS, James Truslow** (Amer. hist.) 1:141
- ADAMS, John** (2d pres., U.S.) 1:136, 142; 22:560; 27:720-21
 Adams, Abigail 1:137
 American Revolution 1:733b, 733h
 Boston 4:306
 Braintree Resolutions 4:433
 Constitution 7:660
 Declaration of Independence 8:590
 Federalist Party 11:81
 Fisheries Question 11:322
 Franklin, Benjamin 12:12
 Government 13:130
 Great Seal of the United States 13:354
 Hamilton, A. 13:739
 Jefferson, Thomas 16:5
 Leonard, D. 17:227
 Marshall, J. 18:365
 Navy, United States 20:35a
 Political Parties 22:342
 Virginia and Kentucky Resolutions 28:168
 White House 28:719
 XYZ Correspondence 29:628
Illus. 1:733c; 27:721
 house 1:137
- ADAMS, John Couch** (Eng. astron.) 1:145
 Celestial Mechanics 6:126
 Gravitation 13:207
 Neptune 20:101
- ADAMS, John Quincy** (6th pres., U.S.) 1:136, 146; 27:729
 Amistad Case 1:745
 Clay, H. 7:34
 Gag Rules 12:223
 Ghent, Treaty of 12:722
 Jackson, A. 15:644
 Measures and Measuring Systems 18:594
 Monroe, J. 19:381
 Monroe Doctrine 19:385
- Oregon Question 21:55
Illus. 18:66
- ADAMS, Maude** (Amer. actress) 1:148
 Barrie, J. M. 3:269
- ADAMS, Mount** (N.H.) 1:150
Map(s) 20:179a
- ADAMS, Mount** (Wash.) 1:150; 28:398
Map(s) 28:WASHINGTON
- Adams, Nick** (lit. char.) 14:83
- ADAMS, Samuel** (Amer. patriot) 1:148
 American Revolution 1:733b
 Boston 4:306
 Circular Letters 6:735
 Revere, P. 23:454
Illus. 1:716
- ADAMS, Samuel Hopkins** (Amer. au.) 1:150
- ADAMS, Sherman** (Amer. pol.) 1:150; 10:105
- Adams, William** (Eng. navig.) Yokosuka 29:682
- ADAMS, William Taylor** (Amer. au.) 1:150
- Adams Act** (U.S., 1906) 1:350
- ADAM'S APPLE** (anat.) 1:150
 Larynx 16:768
- Adam's apple** (fruit). See *Ethrog*
- Adam's Bridge** (shoals, Sri Lanka) 25:550
Map(s) 25:550a
- Adamsite** (chem.) 6:366
- Adams National Historic Site** (Quincy, Mass.) 19:778; 23:100
Illus. 1:137
- ADAM'S NEEDLE** (bot.) 1:151
- Adams, Robert** (Scot. phot.) 22:11
Illus.
 port. of McCandlish sisters 22:11
- Adams, Onis** (1916) 23:222
- Adams-Onis Treaty** (U.S.-Sp., 1819). See *Transcontinental Treaty*
- Adams Papers, The** (Adams fam. documents) 1:148
- Adam's Peak** (mt., Sri Lanka) 25:550
Illus. 25:550g
Map(s) 25:550a
- Adams press** (print.) 1:141
- ADAM STYLE** (arch., design) 1:135; 10:410
 Architecture 2:232
 Ceiling 6:122
 Furniture 12:193
 House 14:467
- ADANA** (Turk.) 1:151; 27:250
- Adangme** (Afr. people) 12:715-16
- Adans le Roi** (Fr. bard). See *Adenet le Roi*
- ADAPTATION** (biol.) 1:151, 854
 Acclimatization 1:81
 Animal Behavior 1:875
 Aquatic Animals 2:134
 Bird 3:796-97
 Culture 8:318
 Darwin, Charles Robert 8:509
 fol.
 Desert 9:8
 desert plants 9:10
 Drought 9:402
 Ecology, Human 9:593
 Evolution 10:734, 739
 Fish 11:299
 Flight, Animal 11:401
 Genetics 12:400
 Human Being 14:545b
 Human Body 14:547
 Life 17:419
 Mammal 18:198, 205
 Parasites and Predators 21:420
 Primate 22:580
 Protective Coloration 22:671-72
 Race 23:121
 Senses and Sensation 24:559
 sexual reproduction 23:413
 Territory 26:522
- Adapted Colonial furniture style** 12:202-3
- Adaptive control** (Indus.) 18:38
- ADAR** (Jew. mo.) 1:152; 16:67
- Adare, Cape** (Antarc.) 2:30-31
Map(s) 2:ANTARCTICA
- Adari** (lang.) 10:624
- Adat** (Indon. customary law) 15:80, 86
- Adcock antenna** (electron.) 9:155
- ADD**. See *Long-Distance Flying Command*
- ADDAMS, Charles Samuel** (Amer. cartoonist) 1:152; 5:736, 738
Illus. 5:739
- ADDAMS, Jane** (Amer. soc. worker) 1:153; 27:550
 Philanthropy 21:875
 Settlement House 24:593
- ADDA** (animal) 1:153
- Addend** (math.) 1:555
- ADDER** (snake) 1:153; 8:570; 25:96; 28:144
Illus. 8:570
- ADDER'S-TONGUE** (flower) 1:154
- Addiction, Drug**. See *Drug Addiction and Abuse*
- Adding Machine, The** (play, Rice) 1:707
- Adding machines**
 Burroughs, W. S. 5:27
 Calculator 5:161
- ADDINGTON, Henry, 1st Viscount Sidmouth** (Eng. states.) 1:154; 13:322
- ADDINSELL, Richard Stuart** (Eng. comp.) 1:154
- ADDIS ABABA** (Eth.) 1:154; 10:621, 625
 World War II 29:449
Illus. 10:622
- ADDISON** (ill.) 1:157
- Addison, Christopher** (Brit. pub. off.) 13:332
- ADDISON, Joseph** (Eng. au.) 1:155; 10:441-42
 Cato 6:59
 Criticism, Literary 8:222
 Essay 10:590
 Humor 14:563
Paradise Lost 21:399
 Pope, A. 22:397
Spectator, The 25:464
 Steele, R. 25:668
Tatler 26:311
- Addison, Thomas** (Eng. phy.)
 Addison's Disease 1:157
 Endocrinology 10:339
- ADDISON'S DISEASE** 1:157
 Adrenal Glands 1:181
 Gum 13:602
 Loeb, R. F. 17:663
- ADDITION** (math.) 1:157; 2:295
 Abacus 1:5
 Algebra 1:555, 559, 562
 Algorithm 1:574
 Binary Notation 3:752
 Calculator 5:163
 Complex Numbers 7:460
 Computer 7:483
 Field 11:163
 Numerals 20:541
- Additive color process** (phot.) 22:22, 27
- Additives** (food). See *Food Additive*
- Additives** (gasoline) 12:337-38
- Additives** (paint) 21:206
- Added Parliament** (Eng. hist.) 15:675
- Addo Elephant National Park** (S.Afr.) 25:265
- ADDRESS, FORMS OF** 1:158
- Addresses to the German Nation** (bk., Fichte) 11:158
- Address to the Christian Nobility of the German Nation** (pam., Luther) 12:661
- Adduct** (chem.) 1:521
 Acids and Bases 1:108
 Inclusion Complex 14:843
- ADE, George** (Amer. jour.) 1:160
- ADEA** (U.S., 1978). See *Age Discrimination in Employment Act*
- ADELAIDE** (Austr.) 1:160; 2:708, 713-14, 723 fol., 746
- ADELAIDE** (It. q.) 1:160
 Berengar 3:572
 Otto I 21:134
 Otto II 21:134
- ADELAIDE, University of** (Austr.) 1:161
- Adelantado system** (Sp. col. admin.) 17:37
- Adelard of Bath** (Eng. philos., math.) 2:293
- Adelgid** (insect) 2:93
- Adelheid** (It. q.). See *Adelaide*
- ADELIE COAST** (Antarc.) 1:161; 2:30, 32-33
 Dumont d'Urville, J.S.C. 9:469
 French Southern and Antarctic Territories 12:74
Map(s) 2:ANTARCTICA
- Adelie penguin** (zool.) 2:30; 21:629
Illus. 21:630
- ADELPHI** (comedy, Terence) 1:161
- ADELPHI UNIVERSITY** (Garden City, N.Y.) 1:161
- ADELUNG, Johann Christoph** (Ger. philol.) 1:161
- Adelwulf** (W. Sax. k.). See *Aethelwulf*
- ADEN** (Yem.) 1:162; 29:669-71
 Arabia 2:159, 161
- ADEN, Gulf of** (Ind.O.) 1:163; 23:306
Map(s) 2:ARABIA
- Adena culture** (archaeo.) 27:689
 Kentucky 16:389
 Mound 19:565
- ADENAUER, Konrad** (Ger. states.) 1:163; 12:617-18, 699
Illus. 2:618
- ADENET LE ROI** (Fr. bard) 1:163
- Adenine** (biochem.) 3:761; 23:20
 DNA 9:222; 23:414
 Nucleic Acid 20:534
 RNA 23:556-57
- ADENITIS** (med.) 1:163
- Adenocarcinoma** (med.) 25:72; 27:215
- Adenohypophysis** (anat.) 22:158
 Hormone 14:381-82
Illus. 22:158
- ADENOIDS** (anat.) 1:164
 Deafness 8:558
 Pharynx 21:854
 Tonsillectomy 26:840
- Adenoma** (med.) 27:215
 Thyroid 26:716
- Adenosine** (chem.) 2:652
- Adenosine diphosphate** (biochem.). See *ADP*
- Adenosine triphosphate**. See *ATP*
- Adenotonsillectomy** (surg.) 26:840
- Adenovirus** (med.) 28:175
- Aden Protectorate** (former Brit. protectorate, Arab.) 29:669, 671. See also *South Arabia, Protectorate of*
 Yafa 29:636
- Adeodatus** (s. of St. Augustine) 2:685-86
- ADEODATUS I, Saint** (pope) 1:164
- ADEODATUS II, Saint** (pope) 1:164
- Adephaga** (zool.) 3:460-61
- ADF**. See *Arab Deterrent Force*
- Adherbal** (Numidian r.) 16:212
- ADHESION** (phys.) 1:164
 Cohesion 7:194
 Friction 12:90
- Adhesion** (pol. sci.) 1:80
- Adhesive pericarditis** (med.) 14:5
- ADHESIVES** 1:165
 Epoxy Resin 10:525
 Glue 12:818
 Lacquerwork 16:647-48
 Petrochemical 21:821
- Adiabatic demagnetization** (phys.) 8:274
- Adiabatic expansion** (phys.) 12:321
- Adiabatic flame temperature** 7:361
- Adiabatic process** (meteorol.) 7:75
- ADIABENE** (anc. king., Mesop.) 1:166
 Jews 16:75
- Adiantaceae** (bot.) 11:114
- ADIAPHORISTS** (rel.) 18:658
- ADI-BUDDHA** (Buddhism) 1:166
- ADIGE RIVER** (It.) 1:166
 World War II 29:461
Map(s) 15:ITALY
- ADIGRANTH** (Sikh scriptures) 1:166; 24:808
 Golden Temple 13:32
 Govind Singh 13:133
 Nanak 19:721
- Adios** (horse) 14:418
- Adios Butler** (horse) 14:418
- Adipate** (min.). See *Chabazite*
- ADIPOSE TISSUE** (anat.) 1:166; 18:749-50
 Cell 6:134
 Connective Tissue 7:602
 Lipoma 17:545
 Massage 18:475
 Obesity 20:594
- Adirondack black fly** 4:31
- Adirondack Forest Preserve** (N.Y.) 1:166-67
- ADIRONDACK MOUNTAINS** (N.Y.) 1:166; 19:580; 20:228b, 228c, 228L; 27:501